JURISDICTIONAL DETERMINATION AND WETLANDS DELINEATION TECHNICAL ASSESSMENT

FOR

IMPACTS ASSOCIATED WITH THE SOUTH ORANGE COUNTY TRANSPORTATION INFRASTRUCTURE IMPROVEMENT PROJECT

CENTRAL CORRIDOR - COMPLETE
CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION
ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION
ALIGNMENT 7 CORRIDOR - FAR EAST MODIFIED
FAR EAST CORRIDOR – WEST and
FAR EAST CORRIDOR - MODIFIED

August 9, 2004
[Revised April 6, 2005]

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PREFACE

This Wetlands Delineation Technical Report describes the location and extent of aquatic features located within the disturbance limits of the alternatives considered in the Environmental Impact Statement/Subsequent Environmental Impact Report for the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP). This evaluation describes details of wetlands and other waters with respect to the regulatory authority of the United States Army Corps of Engineers, the California Department of Fish and Game, and the California Coastal Commission. Isolated waters for which jurisdiction have not been determined are also described. This evaluation was conducted for the Central Corridor – Complete, the Central Corridor – Avenida La Pata Variation, the Alignment 7 Corridor – Avenida La Pata Variation, the Alignment 7 Corridor – Far East Crossover - Modified, the Far East Corridor – West and the Far East Corridor – Modified. Figure 1 on page 1-2 depicts the relative location of the alignments. Descriptions of identified aquatic features, total jurisdictional areas with respect to each above-listed agency, and a discussion of regulatory procedures are provided herein.

GLOSSARY

G.1 ACRONYMS FOR THE BUILD ALTERNATIVES

There are a number of build alternatives being evaluated for the South Orange County Transportation Infrastructure Improvement Project. A select number of these are evaluated in this report. The Acronyms for the build alternatives evaluated in this report are listed below.

Central Corridor – Complete – Initial Alternative	CC-Initial Alternative
Central Corridor – Complete – Ultimate Alternative	CC-Ultimate Alternative
Central Corridor – Avenida La Pata Variation – Initial Alternative	CC-ALPV-Initial Alternative
Central Corridor – Avenida La Pata Variation – Ultimate Alternative	CC-ALPV-Ultimate Alternative
Alignment 7 Corridor – Avenida La Pata Variation – Initial Alternative	A7C-ALPV-Initial Alternative
Alignment 7 Corridor – Avenida La Pata Variation – Ultimate Alternative	A7C-ALPV-Ultimate Alternative
Alignment 7 Corridor – Far East Crossover - Modified – Initial Alternative	A7C-FEC-M-Initial Alternative
Alignment 7 Corridor – Far East Crossover- Modified– Ultimate Alternative	A7C-FEC-M-Ultimate Alternative
Far East Corridor – West – Initial Alternative	FEC-W-Initial Alternative
Far East Corridor – West – Ultimate Alternative	FEC-W-Ultimate Alternative
Far East Corridor – Modified – Initial Alternative	FEC-M-Initial Alternative
Far East Corridor – Modified – Ultimate Alternative	FEC-M-Ultimate Alternative

G.2 OTHER ACRONYMS

CCC	California Coastal Commission
CDFG	California Department of Fish and Game
Corps	United States Army Corps of Engineers
EPA	United States Environmental Protection Agency
FAC	Facultative plant
FACU	Facultative upland plant
FACW	Facultative wetland plant
GLA	Glenn Lukos Associates
MBA	Michael Brandman Associates
NI	No Wetland Indicator Status

OBL	Obligate wetland plant
OHWM	Ordinary High Water Mark
RWQCB	Regional Water Quality Control Board
SAMP	Special Area Management Plan
SWANCC	Solid Waste Agency of Northern Cook County
UPL	Obligate upland plant
WDRs	Waste Discharge Requirements

G.3 GLOSSARY OF TERMS

Depressional Wetland	A wetland that lay within a depression in the landscape, generally draining a small surface area.
Ephemeral Stream	A stream or part of a stream that flows only in direct response to precipitation; it receives little or no water from springs, melting snow, or other sources; its channel is at all times above the water table.
Forested Wetland	A wetland class where the soil is saturated and often inundated, and woody plants taller than 20 feet form the dominant cover, e.g. red maple, American elm, and tamarack; water tolerant shrubs often form a second layer beneath the forest canopy, with a layer of herbaceous plants growing beneath the shrubs.
Hydric soil	Soil that is wet long enough to periodically produce anaerobic conditions, thereby influencing the growth of plants.
Hydrophytic vegetation	Vegetation that is tolerant of or adapted to prolonged periods of soil saturation.
Intermittent Stream	Streams that discharge ground water primarily during the wet seasons when the water table is high, and remain dry for a portion of the year; it's channel is above the water table during some portion of the year.
Open Water	An aquatic resource exhibiting persistent areas of open water with less than 30-percent vegetative cover.
Perennial Stream	A stream that normally has water in its channel at all times because it is sustained by groundwater discharge as well as by surface runoff; it's channel is below the ground water table.

Slope Wetland	A wetland characterized by the discharge of groundwater, often on a slope.
Wetland hydrology	Saturated soils within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year.
Vernal Pool	Vernal pools are depressions that pond shallow water following winter and spring rains due to an impervious hardpan that prevents percolation of the ponded water. In the SOCTIP survey area, vernal pools are distinguished from other seasonal wetland habitats by basin topography and the presence of indicator plant species (Zedler 1987). For this survey, a basin was defined as a vernal pool if it contains at least one indicator species from Zedler (1987).
Vernal Marsh	Habitat is distinguished from vernal pool habitat by the lack of vernal pool indicator species, specifically from Table 6A of Zedler (1987), such as dwarf wool heads, marsh cudweed, or hyssop loosestrife. In the survey area, vernal marsh habitat is dominated by needle spikerush, rabbitsfoot grass, curly dock and mulefat. All vernal marshes were surveyed for listed fairy shrimp species according to USFWS protocols.

1.0 INTRODUCTION

This report summarizes the preliminary findings regarding United States Army Corps of Engineers (Corps) and California Department of Fish and Game (CDFG) jurisdiction, and for limited segments of the Far East and Central Alignments, the California Coastal Commission (CCC) jurisdiction for the Foothill Transportation Corridor-South.[1] From July through September, 2001 and April through June, 2004, Biologists and Regulatory Specialists of Glenn Lukos Associates (GLA) and P&D Consultants examined portions of the Central, 7 and Far East Alignments to determine the limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act, (2) CDFG jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code, (3) isolated waters not subject to Corps, CDFG or CCC jurisdiction and (4) for limited portions of the Far East and Central Alignments, CCC jurisdiction pursuant to the California Coastal Act. On October 26 and November 9, 2004, Susan Meyer from the Corps conducted a field verification. This delineation incorporates comments provided during the verification. Enclosed are 700-scale maps [Exhibits 1 and 2] that depict the jurisdictional areas. Figure 1 on Page 1-2 depicts the relative location of each alignment. Drainage descriptions and jurisdictional totals for the entire study area are included as Appendix A. Impact totals and study area totals for isolated features are included as Appendix B. Wetland data sheets are attached as Appendix C. Overlay maps depicting data from the *Planning Level Delineation and Geospatial Characterization of Riparian Ecosystems of San Juan Creek and Portions of San Mateo Creek Watersheds, Orange County, California*[2], are attached as Appendices D and E. Appendix F is an aerial photograph overlay.

[1] This report presents a final determination of jurisdictional boundaries. The Corps has made a final determination through the verification process If a final jurisdictional determination is required from other agencies, GLA can assist in getting written confirmation of jurisdictional boundaries from the agencies.

[2] Lichvar, R. et al. 2000. *Planning Level Delineation and Geospatial Characterization of Riparian Ecosystems of San Juan Creek and Portions of San Mateo Creek Watersheds, Orange County, California.* Army Corps of Engineers, Engineer and Research Development Center and Cold Regions Research and Engineering Laboratory: Hanover N.H.

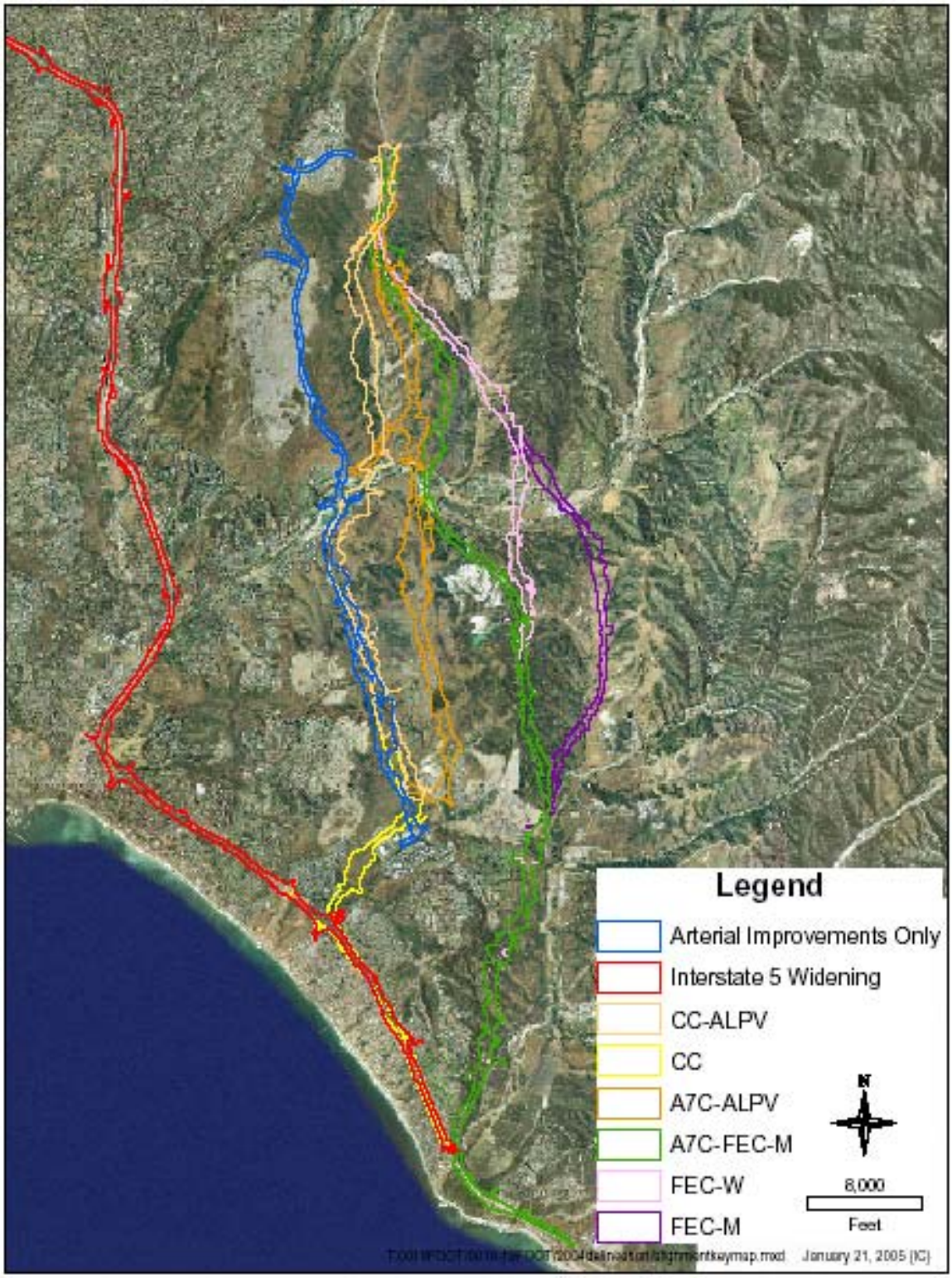

Figure 1: Relative location of Alternatives addressed in this report

1.1 PROJECT HISTORY

This delineation is derived from several sources. The following discussion provides a summary of prior delineations and the current effort to delineate the SOCTIIP alternatives.

From October 1995 to May 1996 a jurisdictional delineation was conducted by Michael Brandman Associates (MBA) for the CC Alternative (previously called the BX Alternative), and the FEC Alternative (previously called the CP Alternative) (1995/1996 MBA Delineation). This delineation was never verified by the Corps, CDFG, RWQCB or CCC. From July 2001 to September 2001, the jurisdictional delineation was updated by GLA (2001 GLA Delineation). At that time, GLA regulatory specialists revised the delineation for the Far East Alignment based on field indicators observed during field visits as well as delineating the A7C – FEC Alternative. This delineation was never verified. From October 2002 to November 2003, GLA conducted a jurisdictional delineation for the portion of Rancho Mission Viejo (RMV) that overlaps with segments of the SOCTIIP study area and corridor alternatives addressed in this report (2003 RMV Delineation). The RMV delineation verification occurred from March 2003 to October 2003. For the purposes of this report, the verified RMV delineation data has replaced all previous data where overlaps occurred. In October 2003, a gap analysis was conducted to determine if and where data was lacking for the A7C-FEC-M Alternative, FEC-M Alternative and FEC-W Alternative. From April 2004 through June 2004, GLA regulatory specialists proceeded to delineate the remaining areas which had not yet been previously delineated as well as updating the delineation for any areas of the A7C-FEC-M Alternative, FEC-M Alternative, and FEC-W Alternative where 2001 delineation data has not been superseded by 2003 RMV data (2004 GLA Delineation). From November 2004 through December 2004, the delineation was refined to incorporate input from the Corps during the field verification. Figure 2 depicts the delineation history graphically.

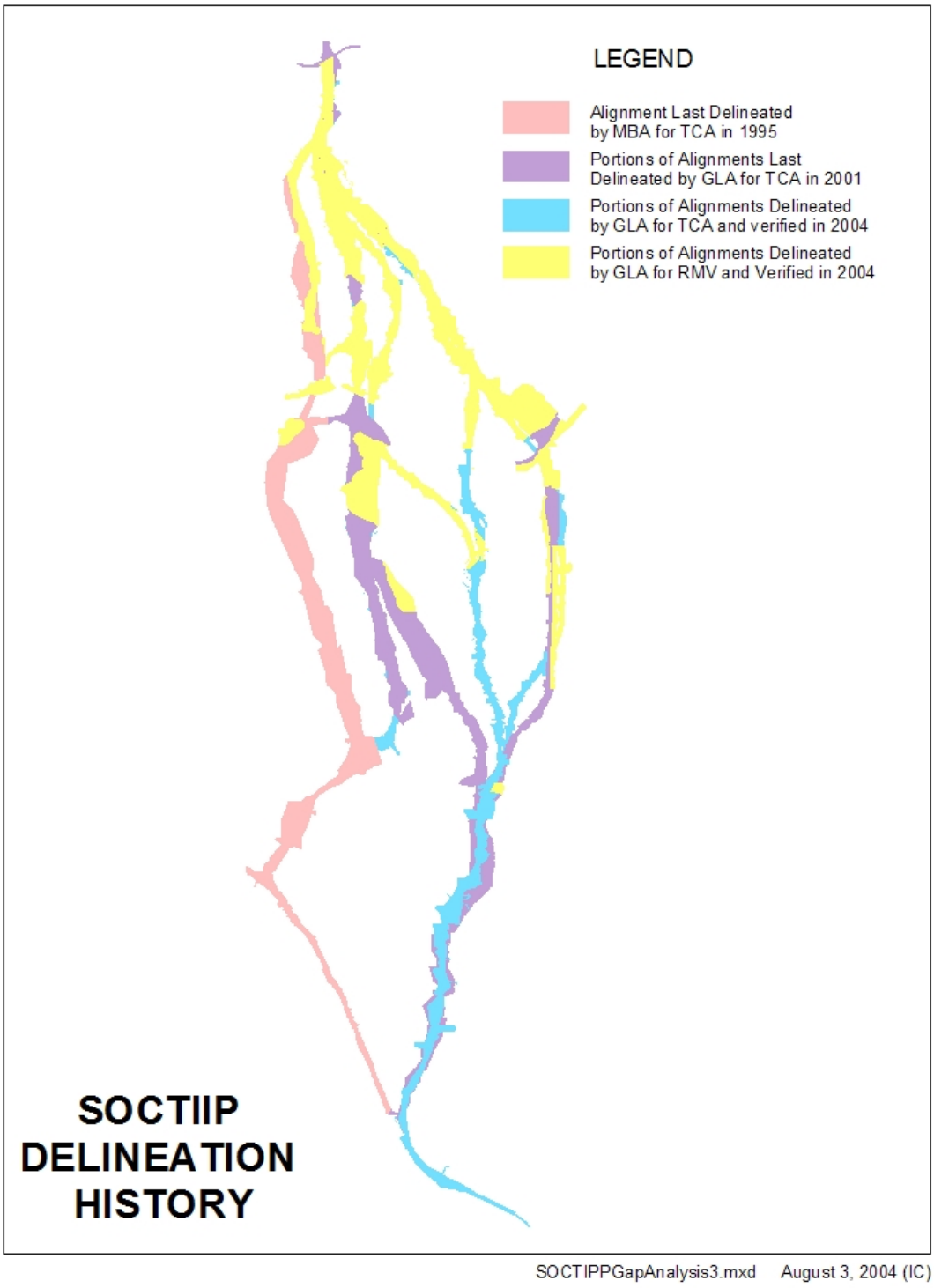

Figure 2: Graphical representation of SOCTIIP Delineation History

1.2 STUDY AREA TOTALS

Jurisdictional totals for the study areas, which extend from 200 to 1000 feet beyond the disturbance limits of each alignment, are included in Appendix A along with detailed drainage descriptions. Jurisdictional totals strictly represent the surface area of each feature and do not include an assessment of the relative quality of each feature. There is substantial overlap between the alignments. Therefore, the jurisdictional totals for each alternative are not mutually exclusive. In addition, the Corps, CDFG and CCC, regulate many of the same features, therefore jurisdictional totals for the various agencies are also not mutually exclusive.

1.3 JURISDICTIONAL IMPACT TOTALS

This impact analysis addresses both the initial and ultimate disturbance limits of the SOCTIIP alternatives although at this time permits are being sought only for the initial disturbance limits. Impact totals represent only the surface area subject to regulation by the various agencies and do not represent a relative assessment of function. This analysis assumes that all drainages within the disturbance limits are permanently filled as a result of the SOCTIIP, except for those that will be bridged. Although the other reaches will be filled the linear nature of a transportation project results in the installation of cross-culverts in a majority of drainages allowing for the retention of significant hydrologic function[3] [See Table 1.3-1]. Installation of the cross-culverts is still considered a permanent fill. For bridges, the small area of impact where the support columns are founded into the ground have been included as permanent impacts, while the remaining bridge right of way is assumed to be temporarily impacted for piling installation although the bridge structure will span over the open terrain. Although alignment refinements designed to avoid Tesoro Wetland (FE/C/7-Wetland 1) were not completed for A7C-ALPV, CC, and CC-ALPV, for the purposes of providing relative comparison of the SOCTIIP corridor alternatives impacts to Tesoro Wetland (FE/C/7-Wetland 1) were assumed to be avoided in this analysis.

[3] For locations where cross-culverts are not proposed.

TABLE 1.3-1 Summary of Drainages To Be Filled Without the Construction of Cross-Culverts or Other Hydrologic Connection

Alternative	Drainages to Be completely Filled with No Cross-Culvert or Other Hydrologic Connection
CC	Southern Tributary of C-10
CC-ALPV	Southern Tributary of C-10
A7C-ALPV	7-4, 7-9, Upper reaches of 7-10, 7-14
A7C-FEC-M	Southern Tributary of FE/7-3, Northern Tributary of FE/7-6, Northeastern Tributary FE/7-9, Southern and North Central Tributaries of FE/7-12, Northern Tributary of FE/7-2, 7-2, 7-11, Upper Reaches of FE/7-17, FE/7-19, FE/7-20, FE/7-23 and FE/7-25
FEC-W	Southern Tributary of FE/7-2, FE-2A, FE-7-4, Northeastern Tributary FE/7-9, Southern and North Central Tributaries of FE/7-12, Upper Reaches of FE/7-17, FE/7-19, FE/7-20, FE/7-23 and FE/7-25
FEC-M	FE/7-8A, Southern and North Central Tributaries of FE/7-12, Upper Reaches of FE/7-17, FE/7-19, FE/7-20, FE/7-23, FE/7-25, Two Ephemeral Tributaries of FEM-11, FEM-3, FEM-5, FEM-6, FEM-8, Southern Tributary of FE/7-2, FE-2A, Ephemeral Tributaries to FE-7

It should also be noted that many of the alternatives share common segments and, thus, have identical impacts along these shared segments. It is important, therefore, to recognize that areas of jurisdictional impact identified along one alternative may be common to multiple alternatives. In addition, the Corps, CDFG, and CCC regulate many of the same features, therefore, jurisdictional impact totals for the various agencies do overlap and should not be considered mutually exclusive.

1.3.1 Army Corps of Engineers Impact Totals

Army Corps of Engineers (Corps) jurisdiction, as described more fully in Section 3, generally extends to the Ordinary High Water Mark (OHWM) of features that discharge to navigable waters, in this case the Pacific Ocean, are tributary to features that discharge to navigable waters or are themselves considered a navigable water. In addition, the Corps also regulates features that are adjacent to jurisdictional waters and meet the Corps' definition of a wetland. All features that meet the above definitions are considered "waters of the US." The surface area that these features cover is subject to regulation by the Corps pursuant to Section 404 of the Clean Water Act. Surface area is determined using the OHWM, which refers to the lateral extent of stream flow occurring during a normal storm event or the area that meets the Corps' definition of a wetland. These limits are determined in the field based upon the field indicators described in Section 3. All waters are examined for wetland characteristics including the presence of vegetation adapted to sustained soil saturation and evidence of saturation occurring for at least 18 consecutive days including the presence of hydric soils, which are soils that exhibit indicators of saturation, and are either classified as wetland or non-wetland waters. All of the wetlands

subject to Corps jurisdiction are also considered special aquatic sites. Special aquatic sites are defined as "geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values" (40 CFR 230.s.3). No other special aquatic sites, including riffle-pool complexes, mud flats, vegetated shallows, coral reefs and sanctuaries, were identified within the impact boundaries. In order to further clarify the types of resources to be impacted, they have been divided into the following categories: perennial, intermittent and ephemeral streams, open water, slope wetlands, depressional wetlands and forested wetlands.

Pursuant to *Solid Waste Agency of Northern Cook County (SWANNC*), Corps jurisdiction does not extend to features that exhibit no surface connection to other jurisdictional features. Both permanent and temporary impacts are provided in this report. Permanent impact totals are summarized by resource agency in Table 1.3-2. Temporary impact totals are summarized by resource agency in Table 1.3-3. Permanent impact totals are summarized by resource type in Table 1.3-4. Temporary impact totals are summarized by resource type in Table 1.3-5.

Central Corridor Complete

The CC-Initial Alternative will permanently impact approximately 14.87 acres subject to Corps jurisdiction. This total consists of 13.40 acres of wetland and 1.47 acres of non-wetland waters.

The CC-Initial Alternative will temporarily impact approximately 12.10 acres subject to Corps jurisdiction. This total consists of 1.58 acres of wetland and 10.52 acres of non-wetland waters.

The CC-Ultimate Alternative will permanently impact approximately 15.08 acres subject to Corps jurisdiction. This total consists of 13.57 acres of wetland and 1.51 acres of non-wetland waters.

The CC-Ultimate Alternative will temporarily impact approximately 12.65 acres subject to Corps jurisdiction. This total consists of 1.65 acres of wetland and 11.00 acres of non-wetland waters.

Central Corridor – Avenida La Pata Variation

The CC – ALPV-Initial Alternative will permanently impact approximately 12.38 acres subject to Corps jurisdiction. This total consists of 11.41 acres of wetland and 0.97 acres of non-wetland waters.

The CC – ALPV-Initial Alternative will temporarily impact approximately 12.10 acres subject to Corps jurisdiction. This total consists of 1.58 acres of wetland and 10.52 acres of non-wetland waters.

The CC – ALPV-Ultimate Alternative will permanently impact approximately 13.39 acres subject to Corps jurisdiction. This total consists of 12.38 acres of wetland and 1.01 acres of non-wetland waters.

The CC – ALPV-Ultimate Alternative will temporarily impact approximately 12.65 acres subject to Corps jurisdiction. This total consists of 1.65 acres of wetland and 11.00 acres of non-wetland waters.

Alignment 7 Corridor – Avenida La Pata Variation

The A7C – ALPV Initial Alternative will permanently impact approximately 2.52 acres subject to Corps jurisdiction. This total consists of 0.56 acres of wetland and 1.96 acres of non-wetland waters.

The A7C – ALPV Initial Alternative will temporarily impact approximately 5.51 acres subject to Corps jurisdiction. This total consists of 1.91 acres of wetland and 3.60 acres of non-wetland waters.

The A7C – ALPV-Ultimate Alternative will permanently impact approximately 3.34 acres subject to Corps jurisdiction. This total consists of 1.36 acres of wetland and 1.98 acres of non-wetland waters.

The A7C – ALPV-Ultimate Alternative will temporarily impact approximately 6.07 acres subject to Corps jurisdiction. This total consists of 2.47 acres of wetland and 3.60 acres of non-wetland waters.

Alignment 7 Corridor – Far East Crossover – Modified

The A7C – FEC – M-Initial Alternative permanently will impact approximately 6.78 acres subject to Corps jurisdiction. This total consists of 0.93 acres of jurisdictional wetland and 5.85 acres of non-wetland waters.

The A7C – FEC – M-Initial Alternative will temporarily impact approximately 11.08 acres subject to Corps jurisdiction. This total consists of 8.51 acres of jurisdictional wetland and 2.57 acres of non-wetland waters.

TheA7C – FEC – M-Ultimate Alternative will permanently impact approximately 6.90 acres subject to Corps jurisdiction. This total consists of 0.93 acres of wetland and 5.97 acres of non-wetland waters.

TheA7C – FEC – M-Ultimate Alternative will temporarily impact approximately 12.24 acres subject to Corps jurisdiction. This total consists of 8.77 acres of wetland and 3.47 acres of non-wetland waters.

Far East Corridor - West

The FEC – W-Initial Alternative will permanently impact approximately 6.69 acres subject to Corps jurisdiction. This total consists of 2.62 acres of wetland and 4.07 acres of non-wetland waters.

The FEC – W-Initial Alternative will temporarily impact approximately 9.15 acres subject to Corps jurisdiction. This total consists of 8.62 acres of wetland and 0.53 acres of non-wetland waters.

The FEC – W-Ultimate Alternative will permanently impact approximately 6.96 acres subject to Corps jurisdiction. This total consists of 2.64 acres of wetland and 4.32 acres of non-wetland waters.

The FEC – W-Ultimate Alternative will temporarily impact approximately 9.35 acres subject to Corps jurisdiction. This total consists of 8.71 acres of wetland and 0.64 acres of non-wetland waters.

Far East Corridor – Modified

The FEC-M-Initial Alternative will permanently impact approximately 5.44 acres subject to Corps jurisdiction. This total consists of 1.71 acres of wetland and 3.73 acres of non-wetland waters.

The FEC-M-Initial Alternative will temporarily impact approximately 11.31 acres subject to Corps jurisdiction. This total consists of 8.98 acres of wetland and 2.33 acres of non-wetland waters.

The FEC-M- Ultimate Alternative will permanently impact approximately 6.02 acres subject to Corps jurisdiction. This total consists of 1.99 acres of wetland and 4.04 acres of non-wetland waters.

The FEC-M- Ultimate Alternative will temporarily impact approximately 12.06 acres subject to Corps jurisdiction. This total consists of 9.11 acres of wetland and 2.95 acres of non-wetland waters.

1.3.2 California Department of Fish and Game Impact Totals

California Department of Fish and Game (CDFG) jurisdiction, as described more fully in Section 3.0, extends to all lakes, streambeds and impoundments of streambeds regardless of contiguity with other jurisdictional features. The lateral extent of CDFG jurisdiction is based upon the presence of a bed and bank or riparian vegetation associated with the streambed. A detailed description of the methodology used to determine the extent of jurisdictional riparian habitat is

included in Section 3.0. Permanent impact totals are summarized by resource agency in Table 1.3-2. Temporary impact totals are summarized by resource agency in Table 1.3-3. Permanent impact totals are summarized by resource type in Table 1.3-4. Temporary impact totals are summarized by resource type in Table 1.3-5.

Central Corridor – Complete

The CC- Initial Alternative will permanently impact approximately 18.23 acres subject to CDFG jurisdiction. This total consists of 17.20 acres of vegetated riparian habitat and 1.03 acres of unvegetated streambed.

The CC- Initial Alternative will temporarily impact approximately 12.74 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.

The CC- Ultimate Alternative will permanently impact approximately 19.20 acres subject to CDFG jurisdiction. This total consists of 18.14 acres of vegetated riparian habitat and 1.06 acres of unvegetated streambed.

The CC- Ultimate Alternative will temporarily impact approximately 13.65 acres subject to CDFG jurisdiction. This total consists of 13.65 acres of vegetated riparian habitat and 0.00 acres of unvegetated streambed.

Central Corridor – Avenida La Pata Variation

The CC- ALPV-Initial Alternative will permanently impact approximately 15.75 acres subject to CDFG jurisdiction. This total consists of 14.94 acres of vegetated riparian habitat and 0.81 acres of unvegetated streambed.

The CC- ALPV-Initial Alternative will temporarily impact approximately 12.74 acres subject to CDFG jurisdiction, all of which consists of vegetated riparian habitat.

The CC- ALPV-Ultimate Alternative will permanently impact approximately 17.51 acres subject to CDFG jurisdiction. This total consists of 16.67 acres of vegetated riparian habitat and 0.85 acres of unvegetated streambed.

The CC- ALPV-Ultimate Alternative will temporarily impact approximately 13.65 acres subject to CDFG jurisdiction, all of which consists of vegetated riparian habitat.

Alignment 7 Corridor – Avenida La Pata Variation

The A7C-ALPV- Initial Alternative will permanently impact approximately 9.89 acres subject to CDFG jurisdiction. This total consists of 8.99 acres of vegetated riparian habitat and 0.90 acre of unvegetated streambed.

The A7C-ALPV- Initial Alternative will temporarily impact approximately 6.63 acres subject to CDFG jurisdiction, all of which consists of vegetated riparian habitat.

The A7C-ALPV- Ultimate Alternative will permanently impact approximately 11.12 acres subject to CDFG jurisdiction. This total consists of 10.17 acres of vegetated riparian habitat and 0.95 acres of unvegetated streambed.

The A7C-ALPV- Ultimate Alternative will temporarily impact approximately 7.19 acres subject to CDFG jurisdiction, all of which consists of vegetated riparian habitat.

Alignment 7 Corridor – Far East Crossover – Modified

The A7C-FEC-M- Initial Alternative will permanently impact approximately 23.83 acres subject to CDFG jurisdiction. This total consists of 21.52 acres of vegetated riparian habitat and 2.31 acres of unvegetated streambed.

The A7C-FEC-M- Initial Alternative will temporarily impact approximately 14.86 acres subject to CDFG jurisdiction, all of which consists of vegetated riparian.

The A7C-FEC-M- Ultimate Alternative will permanently impact approximately 24.21 acres subject to CDFG jurisdiction. This total consists of 21.93 acres of vegetated riparian habitat and 2.28 acres of unvegetated streambed.

The A7C-FEC-M- Ultimate Alternative will temporarily impact approximately 16.99 acres subject to CDFG jurisdiction, all of which consists of vegetated riparian.

Far East Corridor – West

The FEC-W- Initial Alternative will permanently impact approximately 25.45 acres subject to CDFG jurisdiction. This total consists of 23.13 acres of vegetated riparian habitat and 2.32 acres of unvegetated streambed.

The FEC-W- Initial Alternative will temporarily impact approximately 11.23 acres subject to CDFG jurisdiction. This total consists of 11.22 acres of vegetated riparian habitat and 0.01 acres of unvegetated streambed.

The FEC-W- Ultimate Alternative will permanently impact approximately 26.31 acres subject to CDFG jurisdiction. This total consists of 23.92 acres of vegetated riparian habitat and 2.39 acres of unvegetated streambed.

The FEC-W- Ultimate Alternative will temporarily impact approximately 11.80 acres subject to CDFG jurisdiction. This total consists of 11.79 acres of vegetated riparian habitat and 0.01 acres of unvegetated streambed.

Far East Corridor – Modified

The FEC-M- Initial Alternative will permanently impact approximately 18.67 acres subject to CDFG jurisdiction. This total consists of 16.88 acres of vegetated riparian habitat and 1.79 acres of unvegetated streambed.

The FEC-M- Initial Alternative will temporarily impact approximately 13.28 acres subject to CDFG jurisdiction. This total consists of 13.27 acres of vegetated riparian habitat and 0.01 acres of unvegetated streambed.

The FEC-M- Ultimate Alternative will permanently impact approximately 19.90 acres subject to CDFG jurisdiction. This total consists of 17.95 acres of vegetated riparian habitat and 1.95 acres of unvegetated streambed.

The FEC-M- Ultimate Alternative will temporarily impact approximately 14.35 acres subject to CDFG jurisdiction. This total consists of 14.34 acres of vegetated riparian habitat and 0.01 acres of unvegetated streambed.

TABLE 1.3-2
SUMMARY OF PERMANENT IMPACTS TO JURISDICTION
(in acres)

	CORPS			CDFG		
Alternative	Total	Non-Wetland Water	Wetlands	Total	Unvegetated Streambed	Vegetated
CC – Initial	14.87	1.47	13.40	18.23	1.03	17.20
CC – Ultimate	15.08	1.51	13.57	19.20	1.06	18.14
CC-ALPV – Initial	12.38	0.97	11.41	15.75	0.81	14.94
CC-ALPV – Ultimate	13.39	1.01	12.38	17.51	0.85	16.67
A7C-ALPV – Initial	2.52	1.96	0.56	9.89	0.90	8.99
A7C-ALPV – Ultimate	3.34	1.98	1.36	11.12	0.95	10.17
A7C-FEC-M – Initial	6.78	5.85	0.93	23.83	2.31	21.52
A7C-FEC-M – Ultimate	6.90	5.97	0.93	24.21	2.28	21.93
FEC-W – Initial	6.69	4.07	2.62	25.45	2.32	23.13
FEC-W – Ultimate	6.96	4.32	2.64	26.31	2.39	23.92
FEC-M – Initial	5.44	3.73	1.71	18.67	1.79	16.88
FEC-M – Ultimate	6.02	4.04	1.99	19.90	1.95	17.95

TABLE 1.3-3
SUMMARY OF TEMPORARY IMPACTS TO JURISDICTION
(in acres)

	CORPS			CDFG		
Alignment	Total	Non-Wetland Water	Wetlands	Total	Unvegetated Streambed	Vegetated
CC – Initial	12.10	10.52	1.58	12.74	0.00	12.74
CC – Ultimate	12.65	11.00	1.65	13.65	0.00	13.65
CC-ALPV – Initial	12.10	10.52	1.58	12.74	0.00	12.74
CC-ALPV – Ultimate	12.65	11.00	1.65	13.65	0.00	13.65
A7C-ALPV – Initial	5.51	3.60	1.91	6.63	0.00	6.63
A7C-ALPV – Ultimate	6.07	3.60	2.47	7.19	0.00	7.19
A7C-FEC-M – Initial	11.08	2.57	8.51	14.86	0.00	14.86
A7C-FEC-M – Ultimate	12.24	3.47	8.77	16.99	0.00	16.99
FEC-W – Initial	9.15	0.53	8.62	11.23	0.01	11.22
FEC-W – Ultimate	9.35	0.64	8.71	11.80	0.01	11.79
FEC-M – Initial	11.31	2.33	8.98	13.28	0.01	13.27
FEC-M – Ultimate	12.06	2.95	9.11	14.35	0.01	14.34

TABLE 1.3-4
SUMMARY OF PERMANENT IMPACTS (IN ACRES)
TO CORPS JURISDICTION
BY TYPE OF AQUATIC RESOURCE

Alternative	Perennial	Intermittent	Open Water	Slope Wetland[1]	Depressional Wetland[2]	Forested Wetland	Ephemeral	Total
CC-Initial	12.77	0.53	0.00	0.12	0.00	0.00	1.44	14.87
CC-Ultimate	12.94	0.51	0.00	0.12	0.00	0.00	1.51	15.08
CC-ALPV-Initial	10.5	0.53	0.00	0.12	0.00	0.00	1.23	12.38
CC-ALPV-Ultimate	11.52	0.45	0.00	0.12	0.00	0.00	1.3	13.39
A7C-ALPV-Initial	0.69	0.08	0.00	0.00	0.00	0.00	1.75	2.52
A7C-ALPV-Ultimate	1.5	0.75	0.00	0.00	0.00	0.00	1.09	3.34
A7C-FEC-M-Initial	0.62	0.36	0.00	0.00	0.33	0.00	5.47	6.78
A7C-FEC-M-Ultimate	0.62	0.36	0.00	0.00	0.33	0.00	5.59	6.90
FEC-W-Initial	0.62	1.533	1.52	0.00	0.33	0.00	2.68	6.69
FEC-W-Ultimate	0.62	1.58	1.52	0.00	0.33	0.00	2.91	6.96
FEC-M-Initial	0.62	0.7	0.22	0.00	0.51	0.00	3.39	5.44
FEC-M-Ultimate	0.62	0.86	0.31	0.00	0.62	0.00	3.61	6.02

[1] In HGM Wetland classification, slope wetlands normally are found where there is a discharge of groundwater to the land surface.
[2] In HGM Wetland classification, depressional wetlands occur in topographic depressions and include those features identified within this document as vernal marshes, seasonal ponds and vernal pools.

TABLE 1.3-5
SUMMARY OF TEMPORARY IMPACTS (IN ACRES)
TO CORPS JURISDICTION
BY TYPE OF AQUATIC RESOURCE

Alternative	Perennial	Intermittent	Open Water	Slope Wetland[1]	Depressional Wetland[2]	Forested Wetland	Ephemeral	Total
CC-Initial	0.00	12.10	0.00	0.00	0.00	0.00	0.00	12.10
CC-Ultimate	0.00	12.65	0.00	0.00	0.00	0.00	0.00	12.65
CC-ALPV-Initial	0.00	12.10	0.00	0.00	0.00	0.00	0.00	12.10
CC-ALPV-Ultimate	0.00	12.65	0.00	0.00	0.00	0.00	0.00	12.65
A7C-ALPV-Initial	0.78	4.48	0.00	0.22	0.00	0.00	0.03	5.51
A7C-ALPV-Ultimate	1.21	4.48	0.00	0.35	0.00	0.00	0.03	6.07
A7C-FEC-M-Initial	8.22	2.86	0.00	0.00	0.00	0.00	0.00	11.08
A7C-FEC-M-Ultimate	8.38	3.86	0.00	0.00	0.00	0.00	0.00	12.24
FEC-W-Initial	8.22	0.92	0.00	0.00	0.00	0.00	0.01	9.15
FEC-W-Ultimate	8.22	1.12	0.00	0.00	0.00	0.00	0.01	9.35
FEC-M-Initial	8.22	3.0	0.00	0.00	0.07	0.00	0.02	11.31
FEC-M-Ultimate	8.22	3.75	0.00	0.00	0.07	0.00	0.02	12.06

[1] In HGM Wetland classification, slope wetlands normally are found where there is a discharge of groundwater to the land surface.
[2] In HGM Wetland classification, depressional wetlands occur in topographic depressions and include those features identified within this document as vernal marshes, seasonal ponds and vernal pools.

1.3.2 CCC Impact Totals

As detailed in Section 3.0, pursuant to the Coastal Act, California Coastal Commission (CCC) regulates the diking, filling or dredging of wetlands within the coastal zone. The Coastal Act defines wetlands as land "…*which may be covered periodically or permanently with shallow water*." Subsequent interpretive guidelines state that the "…*presence or absence of hydric soils and/or hydrophytes alone are not necessarily determinative when the Commission identifies wetland under the Coastal Act.*" Therefore, CCC regulates impacts to all wetlands regulated by the Corps, which require that three-parameters including vegetation, soils and hydrology are present in order for a feature to be classified as a wetland, as well as any features in which at least one or two of the previous parameters is met. The totals listed below reflect permanent impacts to features that are subject to CCC regulation. Permanent impact totals to CCC jurisdiction are summarized in Table 1.3-6. Temporary impact totals to CCC jurisdiction are summarized in Table 1.3-7.

Central Corridor - Complete

Permanent impacts to CCC jurisdiction associated with those segments of the CC – Initial Alternative within the coastal zone total approximately 0.02 acre all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

There are no temporary impacts to CCC jurisdiction associated with the CC – Initial Alternative.

There are no permanent or temporary impacts to CCC jurisdiction associated with the CC – Ultimate Alternative.

Central Corridor – Avenida La Pata Variation

There are no permanent or temporary impacts to CCC jurisdiction associated with the CC – ALPV - Initial Alternative.

There are no permanent or temporary impacts to CCC jurisdiction associated with the CC – ALPV - Ultimate Alternative.

Alignment 7 Corridor – Avenida La Pata Variation

There are no permanent or temporary impacts to CCC jurisdiction associated with the A7C – ALPV - Initial Alternative.

There are no permanent or temporary impacts to CCC jurisdiction associated with the A7C – ALPV - Ultimate Alternative.

Alignment 7 Corridor – Far East Crossover - Modified

Permanent impacts to CCC jurisdiction associated with those segments of the A7C – FEC - M – Initial Alternative within the coastal zone total approximately 0.34 acre all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Temporary impacts to CCC jurisdiction associated with those segments of the A7C – FEC - M – Initial Alternative within the coastal zone total approximately 8.22 acres all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Permanent impacts to CCC jurisdiction associated with those segments of the A7C – FEC - M – Ultimate Alternative within the coastal zone total approximately 0.35 acre all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Temporary impacts to CCC jurisdiction associated with those segments of the A7C – FEC - M – Ultimate Alternative within the coastal zone total approximately 8.38 acres all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Far East Corridor – West

Permanent impacts to CCC jurisdiction associated with those segments of the FEC - W – Initial Alternative within the coastal zone total approximately 0.34 acre all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Temporary impacts to CCC jurisdiction associated with those segments of the FEC - W – Initial Alternative within the coastal zone total approximately 8.22 acres all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Permanent impacts to CCC jurisdiction associated with those segments of the FEC - W – Ultimate Alternative within the coastal zone total approximately 0.35 acre all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Temporary impacts to CCC jurisdiction associated with those segments of the FEC - W – Ultimate Alternative within the coastal zone total approximately 8.38 acres all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Far East Corridor – Modified

Permanent impacts to CCC jurisdiction associated with those segments of the FEC - M – Initial Alternative within the coastal zone total approximately 0.34 acre all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Temporary impacts to CCC jurisdiction associated with those segments of the FEC - M – Initial Alternative within the coastal zone total approximately 8.22 acres all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Permanent impacts to CCC jurisdiction associated with those segments of the FEC - M – Ultimate Alternative within the coastal zone total approximately 0.35 acre all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

Temporary impacts to CCC jurisdiction associated with those segments of the FEC - M – Ultimate Alternative within the coastal zone total approximately 8.38 acres all of which consist of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

TABLE 1.3-6
SUMMARY OF PERMANENT IMPACTS TO CCC JURISDICTION

Alignment	Acreage
CC – Initial Alternative	0.02
CC – Ultimate Alternative	0.00
CC-ALPV – Initial Alternative	0.00
CC-ALPV – Ultimate Alternative	0.00
A7C-ALPV – Initial Alternative	0.00
A7C-ALPV – Ultimate Alternative	0.00
A7C-FEC-M – Initial Alternative	0.34
A7C-FEC-M – Ultimate Alternative	0.35
FEC-W – Initial Alternative	0.34
FEC-W – Ultimate Alternative	0.35
FEC-M – Initial Alternative	0.34
FEC-M – Ultimate Alternative	0.35

TABLE 1.3-7

SUMMARY OF TEMPORARY IMPACTS TO CCC JURISDICTION

Alignment	Acreage
CC – Initial Alternative	0.00
CC – Ultimate Alternative	0.00
CC-ALPV – Initial Alternative	0.00
CC-ALPV – Ultimate Alternative	0.00
A7C-ALPV – Initial Alternative	0.00
A7C-ALPV – Ultimate Alternative	0.00
A7C-FEC-M – Initial Alternative	8.22
A7C-FEC-M – Ultimate Alternative	8.38
FEC-W – Initial Alternative	8.22
FEC-W – Ultimate Alternative	8.38
FEC-M – Initial Alternative	8.22
FEC-M – Ultimate Alternative	8.38

2.0 METHODOLOGY

Prior to beginning the field delineation, a series of 400-scale color aerial photographs, 400-scale topographic base maps of the alignments to be evaluated, the delineation maps associated with the 1995/1996 MBA Delineation, and USGS topographic maps (San Clemente, Canada Gobenadora, San Juan Capistrano and Dana Point Quads) were examined to determine the locations of potential areas of Corps/CDFG/CCC jurisdiction. Isolated waters not subject to these three agency's jurisdiction were also evaluated. The criteria used to define the presence and/or limits of jurisdiction vary among the regulatory agencies addressed in this report. As such, where jurisdictional limits were not coincident (e.g., between Corps and CDFG jurisdiction), separate and distinct limits were recorded that depicted the limits of the respective jurisdictional areas. Criteria set forth by each of the agencies and utilized for the jurisdictional determinations and delineation are provided in Section 3.0.

In general, evaluation of each drainage feature relative to each agency jurisdiction, extended beyond the disturbance limits for a minimum of 200 feet for first, second, and third order streams[1,2] and between 500 and 1,000 feet for larger streams. The distance delineated beyond the disturbance limits was generally based on professional judgment. Features greater than 1,000 feet from the disturbance limits were excluded from this analysis. These conventions were also applied where wetlands and/or riparian habitat was identified adjacent to steams. For drainage features that appeared to be isolated due to a lack of surface tributary connection with other jurisdictional waters, the drainage course was followed to its terminus even when it extended beyond the study area. Isolated vernal marsh, vernal pond, slope wetland and pond features were examined for field indicators that suggested the presence of a hydrologic connection with nearby features. If none were present then the feature was designated as isolated. The maps provided in Exhibits 1 and 2 depict the disturbance limits for the Ultimate Alternatives.

[1] Streams were assigned an order according to Strahler, where the smallest unbranched tributaries are given a number of 1. Where two unbranched tributaries meet, the stream order is designated 2. Where two tributaries with an order of 2 meet, the stream order is designated 3, and so on.
[2] Strahler, A.N. (1952). *Hyposemetric (area-altitude) analysis of erosional topography*. Bulletin of The Geographical Society of America.

2.1 SOIL TYPES

The United States Soil Conservation Service (SCS)[3] has mapped the following soil types as occurring in the general vicinity of the project site:

Soil Unit	Soil Taxonomy	Description
Alo Clay	Typic Chromoxererts	9-50% slopes; consists of well drained soils formed in material weathered from calcareous sandstone and shale; it is moderately steep and generally occurs on broad ridgetops.
Altamont Clay	Typic Chromoxererts	9-15% and 30-50% slopes; consists of well drained clays formed in material weathered from calcareous shale; rapid runoff with high erosion.
Balcom clay loam	Calcixerollic Xerochrepts	15-30% slopes; consists of well drained soils on uplands formed from soft fine grained sandstone, calcareous soft shale and marl; moderately steep soil generally occurs on hill ridgetops.
Bosanko clay	Chromic Pelloxererts	9-50% slopes; consists of well drained soils formed in material weathered from calcareous shale, sandstone, or weakly consolidated sediments; strongly sloping soils which generally occurs on broad hilltop ridges and on toe slopes.
Botella clay loam	Pachic Argixerolls	2-15% slopes; consists of well drained soils on alluvial fans which formed in sedimentary alluvium; gently sloping to moderately sloping soil generally occurring on alluvial fans.
Botella loam	Pachic Argixerolls	2-9% slopes; consists of well drained soils on alluvial fans which formed in sedimentary alluvium; gently sloping to moderately sloping soil generally occurring on alluvial fans.

[3] SCS is now known as the National Resource Conservation Service or NRCS.

Soil Unit	Soil Taxonomy	Description
Calleguas clay loam	Typic Xerorthents	50-75% slopes, eroded; consists of well drained soils formed in material weathered from lime coated shale or lime coated sandstone, or both; very steep soil generally has south-facing slopes.
Capistrano sandy loam	Entic Haploxerolls	2-15% slopes; consists of well-drained soils formed in granitic alluvium; gently to strongly sloping soil occurs in long narrow foothill valleys.
Carlsbad gravelly loamy sand	Haplic Durochrepts	2 to 15% slopes; consists of moderately well drained and well drained gravelly loamy sands that are moderately deep over hardpan; formed in material weathered in place from soft ferruginous sandstone, occurs in ridges and in swales
Chino silty clay loam	Aquic Haploxerolls	This nearly level soil consists of poorly drained soils formed in sedimentary alluvium and generally occurs in large alluvial fans.
Cieneba sandy loam	Typic Xerothents	15-75% slopes; consists of somewhat excessively drained soils formed in material weathered from granitic rocks of the Santa Ana Mountains and from the sandstone of the coastal foothills; steep to very steep soil which is eroded.
Corralitos loamy sand	Typic Xeropsamments	This soil is nearly level to gentle sloping; consists of somewhat excessively drained soils formed in mixed coarse textured alluvium.
Cropley clay	Chromic Pelloxererts	2-9% slopes; consists of well drained soils formed in fine textured alluvium derived from sedimentary rocks
Diablo Clay	Chromic Pelloxererts	15-50% slopes; consists of well-drained clays derived from soft, calcareous limestone and shale; occurs on rounded hills.

Soil Unit	Soil Taxonomy	Description
Gaviota fine sandy loam	Lithic Xerorthents	30-50% slopes; consists of well drained, shallow fine sandy loams that formed in material weathered from marine sandstone; found on uplands.
Hanford sandy loam	Typic Xerorthents	2-9% slopes; consists of well-drained soils on alluvial fans and alluvial plains; soils formed in granitic alluvium.
Heurhuero loam	Haplic Natrixeralfs	15-30% slopes, eroded; consists of moderately well drained soils developed in sandy marine sediments; moderately steep and eroded.
Las Flores loamy fine sand	Haplic Natrieralfs	2-9% and 9 to 30%, eroded; consists of moderately well drained loamy fine sands that have a sandy clay sub-soil; soils formed in material weathered from siliceous marine sandstone; found on uplands.
Las Posas fine sandy loam	Typic Rhodoxeralfs	5 to 9% slopes; consist of well drained, moderately deep stony fine sandy loams that have a clay subsoil; soils formed in material weathered from basic igneous rocks; found on uplands.
Marina loamy coarse sand	Alfic Xeropsamments	2 to 30% slopes; consists of somewhat excessively drained, very deep loamy coarse sands derived from weakly consolidated to noncoherent ferruginous eolian sand; found on old beach ridges.
Mocho loam	Fluventic Haploxerolls	2 to 9% slopes; consist of well-drained soils on alluvial fans and flood plains; formed in alluvium derived from sedimentary rock.
Myford sandy loam	Typic Palexeralfs	2-30% slopes; consists of moderately well drained soils on marine terraces formed in sandy sediments.
Pits	No Soil Taxonomy	Open excavations from which soil and underlying material, mostly sand and gravel, have been removed.

Soil Unit	Soil Taxonomy	Description
Riverwash	No Soil Taxonomy	Consists of unconsolidated alluvium, generally stratified and varying widely in texture, recently deposited in intermittent stream, and subject to frequent changes through stream flow.
Rock outcrop - Cieneba complex	No Soil Taxonomy	30 to 75% slopes; consists of 50% or more rock outcrop and 50% or less Cieneba soils and is somewhat excessively drained; form in material weathered from granitic or sandstone rock.
Rough broken land	No Soil Taxonomy	Composed of well drained to excessively drained steep and very steep land dissected by many narrow V-shaped valleys and sharp tortuous divides.
Salinas clay loam	Calcic Pachic Haploxerolls	0 to 2 % slopes; consist of well drained and moderately well drained clay loams that formed in sediments washed from Diablo, Linne, Las Flores, Huerhuero and Olivenhain soils; found on flood plains and alluvial fans.
Soper gravelly loam	Typic Argixerolls	15 to 50% slopes; consists of well-drained soils on foothills; formed in weakly consolidated sandstone and conglomerate.
Soper-Rock outcrop complex	Typic Argixerolls	30 to 75% slopes; consists of 10-15% rock outcrop and shallow Soper soils; formed in weakly consolidated sandstone and conglomerate; found on hillsides and ridges.
Sorrento clay loam	Calcic Haploxerolls	2 to 9% slopes; consists of well-drained soils on upper valley alluvial fans and along stream channels; formed in alluvium derived from sedimentary rock.
Sorrento loam	Calcic Haploxerolls	2 to 9 % slopes; consists of well-drained soils on alluvial fans and flood plains; formed in alluvium derived from sedimentary rock.

Soil Unit	Soil Taxonomy	Description
Steep gullied land	No Soil Taxonomy	Consists of strongly sloping to steep areas that are actively eroding into old alluvium or decomposed rock.
Tidal Flats	No Soil Taxonomy	Occurs as nearly level areas adjacent to bays and lagoons along the coast, periodically covered by tidal overflow. Consists of stratified clayey to sandy deposits; poorly drained and high in salts.
Terrace Escarpments	No Soil Taxonomy	Consists of steep to very steep escarpments, occurring on the nearly even fronts of terraces or alluvial fans; loamy or gravelly soil over soft marine sandstone, shale or gravelly sediments.
Tujunga sand	Typic Xeropsamments	0-5% slopes; consists of very deep, excessively drained sands derived from granitic alluvium; found on alluvial fans and flood plains.
Visalia sandy loam	Pachic Haploxerolls	0 to 2% slopes; Consists of moderately well drained, very deep sandy loams derived from granitic alluvium; found on alluvial fans and flood plains.
Yorba cobbly sandy loam	Typic Haploxeralfs	9-30% slopes, eroded and 30-50% slopes, eroded; consists of well drained soils on terraces formed in gravelly sandy sediment; severely eroded.

Of the soil types identified in the table above, only the Pit Soil Unit may be hydric as listed in the SCS's publication, Hydric Soils of the United States[4]. Hydric soils are those that are "…wet long enough to periodically produce anaerobic conditions, thereby influencing plant growth[5]." Thus the presence of a hydric soil may be a significant indicator of the presence of wetlands. Additionally, riverwash, pits, tidal flats, Carlsbad gravelly loamy sand within depressions and sloughs, Corralitos loamy sand within floodplain channels, Las Flores loamy fine sands within depressions, steep gullied land within depressions, Tujunga sands within intermittent streams

[4] United States Department of Agriculture, Soil Conservation Service. 1991. Hydric Soils of the United States, 3rd Edition, Miscellaneous Publication Number 1491. (In cooperation with the National Technical Committee for Hydric Soils.)

[5] Tiner. R.W. 1999. Wetland Indicators: *A Guide to Wetland Identification, Delineation, Classification and Mapping.* Lewis Publishers: Boca Raton, Florida.

and floodplains, Visalia series within flood plains and Myford sandy loam within depressions may be hydric as listed in the County of Orange and the County of San Diego local lists of hydric soils.

3.0 JURISDICTION

3.1 ARMY CORPS OF ENGINEERS

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

> *(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
> *(2) All interstate waters including interstate wetlands;*
> *(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:*
> *(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
> *(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or*
> *(iii) Which are used or could be used for industrial purpose by industries in interstate commerce.;*
> *(4) All impoundments of waters otherwise defined as waters of the United States under the definition;*
> *(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
> *(6) The territorial seas;*
> *(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*

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

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

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as "…those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987, the Corps published a manual to guide its field personnel in

determining jurisdictional wetland boundaries. The methodology set forth in the Army Corps of Engineers 1987 Wetland Delineation Manual generally requires that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics[1]. While the Wetland Manual provides great detail in methodology and allows for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands[2]);

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

- hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year[3].

3.1.1 DETERMINATION OF CORPS JURISDICTIONAL WETLAND LIMITS

During the field studies, suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Suspected wetland habitats within the areas evaluated for each alignment were evaluated using the methodology set forth in the Wetland Manual. While in the field the limits for each jurisdictional wetland area were recorded onto a 400-scale color aerial photograph using visible landmarks. Other data were recorded onto wetland data sheets that correspond to the location of soil pits/observation points where presence/absence of indicators for hydrophytic vegetation, wetland hydrology and hydric soils were evaluated. The location of soil pits/observation points was determined in the field at the time of the delineation and was dictated by site-specific conditions. For essentially all of the wetlands evaluated, the boundary between wetland and upland was marked by distinct boundaries, usually related to abrupt changes in topography or vegetation. In most instances, these abrupt changes made it possible to locate a clear and distinct wetland boundary without digging numerous soil pits. Where the anticipated disturbance limits affected only portions of a

[1] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

[2] Reed, P.B., Jr. 1988. National List of Plant Species that Occur in Wetlands. United States Fish and Wildlife Service Biological Report 88(26.10).

[3] Average rainfall in southern Orange County is approximately 13 inches per year. Rainfall during 2000-2001 averaged 14.17 inches or 109% percent of normal. This number represents an average. No attempt was made to characterize the local variation within rainfall that exists over a project of this size and geographic complexity. While the majority of the project lies in south Orange County, in areas where the project extends into north San Diego County the geographic setting is similar enough to consider this estimate of rainfall as adequate for providing a general context in which the delineation was conducted. For most of low-lying southern California, five percent of the growing season is equivalent to 18 days.

wetland, the soil pits/observation points were concentrated in areas of potential impacts as indicted by the disturbance limits. For example, soil pits/observation points associated with the wetland adjacent to Tesoro High School (FE/C/7 Wetland[4]) were concentrated along the eastern boundary of the wetland as the western boundary is well removed from the proposed disturbance limits.

A number of sources were used to determine the locations for potential wetland areas, including the 1995/1996 MBA Delineation, aerial photography, topographic maps, soil surveys, and ponding data collected during wet-season fairy shrimp surveys conducted in 1996, 1997, and 2001[5]. Depressional wetlands, such as vernal pools, are defined by the 1987 Manual as "Problem Areas" because various indicators for wetland vegetation and/or hydrology may be absent during summer or fall or completely absent during years of below-average rainfall. Although such areas were not formally delineated during the period of ponding when the wet-season fairy shrimp surveys were performed, the data collected during these surveys was used to augment the delineation data thereby providing for hydrological data not available during the July – September window during which the 2001 delineation was performed.

3.1.2 DETERMINATION OF LIMITS FOR OHWM

For non-wetland waters, including perennial, intermittent, or ephemeral streams, the extent of Corps jurisdiction was determined by the outermost location of attributes used by the Corps to define the presence of an OHWM. As noted above, the following physical characteristics were evaluated in the field: 1) clear, natural line impressed on the bank, 2) shelving, 3) changes in the character of soil, 4) destruction of terrestrial vegetation, 5) the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

For each drainage feature evaluated, the outermost location of any of the above-noted attributes was identified in the field and a width measurement was recorded that captured the outermost attributes (for example, where the presence of litter and debris was noted beyond the line where shelving or terracing was evident within the drainage course, the limits of the litter and debris was used to establish the width of the OHWM). As each drainage feature was traversed, width measurements were recorded where changes in the width of the OHWM were noted (for example, where the limits of the OHWM expanded from eight feet to 12 feet, a measurement was recorded, where the limits receded from 12 feet back to eight feet, another measurement was recorded). In this manner, the full range of widths associated with each jurisdictional drainage was captured and recorded.

[4] Please see Exhibits 1 and 2 for the location of this feature.
[5] Data was collected in part by Tony Bomkamp with GLA

3.1.3 DETERMINATION OF ISOLATED WATERS PURSUANT TO *SWANCC* DECISION

Pursuant to Article I, Section 8 of the United States Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s, the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, the United States Environmental Protection Agency (EPA) asserted that Corps' jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of "waters of the United States" in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.*, 531 U.S. 159 (2001) (SWANCC). In this case, the Court held that use of an isolated, intrastate pond by migratory birds is not a sufficient interstate commerce connection to bring the pond into federal jurisdiction under Section 404 of the Clean Water Act.

The Court notes that its previous support of the Corps' jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc*., 474 U.S. 121 (1985)) was for a wetland that abutted a navigable water and that the Court had declined to express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water.

The opinion goes on to state:

> *In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

Therefore, GLA believes that the Court's opinion goes beyond the migratory bird issue and means that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (regardless of any interstate commerce connection). However, case law on the precise scope of federal/CWA jurisdiction in light of *SWANCC* is still developing.
On January 15, 2003, the general counsels for EPA and the Corps issued a joint memorandum, Appendix A to the Advance Notice of Proposed Rulemaking, 68 Fed. Reg. 1991[6], providing clarifying guidance regarding the SWANNC decision and the agencies' position on CWA jurisdiction in light of the subsequent case law interpreting SWANNC.

The memorandum states that, in view of the SWANNC decision, the agencies will not assert CWA jurisdiction over isolated waters that are both intrastate and non-navigable if the sole basis for asserting such jurisdiction is any of the factors listed in the Migratory Bird Rule, i.e. use of

[6] The EPA and the Corps have since withdrawn the proposed rulemaking (Dec. 16, 2003), but the joint memorandum continues in effect.

the water as habitat by migratory birds, use of the water by federally listed endangered or threatened species, or use of the water to irrigate crops sold in interstate commerce.

The memorandum also advises field staff to seek formal, project-specific approval from Corps Headquarters prior to asserting jurisdiction over isolated, intrastate, non-navigable waters based solely on the other interstate Commerce Clause grounds set forth in 33 C.F.R § 328.3(a)(3)(i)-(iii), i.e. use of water by interstate or foreign travelers for recreation of other purposes, the presence of fish or shellfish that could be taken and sold in interstate commerce, and the use of the water for industrial purposes by industries in interstate commerce.

For purposes of making a jurisdictional determination, relative to Corps jurisdiction, for isolated waters, the following guidelines were used (detailed discussions are provided in descriptions of drainage features that were determined to be isolated in the text below):

- Vernal Pools and Seeps exhibiting wetland vegetation, soils, and hydrology not adjacent to jurisdictional drainages or other jurisdiction waters were determined to be isolated and not subject to Corps jurisdiction.

- Drainage features that lack a clear surface tributary connection to other waters of the U.S. were considered to be isolated. This is consistent with the Corps' discussion regarding the jurisdictional status of ephemeral streams provided in the Preamble to the nationwide permits issued on March 9, 2000:

  > *We agree that ephemeral streams that are tributary to other waters of the United States are also waters of the United States, as long as they possess an OHWM. The upstream limit of waters of the United States is the point where the OHWM is no longer perceptible (see 51 FR 41217). Ephemeral streams that are part of an interstate surface tributary system are waters of the United States because they are an integral part of that surface tributary system, which supports interstate commerce.*[7]

Therefore, where a surface tributary connection, as indicated by the presence of an OHWM between an ephemeral drainage feature and other waters of the United States is lacking, the ephemeral drainage feature is not part of the surface tributary system and is not subject to Corps jurisdiction.

3.2 REGULATION OF ISOLATED FEATURES

Jurisdiction over isolated features has not been determined.

[7] Federal Register / Vol. 65, No. 47 / Thursday, March 9, 2000, Page 12823.

3.3 CALIFORNIA DEPARTMENT OF FISH AND GAME

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFG regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife.

CDFG defines a "stream" (including creeks and rivers) as "…a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFG's definition of "lake" includes "natural lakes or man-made reservoirs."[8]

CDFG jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. CDFG Legal Advisor has prepared the following opinion:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...

- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFG] as natural waterways...

- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...[9]

Based on written regulatory guidance published by CDFG (Administrative Report No. 92-1) and verifications conducted with CDFG personnel in the field on a variety of projects, a number of factors were considered/evaluated in determining the limits of vegetation associations that would be regulated by CDFG as "riparian habitat" that would be considered as part of the "streambed." Specific resources used to aid in the identification and delineation of vegetation defined as "riparian" include the following: *National List of Plant Species that Occur in Wetlands* (Reed, 1988)[10], *A Manual of California Vegetation* (Sawyer and Keeler-Wolfe, 1996)[11], *California*

[8] Department of Fish and Game. 1992. A Field Guide to Lake and Streambed Alteration Agreements. Department of Fish and Game Environmental Services Division: Administrative Report No. 92-1.
[9] October 17, 1998. Letter from Eugene V. Toffoli of CDFG re: Departmental Jurisdiction Over Waterways.
[10] Reed, P.B., Jr. 1988. National List of Plant Species that Occur in Wetlands. United States Fish and Wildlife Service Biological Report 88(26.10).

[11] Sawyer, John, O. and Todd Keeler-Wolfe. 1995. *A Manual of California Vegetation*. California Native Plant Society, Sacramento.

Riparian Systems (Warner and Hendrix, 1984)[12] and *Preliminary Descriptions of Terrestrial Communities* (Holland 1986).[13]

Reed (1988) provides an indicator status for plants that occur in wetlands. Obligate Wetland species (OBL) are defined as species that occur in wetlands 99-percent of the time. Obligate Upland species (UPL) occur in uplands 99-percent of the time. Species between OBL and UPL include Facultative Wet (FACW), that are associated with wetlands 67- to 99-percent of the time with Facultative (FAC) species associated with wetlands 33- to 67-percent of the time. While the Reed list is useful, it must be used in concert with the other references noted, particularly for species rated as facultative. The list is subject to ongoing revisions a more data become available on hydrophytic and non-hydrophytic species. During the field-level delineation, species considered to be "riparian" in all cases but one, coast live oak, exhibited an indicator status of FAC, FACW or OBL. Dominant species identified as components of accepted riparian associations included black willow (*Salix 1602*, OBL), arroyo willow (*Salix lasiolepis*, FACW), yellow willow (*Salix lucida*, OBL), Fremont cottonwood (*Populus fremontii*, FACW), black cottonwood (*Populus trichocarpa balsamifera*, FACW), western sycamore (*Platanus racemosa*, FACW), and mulefat (*Baccharis salicifolia*, FACW). Coast live oak (*Quercus agrifolia*, UPL), as noted above is the only upland species that is typically included as a dominant riparian species.

Use of the wetland indicator status provided in Reed (1988), as a useful tool for separating "riparian" from "upland" species is supported by an understanding of the origins of riparian systems in areas governed by a Mediterranean climatic regime. The dominant tree and shrub species that occur along perennial and intermittent streams are recognized remnants of the Arcto-Tertiary Geoflora of the Late Tertiary and Quaternary Periods that included wet climates, explaining their high demands for water.[14] In areas now dominated by the drier Mediterranean climate, these species persist in areas where there is a permanent or seasonal surface or subsurface water supply. The dominant genera in southern California include: willow (*Salix*, spp.), cottonwood (*Populus* spp.), alder (*Alnus rhombifolia*), sycamore (*Platanus racemosa*), maple (*Acer* spp.), ash (*Fraxinus* spp.), and in some settings, oak (*Quercus* spp.).[15] The hydrologic requirements for many of these genera differ and are generally well known. For example, well-aerated water that is close to the surface will favor alder whereas when the water table is relatively deep, sycamores will predominate as long as the intervening soil aeration is high. Direct measurements of water use by red willow documented water-use rates at 52.7 acre-

[12] Warner, Richard E. and Kathleen M. Hendrix. 1984. *California Riparian Systems*. University of California Press, Berkeley.
[13] Holland, Robert F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game, Sacramento.
[14] Holstein, Glen. 1984. California Riparian Forests: Deciduous Islands in an Evergreen Sea. In: Warner and Hendrix (Eds). *California Riparian Systems: Ecology Conservation, and Productive Management.* University of California Press, Berkeley.
[15] Holstein, Glen. 1984. California Riparian Forests: Deciduous Islands in an Evergreen Sea. In: Warner and Hendrix (Eds). *California Riparian Systems: Ecology Conservation, and Productive Management.* University of California Press, Berkeley.

inches per year with alder-dominated habitat using 47.0 acre inches of water during the peak growing season (July to October).[16]

The methodology described here incorporates the wetland indicator status for each species as provided by Reed (1988), with the hydrologic requirements and historical classification as noted above. The methodology for defining the dimensions of riparian habitat in the field is summarized as follows:

- Designation of an area as "riparian habitat" was generally limited to stands of vegetation that included a predominance of species that exhibited an indicator status of FAC, FACW or OBL. (Coast live oaks were included as riparian habitat in specific instances as further described/discussed below)

- Where all riparian habitat was included within the bank-full stream channel (e.g., riparian herb), the outermost limits of either the bank or riparian habitat was mapped as the limits of CDFG riparian jurisdiction/habitat.

- Where riparian habitat extended beyond the bank-full channel to the active floodplain, and did not extend outside the active floodplain, the outermost limits of either the active floodplain or riparian habitat was mapped as the limits of CDFG riparian jurisdiction/habitat. By inclusion of the active flood plain and associated riparian habitat, the hydrologic, biogeochemical, and habitat functions not specifically associated with riparian vegetation, such as areas with localized ponding that support aquatic organisms (e.g., invertebrates, amphibians, etc.), but providing such hydrologic, biogeochemical and habitat functions, were captured and included within the jurisdictional area(s).

- Where riparian habitat extended beyond the active flood plain to active terraces, the outermost limits of the riparian habitat on the terrace (i.e., canopy edge or "drip line") was mapped as the limits of CDFG riparian jurisdiction/habitat. Similar to inclusion of the flood plain described above, inclusion of the active terraces ensured that functions such as hydrologic exchange with the adjacent uplands, nutrient cycling, shading by overhanging vegetation, bank and channel stabilization by roots, as well as habitat functions were included in the jurisdictional area(s).

  This latter case (i.e., channel stabilization by roots) was most typically applied to southern coast live oak riparian forest. In some cases, particularly in "U"-shaped canyons, the limits of the active terrace were not always discernible. In such cases, coast live oaks were included as riparian where they either (1) exhibited roots that reached the banks of the drainage, thereby, benefiting from the drainage or by providing stabilization for the banks (i.e., a benefit for the stream) or (2) where meaningful portions of the canopy overhung the stream, thereby providing for shading or litter (nutrient cycling)

[16] State of California Department of Public Works. 1942. *Bulletin No. 50: Use of Water by Native Vegetation.*

> which would benefit the stream. Coast live oaks located above active terraces or (where terraces were not distinct) beyond where either roots or shading provided direct benefits to the stream, or that supported a predominance of UPL vegetation were not included as CDFG-regulated riparian vegetation.

Thus, CDFG jurisdictional limits closely mirror those of the Corps. Exceptions are CDFG's exclusion of isolated wetlands (those not associated with a river, stream, or lake), the addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

3.4 CALIFORNIA COASTAL COMMISSION

The California Coastal Act of 1976 (California Public Resources Code Section 30000 et. Seq.) restricts land uses within or adjacent to environmentally sensitive habitat areas (ESHAs). The Coastal Act Section 30107.5 defines an ESHA as:

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

Included within this definition are wetlands, estuaries, streams, riparian habitats, lakes, and portions of open coastal waters which meet the rare or valuable habitat criteria.

The CCC regulates the diking, filling, or dredging of wetlands within the coastal zone. The Coastal Act Section 30121 defines "wetland" as lands *"…within the coastal zone which may be covered periodically or permanently with shallow water…"* The 1981 CCC Statewide Interpretive Guidelines state that hydric soils and hydrophytic vegetation "*…are useful indicators of wetland conditions, but the presence or absence of hydric soils and/or hydrophytes alone are not necessarily determinative when the Commission identifies wetlands under the Coastal Act. In the past, the Commission has considered all relevant information in making such determinations and relied upon the advice and judgment of experts before reaching its own independent conclusion as to whether a particular area will be considered wetland under the Coastal Act. The Commission intends to continue to follow this policy.*"

The 1981 CCC Statewide Interpretive Guidelines define riparian habitats as areas of riparian vegetation. Riparian vegetation is defined as "*…an association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other bodies of fresh water.*" Riparian habitats may encompass wetland areas, but may also extend beyond those areas.

4.0 RESULTS

As mentioned in the introduction, jurisdictional totals for the study areas, which extend from 200 to 1000 feet beyond the disturbance limits of each alignment, are included in Appendix A along with detailed drainage descriptions. Also as mentioned in the introduction, the impact analysis below addresses both initial and ultimate disturbance limits, although at this time permits are being sought only for the initial disturbance limits. The ultimate disturbance limits have been provided to address potential cumulative impacts. Impact totals represent only the surface area subject to regulation by the various agencies and do not represent a relative assessment of function. This analysis assumes that all drainages within the disturbance limits are permanently filled, except for those that will be bridged. For bridges, the small area of impact where the support columns are founded into the ground have been included as permanent impacts, while the remaining bridge right of way is assumed to be temporarily impacted for piling installation although the bridge structure will span over the open terrain. Although the other reaches will be filled, cross-culverts will be installed at the majority of drainages allowing for the retention of significant hydrologic function.

It should also be noted that many of the alternatives share common segments and, thus, have identical impacts along these shared segments. It is important, therefore, to recognize that areas of jurisdictional impact identified along one alternative may be common to multiple alternatives. In addition, the Corps, CDFG, and CCC regulate many of the same features, therefore, jurisdictional impact totals for the various agencies do overlap and should not be considered mutually exclusive.

4.1 ARTERIAL IMPROVEMENTS ONLY

The Arterial Improvements Only (AIO) Alternative was evaluated using the planning-level WES data[1]. TCA acknowledges that this alternative impacts fewer aquatic resources than the alternatives for which the project-level delineation was completed. With concurrence from Corps, the planning level WES delineation was determined to be adequate for evaluation. See Table 4.2-1 below for a summary of the relative planning-level impacts. Unlike the project-level analysis for the other alternatives addressed below, these planning-level impacts for the AIO did not take bridging into account.

[1] Smith, R. D. 2003. Potential Impacts of Alternative Transportation Corridors on Waters of the United States and Riparian Ecosystems for the Southern Orange County Transportation Infrastructure Improvement Project. U.S. Army Engineer Research and Development Center, Waterways Experiment Station, Vicksburg, MS.

4.2 INTERSTATE 5 WIDENING

The Interstate 5 Widening (I5) Alternative was also evaluated using the planning-level WES data. TCA acknowledges that this alternative also impacts fewer aquatic resources than the alternatives for which the project-level delineation was completed. With concurrence from Corps, the planning level WES delineation was determined to be adequate for evaluation. See Table 4.2-1 below for a summary of the relative planning-level impacts. Unlike the project-level analysis for the other alternatives addressed below, these planning-level impacts for the I-5 widening did not take bridging into account.

Table 4.2-1 Summary Of Impacts Resulting From The Planning-Level Impact Analysis

Alternative	Acres Of Riparian Impact	Total Miles Of "Waters Of The U.S." Impacted
AIO	9.2	3.7
I5	13.7	3.0

4.3 CENTRAL CORRIDOR – COMPLETE IMPACT TOTALS

Impact analysis results for both the initial and ultimate disturbance limits are described below and are summarized in Tables 4.3.1-1, 4.3.1-2, 4.3.2-1 and 4.3.2-2.

4.3.1 CENTRAL CORRIDOR – COMPLETE –INITIAL ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the CC-Initial Alternative disturbance limits. Permanent impacts are summarized in Table 4.3.1-1. Temporary impacts are summarized in Table 4.3.1-2.

The CC – Initial Alternative will permanently impact approximately 14.87 acres subject to Corps jurisdiction. This total consists of 13.40 acres of wetland and 1.47 acres of non-wetland waters.

The CC – Initial Alternative will temporarily impact approximately 12.10 acres subject to Corps jurisdiction. This total consists of 1.58 acres of wetland and 10.52 acres of non-wetland waters.

The CC – Initial Alternative will permanently impact approximately 18.23 acres subject to CDFG jurisdiction. This total consists of 17.20 acres of vegetated riparian habitat and 1.03 acres of unvegetated streambed.

The CC – Initial Alternative will temporarily impact approximately 12.74 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.

The CC – Initial Alternative will permanently impact approximately 0.02 acres subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).
There are no temporary impacts to CCC jurisdiction associated with the CC – Initial Alternative.

TABLE 4.3.1-1
PERMANENT JURISDICTIONAL IMPACTS
CENTRAL CORRIDOR COMPLETE – INITIAL ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-WETLAND 1[3]	Perennial	0.00	0.00	0.00	0.00	0.00	0.00
FE/C/7-1	Ephemeral	0.00	0.05	0.05	0.19	0.05	0.24
CANADA CHIQUITA	Perennial	6.77	0.04	6.81	9.22	0.00	9.22
C-WETLAND 1	Slope Wetland	NA	NA	NA	NA	NA	NA
C-WETLAND 2	Slope Wetland	0.09	0.00	0.09	NA	NA	NA
C-2	Ephemeral	NA	NA	NA	0.34	0.01	0.35
C-3	Ephemeral	NA	NA	NA	0.35	0.10	0.45
C-4	Ephemeral	NA	NA	NA	0.00	0.04	0.04
C-5	Ephemeral/ Slope Wetland	0.03	0.00	0.03	0.03	0.00	0.03
C-SAN JUAN CREEK	Intermittent	0.28	0.25	0.53	0.53	0.00	0.53
C-7	Ephemeral	0.02	0.04	0.06	0.05	0.03	0.08
C-8	Ephemeral	0.00	0.12	0.12	0.00	0.12	0.12
C-9	Ephemeral	0.00	0.27	0.27	0.00	0.27	0.27
C-10	Ephemeral	0.00	0.05	0.05	0.00	0.05	0.05
C-11	Ephemeral	0.39	0.01	0.40	0.39	0.01	0.40
C-12	Ephemeral	0.13	0.14	0.27	0.13	0.14	0.27
C-13	Ephemeral	0.01	0.00	0.01	0.01	0.00	0.01
C-14	Ephemeral	0.00	0.21	0.21	0.00	0.21	0.21
SEGUNDA DESHECHA	Perennial	5.66	0.28	5.94	5.93	0.00	5.93
FE/7 SAN MATEO CREEK[4]	Perennial	0.02	0.00	0.02	0.02	0.00	0.02
TOTAL	**NA**	**13.40**	**1.47**	**14.87**	**17.20**	**1.03**	**18.23**

1 These features are depicted on Exhibits 1 and 2.

2 Refer to Appendix B for isolated features totals

[3] Actual grading limits impact 6.08 acres of FE/C/7-Wetland 1. However, based upon refinements to A7C-FEC-M, FEC-W and FEC-M, it is assumed that these impacts could ultimately be avoided.
[4] Feature subject to CCC jurisdiction.

TABLE 4.3.1-2
TEMPORARY JURISDICTIONAL IMPACTS
CENTRAL CORRIDOR COMPLETE – INITIAL ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
C-SAN JUAN CREEK	Intermittent	1.58	10.52	12.10	12.74	0.00	12.74
TOTAL	**NA**	**1.58**	**10.52**	**12.10**	**12.74**	**0.00**	**12.74**

[1] These features are depicted on Exhibits 1 and 2.

4.3.2 CENTRAL CORRIDOR – COMPLETE – ULTIMATE ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the CC-Ultimate Alternative disturbance limits. Permanent impacts are summarized in Table 4.3.2-1. Temporary impacts are summarized in Table 4.3.2-2.

The CC – Ultimate Alternative will permanently impact approximately 15.08 acres subject to Corps jurisdiction. This total consists of 13.57 acres of wetland and 1.51 acres of non-wetland waters.

The CC – Ultimate Alternative will temporarily impact approximately 12.65 acres subject to Corps jurisdiction. This total consists of 1.65 acres of wetland and 11.00 acres of non-wetland waters.

The CC – Ultimate Alternative will permanently impact approximately 19.20 acres subject to CDFG jurisdiction. This total consists of 18.14 acres of vegetated riparian habitat and 1.06 acres of unvegetated streambed.

The CC – Ultimate Alternative will temporarily impact approximately 13.65 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.
There are no permanent or temporary impacts to CCC jurisdiction associated with the CC – Ultimate Alternative.

TABLE 4.3.2-1
PERMANENT JURISDICTIONAL IMPACTS
CENTRAL CORRIDOR – COMPLETE – ULTIMATE ALTERNATIVE
(in acres)

		Corps[2]			**CDFG**		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-WETLAND 1[3]	Perennial	0.00	0.00	0.00	0.00	0.00	0.00
FE/C/7-1	Ephemeral	0.00	0.06	0.06	0.45	0.04	0.49
FE/C/7-2	Ephemeral	NA	NA	NA	0.00	0.002	0.002
CANADA CHIQUITA	Perennial	6.88	0.06	6.94	9.87	0.00	9.87
C-WETLAND 1	Slope Wetland	NA	NA	NA	NA	NA	NA
C-WETLAND 2	Slope Wetland	0.09	0.00	0.09	NA	NA	NA
C-2	Ephemeral	NA	NA	NA	0.34	0.01	0.35
C-3	Ephemeral	NA	NA	NA	0.34	0.10	0.44
C-4	Ephemeral	NA	NA	NA	0.00	0.04	0.04
C-5	Ephemeral/ Slope Wetland	0.03	0.00	0.03	0.03	0.00	0.03
C-SAN JUAN CREEK	Intermittent	0.28	0.23	0.51	0.51	0.00	0.51
C-7	Ephemeral	0.02	0.04	0.06	0.05	0.03	0.08
C-8	Ephemeral	0.00	0.13	0.13	0.00	0.13	0.13
C-9	Ephemeral	0.00	0.27	0.27	0.00	0.27	0.27
C-10	Ephemeral	0.00	0.04	0.04	0.00	0.04	0.04
C-11	Ephemeral	0.39	0.01	0.40	0.39	0.01	0.40
C-12	Ephemeral	0.14	0.18	0.32	0.14	0.18	0.32
C-13	Ephemeral	0.02	0.00	0.02	0.02	0.00	0.02
C-14	Ephemeral	0.00	0.21	0.21	0.00	0.21	0.21
SEGUNDA DESHECHA	Perennial	5.70	0.28	5.98	5.98	0.00	5.98
FE/7 San Mateo Creek[4]	Perennial	0.02	0.00	0.02	0.02	0.00	0.02
TOTAL	**NA**	**13.57**	**1.51**	**15.08**	**18.14**	**1.06**	**19.20**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

[3] Actual grading limits impact 6.51 acres of FE/C/7-Wetland 1 – However, based upon refinements to A7C-FEC-M, FEC-W and FEC-M, it is assumed that these impacts could ultimately be avoided.

[4] Feature subject to CCC jurisdiction.

TABLE 4.3.2-2
TEMPORARY JURISDICTIONAL IMPACTS
CENTRAL CORRIDOR COMPLETE – ULTIMATE ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
C-SAN JUAN CREEK	Intermittent	1.65	11.00	12.65	13.65	0.00	13.65
TOTAL	**NA**	**1.65**	**11.00**	**12.65**	**13.65**	**0.00**	**13.65**

[1] These features are depicted on Exhibits 1 and 2.

4.4 CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION IMPACT TOTALS

Impact analysis results for both the initial and ultimate disturbance limits are described below and are summarized in Tables 4.4.1-1, 4.4.1-2, 4.4.2-1 and 4.4.2-2.

4.4.1 CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION – INITIAL ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the CC-ALPV-Initial Alternative disturbance limits. Permanent impacts are summarized in Table 4.4.1-1. Temporary impacts are summarized in Table 4.4.1-2.

The CC-ALPV-Initial Alternative will permanently impact approximately 12.38 acres subject to Corps jurisdiction. This total consists of 11.41 acres of wetland and 0.97 acre of non-wetland waters.

The CC-ALPV-Initial Alternative will temporarily impact approximately 12.10 acres subject to Corps jurisdiction. This total consists of 1.58 acres of wetland and 10.52 acre of non-wetland waters.

The CC-ALPV – Initial Alternative will permanently impact approximately 15.75 acres subject to CDFG jurisdiction. This total consists of 14.94 acres of vegetated riparian habitat and 0.81 acre of the unvegetated streambed.

The CC-ALPV – Initial Alternative will temporarily impact approximately 12.74 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.

There are no permanent or temporary impacts to CCC jurisdiction associated with the CC-ALPV – Initial Alternative.

TABLE 4.4.1-1
PERMANENT JURISDICTIONAL IMPACTS
CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION – INITIAL ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-WETLAND 1[3]	Perennial	0.00	0.00	0.00	0.00	0.00	0.00
FE/C/7-1	Ephemeral	0.00	0.05	0.05	0.19	0.05	0.24
CANADA CHIQUITA	Perennial	6.77	0.04	6.81	9.23	0.00	9.23
C-WETLAND 1	Slope Wetland	NA	NA	NA	NA	NA	NA
C-WETLAND 2	Slope Wetland	0.09	0.00	0.09	NA	NA	NA
C-2	Ephemeral	NA	NA	NA	0.34	0.01	0.35
C-3	Ephemeral	NA	NA	NA	0.35	0.10	0.45
C-4	Ephemeral	NA	NA	NA	0.00	0.04	0.04
C-5	Ephemeral/ Slope Wetland	0.03	0.00	0.03	0.03	0.00	0.03
C-SAN JUAN CREEK	Intermittent	0.28	0.25	0.53	0.53	0.00	0.53
C-7	Ephemeral	0.02	0.04	0.06	0.05	0.03	0.08
C-8	Ephemeral	0.00	0.12	0.12	0.00	0.12	0.12
C-9	Ephemeral	0.00	0.27	0.27	0.00	0.27	0.27
C-10	Ephemeral	0.00	0.05	0.05	0.00	0.04	0.04
C-11	Ephemeral	0.39	0.01	0.40	0.39	0.01	0.40
C-12	Ephemeral	0.13	0.14	0.27	0.13	0.14	0.27
C-13	Ephemeral	0.01	0.00	0.01	0.01	0.00	0.01
SEGUNDA DESHECHA	Perennial	3.69	0.00	3.69	3.69	0.00	3.69
TOTAL	**NA**	**11.41**	**0.97**	**12.38**	**14.94**	**0.81**	**15.75**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

[3] Actual grading limits impact 6.08 acres of FE/C/7-Wetland 1 – However, based upon refinements to A7C-FEC-M, FEC-W and FEC-M, it is assumed that these impacts could ultimately be avoided.

TABLE 4.4.1-2
TEMPORARY JURISDICTIONAL IMPACTS
CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION – INITIAL ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
C-SAN JUAN CREEK	Intermittent	1.58	10.52	12.10	12.74	0.00	12.74
TOTAL	**NA**	**1.58**	**10.52**	**12.10**	**12.74**	**0.00**	**12.74**

[1] These features are depicted on Exhibits 1 and 2.

4.4.2 CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION – ULTIMATE ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the CC-ALPV-Ultimate Alternative disturbance limits. Permanent impacts are summarized in Table 4.4.2-1. Temporary impacts are summarized in Table 4.4.2-2.

The CC-ALPV – Ultimate Alternative will permanently impact approximately 13.39 acres subject to Corps jurisdiction. This total consists of 12.38 acres of wetland and 1.01 acres of non-wetland waters.

The CC-ALPV – Ultimate Alternative will temporarily impact approximately 12.65 acres subject to Corps jurisdiction. This total consists of 1.65 acres of wetland and 11.00 acres of non-wetland waters.

The CC-ALPV – Ultimate Alternative will permanently impact approximately 17.51 acres subject to CDFG jurisdiction. This total consists of 16.66 acres of vegetated riparian habitat and 0.85 acre of unvegetated streambed.

The CC-ALPV – Ultimate Alternative will temporarily impact approximately 13.65 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.

There are no permanent or temporary impacts to CCC jurisdiction associated with the CC-ALPV – Ultimate Alternative.

TABLE 4.4.2-1
PERMANENT JURISDICTIONAL IMPACTS
CENTRAL CORRIDOR - AVENIDA LA PATA VARIATION – ULTIMATE ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-WETLAND 1[3]	Perennial	0.00	0.00	0.00	0.00	0.00	0.00
FE/C/7-1	Ephemeral	0.00	0.06	0.06	0.45	0.04	0.49
FE/C/7-2	Ephemeral	NA	NA	NA	0.00	0.002	0.002
CANADA CHIQUITA	Perennial	6.88	0.06	6.94	9.87	0.00	9.87
C-WETLAND 1	Slope Wetland	NA	NA	NA	NA	NA	NA
C-WETLAND 2	Slope Wetland	0.09	0.00	0.09	NA	NA	NA
C-2	Ephemeral	NA	NA	NA	0.34	0.01	0.35
C-3	Ephemeral	NA	NA	NA	0.34	0.10	0.44
C-4	Ephemeral	NA	NA	NA	0.00	0.04	0.04
C-5	Ephemeral/ Slope Wetland	0.03	0.00	0.03	0.03	0.00	0.03
C-SAN JUAN CREEK	Intermittent	0.23	0.22	0.45	0.45	0.00	0.45
C-7	Ephemeral	0.02	0.04	0.06	0.05	0.03	0.08
C-8	Ephemeral	0.00	0.13	0.13	0.00	0.13	0.13
C-9	Ephemeral	0.00	0.27	0.27	0.00	0.27	0.27
C-10	Ephemeral	0.00	0.04	0.04	0.00	0.04	0.04
C-11	Ephemeral	0.39	0.01	0.40	0.39	0.01	0.40
C-12	Ephemeral	0.14	0.18	0.32	0.14	0.18	0.32
C-13	Ephemeral	0.02	0.00	0.02	0.02	0.00	0.02
SEGUNDA DESHECHA	Perennial	4.58	0.00	4.58	4.58	0.00	4.58
TOTAL	**NA**	**12.38**	**1.01**	**13.39**	**16.66**	**0.85**	**17.51**

[1] These features are depicted on Exhibits 1 and 2.
[2] Refer to Appendix B for isolated features totals
[3] Actual grading limits impact 6.51 acres of FE/C/7-Wetland 1 – However, based upon refinements to A7C-FEC-M, FEC-W and FEC-M, it is assumed that these impacts could ultimately be avoided.

TABLE 4.4.2-2

TEMPORARY JURISDICTIONAL IMPACTS
CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION – ULTIMATE ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
C-SAN JUAN CREEK	Intermittent	1.65	11.00	12.65	13.65	0.00	13.65
TOTAL	**NA**	**1.65**	**11.00**	**12.65**	**13.65**	**0.00**	**13.65**

[1] These features are depicted on Exhibits 1 and 2.

4.5 ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION IMPACT TOTALS

Impact analysis results for both the initial and ultimate disturbance limits are described below and are summarized in Tables 4.5.1-1, 4.5.1-2, 4.5.2-1 and 4.5.2-2.

4.5.1 ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION – INITITAL ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the A7C-ALPV-Initial Alternative disturbance limits. Permanent impacts are summarized in Table 4.5.1-1. Temporary impacts are summarized in Table 4.5.1-2.

The A7C – ALPV - Initial Alternative will permanently impact approximately 2.52 acres subject to Corps jurisdiction. This total consists of 0.56 acre of wetland and 1.96 acres of non-wetland waters.

The A7C – ALPV - Initial Alternative will temporarily impact approximately 5.51 acres subject to Corps jurisdiction. This total consists of 1.91 acre of wetland and 3.60 acres of non-wetland waters.

The A7C – ALPV - Initial Alternative will permanently impact approximately 9.89 acres subject to CDFG jurisdiction. This total consists of 8.99 acres of vegetated riparian habitat and 0.90 acre of unvegetated streambed.

The A7C – ALPV - Initial Alternative will temporarily impact approximately 6.63 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.

There are no permanent or temporary impacts to CCC jurisdiction associated with the A7C - ALPV – Initial Alternative.

TABLE 4.5.1-1
PERMANENT JURISDICTIONAL IMPACTS
ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION – INITIAL ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-WETLAND 1[3]	Perennial	0.00	0.00	0.00	0.00	0.00	0.00
FE/C/7-1	Ephemeral	0.00	0.05	0.05	0.13	0.05	0.18
FE/C/7-2	Ephemeral	NA	NA	NA	0.00	0.01	0.01
FE/C/7-4	Ephemeral	NA	NA	NA	0.00	0.001	0.001
FE/7-1	Ephemeral	NA	NA	NA	2.41	0.04	2.45
FE/7-2	Intermittent	NA	NA	NA	0.38	0.02	0.40
7-1	Ephemeral	0.00	0.21	0.21	0.64	0.10	0.74
7-3	Ephemeral	0.00	0.002	0.002	0.00	0.01	0.01
7-4	Ephemeral	0.00	0.13	0.13	0.45	0.07	0.52
7-5	Ephemeral	0.00	0.02	0.02	0.26	0.00	0.26
C-5	Ephemeral/ Slope Wetland	0.00	0.09	0.09	0.78	0.00	0.78
CANADA CHIQUITA	Perennial	0.24	0.00	0.24	0.50	0.00	0.50
C-6	Ephemeral	0.00	0.06	0.06	0.25	0.00	0.25
C-SAN JUAN CREEK	Intermittent	0.08	0.00	0.08	0.08	0.00	0.08
7-SAN JUAN CREEK	Ephemeral	0.01	0.74	0.75	0.80	0.00	0.80
7-8	Ephemeral	0.00	0.04	0.04	0.36	0.01	0.37
7-9	Ephemeral	NA	NA	NA	1.27	0.02	1.29
7-10	Ephemeral	NA	NA	NA	0.04	0.03	0.07
7-13	Ephemeral	0.00	0.01	0.01	0.04	0.00	0.04
7-14	Ephemeral	0.004	0.126	0.13	0.11	0.11	0.22
7-15	Ephemeral	0.01	0.12	0.13	0.04	0.10	0.14
7-16	Ephemeral	0.00	0.13	0.13	0.23	0.11	0.34
Segunda Deshecha	Perennial	0.22	0.23	0.45	0.22	0.22	0.44
TOTAL	**NA**	**.56**	**1.96**	**2.52**	**8.99**	**.90**	**9.89**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

[3] Actual grading limits impact 2.71 acres of FE/C/7-Wetland 1 – However, based upon refinements to A7C-FEC-M, FEC-W and FEC-M, it is assumed that these impacts could ultimately be avoided.

TABLE 4.5.1-2
TEMPORARY JURISDICTIONAL IMPACTS
ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION– INITIAL ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
7-SAN JUAN CREEK	Intermittent	0.91	3.57	4.48	5.32	0.00	5.32
Canada Chiquita	Perennial	0.78	0.00	0.78	0.78	0.00	0.78
C-5	Ephemeral/ Slope Wetland	0.22	0.00	0.22	0.22	0.00	0.22
7-5	Ephemeral	0.00	0.003	0.003	0.01	0.00	0.01
7-8	Ephemeral	0.00	0.03	0.03	0.30	0.00	0.30
TOTAL	**NA**	**1.91**	**3.60**	**5.51**	**6.63**	**0.00**	**6.63**

[1] These features are depicted on Exhibits 1 and 2.

4.5.2 ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION – ULTIMATE ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the A7C-ALPV-Ultimate Alternative disturbance limits. Permanent impacts are summarized in Table 4.5.2-1. Temporary impacts are summarized in Table 4.5.2-2.

The A7C – ALPV - Ultimate Alternative will permanently impact approximately 3.34 acres subject to Corps jurisdiction. This total consists of 1.36 acres of wetland and 1.98 acres of non-wetland waters.

The A7C – ALPV - Ultimate Alternative will temporarily impact approximately 6.07 acres subject to Corps jurisdiction. This total consists of 2.47 acres of wetland and 3.60 acres of non-wetland waters.

The A7C – ALPV – Ultimate Alternative will permanently impact approximately 11.12 acres subject to CDFG jurisdiction. This total consists of 10.17 acres of vegetated riparian habitat and 0.95 acre of unvegetated streambed.

The A7C – ALPV – Ultimate Alternative will temporarily impact approximately 7.19 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.

There are no permanent or temporary impacts to CCC jurisdiction associated with the A7C - ALPV – Ultimate Alternative.

TABLE 4.5.2-1
PERMANENT JURISDICTIONAL IMPACTS
ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION – ULTIMATE ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-WETLAND 1[3]	Perennial	0.00	0.00	0.00	0.00	0.00	0.00
FE/C/7-1	Ephemeral	0.00	0.06	0.06	0.32	0.05	0.37
FE/C/7-2	Ephemeral	NA	NA	NA	0.00	0.02	0.02
FE/C/7-4	Ephemeral	NA	NA	NA	0.00	0.002	0.002
FE/7-1	Ephemeral	NA	NA	NA	2.49	0.04	2.53
FE/7-2	Intermittent	NA	NA	NA	0.42	0.01	0.43
FE-1	Ephemeral	NA	NA	NA	0.04	0.00	0.04
7-1	Ephemeral	0.00	0.23	0.23	0.65	0.11	0.76
7-3	Ephemeral	0.00	0.00	0.00	0.00	0.01	0.01
7-4	Ephemeral	0.00	0.13	0.13	0.45	0.07	0.52
7-5	Ephemeral	0.00	0.02	0.02	0.26	0.00	0.26
C-5	Ephemeral/ Slope Wetland	0.00	0.09	0.09	0.80	0.00	0.80
CANADA CHIQUITA	Perennial	0.30	0.00	0.30	0.60	0.00	0.60
C-6	Ephemeral	0.00	0.06	0.06	0.25	0.00	0.25
C-SAN JUAN CREEK	Intermittent	0.08	0.01	0.09	0.09	0.00	0.09
7-SAN JUAN CREEK	Intermittent	0.01	0.65	0.66	0.71	0.00	0.71
7-8	Ephemeral	0.00	0.06	0.06	0.37	0.00	0.37
7-9	Ephemeral	NA	NA	NA	1.27	0.02	1.29
7-10	Ephemeral	NA	NA	NA	0.04	0.03	0.07
7-13	Ephemeral	0.00	0.01	0.01	0.04	0.00	0.04
7-14	Ephemeral	0.004	0.136	0.14	0.11	0.12	0.23
7-15	Ephemeral	0.01	0.14	0.15	0.04	0.12	0.16
7-16	Ephemeral	0.00	0.14	0.14	0.26	0.11	0.37
Segunda Deshecha	Perennial	0.96	0.24	1.20	0.96	0.24	1.20
TOTAL	**NA**	**1.36**	**1.98**	**3.34**	**10.17**	**0.95**	**11.12**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

[3] Actual grading limits impact 7.33 acres of FE/C/7-Wetland 1 – However, based upon refinements to A7C-FEC-M, FEC-W and FEC-M, it is assumed that these impacts could ultimately be avoided.

TABLE 4.5.2-2
TEMPORARY JURISDICTIONAL IMPACTS
ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION – ULTIMATE ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
7-SAN JUAN CREEK	Intermittent	0.91	3.57	4.48	5.32	0.00	5.32
Canada Chiquita	Perennial	1.21	0.00	1.21	1.21	0.00	1.21
C-5	Ephemeral/ Slope Wetland	0.35	0.00	0.35	0.35	0.00	0.35
7-5	Ephemeral	0.00	0.003	0.003	0.01	0.00	0.01
7-8	Ephemeral	0.00	0.03	0.03	0.30	0.00	0.30
TOTAL	**NA**	**2.47**	**3.60**	**6.07**	**7.19**	**0.00**	**7.19**

[1] These features are depicted on Exhibits 1 and 2.

4.6 ALIGMENT 7 CORRIDOR–FAR EAST CROSSOVER – MODIFIED IMPACT TOTALS

Impact analysis results for both the initial and ultimate disturbance limits are described below and are summarized in Tables 4.6.1-1, 4.6.1-2, 4.6.2-1 and 4.6.2-2.

4.6.1 ALIGMENT 7 CORRIDOR–FAR EAST CROSSOVER - MODIFIED – INITIAL ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the A7C-FEC-M-Initial Alternative disturbance limits. Permanent impacts are summarized in Table 4.6.1-1. Temporary impacts are summarized in Table 4.6.1-2.

The A7C-FEC-M – Initial Alternative will permanently impact approximately 6.78 acres subject to Corps jurisdiction. This total consists of 0.93 acre of wetland and 5.85 acres of non-wetland waters.

The A7C-FEC-M – Initial Alternative will temporarily impact approximately 11.08 acres subject to Corps jurisdiction. This total consists of 8.51 acre of wetland and 2.57 acres of non-wetland waters.

The A7C-FEC-M – Initial Alternative will permanently impact approximately 23.83 acres subject to CDFG jurisdiction. This total consists of 21.52 acres of vegetated riparian habitat and 2.31 acres of unvegetated streambed.

The A7C-FEC-M – Initial Alternative will temporarily impact approximately 14.86 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.

The A7C-FEC-M – Initial Alternative will permanently impact approximately 0.34 acre subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

The A7C-FEC-M – Initial Alternative will temporarily impact approximately 8.22 acres subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

TABLE 4.6.1-1
PERMANENT JURISDICTIONAL IMPACTS
ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED – INITIAL ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-1	Ephemeral	0.00	0.03	0.03	0.47	0.02	0.49
FE/C/7-WETLAND 2	Slope Wetland	0.00	0.00	0.00	0.00	0.00	0.00
FE/7-1	Ephemeral	NA	NA	NA	0.00	0.04	0.04
FE/7-2	Intermittent	NA	NA	NA	0.10	0.00	0.10
7-2	Ephemeral	0.00	0.02	0.02	0.00	0.06	0.06
7-3	Ephemeral	0.00	0.59	0.59	4.34	0.13	4.47
7-6	Ephemeral	0.00	0.003	0.003	0.00	0.003	0.003
7-San Juan Creek	Intermittent	0.00	0.01	0.01	0.80	0.00	0.80
7-10	Ephemeral	0.00	0.00	0.00	0.03	0.05	0.08
7-11	Ephemeral	0.00	0.00	0.00	0.00	0.03	0.03
7-12	Ephemeral	0.00	0.04	0.04	0.55	0.00	0.55
7-13	Ephemeral	0.00	2.41	2.41	2.57	0.82	3.39
FE/7-3	Ephemeral	0.00	0.25	0.25	2.23	0.00	2.23
FE/7-4	Intermittent	0.00	0.00	0.00	0.98	0.01	0.99
FE/7-6	Ephemeral	0.00	0.12	0.12	1.02	0.05	1.07
FE/7-7	Ephemeral	0.00	0.11	0.11	1.92	0.01	1.93
FE/7-8	Ephemeral	0.00	0.19	0.19	2.34	0.08	2.42
FE/7-9	Ephemeral	0.00	0.10	0.10	0.00	0.10	0.10
FE/7-10	Ephemeral	0.00	0.05	0.05	0.17	0.04	0.21
FE/7-11	Perennial	0.12	0.37	0.49	0.76	0.00	0.76
FE/7-12	Intermittent	0.35	0.00	0.35	0.35	0.00	0.35
FE/7-12	Ephemeral	0.00	0.15	0.15	0.55	0.07	0.62
FE/7-14	Ephemeral	0.00	0.18	0.18	0.14	0.05	0.19
FE/7-VM18	Depressional Wetland	0.04	0.00	0.04	NA	NA	NA
FE/7-VM19	Depressional Wetland	0.06	0.00	0.06	NA	NA	NA
FE/7-15	Ephemeral	0.00	0.13	0.13	0.26	0.10	0.36

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/7-16	Ephemeral	0.00	0.07	0.07	0.00	0.07	0.07
FE/7-17	Ephemeral	0.00	0.11	0.11	0.00	0.11	0.11
FE/7-18	Ephemeral	0.00	0.50	0.50	0.75	0.25	1.00
FE/7-19	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-20	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-21	Ephemeral	0.00	0.07	0.07	0.52	0.00	0.52
FE/7-22	Ephemeral	0.00	0.27	0.27	0.33	0.14	0.47
FE/7-23	Ephemeral	0.00	0.002	0.002	0.00	0.002	0.002
FE/7-24	Ephemeral	0.00	0.03	0.03	0.00	0.03	0.03
FE/7-25	Ephemeral	0.00	0.02	0.02	0.00	0.02	0.02
FE/7-SAN MATEO CREEK[3]	Perennial	0.12	0.00	0.12	0.12	0.00	0.12
FE/7-SAN MATEO MARSH-EAST of I5[3]	Freshwater Forested Wetland	0.00	0.00	0.00	0.21	0.00	0.21
FE/7-VM20[3]	Depressional Wetland	0.05	0.00	0.05	NA	NA	NA
FE/7-VP3[3]	Depressional Wetland	0.18	0.00	0.18	NA	NA	NA
San Onofre Creek[3]	Perennial	0.01	0.00	0.01	0.01	0.00	0.01
TOTAL	**NA**	**0.93**	**5.85**	**6.78**	**21.52**	**2.31**	**23.83**

1 These features are depicted on Exhibits 1 and 2.

2 Refer to Appendix B for isolated features totals

3 Feature subject to CCC jurisdiction.

TABLE 4.6.1-2
TEMPORARY JURISDICTIONAL IMPACTS
ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED – INITIAL ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
7-SAN JUAN CREEK	Intermittent	0.29	2.57	2.86	6.64	0.00	6.64
SAN MATEO CREEK[2]	Perennial	7.32	0.00	7.32	7.32	0.00	7.32
San Onofre Creek[2]	Perennial	0.90	0.00	0.90	0.90	0.00	0.90
TOTAL	**NA**	**8.51**	**2.57**	**11.08**	**14.86**	**0.00**	**14.86**

[1] These features are depicted on Exhibits 1 and 2.

[2] Feature subject to CCC jurisdiction.

4.6.2 ALIGMENT 7 CORRIDOR–FAR EAST CROSSOVER - MODIFIED – ULTIMATE ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the A7C-FEC-M-Ultimate Alternative disturbance limits. Permanent impacts are summarized in Table 4.6.2-1. Temporary impacts are summarized in Table 4.6.2-2.

The A7C-FEC-M – Ultimate Alternative will permanently impact approximately 6.90 acres subject to Corps jurisdiction. This total consists of 0.93 acre of wetland and 5.97 acres of non-wetland waters.

The A7C-FEC-M – Ultimate Alternative will temporarily impact approximately 12.24 acres subject to Corps jurisdiction. This total consists of 8.77 acres of wetland and 3.47 acres of non-wetland waters.

The A7C-FEC-M – Ultimate Alternative will permanently impact approximately 24.21 acres subject to CDFG jurisdiction. This total consists of 21.93 acres of vegetated riparian habitat and 2.28 acres of unvegetated streambed.

The A7C-FEC-M – Ultimate Alternative will temporarily impact approximately 16.99 acres subject to CDFG jurisdiction all of which consists of vegetated riparian habitat.

The A7C-FEC-M – Ultimate Alternative will permanently impact approximately 0.35 acre subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

The A7C-FEC-M – Ultimate Alternative will temporarily impact approximately 8.38 acres subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

TABLE 4.6.2-1
JURISDICTIONAL IMPACTS
ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED – ULTIMATE ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-1	Ephemeral	0.00	0.03	0.03	0.47	0.02	0.49
FE/C/7-WETLAND 2	Slope Wetland	0.00	0.00	0.00	0.00	0.00	0.00
FE/7-1	Ephemeral	NA	NA	NA	0.01	0.04	0.05
FE/7-2	Intermittent	NA	NA	NA	0.11	0.00	0.11
7-2	Ephemeral	0.00	0.02	0.02	0.00	0.06	0.06
7-3	Ephemeral	0.00	0.60	0.60	4.42	0.14	4.56
7-6	Ephemeral	0.00	0.003	0.003	0.00	0.003	0.003
7-San Juan Creek	Intermittent	0.00	0.01	0.01	0.86	0.00	0.86
7-10	Ephemeral	NA	NA	NA	0.01	0.04	0.05
7-11	Ephemeral	NA	NA	NA	0.00	0.03	0.03
7-12	Ephemeral	0.00	0.04	0.04	0.52	0.00	0.52
7-13	Ephemeral	0.00	2.34	2.34	2.58	0.75	3.33
FE/7-3	Ephemeral	0.00	0.26	0.26	2.27	0.00	2.27
FE/7-4	Intermittent	NA	NA	NA	0.97	0.01	0.98
FE/7-6	Ephemeral	0.00	0.12	0.12	0.95	0.05	1.00
FE/7-7	Ephemeral	0.00	0.12	0.12	2.06	0.01	2.07
FE/7-8	Ephemeral	0.00	0.19	0.19	2.34	0.09	2.43
FE/7-9	Ephemeral	0.00	0.10	0.10	0.00	0.10	0.10
FE/7-10	Ephemeral	0.00	0.05	0.05	0.24	0.04	0.28
FE/7-11	Perennial	0.12	0.37	0.49	0.76	0.00	0.76
FE/7-12	Intermittent	0.35	0.00	0.35	0.35	0.00	0.35
FE/7-12	Ephemeral	0.00	0.27	0.27	0.59	0.08	0.67
FE/7-14	Ephemeral	0.00	0.19	0.19	0.15	0.05	0.20
FE/7-VM18	Depressional Wetland	0.04	0.00	0.04	NA	NA	NA
FE/7-VM19	Depressional Wetland	0.06	0.00	0.06	NA	NA	NA
FE/7-15	Ephemeral	0.00	0.14	0.14	0.25	0.12	0.37

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/7-16	Ephemeral	0.00	0.07	0.07	0.00	0.07	0.07
FE/7-17	Ephemeral	0.00	0.10	0.10	0.00	0.10	0.10
FE/7-18	Ephemeral	0.00	0.53	0.53	0.81	0.26	1.07
FE/7-19	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-20	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-21	Ephemeral	0.00	0.07	0.07	0.53	0.00	0.53
FE/7-22	Ephemeral	0.00	0.27	0.27	0.33	0.14	0.47
FE/7-23	Ephemeral	0.00	0.002	0.002	0.00	0.002	0.002
FE/7-24	Ephemeral	0.00	0.03	0.03	0.00	0.03	0.03
FE/7-25	Ephemeral	0.00	0.02	0.02	0.00	0.02	0.02
FE/7-SAN MATEO CREEK[3]	Perennial	0.12	0.00	0.12	0.12	0.00	0.12
FE/7-SAN MATEO MARSH-EAST of I5[3]	Palustrine Forested Wetland	0.00	0.00	0.00	0.22	0.00	0.22
FE/7-VM20[3]	Depressional Wetland	0.05	0.00	0.05	NA	NA	NA
FE/7-VP3[3]	Depressional Wetland	0.18	0.00	0.18	NA	NA	NA
San Onofre Creek[3]	Perennial	0.01	0.00	0.01	0.01	0.00	0.01
TOTAL	**NA**	**0.93**	**5.97**	**6.90**	**21.93**	**2.28**	**24.21**

1 These features are depicted on Exhibits 1 and 2.

2 Refer to Appendix B for isolated features totals

3 Feature subject to CCC jurisdiction.

TABLE 4.6.2-2
TEMPORARY JURISDICTIONAL IMPACTS
ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED – ULTIMATE ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
7-SAN JUAN CREEK	Intermittent	0.39	3.47	3.86	8.61	0.00	8.61
FE/7 SAN MATEO CREEK[2]	Perennial	7.48	0.00	7.48	7.48	0.00	7.48
San Onofre Creek[2]	Perennial	0.90	0.00	0.90	0.90	0.00	0.90
TOTAL	**NA**	**8.77**	**3.47**	**12.24**	**16.99**	**0.00**	**16.99**

[1] These features are depicted on Exhibits 1 and 2.
[2] Feature subject to CCC jurisdiction.

4.7 FAR EAST CORRIDOR – WEST IMPACT TOTALS

Impact analysis results for both the initial and ultimate disturbance limits are described below and are summarized in Tables 4.7.1-1, 4.7.1-2, 4.7.2-1, and 4.7.2-2

4.7.1 FAR EAST CORRIDOR – WEST– INITIAL ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the FEC-W-Initial Alternative disturbance limits. Permanent impacts are summarized in Table 4.7.1-1. Temporary impacts are summarized in Table 4.7.1-2.

The FEC-W – Initial Alternative will permanently impact approximately 6.69 acres subject to Corps jurisdiction. This total consists of 2.62 acres consist of wetland and 4.07 acres of non-wetland waters.

The FEC-W – Initial Alternative will temporarily impact approximately 9.15 acres subject to Corps jurisdiction. This total consists of 8.62 acres consist of wetland and 0.53 acre of non-wetland waters.

The FEC-W – Initial Alternative will permanently impact approximately 25.45 acres subject to CDFG jurisdiction. This total consists of 21.13 acres consist of vegetated riparian habitat and 2.32 acres of unvegetated streambed.

The FEC-W – Initial Alternative will temporarily impact approximately 11.23 acres subject to CDFG jurisdiction. This total consists of 11.22 acres consist of vegetated riparian habitat and 0.01 acre of unvegetated streambed.

The FEC-W – Initial Alternative will permanently impact approximately 0.34 acre subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

The FEC-W – Initial Alternative will temporarily impact approximately 8.22 acres subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

TABLE 4.7.1-1
PERMANENT JURISDICTIONAL IMPACTS
FAR EAST CORRIDOR – WEST – INITIAL ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-1	Ephemeral	0.00	0.03	0.03	0.47	0.02	0.49
FE/C/7-WETLAND 2	Slope Wetland	0.00	0.00	0.00	0.00	0.00	0.00
FE/7-1	Ephemeral	NA	NA	NA	1.47	0.04	1.51
FE/7-2	Intermittent	NA	NA	NA	0.29	0.02	0.31
FE-1	Ephemeral	NA	NA	NA	0.48	0.00	0.48
FE-2A	Ephemeral	NA	NA	NA	0.00	0.02	0.02
FE-2B	Ephemeral	0.00	0.06	0.06	0.00	0.06	0.06
FE-3	Intermittent	0.00	0.00	0.00	0.33	0.00	0.33
FE-5	Intermittent	0.04	0.07	0.11	1.14	0.00	1.14
FE-6	Ephemeral	NA	NA	NA	0.40	0.01	0.41
FE-7	Ephemeral	0.00	0.26	0.26	0.24	0.02	0.26
FE-7	Intermittent	1.07	0.00	1.07	4.79	0.00	4.79
FE-7	Open Water	0.58	0.94	1.52	0.58	0.94	1.52
FEW-San Juan Creek	Intermittent	0.00	0.003	0.003	0.02	0.00	0.02
FEW-2	Ephemeral	0.00	0.07	0.07	0.48	0.03	0.51
FE/7-3	Ephemeral	0.00	0.16	0.16	2.70	0.00	2.70
FE/7-4	Ephemeral	0.00	0.00	0.00	0.33	0.04	0.37
FE/7-6	Ephemeral	0.00	0.10	0.10	0.98	0.03	1.01
FE/7-7	Ephemeral	0.00	0.11	0.11	1.92	0.01	1.93
FE/7-8	Ephemeral	0.00	0.19	0.19	2.34	0.08	2.42
FE/7-9	Ephemeral	0.00	0.10	0.10	0.00	0.10	0.10
FE/7-10	Ephemeral	0.00	0.05	0.05	0.17	0.04	0.21
FE/7-11	Perennial	0.12	0.37	0.49	0.76	0.00	0.76
FE/7-12	Intermittent	0.35	0.00	0.35	0.35	0.00	0.35
FE/7-12	Ephemeral	0.00	0.15	0.15	0.55	0.07	0.62
FE/7-14	Ephemeral	0.00	0.18	0.18	0.14	0.05	0.19
FE/7-VM18	Depressional Wetland	0.04	0.00	0.04	NA	NA	NA
FE/7-VM19	Depressional	0.06		0.06	NA		NA

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
	Wetland		0.00			NA	
FE/7-15	Ephemeral	0.00	0.13	0.13	0.26	0.10	0.36
FE/7-16	Ephemeral	0.00	0.07	0.07	0.00	0.07	0.07
FE/7-17	Ephemeral	0.00	0.11	0.11	0.00	0.11	0.11
FE/7-18	Ephemeral	0.00	0.50	0.50	0.75	0.25	1.00
FE/7-19	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-20	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-21	Ephemeral	0.00	0.07	0.07	0.52	0.00	0.52
FE/7-22	Ephemeral	0.00	0.27	0.27	0.33	0.14	0.47
FE/7-23	Ephemeral	0.00	0.002	0.002	0.00	0.002	0.002
FE/7-24	Ephemeral	0.00	0.03	0.03	0.00	0.03	0.03
FE/7-25	Ephemeral	0.00	0.02	0.02	0.00	0.02	0.02
FE/7-SAN MATEO CREEK[3]	Perennial	0.12	0.00	0.12	0.12	0.00	0.12
FE/7-SAN MATEO MARSH-EAST of I5[3]	Palustrine Forested Wetland	0.00	0.00	0.00	0.21	0.00	0.21
FE/7-VM20[3]	Depressional Wetland	0.05	0.00	0.05	NA	NA	NA
FE/7-VP3[3]	Depressional Wetland	0.18	0.00	0.18	NA	NA	NA
San Onofre Creek[3]	Perennial	0.01	0.00	0.01	0.01	0.00	0.01
TOTAL	**NA**	**2.62**	**4.07**	**6.69**	**23.13**	**2.32**	**25.45**

1 These features are depicted on Exhibits 1 and 2.

2 Refer to Appendix B for isolated features totals.

3 Feature subject to CCC jurisdiction.

TABLE 4.7.1-2
TEMPORARY JURISDICTIONAL IMPACTS
FAR EAST COORIDOR - WEST – INITIAL ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE-3 (Canada Gobernadora)	Intermittent	0.12	0.00	0.12	0.64	0.00	0.64
FEW-SAN JUAN CREEK	Intermittent	0.28	0.52	0.80	2.36	0.00	2.36
FEW-2	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
SAN MATEO CREEK[2]	Perennial	7.32	0.00	7.32	7.32	0.00	7.32
San Onofre Creek[2]	Perennial	0.90	0.00	0.90	0.90	0.00	0.90
TOTAL	**NA**	**8.62**	**0.53**	**9.15**	**11.22**	**0.01**	**11.23**

[1] These features are depicted on Exhibits 1 and 2.
[2] Feature subject to CCC jurisdiction.

4.7.2 FAR EAST CORRIDOR – WEST– ULTIMATE ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the FEC-W-Ultimate Alternative disturbance limits. Permanent impacts are summarized in Table 4.7.2-1. Temporary impacts are summarized in Table 4.7.2-2.

The FEC-W – Ultimate Alternative will permanently impact approximately 6.96 acres subject to Corps jurisdiction. This total consists of 2.64 acres consist of wetland and 4.32 acres of non-wetland waters.

The FEC-W – Ultimate Alternative will temporarily impact approximately 9.35 acres subject to Corps jurisdiction. This total consists of 8.71 acres consist of wetland and 0.64 acre of non-wetland waters.

The FEC-W – Ultimate Alternative will permanently impact approximately 26.31 acres subject to CDFG jurisdiction. This total consists of 23.92 acres consist of vegetated riparian habitat and 2.39 acres of unvegetated streambed.

The FEC-W – Ultimate Alternative will temporarily impact approximately 11.80 acres subject to CDFG jurisdiction. This total consists of 11.79 acres consist of vegetated riparian habitat and 0.01 acre of unvegetated streambed.

The FEC-W – Ultimate Alternative will permanently impact approximately 0.35 acre subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

The FEC-W – Ultimate Alternative will temporarily impact approximately 8.38 acres subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

TABLE 4.7.2-1
PERMANENT JURISDICTIONAL IMPACTS
FAR EAST CORRIDOR – WEST – ULTIMATE ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-1	Ephemeral	0.00	0.03	0.03	0.47	0.02	0.49
FE/C/7-WETLAND 2	Slope Wetland	NA	NA	NA	NA	NA	NA
FE/7-1	Ephemeral	NA	NA	NA	1.56	0.04	1.60
FE/7-2	Intermittent	NA	NA	NA	0.29	0.02	0.31
FE-1	Ephemeral	NA	NA	NA	0.48	0.00	0.48
FE-2A	Ephemeral	NA	NA	NA	0.00	0.02	0.02
FE-2B	Ephemeral	0.00	0.07	0.07	0.00	0.07	0.07
FE-3	Intermittent	0.03	0.00	0.03	0.58	0.00	0.58
FE-5	Intermittent	0.03	0.07	0.10	1.13	0.00	1.13
FE-6	Ephemeral	NA	NA	NA	0.40	0.01	0.41
FE-7	Ephemeral	0.00	0.26	0.26	0.24	0.02	0.26
FE-7	Intermittent	1.07	0.00	1.07	4.79	0.00	4.79
FE-7	Open Water	0.58	0.94	1.52	0.58	0.94	1.52
FEW-2	Ephemeral	0.00	0.07	0.07	0.52	0.03	0.55
FEW- SAN JUAN CREEK	Intermittent	0.00	0.03	0.03	0.05	0.00	0.05
FE/7-3	Ephemeral	0.00	0.18	0.18	2.72	0.01	2.73
FE/7-4	Ephemeral	0.00	0.00	0.00	0.33	0.04	0.37
FE/7-6	Ephemeral	0.00	0.11	0.11	0.98	0.03	1.01
FE/7-7	Ephemeral	0.00	0.13	0.13	2.10	0.01	2.11
FE/7-8	Ephemeral	0.00	0.19	0.19	2.34	0.09	2.43
FE/7-9	Ephemeral	0.00	0.10	0.10	0.00	0.10	0.10
FE/7-10	Ephemeral	0.00	0.05	0.05	0.24	0.04	0.28
FE/7-11	Perennial	0.12	0.37	0.49	0.76	0.00	0.76
FE/7-12	Intermittent	0.35	0.00	0.35	0.35	0.00	0.35
FE/7-12	Ephemeral	0.00	0.27	0.27	0.59	0.08	0.67
FE/7-14	Ephemeral	0.00	0.19	0.19	0.15	0.05	0.20
FE/7-VM18	Depressional Wetland	0.04	0.00	0.04	NA	NA	NA
FE/7-VM19	Depressional	0.06		0.06	NA		NA

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
	Wetland		0.00			NA	
FE/7-15	Ephemeral	0.00	0.14	0.14	0.25	0.12	0.37
FE/7-16	Ephemeral	0.00	0.07	0.07	0.00	0.07	0.07
FE/7-17	Ephemeral	0.00	0.10	0.10	0.00	0.10	0.10
FE/7-18	Ephemeral	0.00	0.53	0.53	0.81	0.26	1.07
FE/7-19	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-20	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-21	Ephemeral	0.00	0.07	0.07	0.52	0.00	0.52
FE/7-22	Ephemeral	0.00	0.28	0.28	0.34	0.15	0.49
FE/7-23	Ephemeral	0.00	0.002	0.002	0.00	0.002	0.002
FE/7-24	Ephemeral	0.00	0.03	0.03	0.00	0.03	0.03
FE/7-25	Ephemeral	0.00	0.02	0.02	0.00	0.02	0.02
FE/7-SAN MATEO CREEK[3]	Perennial	0.12	0.00	0.12	0.12	0.00	0.12
FE/7-SAN MATEO MARSH-EAST of I5[3]	Freshwater Forested Wetland	0.00	0.00	0.00	0.22	0.00	0.22
FE/7-VM20[3]	Depressional Wetland	0.05	0.00	0.05	NA	NA	NA
FE/7-VP3[3]	Depressional Wetland	0.18	0.00	0.18	NA	NA	NA
San Onofre Creek[3]	Perennial	0.01	0.00	0.01	0.01	0.00	0.01
TOTAL	**NA**	**2.64**	**4.32**	**6.96**	**23.92**	**2.39**	**26.31**

1 These features are depicted on Exhibits 1 and 2.

2 Refer to Appendix B for isolated features totals

3 Feature subject to CCC jurisdiction.

TABLE 4.7.2-2
TEMPORARY JURISDICTIONAL IMPACTS
FAR EAST CORRIDOR – WEST – ULTIMATE ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE-3 (Canada Gobernadora)	Intermittent	0.14	0.00	0.14	0.68	0.00	0.68
FEW-SAN JUAN CREEK	Intermittent	0.35	0.63	0.98	2.89	0.00	2.89
FEW-2	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
SAN MATEO CREEK[2]	Perennial	7.32	0.00	7.32	7.32	0.00	7.32
San Onofre Creek[2]	Perennial	0.90	0.00	0.90	0.90	0.00	0.90
TOTAL	**NA**	**8.71**	**0.64**	**9.35**	**11.79**	**0.01**	**11.80**

[1] These features are depicted on Exhibits 1 and 2.
[2] Feature subject to CCC jurisdiction.

4.8 FAR EAST CORRIDOR – MODIFIED IMPACT TOTALS

Impact analysis results for both the initial and ultimate disturbance limits are described below and are summarized in Tables 4.8.1-1, 4.8.1-2, 4.8.2-1, and 4.8.2-2

4.8.1 FAR EAST CORRIDOR – MODIFIED – INITIAL ALTERNATIVE IMPACT TOTALS

The following impacts are based upon the FEC-M-Initial Alternative disturbance limits. Permanent impacts are summarized in Table 4.8.1-1. Temporary impacts are summarized in Table 4.8.1-2.

The FEC-M – Initial Alternative will permanently impact approximately 5.44 acres subject to Corps jurisdiction. This total consists of 1.71 acres consist of wetland and 3.73 acres of non-wetland waters.

The FEC-M – Initial Alternative will temporarily impact approximately 11.31 acres subject to Corps jurisdiction. This total consists of 8.98 acres consist of wetland and 2.33 acres of non-wetland waters.

The FEC-M – Initial Alternative will permanently impact approximately 18.67 acres subject to CDFG jurisdiction. This total consists of 16.88 acres consist of vegetated riparian habitat and 1.79 acres of unvegetated streambed.

The FEC-M – Initial Alternative will temporarily impact approximately 13.28 acres subject to CDFG jurisdiction. This total consists of 13.27 acres consist of vegetated riparian habitat and 0.01 acre of unvegetated streambed.

The FEC-M – Initial Alternative will permanently impact approximately 0.34 acre subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

The FEC-M – Initial Alternative will temporarily impact approximately 8.22 acres subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

TABLE 4.8.1-1
PERMANENT JURISDICTIONAL IMPACTS
FAR EAST CORRIDOR – MODIFIED – INITIAL ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-1	Ephemeral	0.00	0.03	0.03	0.47	0.02	0.49
FE/C/7-WETLAND 2	Slope Wetland	NA	NA	NA	NA	NA	NA
FE/7-1	Ephemeral	NA	NA	NA	1.47	0.04	1.51
FE/7-2	Intermittent	NA	NA	NA	0.29	0.02	0.31
FE-1	Ephemeral	NA	NA	NA	0.48	0.00	0.48
FE-2A	Ephemeral	NA	NA	NA	0.00	0.02	0.02
FE-2B	Ephemeral	0.00	0.06	0.06	0.00	0.06	0.06
FE-3	Intermittent	0.00	0.00	0.00	0.33	0.00	0.33
FE-5	Ephemeral	0.00	0.06	0.06	0.86	0.00	0.86
FE-6	Ephemeral	NA	NA	NA	0.30	0.02	0.32
FE-7	Intermittent	0.24	0.00	0.24	1.15	0.00	1.15
FE-7	Ephemeral	0.00	0.09	0.09	0.00	0.05	0.05
FEM-1	Ephemeral	0.08	0.42	0.50	1.12	0.06	1.18
FEM-3	Ephemeral	0.00	0.00	0.00	0.52	0.02	0.54
FEM-5	Ephemeral	0.00	0.001	0.001	0.00	0.001	0.001
FEM-6	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FEM-8	Ephemeral	0.00	0.004	0.004	0.00	0.004	0.004
FEM-VM11	Depressional Wetland	0.03	0.00	0.03	NA	NA	NA
FEM-VP2	Depressional Wetland	0.15	0.00	0.15	NA	NA	NA
FEM-San Juan Creek	Intermittent	0.00	0.01	0.01	0.01	0.00	0.01
FEM-10	Ephemeral	0.00	0.30	0.30	3.25	0.03	3.28
FEM-10	Open Water	0.22	0.00	0.22	0.22	0.00	0.22
FEM-11	Ephemeral	0.00	0.17	0.17	0.97	0.07	1.04
FEM-12	Ephemeral	0.00	0.09	0.09	0.05	0.05	0.10
FEM-13	Ephemeral	0.001	0.139	0.14	0.001	0.139	0.14
FEM-14	Ephemeral	0.00	0.05	0.05	0.00	0.05	0.05
FEM-15	Ephemeral	0.00	0.15	0.15	0.00	0.15	0.15

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FEM-16	Ephemeral	0.00	0.05	0.05	0.53	0.00	0.53
FE/7-7	Intermittent	0.06	0.04	0.10	0.59	0.00	0.59
FE/7-8	Ephemeral	0.00	0.04	0.04	0.27	0.02	0.29
FE/7-8A	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-9	Ephemeral	0.00	0.05	0.05	0.00	0.05	0.05
FE/7-10	Ephemeral	0.00	0.03	0.03	0.00	0.03	0.03
FE/7-11	Perennial	0.12	0.37	0.49	0.76	0.00	0.76
FE/7-12	Intermittent	0.35	0.00	0.35	0.35	0.00	0.35
FE/7-12	Ephemeral	0.00	0.15	0.15	0.55	0.07	0.62
FE/7-14	Ephemeral	0.00	0.18	0.18	0.14	0.05	0.19
FE/7-VM18	Depressional Wetland	0.04	0.00	0.04	NA	NA	NA
FE/7-VM19	Depressional Wetland	0.06	0.00	0.06	NA	NA	NA
FE/7-15	Ephemeral	0.00	0.13	0.13	0.26	0.10	0.36
FE/7-16	Ephemeral	0.00	0.07	0.07	0.00	0.07	0.07
FE/7-17	Ephemeral	0.00	0.11	0.11	0.00	0.11	0.11
FE/7-18	Ephemeral	0.00	0.50	0.50	0.75	0.25	1.00
FE/7-19	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-20	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-21	Ephemeral	0.00	0.07	0.07	0.52	0.00	0.52
FE/7-22	Ephemeral	0.00	0.27	0.27	0.33	0.14	0.47
FE/7-23	Ephemeral	0.00	0.002	0.002	0.00	0.002	0.002
FE/7-24	Ephemeral	0.00	0.03	0.03	0.00	0.03	0.03
FE/7-25	Ephemeral	0.00	0.02	0.02	0.00	0.02	0.02
FE/7-SAN MATEO CREEK[3]	Perennial	0.12	0.00	0.12	0.12	0.00	0.12
FE/7-SAN MATEO MARSH-EAST of I5[3]	Freshwater Forested Wetland	0.00	0.00	0.00	0.21	0.00	0.21
FE/7-VM20[3]	Depressional Wetland	0.05	0.00	0.05	NA	NA	NA

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/7-VP3[3]	Depressional Wetland	0.18	0.00	0.18	NA	NA	NA
San Onofre Creek[3]	Perennial	0.01	0.00	0.01	0.01	0.00	0.01
TOTAL	**NA**	**1.71**	**3.73**	**5.44**	**16.88**	**1.79**	**18.67**

1 These features are depicted on Exhibits 1 and 2.

2 Refer to Appendix B for isolated features totals

3 Feature subject to CCC jurisdiction.

TABLE 4.8.1-2
TEMPORARY JURISDICTIONAL IMPACTS
FAR EAST CORRIDOR - MODIFIED – INITIAL ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE-3 (Canada Gobernadora)	Intermittent	0.12	0.00	0.12	0.64	0.00	0.64
FEM-SAN JUAN CREEK	Intermittent	0.29	2.27	2.56	2.56	0.00	2.56
FEM-Wetland 3	Depressional Wetland	0.07	0.00	0.07	0.07	0.00	0.07
FEM-6	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FEM-7	Ephemeral	0.00	0.01	0.01	0.02	0.00	0.02
Cristianitos	Intermittent	0.28	0.04	0.32	1.76	0.00	1.76
SAN MATEO CREEK[2]	Perennial	7.32	0.00	7.32	7.32	0.00	7.32
San Onofre Creek[2]	Perennial	0.90	0.00	0.90	0.90	0.00	0.90
TOTAL	**NA**	**8.98**	**2.33**	**11.31**	**13.27**	**0.01**	**13.28**

1 These features are depicted on Exhibits 1 and 2.

2 Feature subject to CCC jurisdiction.

4.8.2 FAR EAST CORRIDOR – MODIFIED – ULTIMATE ALTERNATIVE IMPACT

TOTALS

The following impacts are based upon the FEC-M-Ultimate Alternative disturbance limits. Permanent impacts are summarized in Table 4.8.2-1. Temporary impacts are summarized in Table 4.8.2-2.

The FEC-M – Ultimate Alternative will permanently impact approximately 6.02 acres subject to Corps jurisdiction. This total consists of 1.99 acres consist of wetland and 4.04 acres of non-wetland waters.

The FEC-M – Ultimate Alternative will temporarily impact approximately 12.06 acres subject to Corps jurisdiction. This total consists of 9.11 acres consist of wetland and 2.95 acres of non-wetland waters.

The FEC-M – Ultimate Alternative will permanently impact approximately 19.90 acres subject to CDFG jurisdiction. This total consists of 17.95 acres consist of vegetated riparian habitat and 1.95 acres of unvegetated streambed.

The FEC-M – Ultimate Alternative will temporarily impact approximately 14.35 acres subject to CDFG jurisdiction. This total consists of 14.34 acres consist of vegetated riparian habitat and 0.01 acres of unvegetated streambed.

The FEC-M – Ultimate Alternative will permanently impact approximately 0.35 acre subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

The FEC-M – Ultimate Alternative will temporarily impact approximately 8.38 acres subject to CCC jurisdiction. This total all consists of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

TABLE 4.8.2-1
PERMANENT JURISDICTIONAL IMPACTS
FAR EAST CORRIDOR – MODIFIED – UTLIMATE ALTERNATIVE
(in acres)

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/C/7-1	Ephemeral	0.00	0.03	0.03	0.47	0.02	0.49
FE/C/7-WETLAND 2	Slope Wetland	NA	NA	NA	NA	NA	NA
FE/7-1	Ephemeral	NA	NA	NA	1.56	0.04	1.60
FE/7-2	Intermittent	NA	NA	NA	0.29	0.02	0.31
FE-1	Ephemeral	NA	NA	NA	0.48	0.00	0.48
FE-2A	Ephemeral	NA	NA	NA	0.00	0.02	0.02
FE-2B	Ephemeral	0.00	0.07	0.07	0.00	0.07	0.07
FE-3	Intermittent	0.03	0.00	0.03	0.59	0.00	0.59
FE-5	Ephemeral	0.002	0.058	0.06	0.86	0.00	0.86
FE-6	Ephemeral	NA	NA	NA	0.36	0.02	0.38
FE-7	Intermittent	0.25	0.11	0.36	1.26	0.07	1.33
FEM-1	Ephemeral	0.08	0.45	0.53	1.15	0.08	1.23
FEM-3	Ephemeral	NA	NA	NA	0.69	0.02	0.71
FEM-5	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FEM-6	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FEM-8	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FEM-VM10	Depressional Wetland	0.04	0.00	0.04	NA	NA	NA
FEM-VM11	Depressional Wetland	0.04	0.00	0.04	NA	NA	NA
FEM-VM12	Depressional Wetland	0.03	0.00	0.03	NA	NA	NA
FEM-VP2	Depressional Wetland	0.18	0.00	0.18	NA	NA	NA
FEM-San Juan Creek	Intermittent	0.00	0.01	0.01	0.01	0.00	0.01
FEM-10	Ephemeral	0.34	0.00	0.34	0.34	0.00	0.34
FEM-10	Open Water	0.00	0.31	0.31	3.31	0.04	3.35
FEM-11	Ephemeral	0.00	0.18	0.18	0.96	0.09	1.05
FEM-12	Ephemeral	0.00	0.10	0.10	0.05	0.06	0.11

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FEM-13	Ephemeral	0.004	0.146	0.15	0.004	0.146	0.15
FEM-14	Ephemeral	0.00	0.05	0.05	0.00	0.05	0.05
FEM-15	Ephemeral	0.00	0.16	0.16	0.00	0.16	0.16
FEM-16	Ephemeral	0.00	0.05	0.05	0.56	0.00	0.56
FE/7-7	Intermittent	0.06	0.05	0.11	0.63	0.00	0.63
FE/7-8	Ephemeral	0.00	0.05	0.05	0.27	0.02	0.29
FE/7-8A	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-9	Ephemeral	0.00	0.06	0.06	0.00	0.06	0.06
FE/7-10	Ephemeral	0.00	0.03	0.03	0.00	0.03	0.03
FE/7-11	Perennial	0.12	0.37	0.49	0.76	0.00	0.76
FE/7-12	Intermittent	0.35	0.00	0.35	0.35	0.00	0.35
FE/7-12	Ephemeral	0.00	0.27	0.27	0.59	0.08	0.67
FE/7-14	Ephemeral	0.00	0.19	0.19	0.15	0.05	0.20
FE/7-VM18	Depressional Wetland	0.04	0.00	0.04	NA	NA	NA
FE/7-VM19	Depressional Wetland	0.06	0.00	0.06	NA	NA	NA
FE/7-15	Ephemeral	0.00	0.14	0.14	0.25	0.12	0.37
FE/7-16	Ephemeral	0.00	0.07	0.07	0.00	0.07	0.07
FE/7-17	Ephemeral	0.00	0.10	0.10	0.00	0.10	0.10
FE/7-18	Ephemeral	0.00	0.53	0.53	0.81	0.26	1.07
FE/7-19	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-20	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FE/7-21	Ephemeral	0.00	0.07	0.07	0.53	0.00	0.53
FE/7-22	Ephemeral	0.00	0.27	0.27	0.33	0.14	0.47
FE/7-23	Ephemeral	0.00	0.002	0.002	0.00	0.002	0.002
FE/7-24	Ephemeral	0.00	0.03	0.03	0.00	0.03	0.03
FE/7-25	Ephemeral	0.00	0.02	0.02	0.00	0.02	0.02
FE/7-SAN MATEO CREEK[3]	Perennial	0.12	0.00	0.12	0.12	0.00	0.12
FE/7-San Mateo Marsh East I5[3]	Freshwater Forested Wetland	0.00	0.00	0.00	0.21	0.00	0.21
FE/7-VM20[3]	Depressional Wetland	0.05	0.00	0.05	NA	NA	NA

		Corps[2]			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE/7-VP3[3]	Depressional Wetland	0.18	0.00	0.18	NA	NA	NA
San Onofre Creek[3]	Perennial	0.01	0.00	0.01	0.01	0.00	0.01
TOTAL	**NA**	**1.99**	**4.04**	**6.02**	**17.95**	**1.945**	**19.90**

1 These features are depicted on Exhibits 1 and 2.

2 Refer to Appendix B for isolated features totals

3 Feature subject to CCC jurisdiction.

TABLE 4.8.2-2
TEMPORARY JURISDICTIONAL IMPACTS
FAR EAST CORRIDOR – MODIFIED - ULTIMATE ALTERNATIVE
(in acres)

		Corps			CDFG		
Jurisdictional Feature[1]	**Resource Type**	**Wetlands**	**Non-wetland Waters**	**Total**	**Vegetated**	**Unvegetated Streambed**	**Total**
FE-3 (Canada Gobernadora)	Intermittent	0.14	0.00	0.14	0.68	0.00	0.68
FEM-SAN JUAN CREEK	Intermittent	0.37	2.90	3.27	3.27	0.00	3.27
FEM-Wetland 3	Depressional Wetland	0.07	0.00	0.07	0.07	0.00	0.07
FEM-6	Ephemeral	0.00	0.01	0.01	0.00	0.01	0.01
FEM-7	Ephemeral	0.00	0.01	0.01	0.02	0.00	0.02
Cristianitos	Intermittent	0.31	0.03	0.34	2.08	0.00	2.08
SAN MATEO CREEK[2]	Perennial	7.32	0.00	7.32	7.32	0.00	7.32
San Onofre Creek[2]	Perennial	0.90	0.00	0.90	0.90	0.00	0.90
TOTAL	**NA**	**9.11**	**2.95**	**12.06**	**14.34**	**0.01**	**14.35**

1 These features are depicted on Exhibits 1 and 2.
2 Feature subject to CCC jurisdiction.

5.0 DISCUSSION

The impacts described in Section 4.0 require authorization from the Corps, CDFG, and CCC as described below. The scope of RWQCB jurisdiction, beyond the CWA Section 404, is not settled.

5.1 CORPS REGULATIONS AND PROCEDURES

The discharge of dredged or fill material (temporarily or permanently) into waters of the United States requires prior authorization from the Corps pursuant to Section 404 of the Clean Water Act. Activities that usually involve a regulated discharge of dredged or fill materials include (but are not limited to) grading, placing of riprap for erosion control, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments[1]), stockpiling excavated material, mechanized removal of vegetation, and driving of piles for certain types of structures. Activities that do not involve a regulated discharge (if performed in a manner to avoid discharges) include excavation, placing a structure, driving pilings (for transportation structures), clearing of vegetation using hand held equipment and working above the ground surface, pumping water, and walking or driving vehicles.

Federal law recognizes wetlands and other waters of the United States as valuable natural resources. Therefore, federal agencies, principally the Corps, USFWS, and EPA strongly discourage activities within federal jurisdiction that alter aquatic habitats.

5.1.1 INDIVIDUAL SECTION 404 PERMITS

The Corps can only issue a permit for the discharge of dredged or fill material into waters of the United States for the Least Environmentally Damaging Practicable Alternative (LEDPA). A project alternative is considered practicable if: 1) it may be feasibly implemented after considering project cost and logistics; and 2) it fulfills the project purpose and need. The Corps cannot authorize a project alternative if there is another practicable alternative that would result in less impact to the aquatic environment, unless the alternative would have other significant adverse environmental consequences. A determination as to which alignment represents the LEDPA is to be determined through the NEPA/404 Integration Process.

[1] Similar planting activities associated with on-going farming operations may be exempt from regulation by Section 404(f) of the Clean Water Act.

5.2 CDFG REGULATIONS AND PROCEDURES

Unlike the Corps, CDFG regulates not only the discharge of dredged or fill material, but all activities that alter streams and lakes and their associated habitat. CDFG has no abbreviated permitting process comparable to the Corps nationwide permits. A CDFG 1602 Streambed Alteration Agreement is required for all activities resulting in impacts to streambeds and their associated riparian habitats.

A 1602 notification (application) will not be accepted by the CDFG until after an Environmental Impact Report (EIR) or Negative Declaration has been certified. CDFG generally requires that any impacts to streambeds and adjacent riparian habitats be fully mitigated. A mitigation plan should be submitted with the notification package.

5.3 CALIFORNIA COASTAL COMMISSION JURISDICTION

Potential CCC jurisdiction at the site may include all areas that are permanently or periodically inundated or saturated close to the soil surface occurring within the coastal zone. In addition, the CCC will consider indirect impacts due to shading where such impacts affect portions of wetlands or riparian habitat. Portions of San Mateo Creek, San Mateo Marsh east of Interstate-5, and San Onofre Creek as well as several ponding features that will not be impacted are located within the Coastal Zone. Approximately 0.92 acre of San Onofre Creek, 0.22 acre of San Mateo Marsh east of Interstate-5 and 7.56 acres of San Mateo Creek fall within the disturbance limits of the A7C-FEC-M, FEC-M and FEC-W Alternatives resulting in 8.71 acres of impact to CCC wetlands. Approximately 0.02 acre of San Mateo Creek falls within the disturbance limits of the CC Initial Alternative. FHWA will prepare a Federal Consistency determination to comply with the requirement that "each Federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs." [Section 307(c)].

5.4 ISOLATED AQUATIC FEATURES

Pursuant to the *SWANCC* decision, the following aquatic features are not subject to Corps jurisdiction: C-Wetland 1, C-2, C-3, C-4, FE/C/7-2, FE/C/7-3, FE/C/7-4, FE/7-1, FE/7-2, FE-1, 7-3, 7-9, 7-10, 7-11, FE/C/7-Wetland 2, FE/7-4, FEM-Pond 1, FEM-VM 7, FEM-VM 8, FEM-3, FEM-2, FEW-1, FE-6, FE-4, C-Pond 1, FE-Wetland 1, FE-2A, FE-Pond 1, and portions of 7-2, 7-3, 7-13, FE/7-3, and FEM-17. For those waters determined to be within CWA jurisdiction, 401 certification will be required from the Regional Board as part of the 404 permit process. Jurisdiction over isolated features has not been determined

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APPENDIX A

I. SUMMARY OF JURISDICTIONAL TOTALS FOR CORRIDOR STUDY AREAS

Jurisdictional totals for the study areas, which extend from 200 to 1000 feet beyond the disturbance limits of each alignment, are included in Appendix A along with detailed drainage descriptions. Jurisdictional totals strictly represent the surface area of each feature and do not include an assessment of the relative quality of each feature. It should be noted that many of the alternatives share common segments and, thus, have identical impacts along these shared segments. It is important, therefore, to recognize that areas of jurisdictional impact identified along one alternative may be common to multiple alternatives. In addition, the Corps, CDFG, and CCC regulate many of the same features, therefore, jurisdictional impact totals for the various agencies do overlap and should not be considered mutually exclusive.
The drainage descriptions below will only include a description of the applicable jurisdiction(s). Table A-1 provides a summary of the total area subject to regulation by Corps and CDFG located within the study areas. Table A-2 provides a summary of the total area subject to regulation by CCC within the study areas.

TABLE A-1
SUMMARY OF JURISDICTIONAL TOTALS FOR CORRIDOR STUDY AREAS
(in acres)

	CORPS		CDFG	
Alignment	**Total**	**Wetlands**	**Total**	**Vegetated**
CC	113.64	55.41	158.51	156.04
CC-ALPV	113.43	55.41	158.30	156.04
A7C-ALPV	165.64	71.59	247.07	242.37
A7C-FEC-M	207.96	133.28	309.07	300.21
FEC-W	178.25	109.81	315.90	307.86
FEC-M	212.18	138.28	341.15	332.68

TABLE A-2
SUMMARY OF CCC JURISDICTION FOR CORRIDOR STUDY AREAS
(in acres)

Feature	Total
SAN MATEO CREEK	17.44
SAN MATEO MARSH/EAST OF I-5	23.51
SAN MATEO MARSH/WEST OF I-5	68.55
FE/7-VP3	0.18
FE/7-VP4	0.03
FE/7-VM20	0.05
SAN ONOFRE CREEK WETLAND COMPLEX	5.30
TOTAL	**115.06**

A. TOTAL ARMY CORPS OF ENGINEERS JURISDICTION WITHIN CORRIDOR STUDY AREAS

Army Corps of Engineers (Corps) jurisdiction, as described more fully in Section 3.0, generally extends to the OHWM of features that discharge to navigable waters, in this case the Pacific Ocean, are tributary to features that discharge to navigable waters or are themselves considered a navigable water. In addition, features that are adjacent to jurisdictional waters and meet the Corps' definition of a wetland are also regulated by the Corps. All features that meet the above definitions are considered "waters of the US". The surface area that these features cover is subject to regulation by the Corps pursuant to Section 404 of the Clean Water act. Surface area is determined using the OHWM, which refers the lateral extent of stream flow occurring during a normal storm event or the area that meets the Corps' definition of a wetland. These limits are determined in the field based upon the field indicators described in Section 3.0. All waters are examined for wetland characteristic including the presence of vegetation adapted to sustained soil saturation and evidence of saturation occurring for at least 18 consecutive days including the presence of hydric soils, which are soils that exhibit indicators of saturation, and are either classified as wetland or non-wetland waters. Pursuant to SWANNC, Corps jurisdiction does not extent to features that exhibit no surface connection to other jurisdictional features. Total Corps jurisdiction listed below include all features within the disturbance limits of each alignment as well as all features within 200 to 1000 feet beyond the disturbance limits.

Approximately 113.64 acres within the CC study area are subject to Corps jurisdiction. This total consists of 55.41 acres of wetland and 58.23 acres of non-wetland waters.

Approximately 113.43 acres within the CC – ALPV study area are subject to Corps jurisdiction. This total consists of 55.41 acres of wetland and 58.02 acres of non-wetland waters.

Approximately 165.64 acres within the A7C – ALPV study area are subject to Corps jurisdiction. This total consists of 71.59 acres of wetland and 94.05 acres of non-wetland waters.

Approximately 207.96 acres within the A7C – FEC – M study area are subject to Corps jurisdiction. This total consists of 133.28 acres of wetland and 74.68 acres of non-wetland waters.

Approximately 178.28 acres within the FEC – W study area are subject to Corps jurisdiction. This total consists of 109.81 acres of wetland and 68.47 acres of non-wetland waters.

Approximately 212.18 acres within the FEC – M study area are subject to Corps jurisdiction. This total consists of 138.28 acres of wetland and 73.86 acres of non-wetland waters.

B. TOTAL CALIFORNIA DEPARTMENT OF FISH AND GAME JURISDICTION WITHIN CORRIDOR STUDY AREAS

California Department of Fish and Game (CDFG) jurisdiction, as described more fully in Section 3.0, extends to all lakes, streambeds and impoundments of streambeds regardless of contiguity with other jurisdictional features. The lateral extent of CDFG jurisdiction is based upon the presence of a bed and bank or riparian vegetation associated with the streambed. A detailed description of the methodology used to determine the extent of jurisdictional riparian habitat is included in Section 3.0. The total CDFG jurisdiction listed below include all features within the disturbance limits of each alignment as well as all features within 200 to 1000 feet beyond the disturbance limits.

Approximately 158.51 acres within the CC study area are subject to CDFG jurisdiction. This total consists of 156.04 acres of jurisdictional wetland and 2.47 acres of non-wetland waters.

Approximately 158.3 acres within the CC – ALPV study area are subject to CDFG jurisdiction. This total consists of 156.04 acres of jurisdictional wetland and 2.26 acres of non-wetland waters.

Approximately 247.07 acres within the A7C – ALPV study area are subject to CDFG jurisdiction. This total consists of 242.37 acres of jurisdictional wetland and 4.7 acres of non-wetland waters.

Approximately 308.99 acres within the A7C – FEC-M study area are subject to CDFG jurisdiction. This total consists of 300.17 acres of jurisdictional wetland and 8.82 acres of non-wetland waters.

Approximately 315.90 acres within the FEC-W study area are subject to CDFG jurisdiction. This total consists of 307.86 acres of jurisdictional wetland and 8.04 acres of non-wetland waters.

Approximately 341.15 acres within the FEC-M study area are subject to CDFG jurisdiction. This total consists of 332.68 acres of jurisdictional wetland and 8.47 acres of non-wetland waters.

C. CALIFORNIA COASTAL COMMISSION JURISDICTION WITHIN CORRIDOR STUDY AREAS

As detailed in Section 3.0, pursuant to the Coastal Act, California Coastal Commission (CCC) regulates the diking, filling or dredging of wetlands within the coastal zone. The Coastal Act defines wetlands as land "*which may be covered periodically or permanently with shallow water*." Subsequent interpretive guidelines state that the "*presence or absence of hydric soils and/or hydrophytes alone are not necessarily determinative when the Commission identifies wetland under the Coastal Act.*" Therefore, CCC regulates impacts to all wetlands regulated by Corps and RWQCB, which require that three-parameters including vegetation, soils and hydrology are present in order for a feature to be classified as a wetland, as well as any features in which at least only one or two of the previous parameters is met. The total CCC jurisdiction listed below include all features within the disturbance limits of each alignment as well as all features within 200 to 1000 feet beyond the disturbance limits.

Approximately 0.02 acres within the CC study area are subject to CCC jurisdiction. This consists entirely of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants)..

Approximately 115.06 acres within the A7C – FEC – M, FEC – W FEC – M and study areas are subject to CCC jurisdiction. This total consists entirely of areas that qualify as CCC wetlands based on the presence of one parameter out of three possible parameters (soils, hydrology, plants).

II. DETAILED BREAKDOWN OF STUDY AREA TOTALS BY CORRIDOR ALTERNATIVE

The following provides a detailed description of jurisdictional totals for the entire study area associated with each corridor alternative. These totals include all jurisdiction within the disturbance limits as well as all jurisdiction within 200 to 1000 feet beyond the disturbance limits.

A. CENTRAL CORRIDOR – COMPLETE STUDY AREA

Jurisdictional areas were generally not delineated for the Central Corridor – Complete (CC) alternative in 2001, with the exception of areas such as the wetland adjacent to Tesoro High School (designated as FE/C/7 Wetland), the Cañada Chiquita Wetland Complex (including tributaries), and San Juan Creek where changes from the 1995/1996 MBA Delineation were noted. Several jurisdictional areas associated with the CC Alignment were delineated for Rancho Mission Viejo. These areas have been verified by both the Corps and CDFG and are indicated on the delineation maps as verified. For all other areas, the jurisdictional totals were carried over from the 1995/1996 MBA Delineation. Drainage descriptions for the features that have not yet been verified have been extracted from the 1995/1996 MBA Delineation Report and are included below. Exhibit 1 depicts the location and extent of Corps jurisdictional areas. Exhibit 2 depicts the location and extent of CDFG jurisdictional areas.

Corps jurisdiction associated with the CC Alternative study area totals approximately 113.64 acres, of which 55.41 acres consist of jurisdictional wetlands. CDFG jurisdiction associated with the CC- Alternative study area totals 158.51 acres, of which 156.04 acres consist of vegetated riparian or wetland habitat. There is no jurisdiction associated with the portion of the CC- Alternative study area that is located within the Coastal Zone.

TABLE A-3
JURISDICTIONAL AREAS
CENTRAL CORRIDOR – COMPLETE STUDY AREA
(in acres)

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/C/7 WETLAND 1	12.62	12.62	12.62	12.62
FE/C/7-1	0.09	0.00	0.73	0.66
FE/C/7-2	0.00	0.00	0.02	0.00
FE/C/7-3	0.00	0.00	0.01	0.00
FE/C/7-4	0.00	0.00	0.02	0.00
FE/C/7-WETLAND 2	0.00	0.00	0.00	0.00
CANADA CHIQUITA	23.81	22.56	43.73	43.72
C-1	0.00	0.00	0.02	0.00
C-WETLAND 1	0.00	0.00	0.00	0.00
C-2	0.00	0.00	0.49	0.48
C-3	0.00	0.00	0.85	0.75
C-4	0.00	0.00	0.04	0.00
C-5	0.75	0.56	2.59	2.59
C-WETLAND 2	0.09	0.09	0.00	0.00
C-6	0.10	0.00	0.50	0.50
C-SAN JUAN CREEK	54.33	6.17	73.24	73.24
C-6B	0.01	0.00	0.01	0.00
C-POND 1	0.00	0.00	0.00	0.00
C-7	0.06	0.02	0.08	0.05
C-8	0.27	0.00	0.27	0.00
C-9	1.63	0.00	1.83	1.18
C-10	0.06	0.00	0.06	0.00
C-11	0.48	0.39	0.48	0.39
C-12	0.80	0.33	0.99	0.52
C-13	6.40	2.43	6.40	6.40
C-14	0.21	0.00	0.21	0.00
SEGUNDA DESHECHA	11.93	10.24	13.32	12.94
TOTAL	**113.64**	**55.41**	**158.51**	**156.04**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

A.1 DRAINAGE DESCRIPTIONS – CENTRAL CORRIDOR – COMPLETE STUDY AREA

FE/C/7 Wetland 1

FE/C/7 Wetland is located south of Oso Parkway between the alignment and Tesoro High School. It is vegetated with mule fat (*Baccharis salicifolia*, FACW), black willow (*Salix goodingii*, OBL), western ragweed (*Ambrosia psilostachya*, FAC), cattail (*Typha domingensis*, OBL), arroyo willow (*Salix lasiolepis*, FACW), bristly ox tongue (*Picris echioides*, FAC), Bermuda grass (*Cynodon dactylon*, FAC), clustered field sedge (*Carex praegracilis*, FACW-[1]), iris-leaved rush (*Juncus xiphioides*, OBL), spike rush (*Eleocharis macrostachya*, OBL), Mexican rush (*Juncus mexicanus*, FACW), and rabbitfoots grass (*Polypogon monspeliensis*, FACW+). The wetland is adjacent to Chiquita Creek and was inundated at several locations in November 2001. Soils were mainly composed of low chroma sandy loam with faint to distinct mottles.

Corps, and CDFG jurisdiction total 12.62 acres all of which are jurisdictional vegetated wetlands. The disturbance limits extend through the eastern portion of the wetland.

Drainage FE/C/7-1

Drainage FE/C/7-1 consists of a two to four foot wide ephemeral channel within a deep ravine. The channel traverses the disturbance limits. The channel bottom is vegetated with a predominance of non-native species including ripgut brome (*Bromus diandrus, NI*), Italian rye grass (*Lolium multiflorum*, FAC), horehound (*Marrubium vulgare*, FAC), black mustard (*Brassica nigra*, UPL), Italian thistle (*Carduus pycnocephalus*, UPL), and cardoon (*Cynara cardunculus*, UPL). The banks of the ravine support coastal sage scrub including buckwheat (*Erigonum fasciculatum*, UPL), lemonade berry (*Rhus integrifolia*, UPL), white sage (*Salvia apiana*, UPL), coyote brush (*Baccharis pilularis*, UPL), and prickly pear (*Opuntia littoralis*, UPL). A canopy of coast live oak (*Quercus agrifolia*, UPL) and Mexican elderberry (*Sambucus mexicana*, FACU) extends along much of the drainage. The presence of an OHWM was indicated by shelving, destruction of terrestrial vegetation and changes in soil character.

Corps jurisdiction associated with the channel totals 0.09 acre. CDFG jurisdiction associated with the drainage totals 0.73 acre, of which 0.66 acre consists of vegetated oak riparian habitat.

Drainage FE/C/7-2

[1] Positive or negative signs are used to more specifically define the frequency of occurrence on wetlands. A positive sign (+) indicates a frequency toward the higher end of a category (more frequently found in wetlands), and a negative (-) sign indicates frequency toward the lower end of a category (less frequently found in wetlands.

Drainage FE/C/7-2 consists of an approximately one-foot wide channel. It is an ephemeral drainage that originates within the disturbance limits of all alternatives and terminates in a broad swale within a disked field. The channel is vegetated with upland scrub.

The feature totals 0.02 acre of ephemeral channel. CDFG jurisdiction totals 0.02 acre, none of which consists of vegetated riparian habitat.

Drainage FE/C/7-3

Drainage FE/C/7-3 consists of an approximately one-foot wide channel. It is an ephemeral drainage that originates east of the disturbance limits common to all alternatives and terminates in a broad swale within a disked field. The channel is vegetated with upland scrub.

The feature totals 0.01 acre of ephemeral channel. CDFG jurisdiction totals 0.01 acre, none of which consists of vegetated riparian habitat.

Drainage FE/C/7-4

Drainage FE/C/7-4 consists of an approximately one-foot wide channel. It is an ephemeral drainage that originates east of the disturbance limits common to all alternatives and terminates in a broad swale within a disked field. The channel is vegetated with upland scrub.

The feature totals 0.02 acre of ephemeral channel. CDFG jurisdiction totals 0.02 acre, none of which consists of vegetated riparian habitat.

FE/C/7-Wetland 2

FE/C/7-Wetland 2 is a slope wetland vegetated with Mexican rush *(Juncus mexicanus*, FACW), bristly ox tongue (*Picris echioides*, FAC), Bermuda grass (*Cynodon dactylon*, FAC), and clustered field sedge (*Carex praegracilis*, FACW). Soils were saturated in the upper 12 inches and were characterized by gleyed color (2.5/N).

The feature totals 0.11 acre of wetland. Because this feature does not constitute a streambed or lake, it is not regulated by CDFG.

CAÑADA CHIQUITA

Cañada Chiquita is a broad canyon that generally runs in a north-south direction at Oso Parkway and extends for approximately 2 miles to San Juan Creek. The canyon includes a drainage course which supports a variety of associated (jurisdictional) wetland types including alkali marsh, alkali meadow, freshwater marsh and southern arroyo willow riparian forest. Specifically, Cañada Chiquita is vegetated along the entire reach with freshwater species including southern

cattail (*Typha domingensis*, OBL), Olney's bulrush (*Scirpus californicus*, OBL), Mexican rush (*Juncus mexicanus*, FACW), needle-stemmed spikerush (*Eleocharis acicularis*, OBL), water-cress (*Rorippa nasturtium-aquaticum*, OBL), rabbitsfoot grass (*Polypogon monspeliensis*, FACW+), rough vervain (*Verbena scabra*, OBL), and black willow (*Salix gooddingii*). The main channel is not clearly discernible immediately south of Oso Parkway where a wetland complex is located. This wetland complex serves as a groundwater discharge zone where groundwater from the Upper Chiquita (north of Oso Parkway) watershed is forced to the surface by bedrock resulting in the wetland area south of Oso Parkway. The groundwater originating in the Upper Chiquita watershed is fresh water, with electroconductivity of less than 800µ Mhos. Groundwater is also contributing to the 2 mile long system as evidenced by the many seeps located within the canyon. The brackish/alkali seeps, which typically exhibit an electroconductivity of between 1,500 and 2,500µ Mhos, also serve as groundwater discharge areas.

Corps jurisdiction totals 23.81 acres, of which 22.56 acres are wetlands. CDFG jurisdiction totals 43.73 acres, of which 43.72 acres consist of vegetated riparian habitat.

Drainage C-1

Drainage C-1 originates west of the CC disturbance limits and extends towards the east where it ends in ruderal vegetation. The channel bed is unvegetated sandy loam and its banks are vegetated with sage scrub. The presence of an OHWM was indicated by a change in soil character and destruction of terrestrial vegetation.

CDFG jurisdiction totals 0.02 acre, none of which consists of vegetated riparian habitat. The feature totals 0.02 acre of ephemeral channel.

C – Wetland 1

C – Wetland 1 is a slope wetland vegetated with beaked spikerush (*Eleocharis rostellata*, OBL), Mexican rush (*Juncus mexicanus*, FACW), Olney's bulrush (*Scirpus americanus*, OBL), clustered field sedge (*Carex praegracilis*, FACW-), saltgrass (*Distichlis spicata*, FACW), and rabbitsfoot grass (*Polypogon monspeliensis*, FACW+). Soils were saturated in the upper 12 inches and exhibited a sulfitic odor.

because the feature does not constitute a streambed or lake there is no CDFG jurisdictional acreage. The feature totals 0.40 acre of wetland.

Drainage C-2

Drainage C-2 varies from 1 to 6 feet in width. It originates to the west of the disturbance limits of the Central Corridor alternatives and extends east where it ends in ruderal vegetation. The upper reach of the drainage is vegetated with chaparral and exhibits an unvegetated channel bed.

The lower reach of the channel is vegetated with mulefat (*Baccharis salicifolia*, FACW), arroyo willow (*Salix lasiolepis*, FACW), upland bromes and coast live oak. The portion of the channel vegetated with mulefat and arroyo willow exhibits low chroma soils (10yr 3/2) with oxidized rhizospheres. CDFG jurisdiction totals 0.49 acre, of which 0.48 acre consists of vegetated riparian habitat. This feature totals 0.13 acre of wetland and 0.25 acre of ephemeral channel.

Drainage C-3

Drainage C-3 varies from 6 to 10 feet in width. It originates to the west of the disturbance limits of the Central Corridor alternatives and extends east where it ends in ruderal vegetation. The channel originates with a seep exhibiting standing water and vegetated with needle-stemmed spikerush (*Eleocharis acicularis*, OBL), water-cress (*Rorippa nasturtium-aquaticum*, OBL), rabbitsfoot grass *(Polypogon monspeliensis*, FACW+), Bermuda grass (*Cynodon dactylon*, FAC), Mexican rush *(Juncus mexicanus*, FACW), Olney's bulrush (*Scirpus americanus*, OBL) and cocklebur (*Xanthium strumarium*, FAC+). Soils exhibited a sulfitic odor. The lower portion of the drainage is vegetated with salt grass (*Distichlis spicata*, FACW) and mulefat (*Baccharis salicifolia*, FACW). The channel bed exhibits low chroma soils (10yr 3/2) with oxidized rhizospheres.

CDFG jurisdiction totals 0.85 acre, of which 0.75 acre consists of vegetated riparian habitat. This feature totals 0.68 acre of wetland and 0.02 acre of ephemeral channel.

Drainage C-4

Drainage C-4 originates west of the CC disturbance limits and extends towards the east where it ends in ruderal vegetation. The channel bed is unvegetated sandy loam and its banks are vegetated with lemonadeberry (*Rhus integrifolia*, UPL), California sagebrush (*Artemesia californica*, UPL) and California buckwheat (*Eriogonum fasciculatum*, UPL).

The presence of an OHWM was indicated by a change in soil character and destruction of terrestrial vegetation. CDFG jurisdiction totals 0.04 acre, of which none consists of vegetated riparian habitat. This feature totals 0.04 acre of ephemeral channel.

Drainage C-5

Drainage C-5 originates east of the disturbance limits of Central Corridor alternatives and extends west to discharge into Canada Chiquita. The channel varies from one to four feet in width and is generally unvegetated. The presence of an OHWM was indicated by sediment deposits. The banks of the upper reach are vegetated with coast live oak (*Quercus agrifolia*, UPL), mulefat (*Baccharis salicifolia*, FACW), upland bromes (*Bromus* spp., UPL) and coastal sage scrub. The lower reach of the drainage is adjacent to a slope wetland vegetated with Mexican rush (*Juncus mexicanus*, FACW), Emory's baccharis (*Baccharis emoryii*, FACW), yerba mansa (*Anemopsis californica*, OBL), Olney's bulrush (*Scirpus americanus*, OBL), curly

dock (*Rumex crispus*, FACW-), clustered field sedge (*Carex praegracilis*, FACW-), salt spring checkerbloom (*Sidalcea neomexicana*, FACW), witchgrass (*Panicum capillare*, FAC), cut-leaf water parsnip (*Berula erecta*, OBL), wrinkled rush *(Juncus rugulosis*, OBL), beaked spikerush (*Eleocharis rostellata*, OBL), salt grass (*Distichlis spicata*, FACW) and iris-leaved rush *(Juncus xiphioides*, OBL).

Corps jurisdiction totals 0.75 acre, of which 0.56 acre is wetlands. CDFG jurisdiction totals 2.59 acres, all of which consists of vegetated riparian habitat.

C – Wetland 2

C – Wetland 2 is a slope wetland vegetated with arroyo willow (*Salix lasiolepis*, FACW), Bermuda grass (*Cynodon dactylon*, FAC), Olney's bulrush (*Scirpus americanus*, OBL), tall cyperus (*Cyperus eragrostis*, FACW), bristly ox tongue (*Picris echioides*, FAC), mulefat (*Baccharis salicifolia*, FACW), brown cyperus (*Cyperus niger*, FACW+), Mexican rush (*Juncus mexicanus*, FACW), cut-leaf water parsnip (*Berula erecta*, OBL), clustered field sedge (*Carex praegracilis*, FACW-) and needle-stemmed spikerush (*Eleocharis acicularis*, OBL). The soil exhibited saturation in the upper 12 inches and a sulfitic odor.

There is no CDFG acreage that is jurisdictional. Corps jurisdiction totals 0.09 acre, all of which is wetland.

Drainage C-6

Drianage C-6 originates west of the disturbance limits of the CC alternatives and extends south to discharge into San Juan Creek. The channel varies from 2 to 5 feet in width and is generally unvegetated and composed of sand and cobbles. The banks of the channel are vegetated with mulefat scrub. The presence of an OHWM was indicated by sediment deposits and litter and debris.

Corps jurisdiction totals 0.10 acre, none of which is wetlands. CDFG jurisdiction totals 0.50 acre, all of which consists of vegetated riparian habitat

C - San Juan Creek

San Juan Creek is a major vegetated drainage including arroyo willow (*Salix lasiolepis*, FACW), mulefat (*Baccharis salicifolia*, FACW), western sycamore (*Platanus racemosa*, FACW) and coast live oak (*Quercus agrifolia*, NL). Low flow channels, which carry water throughout much of the year, are dominated by herbaceous cover including water-cress (*Rorippa nasturtium-aquaticum*, OBL), water speedwell (*Veronica anagallis-aquatica*, OBL), yellow waterweed (*Ludwigia peploides*, OBL), and knotgrass (*Paspalum distichum*, OBL).

Corps jurisdiction extends to the OHWM of the channel, which was indicated by a clear, natural line impressed on the bank, destruction of terrestrial vegetation, and the presence of litter and debris. Corps jurisdiction totals 54.33 acres, of which 6.17 acres are wetlands. CDFG jurisdiction totals 73.24 acres, all of which consists of vegetated riparian habitat.

Drainage C-6B

Drainage C-6B originates at a nursery to the south of San Juan Creek and to the west of the disturbance limits of the CC alternatives. The unvegetated channel measures approximately 3 feet in width and exhibits a loam and cobble bed. The banks are vegetated with coast live oak (*Quercus agrifolia*, UPL).

Corps jurisdiction totals 0.01 acre, of which none is wetlands. CDFG jurisdiction totals 0.01 acre, none of which consists of vegetated riparian habitat.

C – Pond 1

C – Pond 1 is an abandoned feature constructed in upland. At the time of the delineation the feature exhibited no standing water or saturated soils. The margin of the feature once supported mulefat and willows.

The feature exhibits no surface connection to San Juan Creek and has no jurisdictional features discharging into it. This feature totals 0.12 acre, none of which is wetland. Because this feature does not constitute a streambed or lake, there is no acreage subject to CDFG jurisdiction

Drainage C-7

Drainage C-7 is an incised channel which is approximately 3 feet wide. The channel bottom is generally unvegetated consisting of sand and cobbles. The banks of the channel are vegetated with non-native annual grasses. ACOE and CDFG jurisdiction extends to the OHWM which was indicated by shelving.

Corps jurisdiction totals 0.06 acre, of which 0.02 acre is wetlands. CDFG jurisdiction totals 0.08 acre, of which 0.05 acre consists of vegetated riparian habitat.

Drainage C-8

Drainage C-8 is an incised channel which varies in width from 3 to 4 feet. The channel bottom is generally unvegetated consisting of sand and cobbles. The banks of the channel are sparsely vegetated with coast live oak (*Quercus agrifolia*, NI) and mulefat (*Baccharis salcifolia,* FACW).

Corps jurisdiction extends to the OHWM which was indicated by destruction of terrestrial vegetation. Corps jurisdiction totals 0.27 acre, none of which is wetlands. CDFG jurisdiction totals 0.27 acre, none of which is vegetated riparian habitat.

Drainage C-9

Drainage C-9 is an incised channel approximately 2 feet in width. The channel bottom is generally unvegetated consisting of sand and cobbles. The banks of the channel are vegetated with western sycamore (*Platanus racemosa*, FACW) and coast lice oak (*Quercus agrifolia*, NI).

Corps jurisdiction extends to the OHWM which was indicated by destruction of terrestrial vegetation. Corps jurisdiction totals 1.63 acres, none of which are wetlands. CDFG jurisdiction totals 1.83 acres, of which 1.18 acres consist of vegetated riparian habitat.

Drainage C-10

Drainage C-10 is an incised channel which varies in width from approximately 1 to 3 feet. The channel bottom is generally unvegetated, consisting of sand. The banks of the channel are vegetated with coyote brush (*Baccharis pilularis*, NI), harding grass (*Phalaris aquatica*, FAC+), cardoon (*Cynara cardunculus*, NI), California sagebrush (*Artemisia* californica, NI), giant wild rye (*Leymus cindensatus*, NI) and mulefat (*Baccharis salicifolia*, FACW). ACOE and CDFG jurisdiction extends to the OHWM which was indicated by shelving. Corps jurisdiction totals 0.06 acre, none of which is wetlands. CDFG jurisdiction totals 0.06 acre, none of which is vegetated riparian habitat.

Drainage C-11

This drainage/wetland complex includes a shallow channel which drains into a man-made cattle pond. This drainage is approximately 3 feet in width. Dominant vegetation includes western sycamore (*Platanus racemosa*, FACW). Dominant vegetation in the pond includes mulefat (*Baccharis salicifolia*, FACW), cocklebur (*Xanthium strumarium*, FAC+), coyote brush (*Baccharis pilularis*, NI), tree tobacco (*Nicotinia glauca*, FAC) and lemonadeberry (*Rhus integrifolia*, NI).

CDFG jurisdiction totals 0.48 acre, of which 0.39 acre consists of vegetated riparian habitat. Corps jurisdiction totals 0.48 acre, of which 0.39 acre is wetland.

Drainage C-12

Drainage C-12 is a deeply incised channel that varies in width from approximately 2 to 4 ft. The channel bottom is sparsely vegetated with cocklebur (*Xanthium strumarium*, FAC+), white sweetclover (*Melilotus alba*, FACU+), cheeseweed (*Mava parviflora*, NI) and mulefat (*Baccharis salicifolia*, FACW). The banks are generally vegetated with mulefat (*Bacharis*

salicifolia, FACW), coyote bush (*Baccharis pilularis*, UPL) and giant wild rye (*Leymus condensatus*, UPL). The channel bed consists of a rocky, cobbly substrate. The presence of an OHWM was indicated by shelving and the destruction of terrestrial vegetation. One tributary of Drainage C-12 exhibited flowing water and supports western sycamore (*Platanus racemosa*, FACW), arroyo willow (*Salix lasiolepis*, FACW) and mulefat (*Baccharis salicifolia*, FACW). Dominant understory vegetation includes giant creek nettle (*Urtica dioica ssp. holosericea*, FACW), cut-leaf water parsnip (*Berula erecta*, OBL) and yellow waterweed (*Ludwigia peploides*, OBL).

Corps jurisdiction totals 0.80 acre, of which 0.33 acre is wetlands. CDFG jurisdiction totals 0.99 acre, of which 0.52 acre consists of vegetated riparian habitat.

Drainage C-13

Drainage C-13 originates east of the disturbance limits of the CC alternatives and includes a mitigation site vegetated with southern willow scrub. The channel below the mitigation site is incised and supports Bermuda grass (*Cynodon dactylon*, FAC), saltgrass (Distichlis spicata, FACW), cattails (Typha domingensis, OBL), Olney's bulrush (Scirpus americanus, OBL) and cocklebur (*Xanthium strumarium*, FAC+).

Corps jurisdiction extends to the OHWM of the channel which was indicated by shelving and destruction of terrestrial vegetation. Corps jurisdiction totals 6.4 acres, of which 2.43 acres are wetlands. CDFG jurisdiction totals 6.40 acre, all of which consists of vegetated riparian habitat.

Drainage C-14

Drainage C-14 is an incised channel which is approximately 6 feet. The channel bottom is generally unvegetated consisting of sand and cobbles. The banks of the channel are vegetated with non-native annual grasses.

Corps jurisdiction extends to the OHWM of the channel which was indicated by shelving and destruction of terrestrial vegetation. Corps jurisdiction totals 0.21 acre, none of which is wetlands. CDFG jurisdiction totals 0.21 acre, none of which is vegetated riparian habitat.

Segunda Deshecha

The upper portions of this drainage support southern willow scrub and coast live oak. The lower portions of this drainage support coastal fresh water marsh. The dominant vegetation includes southern cattail (*Typha domingensis*, OBL), brown cyperus (*Cyperus niger*, FACW+), water-cress (*Rorippa nasturtium-aquaticum*, OBL), cut-leaf water parsnip (*Berula erecta*, OBL). Portions of Segunda Deshecha are being expanded as mitigation for authorized impacts associated with Talega Planned Community. The 1994 data was updated to include these areas. The presence of hydric soil was assumed because all the dominant vegetation had an indicator

status of OBL or FACW and there was an abrupt change in topography. An indicator for wetland hydrology includes standing water. The reaches southwest of Avenida La Pata have been have been lined with concrete that has accumulated sufficient sediment to support patches of cattails.

Corps jurisdiction totals 11.93 acres, of which 10.24 acres are wetlands. CDFG jurisdiction totals 13.32 acres, of which 12.94 acres consist of vegetated riparian habitat.

B. CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION STUDY AREA

Jurisdictional areas were generally not delineated for the Central Corridor – Avenida La Pata Variation (CC-ALPV) in 2001, with the exception of areas such as the wetland adjacent to Tesoro High School (designated as FE/C/7 Wetland), the Cañada Chiquita Wetland Complex (including tributaries), and San Juan Creek where changes from the 1995/1996 MBA Delineation were noted. Several jurisdictional areas associated with CC – ALPV were delineated for Rancho Mission Viejo. These areas have been verified by both the Corps and CDFG and are indicated on the delineation maps as verified. For all other areas, the jurisdictional totals were carried over from the 1995/1996 MBA Delineation after site reconnaissance indicated that no substantial changes were evident for the drainages south of San Juan Creek. Drainage descriptions for the features that have not yet been verified have been extracted from the 1995/1996 MBA Delineation Report and are included below. Exhibit 1 depicts the location and extent of Corps jurisdictional areas. Exhibit 2 depicts the location and extent of CDFG jurisdictional areas.

Corps jurisdiction associated with the CC-ALPV Alternative study area totals approximately 113.43 acres, of which 55.41 acres consist of jurisdictional wetlands. CDFG jurisdiction associated with the CC-Avenida La Pata Variation study area totals 158.30 acres, of which 156.04 acres consist of vegetated riparian or wetland habitat. There is no jurisdiction associated with CC- ALPV Alternative study area that is located within the Coastal Zone.

TABLE A-4
JURISDICTIONAL AREAS
CENTRAL CORRIDOR-AVENIDA LA PATA VARIATION STUDY AREA
(in acres)

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/C/7 WETLAND 1	12.62	12.62	12.62	12.62
FE/C/7-1	0.09	0.00	0.73	0.66
FE/C/7-2	0.00	0.00	0.02	0.00
FE/C/7-3	0.00	0.00	0.01	0.00
FE/C/7-4	0.00	0.00	0.02	0.00
FE/C/7-WETLAND 2	0.00	0.00	0.00	0.00
CANADA CHIQUITA	23.81	22.56	43.73	43.72
C-1	0.00	0.00	0.02	0.00
C-WETLAND 1	0.00	0.00	0.00	0.00
C-2	0.00	0.00	0.49	0.48
C-3	0.00	0.00	0.85	0.75
C-4	0.00	0.00	0.04	0.00
C-5	0.75	0.56	2.59	2.59
C-WETLAND 2	0.09	0.09	0.00	0.00
C-6	0.10	0.00	0.50	0.50
C-SAN JUAN CREEK	54.33	6.17	73.24	73.24
C-6B	0.01	0.00	0.01	0.00
C-POND 1	0.00	0.00	0.00	0.00
C-7	0.06	0.02	0.08	0.05
C-8	0.27	0.00	0.27	0.00
C-9	1.63	0.00	1.83	1.18
C-10	0.06	0.00	0.06	0.00
C-11	0.48	0.39	0.48	0.39
C-12	0.80	0.33	0.99	0.52
C-13	6.40	2.43	6.40	6.40
SEGUNDA DESHECHA	11.93	10.24	13.32	12.94
TOTAL	**113.43**	**55.41**	**158.30**	**156.04**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

B.1 DRAINAGE DESCRIPTIONS – CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION STUDY AREA

CC-ALPV Alternative overlaps the CC Alternative. Please see CC Drainage Descriptions above.

C. ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION

Several jurisdictional areas associated with Alignment 7 Corridor - Avenida La Pata Variation – (A7C-ALPV) study area were delineated for Rancho Mission Viejo. These areas have been verified by both Corps and CDFG and are indicated on the delineation maps as verified. For all other areas, the jurisdictional totals were mapped in 2001. Exhibit 1 depicts the location and extent of Corps jurisdictional areas. Exhibit 2 depicts the location and extent of CDFG jurisdictional areas.

Corps jurisdiction associated with the A7C-ALPV Alternative study area totals approximately 165.64 acres, of which 71.59 acres consist of jurisdictional wetlands. CDFG jurisdiction associated with the A7C-ALPV Alternative study area totals 247.07 acres, of which 242.37 acres consists of vegetated riparian or wetland habitat. There is no jurisdiction associated with A7C-ALPV Alternative study area that is located within the Coastal Zone.

TABLE A-5
JURISDICTIONAL AREAS
ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION STUDY AREA
(in acres)

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/C/7 WETLAND 1	12.62	12.62	12.62	12.62
FE/C/7-1	0.09	0.00	0.73	0.66
FE/C/7 WETLAND 2	0.00	0.00	0.00	0.00
FE/C/7-2	0.00	0.00	0.02	0.00
FE/C/7-3	0.00	0.00	0.01	0.00
FE/C/7-4	0.00	0.00	0.02	0.00
FE/7-1	0.00	0.00	3.27	3.16
FE/7-2	0.00	0.00	0.57	0.48
FE-1	0.00	0.00	1.76	1.70
7-1	0.32	0.00	1.38	1.26
7-3	1.16	0.00	6.04	5.79
C-5	0.75	0.56	2.53	2.53
CANADA CHIQUITA	23.81	22.56	43.73	43.72
7-4	0.17	0.00	0.57	0.45
7-5	0.03	0.00	0.32	0.32
7-6	0.02	0.00	0.35	0.35
SAN JUAN CREEK – 7	52.69	19.28	70.06	70.06
SAN JUAN CREEK - C	54.33	6.17	73.24	73.24
7-8	0.12	0.00	2.21	2.19
7-9	0.00	0.00	1.30	1.27
7-10	0.00	0.00	0.28	0.00
7-13	6.99	0.14	11.26	8.64
7-14	0.21	0.00	0.30	0.11
7-15	0.18	0.02	0.20	0.04
7-16	0.22	0.00	0.98	0.84
SEGUNDA DESHECHA	11.93	10.24	13.32	12.94
TOTAL	**165.64**	**71.59**	**247.07**	**242.37**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

C.1 DRAINAGE DESCRIPTIONS – ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION STUDY AREA

Portions of the A7C-APLV Alternative overlap with the CC and CC-ALPV Alternatives. Please see drainage descriptions above for features that have been previously addressed.

Drainage FE/7-1

Drainage FE/7-1 varies in width from two to four feet. It is an ephemeral drainage that traverses the disturbance limits common to all alternatives except the CC alternatives and terminates in grassland approximately 2,000 feet from Cañada Chiquita. The banks of the channel in the upper portion of the drainage are vegetated with upland non-native grasses and/or coastal sage scrub. Beginning near the eastern limits of grading, a coast live oak-sycamore forest occupies the canyon and adjacent slopes. Dominant vegetation includes coast live oak (*Quercus agrifolia,* UPL) and western sycamore (*Platanus racemosa,* FACW) woodland with a dense blackberry (*Rubus ursinus,* FAC) and poison oak (*Toxicodendron diversilobum,* UPL) understory. The understory also supports mugwort (*Artemesia douglasiana,* FAC) and giant wild rye (*Leymus condensatus,* FACU). Riparian vegetation varies from 20 to 40 feet in width. The presence of an OHWM was indicated by change in soil character and destruction of terrestrial vegetation. As noted above, the drainage terminates in grassland approximately 2,000 feet from Chiquita Creek.

This feature totals 0.20 acre of ephemeral channel. CDFG jurisdiction totals 3.27 acre, of which 3.16 acre consists of vegetated riparian habitat.

Drainage FE/7-2

Drainage FE/7-2 varies from three to 32 feet in width and includes wetlands characterized by emergent vegetation. It originates at a seep and traverses the disturbance limits common to all alternatives (except the Central Corridor alternatives). The channel bed is characterized by low chroma clay soil with high chroma mottles. Dense emergent vegetation precludes establishment of a clear OHWM. Dominant plants include Olney's bulrush (*Scirpus americanus,* OBL), beaked spikerush (*Eleocharis rostellata,* OBL), creeping spikerush (*Eleocharis macrostachya,* OBL), western ragweed (*Ambrosia psilostachya,* FAC), wild lettuce (*Lactuca serriola,* FAC) water-parsnip (*Berula erecta,* OBL), knotgrass (*Paspalum distichum,* OBL), umbrella sedge (*Cyperus niger,* FACW), and rabbitsfoot grass (*Polypogon monspeliensis,* FACW). The seep at the beginning of the drainage supports saltgrass (*Distichlis spicata,* FACW) and Mexican rush *(Juncus mexicanus,* FACW).

The northern tributary to Drainage FE/7-2 varies in width from one to two feet. The tributary traverses the alignment to join FE/7-2, which terminates in grassland.. The banks of the tributary are vegetated with upland scrub including buckwheat (*Eriogonum fasciculatum,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), lemonade berry (*Rhus integrifolia,* UPL), coyote brush

(*Baccharis pilularis,* UPL), and Mexican elderberry (*Sambucus mexicana,* FACU) with an occasional oak (*Quercus agrifolia,* UPL) and a few scattered mule fat (*Baccharis salicifolia,* FACW). Located near its origin is a 34-foot by 24-foot wetland with low chroma, saturated soil and vegetated with mule fat (*Baccharis salicifolia,* FACW), lemonade berry (*Rhus integrifolia,* UPL), Bulrush (*Scirpus americanus,* OBL), Mexican rush (*Juncus mexicanus,* FACW), and yerba mansa (*Anemopsis californicus,* OBL).

This feature consists of 0.36 acres of wetlands and 0.14 acre of ephemeral channel. CDFG jurisdiction totals 0.57 acres, of which 0.48 acre consists of vegetated habitat.

Drainage FE-1

Drainage FE-1 varies from two to four feet in width. The channel originates east of the alignment and traverses the disturbance limits common to all alternative (except the Central Corridor alternatives) until the bed and bank terminates in grassland approximately a half mile from Cañada Chiquita. The drainage supports oak (*Quercus agrifolia,* UPL*)* woodland with western ragweed (*Ambrosia psilostachya,* FAC), scattered sedges (*Carex*), lemonade berry (*Rhus integrifolia,* UPL), and Mexican elderberry (*Sambucus mexicanus,* FACU) in the understory. The oak canopy averages 40 to 60 feet in width.

CDFG jurisdiction totals 1.76 acre, of which 1.70 acre consists of vegetated riparian habitat. This feature totals 0.16 acre of ephemeral channel.

Drainage 7-1

Drainage 7-1 is an incised ephemeral channel that varies in width from three to five feet. It traverses the disturbance limits where it enters a cement lined channel at the Santa Margarita Water District water treatment plant. The channel bottom consists of loamy sand and is vegetated with arroyo willow (*Salix lasiolepis,* FACW), mule fat (*Baccharis salicifolia,* FACW), and coyote brush (*Baccharis pilularis,* UPL). The banks are vegetated with native needlegrass (*Nassella pulchra,* UPL) and western ragweed (*Ambrosia psilostachya,* FAC). The limits of the channel were limited to the OHWM of the channel was indicated by changes in soil characteristics and destruction of terrestrial vegetation. Riparian vegetation varied from 10 to 35 feet in width.

Corps jurisdiction is 0.32 acre. CDFG associated with the channel totals 1.38 acre, of which 1.26 acres consist of southern riparian scrub dominated by willow and mule fat.

Drainage 7-3

Drainage 7-3 located to the east of the A7C FEC-M alignment where it extends eastward to join another ephemeral drainage that extends to San Juan Creek. The main channel varies from one to four feet wide. The channel is incised and clearly defined by bed and bank, sediment deposits,

debris racks, and destruction of terrestrial vegetation. The channel is vegetated with patches of mule fat (*Baccharis salicifolia*, FACW), coast live oak (*Quercus agrifolia,* UPL), and annual grassland. Scattered western sycamores (*Platanus racemosa*, FACW) and arroyo willows (*Salix laseolepis*, FACW) occur throughout the main channel. Several ephemeral tributaries enter the main channel within the alignment. These tributaries are generally vegetated with annual grassland or ruderal vegetation.

A few ephemeral side channels occur in association with this drainage system in which the OHWM terminates within broad swales.

Corps jurisdiction totals 1.16 acres, none of which are wetlands. CDFG jurisdiction totals 6.04 acres, of which 5.79 acres consist of vegetated riparian habitat

Drainage 7-4

Drainage 7-4 and its tributary vary in width from one to five feet. Drainage 7-4 originates west of the A7C – ALPV alignment and extends south, parallel to the disturbance limits and discharges into San Juan Creek through a culvert. The upstream reaches of both channels are vegetated with coastal sage scrub and chaparral including buckwheat (*Eriogonum fasciculatum,* UPL), California sagebrush (*Artemesia californica,* UPL), monkey flower (*Mimulus aurantiacus,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), and lemonade berry (*Rhus integrifolia,* UPL). Its bed is vegetated with primarily non-native grasses, curly dock (*Rumex crispus,* FACW-), and rabbitsfoot grass (*Polypogon monspeliensis,* FACW). The lower reach of the drainage is vegetated with oak woodland that averages 40 feet in width.

Corps jurisdiction totals 0.17 acre, none of which are wetlands. CDFG jurisdiction totals 0.57 acre, of which 0.45 acre consists of vegetated riparian habitat.

Drainage 7-5

Drainage 7-5 is located to the east of the A7C – ALPV alignment. The drainage varies from one to three feet wide and has a channel composed of boulders and coarse sandy loam. It is vegetated with coast live oak (*Quercus agrifolia,* UPL), lemonade berry (*Rhus integrifolia,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), sycamore (*Platanus racemosa,* FACW), Italian thistle (*Carduus pycnocephalus,* UPL), Mexican elderberry (*Sambucus mexicanus,* FACU), non-native grass (*Bromus sp., NI*), bull thistle (*Cirsium vulgare,* FACU), and nightshade (*Solanum douglasii,* FAC). The oak canopy averages 60 feet in width. The attributes associated with an OHWM included the destruction of terrestrial vegetation and shelving.

Corps jurisdiction associated with the channel totals 0.03 acres. CDFG jurisdiction totals 0.32 acre, all of which consists of oak riparian habitat.

Drainage 7-6

Drainage 7-6 is located to the east of the A7C-FEC-M alignment. The drainage varies from one to three feet wide and has a channel composed of boulders and coarse sandy loam. It is vegetated with coast live oak (*Quercus agrifolia,* UPL), lemonade berry (*Rhus integrifolia,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), sycamore (*Platanus racemosa,* FACW), Italian thistle (*Carduus pycnocephalus,* UPL), Mexican elderberry (*Sambucus mexicanus,* FACU), non-native grass (*Bromus sp., NI*), bull thistle (*Cirsium vulgare,* FACU), and nightshade (*Solanum douglasii,* FAC). The oak canopy averages 60 feet in width.

The attributes associated with an OHWM included the destruction of terrestrial vegetation and shelving. Corps jurisdiction associated with the channel totals 0.02 acre. CDFG jurisdiction totals 0.35 acre, of which all consists of oak riparian habitat.

San Juan Creek-7

San Juan Creek traverses the A7C alternative alignments from east to west. The channel varies from 350 to 500 feet in width within which is included a linear strip of wetland from that varies from 30 to 60 feet wide. The channel includes many low flow braids that are unvegetated as well as some slightly raised vegetated areas with the presence of litter and debris. The channel consists primarily of cobble and clean sand. A low flow channel exhibited base flow in August and was vegetated with cattail (*Typha domingensis,* OBL), knotgrass (*Paspalum distichum,* OBL), yellow waterweed (*Ludwigia peploides,* OBL), water speedwell (*Veronica anagallis-aquatica,* OBL), arroyo willow (*Salix lasiolepis,* FACW), watercress (*Rorippa nasturtium-aquatica,* OBL), and smooth bur marigold (*Bidens laevis,* OBL). Soil within the wetland was gleyed sand with a sulfidic odor. To either side of the wetland, a sand and cobble bed was vegetated with bicolored cudweed (*Gnathalium bicolor,* UPL), scale broom (*Lepidospartum squamatum,* UPL), occasional deerweed (*Lotus scoparius,* UPL), telegraph weed (*Heterotheca grandiflora,* UPL*)* and mule fat (*Baccharis salicifolia,* FACW). Black cottonwood (*Populus balsamifera trichocarpa,* FACW), sycamore (*Platanus racemosa,* FACW), and giant reed (*Arundo donax,* FACW) were common closer to the banks. Attributes associated with an OHWM included shelving, destruction of terrestrial vegetation, change in soil character and the presence of litter and debris. Sycamore and willow riparian vegetation varies from 400 to 900 feet in width.

Corps jurisdiction associated with the channel totals 54.33 acres, of which 6.17 acres are jurisdictional wetlands. CDFG jurisdiction associated with the channel totals 73.24 acres all of which consists of riparian habitat.

Drainage 7-8

Ephemeral Drainage 7-8 is a deeply incised channel that varies in width from one to five feet. It originates west of the A7C-ALPV alignment and extends northeast, crosses Ortega Highway through a culvert and then terminates in a mosaic of nonnative grassland, sycamore woodland and mule fat scrub approximately 700 feet from San Juan Creek. The drainage exhibits no surface tributary connection with San Juan Creek or other jurisdictional waters. Where it is evident, the channel bottom is generally unvegetated consisting of sand, cobbles and leaf litter. The banks of the channel are vegetated with coast live oak (*Quercus agrifolia,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), toyon (*Heteromeles arbutifolia,* UPL), nightshade (*Solanum americanum,* FAC), mugwort (*Artemesia douglasiana,* FAC), bristly ox tongue (*Picris echioides,* FAC), fennel (*Foeniculum vulgare,* FACU), cardoon (*Cynara cardunculus,* UPL), black mustard (*Brassica nigra,* UPL), mule fat (*Baccharis salicifolia,* FACW), Mexican elderberry (*Sambucus mexicanus,* FACU), Italian thistle (*Carduus pycnocephalus,* UPL), and a single black willow (*Salix gooddingii,* OBL).

Corps jurisdiction extends to the OHWM of the channel, which was indicated by destruction of terrestrial vegetation, shelving and change in soil character. The riparian vegetation varies from 9 to 100 feet in width. Corps jurisdiction is limited to the 0.12 acre channel. CDFG jurisdiction associated with the channel totals 2.21 acres, of which 2.19 acres consist of riparian habitat.

Drainage 7-9

Drainage 7-9 originates within the disturbance limits of the A7C-ALPV alternative and extends northward where it discharges beneath Ortega Highway through a culvert. It is moderately incised, varying in width from two to four feet. It terminates, approximately 1,000 feet from San Juan Creek, in a mosaic of grassland and mule fat scrub shortly after passing through a culvert under Ortega Highway. The drainage exhibits no surface tributary connection with San Juan Creek or other jurisdictional waters. The channel bottom is mainly unvegetated consisting of sand or silty clay loam, cobbles and leaf litter. The banks are vegetated with coast live oaks (*Quercus agrifolia,* UPL), toyon (*Heteromeles arbutifolia,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), mugwort (*Artemsia douglasiana,* FAC), Italian thistle (*Carduus pycnocephalus,* UPL), and bull thistle (*Cirsium vulgare,* FACU). The limits of the channel were indicated by shelving and destruction of terrestrial vegetation.

The oak riparian canopy varies from 35 to 60 feet in width. CDFG jurisdiction associated with the channel totals 1.30 acre, of which 1.27 acres consists of oak riparian habitat.

Drainage 7-10

Drainage 7-10 originates within the disturbance limits of the A7C – FEC–M alternative and extends under Ortega Highway where it disappears in grassland before reaching San Juan Creek. The channel is approximately three feet wide. The channel is deeply incised and the channel bed contains large boulders and cobbles. It is vegetated with scattered non-native grasses and toyon (*Heteromeles arbutifolia,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), coyote bush

(*Baccharis pilularis,* UPL), western ragweed (*Ambrosia psilostachya,* FAC), Mexican elderberry (*Sambucus mexicana,* FACU), cudweed (*Gnaphalium canescens*), California sagebrush (*Artemesia californica,* UPL), and laurel sumac (*Malosma laurina,* UPL).

The channel bed was not accessible, therefore OHWM was estimated from destruction of terrestrial vegetation. CDFG jurisdiction totals 0.28 acre, none of which consists of vegetated riparian habitat.

Drainage 7-13

Drainage 7-13 originates as a series of tributaries merging on the southern (western) portion of the disturbance limits of the A7C – FEC – M alternative and traversing through the alignment. It is relatively incised and vegetated with oak woodland with ephemeral tributaries in sage scrub. The OHWM of one northwestern tributary ends in ruderal grassland. The eastern tributary contains an unvegetated sediment basin utilized by mining operations. The drainage is vegetated with mulefat and oak woodland or unvegetated in scrub.

Corps jurisdiction totals 6.99 acres, of which 0.14 acres are wetlands. CDFG jurisdiction totals 11.26 acres, of which 8.64 acres consist of vegetated riparian habitat. This feature totals 6.95 acres of ephemeral channel and 0.14 acre of wetland.

Drainage 7-14

Drainage 7-14 consists of an incised channel that varies from one to three feet in width. The channel originates within the disturbance limits of the A7C – ALPV alternative and extends to the west through a culvert under La Pata Road and into San Juan Creek. The channel is trampled in some areas from cattle. Such areas are dominated by non-native herbs, such as wild oats (*Avena sp., UPL*), cardoon (*Cynara cardunculus, UPL*), bull thistle (*Cirsium vulgare, FACU*), mustard (*Brassica nigra, UPL),* tocalote (*Centaurea melitensis, UPL*), and cudweed (*Gnaphalium canescens, UPL*), but also contain goldenbush (*Isocoma menziesii, UPL*), coyote brush (*Baccharis pilularis, UPL*) and mulefat (*Baccharis salicifolia, FACW*). The lower reaches are dominated by coast live oak (*Quercus agrifolia, UPL*) and various coastal sage scrub species including California sagebrush (*Artemesia californica, UPL*) and monkey flower (*Mimulus aurantiacus, UPL*). The oak riparian canopy averages 30 feet in width while the mulefat scrub averages 21 feet wide. The banks of the upper reaches are vegetated with coastal sage scrub including California sagebrush (*Artemesia californica, UPL*), monkey flower (*Mimulus aurantiacus, UPL*), giant wild rye (*Leymus condesatus*), western ragweed (*Ambrosia psilostachya, FAC*), mustard (*Brassica nigra, UPL*) and Italian rye (*Lolium multiflorum, FAC*).

Corps jurisdiction extends to the OHWM of the channel, which was indicated by destruction of terrestrial vegetation. Corps jurisdiction totals 0.21 acre, none of which is wetlands. CDFG jurisdiction totals 0.30 acre, of which 0.11 acre consists of vegetated riparian habitat.

Drainage 7-15

Drainage 7-15 originates within the disturbance limits of the A7C – ALPV alternative and extends westward to join Prima Deshecha. The channel varies from one to three feet in width and contains a wetland swale supporting Italian rye (*Lolium multiflorum, FAC*) and saltgrass (*Distichalis spicata, FACW*). The channel bed within the wetland swale was composed of low chroma silty clay soil with oxidized root channels. The remainder of the drainage supports cocklebur (*Xanthium strumarium, FAC+*), mustard (*Brassica nigra, UPL*), bristly ox tongue (*Picris echioides, FAC*), cardoon (*Cynara cardunculus, UPL*), wild oats (*Avena sp., UPL*), Italian thistle (*Carduus pycnocephalus, UPL*), prickly lettuce (*Latuca serriola, FAC*), scattered sunflower (*Helianthus annuus*), western ragweed (*Ambrosia psilostachya, FAC*), milkweed (*Ascelpias fascicularis, FAC*), scattered coyote brush (*Baccharis pilularis, UPL*), goldenbush (*Isocoma menzesii*, UPL), and mulefat (*Baccharis salicifolia, FACW*) and ripgut brome (*Bromus diandrus, NI*). The channel bed is primarily composed of boulders, cobbles and silty clay.

Where discernible, the presence of an OHWM was indicated by change in soil character and destruction of terrestrial vegetation. Where discernible, the presence of an OHWM was indicated by the destruction of terrestrial vegetation. Corps jurisdiction totals 0.18 acre, of which 0.02 acre is wetlands. CDFG jurisdiction totals 0.20 acre, of which 0.04 acre consists of vegetated riparian habitat.

Drainage 7-16

Drainage 7-16 originates east of the disturbance limits of the A7C – ALPV alternative. The channel bed is composed of high chroma silty clay loam channel. Where discernible, the channel varies from one to two feet in width and is vegetated with a predominance of non-native species including cardoon (*Cynara cardunculus, UPL*), mustard (*Brassica nigra, UPL*), bristly ox tongue (*Picris echioides, FAC*), wild oats (*Avena sp., UPL*), ripgut brome (*Bromus diandrus, NI*) and well as mulefat (*Baccharis salicifolia*, FACW), giant wild rye (*Leymus condensatus, FACU*), goldenbush (*Isocoma menzesii, UPL*), lemonadeberry (*Rhus integrifolia*, UPL) and coyote brush (*Baccharis pilularis, UPL*).

Where discernible, the presence of an OHWM was indicated by destruction of terrestrial vegetation. There was no OHWM in most areas. Corps jurisdiction totals 0.22 acre, of which none are wetlands. CDFG jurisdiction totals 0.98 acre, of which 0.84 acre consists of vegetated riparian habitat.

Segunda Deshecha

The upper portions of this drainage support southern willow scrub and coast live oak. The lower portions of this drainage support coastal fresh water marsh. The dominant vegetation includes southern cattail (*Typha domingensis*, OBL), brown cyperus (*Cyperus niger*, FACW+), water-

cress (*Rorippa nasturtium-aquaticum*, OBL), cut-leaf water parsnip (*Berula erecta*, OBL). Portions of Segunda Deshecha are being expanded as mitigation for authorized impacts associated with Talega Master Planned community. The 1994 data has been updated to include these areas. The presence of hydric soil was assumed because all the dominant vegetation had an indicator status of OBL or FACW and there was an abrupt change in topography. Indicator for wetland hydrology included standing water. The reaches southwest of Avenida La Pata have been have been lined with concrete that has accumulated sufficient sediment to support patches of cattails.

Corps jurisdiction totals 11.93 acres, of which 10.24 acres are wetlands. CDFG jurisdiction totals 13.32 acres, of which 12.94 acres consist of vegetated riparian habitat.

D. ALIGNMENT 7 CORRIDOR - FAR EAST CROSSOVER –MODIFIED STUDY AREA

Several jurisdictional areas associated with Alignment 7 Corridor - Far East Crossover – Modified (A7C-FEC-M) study area were delineated for Rancho Mission Viejo. These areas have been verified by both Corps and CDFG and are indicated on the delineation maps as verified. For all other areas, the jurisdictional totals were mapped in 2001 and 2003. Exhibit 1 depicts the location and extent of Corps jurisdictional areas. Exhibit 2 depicts the location and extent of CDFG jurisdictional areas.

Corps jurisdiction associated with the A7C-FEC-M Alternative study area totals approximately 207.87 acres, of which 133.23 acres consist of jurisdictional wetlands. CDFG jurisdiction associated with the A7C-FEC-M Ultimate Alternative study area totals 309.07 acres, of which 300.21 acres consists of vegetated riparian or wetland habitat. CCC jurisdiction associated with the A7C-FEC-M Alternative study area totals approximately 115.06 acres, all of which consist of one-parameter wetlands.

TABLE A-6
JURISDICTIONAL AREAS
ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED STUDY AREA
(in acres)

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/C/7 WETLAND 1	12.62	12.62	12.62	12.62
FE/C/7-1	0.09	0.00	0.73	0.66
FE/C/7 WETLAND 2	0.00	0.00	0.00	0.00
FE/C/7-2	0.00	0.00	0.02	0.00
FE/C/7-3	0.00	0.00	0.01	0.00
FE/C/7-4	0.00	0.00	0.02	0.00
FE/7-1	0.00	0.00	3.27	3.16
FE/7-2	0.00	0.00	0.57	0.48
7-1	0.32	0.00	1.38	1.26
7-2	0.02	0.00	0.06	0.00
7-3	1.16	0.00	6.04	5.79
C-5	0.75	0.56	2.53	2.53
7-4	0.17	0.00	0.57	0.45
7-5	0.03	0.00	0.32	0.32
7-6	0.02	0.00	0.35	0.35
7-7	1.10	0.48	2.44	2.44
SAN JUAN CREEK – 7/WETLAND COMPLEX	52.69	19.28	70.06	70.06
7-8	0.12	0.00	2.21	2.19
7-9	0.00	0.00	1.30	1.27
7-10	0.00	0.00	0.28	0.00
7-11	0.00	0.00	0.03	0.00
7-12	0.11	0.00	1.94	1.94
7-13	6.99	0.14	11.26	8.64
FE/7-3	4.14	0.03	11.97	10.01
FE/7-4	0.00	0.00	2.47	2.38
FE/7-5	0.00	0.00	0.02	0.00
FE/7-6	0.36	0.00	2.17	1.95
FE/7-7	1.36	0.09	11.55	11.19
FE/7-8	0.43	0.00	2.91	2.62
FE/7-9	0.18	0.00	0.18	0.00
FE/7-10	0.31	0.00	2.90	2.76

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/7-11	1.10	0.12	1.35	1.35
FE/7-12	1.39	0.68	3.06	3.04
FEVM 17	0.05	0.05	0.00	0.00
DRAINAGE FE/7-13	0.02	0.00	0.02	0.00
DRAINAGE FE/7-14	0.34	0.00	0.38	0.23
VERNAL MARSH FEVM 16	0.05	0.05	0.00	0.00
VERNAL MARSH FEVM 18	0.04	0.04	0.00	0.00
VERNAL MARSH FEVM 19	0.06	0.06	0.00	0.00
DRAINAGE FE/7-15	0.40	0.03	0.88	0.64
DRAINAGE FE/7-16	0.23	0.00	0.23	0.00
DRAINAGE FE/7-18	1.10	0.00	1.72	0.95
DRAINAGE FE/7-19	0.03	0.00	0.03	0.00
DRAINAGE FE/7-20	0.03	0.00	0.03	0.00
DRAINAGE FE/7-21	0.28	0.00	1.68	1.68
DRAINAGE FE/7-22	0.63	0.00	1.38	1.23
DRAINAGE FE/7-23	0.02	0.00	0.02	0.00
DRAINAGE FE/7-24	0.04	0.00	0.04	0.00
DRAINAGE FE/7-25	0.05	0.00	0.05	0.00
SAN MATEO CREEK / WETLAND COMPLEX	35.33	15.25	47.71	47.71
SAN MATEO MARSH	68.55	68.55	68.55	68.55
VERNAL MARSH FE-VM 20	0.05	0.05	0.00	0.00
SAM MATEO MARSH EAST OF I-5	13.60	13.60	24.46	24.46
VERNAL POOL FE-VP 3	0.18	0.18	0.00	0.00
VERNAL POOL FE-VP 4	0.030	0.03	0.00	0.00
SAN ONOFRE CREEK / WETLAND COMPLEX	1.39	1.39	5.30	5.30
TOTAL	**207.96**	**133.28**	**309.07**	**300.21**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

D.1 DRAINAGE DESCRIPTIONS – ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED STUDY AREA

Portions of the A7C-FEC-M Alternative overlap with the CC, CC-ALPV and A7C-ALPV Alternatives. Please see drainage descriptions above for features that have been previously addressed.

Drainage 7-2

Drainage 7-2 consists of two tributaries. The southern tributary is incised within a historically disked canyon bottom. The presence of an OHWM was indicated by sediment deposits. The northern tributary consists of an unvegetated channel within sage scrub vegetation. The channel ends in ruderal vegetation.

Corps jurisdiction totals 0.02 acre, of which none are wetlands. CDFG jurisdiction totals 0.06 acre, of which none consists of vegetated riparian habitat. The feature totals 0.06 acre of ephemeral channel..

Drainage 7-7

Drainage 7-7 is located to the west of the disturbance limits of the A7C – FEC-M alternative. It is wetland drainage vegetated with cattail (*Typha domingensis,* OBL) and bulrush (*Scirpus americanus,* OBL*).* Mulefat and willow (*Salix* species, FACW) vegetate the bank south of San Juan Creek Road.

Corps jurisdiction consists of 1.10 acres, of which 0.48 are wetlands. CDFG jurisdiction totals 2.44 acres, all of which consists of vegetation.

Drainage 7-11

Drainage 7-11 is an incised channel within the disturbance limits of the A7C – FEC-M alternative and is vegetated with upland scrub, chaparral, annual grassland and mulefat at its base. Riparian oak habitat is located on the sandy loam bed.

The presence of an OHWM was indicated by sediment deposits. OHWM ended in ruderal vegetation on the north side of Ortega Highway. CDFG jurisdiction totals 0.03 acre, none of which consists of vegetated riparian habitat.

Drainage 7-12

Drainage 7-12 is incised and traverses the disturbance limits in a northeast direction. The base is vegetated with mulefat.

Corps jurisdiction totals 0.11 acre, none of which are wetlands. CDFG jurisdiction totals 1.94 acres, all of which consist of vegetated riparian habitat.

Drainage FE/7-3

Drainage FE/7-3 runs north-east across the disturbance limits of the A7C – FEC-M alternative and is the western tributary is vegetated with willow woodland. The south central tributary is vegetated with oaks and mulefat and ends at a detention basin vegetated with mud nama (*Nama stenocarpum*, FACW) and cocklebur (*Xanthium strumarium*, FAC). The distinctive eastern tributary that parallels the road alignment is vegetated with southern will forest and coast oak. The terrain is broad and sandy with ample sediment deposits.

Corps jurisdiction totals 4.14 acres, of which 0.03 acre is wetlands. CDFG jurisdiction totals 11.97 acres, of which 10.01 acres consist of vegetated riparian habitat.

Drainage FE/7-4

Drainage FE/7-4 is located both within the disturbance limits of the Far East Corridor alignments and also to the west of them. The tributaries are vegetated with oak woodland. Seepage supports cattails, willows and alkali meadow.

CDFG jurisdiction totals 2.47 acres, of which 2.38 acres consist of vegetated riparian habitat.

Drainage FE/7-5

Drainage FE/7-5 consists of several ephemeral channels that discharge into an artificially irrigated lake behind Trampas Dam.

The channel banks are vegetated with upland chaparral. CDFG jurisdiction totals 0.02 acre, none of which consist of vegetated riparian habitat.

Drainage FE/7-6

Drainage FE/7-6 originates within the disturbance limits of the Far East Corridor alignments and traverses the alignment toward the east before reaching Cristianitos Creek. The channel is approximately two-to-five feet wide. The channel is moderately to deeply incised. The banks of the channel are vegetated with poison oak (*Toxicodendron diversilobum*, UPL), coast live oaks (*Quercus agrifolia*, UPL), toyon (*Heteromeles arbutifolia*, UPL), lemonade berry (*Rhus integrifolia*, UPL), hollyleaf redberry (*Rhamnus ilicifolia*, UPL), monkeyflower (*Mimulus aurantiacus*, UPL), giant wild rye (*Leymus condensatus*, FACU), and Italian thistle (*Carduus pycnocephalus*, UPL).

The OHWM was identified based on debris racks, sediment deposits, and shelving. A riparian oak canopy extends beyond the channel to approximately 65 feet in width. Corps jurisdiction associated with the channel totals 0.36 acre. CDFG jurisdiction associated with the channel totals 2.17 acres, of which 1.95 acres consist of riparian oak habitat.

Drainage FE/7-7

Drainage FE/7-7 originates within the disturbance limits of the Far East Corridor alignment and traverses the alignment toward the east before reaching Cristianitos Creek. The channel is approximately two-to-five feet wide through most of the alignment. One section of the channel located immediately above an access road crossing is approximately 22 feet wide. Sediment deposition has widened the channel in this area. The channel is incised through bedrock in the upper part and is located within a deep v-shaped canyon through the mid reach. The banks of the channel are vegetated with poison oak (*Toxicodendron diversilobum*, UPL), coast live oaks (*Quercus agrifolia*, UPL), toyon (*Heteromeles arbutifolia*, UPL), lemonade berry (*Rhus integrifolia*, UPL), hollyleaf redberry (*Rhamnus ilicifolia*, UPL), monkeyflower (*Mimulus aurantiacus*, UPL), giant wild rye (*Leymus condensatus*, FACU), and Italian thistle (*Carduus pycnocephalus*, UPL). A small patch of wrinkled rush (*Juncus rugulosus*, OBL) occurs in the upper part of a small tributary.

The OHWM was identified based on debris racks, sediment deposits, and shelving. A riparian oak canopy extends beyond the channel to approximately 65 feet in width.

Wetland habitat occurs within the channel at the lower, immediately before reaching Cristianitos Creek. The channel is vegetated with southern cattail (*Typha domingensis*, OBL), arroyo willow (*Salix laseolepis*, FACW), tall flat sedge (*Cyperus eragrostis*, FACW), and blackberry (*Rubus urisinus*, FAC). The channel exhibited slowly flowing water approximately two inches deep at the time of our site visit in June 2004. Soils within the channel exhibit hydric characteristics including a sandy texture with a mucky, organic surface.

A small tributary occurs north of the upper end of the main channel and terminates in a closed basin. The tributary is vegetated with a mix of upland ruderal vegetation and mule fat scrub. The basin is vegetated with upland ruderal species and cocklebur (*Xanthium strumarium*, FAC+). The basin has no outlet.

Corps jurisdiction totals 1.36 acres, of which 0.09 acre is wetland. CDFG jurisdiction totals 11.55 acres, of which 11.19 acres consist of vegetated riparian oak habitat.

Drainage FE/7-8

Drainage FE/7-8 originates within the disturbance limits of the Far East Corridor alignments and traverses the alignment toward the east before reaching Cristianitos Creek. The channel is approximately two-to-four feet wide. The channel is moderately incised. The banks of the

channel are vegetated with poison oak (*Toxicodendron diversilobum,* UPL), coast live oaks (*Quercus agrifolia,* UPL), toyon (*Heteromeles arbutifolia,* UPL), lemonade berry (*Rhus integrifolia*, UPL), hollyleaf redberry (*Rhamnus ilicifolia*, UPL), monkeyflower (*Mimulus aurantiacus,* UPL), giant wild rye (*Leymus condensatus,* FACU), and Italian thistle (*Carduus pycnocephalus*, UPL). A patch of mule fat (*Baccharis salicifolia,* (FACW) and few arroyo willows (*Salix laseolepis,* FACW) occurs at the mid-point of the drainage. A riparian oak canopy extends beyond the channel to approximately 65 feet in width in the upper portion of the channel.

The OHWM was identified based on debris racks, sediment deposits, and shelving.

Corps jurisdiction totals 0.43 acres, none of which are wetlands. CDFG jurisdiction totals 2.91 acres, of which 2.62 acres consist of vegetated riparian habitat.

Drainage FE/7-9

Drainage FE/7-9 originates within the disturbance limits of the Far East Corridor alignment and traverses the alignment toward the east before reaching Cristianitos Creek. The channel is approximately two-to-four feet wide. In the upper part, the drainage is located within a series of deep v-shaped canyons. Below the confluence of these upper canyons, the channel is no longer discernible. The channel begins again with a headcut approximately 600 feet below this point. In the upper part the channel is vegetated with poison oak (*Toxicodendron diversilobum,* UPL), coast live oaks (*Quercus agrifolia*, UPL), toyon (*Heteromeles arbutifolia,* UPL), lemonade berry (*Rhus integrifolia*, UPL), and hollyleaf redberry (*Rhamnus ilicifolia*, UPL). The lower portion of the drainage is vegetated with California sagebrush (*Artemisia californica,* UPL), coyote brush (*Baccharis pilularis*, UPL), monkeyflower (*Mimulus aurantiacus,* UPL), giant wild rye (*Leymus condensatus,* FACU), mugwort (*Artemisia douglasiana,* FAC), and Italian thistle (*Carduus pycnocephalus*, UPL).

The OHWM was identified based on debris racks, sediment deposits, and shelving. Corps and CDFG jurisdiction associated with Drainage FE/7-9 totals 0.16 acre.

Drainage FE/7-10

Drainage FE/7-10 originates within the disturbance limits for the Far East Corridor alignment and extends south beyond the eastern disturbance limits where the OHWM disappears briefly in a grassy swale before joining Cristianitos Creek within the disturbance limits for the Far East Alignment. The channel bed is composed of well-drained soils, cobbles and leaf litter. The channels upper reaches are vegetated with coast live oak (*Quercus agrifolia,* UPL), Mexican elderberry (*Sambucus mexicanus,* FACU), monkey flower (*Mimulus aurantiacus,* UPL), lemonadeberry (*Rhus integrifolia,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), mule fat (*Baccharis salicifolia,* FACW), cudweed (*Gnathalium canescens*, UPL), mugwort (*Artemesia douglasiana,* FAC), coyote brush (*Baccharis pilularis,* UPL), western ragweed (*Ambrosia*

psilostachya, FAC), and non-native grasses and herbs such as wild lettuce (*Lactuca serriola,* FAC), cardoon (*Cynara cardunculus,* UPL), mustard (*Brassica nigra,* UPL), and tocalote (*Centaurea melitensis,* UPL). The channels lower reaches are vegetated with coyote brush (*Baccharis pilularis,* UPL*)*, buckwheat (*Eriogonum fasciculatum*, UPL), tree tobacco (*Nicotiana glauca*, FAC), California sagebrush (*Artemesia californica*, UPL), white clover (*Melilotus alba,* FACU*)*, mustard (*Brassica nigra,* UPL), and non-native grasses.

The presence of an OHWM was indicated by shelving and destruction of terrestrial vegetation. The oak canopy varied from 50 to 80 feet wide.

A tributary channel originates at the eastern edge of the Talega development, traverses the disturbance limits and joins Drainage FE/7-3. The channel bed is composed of well drained soils, cobbles and leaf litter and the banks are vegetated with coast live oak (*Quercus agrifolia,* UPL), Mexican elderberry (*Sambucus mexicanus,* FACU), monkey flower (*Mimulus aurantiacus,* UPL), lemonadeberry (*Rhus integrifolia,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), cudweed (*Gnathalium bicolor,* UPL*)*, mugwort (*Artemesia douglasiana,* FAC), western ragweed (*Ambrosia psilostachya,* FAC), and non-native grasses and herbs such as wild lettuce (*Lactuca serriola,* FAC), cardoon (*Cynara cardunculus,* UPL), mustard (*Brassica nigra,* UPL), and tocalote (*Centaurea melitensis*, UPL).

The presence of an OHWM was indicated by shelving and destruction of terrestrial vegetation. The oak canopy varied from 50 to 80 feet wide.

Corps jurisdiction associated with Drainage FE/7-3 totals 0.30 acre. CDFG jurisdiction associated with the drainage totals 2.88 acres, of which 2.76 acres consists of riparian habitat.

Drainage FE/7-11

Drainage FE/7-11 is located within the disturbance limits of the Far East Corridor alignment and is relatively incised. It is vegetated with southern willow scrub, some willow wetland, cattails and alkali meadow. The vegetation appears partially supported by urban runoff.

Corps jurisdiction totals 1.10 acres, of which 0.12 acres are wetlands. CDFG jurisdiction totals 1.35 acres, all of which consists of vegetated riparian habitat

Drainage FE/7-12

Drainage FE/7-12 originates to the west of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos Creek. The channel varies from five to twelve feet in width. The channel bed of the upper reach is composed of a sandy loam substrate and exhibited surface water in September. This portion of the channel is vegetated with cocklebur (*Xanthium strumarium*, FAC+), rabbitsfoot grass (*Polypogon monspeliensis*, FACW+), mule fat (*Baccharis salicifolia*, FACW-), western ragweed (*Ambrosia psilostachya*, FAC), coyote brush (*Baccharis*

pilularis, UPL), white clover (*Melilotus alba*, FACU*)*, salt cedar (*Tamarix* sp., FACW), and pampas grass (*Cortaderia selloanoa*, UPL). The lower reach of the channel has a cobbly sandy loam bed, with some evidence of subsurface flow and is vegetated with mule fat (*Baccharis salicifolia*, FACW-), coyote brush (*Baccharis pilularis*, UPL), white clover (*Melilotus alba,* FACU*)*, western ragweed (*Ambrosia psilostachya,* FAC), giant wild rye (*Leymus condensatus*, FACU), rabbitsfoot grass (*Polypogon monspeliensis*, FACW+), and non-native grasses. The riparian vegetation varies from 17 feet to 90 feet in width. The presence of an OHWM was indicated by change in soil character. A deeply incised v-channel occurs within this drainage system. The channel originates to the west of the alignment and traverses the disturbance limits to join the main channel. The upper reaches of the v-channel, over 700 feet west of the disturbance limits, supports a cattail wetland. The lower reaches of the channel are vegetated with saltgrass (*Distichlis spicata*, FACW), mustard (*Brassica nigra*, UPL), mule fat (*Baccharis salicifolia*, FACW-), narrow leaved cattail (*Typha sp*., OBL), artichoke thistle (*Cynara cardunculus*, UPL), coyote brush (*Baccharis pilularis*, UPL), and sow thistle (*Sonchus oleraceus*, NI). The channels riparian vegetation varies from four to 15 feet in width. The presence of an OHWM was indicated by shelving and a change in soil character. A series of ephemeral, incised tributary channels occur within this drainage system. These features average one-to-two feet in width. The slopes of these tributaries are composed of colluvial soils that contribute to erosion. The channel beds are composed of fine sandy loam with angular cobbles and are vegetated with coyote brush (*Baccharis pilularis*, UPL), sow thistle (*Sonchus oleraceus*, NI), fennel (*Foeniculum vulgare*, FACU), and non-native grasses with sparse native needlegrass (*Nassella pulchra,* UPL*)* on the upper banks.

Corp jurisdiction associated with Drainage FE/7-12 totals 1.33 acres, of which 0.63 acre consists of jurisdictional wetlands. CDFG jurisdiction associated with the drainage totals 3.02 acres, 3.00 acres of which consists of riparian habitat.

Vernal Marsh FEVM 17

Vernal Marsh FEVM 17 formed in a landslide created basin covering approximately 0.05 acre. The basin supports cocklebur (*Xanthium strumarium*, FAC), Mexican rush (*Juncus Mexicanus*, FACW), and mule fat (*Baccharis Salicifolia*, FACW). Ponding was observed from February 21, 2001 though April 8, 2001 meeting criteria 3 for hydric soils and the criteria for wetland hydrology (saturated in the upper 12 inches for a minimum of 18 consecutive days).

This feature is adjacent to other jurisdictional features, and therefore is subject to Corps jurisdiction, which totals 0.05 acre of wetland.

Drainage FE/7-13

Drainage FE/7-13 originates east of the Far East Corridor alignment and continues east to join Cristianitos Creek. The steep channel averages one foot wide and is composed of fine sandy loam with about 90 percent cobbles and angular rock fragments. The banks are colluvium. The

channel is vegetated with coyote brush (*Baccharis pilularis*, UPL), cardoon (*Cynara cardunculus*, UPL), wild oat (*Avena sp.*, UPL*)*, fennel (*Foeniculum vulgare*, FACU), Italian thistle (*Carduus pycnocephalus*, UPL), ripgut brome (*Bromus diandrus*, UPL), black mustard (Brassica nigra, UPL), and white clover (*Melilotus alba*, FACU*)*.

The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation. Corps and CDFG jurisdiction associated with the drainage totals 0.02 acre.

Drainage FE/7-14

Drainage FE/7-14 originates to the east of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos creek. The steeply incised channel varies from two to four feet wide and has a bed composed of cobbly sand with low organic matter. The channel is vegetated with sagebrush (*Artemesia californica*, UPL), coyote brush (*Baccharis pilularis*, UPL), mule fat (*Baccharis salicifolia*, FACW-), purple needlegrass (*Nassella pulchra*, UPL*)*, cardoon (*Cynara cardunculus*, UPL), fennel (*Foeniculum vulgare*, FACU), and non-native grasses.

The presence of an OHWM was indicated by the presence of litter and debris. Riparian vegetation is contained within the channel.

Several tributaries to the main channel occur within the drainage system. These tributaries are located in deep v-shaped canyons and vary from one to six feet in width. The upper reaches of these drainages have a shallow A horizon with pockets of buried detrital matter that overlays loamy sand with large cobbles and boulders. The channels are vegetated with a few black (*Salix gooddingii*, OBL) and arroyo (*Salix lasiolepis*, FACW) willows throughout the channel, lemonade berry (*Rhus integrifolia*, UPL), coyote brush (*Baccharis pilularis*, UPL), California sagebrush (*Artemesia californica*, UPL), sticky leaf monkey flower (*Mimulus aurantiacus*, UPL), purple needlegrass (*Nassella pulchra*, UPL*)*, giant wild rye (*Leymus condensatus*, FACU), a few mule fat (*Baccharis salicifolia*, FACW-), and a few Mexican elderberry (*Sambucus mexicana*, FAC) on the upper banks. The lower reaches have a much lower organic content in the soil and are vegetated with mule fat (*Baccharis salicifolia*, FACW-), coyote brush (*Baccharis pilularis*, UPL), Mexican elderberry (*Sambucus mexicana*, FAC), sagebrush (*Artemesia californica*, UPL), tarweed (*Hemizonia fasciculara*, UPL), western ragweed (*Ambrosia psilostachya*, FAC), and poison oak (*Toxicodendron diversilobum*, UPL).

The presence of an OHWM was indicated by the presence of debris and litter.

Corps jurisdiction associated with the drainage system totals 0.34 acres. CDFG jurisdiction associated with the drainage system totals 0.38 acres, 0.23 acres of which consists of riparian vegetation.

Vernal Marsh FEVM 16

Vernal Marsh FEVM 16 formed in a landslide created basin covering approximately 0.05 acre. The basin supports cocklebur (*Xanthium strumarium*, FAC). Ponding was observed from February 13, 2001 though May 15, 2001 meeting criteria 3 for hydric soils and the criteria for wetland hydrology (saturated in the upper 12 inches for a minimum of 18 consecutive days).

This feature is adjacent to other jurisdictional features, and therefore is subject to Corps jurisdiction, which totals 0.05 acre of wetland.

The seasonal marsh is not subject to CDFG jurisdiction.

Vernal Marsh FEVM 18

Vernal Marsh FEVM 18 formed in a landslide created basin covering approximately 0.04 acre. The basin supports cocklebur (*Xanthium strumarium*, FAC), mustard (*Brassica nigra*, UPL), alkali mallow (*Malvella leprosa*, FAC), cudweed (*Gnathalium luteo-album*, FACW-), rabbitsfoot grass (*Polypogon monspeliensis*, FACW+), Mexican rush (*Juncus mexicanus*, FACW*)* and (*Echinchloa* sp.,≥FACW). The basin failed to pond in 2001, however, ponding was observed from January 25, 1997 to April 10, 1997 during fairy shrimp surveys.

This feature is adjacent to other jurisdictional features, and therefore is subject to Corps jurisdiction, which totals 0.04 acre of wetland.

Vernal Marsh FEVM 19

Vernal Marsh FEVM 19 formed in a landslide created basin covering approximately 0.06 acre. The basin supports cocklebur (*Xanthium strumarium*, FAC), mustard (*Brassica nigra*, UPL), alkali mallow (*Malvella leprosa*, FAC), cudweed (*Gnathalium luteo-album*, FACW-), rabbitsfoot grass (*Polypogon monspeliensis*, FACW+), Mexican rush (*Juncus mexicanus*, FACW*)* and (*Echinchloa* sp.,≥FACW). Ponding was observed from February 21, 2001 though April 4, 2001 meeting criteria 3 for hydric soils and the criteria for wetland hydrology (saturated in the upper 12 inches for a minimum of 18 consecutive days).

This feature is adjacent to other jurisdictional features, and therefore is subject to Corps jurisdiction, which totals 0.06 acre of wetland.

Drainage FE/7-15

Drainage FE/7-15 consists of an incised channel that varies three to eight feet in width cut through stratified sandy and cobbly alluvial sediments. The channel originates to the west of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos Creek. The channel bed is composed of medium loamy sand and is vegetated with sagebrush (*Artemesia*

californica, UPL), mule fat *(Baccharis salicifolia*, FACW-), rabbitsfoot grass (*Polypogon monspeliensis*, FACW+), white sage (*Salvia apiana*, UPL), western ragweed (*Ambrosia psilostachya*, FAC), and coyote brush (*Baccharis pilularis*, UPL). The mule fat scrub varies from six to eight feet wide. The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation.

Two tributary drainages occur within the disturbance limits. These channels vary from one to three feet wide and are composed of medium sandy loam with large cobbles, cut through stratified alluvium sediments. The channels are vegetated with coyote brush (*Baccharis pilularis*, UPL), giant wild rye (*Leymus condensatus*, FACU), Mexican elderberry (*Sambucus mexicana*, FAC), sagebrush (*Artemesia californica*, UPL), sticky leaf monkey flower (*Artemesia californica*, UPL), black mustard (*Brassica nigra*, UPL), ripgut brome (*Bromus diandrus*, UPL), deerweed (*Lotus scoparius*, UPL), and common sunflower (*Helianthus annus*, FAC-).

The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation.

Corps jurisdiction associated with the drainage system totals 0.40 acre, of which 0.03 acre consists of wetlands. CDFG jurisdiction associated with the drainage system totals 0.88 acre, of which 0.64 acre consists of mule fat scrub.

Drainage FE/7-16

Drainage FE/7-16 originates to the west of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos Creek. The channel varies from four to five feet wide and is composed of a cobbly sandy substrate. The channel is located within a highly incised canyon and is vegetated with buckwheat (*Eriogonum fasciculatum*, UPL), coyote brush (*Baccharis pilularis*, UPL), California sagebrush (*Artemesia californica*, UPL), laurel sumac (*Malosma laurina*, UPL), Mexican elderberry (*Sambucus mexicana*, FAC), poison oak (*Toxicodendron diversilobum*, UPL), tree tobacco (*Nicotiana glauca*, FAC), fennel (*Foeniculum vulgare*, FACU), giant wild rye (*Leymus condensatus*, FACU), lemonade berry (*Rhus integrifolia*, UPL), mustard (*Brassica nigra*, UPL), and sticky leaf monkey flower (*Mimulus aurantiacus*, UPL).

The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation. Corps, and CDFG jurisdiction associated with the drainage totals 0.23 acres.

Drainage FE/7-18

Drainage FE/7-18 is a highly vegetated V channel that varies from five to 18 feet in width. Its tributary varies from three to five feet in width. The channel has a sandy loam substrate with no cobbles or boulders and is vegetated with cocklebur (*Xanthium strumarium*, FAC), mule fat (*Baccharis salicifolia*, FACW-), arroyo willow (*Salix lasiolepis*, FACW), pampas grass (*Cortaderia selloana*, UPL), and bristly ox tongue (*Picris echioides*, FAC). The willow and mule fat scrub varies from 20 feet to 50 feet in width wide.

The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation. Corps jurisdiction associated with the drainage totals 1.10 acres. CDFG jurisdiction associated with the drainage totals 1.72 acres, of which 0.95 acre consists of willow scrub.

Drainage FE/7-19

Drainage FE/7-19 originates within the disturbance limits and traverses the Far East Corridor alignment to join San Mateo Creek. The high gradient channel averages one foot in width and is composed of sandy loam soils with high organic content in the A horizon. The drainage is vegetated with monkey flower (*Mimulus aurantiacus*, UPL), sagebrush (*Artemesia californica*, UPL), coyote brush (*Baccharis pilularis*, UPL), gum plant (*Grindelia camporum*, FACU), and bladderpod (*Isomeris arborea*, UPL).

The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation. Corps and CDFG jurisdiction associated with the drainage totals 0.03 acre.

Drainage FE/7-20

Drainage FE/7-20 originates within the disturbance limits of the Far East Corridor alignment and traverses the alignment to join San Mateo Creek. The channel averages one foot in width and vegetated with coyote brush (*Baccharis pilularis*, UPL), Mexican elderberry (*Sambucus mexicana*, FAC), sagebrush (*Artemesia californica*, UPL), tree tobacco (*Nicotiana glauca*, FAC), and cocklebur (*Xanthium strumarium*, FAC).

The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation. Corps and CDFG jurisdiction associated with the drainage totals 0.03 acre.

Drainage FE/7-21

Drainage FE/7-21 varies from two to six feet in width. The channel originates west of the Car East Corridor alignment and traverses the disturbance limits to join San Mateo Creek. The channel is composed of fine-sandy loam soil with no cobbles or boulders and is vegetated with Mexican elderberry (*Sambucus mexicana*, FAC), coyote brush (*Baccharis pilularis*, UPL), and cocklebur (*Xanthium strumarium*, FAC).

The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation. The Mexican elderberry averages 30 feet in width. Corps jurisdiction associated with the drainage totals 0.28 acre. CDFG jurisdiction associated with the drainage totals 1.68 acre, all of which consists of riparian habitat.

Drainage FE/7-22

Drainage FE/7-22 originates west of the Far East Corridor alignment and traverses the disturbance limits to join San Mateo Creek. The deeply incised channel varies from 10 to 25 feet in width and is composed of sandy soil with no cobbles. The middle portion of the channel is vegetated with Mexican elderberry (*Sambucus mexicana*, FAC), sagebrush (*Artemesia californica*, UPL), coyote brush (*Baccharis pilularis*, UPL), and non-native pampas grass (*Cortaderia selloana*, UPL). The upstream and downstream reaches support willow (*Salix lasiolepis*, FACW) and mule fat (*Baccharis salicifolia*, FACW).

The presence of an OHWM was indicated by shelving and destruction of terrestrial vegetation. The riparian vegetation varies from 25 to 40 feet in width.

Two tributary drainages occur within the alignment. The channels average two feet in width and are composed of coarse sand, sandy loam and no cobbles. The lower reach of the channels are natural, while its upper reach has been filled and rerouted by agricultural activities. The channel is vegetated with mule fat (*Baccharis salicifolia*, FACW-), coyote brush (*Baccharis pilularis*, UPL), sagebrush (*Artemsia californica*, UPL), mustard (*Brassica nigra*, UPL), fennel (*Foeniculum vulgare*, FACU), Mexican elderberry (*Sambucus mexicana*, FAC), horseweed (*Conyza canadensis*, FAC), and castor bean (*Ricinus communis*, UPL).

The presence of an OHWM was indicated by destruction of terrestrial vegetation and shelving.

Corps jurisdiction associated with the drainage system totals 0.63 acres. CDFG jurisdiction associated with the drainage system totals 1.38 acres, of which 1.23-acres consist of riparian habitat.

Drainage FE/7-23

Drainage FE/7-23 originates within the disturbance limits of the Far East Corridor alignment and extends southeast to join San Mateo Creek. The channel averages one foot in width and is composed of cobbly sand that results from road runoff. The drainage is vegetated with mule fat (*Baccharis salicifolia*, FACW-), fennel (*Foeniculum vulgare*, FACU), caster bean (*Ricinus communis*, UPL), coyote brush (*Baccharis pilularis*, UPL), western ragweed (*Ambrosia psilostachya*, FAC), tocalote (*Centaurea melitensis*, UPL), mustard (*Brassica nigra*, UPL), and wild oats (*Avena sp.*, UPL).

The presence of an OHWM was indicated by destruction of terrestrial vegetation and shelving. Corps and CDFG jurisdiction associated with the drainage totals 0.02 acre.

Drainage FE/7-24

Drainage FE/7-24 originates within the disturbance limits of the Far East Corridor alignment and extends southeast to join San Mateo creek. The channel averages three feet in width and is composed of cobbly sand. The drainage is vegetated with coyote brush (*Baccharis pilularis*, UPL), fennel (*Foeniculum vulgare*, FACU), sagebrush (*Artemesia californica*, UPL), mule fat (*Baccharis salicifolia*, FACW-), mustard (*Brassica nigra*, UPL), and Mexican elderberry (*Sambucus mexicana*, FAC).

The presence of an OHWM was indicated by destruction of terrestrial vegetation and shelving. Corps and CDFG jurisdiction associated with the drainage totals 0.04 acre.

Drainage FE/7-25

Drainage FE/7-25 originates within the disturbance limits of the Far East Corridor alignment and extends southeast to join San Mateo Creek. The channel varies from one to three feet in width and is composed of cobbly sand. The drainage is vegetated with sagebrush (*Artemsia californica*, UPL), mustard (*Brassica nigra*, UPL), coyote brush (*Baccharis pilularis*, UPL), tree tobacco (*Nicotiana glauca*, FAC), coast sunflower (*Encelia californica*, UPL), and Mexican elderberry (*Sambucus mexicana*, FAC).

The presence of an OHWM was indicated by destruction of terrestrial vegetation and shelving. Corps and CDFG jurisdiction associated with the drainage totals 0.05 acre.

San Mateo Creek

The San Mateo Creek/Wetland Complex consists of the braided channel of San Mateo Creek and includes areas of the low-flow channel, which are supported by base flow throughout the year. The channel varies from 200 to 1100 feet wide and is composed of coarse sand with cobbles and boulders. There are similar but narrower braids throughout the channel bed with several islands that support both annual and perennial vegetation including mule fat (*Baccharis salicifolia*, FACW-), narrow-leaved willow (*Salix exigua*, OBL), arroyo willow (*Salix lasiolepis*, FACW), fennel (*Foeniculum vulgare*, FACU), rabbitsfoot grass (*Polypogon monspeliensis*, FACW+), red and ripgut brome (*Bromus rubens* and *Bromus diandrus*, UPL), white clover (*Melilotis alba*, FACU), and curly dock (*Rumex crispus*, FACW-). In general, vegetation within the drainage varies from mature willow woodland to mule fat scrub and open cobbly wash. Wetland areas are vegetated with yellow willow (*Salix lucida*, FACW*)*, arroyo willow (*Salix lasiolepis*, FACW*)*, cattail (*Typha domingensis*, OBL), spike rush (*Eleocharis acicularis*, OBL), bulrush (*Scirpus americanus*, OBL*)*, narrow leafed willow (*Salix exigua*, OBL), mule fat (*Baccharis salicifolia*, FACW-), sedge (*Cyperus* sp., ≥FACW) iceplant (*Carpobrutus* sp., UPL), saltgrass (*Distichlis spicata*, FACW), celery (*Apium graveolens*, FACW), cudweed (*Gnathalium luteo-album* (FACW-), white alder (*Alnus rhombifolia*, FACW), horsetail (*Equisetum* sp., ≥FAC), and rabbitfoot grass (*Polypogon monspeliensis*, FACW+).
The presence of an OHWM was indicated by the presence of litter and debris, clear line impressed upon the bank, destruction of terrestrial vegetation and change is soil character. Corps

jurisdiction associated with the channel totals 35.33 acres, of which 15.25 acres consist of jurisdictional wetlands. CDFG and jurisdiction associated with the channel total 47.71 acres, all of which consists of riparian habitat. Riparian habitat within the Coastal Zone totals 17.44 acres, all of which consists of one-parameter wetland.

San Mateo Marsh

San Mateo Marsh is a coastal freshwater marsh that is located near the southern end of the study area where San Mateo Creek discharges into the ocean. The marsh is a mosaic of wetland/riparian habitat that is located on both the coastal and inland sides of Interstate-5. The Trestles Wetland Preserve, on the coastal side of Interstate-5, consists of willow riparian forest, southern sycamore riparian forest, freshwater marsh dominated by hardstem bulrush (*Scirpus acutus*, OBL) and southern cattail (*Typha domingensis*, OBL), brackish marsh dominated by Olney's bulrush (*Scirpus americanus*, OBL), and small areas of coastal salt marsh dominated by fleshy jaumea (*Jaumea carnosa*, OBL) and pickleweed (*Salicornia virginica*, OBL).

Delineation of the coastal side of Interstate-5 was based on aerial photography and has not been confirmed in the field since it lies outside of the disturbance limits. Corps, CDFG and CCC jurisdiction associated with the wetland totals approximately 68.55 acres all of which consist of jurisdictional wetlands.

Vernal Marsh FE-VM 20

Vernal Marsh FE-VM 20 is located adjacent to the Interstate-5 off ramp at Basilone Road. The basin appears to have been created by construction of the offramp and supports hydrophytic vegetation including mule fat (*Baccharis salicifolia*, FACW), arroyo willow (*Salix lasiolepis*, FACW), western goldenrod (*Euthamia occidentalis*, OBL), and salt marsh fleabane (*Pluchea odorata*, OBL). The basin was observed to be ponded from February 13, 2001 to February 21, 2001 meeting criteria 3 for hydric soils.

This feature is adjacent to other jurisdictional features, and therefore is subject to Corps jurisdiction, which totals 0.05 acre of wetland. of wetland

San Mateo Marsh East of I-5

Inland from Interstate-5, a portion of San Mateo Marsh, separated from San Mateo creek by agricultural fields is located immediately east of Interstate-5 and north of Basilone Road. This area consists of willow riparian forest and brackish marsh. The willow riparian forest is dominated by arroyo willow (*Salix lasiolepis*, FACW) with an understory of giant nettle.(*Urtica dioica*, FACW). The wettest areas within the willow forest supports fruit bur-reed (*Sparganium eurycarpum*, OBL), Olney's bulrush (*Scirpus americanus*, OBL), red-rooted umbrella sedge (*Cyperus erythrorhizos*, OBL), straw colored umbrella sedge (*Cyperus strigosus*, FACW), and California bulrush (*Scirpus californicus*, OBL). Sediment deposits and moderate shelving

indicated the presence of hydrology. Soils were composed of low chroma silt layers interbedded with layers of fine sand and buried organics.

Corps jurisdiction associated with marsh totals 13.60 acres, all of which consist of wetlands. CDFG jurisdiction associated with the marsh totals approximately 24.46 acres, all of which consist of willow woodland. Riparian habitat within the Coastal Zone totals 23.52 acres, all of which consists of one-parameter wetland.

Vernal Pool FE-VP 3

Vernal Pool FE-VP 3 is a basin which covers 0.18 acres vegetated with dwarf wholly heads (*Psilocarphus brevissimus*, OBL), rabbitfoot grass (*Polypogon monspeliensis*, FACW), Boccone's sand spurry (*Spergullaria bocconei*, FAC), smooth cat's ear (*Hypochaeris glabra*, UPL), and mule fat (*Baccharis salicifolia*, FACW). The basin was observed to be ponded from February 13, 2001 to February 21, 2001 meeting criteria 3 for hydric soils.

This feature is adjacent to other jurisdictional features, and therefore is subject to Corps jurisdiction, which totals 0.18 acre of wetland.

Vernal Pool FE-VP 4

Vernal Pool FE-VP 4 is located on the bluff north of San Onofre Creek. The 0.09-acre basin supported dwarf wholly heads (*Psilocarphus brevissimus*, OBL), hyssop loosestrife (*Lythrum hyssopifolium*, FACW), rabbitfoot grass (*Polypogon monspeliensis*, FACW), and curly dock (*Rumex crispus*, FACW). The basin was observed to be ponded from February 13, 2001 to February 21, 2001 meeting criteria 3 for hydric soils.

This feature is adjacent to other jurisdictional features, and therefore is subject to Corps jurisdiction, which totals 0.03 acre of wetland.

San Onofre Creek

The San Onofre Creek/Wetland complex is a major drainage within the study area. The low flow channels within the creek are dominated by herbaceous cover including water-cress (*Rorippa nasturtium-aquaticum*, OBL) yellow waterweed (*Ludwigia peploides*, OBL), water speedwell (*Veronica anagallis-aquatica*, OBL), southern cattail (*Typha domingensis*, OBL), and common monkey flower (*Mimulus guttatus*, OBL). Dominant overstory vegetation includes western sycamore (*Platanus racemosa*, FACW) and arroyo willow (*Salix lasiolepis*, FACW).

Corps jurisdiction totals 1.39 acres, all of which is wetlands. CDFG and CCC jurisdiction totals 5.3 acres, all of which consists of vegetated riparian habitat.

E. FAR EAST CORRIDOR – MODIFIED STUDY AREA

Several jurisdictional areas associated with Far East Corridor – Modified (FEC-M) study area were delineated for Rancho Mission Viejo. These areas have been verified by both Corps and CDFG and are indicated on the delineation maps as verified. For all other areas, the jurisdictional totals were mapped in 2001 and 2003. Exhibit 1 depicts the location and extent of Corps jurisdictional areas. Exhibit 2 depicts the location and extent of CDFG jurisdictional areas.

Corps jurisdiction associated with the FEC-M Alternative study area totals approximately 212.09 acres, of which 138.23 acres consist of jurisdictional wetlands. CDFG jurisdiction associated with the FEC-M Alternative study area totals 341.15cres, of which 332.68 acres consists of vegetated riparian or wetland habitat. CCC jurisdiction associated with the FEC-M Alternative study area totals approximately 115.06 acres, all of which consist of one-parameter wetlands.

TABLE A-7
JURISDICTIONAL AREAS
FAR EAST CORRIDOR – MODIFIED STUDY AREA
(in acres)

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/C/7 WETLAND 1	12.62	12.62	12.62	12.62
FE/C/7-1	0.09	0.00	0.73	0.66
FE/C/7 WETLAND 2	0.00	0.00	0.00	0.00
FEC/7-2	0.00	0.00	0.02	0.00
FE/C/7-3	0.00	0.00	0.01	0.00
FE/C/7-4	0.00	0.00	0.02	0.00
FE/7-1	0.00	0.00	3.27	3.16
FE/7-2	0.00	0.00	0.57	0.48
FE-1	0.00	0.00	1.76	1.70
FE – WETLAND 1	0.00	0.00	0.00	0.00
FE-2	0.00	0.00	5.81	5.81
FE-2A	0.00	0.00	1.48	1.44
FE-2B	0.14	0.00	0.14	0.00
FE – POND 1	0.00	0.00	0.00	0.00
FE-3 CANADA GOBANADORA	1.91	1.85	6.72	6.72
FE-4	0.00	0.00	4.82	4.82
FE-5	0.63	0.15	5.46	5.20
FE – WETLAND 2	0.00	0.00	0.00	0.00
FE-6	0.00	0.00	1.12	1.07
FEW -1	0.00	0.00	0.12	0.00

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE-7	4.52	2.26	12.27	10.79
FEM-1	2.19	0.34	5.10	4.79
FEM-2	0.00	0.00	0.01	0.00
FEM-3	0.00	0.00	1.77	1.77
FEM-5	0.01	0.00	0.01	0.00
FEM-6	0.02	0.00	0.02	0.00
FEM-7	0.01	0.00	0.02	0.02
FEM-8	0.02	0.00	0.07	0.06
FEM-9	0.01	0.00	0.01	0.00
FEM-POND 1	0.00	0.00	0.00	0.00
FEM-VM 7	0.00	0.00	0.00	0.00
FEM-VM 8	0.00	0.00	0.00	0.00
FEM-VM 9	0.78	0.78	0.78	0.78
FEM-VM 10	0.06	0.06	0.00	0.00
FEM-VM 11	0.04	0.04	0.00	0.00
FEM-VM 12	0.04	0.04	0.00	0.00
FEM-VP 2	0.18	0.18	0.00	0.00
FEM – SEEP 1	0.51	0.51	0.51	0.51
FEM – SAN JUAN CREEK	26.87	2.92	26.87	26.87
FEM-10	1.82	0.63	6.30	6.04
FEM-11	6.65	5.80	9.40	9.18
FEM-12	0.52	0.00	0.63	0.22
FEM-13	0.89	0.03	3.05	2.52
FEM-14	0.24	0.00	0.29	0.06
FEM-15	0.36	0.00	0.36	0.00
FEM-16	0.22	0.00	0.96	0.86
FE/7-7	1.35	0.09	11.55	11.19
FEM-17	0.44	0.07	1.29	1.11
GABINO CREEK	4.74	0.19	4.32	4.32
CRISTIANITOS CREEK	18.06	9.64	47.59	47.30
FE/7-8	0.43	0.00	2.91	2.62
FE/7-8A	0.05	0.00	0.05	0.00
FE/7-8B	0.01	0.00	0.01	0.00
FE/7-9	0.18	0.00	0.18	0.00
FEM-18	0.04	0.00	0.12	0.09
FEM-19	0.01	0.00	0.01	0.00
FEM-20	0.02	0.00	0.02	0.00

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/7-10	0.31	0.00	2.90	2.76
FE/7-11	1.09	0.12	1.35	1.35
FE/7-12	1.39	0.68	3.06	3.04
FE/7-13	0.02	0.00	0.02	0.00
FE/7-14	0.34	0.00	0.38	0.23
FE/7-VM 16	0.05	0.05	0.00	0.00
FE/7-VM 17	0.05	0.05	0.00	0.00
FE/7-VM 18	0.04	0.04	0.00	0.00
FE/7-VM 19	0.06	0.06	0.00	0.00
FE/7-15	0.40	0.03	0.88	0.64
FE/7-16	0.23	0.00	0.23	0.00
FE/7-17	0.21	0.00	0.21	0.00
FE/7-18	1.10	0.00	1.72	0.95
FE/7-19	0.03	0.00	0.03	0.00
FE/7-20	0.03	0.00	0.03	0.00
FE/7-21	0.28	0.00	1.68	1.68
FE/7-22	0.63	0.00	1.38	1.23
FE/7-23	0.02	0.00	0.02	0.00
FE/7-24	0.04	0.00	0.04	0.00
FE/7-25	0.05	0.00	0.05	0.00
SAN MATEO CREEK	35.33	15.25	47.71	47.71
SAN MATEO MARSH	68.55	68.55	68.55	68.55
SAN MATEO MARSH – EAST OF I5	13.60	13.60	24.46	24.46
FE/7-VM 20	0.05	0.05	0.00	0.00
FE/7-VP 3	0.18	0.18	0.00	0.00
FE/7-VP 4	0.03	0.03	0.00	0.00
SAN ONOFRE CREEK	1.39	1.39	5.30	5.30
TOTAL	**212.18**	**138.28**	**341.15**	**332.68**

1 These features are depicted on Exhibits 1 and 2.

2 Refer to Appendix B for isolated features totals

E.1 DRAINAGE DESCRIPTIONS – FEC-M STUDY AREA

Portions of the FEC-M Alternative overlap with the CC, CC-ALPV, A7C-ALPV and A7C-FEC-M Alternatives. Please see drainage descriptions above for features that have been previously addressed.

Drainage FE-1

Drainage FE-1 varies from two to four feet in width. The channel originates east of the alignment common to all alternatives except the Central Corridor alternatives. It traverses the disturbance limits until the bed and bank terminates in grassland approximately a half mile from Cañada Chiquita. The drainage supports oak (*Quercus agrifolia,* UPL*)* woodland with western ragweed (*Ambrosia psilostachya,* FAC), scattered sedges (*Carex*), lemonade berry (*Rhus integrifolia,* UPL), and Mexican elderberry (*Sambucus mexicanus,* FACU) in the understory. The oak canopy averages 40 to 60 feet in width.

CDFG jurisdiction associated with the channel totals 1.76 acres, of which 1.70 acres consist of oak riparian habitat.

Drainage FE – Wetland 1

FE-Wetland 1 consists of a seep that has been highly disturbed by cattle. The seep is located approximately 100 feet to the west of FE-2. The seep is vegetated with curly dock (*Rumex crispus*, FACW-), Mexican rush (*Juncus mexicanus,* FACW*)*, watercress (*Rorippa nasturtium-aquatica*, OBL), wild celery (*Apium graveolens*, FACW), and *Cyperus* sp., ≥FACW. The seep exhibited saturated soil and surface water in August; however, this seep exhibits no surface tributary connection to other jurisdictional waters and is not adjacent to other jurisdictional waters . Soils were gleyed clay loam.

The feature totals 0.16 acre, all of which is wetland. Since the feature does not exhibit a bed or bank is not regulated by CDFG.

Drainage FE-2

Drainage FE-2 averages ten feet in width and extends parallel to the Far East Corridor alignment and terminates in grassland approximately 500 feet from Cañada Gobenadora. The channel was composed of gleyed clay loam soil with a sulfidic odor and exhibited surface water in August. The channel supported cattail (*Typha domingensis*, OBL), mule fat (*Baccharis salicifolia,* FACW), and spike rush (*Eleocharis* spp, ≥FACW). Vegetation on the banks included black willow (*Salix gooddingii,* OBL), arroyo willow (*Salix lasiolepis*, FACW), and mule fat (*Baccharis salicifolia,* FACW) with cardoon (*Cynara cardunculus,* UPL), western ragweed (*Ambrosia psilostachya,* FAC), and mustard (*Brassica nigra,* UPL) in the understory.

The presence of an OHWM was indicated by change in soil character and destruction of terrestrial vegetation. The willow canopy averages 100 feet in width. The feature totals 0.16 acre all of which consists of jurisdictional wetlands. CDFG jurisdiction associated with the channel totals 1.78 acres of willow riparian habitat.

Drainage FE-2a

Drainage FE-2a varies from three to five feet in width and is heavily trampled by cattle. The channel is located within the disturbance limits and terminates in grassland. The unvegetated channel consists of saturated sandy loam soil with a well developed A horizon. The channel banks are vegetated with mature oak (*Quercus agrifolia,* UPL) woodland with a few Mexican elderberries (*Sambucus mexicanus,* FACU) along the margins.

The feature totals 0.08 acre, none of which consists of jurisdictional wetlands. CDFG jurisdiction associated with the channel totals 1.48 acres of which 1.44 acres are oak riparian habitat.

Drainage FE-2b

Drainage FE-2b exhibited base flows in July and varies from two to four feet wide. The channel originates west of the Far East Corridor alignment, traverses the disturbance limits and discharges into FE-3 east of the disturbance limits. The channel consists of sandy loam soil with high organic content and a well developed A horizon. The channel banks of the lower reach are vegetated with coast live oak (*Quercus agrifolia,* UPL) and lemonade berry (*Rhus integrifolia,* UPL) while the banks of the upper reach are vegetated with non-native grasses and coastal sage scrub.

Corps, and CDFG jurisdiction associated with the channel totals 0.14 acre.

Drainage FE – Pond 1

FE-Pond 1 is constructed in upland and exhibits no surface connection to other jurisdictional waters. The feature totals 0.83 acre of ephemeral drainage, none of which is wetland. There is no CDFG jurisdictional acreage.

Drainage FE-3 Gobenadora

Drainage FE-3 is approximately 15 feet wide. It originates outside of the disturbance limits of the Far East Corridor and traverses the alignment. The channel bottom is clean sand, which exhibited base flow in July 2001. The channel is vegetated with arroyo willow (*Salix lasiolepis,* FACW), black willow (*Salix gooddingii,* OBL), mule fat (*Baccharis salicifolia,* FACW), bulrush (*Scirpus americanus,* OBL), western ragweed (*Ambrosia psilostachya,* FAC), white clover (*Melilotus alba,* FACU *alba*), cocklebur (*Xanthium strumarium,* FAC+), willow weed

(*Polygonum lapathifolium*, OBL) watercress (*Rorippa nasturtium-aquatica*, OBL), tall flatsedge (*Cyperus eragrostis*, FACW), speedwell (*Veronica angallis-aquatica*, OBL), and knotgrass (*Paspalum distichum*, OBL) The channel bed was composed of low chroma (10YR 4/1) sandy loam soils with mottles. Two adjacent areas had clear signs of water flow and some areas of saturated soil. The southern area was primarily vegetated with white clover (*Melilotus alba*, FACU*)*, Bermuda grass (*Cynodon dactylon*, FAC*)* and Italian rye grass (*Lolium multiflorum*, FAC), though there were many other hydrophytic species present including mule fat (*Baccharis salicifolia*, FACW) and willow (*Salix lasiolepis*, FACW). The silty clay loam soils were low chroma (5YR 4/1) though there were no mottles present. The northern area had a larger proportion of mule fat and cocklebur. These two areas totaled approximately 14,000 square feet.

The presence of an OHWM was indicated by change in soil character, destruction of vegetation and shelving. Corps jurisdiction associated with the channel totals 1.91 acres, of which 1.85 acres are jurisdictional wetlands. CDFG jurisdiction associated with the channel totals 6.72 acres of willow riparian habitat.

Drainage FE-4

Drainage FE-4 is located east of the Far East Corridor alignment. It originates with a wetland seep vegetated with black willow (Salix gooddingii, OBL), mulefat (Baccharis salicifolia, FACW), wrinkled rush (Juncus rugulosis, OBL), Mexican rush (Juncus mexicanus, FACW). The channel, which averages one foot wide, terminates in a depressional area approximately 1300 feet from Cañada Gobenadora. The channel is located within a relatively broad swale that has been disturbed by cattle. The channel bed is composed of a silt loam soil covered with a thick leaf layer and lacks a surface tributary connection with other jurisdictional waters. The channel banks are vegetated with coast live oak (*Quercus agrifolia,* UPL), black willow (*Salix gooddingii*, OBL), giant wild rye (*Leymus condensatus,* FACU), mugwort (*Artemesia douglasiana,* FAC), lemonade berry (*Rhus integrifolia,* UPL), milkweed (*Asclepias fascicularus,* FAC), western ragweed (*Ambrosia psilostachya*, FAC), tarweed (*Hemizonia fasciculata,* UPL), and non-native grasses. Where discernible, the presence of an OHWM was indicated by shelving and destruction of terrestrial vegetation. The riparian oak canopy varies from 50 to 60 feet wide.

The feature totals 2.65 acre of ephemeral drainage. CDFG jurisdiction associated with the channel totals 4.82 acres, of which all consists of oak riparian habitat.

FE – Wetland 2

FE – Wetland 2 exhibits influence by groundwater. It supports a single black willow (*Salix gooddingii*, OBL) and an understory of hydrophytic herbaceous vegetation including Mexican rush (*Juncus mexicanus*, FACW).

The feature exhibits no bed and bank and is therefore not subject to CDFG jurisdiction. The feature totals 0.23 acre all of which consists of wetland.

Drainage FE-5

Drainage FE-5 varies from three to eight feet in width. The channel originates east of the Far East Corridor alignment, traverses the disturbance limits and extends west where the OHWM disappears upon reaching the road and before reaching Cañada Gobenadora. The mid reach segment of the drainage exhibited surface water, as well as highly organic sandy loam soils (N 3/1) with coarse distinct mottles and a sulfidic odor. This portion of the channel is vegetated with smartweed (*Polygonum punctatum,* OBL), watercress (*Rorippa nasturtium-aquatica,* OBL), stinging nettle (*Urtica dioica,* FACW), black willow (*Salix gooddingii,* OBL*)* and duckweed (*Lemna* sp., OBL). The channel banks were vegetated with sycamore (*Platanus racemosa,* FACW), arroyo willow (*Salix lasiolepis,* FACW), poison oak (*Toxicodendron diversilobum,* UPL), coast live oak (*Quercus agrifolia,* UPL), and toyon (*Heteromeles arbutifolia,* UPL). West of the alignment, the drainage supports mainly western sycamore (*Platanus racemosa,* FACW) dominated woodland. East of the alignment, the channel supports mature oak (*Quercus agrifolia,* UPL) woodland. The banks of this portion of the drainage are vegetated with coast live oak (*Quercus agrifolia,* UPL), toyon (*Heteromeles arbutifolia,* UPL), and lemonade berry *(Rhus integrifolia,* UPL). Cattle have trampled the OHWM in some portions of the drainage.

Where discernible, the presence of an OHWM was determined by change in soil character, shelving, and destruction of terrestrial vegetation. The riparian vegetation varies from 10 to 200 feet in width. This feature includes an adjacent seep supporting alkali meadow vegetation. Corps jurisdiction associated with the channel totals 0.63 and 0.64 acres respectively, of which 0.15 acres consist of jurisdictional wetlands. CDFG jurisdiction associated with the channel totals 5.46 acres, of which 5.20 acres consist of riparian habitat.

Drainage FE-6

Drainage FE-6 originates to the east of the Far East Corridor alignment, traverses the disturbance limits and extends west where the OHWM disappears in grassland, approximately 1,500 feet from Gobernadora Creek. The channel varies from one to three feet in width. The slightly incised channel bed is composed of sandy loam and leaf litter. The channel banks are vegetated with poison oak (*Toxicodendron diversilobum,* UPL), lemonade berry (*Rhus integrifolia,* UPL), coast live oak (*Quercus agrifolia,* UPL), monkey flower (*Mimulus aurantiacus,* UPL), and Italian thistle (*Carduus pycnocephalis,* UPL).

The presence of an OHWM was indicated by change in soil character, shelving and destruction of terrestrial vegetation. The riparian oak canopy averages 40 feet in width. The feature includes 0.11 acre of ephemeral drainage. CDFG jurisdiction associated with the channel totals 1.12 acres, of which 1.07 acres consist of riparian habitat.

Drainage FEW-1

Drainage FEW-1 originates within the disturbance limits of the Far East Corridor alignment and extends west where it terminates in grassland, approximately 1,000 feet from Gobernadora Creek. The channel varies from three to five feet in width. The channel bed is composed of sandy loam and is vegetated with California sagebrush (*Artemesia californica,* UPL), lemonade berry (*Rhus integrifolia,* UPL), monkey flower (*Mimulus aurantiacus,* UPL), Mexican elderberry (*Sambucus mexicanus,* FACU), toyon (*Heteromeles arbutifolia,* UPL), coyote brush (*Baccharis pilularis,* UPL), prickly pear (*Opuntia littoralis sp. ,* UPL), giant wild rye (*Leymus condensatus,* FACU), and non-native grass (*Brome* sp.).

The presence of an OHWM was determined by shelving and destruction of terrestrial vegetation. CDFG jurisdiction totals 0.12 acre, none of which consists of vegetated riparian habitat or wetland.

Drainage FE-7

Drainage FE-7 averages 13 feet in width. The channel originates north of the Far East Corridor – West alignment, traverses the disturbance limits and extends south of the disturbance limits to eventually join San Juan Creek. The drainage includes several tributaries ranging from two to five feet in width. The channel is composed of inundated coarse sandy loam with a gleyed color and sulfidic odor. The channel is vegetated with arroyo willow (*Salix lasiolepis,* FACW), lemonade berry (*Rhus integrifolia,* UPL), wrinkled rush (*Juncus rugulosis,* OBL), willow herb (*Epilobium ciliatum,* FACW), coast live oak (*Quercus agrifolia,* UPL*)*, black willow (*Salix gooddingii,* OBL), and toyon (*Heteromeles arbutifolia,* UPL).

The presence of an OHWM was determined by change in soil character, shelving, and destruction of terrestrial vegetation. The riparian canopy averages 50 feet in width.

A tributary to Drainage FE-7 occurs within the alignment and averages two feet in width. The tributary originates within the disturbance limits, traverses the alignment and extends west to join the main channel. The channel is composed of loamy sand covered with leaf litter and is vegetated with Italian thistle (*Carduus pycnocephalus,* UPL), mustard (*Brassica nigra,* UPL), non-native grass (*Bromus sp., NI*), wild oat (*Avena sp.,* UPL *sp.*), curly dock (*Rumex crispus,* FACW-), cudweed (*Gnathalium canescens,* UPL*)*, monkey flower (*Mimulus aurantiacus,* UPL), laurel sumac (*Malosma laurina,* UPL), California sagebrush (*Artemesia californica,* UPL), toyon (*Heteromeles arbutifolia,* UPL), and coast live oak (*Quercus agrifolia,* UPL).

The presence of an OHWM was indicated by shelving, change in soil character and destruction of terrestrial vegetation.

Corps jurisdiction associated with the channel totals 4.52 acres, of which 2.26 acres consist of jurisdictional wetlands. CDFG jurisdiction associated with the channel totals 12.27 acres, of which 10.79 acres consist of willow riparian habitat and riparian oak woodland.

Drainage FEM-1

Drainage FEM-1 varies from five to eight feet in width. The channel originates north of the FEC-M alignment, traverses the disturbance limits, and extends south and west of the concrete plant to join San Juan Creek. The channel is a sandy wash and is vegetated with coast live oaks (*Quercus agrifolia*, UPL), mule fat (*Baccharis salicifolia,* FACW), western ragweed (*Ambrosia psilostachya,* FAC), buckwheat (*Eriogonum fasciculatum,* UPL), wrinkled rush (*Juncus rugulosis,* FACW), and sedge (*Cyperus sp.* ≥FACW).

The presence of an OHWM was indicated by change in soil character, shelving, and destruction of terrestrial vegetation. Portions of the drainage exhibit subsurface flows. The riparian vegetation varies from 10 to 52 feet in width. Corp jurisdiction associated with the channel totals 2.19 acres, of which 0.34 acres are wetland. CDFG jurisdiction associated with the channel totals 5.10 acres, of which 4.79 acres consist of riparian habitat.

Drainage FEM-2

Drainage FEM-2 is an ephemeral drainage vegetated with scrub located west of the disturbance limits of the FEC-M alignment. The feature totals 0.01 acres. CDFG jurisdiction totals 0.01 acres.

Drainage FEM-3

Drainage FEM-3 is a roadside, culturally altered drainage that supports natural plant communities. The channel originates north of the FEC-M alignment, traverses the disturbance limits, and extends south where it is diverted around the concrete plant. The OHWM disappears north of San Juan Creek. The channel varies from five to twenty feet in width. The channel bed is composed of coarse sand. The channel banks are vegetated with laurel sumac (*Malosma laurina,* UPL), mule fat (*Baccharis salicifolia,* FACW), Mexican elderberry (*Sambucus mexicanus,* FACU), buckwheat (*Eriogonum fasciclatum,* UPL), sedge (*Cyperus SP.*, ≥FACW), mustard (*Brassica nigra*, UPL), wild oat (*Avena sp.*, UPL), sycamore (*Platanus racemosa*, FACW) and curly dock (*Rumex crispus,* FACW).

The presence of an OHWM was indicated by destruction of terrestrial vegetation, change in soil character and shelving. The mule fat scrub varies from five to sixteen feet in width. CDFG jurisdiction associated with the channel totals 1.77 acres, all of which consists of riparian habitat.

Drainage FEM-5

Drainage FEM-5 is located west of the Far East Corridor alignment and south of the concrete plant. The high gradient channel averages one foot in width, is scoured to bedrock and is unvegetated. The banks of the channel support fascicled tarplant (*Hemizonia fasciculata*, UPL), wild lettuce (*Lactuca serriola*, UPL), curly dock (*Rumex crispus*, FACW), tocalote (*Centaurea melitensis*, UPL) black mustard (*Brassica nigra*, UPL), white clover (*Melilotus alba*, FACU), and telegraph weed (*Heterotheca grandiflora*, UPL).

The presence of an OHWM was determined by change in soil character, shelving and destruction of terrestrial vegetation. Corps and CDFG jurisdiction associated with the channel total 0.01 acre.

Drainage FEM-6

Drainage FEM-6 is located west of the Far East Corridor alignment and south of the concrete plant. The channel averages two feet in width. The banks of the channel support mule fat *(Baccharis salicifolia*, FACW), curly dock (*Rumex crispus*, FACW), tocalote (*Centaurea melitensis*, UPL) black mustard (*Brassica nigra*, UPL), white clover (*Melilotus alba*, FACU), and telegraph weed (*Heterotheca grandiflora*, UPL).

The presence of an OHWM was determined by change in soil character, shelving and destruction of terrestrial vegetation. Corps and CDFG jurisdiction associated with the channel total 0.02 acre.

Drainage FEM-7

Drainage FEM-7 is located west of the Far East Corridor alignment and south of the concrete plant. The channel averages two feet in width. The banks of the channel support mule fat *(Baccharis salicifolia*, FACW), curly dock (*Rumex crispus*, FACW), tocalote (*Centaurea melitensis*, UPL) black mustard (*Brassica nigra*, UPL), white clover (*Melilotus alba*, FACU), and telegraph weed (*Heterotheca grandiflora*, UPL).

The presence of an OHWM was determined by change in soil character, shelving and destruction of terrestrial vegetation. Corps jurisdiction associated with the channel total 0.01 acre. CDFG jurisdiction associated with the channel totals 0.02 acre all of which consists of mule fat scrub.

Drainage FEM-8

Drainage FEM-8 is located west of the Far East Corridor alignment and south of the concrete plant. The channel averages two feet in width and is somewhat incised. The channel bed is unvegetated. The banks of the channel support coastal sage scrub, riverwash species and non-

native herbs. There is a single patch of mule fat *(Baccharis salicifolia*, FACW) near the confluence with San Juan Creek.

The presence of an OHWM was determined by change in soil character, shelving and destruction of terrestrial vegetation. Corps jurisdiction totals 0.02 acre, none of which are wetlands. CDFG jurisdiction totals 0.07 acre, of which 0.06 acre consists of vegetated riparian habitat.

Drainage FEM-9

Drainage FEM-9 is located west of the Far East Corridor alignment and south of the concrete plant. The channel averages two feet in width and is somewhat incised. The channel bed is unvegetated. The banks of the channel support coastal sage scrub, riverwash species and non-native herbs. The channel appears to drain into FE-Seep 2.

The presence of an OHWM was determined by change in soil character, shelving and destruction of terrestrial vegetation. Corps and CDFG jurisdiction associated with the channel total 0.01 acre.

FEM Pond 1

FEM-Pond 1 is a mining pit that supports black willow (*Salix gooddingii*, OBL) and willowweed (*Polygonum lapathifolium*,OBL).

The feature results from mining operation s and is not subject to regulation by Corps or CDFG. The feature totals 3.61 acres, all of which are wetland.

Vernal Marsh FEVM 7

Vernal Marsh FEVM 7 is a basin that covers approximately 0.27 acre and was vegetated with scattered individuals of mule fat (*Baccharis salicifolia*, FACW-) and herbaceous hydrophytic vegetation including curly dock (*Rumex crispus*, FACW-), cocklebur (*Xanthium strumarium*, FAC+), and rabbitfoot grass (*Polypogon monspeliensis*, FACW+) in 1995. The basin was observed to be ponded from January 11, 2001 to April 4, 2001 meeting criteria 3 for hydric soils and the criteria for wetland hydrology (saturated in the upper 12 inches for a minimum of 18 consecutive days).

This feature is on the terrace immediately adjacent to San Juan Creek. This feature is adjacent to San Juan Creek and therefore, is subject to Corps jurisdiction. Corps jurisdiction associated with the vernal marsh totals 0.19 acre of jurisdictional wetland. This feature does not exhibit a bed or bank and is therefore not regulated by CDFG.

Vernal Marsh FEVM 8

Vernal Marsh FEVM 8 is a basin that covers approximately 0.48 acre and was vegetated with scattered individuals of mule fat (*Baccharis salicifolia*, FACW-) and herbaceous hydrophytic vegetation including curly dock (*Rumex crispus*, FACW-), cocklebur (*Xanthium strumarium*, FAC+), and rabbitfoot grass (*Polypogon monspeliensis*, FACW+) in 1995. The basin was observed to be ponded from January 25, 2001 to February 21, 2001 meeting criteria 3 for hydric soils and the criteria for wetland hydrology (saturated in the upper 12 inches for a minimum of 18 consecutive days). This feature is on the terrace immediately adjacent to San Juan Creek.

Corps jurisdiction associated with the vernal marsh totals 0.48-acre of jurisdictional wetland. This feature does not exhibit a bed or bank and is therefore not regulated by CDFG.

Vernal Marsh FEVM 9

Vernal Marsh FEVM 9 is a basin that covers approximately 0.79 acre and was vegetated with scattered individuals of mule fat (*Baccharis salicifolia*, FACW-) and black willow (Salix gooddingii, OBL) as well as herbaceous hydrophytic vegetation including needle-stemmed spike rush (*Eleocharis acicularis*, OBL), cocklebur (*Xanthium strumarium*, FAC+), curly dock (*Rumex crispus*, FACW-), and rabbitfoot grass (*Polypogon monspeliensis*, FACW+). The basin was observed to be ponded from January 11, 2001 to May 15, 2001 meeting criteria 3 for hydric soils and the criteria for wetland hydrology (saturated in the upper 12 inches for a minimum of 18 consecutive days).

This feature is adjacent to other jurisdictional features, and therefore is subject to Corps jurisdiction, which totals 0.78 acre.

Vernal Marsh FEVM 10

Vernal Marsh FEVM 10 is a basin that covers approximately 0.06 acre and was vegetated with scattered individuals of mule fat (*Baccharis salicifolia*, FACW-) and herbaceous hydrophytic vegetation including hyssop loosestrife (*Lythrum hyssopifolium*, FACW), curly dock (*Rumex crispus*, FACW-), and rabbitfoot grass (*Polypogon monspeliensis*, FACW+). The basin was observed to be ponded from January 11, 2001 to April 8, 2001 meeting criteria 3 for hydric soils and the criteria for wetland hydrology (saturated in the upper 12 inches for a minimum of 18 consecutive days).

This feature is on the terrace immediately adjacent to San Juan Creek. This feature is adjacent to San Juan Creek and therefore, is subject to Corps jurisdiction. Corps jurisdiction associated with the vernal marsh totals 0.06 acre of jurisdictional wetland. This feature does not exhibit a bed or bank and is therefore not regulated by CDFG.

Vernal Marsh FEVM 11

Vernal Marsh FEVM 11 is a basin that covers approximately 0.04 acre and was vegetated with scattered individuals of mule fat (*Baccharis salicifolia*, FACW-) and herbaceous hydrophytic vegetation including needle-stemmed spike rush (*Eleocharis acicularis*, OBL), hyssop loosestrife (*Lythrum hyssopifolium*, FACW), wrinkled rush (*Juncus rugulosis*, OBL), and rabbitfoot grass (*Polypogon monspeliensis*, FACW+) in 1995. The basin was observed to be ponded from February 13, 2001 to February 21, 2001 meeting criteria 3 for hydric soils.

This feature is on the terrace immediately adjacent to San Juan Creek. This feature is adjacent to San Juan Creek and therefore, is subject to Corps jurisdiction. Corps jurisdiction associated with the vernal marsh totals 0.04 acre of jurisdictional wetland. This feature does not exhibit a bed or bank and is therefore not regulated by CDFG.

Vernal Marsh FEVM 12

Vernal Marsh FEVM 12 is a basin that covers approximately 0.04 acre and was vegetated with scattered individuals of mule fat (*Baccharis salicifolia*, FACW-) and herbaceous hydrophytic vegetation including wrinkled rush (*Juncus rugulosis*, OBL), hyssop loosestrife (*Lythrum hyssopifolium*, FACW), curly dock (*Rumex crispus*, FACW-), and rabbitfoot grass (*Polypogon monspeliensis*, FACW+) in 1995. The basin was observed to be ponded to a depth of 10 inches on February 21, 2001, meeting criteria 3 for hydric soils.

Corps jurisdiction associated with the vernal marsh totals 0.04-acre of jurisdictional wetland. This feature does not exhibit a bed or bank and is therefore not regulated by CDFG.

Vernal Pool FEVP 2

Vernal Pool FEVP 2 is a basin that covers approximately 0.18-acre and was vegetated with mule fat (*Baccharis salicifolia*, FACW-), hyssop loosestrife (Lythrum hyssopifolium, FACW), curly dock (*Rumex crispus*, FACW-), and rabbitfoot grass (*Polypogon monspeliensis*, FACW+) in 1995. The basin was observed to be ponded from February 13, 2001 to February 21, 2001 meeting criteria 3 for hydric soils.

This feature is on the terrace immediately adjacent to San Juan Creek. This feature is adjacent to San Juan Creek and therefore, is subject to Corps jurisdiction. Corps jurisdiction associated with the vernal pool totals 0.18 acre of jurisdictional wetland. This feature does not exhibit a bed or bank and is therefore not regulated by CDFG.

FEM – Seep 1

FEM-Seep 1 supports black willow (*Salix gooddingii*, OBL), wrinkled rush (*Juncus rugulosis*, OBL), and western ragweed (*Ambrosia psilostachya*, FAC) growing on moist sandy loam soils

with low chroma and redoxymorphic features. The seep has a clear drainage supplying runoff from the concrete plant, but has no clear drainage connecting it to San Juan Creek.

This feature is on the terrace immediately adjacent to San Juan Creek. This feature is adjacent to San Juan Creek and therefore, is subject to Corps jurisdiction. Corps jurisdiction total 0.51 acres, all of which are wetlands. CDFG jurisdiction totals 0.51 acres, all of which consist of vegetated riparian habitat.

FEM-San Juan Creek

San Juan Creek traverses the Far East Corridor alignment at a proposed bridge site. The channel bed varies from eight to 480 feet in width and contains perennial flows. The creek is a wide riparian area with one main wetland channel that begins to the east of the study area and terminates to the west of the proposed bridge. Some reaches are restricted within deeply incised bedrock, while others form braided channels in a broad floodplain. A second wetland channel originates at the freshwater marsh/pond approximately 650 feet to the east of the proposed bridge and flows on the south side of the broad channel bed. This channel extends west after the initial channel disappears. The creek is vegetated in part with arroyo willow (*Salix lasiolepis,* FACW), black willow (*Salix gooddingii,* OBL), yellow willow (*Salix lucida,* FACW), red willow (*Salix laevigata,* FACW), cattail (*Typha domingensis and Typha latifolia,* OBL), mule fat (*Baccharis salicifolia,* FACW), western sycamore (*Platanus racemosa,* FACW), giant reed (*Arundo donax,* FACW), monkey flower (*Mimulus cardinalis,* OBL), rabbitfoot grass (*Polypogon monspeliensis,* FACW), plantain (*Plantago major,* FACW), cocklebur (*Xanthium strumarium,* FAC+), white clover (*Melilotus alba,* FACU *albus*), duckweed (*Lemna sp.*, OBL), tamarisk (*Tamarix ramosissima.*, FACW), sow thistle (*Sonchus oleraceus, NI*), northern willow herb (*Epilobum ciliatum,* FACW*),* mugwort (*Artemesia douglasiana,* FAC), stinging nettles (*Urtica dioica,* FACW), African umbrella sedge (*Cyperus involucratus,* OBL), Mexican rush (*Juncus mexicanus,* FACW), and bulrush (*Scirpus microcarpus,* OBL). Within the channel bed, slightly raised gravel bars support some upland vegetation, such as prickly pear (*Opuntia littoralis* sp. , UPL), but also exhibit very large debris racks. Several low flow channels, some with hydric soils and flowing water or saturated soil, characterize the section of creek under the bridge crossing. There are also several pockets wetlands in depressional areas. The channel bed is primarily cobble and clean sand. The sandy soils at the fringe of the pond are saturated and have low chroma colors and evidence of redox. Standing water in soil pits may indicate high ground water though shelving, litter and debris also indicate surface flow. This ponding area is vegetated with similar species.

There is an elevated portion of the streambed with no hydric characteristics that appears to separate the west end of the ponding area from the San Juan Creek except for at the southern most side of creek bed where the wetland channel flows. The presence of an OHWM was indicated by shelving, lines impressed upon the banks, destruction of terrestrial vegetation, change in soil character and the presence of litter and debris. Corp and CDFG jurisdiction

associated with the channel totals 26.87 acres, of which 2.92 acres consist of jurisdictional willow riparian wetlands.

Drainage FEM-10

Drainage FEM-10 originates within the disturbance limits of the Far East Corridor alignment and flows north to join San Juan Creek just beyond Ortega Highway. The channel is deeply incised and varies from three to six feet in width. The banks of the channel support mature oak woodland. The channel bed is composed of sandy loam to clay loam with some cobbles and contains several pockets of sediment and detrital material deposited behind accumulated debris. The channel is vegetated with poison oak (*Toxicodendron diversilobum,* UPL), mule fat (*Baccharis salicifolia,* FACW), monkyflower (*Mimulus aurantiacus,* UPL), heart-shaped pennstemon (*Keckiella cordifolia,*UPL), Italian thistle (*Carduus pycnocephalus,* UPL), and tumbleweed (*Salsola australis,* UPL). The riparian oak canopy varies from 30 to 90 feet in width.

Three tributary drainages discharge into Drainage FEM-10. The tributary channels are steep, moderately incised, and vary from three to four feet in width. The banks of the tributaries are vegetated with poison oak (*Toxicodendron diversilobum,* UPL), toyon (*Heteromeles arbutifolia,* UPL), coast live oak (*Quercus agrifolia,* UPL), laurel sumac (*Malosma laurina,* UPL), lemonade berry (*Rhus integrifolia,* UPL), arroyo willow (*Salix lasiolepis,* FACW), hollyleaf redberry (*Rhamnus ilicifolia,* UPL), monkeyflower (*Mimulus aurantiacus,* UPL), giant wild rye (*Leymus condensatus,* FACU), and heart leaved penstemmon (*Keckiella cordifolia,* UPL). A swale-like area occurs within one tributary that is vegetated with Mexican rush (*Juncus mexicanus,* FACW). The swale exhibits high chroma soils and was determined to be non-wetland.

The presence of an OHWM was indicated by shelving, destruction of terrestrial vegetation and the presence of litter and debris. The oak canopy averages 40 feet in width.

Another tributary drainage occurs within this drainage system and drains to a pond. The pond that appears to be fed by this tributary drainage only. The pond is elevated above Drainage FEM-10 and is vegetated with knotgrass (*Paspalum distichum,* OBL) and cattail (*Typha domingensis,* OBL). The pond was inundated in August 2001 and exhibits a gleyed clay loam soil. A sulfidic odor was detected during our August 2001 field visit.

The pond measures approximately 100-feet by 180-feet. Corps and CDFG jurisdiction associated with the pond totals 0.46 acre.

Corps jurisdiction associated with the Drainage FEM-10 system totals 1.82 acres, of which 0.63 acres are wetland. CDFG jurisdiction associated with the drainage system totals 6.30 acres, of which 6.04 acres consist of riparian habitat.

Drainage FEM-11

Drainage FEM-11 has been severely trampled by cattle and includes a stock pond impoundment. The channel originates east of the Far East Corridor alignment, exits the disturbance limits to the south and continues to parallel the disturbance limits for several thousand feet. The channel varies from one to ten feet in width and is vegetated with mule fat scrub, willow riparian and upland vegetation.

The uppermost reach of the channel is a deeply entrenched with a cobble and loam bed. This portion of the channel is vegetated with mule fat (*Baccharis salicifolia,* FACW), coyote brush (*Baccharis pilularis,* UPL), tocolate (*Centaurea melitensis,* UPL), Italian rye grass (*Lolium multiflorum,* FAC), spike rush (*Eleocharis*), and mustard (*Brassica nigra,* UPL). The slopes are vegetated with monkeyflower (*Mimulus aurantiacus,* UPL), sagebrush (*Artemesia californica,* UPL), prickly pear (*Opuntia littoralis,* UPL), black sage (*Salvia mellifera,* UPL), and Mexican elderberry (*Sambucus mexicanus,* FACU). Some portions of the upper reach are surrounded by both native and non-native grasses and vegetated with western ragweed (*Ambrosia psilostachya,* FAC), rush (*Juncus* sp., ≥FACW), rabbitfoot grass (*Polypogon monspeliensis,* FACW), mule fat (*Baccharis salicifolia,* FACW), cocklebur (*Xanthium strumarium,* FAC+), and curly dock (*Rumex crispus,* FACW-).

The drainage system includes several tributary drainages. Portions of the main channel and tributaries are severely trampled by cattle and vegetated with white sage (*Salvia apiana,* UPL), needlegrass (*Nassella pulchra,* UPL), western ragweed (*Ambrosia psilostachya,* FAC), cocklebur (*Xanthium strumarium,* FAC+), curly dock (*Rumex crispus,* FACW-), non-native grasses, and mule fat (*Baccharis salicifolia,* FACW).

A brief portion of the channel that extends outside of the disturbance limits supports willow woodland. This portion of the channel exhibited standing water in July 2001 and is vegetated with arroyo willow (*Salix lasiolepis,* FACW), wild rose (*Rosa californica,* FAC+), lemonade berry (*Rhus integrifolia,* UPL), monkey flower (*Mimulus aurantiacus,* UPL), toyon (*Heteromeles arbutifolia,* UPL), wild celery (*Apium graveolens,* FACW), Mexican rush (*Juncus mexicanus,* FACW), spike rush (*Eleocharis,* ≥FACW), cocklebur (*Xanthium strumarium,* FAC+), and rabbitfoot grass (*Polypogon monspeliensis,* FACW).

The reach just north of the stock pond is a low gradient drainage with 5 inches of coarse sand overlaying a loamy fine sand with redoxymorphic features. This portion of the channel is vegetated with mule fat (*Baccharis salicifolia,* FACW), cocklebur (*Xanthium strumarium,* FAC+), western ragweed (*Ambrosia psilostachya,* FAC), rabbitfoot grass (*Polypogon monspeliensis,* FACW), and rush (*Juncus Sp.,* ≥FACW).

South of the stock pond the channel bed varies between loamy clay, sand and silty clay loam. In the southern reaches of the channel soils are low chrome (10YR4/2) with mottles. The channel is vegetated with western ragweed (*Ambrosia psilostachya,* FAC), rabbitfoot grass (*Polypogon*

monspeliensis, FACW), lemonade berry (*Rhus integrifolia,* UPL), black willow (*Salix gooddingii,* OBL), mule fat (*Baccharis salicifolia,* FACW), coast live oak (*Quercus agrifolia,* UPL), toyon (*Heteromeles arbutifolia,* UPL), salt grass (*Distichlis spicata,* FACW), bulrush (*Scirpus americanus,* OBL), spike rush (*Eleocharis sp*., ≥FACW), cocklebur (*Xanthium strumarium,* FAC+), Mexican rush (*Juncus mexicanus,* FACW), cattail (*Typha sp*., OBL), and knotgrass (*Paspalum distichum,* OBL). The slopes of the channel are intermittently vegetated with California sagebrush (*Artemesia californica,* UPL), lemonade berry (*Rhus integrifolia,* UPL), poison oak (*Toxicodendron diversilobum,* UPL), coast live oak (*Quercus agrifolia,* UPL), and goldenbush (*Isocoma menzesii,* UPL), or a mosaic of native and non-native grassland. The presence of an OHWM was indicated by clear lines impressed upon the bank, destruction of vegetation, shelving and change in soil character. The riparian vegetation varies from five feet to 100 feet in width.

The tributary drainages generally vary from one to five feet wide, with one tributary ranging from eight to ten feet wide. The tributaries are generally vegetated with upland and riparian scrub vegetation including mule fat (*Baccharis salicifolia,* FACW), coyote brush (*Baccharis pilularis,* UPL), monkey flower (*Mimulus aurantiacus,* UPL), prickly pear (*Opuntia littoralis,* UPL), white sage (*Salvia apiana,* UPL), California sagebrush (*Artemesia californica,* UPL), western ragweed (*Ambrosia psilostachya,* FAC), tarweed (*Hemizonia fasciculariis,* UPL), needlegrass (*Nassella pulchra,* UPL), black sage (*Salvia* mellifera, UPL), Mexican elderberry (*Sambucus mexicanus,* FACU), rush (*Juncus sp., ≥*FACW), rabbitfoot grass (*Polypogon monspeliensis,* FACW), cocklebur (*Xanthium strumarium,* FAC+), curly dock (*Rumex crispus,* FACW-), tocalote (*Centaurea melitensis,* UPL), Italian rye grass (*Lolium multiflorum,* FAC), and cudweed (*Gnathalium canescens,* UPL).

The tributary that ranges from eight to ten feet wide is composed of sandy loam soil and has been heavily impacted by cattle. Several large ponding areas occur throughout the length of the channel. The upper reach of the channel supports scattered mule fat (*Baccharis salicifolia,* FACW) and nonnative grasses. The middle reach is vegetated with lemonade berry (*Rhus integrifolia,* UPL), arroyo willow (*Salix lasiolepis,* FACW), fennel (*Foeniculum vulgare,* FACU), scrub oak (*Quercus dumosa*), western ragweed (*Ambrosia psilostachya,* FAC), mule fat (*Baccharis salicifolia,* FACW), black willow (*Salix gooddingii,* OBL), narrow leaved cattail (*Typha domingensis,* OBL), clover (*Melilotus alba,* FACU), and fennel (*Foeniculum vulgare,* FACU), and has a bed consisting of 5" of coarse sand overlaying high chroma sandy loam with no redoxymorphic features. The lower reach is dominated by arroyo willow (*Salix lasiolepis,* FACW) and is inundated. The riparian vegetation varies from 17 feet to 34 feet in width.

A wetland area originates west of the alignment and discharges into FEM-11. The channel is entrenched due to erosion and varies from one to five feet in width. The channel bed is composed of gleyed sandy clay with oxidized root channels and redoxymorphic feature (mottles). The channel was vegetated with wrinkled rush (*Juncus rugulosis,* FACW), bedstraw (*Galium*), western ragweed (*Ambrosia psilostachya,* FAC), weedy cudweed (*Gnathalium luteo-album*), cudweed (*Gnathalium canesens,* UPL) cocklebur (*Xanthium strumarium,* FAC+), daisy

(*Erigeron*), spike rush (*Eleocharis*), lemonade berry (*Rhus integrifolia,* UPL), California sagebrush (*Artemesia californica,* UPL), monkey flower (*Mimulus aurantiacus,* UPL), coyote brush (*Baccharis pilularis,* UPL), white sage (*Salvia apiana,* UPL), and buckwheat (*Eriogonum fasciculatum,* UPL).

Corps jurisdiction totals 6.65 acres, of which 5.80 acres are wetlands. CDFG jurisdiction totals 9.4 acres, of which 9.18 acres consist of vegetated riparian habitat.

Drainage FEM-12

Drainage FEM-12 originates to the east of the Far East Corridor alignment and traverses the disturbance limits where it discharges into Cristianitos Creek. The channel varies from four to five feet in width and is composed of fine sandy loam with a high chroma and a moderately developed A horizon. The channel is vegetated with coyote brush (*Baccharis pilularis,* UPL), lemonade berry (*Rhus integrifolia,* UPL), California sagebrush (*Artemesia californica,* UPL), mule fat (*Baccharis salicifolia,* FACW), and sticky monkey flower (*Mimulus aurantiacus,* UPL). The lower portion of the drainage is vegetated with mule fat/coyote brush scrub with approximately 30-percent cover by mule fat.

Two tributary drainages enter Drainage FEM-12. These vary from one to four feet in width and have been heavily impacted by cattle. The channel bed is composed of high chroma sandy loam with well developed A horizon. Vegetation within these tributaries includes California sagebrush (*Artemesia californica,* UPL), coyote brush (*Baccharis pilularis,* UPL), monkey flower (*Mimulus aurantiacus,* UPL), toyon (*Heteromeles arbitufolia*), lemonade berry (*Rhus integrifolia,* UPL), Mexican elderberry (*Sambucus mexicanus,* FACU), needlegrass (*Nassella pulchra,* UPL), non-native grasses, western ragweed (*Ambrosia psilostachya,* FAC), tocalote (*Centaurea melitensis,* UPL), goldenbush (*Isocoma menzesii,* UPL), and mule fat (*Baccharis salicifolia,* FACW).

Corp jurisdiction associated with the drainage system totals 0.52 acre. CDFG jurisdiction associated with the drainage system totals 0.63 acre, of which 0.22 acre consists of mule fat scrub.

Drainage FEM-13

Drainage FEM-13 originates to the east of the Far East Corridor alignment and traverses the disturbance limits and continues west until it terminates in mule fat scrub with a non-native understory. There is a culvert visible on the west side of the road that apparently connects FEM-13 to Cristianitos Creek. The channel varies from five to 22 feet in width alternates between grassy reaches and cobble substrate with cobbles predominating. The upper reach of the drainage, over 300 feet to the northeast of the disturbance limits, has evidence of seeps. The drainage is predominately vegetated with sagebrush (*Artemesia californica,* UPL), lemonade berry (*Rhus integrifolia,* UPL), coyote brush (*Baccharis pilularis,* UPL), mule fat (*Baccharis*

salicifolia, FACW), western ragweed (*Ambrosia psilostachya,* FAC), non-native grasses, saltgrass (*Distichlis spicata,* FACW), and rabbitfoot grass (*Polypogon monspeliensis,* FACW). There is, however, an extensive stretch of wetland within the channel. It is vegetated with rabbitfoot grass (*Polypogon monspeliensis,* FACW) and saltgrass (*Distichlis spicata,* FACW). The channel exhibited surface water in August and the bed was composed of low chroma (10YR4/2) silty clay loam soils with mottles. After its confluence with a small tributary, the channel is characterized by broad mule fat scrub. The understory contains western ragweed (*Ambrosia psilostachya,* FAC), rabbitfoot grass (*Polypogon monspeliensis,* FACW), various non-native grasses, Italian thistle (*Carduus pycnocephalis,* UPL), bull thistle (*Cirsium vulgare,* FACU), giant wild rye (*Leymus condensatus,* FACU), and curly dock (*Rumex crispus,* FACW-). Before the confluence with the tributary, mule fat (*Baccharis salicifolia,* FACW*)* is sparse and located within the channel. After the confluence, the mule fat scrub varies from 20 to 160 feet in width. Cattle had destroyed much of the channel. Where discernible, the presence of OHWM was indicated by change in soil character and destruction of terrestrial vegetation.

The tributary channel originates to the east of the alignment and discharges into main channel of Drainage FEM-13 within the disturbance limits. The channel varies from four to five feet in width and is composed of cobbly to large boulders. The drainage is vegetated with coast live oak (*Quercus agrifolia,* UPL), coyote brush (*Baccharis pilularis,* UPL), western ragweed (*Ambrosia psilostachya,* FAC), mule fat (*Baccharis salicifolia,* FACW), lemonade berry (*Rhus integrifolia,* UPL), black sage (*Salvia mellifera,* UPL), mustard (*Brassica nigra,* UPL), and giant wild rye (*Leymus condensatus,* FACU). The presence of an OHWM was indicated by destruction of terrestrial vegetation and shelving.

Corps jurisdiction associated with the FEM-13 drainage system totals 0.89 acre, of which 0.03 acre consists of jurisdictional wetlands. CDFG jurisdiction associated with the drainage system totals 3.05 acres, of which 2.52 acres consist of mule fat scrub.

Drainage FEM-14

Drainage FEM-14 originates to the east of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos creek. The channel varies from three to four feet in width and has been scoured to badland sediments. The drainage is vegetated with western ragweed (*Ambrosia psilostachya,* FAC), saltgrass (*Distichlis spicata,* FACW), mule fat (*Baccharis salicifolia,* FACW), coast live oak (*Quercus* , UPL), non-native grasses, needlegrass (*Nassella pulchra,* UPL), milkweed (*Asclepias fascicularis*), sagebrush (*Artemesia californica,* UPL), and coyote brush (*Baccharis pilularis,* UPL).

The presence of an OHWM was indicated by shelving and destruction of terrestrial vegetation. Corps jurisdiction associated with the channel totals 0.24 acre. CDFG jurisdiction associated with the channel totals 0.29 acre, of which 0.06 acre consists of riparian oak habitat.

Drainage FEM-15

Drainage FEM-15 originates to the east of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos Creek. The channel is moderately incised and varies from five to seven feet in width. The channel bed is composed of loamy coarse sand overlaying sandy loam. The drainage is vegetated with Bermuda grass (*Cynodon dactylon,* FAC), rabbitfoot grass (*Polypogon monspeliensis,* FACW), cocklebur (*Xanthium strumarium,* FAC+), deer weed (*Lotus scoparius,* UPL), tocolate *(Centaurea melitensis,* UPL), lemonade berry (*Rhus integrifolia,* UPL), coyote brush (*Baccharis pilularis,* UPL), mule fat (*Baccharis salicifolia,* FACW), sagebrush (*Artemesia californica,* UPL), and arroyo willow (*Salix lasiolepis,* FACW). The single patch of arroyo willow measures approximately 300 square feet and one patch of mule fat measures approximately 100 square feet. All other scarce mule fat is contained within the channel. The presence of an OHWM was indicated by shelving, the presence of litter and debris and destruction of terrestrial vegetation.

A tributary channel originates approximately east of the alignment and traverses the disturbance limits to join the main FEM-15 channel. The tributary is deeply incised and averages three feet wide. The channel bed is composed of sand and cobbles and is vegetated with cudweed (*Gnathalium canescens,* UPL), arroyo willow (*Salix lasiolepis,* FACW), coyote brush (*Baccharis pilularis,* UPL), lemonade berry (*Rhus integrifolia,* UPL), goldenbush (*Isocoma menzesii,* UPL), Bermuda grass (*Cynodon dactylon,* FAC), needlegrass (*Nassella pulchra,* UPL), and tocalote (*Centaurea melitensis,* UPL).

The presence of an OHWM was indicated by the presence of litter and debris, destruction of terrestrial vegetation and shelving. All riparian vegetation is scarce and located within the OHWM.

Corps jurisdiction associated with the FEM-15 drainage system totals 0.36 acre. CDFG jurisdiction associated with the drainage system totals 0.36 acre.

Drainage FEM-16

Drainage FE-24 is deeply incised. The headwaters of Drainage FE-24 are erosional and located within a graded area. The drainage originates to the east of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos creek. The channel is scoured to sandy badland sediments and varies from three to five feet in width. The upper reach is vegetated with arroyo willow (*Salix lasiolepis,* FACW), mule fat (*Baccharis salicifolia,* FACW), goldenbush (*Isocoma menzesii,* UPL), monkey flower (*Mimulus aurantiacus,* UPL), lemonade berry (*Rhus integrifolia,* UPL), bindweed (*Convolvulus arvensis,* UPL), cudweed (*Gnathalium canescens,* UPL), Bermuda grass (*Cynodon dactylon,* FAC), and non-native grasses. Two arroyo willows total approximately 250 square feet and scattered mule fat near the confluence totals approximately 200 square feet. After the confluence with FE-24a, the drainage is vegetated with coast live oaks (*Quercus agrifolia,* UPL), toyon (*Heteromeles arbutifolia,* UPL), Mexican

elderberry (*Sambucus mexicanus,* FACU), giant wild rye (*Leymus condensatus,* FACU), lemonade berry (*Rhus integrifolia,* UPL), and poison oak (*Toxicodendron diversilobum,* UPL). The oak canopy averaged 80 feet in width. The presence of an OHWM was indicated by destruction of terrestrial vegetation, the presence of litter and debris, change in soil character and shelving.

A tributary drainage originates to the east of the alignment and traverses the disturbance limits to join the main FEM-16 channel. The incised tributary is composed of partially lithified sediments and averages two feet wide. The channel is vegetated with goldenbush (*Isocoma menzesii,* UPL), mustard (*Brassica nigra,* UPL), non-native grasses and cudweed (*Gnathalium canescens).* The presence of an OHWM was indicated by shelving and destruction of terrestrial vegetation.

Corps jurisdiction associated with the FEM-16 drainage system totals 0.22 acre. CDFG jurisdiction associated with the drainage system totals 0.96 acre, of which 0.86 acre consists of riparian habitat.

Gabino Creek

Gabino Creek originates to the east of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos Creek. The channel varies from 11 to 380 feet in width and is composed of cobbly sand. The majority of the drainage is a broad floodplain with various braids throughout. Some braids supports only annual vegetation. To the east of the disturbance limits there appears to be a 70-foot wide low flow channel that is directed through six four-inch corrugated metal pipes. While in some years water may flow across the road from the northern half of the channel, this does not appear to be an ordinary occurrence. No saturated soil was apparent to the east of the existing road. There were no debris or sediment deposits to indicate ordinary high flows. West of the existing road, the sandy substrate was saturated to the surface from high groundwater. In some locations, the coarse sand substrate contained high chroma mottles and some organic streaking. The lower reach of the channel is vegetated with arroyo willow (*Salix lasiolepis,* FACW), mule fat (*Baccharis salicifolia,* FACW), (*Cyperus erogrostis,* FACW), mugwort (*Artemesia douglasiana,* FAC), poison oak (*Toxicodendron diversilobum,* UPL), coast live oak (*Quercus agrifolia,* UPL), western ragweed (*Ambrosia psilostachya,* FAC), rabbit-foot grass (*Polypogon monspeliensis,* FACW), tamarisk (*Tamarix sp*., FACW), and (*Gnathalium luteo-album,* FACW-). The upper reach of the channel supports open wash habitat, mule fat scrub and sycamore islands. The vegetation is patchy, covering perhaps 50 percent of the channel bed.

The presence of an OHWM was indicated by the presence of litter and debris, destruction of vegetation, shelving and change in soil character. The riparian vegetation varies from 50 feet to 380 feet in width. Corps jurisdiction associated with the channel totals 4.74 acres, of which 0.19 acre consists of jurisdictional wetlands. CDFG jurisdiction associated with the channel totals 4.32 acres all of which consist of riparian habitat.

Cristianitos Creek

Cristianitos Creek remains west of the Far East Corridor alignment for most of its length. The channel varies from eight to 30 feet in width and is composed of cobbly sand. The sandy substrate was saturated to the surface from high groundwater. Before the confluence with Gabino, vegetation includes arroyo willow (*Salix lasiolepis,* FACW), poison oak (*Toxicodendron diversilobum,* UPL), coast live oak (*Quercus agrifolia,* UPL), stinging nettle (*Urtica dioica,* FACW), narrow leaved cattail (*Typha sp*., OBL), sedge, toyon (*Heteromeles arbutifolia,* UPL), plantain (*Plantago major,* FACW), Mexican elderberry (*Sambucus mexicana,* FAC), white clover (*Melilotus alba,* FACU*),* milkweed (*Ascelpisa fascicularis,* FAC), and lemonade berry (*Rhus integrifolia,* UPL). Further south under the proposed bridge, the channel is vegetated with coast live oak (*Quercus agrifolia,* UPL), arroyo willow (*Salix lasiolepis*, FACW), narrow leaved cattail (*Typha sp*., OBL) Sedge (*Cyperus sp*., ≥FACW), white clover (*Melilotus alba,* FACU*),* deerweed (*Lotus scoparius*, UPL), sycamore (*Platanus racemosa*, FACW), cottonwood (*Populus fremontii,* FAC+), wrinkled rush (*Juncus rugulosus*, OBL), watercress (*Rorippa nasturtium-aquatica,* OBL), and willow herb (*Epilobum ciliatum,* FACW), and the soil has a mucky organic layer above the sand. The riparian vegetation, including emergent wetland and oak woodland varies from 60 feet to 150 feet in width.

A small tributary to Cristianitos Creek originates with a concrete V-ditch to the west of the alignment and extends under the road through a four-inch corrugated metal pipe to join the main Cristianitos Creek channel. The tributary channel averages two feet in width and is composed of silty clay loam sediment deposits. The banks of the channel support Mexican elderberry (*Sambucus mexicana,* FACU), coast live oak (*Quercus agrifolia,* UPL), and arroyo willow (*Salix lasiolepis*, FACW) with a poison oak (*Toxicodendron diversilobum,* UPL), wild oat (*Avena sp.*,UPL), and milk thistle (*Silybum marianum,* UPL) understory. The riparian vegetation averages 40 feet in width.

The presence of an OHWM was indicated by destruction of terrestrial vegetation, change in soil character and shelving.

Corps jurisdiction associated with Cristianitos Creek totals 18.06 acres, of which 9.64 acres consists of jurisdictional wetlands. CDFG jurisdiction associated with Cristianitos Creek totals 47.59 acres, of which 47.3 acres consist of riparian habitat.

Drainage FEM-17

Drainage FEM-17 originates to the east of the Far East Corridor alignment and traverses the disturbance limits to join Cristianitos creek. The channel is a relatively well-defined sandy wash that varies from four to five feet in width. The tributaries to Drainage FEM-17 average two feet wide. One tributary is scoured while the other supports riparian vegetation that averages 20 feet in width. The upper reach of the channel is vegetated with California sagebrush (*Artemesia californica,* UPL), coyote brush (*Baccharis pilularis,* UPL), poison oak (*Toxicodendron*

diversilobum, UPL), arroyo willow (*Salix lasiolepis,* FACW), Mexican elderberry (*Sambucus mexicanus,* FACU), monkey flower (*Mimulus aurantiacus,* UPL), deerweed (*Lotus scoparius,* UPL), and cocklebur (*Xanthium strumarium,* FAC+). The lower reach of the channel supports sparse mule fat (*Baccharis salicifolia,* FACW) and black willow (*Salix gooddingii,* OBL) within the banks as well as (*Baccharis pilularis,* UPL) and coast live oaks (*Quercus agrifolia,* UPL) on the banks.

The presence of an OHWM was indicated by change in soil character. The channels willow and mule fat scrub varies from five to 25 feet in width. Corps jurisdiction associated with the channel totals 0.44 acre. CDFG jurisdiction associated with the channel totals 1.29 acres, of which 1.11 acres consists of willow scrub.

Drainage FEM-18

Drainage FEM-18 is an incised channel to the east of the disturbance limits of the Far East Corridor alignment that varies between 1 and 2 feet in width. The lower portion is comprised of ephemeral oak woodland and scrub. The channel connects to Cristianitos Creek.

Corps jurisdiction totals 0.04 acre, none of which are wetlands. CDFG jurisdiction totals 0.12 acre, of which 0.09 acre consists of vegetated riparian habitat.

Drainage FEM-19

Drainage FEM-19 is an incised channel to the east of the disturbance limits of the Far East Corridor alignment and is vegetated with a canopy of oak and upland scrub. The channel connects to Cristianitos Creek.

Corps jurisdiction totals 0.01 acre, none of which is wetland. CDFG jurisdiction totals 0.01 acre, none of which consist of vegetated riparian habitat.

Drainage FEM-20

Drainage FEM-20 is an incised channel to the east of the Far East Corridor alignment that is vegetated with a canopy of oak and upland scrub. The channel connects to Cristianitos Creek. Corps jurisdiction totals 0.02 acre. CDFG jurisdiction totals 0.02 acre, none of which consist of vegetated riparian habitat.

F. FAR EAST CORRIDOR – WEST STUDY AREA

Several jurisdictional areas associated with Far East Corridor – West Alternative (FEC-W) study area were delineated independently for Rancho Mission Viejo. These areas have been verified by both Corps and CDFG and are indicated on the delineation maps as verified. For all other areas, the jurisdictional totals were mapped in 2001 and 2003. Exhibit 1 depicts the location and

extent of Corps jurisdictional areas. Exhibit 2 depicts the location and extent of CDFG jurisdictional areas.

Corps jurisdiction associated with the FEC-W Alternative study area totals approximately 178.16 acres, of which 109.76 acres consist of jurisdictional wetlands. CDFG jurisdiction associated with the FEC-W Alternative study area totals 315.90 acres, of which 307.86 acres consists of vegetated riparian or wetland habitat. CCC jurisdiction associated with the FEC-W Alternative study area totals approximately 184.36 acres, all of which consist of vegetated riparian habitat and 134.01 acres, of which consist of jurisdictional wetlands. CCC jurisdiction associated with the FEC-W Alternative study area totals approximately 115.06 acres, all of which consist of one-parameter wetlands.

TABLE A-8
JURISDICTIONAL AREAS
FAR EAST CORRIDOR – WEST STUDY AREA
(in acres)

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/C/7 WETLAND 1	12.62	12.62	12.62	12.62
FE/C/7-1	0.09	0.00	0.73	0.66
FE/C/7 WETLAND 2	0.00	0.00	0.00	0.00
FEC/7-2	0.00	0.00	0.02	0.00
FE/C/7-3	0.00	0.00	0.01	0.00
FE/C/7-4	0.00	0.00	0.02	0.00
FE/7-1	0.00	0.00	3.27	3.16
FE/7-2	0.00	0.00	0.57	0.48
FE-1	0.00	0.00	1.76	1.70
FE – WETLAND 1	0.00	0.00	0.00	0.00
FE-2	0.00	0.00	5.81	5.81
FE-2A	0.00	0.00	1.48	1.44
FE-2B	0.14	0.00	0.14	0.00
FE – POND 1	0.00	0.00	0.00	0.00
FE-3 CANADA GOBANADORA	1.91	1.85	6.72	6.72
FE-4	0.00	0.00	4.82	4.82
FE-5	0.63	0.15	5.46	5.20
FE – WETLAND 2	0.00	0.00	0.00	0.00
FE-6	0.00	0.00	1.12	1.07
FEW –1	0.00	0.00	0.12	0.00
FE-7	4.52	2.26	12.27	10.79
FEW – SAN JUAN CREEK	8.10	2.85	18.66	18.66
FEW-2	0.16	0.00	1.31	1.31
FEW-3	0.00	0.00	0.07	0.07
FE/7-3	4.14	0.03	11.97	10.01
FE/7-4	0.00	0.00	2.47	2.38
FE/7-5	0.00	0.00	0.02	0.00
FE/7-6	0.36		2.17	1.95
FE/7-7	1.35	0.09	11.55	11.19
CRISTIANITOS CREEK	18.06	9.64	47.59	47.30
FE/7-8	0.43	0.00	2.91	2.62
FE/7-8A	0.05	0.00	0.05	0.00

	CORPS[2]		CDFG	
Jurisdictional Feature[1]	**Total**	**Wetlands**	**Total**	**Vegetated**
FE/7-8B	0.01	0.00	0.01	0.00
FE/7-9	0.18	0.00	0.18	0.00
FE/7-10	0.31	0.00	2.90	2.76
FE/7-11	1.09	0.12	1.35	1.35
FE/7-12	1.39	0.68	3.06	3.04
FE/7-13	0.02	0.00	0.02	0.00
FE/7-14	0.34	0.00	0.38	0.23
FE/7-VM 16	0.05	0.05	0.00	0.00
FE/7-VM 17	0.05	0.05	0.00	0.00
FE/7-VM 18	0.04	0.04	0.00	0.00
FE/7-VM 19	0.06	0.06	0.00	0.00
FE/7-15	0.40	0.03	0.88	0.64
FE/7-16	0.23	0.00	0.23	0.00
FE/7-17	0.21	0.00	0.21	0.00
FE/7-18	1.10	0.00	1.72	0.95
FE/7-19	0.03	0.00	0.03	0.00
FE/7-20	0.03	0.00	0.03	0.00
FE/7-21	0.28	0.00	1.68	1.68
FE/7-22	0.63	0.00	1.38	1.23
FE/7-23	0.02	0.00	0.02	0.00
FE/7-24	0.04	0.00	0.04	0.00
FE/7-25	0.05	0.00	0.05	0.00
SAN MATEO CREEK	35.33	15.25	47.71	47.71
SAN MATEO MARSH	68.55	68.55	68.55	68.55
SAN MATEO MARSH – EAST OF I5	13.60	13.60	24.46	24.46
FE/7-VM 20	0.05	0.05	0.00	0.00
FE/7-VP 3	0.18	0.18	0.00	0.00
FE/7-VP 4	0.03	0.03	0.00	0.00
SAN ONOFRE CREEK	1.39	1.39	5.30	5.30
TOTAL	**178.25**	**109.81**	**315.90**	**307.86**

[1] These features are depicted on Exhibits 1 and 2.

[2] Refer to Appendix B for isolated features totals

F.1 DRAINAGE DESCRIPTIONS – FEC-W STUDY AREA

Portions of the FEC-W Alternative overlap with the CC, CC-ALPV, A7C-ALPV, A7C-FEC-M and FEC-M Alternatives. Please see drainage descriptions above for features that have been previously addressed.

FEW-San Juan Creek

San Juan Creek traverses the alignment at a proposed bridge site. The channel bed varies from eight to 480 feet in width and contains perennial flows. The creek is a wide riparian area with one main wetland channel that begins to the east of the study area and terminates to the west of the proposed bridge. Some reaches are restricted within deeply incised bedrock, while others form braided channels in a broad floodplain. A second wetland channel originates at the freshwater marsh/pond approximately 650 feet to the east of the proposed bridge and flows on the south side of the broad channel bed. This channel extends west after the initial channel disappears. The creek is vegetated in part with arroyo willow (*Salix lasiolepis,* FACW), black willow (*Salix gooddingii,* OBL), yellow willow (*Salix lucida,* FACW), red willow (*Salix laevigata,* FACW), cattail (*Typha domingensis and Typha latifolia,* OBL), mule fat (*Baccharis salicifolia,* FACW), western sycamore (*Platanus racemosa,* FACW), giant reed (*Arundo donax,* FACW), monkey flower (*Mimulus cardinalis,* OBL), rabbitfoot grass (*Polypogon monspeliensis,* FACW), plantain (*Plantago major,* FACW), cocklebur (*Xanthium strumarium,* FAC+), white clover (*Melilotus alba,* FACU *albus*), duckweed (*Lemna sp.*, OBL), tamarisk (*Tamarix ramosissima.*, FACW), sow thistle (*Sonchus oleraceus, NI*), northern willow herb (*Epilobum ciliatum,* FACW*),* mugwort (*Artemesia douglasiana,* FAC), stinging nettles (*Urtica dioica,* FACW), African umbrella sedge (*Cyperus involucratus,* OBL), Mexican rush (*Juncus mexicanus,* FACW), and bulrush (*Scirpus microcarpus,* OBL). Within the channel bed, slightly raised gravel bars support some upland vegetation, such as prickly pear (*Opuntia littoralis* sp. , UPL), but also exhibit very large debris racks. Several low flow channels, some with hydric soils and flowing water or saturated soil, characterize the section of creek under the bridge crossing. There are also several pockets wetlands in depressional areas. The channel bed is primarily cobble and clean sand. The sandy soils at the fringe of the pond are saturated and have low chroma colors and evidence of redox. Standing water in soil pits may indicate high ground water though shelving, litter and debris also indicate surface flow. This ponding area is vegetated with similar species. There is an elevated portion of the streambed with no hydric characteristics that appears to separate the west end of the ponding area from the San Juan Creek except for at the southern most side of creek bed where the wetland channel flows.

The presence of an OHWM was indicated by shelving, lines impressed upon the banks, destruction of terrestrial vegetation, change in soil character and the presence of litter and debris. Corps jurisdiction totals 8.10 acres, of which 2.85 acres are wetlands. CDFG jurisdiction totals 18.66 acres, all of which consists of vegetated riparian habitat.

Drainage FEW-2

Drainage FEW-2 consists of an incised channel with a sandy loam bed. The presence of an OHWM was indicated by sediment deposits, litter and debris. The channel banks are vegetated with coast live oak (*Quercus agrifolia*, UPL).

Corps jurisdiction totals 0.16 acres, none of which are wetlands. CDFG jurisdiction totals 1.31 acres, all of which consists of vegetated riparian habitat.

Drainage FEW-3

Drainage FEW-3 consists of an marked incision. CDFG jurisdiction totals 0.07 acres, all of which consists of vegetated riparian habitat.

APPENDIX B

I. SUMMARY OF IMPACTS TO ISOLATED FEATURES BASED ON OHWM

Tables B-1 through B-12 summarize permanent impacts to isolated features based on the initial and ultimate disturbance limits.

TABLE B - 1
PERMANENT IMPACTS TO ISOLATED FEATURES
CENTRAL CORRIDOR COMPLETE – INITIAL ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non-Wetland Waters	Total Area	Total Length (linear feet)
C-WETLAND 1	0.40	0.00	0.40	NA
C-2	0.13	0.11	0.24	1,013
C-3	0.28	0.01	0.29	743
C-4	0.00	0.04	0.04	742
TOTAL	**0.81**	**0.16**	**0.97**	**2,498**

[1] These features are depicted on Exhibit 1.

TABLE B-2
PERMANENT IMPACTS TO ISOLATED FEATURES
CENTRAL CORRIDOR – COMPLETE – ULTIMATE ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non-Wetland Waters	Total Area	Total Length (linear feet)
C-WETLAND 1	0.40	0.00	0.40	NA
FE/C/7-2	0.00	0.02	0.02	64
C-2	0.13	0.11	0.24	1,013
C-3	0.28	0.01	0.29	743
C-4	0.00	0.04	0.04	767
TOTAL	**0.81**	**0.18**	**0.99**	**2,587**

[1] These features are depicted on Exhibit 1.

TABLE B-3

PERMANENT IMPACTS TO ISOLATED FEATURES
CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION – INITIAL ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non-Wetland Waters	Total Area	Total Length (linear feet)
C-WETLAND 1	0.40	0.00	0.40	NA
C-2	0.13	0.11	0.24	1,013
C-3	0.28	0.01	0.29	743
C-4	0.00	0.04	0.04	742
TOTAL	**0.81**	**0.16**	**0.97**	**2,498**

[1] These features are depicted on Exhibit 1.

TABLE B-4
PERMANENT IMPACTS TO ISOLATED FEATURES
CENTRAL CORRIDOR - AVENIDA LA PATA VARIATION – ULTIMATE ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non-Wetland Waters	Total Area	Total Length (linear feet)
C-WETLAND 1	0.40	0.00	0.40	NA
FE/C/7-2	0.00	0.02	0.02	64
C-2	0.13	0.11	0.24	1,013
C-3	0.28	0.01	0.29	743
C-4	0.00	0.04	0.04	767
TOTAL	**0.81**	**0.18**	**0.99**	**2,587**

[1] These features are depicted on Exhibit 1.

TABLE B-5
PERMANENT IMPACTS TO ISOLATED FEATURES

ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION – INITIAL ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non-Wetland Waters	Total Area	Total Length (linear feet)
FE/7-1	0.00	0.09	0.09	1,108
FE/7-2	0.29	0.06	0.35	2,265
FE/C/7-2	0.00	0.01	0.01	404
FE/C/7-4	0.00	0.001	0.001	40
FE-1	0.00	0.004	0.004	78
7-3	0.00	0.01	0.01	283
7-9	0.00	0.13	0.13	1,576
7-10	0.00	0.03	0.03	452
TOTAL	**0.29**	**0.34**	**0.63**	**6,206**

[1] These features are depicted on Exhibit 1.

TABLE B-6
PERMANENT IMPACTS TO ISOLATED FEATURES
ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION – ULTIMATE ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non - Wetland Waters	Total Area	Total Length (linear feet)
FE/C/7-2	0.00	0.02	0.02	658
FE/7-1	0.00	0.10	0.10	1,138
FE/7-2	0.32	0.06	0.38	2,416
FE/C/7-4	0.00	0.002	0.002	77
FE-1	0.00	0.004	0.004	78
7-3	0.00	0.01	0.01	283
7-9	0.00	0.13	0.13	1,576
7-10	0.00	0.04	0.04	495
TOTAL	**0.32**	**.37**	**0.69**	**6,721**

[1] These features are depicted on Exhibit 1.

TABLE B-7
PERMANENT IMPACTS TO ISOLATED FEATURES

ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED – INITIAL ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non- Wetland Waters	Total Area	Total Length (linear feet)
FE/C/7-WETLAND 2	0.07	0.00	0.07	NA
FE/7-1	0.00	0.01	0.01	140
FE/7-2	0.06	0.02	0.08	895
FE/7-3	0.54	0.07	0.61	912
7-2	0.00	0.04	0.04	1,137
7-3	0.00	0.02	0.02	484
7-10	0.00	0.03	0.03	240
7-11	0.00	0.02	0.02	412
7-13	0.00	0.05	0.05	885
FE/7-4	0.82	0.01	0.83	708
TOTAL	**1.49**	**0.27**	**1.76**	**5,813**

[1] These features are depicted on Exhibit 1.

TABLE B-8
PERMANENT IMPACTS TO ISOLATED FEATURES
ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED – ULTIMATE ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non-Wetland Waters	Total Area	Total Length (linear feet)
FE/C/7-WETLAND 2	0.10	0.00	0.10	NA
FE/7-1	0.00	0.01	0.01	140
FE/7-2	0.06	0.03	0.09	896
FE/7-3	0.54	0.07	0.61	912
7-2	0.00	0.04	0.04	1,137
7-3	0.00	0.02	0.02	555
7-10	0.00	0.03	0.03	275
7-11	0.00	0.02	0.02	412
7-11	0.00	0.05	0.05	911
FE/7-4	0.81	0.01	0.82	697
TOTAL	**1.51**	**0.28**	**1.79**	**5,935**

[1] These features are depicted on Exhibit 1.

TABLE B-9
PERMANENT IMPACTS TO ISOLATED FEATURES
FAR EAST CORRIDOR – WEST – INITIAL ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non-Wetland Waters	Total Area	Total Length (linear feet)
FE/C/7-WETLAND 2	0.07	0.00	0.07	NA
FE/7-1	0.00	0.06	0.06	812
FE/7-2	0.29	0.01	0.30	1,043
FE-1	0.00	0.03	0.03	351
FE-2A	0.00	0.02	0.02	480
FE-6	0.00	0.04	0.04	899
FE/7-4	0.00	0.05	0.05	1,124
TOTAL	**0.36**	**0.21**	**0.57**	**4,709**

[1] These features are depicted on Exhibit 1.

TABLE B-10
PERMANENT IMPACTS TO ISOLATED FEATURES
FAR EAST CORRIDOR – WEST – ULTIMATE ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non- Wetland Waters	Total Area	Total Length (linear feet)
FE/C/7-WETLAND 2	0.11	0.00	0.11	NA
FE/7-1	0.00	0.07	0.07	837
FE/7-2	0.29	0.01	0.30	1,043
FE-1	0.00	0.03	0.03	351
FE-2A	0.00	0.02	0.02	480
FE-6	0.00	0.05	0.05	912
FE/7-4	0.00	0.05	0.05	1,124
TOTAL	**0.40**	**0.23**	**0.63**	**4,747**

[1] These features are depicted on Exhibit 1.

TABLE B-11
PERMANENT IMPACTS TO ISOLATED FEATURES
FAR EAST CORRIDOR – MODIFIED – INITIAL ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non-Wetland Waters	Total Area	Total Length (linear feet)
FE/C/7-WETLAND 2	0.07	0.00	0.07	NA
FE/7-1	0.00	0.06	0.06	812
FE/7-2	0.29	0.01	0.30	1,043
FE-1	0.00	0.03	0.03	351
FE-2A	0.00	0.02	0.02	480
FE-6	0.00	0.04	0.04	899
FEM-3	0.00	0.12	0.12	465
FEM-POND 1	0.02	0.00	0.02	NA
TOTAL	**0.38**	**0.28**	**0.66**	**4,050**

[1] These features are depicted on Exhibit 1.

TABLE B-12
PERMANENT IMPACTS TO ISOLATED FEATURES
FAR EAST CORRIDOR – MODIFIED – UTLIMATE ALTERNATIVE
(in acres)

Feature Name[1]	Wetland Area	Non- Wetland Waters	Total Area	Total Length (linear feet)
FE/C/7-WETLAND 2	0.11	0.00	0.11	NA
FE/7-1	0.00	0.07	0.07	837
FE/7-2	0.29	0.01	0.30	1,043
FE-1	0.00	0.03	0.03	351
FE-6	0.00	0.04	0.04	899
FE-2A	0.00	0.02	0.02	480
FEM-3	0.00	0.15	0.15	562
FEM-POND 1	0.02	0.00	0.02	NA
TOTAL	**0.42**	**0.32**	**0.74**	**4,172**

[1] These features are depicted on Exhibit 1.

II. SUMMARY OF TOTAL AREA (BASED ON OHWM) ASSOCIATED WITH ISOLATED FEATURES WITHIN THE STUDY AREAS

Tables B-13 through B-18 summarize the total acreage of isolated feature impacts located within the total study areas.

TABLE B-13
ISOLATED FEATURES – TOTAL STUDY AREA
CENTRAL CORRIDOR – COMPLETE STUDY AREA
(in acres)

Feature Name[1]	Total Area	Wetland Area	Non- Wetland Waters
FE/C/7-2	0.02	0.00	0.02
FE/C/7-3	0.01	0.00	0.01
FE/C/7-4	0.02	0.00	0.02
FE/C/7-WETLAND 2	0.11	0.11	0.00
C-1	0.02	0.00	0.02
C-WETLAND 1	0.40	0.40	0.00
C-2	0.38	0.13	0.25
C-3	0.70	0.68	0.02
C-4	0.04	0.00	0.04
C-POND 1	0.12	0.00	0.12
TOTAL	**1.82**	**1.32**	**0.50**

[1] These features are depicted on Exhibit 1.

TABLE B-14
ISOLATED FEATURES – TOTAL STUDY AREA
CENTRAL CORRIDOR-AVENIDA LA PATA VARIATION STUDY AREA
(in acres)

Feature Name[1]	Total Area	Wetland Area	Non-Wetland Waters
FE/C/7-2	0.02	0.00	0.02
FE/C/7-3	0.01	0.00	0.01
FE/C/7-4	0.02	0.00	0.02
FE/C/7-WETLAND 2	0.11	0.11	0.00
C-1	0.02	0.00	0.02
C-WETLAND 1	0.40	0.40	0.00
C-2	0.38	0.13	0.25
C-3	0.70	0.68	0.02
C-4	0.04	0.00	0.04
C-POND 1	0.12	0.00	0.12
TOTAL	**1.82**	**1.32**	**0.50**

[1] These features are depicted on Exhibit 1.

TABLE B-15
ISOLATED FEATURES – TOTAL STUDY AREA
ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION STUDY AREA
(in acres)

Feature Name[1]	Total Area	Wetland Area	Non-Wetland Waters
FE/C/7 WETLAND 2	0.11	0.11	0.00
FE/C/7-2	0.02	0.00	0.02
FE/C/7-3	0.01	0.00	0.02
FE/C/7-4	0.02	0.00	0.02
FE/7-1	0.20	0.00	0.20
FE/7-2	0.50	0.36	0.14
FE-1	0.16	0.00	0.16
7-9	0.09	0.00	0.09
7-10	0.19	0.00	0.19
TOTAL	**1.30**	**0.47**	**0.84**

[1] These features are depicted on Exhibit 1.

TABLE B-16
ISOLATED FEATURES – TOTAL STUDY AREA
ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER – MODIFIED STUDY AREA
(in acres)

Feature Name[1]	Total Area	Wetland Area	Non-Wetland Waters
FE/C/7 WETLAND 2	0.11	0.11	0.00
FE/C/7-2	0.02	0.00	0.02
FE/C/7-3	0.01	0.00	0.01
FE/C/7-4	0.02	0.00	0.02
FE/7-1	0.20	0.00	0.20
FE/7-2	0.50	0.36	0.14
7-9	0.09	0.00	0.09
7-10	0.19	0.00	0.19
7-11	0.02	0.00	0.02
FE/7-4	1.32	1.10	0.22
FE/7-5	0.02	0.00	0.02
TOTAL	**2.5**	**1.57**	**0.93**

[1] These features are depicted on Exhibit 1.

TABLE B-17
ISOLATED FEATURES – TOTAL STUDY AREA
FAR EAST CORRIDOR – MODIFIED STUDY AREA
(in acres)

Feature Name[1]	Total Area	Wetland Area	Non-Wetland Waters
FE/C/7 WETLAND 2	0.11	0.11	0.00
FEC/7-2	0.02	0.00	0.02
FE/C/7-3	0.01	0.00	0.01
FE/C/7-4	0.02	0.00	0.02
FE/7-1	0.20	0.00	0.20
FE/7-2	0.50	0.36	0.14
FE-1	0.16	0.00	0.16
FE – WETLAND 1	0.16	0.16	0.00
FE-2	1.40	1.32	0.08
FE-2A	0.08	0.00	0.08
FE-4	2.65	2.65	0.00
FE – WETLAND 2	0.23	0.23	0.00
FE-6	0.11	0.11	0.00
FEW -1	0.12	0.00	0.12
FEM-2	0.01	0.00	0.01
FEM-3	0.43	0.00	0.43
FEM-POND 1	3.61	3.61	0.00
FEM-VM 7	0.19	0.19	0.00
FEM-VM 8	0.48	0.48	0.00
TOTAL	**10.49**	**9.22**	**1.270**

[1] These features are depicted on Exhibit 1.

TABLE B-18
ISOLATED FEATURES – TOTAL STUDY AREA
FAR EAST CORRIDOR – WEST STUDY AREA
(in acres)

Feature Name[1]	Total Area	Wetland Area	Non-Wetland Waters
FE/C/7 WETLAND 2	0.11	0.11	0.00
FEC/7-2	0.02	0.00	0.02
FE/C/7-3	0.01	0.00	0.01
FE/C/7-4	0.02	0.00	0.02
FE/7-1	0.20	0.00	0.20
FE/7-2	0.50	0.36	0.14
FE-1	0.16	0.00	0.16
FE – WETLAND 1	0.16	0.16	0.00
FE-2	1.40	1.32	0.08
FE-2A	0.08	0.00	0.08
FE-4	2.65	2.65	0.00
FE – WETLAND 2	0.23	0.23	0.00
FE-6	0.11	0.11	0.00
FEW –1	0.12	0.00	0.12
FE/7-4	1.32	1.10	0.22
FE/7-5	0.02	0.00	0.02
TOTAL	**7.11**	**6.04**	**1.07**

[1] These features are depicted on Exhibit 1.

#3

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PAL Applicant/Owner: [illegible] Investigator: [illegible]	Date: 1/15/03 County: State:
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 1 ~~2~~

paddocks desirable

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. mulefat	S	FACW	9.		
2. fennel	H	UPL	10.		
3. acacia redolens	S	UPL	11.		
4. picris echoides	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ✓ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: debris, [illegible]

SOILS

Map Unit Name (Series and Phase): Corralitos loamy sand — Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Typic Xerorthents — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
~~0-10~~		2.5Y 4/3			
~~10+~~		2.5Y 4/3	5Y 5/6		loam
0-4					sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Ortega Gateway	Date: 3/5/03
Applicant/Owner: RMW	County: OR
Investigator: TC/TB	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 1-4

eo W bio-pond

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Mulefat	shrub	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: depression, however even though lying 4 days of storm even - no signs of saturation

SOILS

Map Unit Name (Series and Phase): Conalter Sandy loam — Drainage Class: Somewhat excessively drained

Taxonomy (Subgroup): Typic Xerorthents — Field Observations: Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		10YR3/2	none		loamy

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	(Circle)
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)

Remarks: only a soil [illegible]

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Planning area Applicant/Owner: RMV Investigator: IC/TL	Date: 11/25/2002 County: CA State: OR
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: 2-D Transect ID: Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible]	shrub	FacW	9.		
2. [illegible]	tree	FacW	10.		
3. bromus sp. ame asm adj	herb	UPL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: terrace adj to creek, ~15 feet wide indiv terrace ~4 ft [illegible] meets

[illegible]

135

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam 2 to 5 slops

Drainage Class: Welldrained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Entic Haploxeroils

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10		2.5Y 5/3	10YR 5/6		Sand [illegible]
10-12		Gley 1 5GY 4/0			Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:
meets

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita	Date: 11/25/2002
Applicant/Owner: RMV	County: CA
Investigator: ICFTL	State: OR
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 2 (2)
Is the area a potential Problem Area? Yes (No)	Plot ID:
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible]	herb	OBL	9.		
2. [illegible] macrostaychya	herb	OBL	10.		
3. Yerbamansa	herb	OBL	11.		
4. Hydrocotyle	herb	FAW	12.		
5. Cyperus eragrostis	herb	FAW+	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: water

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	~ (in.)
Depth to Free Water in Pit:	~ (in.)
Depth to Saturated Soil:	4" (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: 1/2 flooded - [illegible] margin (~5-7ft wide)

125

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam 2 to 9% slopes Drainage Class: well drained

Taxonomy (Subgroup): Typic Haploxerolls Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 3/3	none		Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks: meets

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: CHIQUITA
Applicant/Owner: RMV
Investigator: TCFTL

Date: 11/25/02
County: CA
State: OR

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: C
Transect ID: 2F3
Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. willow (black)	tree	OBL
2. bromus sp	herb	UPL
3. mulefat	shrub	FACW
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)
Depth to Free Water in Pit: ____ (in.)
Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: does not meet

135

SOILS

Map Unit Name (Series and Phase): Canisteo Sandy Loam — Drainage Class: well drained

Taxonomy (Subgroup): Typic Haplaquolls — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10		2.5Y 2/1	10YR 5/6	few	sandy
10-12		2.5Y [illegible]	7.5YR 4/6	[illegible]	loamy sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita	Date: 11/25/2002
Applicant/Owner: RMV	County: OR
Investigator: IC/TL	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: 2-45
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible]	tree	FACW	9.		
2. [illegible]	H	OBL	10.		
3. [illegible]	H	OBL	11.		
4. celery	H	FACW	12.		
5. [illegible]	H	OBL	13.		
6. [illegible]	H	OBL	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: [illegible] meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ((in.)

Depth to Free Water in Pit: ((in.)

Depth to Saturated Soil: ((in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ✓ Drift Lines
- ✓ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets

SOILS

Map Unit Name (Series and Phase): Riverwash Drainage Class: NWI

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		2.5Y 5/2			Sandy loam
10+		2.5Y 5/2			sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets / marginal on boundary

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks: meets

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Applicant/Owner: RMV Investigator: IC/TL	Date: 11/25/02 County: CA State:
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: 25 Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. rumex crispus	herb	FacW	9.		
2. saltgrass	herb	FacW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100 %

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: lawn/grass adj to stream,

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: well

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes / No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7		5Y 2.5/1			clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Oder
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

marginal

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: CHIQUITA	Date: 11/25/02
Applicant/Owner: RMV	County: OR
Investigator: ICTL	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: 26
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. beet Beta vulgaris	herb	FACU	9.		
2. ambrosia pilostachya	H	FAC	10.		
3. bindweed polygonum convolvulus	H	NI	11.		
4. bromus sp.?	H	UPL	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adj to creek/lowlying groundwater fed perennial stream

SOILS

Map Unit Name (Series and Phase): Riverwash Drainage Class: WNL

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7			5Y 2.5/1		clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: CHIQUITA Applicant/Owner: RMV Investigator: TC/TL	Date: 11/25/02 County: OR State: OR
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: Transect ID: 2 (1) Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. bermuda grass	herb	FAC	9.		
2. ryegrass	herb	FAC	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: low lying terrace adj to gwd water derived perennial stream

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7			5Y 2.5/1		clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

meets

Approved by HQUSACE 3/92

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DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: CHAUTA
Applicant/Owner: RMV
Investigator: IC/TL

Date: 11/25/02
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID: 2 (C)
Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. [illegible]	herb	FACW
2. [illegible]	↓	OBL
3. ragweed	↓	FAC
4. brome		UPL
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NONE (in.)
Depth to Free Water in Pit: NONE (in.)
Depth to Saturated Soil: NONE (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Now up on a bank. [illegible] to bank

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: well

Taxonomy (Subgroup):

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	none		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

		(Circle)
Hydrophytic Vegetation Present?	Yes / No	(Circle)
Wetland Hydrology Present?	Yes / No	
Hydric Soils Present?	Yes / No	
Is this Sampling Point Within a Wetland?	Yes / No	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: CHIQUITA	Date: 11/26/02
Applicant/Owner: RMV	County: OR
Investigator: TC/MR	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 2(1)
Is the area a potential Problem Area? Yes (No)	Plot ID:
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. mulefat	shrub	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: weed

HYDROLOGY

__ Recorded Data (Describe in Remarks):
- __ Stream, Lake, or Tide Gauge
- __ Aerial Photographs
- __ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- __ Inundated
- __ Saturated in Upper 12 Inches
- __ Water Marks
- __ Drift Lines
- X Sediment Deposits sand
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- __ Oxidized Root Channels in Upper 12 Inches
- __ Water-Stained Leaves
- __ Local Soil Survey Data
- __ FAC-Neutral Test
- __ Other (Explain in Remarks)

Remarks: damp, lowlying area connect to adj groundwater-driven perennial str

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SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Very Well

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup):

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10					Sand
10-12		10YR4/2	tan to mottles/oxidized Rhizosphere		Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita
Applicant/Owner: BLM
Investigator: IC/MR

Date: 11/26/2002
County: DB
State: CO

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID: 2
Plot ID: 10

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Mulefat	shrub	FACW
2. anemopsis	herb	OBL
3.		
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meds

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)
Depth to Free Water in Pit: ____ (in.)
Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits no recent sediment deposits
___ Drainage Patterns in Wetlands topographic low feature
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: no primary indicators

no OHWM several feet above water level in adj creek.

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SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		7.5YR 2.5/1			loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✗ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Soils similar to dark wall upland areas.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: CHICQUITA Applicant/Owner: RMV Investigator: TC/MR	Date: 11/26/2002 County: ORA State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: (1) Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. distichlis		FACW	9.		
2. hordeus marinus		FACW	10.		
3. Lambrosa psilostachya		FAC	11.		
4. Lolium multiflorum		UPL	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands — lowly terrace adj to stream
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
X FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: adj to stream but elevated no oxidized rhizospheres

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		7.5 YR 2.5/1			loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks: marginal hydrology

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: CHANTA Applicant/Owner: RMV Investigator: TC / TM	Date: 12/6/02 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: Transect ID: 2 (42) Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. mulefat	Shrub	FacW
2. distichlis spicata	herb	facW
3. hornes	herb	upl
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: mod

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands wind rows

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: mod

SOILS

Map Unit Name (Series and Phase): Bosanko clay 30-50% slopes Drainage Class: well drained

Taxonomy (Subgroup): Chromic Pelloxererts Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
7-12		10R 2.5/1			clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: mucky

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: CHIQUITA	Date: 12/6/02
Applicant/Owner: RMV	County: 013
Investigator: JC/JM	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 2
Is the area a potential Problem Area? Yes (No)	Plot ID: 2
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. mulfat	shrub	FACW
2. lupines	herb	upl
3. ~~red~~ willow	tree	FACW
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66% / 100% impervious layer

Remarks: marsh

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ~~_____~~ (in.)

Depth to Free Water in Pit: ~~_____~~ (in.)

Depth to Saturated Soil: ~~_____~~ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: marsh

SOILS

Map Unit Name (Series and Phase): Geneva Sandy loam, 15 to 30% slopes
Drainage Class: somewhat excessively drained
Taxonomy (Subgroup): Typic Xerorthents
Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	none		silty loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Applicant/Owner: RMV Investigator: TC/JM	Date: 12/ /02 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: 2-14 Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. distichlis spicata	herb	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands Winnasia

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: on shelf adj to drainage

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SOILS

Map Unit Name (Series and Phase): Bosanko Clay 30-50% Slopes
Drainage Class: Well drained
Taxonomy (Subgroup): Chromic Palexerepts
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12"		10YR 4/3	none		clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ~~Yes~~ No (Circle)
Wetland Hydrology Present? Yes ~~No~~
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: does not meet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chewaka Applicant/Owner: RMV Investigator: TC/AM	Date: 3/8/03 County: Cl State: OR
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: 15

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. grey willow	T	FACW
2. juncus xiphioides	H	OBL
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: just below head cut, appears to outpass water table

135

SOILS

Map Unit Name (Series and Phase): Canisteo Sandy Loam 2-9% Slopes
Drainage Class: Well drained
Taxonomy (Subgroup): Entic Hapludolls
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		5YR 2.5/1			sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Applicant/Owner: FRMV Investigator: IC/AM	Date: 3/8/03 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 16

upstream of headcut

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. arroyo willow	T	FacW	9.		
2. bromus diandrus	H	UPL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches none
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: above headcut swale, no evidence of sat even after Rain event (w/in one week)

135

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam, 2 to 9% slopes Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerolls Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		2.5Y 2.5/1	none	—	loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: low chroma, but less than 1 week after rain event — no saturation in upper 16"

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita	Date: 3/8/03
Applicant/Owner: RMV	County: ORG
Investigator: IC/RM	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 17
Is the area a potential Problem Area? Yes (No)	Plot ID:
(If needed, explain on reverse.)	

W/in incision on upper bank

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Carex praegracilis		FACW	9.		
2. Mulefat		FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: mesic

HYDROLOGY

- ___ Recorded Data (Describe in Remarks):
  - ___ Stream, Lake, or Tide Gauge
  - ___ Aerial Photographs
  - ___ Other
- X No Recorded Data Available

Field Observations:

Depth of Surface Water:	___ (in.)
Depth to Free Water in Pit:	___ (in.)
Depth to Saturated Soil:	___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: W/in drainage bottom

134

SOILS

Map Unit Name (Series and Phase): Callegus clay loam 50-1.75% slope ended

Drainage Class: well drained

Taxonomy (Subgroup): Typic xerorthents

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		2.5Y 3/2	none		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chanute Applicant/Owner: & RMV Investigator: Ic/DM	Date: 10/6/03 County: OK State: OK
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: 2-18

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. distichlisspicata	herb	facW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

None

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: no indicators present (located within an erosional feature w/no recent signs of flow)

171

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR3/2	No mottle		Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	Yes	(No)	
Hydric Soils Present?	Yes	(No)	

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks:

does not meet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Applicant/Owner: RMV Investigator: IC/DM	Date: 10/6/03 County: OR State: Ch
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 2-1a 5

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Lolium multiflorum	herb	NL	9.		
2. Lisprcatin	herb	FacW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: (Based on personal observation — lolium multiflorum appears to persist equally in wet/dry environments) so we will treat it as fac. - meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

None

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

none (on very few)

Remarks: does not meet

135

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam

Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxeroll

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	none		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: pit north of mf (south of mulefat w/ arenops silt 10YR 3/1 w/ oxidized Rhizospheres)

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	(Circle)
Wetland Hydrology Present?	Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)
Hydric Soils Present?	Yes (No)	

Remarks: does not meet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Applicant/Owner: RMV Investigator: IC/DM	Date: 11/7/03 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 2-20

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. bro hordeaceus	herb	upl	9.		
2. lolium multiflorum		NI	10.		
3. dispicata		facw	11.		
4. jubufonium		facw+	12.		
5. hordeum depressum/		≥fac	13.		
6. intercedes			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). ≥60%

Remarks: pit 6 on margin w/ upland veg (did not include areas w/ primarily bro hordeaceus
see note on 2-19 re lolium

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
X FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: does not meet south bank of drainage

135

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam 2 to 9% Slopes Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerolls Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		10YR3/2	none		Sandy

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: does not meet

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chualta	Date: 10/6/03
Applicant/Owner: RAY	County: OR
Investigator: TOM	State: CA
Do Normal Circumstances exist on the site? Yes (No)	Community ID:
Is the site significantly disturbed (Atypical Situation)? ~~Yes~~ (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: 2-21
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Avena sp	herb	upl	9.		
2. bromus mollis	herb	upl	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: ____ (in.)

Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

none

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: does not meet

135

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam 2 to 9% slope
Drainage Class: Well drained
Taxonomy (Subgroup): Entic Haploxerolls
Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	none		sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: does not meet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chaparita Applicant/Owner: RMV Investigator: TC/DM	Date: 10/6/03 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 2-22

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Hordeum (interedens or depressum)		≥fac
2. Lolium multiflorum		NL
3. disticata		FACW
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 266%

Remarks: meet, see sheet 2-R Regarding Lolium

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: ____ (in.)

Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:

Primary Indicators: None
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

very few plants deep

Remarks: doesn't have 2 secondary indicators

135

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam 2 to 9% Slopes Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerolls Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		10YR3/2	none		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: does not meet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Applicant/Owner: RMV Investigator: IC/DM	Date: 10/7/03 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: Slope wetland 23

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. dispicata		facw	9.		
2. jumexicanus		facw	10.		
3. sc pungens		obl	11.		
4. anemopsis californica		obl	12.		
5. lolium multiflorum		NI	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). ≥ 80%

Remarks: see notes re lolium on sheet Z-19

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
none ___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
X FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: meets

135

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam 2 to 9% Slopes Drainage Class: Well drained

Taxonomy (Subgroup): Entic Haploxerolls Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-72		10YR 2/1	w/mottle		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: mott

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks: mott

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Applicant/Owner: RMV Investigator: DM/JC	Date: 10/6/03 County: OR State: OA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 2-24

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. dispicata	herb	facW	9.		
2. lolium multiflorum		NI	10.		
3. dock Rumex crispus		facW	11.		
4. cocklebur xanthium strumarium		fac+	12.		
5. hordeum depressum or intercedens		≥fac	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: some polypogon, juncus concentrated in a few small patches

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

None

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

none

Remarks: no indication of hydrology

SOILS

Map Unit Name (Series and Phase): Capistrano sandy loam 2-9% slopes Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxeralfs Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR3/2	none		silt loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: does not meet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita	Date: 3/14/03
Applicant/Owner: RMV	County: OR
Investigator: TC/TB	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 2-28

drainage upstream of water treatment plant

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. blackwillow	tree	obl	9.		
2. mulefat	shrub	FacW	10.		
3. Ju Rugulosis	herb	OBL	11.		
4. Ju mexicanus	herb	FacW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: no saturati in upper 12" even w/in days of a 10yr storm event does not meet

SOILS

Map Unit Name (Series and Phase): Calleguas clay loam 30 to 75% slopes eroded Drainage Class: well drained

Taxonomy (Subgroup): Typic Xerorthents Field Observations Confirm Mapped Type? (Yes) No

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Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 4/1	none		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: mod

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Soils were observed w/in 1 week of a rainevent
No saturation in upper 12" was evident -
does not meet.

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita Applicant/Owner: RWQ Investigator: EC/TB	Date: 11/5/07 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: E-25

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. distichlis spicata	herb	facW	9.		
2. Anemopsis californica	herb	obl	10.		
3. Salicornia pacifica	herb	facW	11.		
4. ambrosia psilostachya	herb	fac	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other X No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: NONE ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): X Oxidized Root Channels in Upper 12 Inches ___ Water-Stained Leaves ___ Local Soil Survey Data X FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	

Remarks: meets

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SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup):

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	wet mottle		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: pit just upslope of amenopis 10YR 3/3 no mottle

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks: meet

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Chiquita	Date: 8/3/01
Applicant/Owner: RHV	County: OR
Investigator: PS/EC	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: 27
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Anemopsis californica	Herb	OBL	9.		
2. Scirpus americanus	↓	OBL	10.		
3. Juncus mexicanus	↓	FACW	11.		
4. Lambissa psilostachya	↓	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: met

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: to surface (in.)

Depth to Free Water in Pit: ↓ (in.)

Depth to Saturated Soil: ↓ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
X Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam 2-9% Slp — Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerolls — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		5Y 3/2	4/ mottle		Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	(Yes)	No	
Hydric Soils Present?	(Yes)	No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Planning area 3 Gobernadora Applicant/Owner: Rancho Mission Viejo Investigator: TC/JM	Date: 11/7/02 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: ~~3~~ 1

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. ☆ acrisechoides	herb	FAC
2. ☆ cynodon dactylon	herb	FAC
3. ☆ eleocharis macrostachya	herb	OBL
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: not dominant but present: juncus xiphioides + bromus diandrus

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators: none
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches → very few if any. majority of living roots did not exhibit oxidized rhizospheres
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: see back
does not meet

135

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam 2-9% slope Drainage Class: Well drained

Taxonomy (Subgroup): Entic Haploxerolls Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12"		2.5/N (Gley)	page none		clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: No apparent hydrology at present, dry year → may exhibit signs at a wetter part of wetter year however lack of oxidized rhizospheres makes this unlikely.

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Planning area 3 Gobernadora Applicant/Owner: RMV Investigator: IC/JM	Date: 11/7/02 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: 3-2

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Salix goodingii	tree	OBL
2. Xanthium strumarium	herb	Fact
3. Glinus lotoides	groundcover	OBL
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: ____ (in.)

Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands basin/large cracks evidence of wetting & drying

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: water observed at 4 feet below ground surface in recently dug pit

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 4/2	w/ mottle	abundant distinct	loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Planning area 3 Gobernadora	Date: 11/7/02
Applicant/Owner: RMV	County: OR
Investigator: IC/JM	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Plot ID: 3-3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Paygonum lapathifolium	herb	OBL	9.		
2. glinus lotoides	groundwater	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands basin/large cracks - evidence of wetting & drying

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: water observed at 4 feet below ground surface in Recently dug pit.

SOILS

Map Unit Name (Series and Phase): River wash

Drainage Class: _____

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR4/2	w/mottle	abundant distinct	loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: mtls

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA3 Gobernadora Applicant/Owner: RMV Investigator: IC/JM	Date: 1/4/02 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 3-( )

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. xanthium strumarium	herb	Fact	9.		
2. typha (sp) dead	herb	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands basin/large cracks evidence of wetting & drying

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: water observed at 4 feet below ground surface in recently dug pit

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 4/2	w/mottles	abundant distinct	loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- X Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: wet

WETLAND DETERMINATION

		(Circle)
Hydrophytic Vegetation Present?	(Yes)	No
Wetland Hydrology Present?	(Yes)	No
Hydric Soils Present?	(Yes)	No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gdernador	Date: 11/7/02
Applicant/Owner: RMV	County: OR
Investigator: tc/JM	State: CA

Do Normal Circumstances exist on the site?	Yes	(No)	Community ID:
Is the site significantly disturbed (Atypical Situation)?	Yes	(No)	Transect ID:
Is the area a potential Problem Area?	Yes	(No)	Plot ID: 3 (5)
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Scirpus californica	herb	OBL	9.		
2. Conyza canadensis	herb	FAC	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands basin

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: source of water is undear

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10 YR 4/2	w/mottles	abundant	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gobernador Applicant/Owner: RMV Investigator: JC/JM	Date: 11/7/02 County: OR State: CA
Do Normal Circumstances exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: 62

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. unvegetated			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

NONE

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: top of berm does not meet

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 4/2	unmottled	abundant	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:
neat

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	(Yes) No	Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:
- Indicate that soils may be hydric

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gobernadora
Applicant/Owner: RMV
Investigator: JC/JM

Date: 11/11/02
County: SB
State: CA

Do Normal Circumstances exist on the site? Yes (No)
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: _____
Transect ID: _____
Plot ID: 3-21

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Polypogon monspeliensis	herb	FACW+
2. Bromus diandrus	herb	UPL
3. Baccharis salicifolia	shrub	FACW
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: 4 (in.)
Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: wetl

SOILS

Map Unit Name (Series and Phase): Rockoutcrop-Glendale complex 30 to 75% Slope — Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Typic Xerorthents — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		10YR 4/1		with mottles	sand
4-12			mottled sand		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- X Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks: meet

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3, Gobernadora
Applicant/Owner: RMV
Investigator: IC/JM

Date: 11/1/02
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: 3-2

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Mulefat	Shrub	FACW
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: mat of terrace also supports herb layer including ambrosia psilostachya (FACW) Raphanus sativa (UPL) Polygonum spheliense (FACW) and Bromus sp (UPL)

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: 4 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: terrace adj to stream

192

SOILS

Map Unit Name (Series and Phase): Rockoutcrop-Cieneba complex 30+75% Slope

Drainage Class: Somewhat excessively drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 5/2		no mottle	sand w/some silt

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: sediment too fresh to develop indicators, chroma appears Reduced

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks: mtt

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA3 Gobernadora
Applicant/Owner: RMV
Investigator: JC/JM

Date: 11/1/02
County: OR
State: CA

Do Normal Circumstances exist on the site? Yes (No)
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: F2

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. baccharis salicifolia	shrub	FACW
2. Salix lasiolepis	tree	FACW
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets

147

SOILS

Map Unit Name (Series and Phase): Clenelsa sandy loam 30-75% slopes eroded
Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Typic Xerorthents
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gubernadora Applicant/Owner: RMV Investigator: IC/TM	Date: 11/11/02 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: ____ Transect ID: ____ Plot ID: 3-24

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). ____

Remarks: Ragweed Eupland Bromes to east of Salix

HYDROLOGY

__ Recorded Data (Describe in Remarks):
- __ Stream, Lake, or Tide Gauge
- __ Aerial Photographs
- __ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: ____ (in.)

Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- __ Inundated
- __ Saturated in Upper 12 Inches
- __ Water Marks
- __ Drift Lines
- __ Sediment Deposits
- X Drainage Patterns in Wetlands adj to creek

Secondary Indicators (2 or more required):
- __ Oxidized Root Channels in Upper 12 Inches
- __ Water-Stained Leaves
- __ Local Soil Survey Data
- __ FAC-Neutral Test
- __ Other (Explain in Remarks)

Remarks: 10 feet west of DS # 23

142

SOILS

Map Unit Name (Series and Phase): Ciencia Sandy Loam 30-75% slopes eroded — Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Typic Xerorthents — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3		10YR 4/1			Sandy Loam
3-12		10YR 5/3	w/mottle		Sandy Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gobernadora Applicant/Owner: BMV Investigator: EC/JM	Date: 11/11/02 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: 3-25

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Ambrosia psilostachya	herb	FACW
2. Nassella pulchra	herb	UPL
3. Heterotheca grandiflora	herb	UPL
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: Ragweed terrace North of pond / does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: does not meet

SOILS

Map Unit Name (Series and Phase): Geneva Sandy Loam 30-75% slopes eroded — Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Typic Xerorthents — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		2.5Y 6/3	w/mottle		sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	Is this Sampling Point Within a Wetland? (Circle) Yes (No)
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	Yes (No)	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gobernadora Applicant/Owner: RMV Investigator: TC/TM	Date: 11/11/02 County: OR State: CA
Do Normal Circumstances exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: 3-26

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Epilobium ciliatum		OBL	9.		
2. Salix lasiolepis		FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: ~~1~~ (in.)

Depth to Free Water in Pit: 4 (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets

1+2

SOILS

Map Unit Name (Series and Phase): Cienega Sandy Loam 30 to 75% slopes eroded — Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Typic Xerorthents — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10		brown	no mottle		Sand
10-12		2.5 Y 4/1			

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gobernador Applicant/Owner: RMV Investigator: JC/JW	Date: 11/11/02 County: OR State: CA
Do Normal Circumstances exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: 3-27

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	tree	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ~~_____~~ (in.)

Depth to Free Water in Pit: ~~_____~~ (in.)

Depth to Saturated Soil: 2 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: just east of DS #26/meets

SOILS

142

Map Unit Name (Series and Phase): Cleneba Sandy Loam 30-75% Slopes eroded

Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Typic Xerorthents

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 4/2			sand
		high chroma	no mottle		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- X Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	~~Yes~~	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gobernadora Applicant/Owner: RMV Investigator: JC/JM	Date: 11/11/02 County: OR State: Ga
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 3-28

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Toxicodendron diversilobum	herb	UPL	9.		
2. Salix lasiolepis	tree	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

tegrace adj to Running Stream

Remarks:

175

SOILS

Map Unit Name (Series and Phase): Myford sandy loam 9-15% slopes Drainage Class: moderately well

Taxonomy (Subgroup): Typic Palexeralfs Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		hychroma sand			
12-16		2.5Y5/2	no mottle		sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: doesnt meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)

Wetland Hydrology Present? (Yes) No

Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PA 3 Gobernadora Applicant/Owner: RMV Investigator: TC/JM	Date: 11/11/02 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 3-20

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	tree	FacW	9.		
2. bromus diandrus	herb	UPL	10.		
3. cyperus involucratus	herb	FacW+	11.		
4. juncus rugulosus	herb	OBL	12.		
5. Raphinus sativa	herb	UPL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 60%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: low lying terraceady to flowing creek

SOILS

Map Unit Name (Series and Phase): Myford sandy loam 9-15% slopes
Drainage Class: moderately well drained
Taxonomy (Subgroup): Typic Palexeralfs
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		light brown sand			
6-14		5YR 5/1			sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- X Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

meets

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: RMV, Gobernadora Applicant/Owner: RMV Investigator: TBomKamp	Date: 3-8-03 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Disturbed Mulefat Transect ID: Plot ID: WR 1-30

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Baccharis salicifolius	S	FACW	9.		
2. Lotus Scoparius	S	UPL	10.		
3. Bromus rubens	H	UPL	11.		
4. Ambrosia psilostachy	H	FAC	12.		
5. Hypocharis glabrata	H	UPL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 40%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

NONE

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

NONE

Remarks: Dry Sandy Area — Mulefat very stressed even w/ recent rains

146

SOILS

Map Unit Name (Series and Phase): NA - Very Sandy Drainage Class: Well

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		Sand to 12"			
		Barely Moist			
		W/in 10 days of significant rainfall			(-73")

Hydric Soil Indicators:

None
- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors

None
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	(Circle)
Wetland Hydrology Present?	Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)
Hydric Soils Present?	Yes (No)	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: RMV Gobernadora	Date: 3-8-03
Applicant/Owner: RMV	County: Or
Investigator: TBomkamp	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Plot ID: WR 23 31

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Baccharis Salicifolia S		FACW	9.		
2. Cyperus eragrostis	H	FACW	10.		
3. Juncus Mexicanus	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

NONE

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

NONE

Remarks: Well Drained sand with no saturation in upper 12" ≈ 10 days after 3" rainfall that Ponded Vernal Pools and other Seasonal Ponds Throughout So. California.

146

SOILS

Map Unit Name (Series and Phase): N/A

Drainage Class: well drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2	Clay	10YR 3/3	NONE		
2-4	clayey sand	10YR 3/3	7.5YR 4/6	some/distinct	
4-12	Sand	10YR 3/3	NONE		

Hydric Soil Indicators:

NONE
- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors

NONE
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: weak redox in clayey sand beneath upper 2" clay layer; however, soil has high chroma matrix + is not Hydric

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No (Circle)	(Circle)
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)

Remarks: This is artificial Basin that is not connected hydrologically to nearby Drainage ≈ 4'-5' higher in elevation w/ additional 4-5' berm

NO OHWM - No wetlands + Isolated

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Gobernadora	Date: 3-8-03
Applicant/Owner: RMV	County: SB
Investigator: TBonkamp	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: TB 3 B-34
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Scirpus americanus	H	OBL	9.		
2. Rorippa nasturtium-aquaticum	H	OBL	10.		
3. Juncus Mexicanus	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)
Depth to Free Water in Pit: 1"-2" (in.)
Depth to Saturated Soil: Surface (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
X Water Marks
X Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

146

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		Sand - no colors Taken			
2-12"		Gleyed	Sand		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- [X] Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

		(Circle)
Hydrophytic Vegetation Present?	(Yes)	No
Wetland Hydrology Present?	(Yes)	No
Hydric Soils Present?	(Yes)	No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by: HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Gobernador	Date: 3-8-03
Applicant/Owner: RMV	County: SR
Investigator: TBonkamp	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID: Sulfur Canyon
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: TB4 S-35
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Eleocharis Acicularis	H	OBL
2. Salix lasiolepis	S	FACW
3. Mimulus guttatus	H	OBL
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)

Depth to Free Water in Pit: Surface (in.)

Depth to Saturated Soil: Surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

146

SOILS

Map Unit Name (Series and Phase): Corralitos Loamy Sand — Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Typic Xeropsamments — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		10yr 3/1			
2-12		10yr 3/1	7.5y 4/6		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TRAMPAS
Applicant/Owner: RMV
Investigator: I. Chlup - S. Asgari

Date: June 13/02
County: OR
State: CA

Do Normal Circumstances exist on the site? Yes / No
Is the site significantly disturbed (Atypical Situation)? Yes / No
Is the area a potential Problem Area? Yes / No
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: S-12

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Xanthium strumarium	H	FAC
2. ~~Ha~~ Cynadon dactylon	H	FAC
3. Hirschfeldia incana	H	UPL
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

margin of depression

Secondary Indicators (2 or more required):
- √ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets

133

SOILS

Map Unit Name (Series and Phase): Batella clay loam 9-15% slope Drainage Class: Well drained

Taxonomy (Subgroup): Pachic Argixerolls Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10yr 2/2	10 yr 5/8	many	Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Trampas
Applicant/Owner: RNV
Investigator: ICFSA

Date: 6/13/03
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: S-13

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Lolium multiflorum		NI
2. Medicago		UPL
3. Erodium ~~sp~~ sp.		UPL
4. Ambrosia psylostachya		Fac
5. Hirshfeldia incana		UPL
6. Cynodon dactylon		Fac
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50% ab most

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)
Depth to Free Water in Pit: — (in.)
Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
✓ Oxidized Root Channels in Upper 12 Inches — greater than 6" depth
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test — does not pass
___ Other (Explain in Remarks)

slightly higher elevation than pit (12)

Remarks: does not meet

SOILS

137

Map Unit Name (Series and Phase): Botella clay loam 9-15% slopes Drainage Class: well drained

Taxonomy (Subgroup): Pachic Argixerolls Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		10yr 3/2	—	no mottles	Sandy loam
6+		10yr 3/2	10yr 5/8	many	Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Trampas Applicant/Owner: RMU Investigator: IC/SA	Date: 6/13/03 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 5-14

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. lotus purshianus		UPL	9.		
2. lolium multiflorum		NI	10.		
3. cat sear hypochoris glabra		UPL	11.		
4. Scarlet pimpernel		UPL	12.		
5. spike rush		OBL	13.		
6. bermuda grass		FAC	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: up slope from wetland even if lolium gave fac status

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test — does not
- ___ Other (Explain in Remarks)

Remarks:

133

SOILS

Map Unit Name (Series and Phase): Botella day loam 9-15% Slopes Drainage Class: well drained

Taxonomy (Subgroup): Pachic Argixerolls Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR2/1	w/mottle		loamy

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Mesic

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Trampas	Date: 6/13/03
Applicant/Owner: RNV	County: OR
Investigator: JC/SA	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: S-16
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Xanthium strumarium		FAC
2. Polypogon monspliensis		FACW
3. ? ~~Sparganium~~ Mudhorna		FACW
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- √ Drainage Patterns in Wetlands depression

Secondary Indicators (2 or more required):
- faint √ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meet

SOILS

131

Map Unit Name (Series and Phase): Botella loam 2 to 9 % slopes
Drainage Class: Well drained
Taxonomy (Subgroup): Pachic Argixeroll
Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		2.5Y 4/1		few / faint	clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: hydr

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: trampas Applicant/Owner: RMV Investigator: TC/TB	Date: 7/14/03 County: SR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 5-17

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Jumex iconus		FACW	9.		
2. Inf emulefab		FACW	10.		
3. Baccharis pilularis		UPL	11.		
4. Gramineae		FACW	12.		
5. br rubens		UPL	13.		
6. br diandris		UPL	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

None

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: does not meet — soil too porous to maintain saturation near surface

142

SOILS

Map Unit Name (Series and Phase): Cieneba Sandy loam 30-75% Slopes eroded Somewhat excessively drained

Drainage Class:

Taxonomy (Subgroup): Typic Xerorthents

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-18		hyphchroma	no mottle		Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not breed

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	(Circle)
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: [illegible] meadows	Date: 8/28/01
Applicant/Owner: KMV	County: [illegible]
Investigator: IC	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Plot ID: 6-1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. baccharis salicifolia	shrub	FACW	9.		
2. [illegible] psilostachy	herb	fac	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: very little vegetated cover <30%

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Windrange

175

SOILS

Map Unit Name (Series and Phase): Myford sandy loam, 9-15% slopes

Drainage Class: moderately well drained

Taxonomy (Subgroup): thermic typic Palexeralfs

Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		high chroma			sandy

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: clean sand deposit/no mottle/no layering/roadcut

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Crystal Springs Meadows
Applicant/Owner: RMV
Investigator: JC

Date: 8/30/01
County: DA
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: 6-2

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Apium graveolens	H	FacW
2. Juncus mexicanus	H	FacW
3. Salix lasiolepis	T	FacW
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: weeds

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: 7 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Windrow

175

SOILS

Map Unit Name (Series and Phase): Myford sandy loam, 9-15% slopes

Drainage Class: moderately well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Thermic typic Palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		10YR5/2	w mottle		Sand
2-12		N4	none		Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- X Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No

Hydric Soils Present? Yes No

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Crossing Impressions	Date: 8/30/01
Applicant/Owner: RR	County: QR
Investigator: J-C	State: CT
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: 6-2
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Typha latifolia	H	FACW	9.		
2. Juncus Rugulosis	H	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: continued to drum

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Saturated in damp ~9"

175

SOILS

Map Unit Name (Series and Phase): myford sandy loam, 9-18% slopes

Drainage Class: moderately well drain

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): thermic typic Palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
					sand clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Soil is sand w/ diffuse mottles
clear
clamp at 9" - gleyed colors obscured dry [illegible] 7/16/01

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos meadows	Date: 8/15/01
Applicant/Owner: RMV	County: OR
Investigator: JC/PC	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes **No**	Plot ID: 6-4
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. paspalum distichum		OBL	9.		
2. eleocharis acicularis		OBL	10.		
3. scirpus californicus		OBL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
melt

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: 10 (in.)

Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

179

SOILS

Map Unit Name (Series and Phase): myford sandy loam, thick surface, 2 to 9%

Drainage Class: moderately well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5		2.5 [illegible]	w/ mottle		Sandy loam
5-16		4/5 GY Gly pg.	no mottle		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: met

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes No	(Circle)
Wetland Hydrology Present?	Yes No	
Hydric Soils Present?	Yes No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristiantos Meadow	Date: 8/30/01
Applicant/Owner: RMV	County: CR
Investigator: TCHuy	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: 6-5
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. cynodon dactylon	H	FAC	9.		
2. polypogon monspeliensis	H	FACW	10.		
3. hordeum hardeaceus	H	FACU-	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: depression in landscape + signs of ponding observed to pond 2-13-01 + 2-21-01

177

SOILS

Map Unit Name (Series and Phase): Myford sandy loam, 9-30% slopes

Drainage Class: moderately well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): thermic Typic Palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		2.5YR 5/3	w/mottle		Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: pondel 2-13-01 - 2-21-01 → 4" water pondel 7 2 weeks

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos Meadow Applicant/Owner: RMV Investigator: PS/SY/TL	Date: 7/10/01 County: Or State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: 6-6

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. baccharis salicifolia	S	FacW	9.		
2. ambrosia psilostachya	H	FAC	10.		
3. polypogon interruptus	H	FacW	11.		
4. juncus mexicanus	H	FacW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100 %

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
X FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: meets/very exposed

177

SOILS

Map Unit Name (Series and Phase): myford sandy loam 9-30%

Drainage Class: moderately well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		2.5Y 5/4	w/mottle		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: hydrophytic / does not meet
Reexamination in field during site visit identified low chroma 10YR 3/2 w/ mottles

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks: Revised to yes after site visit by agencies
soils contained mottle which were not identified
in previous pit.

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Crosthwaite Meadows	Date: 7/10/01
Applicant/Owner: RMV	County: OR
Investigator: DSH-C/SY	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: 1-7
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. black willow	T	OBL	9.		
2. mulefat	S	FacW	10.		
3. Rabbitsfoot grass	H	FacW	11.		
4. Saltgrass	H	FacW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: mud

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: within drainage bottom

177

SOILS

Map Unit Name (Series and Phase): myford sandy loam 9-30% Drainage Class: moderately well drained

Taxonomy (Subgroup): typic palexeralfs Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		2.5Y 5/3	with mottles		loam
4-6		2.5Y 5/3	4		
6-9		2.5Y 5/1	11		
9-16		2.5Y 5/3	11		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: mtls

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristiandos Meadow	Date: 8/28/91
Applicant/Owner: RMV	County: OR
Investigator: IG	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: 6-1
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Juncus mexicanus	H	FacW	9.		
2. Pospalum distichum	H	OBL	10.		
3. typha sp	H	OBL	11.		
4. distichlis spicata	H	FacW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: wet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	at surface (in.)
Depth to Free Water in Pit:	at surface (in.)
Depth to Saturated Soil:	at surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: throughout channel surface water is visible periodically

177

SOILS

Map Unit Name (Series and Phase): Myford sandy loam 9-30% slopes

Drainage Class: moderately well drained

Taxonomy (Subgroup): thermic Typic Haploxeralfs

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR4/2	4/mottles		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: pit at margins in salt grass
channel gleyed 10YR4/1

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos Meadow	Date: 3/24/03
Applicant/Owner: RMV	County: OR
Investigator: JC/AM	State: CA
Do Normal Circumstances exist on the site? ~~Yes~~ No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes ~~No~~	Plot ID: 6-11
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. distichlis spicata		FacW
2. Juncus mexicanus		FacW
3.		
4. Just upslope		
5. recharges to		
6. upbranch		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

177

SOILS

Map Unit Name (Series and Phase): myford sandy loam 9/30%

Drainage Class: moderately well drained

Taxonomy (Subgroup): typic Palexeralfs

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7		10YR3/2	w/ motts		clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos Meadow Applicant/Owner: RMV Investigator: [illegible]	Date: 3/24/03 County: State:
Do Normal Circumstances exist on the site? **Yes** No Is the site significantly disturbed (Atypical Situation)? Yes **No** Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 612

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salt grass	herb	FACW	9.		
2. medicago	herb	upl	10.		
3. Rabbit weed	herb	FAC	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: habitat heterogeneous mix of 3 patch types w/ the above dominant (other patches include distichlis + bromus hordeaceus + medicago polymorpha & distichlis)

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

none

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: terrace adjt to stream

SOILS

177

Map Unit Name (Series and Phase): Myford Sandy loam 9-30% Drainage Class: moderately well drained

Taxonomy (Subgroup): Typic palexeralfs Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 3/2	unmottled		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristaintos Meadow	Date: 3/24/03
Applicant/Owner: RMV	County:
Investigator: IC/AM	State:
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: 6-13
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible]	H	OBL	9.		
2. distichlis spicata	H	FACW	10.		
3. bo hordaceus	H	upl	11.		
4. [illegible]	S	FACW	12.		
5. [illegible]	H	upl	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: tosurface (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Saturated in channel

177

SOILS

Map Unit Name (Series and Phase): Myford sandy loam 9-30%

Drainage Class: moderately well drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): typic Palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		10YR 3/2	few pale mottles		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: meets

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristiantos meadows	Date: 3/29/00
Applicant/Owner: RMV	County: CA
Investigator: JC/AM	State: OR
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 6-16

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. mulefat		FacW	9.		
2. medicago		upl	10.		
3. [illegible]		upl	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: w/ drainage

SOILS

177

Map Unit Name (Series and Phase): myford sandy loam, 9-30% Drainage Class: moderately well drained

Taxonomy (Subgroup): Typic Palexeralfs Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		2.5Y 5/2	w/ mottles		Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: see note on sheet 15

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos meadows	Date: 3/24/03
Applicant/Owner: RMV	County: 01
Investigator: IC/AM	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Plot ID: 6-14

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. eleocharis	H	OBL	9.		
2. medicago	H	upl	10.		
3. cotscar	H	upl	11.		
4. bromus hordeaceus	H	upl	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 25%

Remarks: No persistent veg
hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: [illegible] (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

142

SOILS

Map Unit Name (Series and Phase): Cieneba sandy loam 30-75% slope eroded

Drainage Class: somewhat excessively drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic Xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		10Y 6/N			Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No

Hydric Soils Present? Yes No

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks: Visit later is seas confirmed, veg remained upland

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos Meadows	Date: 3/24/03
Applicant/Owner:	County: CA
Investigator:	State: OR
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 6-17

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible] mexicanus	H	FacW	9.		
2. Toleodon's macrostachyus	H	OBL	10.		
3. Catsear (Hypochaeris glabra)	H	UPL	11.		
4. Filaree (erodium sp)	H	UPL	12.		
5. [illegible]	H	UPL	13.		
6. Medicago	H	UPL	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 40%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

175

SOILS

Map Unit Name (Series and Phase): myford sandy loam, 9-15% slopes

Drainage Class: moderately well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): thermic Typic Palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		[illegible]	[illegible]		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No

Hydric Soils Present? Yes No

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks: visit late in season confirms that veg remained dominated by upl species

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos meadows Applicant/Owner: RMV Investigator: IS/AM	Date: 3/21/03 County: State:
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: 6-18

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. medicago		UPL	9.		
2. bromus hordeaceus		UPL	10.		
3. mulefat		FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: veg on banks only

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other X No Recorded Data Available Field Observations: Depth of Surface Water: — (in.) Depth to Free Water in Pit: — (in.) Depth to Saturated Soil: — (in.)	Wetland Hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines X Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): X Oxidized Root Channels in Upper 12 Inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)

Remarks: unvegetated channel - not saturated

175

SOILS

Map Unit Name (Series and Phase): Nutford sandy loam 9-15% slops

Drainage Class: moderately well drained

Taxonomy (Subgroup): thermic typic Palexeralfs

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 3/2	unmottled		c sy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: soil not saturated even though recent storm event has saturated surface portion

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos canyon Applicant/Owner: RMV Investigator: T/AM	Date: 4/3/03 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: F-4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. mulefat	S	facw	9.		
2. bromus rubens	H	upl	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ~~_____~~ (in.)

Depth to Free Water in Pit: ~~_____~~ (in.)

Depth to Saturated Soil: ~~_____~~ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: vegetated margin of pond w/ standing water, depression creek, berms

142

SOILS

Map Unit Name (Series and Phase): Cineba sandy loam 30-75% slope eroded
Drainage Class: somewhat excessively drained
Taxonomy (Subgroup): Typic Xerorthents
Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		5YR 5/3	w/few mottles		clay
2-16		7.5YR 6/3	w/mottles		sand

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: does not meet, significantly disturbed by mining

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: does not meet.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos Canyon	Date: 2/19/03
Applicant/Owner: RMV	County: OR
Investigator: ICATM	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: FFT
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. mulefat	S	FACW	9.		
2. medicago polymorpha	H	UPL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: although w/ indirange, no saturat in upper 18" even though recent storm event

SOILS

134

Map Unit Name (Series and Phase): Calleguas clay loam 50-75% Drainage Class: well drained

Taxonomy (Subgroup): typic xerorthents Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		2.5YR5/2	mottle		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: lots of fresh sediment

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: does not meet

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos Canyon Applic t/Owner: RMV Investigator: TC, TM	Date: 2/19/03 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: F12

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Baccharis pilularis	S	upl	9.		
2. Juncus mexicanus	H	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

None

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: on slump of bank / does not meet

102

SOILS

Map Unit Name (Series and Phase): Alo clay 30-50% slopes Drainage Class: well drained

Taxonomy (Subgroup): Typic Chromoderts Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		10YR 2/1	w/ mottles		clayey

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes ~~No~~
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: does not meet

Approved for HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project: Cristianitos Canyon
Applicant/Owner: RMV
Investigator: JC/JM

Date: 2/19/03
County: OR
State: CA

Do Normal Circumstances exist on the site? Yes No
Is the site significantly disturbed? (Atypical situation)? Yes No
Is the area a potential Problem Area? Yes No
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: E3

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Juncus mexicanus	H	FACW
2. Nassella pulchra	H	UPL
3. Scarlet pimpernel	H	UPL
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 30%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

none

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: on stream bank

102

SOILS

Map Unit Name (Series and Phase): Aloclay 30-50% Slope

Class: wetland

Taxonomy (Subgroup): Typic Chromoxerents

...ervations ... Mapped Type? Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretion, Structure, etc.
0-12		10YR 2/1	unmottled		clayish

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- X Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes No (Circle)	(Circle)
Wetland Hydrology Present?	Yes No	
Hydric Soils Present?	Yes No	Is this Sampling Point Within a Wetland? Yes No

Remarks: does not meet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Cristianitos Canyon Applicant/Owner: RMD Investigator: JC	Date: 8/28/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: ____ Transect ID: ____ Plot ID: 7-14

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. pyrrhocoma nanopeliensis	H	facW	9.		
2. [illegible] spicata	H	facW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: ____ (in.)

Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology some ponding

SOILS

Map Unit Name (Series and Phase): Mylord sandy loam 9-30% Slope Drainage Class: moderately well drained

Taxonomy (Subgroup): Typic Paleraults Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 4/3	w/ mottle		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: met

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Road gap Applicant/Owner: RMV Investigator: IC/SY	Date: 11/9/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: R~~10~~-1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. mulefat	S	FacW	9.		
2. blackwillow	T	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: 13 (in.)

Depth to Saturated Soil: 10 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: depressional area adj to creek

SOILS

Map Unit Name (Series and Phase): Chinosilty clay loam, drained
Drainage Class: somewhat poorly drained
Taxonomy (Subgroup): aquic Haplaxerolls
Field Observations: Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-0	O	litter layer			
0-9				many distinct	Mod. Sand
9+6					grey Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Bradgap Applicant/Owner: RMW Investigator: IC/SY	Date: 11/9/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: P-10-2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Bromus diandrus	H	upl	9.		
2. ambrosia psilostachya	H	fac	10.		
3. picris echoides	H	fac	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: adj to creek

SOILS

Map Unit Name (Series and Phase): Chino silty clay loam drained — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): aquic Haploxerolls — Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: compact fill - nonhydric

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Roadgap	Date: 11/9/01
Applicant/Owner: RMW	County: GR
Investigator: TC/SF	State: CO
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Plot ID: RW-3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cattail (Typha angustifolia)	H	OBL	9.		
2. Salix lasiolepis	S	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: ____ (in.)

Depth to Saturated Soil: ____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adj to creek

SOILS

Map Unit Name (Series and Phase): Chino Silty clay loam drained — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): aquic Haploxerolls — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		2.5Y4/2	10YR5/8	common prominent	fine sandy loam
					medium sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- X Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Roadgaps	Date: 11/9/01
Applicant/Owner: RMP	County: OR
Investigator: TCSX	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: ~~R-10-11~~
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Lolium multiflorum	H	fac	9.		
2. Bromus hordeaceus	H	fac	10.		
3. Cynodon dactylon	H	fac	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: met

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adj to creek

SOILS

Map Unit Name (Series and Phase): Chino silty clay loam drained — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): aquic Haploxerolls — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		2.5Y4/2	none		
6-12	compact				

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Rood gaps	Date: 11/9/01
Applicant/Owner: RMV	County: SR
Investigator: TC/SF	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No	Plot ID: RJD-5
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. baccharis salicifolia	S	FACW	9.		
2. salix lasiolepis	T	FACW	10.		
3. typha dominguensis	H	OBL	11.		
4. ambrosia psilostachya	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adj to creek

SOILS

Map Unit Name (Series and Phase): Chinosilty clay loam, drained — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): aquic Haplaquolls — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3		2.5Y 5/3			SiH loam
3-12				common faint	med Sorl
12-16		5Y 4/1		few prominent	silt loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or ~~Low-Chroma~~ Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Roadgap	Date: 11/9/01
Applicant/Owner: RMY	County: OR
Investigator: TC/ST	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: RM-6
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Carex praegracilis	H	facw	9.		
2. Juncus xiphioides	H	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adj/within creek

SOILS

Map Unit Name (Series and Phase): Chino silty clay loam, drained
Drainage Class: somewhat poorly drained
Taxonomy (Subgroup): Aquic Haploxerolls
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-11		2.5Y 3/1		Common faint	sandy loam
11-16		2.5Y 5/1		common distinct	sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Road gaps Applicant/Owner: RMV Investigator: IC/SF	Date: 11/9/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: RK-7

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. ambrosia psilostachya	H	fac	9.		
2. Carex praecracilis	H	facW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adj to creek

SOILS

Map Unit Name (Series and Phase): Chino Silty clay loam, drained — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): Aquic Haploxerolls — Field Observations: Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		2.5Y3/1		Cmmnfaint	Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Roadgaps
Applicant/Owner: RMV
Investigator: JC/SY

Date: 11/9/01
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: R10-8

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. bromus diandrus	H	upl
2. Ambrosia psilostachya	H	fac
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: adj to creek

SOILS

Map Unit Name (Series and Phase): Chino silty clay loam, drained
Drainage Class: Somewhat poorly drained
Taxonomy (Subgroup): Aquic Haploxerolls
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	-	2.5 Y 4/2	none		
6-12		Compact			

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Roadgaps RMV	Date: 11/9/01
Applicant/Owner:	County: OR
Investigator: TC/SY	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: RD-9
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Cynodondactylon	H	fac
2. Juncus xiphioides	↑	ORL
3. Eleocharis macrostachya		OBL
4. Juncus mexicanus	↓	facW
5. Agrostis echoides	H	fac
6. Baccharis salicifolia	S	facW
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1/2 (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: 6 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Chino Silty clay loam, drained — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): aquic Haploxerolls — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- X Histic Epipedon
- ___ Sulfidic Oder
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ (Gleyed or) Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: gley sandy soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Road gaps Applicant/Owner: RMV Investigator: LC/SY	Date: 11/9/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: Transect ID: Plot ID: R10-10

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. baccharis salicifolia	S	FACW	9.		
2. eleocharis macrostachya		OBL	10.		
3. Salix lasiolepis		FACW	11.		
4. carex praegracilis		FACW	12.		
5. ambrosia psilostachya		FAC	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: w/in drainge floodplain

SOILS

Map Unit Name (Series and Phase): Chino Silty clay loam, drained — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): Aquic Haploxerolls — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-9		2.5Y 5/2		faint	fine sandy loam
9-16		2.5Y 3/1			loamy sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: met

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Road Gap Applicant/Owner: BMV Investigator: TC/ST	Date: 11/9/01 County: Ord State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: R10-11

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Polygonum sphaerostachyum	H	FACW	9.		
2. Baccharis salicifolia	S	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100 %

Remarks: wet

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adj to creek

SOILS

Map Unit Name (Series and Phase): Chino silty clay loam, drained — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): aquic haploxerals — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		2.5Y4/2	None		
4-16					med sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet

WETLAND DETERMINATION

		(Circle)
Hydrophytic Vegetation Present?	(Yes) No	
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	Yes (No)	
Is this Sampling Point Within a Wetland?	Yes (No)	

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: RMV/ GOBernadora
Applicant/Owner: RMV
Investigator: TTS OmKamp

Date: 3-8-03
County:
State:

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: TB6

8=12

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	T	FACW
2. Pteris echioides	H	FAC*
3. Eleocharis Macro.	H	OBL
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1/ (in.)
Depth to Free Water in Pit: 8" (in.)
Depth to Saturated Soil: 7" (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
X Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

1 of 6

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam, 9 to 15 % slopes — Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerolls — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		Sandy			
2-10		10YR 3/1	7.5YR 4/6		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets

WETLAND DETERMINATION

		(Circle)
Hydrophytic Vegetation Present?	(Yes)	No
Wetland Hydrology Present?	(Yes)	No
Hydric Soils Present?	(Yes)	No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

outside Study area

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: RMV Cabin Madera
Applicant/Owner: RMV
Investigator: TBomkamp

Date: 3-8-03
County: SR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: Seep wetland
Transect ID:
Plot ID: TB-5 PC-17

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Betula erecta	H	OBL
2. Rorippa nasturtium-aquaticum	H	OBL
3. Scirpus americanus	H	
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: at surface (in.)
Depth to Free Water in Pit: 1" (in.)
Depth to Saturated Soil: 1" (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

146

SOILS

Map Unit Name (Series and Phase): Corralitos loamy sand — Drainage Class: somewhat poorly drained

Taxonomy (Subgroup): Typic Xeropsamments — Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		Strong Sulfidic odor			
		no	Pit		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Rodgaps
Applicant/Owner: RMV
Investigator: PS/Tc

Date: 8/15/01
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: P2-18

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Typha domingensis	H	OBL
2. Distichlis distichum	H	OBL
3. Ludwigia peploides	H	OBL
4. Veronica arvensis	H	OBL
5. Salix lasiolepis	S	FACW
6. Rorippa nasturtium-aquaticum	H	OBL
7. Bidens laevis	H	OBL
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: melts

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 3 (in.)
Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: melt

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: Well

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		Gley 1 pg	3/N		Coarse Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

meets

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)

Wetland Hydrology Present? (Yes) No

Hydric Soils Present? (Yes) No

(Circle)

Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Road Gap	Date: 5/30/03
Applicant/Owner: BMV	County: OR
Investigator: LYDM	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID:
(If needed, explain on reverse.)	

10-26

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. arroyowillow	S	FacW	9.		
2. mulefat	S	FacW	10.		
3. cattails	H	OBL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Rootlin inundated channel

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	1" (in.)
Depth to Free Water in Pit:	___ (in.)
Depth to Saturated Soil:	4" (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Restricted to immediate banks + channel - well incised +2

207

SOILS

Map Unit Name (Series and Phase): Sorrento Loam 2 to 9% Slopes Drainage Class: well drained

Taxonomy (Subgroup): Calcic Haploxeralfs Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: observed to be ponded 72 weeks

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Road Gaps RMV	Date: May 30, 2003
Applicant/Owner:	County: OR
Investigator: IC/DM	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: ~~PR27~~
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. picris echoides	H	Fac	9.		
2. baccharis pilularis	S	UPL	10.		
3. baccharis Saucifolia	S	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- X Drift Lines
- X Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: signs of surface flow, however soil in pit was not damp and was very loamy—seems well drained—terrace adj to incised low flow channel w/ flowing water only margins are saturated in upper 12"

SOILS

Map Unit Name (Series and Phase): Calleguas Clay loam 50-75% slope eroded — Drainage Class: Well drained

Taxonomy (Subgroup): Typic Xerorthents — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		10YR6/3	none		loamy
16+		2.5YR 3/2	none		loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Road gaps Applicant/Owner: RMV Investigator: IC/CS	Date: 7/9/03 County: State:
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: 28 Transect ID: 15 Plot ID:

10-28

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. arrowwillow	T	facw	9.		
2. Red willow	T	facw	10.		
3. mugwort	H	facw	11.		
4. cattail	H	obl	12.		
5. epilobium ciliatum	H	facw	13.		
6. eleocharis macrostachy	H	OBL	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1" (in.)

Depth to Free Water in Pit: to surface (in.)

Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meet

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: WU

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Inundated > 7 days

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Roadgaps Applicant/Owner: RMV Investigator: JC/CS	Date: 7/9/03 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: 29 Transect ID: 10-F Plot ID:

10-29

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. arroyo willow	T	facw	9.		
2. red willow	T	facw	10.		
3. toxicodendron diversilobum	H	upl	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches none
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: none

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SOILS

Map Unit Name (Series and Phase): Corralitos Loamy Sand, moderately fine substratum somewhat excessively drained

Drainage Class:

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Xeropsamments

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-18	hyl	chroma sand			

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Sandy soils, with enough silt to color but no mottle/high chroma

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes No	(Circle)
Wetland Hydrology Present?	Yes No	
Hydric Soils Present?	Yes No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC South tributary to drainage [illegible]	Date: 7/9/01
Applicant/Owner: TCA	County: Orange
Investigator: T Bimkamp [illegible]	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID: 7-Sem 1
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 7001

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Distichlis spicata	h	FacW	9.		
2. ambrosia psilostachya	h	Fac	10.		
3. lolium multiflorum	h	Upl	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Calleguas clay loam

Drainage Class: well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Entic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		10YR 3/2	10YR 4/6	Many	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors w/Redox features
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) N

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Foothill Corridor FTC South – Drainage plant
Applicant/Owner: TCA
Investigator: T Bomkamp / T. Chiu

Date: 7/9/01
County: Orange
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: [redacted] 7-1
Transect ID:
Plot ID: 7082

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	tree	FACW
2. bromus diandrus	herb	UPL
3. Cardiuus glaucephalus	herb	UPL
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks:
does not meet for vegetati

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Botella loam 2-9% slopes

Drainage Class: well drained

Taxonomy (Subgroup): Pachic Argixerolls

Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 2/1	10YR 5/6	many/distinct	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors w/redox features
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: predominant of matrix in sandy pores

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: San Juan Creek (Map 2)	Date: 8/15/01
Applicant/Owner:	County:
Investigator: PSAC	State:

Do Normal Circumstances exist on the site?	Yes	No	Community ID: San Juan creek
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:
Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes	No	Plot ID: TOP 3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Typha domingensis	H	OBL	9.		
2. paspalum distichum	H	OBL	10.		
3. ludwigia peploides	H	OBL	11.		
4. veronica anagallis-aquatica	H	OBL	12.		
5. Salix lasiolepis	S	FACW	13.		
6. Rorippa nasturtium-aquaticum	H	OBL	14.		
7. Bidens laevis	H	OBL	15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for hydrophytic vegetation

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other.

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 2 (in.)

Depth to Free Water in Pit: 2 (in.)

Depth to Saturated Soil: [illegible] (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name (Series and Phase): Ruerwash

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes / No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10YR 3/1	none	none	sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- X Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:
mut
fr soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC-S 7(4)6 Date: 7/26/01
Applicant/Owner: ICA County: Orange
Investigator: IC, JC, SFA State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: 7-Sep 3
Transect ID:
Plot ID: 7OPS

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Polypogon monspeliensis	H	FACW+
2. Picris echioides	H	FAC
3. Juncus mexicanus	H	FACW
4. ~~Isocoma menziesii~~	~~S~~	
5. Cynodon dactylon	H	FAC
6. Baccharis salicifolia	S	FACW-
7. ~~[illegible]~~		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Isocoma occurs right on edge of bank, so questionable if w/in wetlands.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: none (in.)
Depth to Saturated Soil: none (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits ← possibly (in drainage)
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: occurs w/in a drainage

SOILS

Map Unit Name (Series and Phase): A10 clay 30 to 50% slopes
Drainage Class: well drained
Taxonomy (Subgroup): typic Chromoxererts
Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12"	A	5Y 2.5/1 (wet)	2.5YR 4/6 (wet)	5% mottles	silty clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- [X] Gleyed or Low-Chroma Colors w/Redox features
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: No discernible O horizon

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: ~~FTC~~ FTC-S
Applicant/Owner: TCA 7(4)7
Investigator: JC, JC, SFA

Date: 7/26/01
County: Orange
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: 7-11
Transect ID:
Plot ID: 7OP6

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Polypogon monspeliensis	H	FACW+
2. Baccharis salicifolia (1 plant only)	S	FACW-
3. Paspalum distichum	H	OBL
4. Veronica sp. (<20% cover)	H	OBL
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)
Depth to Free Water in Pit: ___ (in.)
Depth to Saturated Soil: Ø (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Alo clay 30 to 50% slopes Drainage Class: well drained

Taxonomy (Subgroup): typic Chromoterts Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10"	A	5Y 4/1 (wet)	5YR 4/6 (wet)	15%	silty clay gleying
10-12"	B?				silty clay gleying, oxidized root channels
	C	looks sandier, but may be same layer;			

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	(Yes)	No	
Hydric Soils Present?	(Yes)	No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC South	Date: 7-24-01
Applicant/Owner: [illegible]	County:
Investigator: [illegible]	State:
Do Normal Circumstances exist on the site? **Yes** No	Community ID: 7(4)3 (after [illegible] W3a) 7-13
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 7CP7

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2. Lolium multiflorum	Fac		10.		
3. [illegible] xanthium strumarium	fac		11.		
4. [illegible] tristicks spicata	FacW		12.		
5. [illegible] ambrosia psilostachya	fac		13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

None

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name
(Series and Phase): _____ Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
~~1-12"~~	~~A~~	~~5Y 2.5/1~~ (wet)	~~2.5Y 4/6~~	~~5% mottles~~	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: ~~No discernible O horizon~~ high chroma no mottles

non hydric soils high chroma

map unit name Soper Rock outcrop complex, 30-75% sl field observation does not confirm map type

taxonomy Typic Argiaquolls

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes No (Circle)	(Circle)
Wetland Hydrology Present?	Yes No	
Hydric Soils Present?	Yes No	Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: Chlup, [illegible]	Date: 7/31 County: OR State: CA
Do Normal Circumstances exist on the site? **Yes** No Is the site significantly disturbed (Atypical Situation)? Yes **No** Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Community ID: 7(6)1 [7-14] Transect ID: Plot ID: 70P 8

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible]	FACW		9.		
2. [illegible]	FAC		10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: w/in a drainage

SOILS

Map Unit Name (Series and Phase): Soper Rock outcrop complex 30-75% slope
Drainage Class: _____
Taxonomy (Subgroup): Typic Argiaquolls
Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
12"		2.5Y 3/1	none		silty clay

Hydric Soil Indicators:

borderline

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: some oxidized rhizospheres in upper layer, possible gleying – 5Y 2.5/1

WETLAND DETERMINATION

		(Circle)
Hydrophytic Vegetation Present?	(Yes)	No
Wetland Hydrology Present?	(Yes)	No
Hydric Soils Present?	(Yes)	No
Is this Sampling Point Within a Wetland?	(Yes)	No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: 7(6)-4 FTC
Applicant/Owner: TCA
Investigator: JCH

Date: 8/6/01
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: 7(6)4 7-17
Transect ID: 1006
Plot ID: 7-OP-12

wetlands area south of

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	Shrub	FACW
2. Baccharis salicifolia	Shrub	FACW
3. Artemisia californica	Shrub	Upland
4. Avena sp.	Herb	Upland
5. Bromus hordeaceus	Herb	Upland
6. Salix seedlings	Tree	OBL
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet for hydrophytic plants

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
✓ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Soper-Rock outcrop complex 30 to 35 % slopes
Drainage Class: _____
Taxonomy (Subgroup): Typic Argixerolls
Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10R 3/2	10R 4/4	30%	Clay loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: PS, IC	Date: 8/3/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: alkali sie Transect ID: [illegible] Plot ID: FEP-1

FE-Seep 1 / FE17

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. ambrosia psilostachya	herb	Fac	9.		
2. distichalis	herb	FacW	10.		
3. mustard brassica nigra	herb	upl	11.		
4. prickly pear opuntia	herb	upl	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet for hydrophytes

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam 2-9% slope

Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploterols

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-9	A	10YR 3/2	none		sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

does not meet for hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	(Circle)
Wetland Hydrology Present?	(Yes) No	Is this Sampling Point Within a Wetland? Yes (No)
Hydric Soils Present?	Yes (No)	

Remarks:

Approved by HQUS ACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: IC, PS	Date: 8/3/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: 2 FeSeep1 FE/7-2 Transect ID: map 1 alkali seep 7b Plot ID: 7/FEOP2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. mulefat	Shrub	FacW	9.		
2. lemonade berry	shrub	UPL	10.		
3. scirpus americanus	herb	OBL	11.		
4. juncus mexicanus	herb	FacW	12.		
5. yerba mansa / anemopsis calyfornicus	herb	OBL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 60%

Remarks: hydrophytic veg present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: at surface (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 12 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: hydrology present

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam 2-9% slope
Drainage Class: well drained
Taxonomy (Subgroup): Entic Haploxeralls
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	2.5Y 2.5/1	none	none	Sandy Loam
4-12	B	5Y 4/2	none	none	Sandy Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors in upper horizon
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC South tributary to drainage [illegible]	Date: 7/9/01
Applicant/Owner: TCA	County: Orange
Investigator: T Bimkamp [illegible]	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID: 7-Seep 1
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 7001

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Distichlis spicata	h	FacW	9.		
2. ambrosia psilostachya	h	Fac	10.		
3. lolium multiflorum	h	Upl	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 61%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Calleguas clay loam

Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerolls

Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		10YR 3/2	10YR 4/6	Many	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors w/Redox features
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) I

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Foothill Corridor FTC South – Drainage ditch plant
Applicant/Owner: TCA
Investigator: T Bomkamp / T. Chino

Date: 7/9/01
County: Orange
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: [redacted] 7-1
Transect ID:
Plot ID: 7DP2

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	tree	FACW
2. Bromus diandrus	herb	UPL
3. Cardiuus pycnocephalus	herb	UPL
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks:
does not meet for vegetati

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Botella loam 2-9% slopes

Taxonomy (Subgroup): Pachic Argixerolls

Drainage Class: Well drained

Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 2/1	10YR 5/6	many/distinct	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors w/redox features
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: predominantly matrix in sandy layers

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)

Wetland Hydrology Present? (Yes) No

Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: San Juan Creek (Map 2)	Date: 8/15/01
Applicant/Owner:	County:
Investigator: PSAC	State:
Do Normal Circumstances exist on the site? Yes No	Community ID: San Juan creek
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 7OP3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. typha domingensis	H	OBL	9.		
2. paspalum distichum	H	OBL	10.		
3. ludwigia peploides	H	OBL	11.		
4. veronica anagallis-aquatica		OBL	12.		
5. Salix lasiolepis	S	FACW	13.		
6. Rorippa nasturtium-aquatica	H	OBL	14.		
7. Bidens laevis	H	OBL	15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for hydrophytic vegetation

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other.

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 3 (in.)

Depth to Saturated Soil: [illegible] (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes / No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	3/N			

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:
muck
fr soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC-S 7(4)6 | Date: 7/26/01
Applicant/Owner: ICA | County: Orange
Investigator: JC, JC, SFA | State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: 7-Sep 3
Transect ID: 1
Plot ID: 7OP5

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Polypogon monspeliensis	H	FACW+
2. Picris echioides	H	FAC
3. Juncus mexicanus	H	FACW
4. ~~Isocoma menziesii~~	~~S~~	
5. Cynodon dactylon	H	FAC
6. Baccharis salicifolia	S	FacW-
7. [redacted]		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Isocoma occurs right on edge of bank, so questionable if w/in wetlands.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: none (in.)
Depth to Saturated Soil: none (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits ← possibly (in drainage)
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: occurs w/in a drainage

SOILS

Map Unit Name (Series and Phase): A10 clay 30 to 50% slope — Drainage Class: well drained

Taxonomy (Subgroup): typic Chromoxererts — Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12"	A	5Y 2.5/1 (wet)	2.5YR 4/6 (wet)	5% mottles	silty clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors w/Redox features
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: No discernible O horizon

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: ~~FTC~~ FTC-S
Applicant/Owner: TCA 7(4)7
Investigator: JC, JC, SFA

Date: 7/26/01
County: Orange
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: 7-11
Transect ID:
Plot ID: 7OP6

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Polypogon monspeliensis	H	FACW+
2. Baccharis salicifolia	S (plot only)	FACW-
3. Paspalum distichum	H	OBL
4. Veronica sp. (<20% cover)	H	OBL
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)
Depth to Free Water in Pit: ___ (in.)
Depth to Saturated Soil: Ø (in.)

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): alo clay 30 to 50% slopi

Drainage Class: well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic Chromoxererts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10"	A	5Y 4/1 (wet)	5YR 4/6 (wet)	15%	silty clay gleying
10-12"	B?				silty clay gleying oxidized root channels
	↳	looks sandier, but may be same layer.			

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC South	Date: 7-24-0
Applicant/Owner: [illegible]	County:
Investigator: [illegible]	State:
Do Normal Circumstances exist on the site? (Yes) No	Community ID: 7(4)3 (after Confluence W3a) 7-13
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: 7DP7

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2. Lolium multiflorum	Fac		10.		
3. [illegible] Xanthium strumarium	fac		11.		
4. [illegible] Distichlis spicata	FacW		12.		
5. [illegible] Ambrosia psilostachya	fac		13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

None

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name
(Series and Phase): _____ Drainage Class: _____
Field Observations
Taxonomy (Subgroup): _____ Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
~~1-12"~~	~~A~~	~~5Y 2.5/1~~ (wet)	~~2.5Y 4/6~~	~~5% mottles~~	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: ~~No discernible O horizon~~ high chroma no mottles nonhydric soils high chroma

map unit name Soper Rock outcrop complex, 30-75% sl field observation does not confirm mapped type

taxonomy Typic Argiaquolls

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes No (Circle)	(Circle)
Wetland Hydrology Present?	Yes No	
Hydric Soils Present?	Yes No	Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 7/31
Applicant/Owner: TCA	County: OR
Investigator: Chlup, Austin	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID: 7(6)1 [7-14]
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Plot ID: 70P 8

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. salt grass distichlis spicata	FACW		9.		
2. Lolium multiflorum	FAC		10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: w/in a drainage

SOILS

Map Unit Name (Series and Phase): Soper Rock outcrop complex 30-75% slope Drainage Class: _____

Taxonomy (Subgroup): Typic Argiaquolls Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
12"		2.5Y 3/1	none		silty clay

Hydric Soil Indicators:

borderline

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: some oxidized root channels in upper layers, possible gleying – 5Y 2.5/1

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: 7(6)-4 FTC Applicant/Owner: TCA Investigator: JC/IC	Date: 8/6/01 County: OR State: CA landslide area south of
Do Normal Circumstances exist on the site? **Yes** No Is the site significantly disturbed (Atypical Situation)? Yes **No** Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Community ID: 7(6)4 7-17 Transect ID: 1006 Plot ID: 7-OP-12

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepsis	Shrub	FACW	9.		
2. Baccharis salicifolia	Shrub	FACW	10.		
3. Artemisia californica	Shrub	Upland	11.		
4. Avena sp.	Herb	Upland	12.		
5. Bromus hordeaceus	Herb	Upland	13.		
6. Salix goodingi	Tree	Obl	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet for hydrophytic plants

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ✓ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Soper-Rock outcrop complex 30+85% slopes Drainage Class: _____

Taxonomy (Subgroup): Typic Argixerolls Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10R 3/2	10R 4/4	30%	Clay loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: PS, IC	Date: 8/3/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: alkali sie Transect ID: [illegible] Plot ID: FEOP-1

FE-Seep 1 / FE17

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. ambrosia psilostachya	herb	Fac	9.		
2. distichalis	herb	FacW	10.		
3. mustard brassica nigra	herb	upl	11.		
4. prickly pear opuntia	herb	upl	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: does not meet for hydrophytes

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam 2-9% slopes

Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerols

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	A	10YR 3/2	none		sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

does not meet for hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC
Applicant/Owner: TCA
Investigator: JC, PS

Date: 8/3/01
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: 2 FeSeep1
Transect ID: map 1 alkali seep
Plot ID: 7/FEOP-2

FEA-2
766

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. marsh fat	Shrub	FacW
2. Lemonade berry	shrub	UPL
3. Scirpus americanus	herb	OBL
4. Juncus mexicanus	herb	FacW
5. Yerba mansa (Anemopsis californica)	herb	OBL
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 60%

Remarks: hydrophytic veg present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:
Depth of Surface Water: at surface (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 12 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: hydrology present

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam 2-9% slope
Drainage Class: well drained
Taxonomy (Subgroup): Entic Haploxerolls
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	2.5Y 2.5/1	none	none	Sandy loam
4-12	B	5Y 4/2	none	none	Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors (upper horizon)
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: PS/TC	Date: 8/3/01 County: OB State: OA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: 3 ~~fc~~ Seep 1 Transect ID: mnd alkali seep 7b Plot ID: 7/FROP3

FC7-2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Urbamans (Ambrosia californica)	herb	OBL	9.		
2. Scirpus americanus	herb	OBL	10.		
3. Juncus mexicanus	herb	FACW	11.		
4. Ragweed Ambrosia psilostachya	herb	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: hydrophytic vegetat

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

none

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: does not meet for hydrology

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam 2-9% slope
Drainage Class: well drained
Taxonomy (Subgroup): Entic Haploxerolls
Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	A	10YR 3/2	none		sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor None
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: SC, PS	Date: 8/3/01 County: OR State: Cal
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: (4) Transect ID: [illegible] Plot ID: 7/FEC P4

FE/7-2
FeSeep 1
7b

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cyperus esculentis		FacW	9.		
2. Eleocharis		OBL	10.		
3. ambrosia psilostachya		FAC	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: hydric veg present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: a surface (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: hydrology present

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam 2-9% slope

Drainage Class: well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Entic Haploxerolls

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10YR 3/4	no	None	Sandy fine loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor NO
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: no artificial Non channels

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/3/06
Applicant/Owner: TCA	County: OR
Investigator: PS, TC	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: 4(a) (2 feet)
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: nap / alkali
Is the area a potential Problem Area? Yes No	Plot ID: Seep
(If needed, explain on reverse.)	7/FEOP5 7/2

FE/7-2
FeSeep 1
towards center of drainage from A

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cyperus esculentus		FACW	9.		
2. ambrosia psilostachya		FAC	10.		
3. elencharis		OBL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: hydrophytic veg present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: at surface (in.)

Depth to Free Water in Pit: at surface (in.)

Depth to Saturated Soil: at surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: hydrology present

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy Loam 2-9% Slopes
Drainage Class: well drained
Taxonomy (Subgroup): Entic Haploxerolls
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	5Y 3/2	n		fine sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: gleyed hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/28
Applicant/Owner: TCA	County: OK
Investigator: I Chlup	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: CP-5a (FT-2)
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FEOPI

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. typha sp		OBL	9.		
2. baccharis salicifolia		facw	10.		
3. Teleocharis sp		2 facw	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: meet for veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)

Depth to Free Water in Pit: none (in.)

Depth to Saturated Soil: none (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: soil damp but not saturated meet for hydrology

SOILS

Map Unit Name (Series and Phase): Corralitos loamy sand

Drainage Class: Somewhat excessively drained

Field Observations Confirm Mapped Type? Yes (No)

Taxonomy (Subgroup): typic xeropsamments

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	N 4/(1) dark grey		None	clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks: surface sat w/ flow surface water
channel severely degraded by cattle

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/28/01
Applicant/Owner: TCA	County: OR
Investigator: Schlup	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: wetland area adjacent to CPS
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FEOP2 (FE-2)

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. J mexicanus		facW	9.		
2. Rumex sp.		≥ facW	10.		
3. water ess Ranuncula nasturtium aquatica		OBL	11.		
4. cyperus sp.		≥ facW	12.		
5. aphum gravesters		facW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: meet for hydrophytic veg - all very young - just sprouted very degraded by cattle

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)

Depth to Free Water in Pit: 4 (in.)

Depth to Saturated Soil: 4 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name (Series and Phase): Corralitos loamy sand — Drainage Class: Somewhat excessively drained

Taxonomy (Subgroup): typic Xeropsamments — Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR 3/1	None		clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: mucky fine sands

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	(Yes)	No	
Hydric Soils Present?	(Yes)	No	

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Review w/Sara

Project/Site: FTC	Date: 8/28/01
Applicant/Owner: TCA	County: OR
Investigator: Tchlup	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: RS6a - Goberadon Fe3
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FEOP3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. melilotus alba		facup	9.		
2. cynodon dactylon		fac	10.		
3. lolium multiflorum		fac	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: 66% hydrophytic - others hydrophytic but less common willow mulefat, etc.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits → fine deposit w/ low flow channel
- X Drainage Patterns in Wetlands → deposit channel throughout with hydrology

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adjacent to Goberadon

SOILS

Map Unit Name (Series and Phase): Corralitos loamy sand

Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): typic xerorthents

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	5YR 4/1	None		silty clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor None
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

low chroma

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/28
Applicant/Owner: TCA	County: OR
Investigator: J Chlup	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: CP6 Fe-3
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FECP4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. xanthium strumarium		FAC+	9.		
2. polygonum lapathifolium		OBL	10.		
3. rorippa nasturtium-aquatica		OBL	11.		
4. cyperus sp. (erythrostis)		≥FACW	12.		
5. veronica anagallis-aquatica		OBL	13.		
6. paspalum distichum		OBL	14.		
7.			15.		
8.			16.		

7 [illegible]

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks: meet for veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 2 (in.)

Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meet for hydrology

SOILS

Map Unit Name (Series and Phase): Botella loam 2 to 9% slopes Drainage Class: well drained

Taxonomy (Subgroup): Pachic Argixerolls Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR 4/1	7.5YR 5/8	faint/distinct 10%	sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor None
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC
Applicant/Owner: TCA
Investigator: T.Chlup

Date: 3/22/01
County: Or
State: CA

Fe-4

Do Normal Circumstances exist on the site? Yes No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes No
(If needed, explain on reverse.)

Community ID: [illegible]
Transect ID:
Plot ID: FeOPS

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. [illegible]		FacW-
2. [illegible]		up
3. [illegible]		Fact
4. multiflorum		Fac
5. [illegible] Rubrus Sata		Upl
6. polygonum arenastrum		Fac
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). [illegible]

Remarks: 4/6 66% Hydrophytic - meets hydrophyte

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required): none
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves none
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: [illegible]

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam

Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerolls

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	5YR 3/2			Sandy loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No (Circle)	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	Is this Sampling Point Within a Wetland? Yes No

Remarks:

does not have hydric soils indicating saturated for consecutive days

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/27
Applicant/Owner: FCR	County: OR
Investigator: Tchlup	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID: CF 9 + adjacent drainage
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: FCOR7
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Salix lasiandra		OBL
2. Urtica dioica		FACW
3. Polygonum punctatum		OBL
4. Ranunculus aquatilis		OBL
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: 100% hydrophytes - all young vegetation (low % cover in some areas)

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water:	0	(in.)
Depth to Free Water in Pit:	0	(in.)
Depth to Saturated Soil:	0	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Soil damp at end of august, previous observation indicated standing water

SOILS

Map Unit Name (Series and Phase): Cieneba Sandyloam

Drainage Class: Somewhat excessively drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	O	5Y2.5/1	no mottles		Sandy clayloam
4-12	A	5Y5/1	no mottles.		Sandy

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: appears to have high organic matter in top 4 inches (very dark) soil is damp but not saturated, lower sandy layer is low chroma

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks: channel Bed is nearly unvegetated - sprouts young nettle + watercress where damp except for fresh sprouts → Bands - sycamore, elderberry, willows poison oak

previous observations found gleyed sandy soils N3/1 + surface water

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC
Applicant/Owner: TCA
Investigator: TC, P Scheer

Date: 8/3/01
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: [illegible] map 3
Transect ID:
Plot ID: FEOP6

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. bristly oxtongue (Picris echioides)	herb	fac
2. Kickxia elatine	herb	NI
3. wild radish Raphanus Sativus	herb	UPL
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: No hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
none
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches none
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: no hydrology

SOILS

Map Unit Name (Series and Phase): Capistrano Sandy loam

Drainage Class: well drained

Taxonomy (Subgroup): Entic Haploxerolls

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	5YR 2.5/1	none		Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- X Reducing Conditions
- (X) Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)

Wetland Hydrology Present? (Yes) No

Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: Ichlup	Date: 8/30/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: CP10 FE-8 Transect ID: Plot ID: FE0P8

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. epilopum ciliatum		facW	9.		
2. j. rugulosus		OBL	10.		
3. blackwellia salix goodingii		OBL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 2 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: recieving runoff from nursery

SOILS

Map Unit Name (Series and Phase): Rock outcrop - Ciemba complex 30-75% slopes

Drainage Class: _____

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		10YR 4/2	none		clay loam
4-12		N 4/	none		sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meet hydric soils for

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks: Some nursery

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: ETC	Date: 8-16-01
Applicant/Owner: TCA	County: OR
Investigator: SY/IC	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: Pond area South of concrete plant
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FEOP9

FEVM9 DS1C

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Baccharis calcifolia		facw-	9.		
2. xanthium strumarium		fac	10.		
3. pumex crispus		facw-	11.		
4. eleocharis sp		2 facw	12.		
5. salix goodingii		obl	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: appears to fill w/ runoff from concrete plant, then overflow to San Juan Creek ponded 1-11-01 to 5-15-01

SOILS

Map Unit Name (Series and Phase): ✓ Riverwash

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10YR 7/2		many distinct	loam
below 4					loamy cobble

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: meet for hydric soils

* ponded 1-11-01 to 5-15-01

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No

Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: TCA/TB	Date: 8/20/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: E FEVM10 Transect ID: maps Plot ID: FEOP10

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Rumex crispus		FacW	9.		
2. lythrum hyssopifolia		facW	10.		
3. baccharis salicifolia		facW	11.		
4. polypogon monspeliensis		facW+	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- X Other observations dry fairy shrimp surveys

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Refer to field notes for fairy shrimp survey

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands depressional area

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: ponded 1-11-01 to 4-8-01

29x31 feet

SOILS

Map Unit Name (Series and Phase): ✓ Riverwash

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: meets definition of hydric soils (add criteria)
Refer to fairy shrimp data ponded 1-16-01 to 4-8-01

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/16/01
Applicant/Owner: TCA	County: OR
Investigator: TC/SY	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: SJC DS11
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No	Plot ID: FSOP11
(If needed, explain on reverse.)	

FEVP2 pond area

VWA

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. polypogon monspeliensis		facw+	9.		
2. amb vosgyps silostachya		fac	10.		
3. Baccharis salicifolia		facw	11.		
4. ~~[illegible]~~ lythrum hyssopifolia		facw	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: depressed area
ponded 2/13/01 to 2/21/01

SOILS

Map Unit Name (Series and Phase): Riverwash ✓ Drainage Class: _____

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10YR 4/2		Common/faint	loamy sandy
below 4	B		compact	below 4"	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: Compact layer in profile ponded 2-13-01 to 2-21-01 observed

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes / No	(Circle)
Wetland Hydrology Present?	Yes / No	
Hydric Soils Present?	Yes / No	

Is this Sampling Point Within a Wetland? Yes / No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: JC/SY	Date: 8·16·01 County: OR State: CA
Do Normal Circumstances exist on the site? **Yes** No Is the site significantly disturbed (Atypical Situation)? Yes **No** Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Community ID: DS12 ~~FE~~ willow seep 2(1) Transect ID: Plot ID: FEOP12

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. J. Rugulosis		OBL	9.		
2. Salix goodingii		OBL	10.		
3. ambrosia psilostacha		FAC	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: / (in.)

Depth to Free Water in Pit: / (in.)

Depth to Saturated Soil: / (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Profile moist in upper 12"

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 3/1			SL
6-7	B1	10YR 4/3			Medium Sand
7-12	~~BE~~ A2	10YR 3/1			SCL
12-16	B2	10YR 4/1		W/common distinct	SC

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric based on low chroma & Redox Features.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: Depressional area on bench above San Juan Creek.

Willow woodland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC / San Juan creek - Featherly bridge Date: 8/16/01
Applicant/Owner: TCA County: OR
Investigator: JC/SP State: CA

Do Normal Circumstances exist on the site?	Yes	No	Community ID: 6 San Juan FE creek
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:
Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes	No	Plot ID: Prop 19

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Cyperus involucratus	H	OBL
2. baccharis salicifolia	S	facW
3. platanus racemosa	T	facW
4. * salix spp (red? laevigata)		facW+
5. arundo donax		facW
6. yellow willow salix lucidus ssp lasiandra		OBL
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: water fm

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: (coarse stream deposits, within fine surface crust, overlayed by 2in leaf litter, several small, no moisture in upper 12 ↑ no evidence of standy water

SOILS

Map Unit Name (Series and Phase): River wash

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A				cobbly coarse sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: ~~[illegible]~~ clean coarse sand, little organic matter no evidence of saturation

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)

Wetland Hydrology Present? Yes (No)

Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: San Juan Creek FTC	Date: 8/16/01
Applicant/Owner: TCA	County: OR
Investigator: SF/TC	State: Ca
Do Normal Circumstances exist on the site? Yes No	Community ID: San Juan Creek FC DS7
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No	Plot ID:
(If needed, explain on reverse.)	FC OP 20

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
*1. typha sp	H	OBL	9. melilotus alba		FacU
*2. cyperus involucratus	H	OBL	10. artemesia douglasiana		FacW
*3. xanthium strumarium		fac+	*11. salix lasiolepis/red? laevigata?		FacW+
*4. epilobium canens		OBL	*12. mint unidentified		
*5. ~~[illegible]~~ arundo donax		FacW	*13. unidentified stachys ajugoides		OBL
6. rumex crispus		FacW-	14. salix lucidaria sandria		OBL
*7. salix goodingii		OBL	15.		
8. rabbitsfoot/polypogon monspeliensis		FacW+	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands depressional area in drainage

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adventitious roots on black willow

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class:

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup):

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A				Cobbly sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: stream deposit moist to surface in aug.
fine surface crust – hydric soil based on topography + moisture in profile in late summer

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: TC/SY	Date: 8/16/01 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: CS 7a (STC-) FE Transect ID: Plot ID: FeOP 21

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. arundo donax		facW	9.		
2. Sambucus salicifolia		facW	10.		
3. ~~as~~ OS6 Salix spluciolasspsplasondrica		FacW+	11.		
4. platanus racemosa		FacW	12.		
5. cyperus involucratus		OBL	13.		
6. Salix laevigata		OBL	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 4 (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: adventitious Roots

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR4/2	none		sandy with organics

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- (Gleyed or Low-Chroma Colors)
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: inundated w/ flowing water & mucky organic layer

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	(Yes)	No	
Hydric Soils Present?	(Yes)	No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/16/01
Applicant/Owner: TCA	County: OR
Investigator: JCBS	State: CA

Do Normal Circumstances exist on the site?	Yes	No	Community ID: 158 San Juan Creek-FE
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:
Is the area a potential Problem Area?	Yes	No	Plot ID: Map 5 FCOP 12
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Cyperus involucratus		OBL
2. artemesia douglasiana		facW
3. tree w/ simple leaf amorpha fruticosa		fac
4. Salix spp lasiolepis		≥facW
5. eleocharis		≥facW
6. alder Alnus rhombifolia		facW
7. horsetail Equisetum spp		≥fac
8. Salix lucida ssp lasiandra		OBL
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	/	(in.)
Depth to Free Water in Pit:	7	(in.)
Depth to Saturated Soil:	5	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Series of depressional pocket WLs in braided stream channel. Most to surface in channel.

SOILS

Map Unit Name (Series and Phase): River Wash

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2	O	—		—	Fibrous organics
2-16+	A	individual grains		Common/distinct gr Sand	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Saturated @ 5" in August. Redox in Sandy Soil = hydric

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	(Yes)	No	
Hydric Soils Present?	(Yes)	No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8-16-01
Applicant/Owner: TCA	County: OA
Investigator: IC/SY	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: DS 9 SJC-FE
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: SJC map 5
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FEOP 23

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
* 1. cyperus involuctaris		OBL	9. mulefat Baccharis salicifolia		facw
* 2. artemesia douglasian		facw	10. yellow flowered plant Senomera elata		facw
* 3. watercress Rorippa nasturtium-aquatica		OBL	* 11. Salix laevigata? spp		≥ facw
* 4. duckweed lemna spp		OBL	12. cocklebur xanthium strumarium		facf
* 5. stingy nettle urtica [illegible]		facw	13. sycamore platanus Racemosa		facw
6. epilobium canum		facw	14. Juncus rugulosus		OBL
7. mimulus cardinalis		OBL	15. Salix lucida		OBL
* 8. Scirpus microcarpus		OBL	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 7" (in.)

Depth to Free Water in Pit: surface (in.)

Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

* 15 feet open wetland flowing water

SOILS

Map Unit Name (Series and Phase): River Wash

Drainage Class: _____

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: clean sand, inundated in Aug.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks: 15 feet flowing water (indicated by plant list), additional 55 feet to south saturation upper 12" & vegetated by cyperus, salix, Baccharis, Basa (abutments or vegetating slope)

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/15/01
Applicant/Owner: TCA	County: OB
Investigator: TC/PS	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: Nyuus SP 1
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FEOP 25

FE 16c below Dr Dryc 16 wop 5

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Juncus mexicanus	H	FACW	9.		
2. Ambrosia psilostachya	H	FAC	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for hydrophytic vegetation

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required): ↓ in A horizon
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name (Series and Phase): Cieneba sandy loam 30-75% slope
Drainage Class: somewhat excessively drained
Taxonomy (Subgroup): Typic Xerorthents
Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	2.5Y 5/3	10YR 6/8	abundant/prominent	silty clay
4-12	B	2.5Y 5/3	none	none	silty clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: does not meet for hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: PTC	Date: 8/15/01
Applicant/Owner: TCA	County: OR
Investigator: JC/PS	State: CA

FF-wetland 1

Do Normal Circumstances exist on the site?	Yes	No	Community ID: isolated pond/mp5
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:
Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes	No	Plot ID: FCOP 24

VEGETATION

140x20 → pond fringe

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Eragrostis distachya	H	OBL	9.		
2. Typha domingensis	H	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations: confirmed @ print

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 5 (in.)

Depth to Saturated Soil: at surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): Alo clay

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Chromuderts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	Chart 1 gley 3/5G	0	0	Clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

meets for hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

3 x 5ft

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/28/01
Applicant/Owner: TCA	County: OK
Investigator: TC	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: CP 23 FG-19d
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: PEOF 26

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. baccharis Salicifolia		facW	9.		
2. ambrosia psilostachya		fac	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: earlier in the season (July) found some j. rugulosis/eleocharis

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: w/in a drainage

SOILS

Map Unit Name (Series and Phase): Geneba Sandy loam 15-30% slope

Drainage Class: somewhat excessively drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic xerorthents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: sand deposit / no mottles / no gleyy / no odor

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQ USACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: tchlup	Date: 8/30/01 County: OR State: CA FE-19 site 4
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: CP 206 Transect ID: Plot ID: FEOP 28

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. apium provente		facw	9.		
2. j. mexicus		facw	10.		
3. arroyo willow		facw	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)

Depth to Free Water in Pit: none (in.)

Depth to Saturated Soil: 7 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Windrange

SOILS

Map Unit Name (Series and Phase): Myford Sandy loam 9 to 15% slopes

Drainage Class: moderately well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Palexeroffs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2	A	10YR 5/2	5YR 4/6	diffuse/90%	Sand
2-12	B	N 4/	vern		Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/15/01
Applicant/Owner: TCA	County: OR
Investigator: PS/EC	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: Stock pond
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: GOP 29

FF wetland 2

165x165

VEGETATION

fringe of pond

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. paspalum distichum		OBL	9.		
2. eleocharis acicularis		OBL	10.		
3. scirpus californicus		OBL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: Meets for Hydrology

manmade pond mud pits to south + west

sand substrate

25% cover

fringe [illegible]

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 10 (in.)

Depth to Saturated Soil: to surface (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Meets for Hydrology

SOILS

Map Unit Name (Series and Phase): Int?

Drainage Class: _____

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5	A	2.5Y 5/4	10YR 6/8	few diffuse/faint	coarse sand
5-16	B	gley chart 1 4/5GY	no mottle		sand loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets for hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: Schlup	Date: 8/30/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: FEVM13 Transect ID: Plot ID: 40° 30

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible]		Fac	9.		
2. [illegible] mensodiensis		FacW	10.		
3. [illegible]		FacU-	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: meet for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: none 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: look at targ shrip data — observed to pond 2-13-01 to 2-21-01

SOILS

Map Unit Name (Series and Phase): Myford Sandy loam 9-30% slope

Drainage Class: mod. well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	2.5YR 5/3	5YR 7/6	~40% [illegible]	silty clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: No hydric

ponded 2-13-01 - 2-21-01 ↑ 4" depth

fairy shrimp survey indicate pond for at least [illegible] VM141

13 → 1 day observed 4" deep

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)

Wetland Hydrology Present? Yes No

Hydric Soils Present? Yes No

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks: begin by [illegible] before 70 [illegible] 423

[illegible] (salt grass/[illegible]

[illegible]

eleocharis [illegible]

then [illegible]

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: JChlup	Date: 8/30/01 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: FVM14 Transect ID: Plot ID: FCP 31

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cynodon dactylon		FAC	9.		
2. Polypogon monspeliensis		FACW	10.		
3. Hordeum hystrix		FACU-	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water:	0	(in.)
Depth to Free Water in Pit:	0	(in.)
Depth to Saturated Soil:	0	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: evidence of ponding during fairy shrimp surveys
ponded 2-13-01 to 2-21-01

SOILS

Map Unit Name (Series and Phase): Myford sandy loam 9-30% slope

Drainage Class: moderately well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic Palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0+2	A	2.5YR 5/3	5YR 5/8	many distinct	silty clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: Saturated for atleast 7 days Refer to fairy shrimp results
ponded 2-13-01 - 2-21-01
↑ 3" depth

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FC South
Applicant/Owner: TCA
Investigator: Pete Scherr, S Young, I Chinn

Date: 7/10/01
County: Orange
State: CA

Do Normal Circumstances exist on the site? Yes No
Is the site significantly disturbed (Atypical Situation)? Yes No
Is the area a potential Problem Area? Yes No
(If needed, explain on reverse.)

Community ID: FE-19 (site 6)
Transect ID:
Plot ID: CP32 wetland 2 (site 1) FeOP 32

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. mulefat-baccharis salicifolia	shrub	FacW
2. ragweed ambrosia psilostachya	herb	Fac
3. polypogon monspeliensis	herb	facW
4. juncus mexicanus	herb	2facW
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: very compacted meets for hydrology

SOILS

Map Unit Name (Series and Phase): Myford Sandy loam 9 to 30% Slope

Drainage Class: moderately well / rapid

Taxonomy (Subgroup): Typic Palexeralfs

Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A	2.5Y 5/4	7.5YR 4/6	common/distinct	silt loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: highly compacted platey structure w/ mottles does not meet fw soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FC South	Date: 7/10/01
Applicant/Owner: TCA	County: Orange
Investigator: Young, Scherr, Chlup	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: FE-19 (site 7)
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: CP 32 (wetland 2 (site 2) downstream of pond FEOP 33

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Black willow Salix goodingii		OBL	9.		
2. mulefat Baccharis salicifolia		FacW	10.		
3. rabbits-foot grass polypogon monspeliensis		FacW	11.		
4. Saltgrass distichlis spicata		FacW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet for hydrophytic plants

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- X Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meet for hydric soils

SOILS

Map Unit Name (Series and Phase): Myford Sandy loam 9-30% slope
Drainage Class: moderately well drained
Taxonomy (Subgroup): typic Palexeralfs
Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	2.5Y 5/3	7.5YR 4/6	common/distinct	concretions sandy clay loam
4-6	B	2.5Y 5/3	7.5YR 4/6	common/distinct	loamy coarse sand
6-9	Ab	2.5Y 5/1	7.5YR 4/6	many prominent	clay loam
9-16	B	2.5Y 5/3	7.5YR 4/6	common/distinct	loam w/ coarse sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets for hydric soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: TChlup	Date: 9/4/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: EcVm15 Transect ID: Plot ID: FEOP34

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Baccharis [illegible]		FacW	9.		
2. Eleocharis sp		≥FacW	10.		
3. [illegible]		FacW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for hydrology

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____(in.)

Depth to Free Water in Pit: _____(in.)

Depth to Saturated Soil: _____(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands depressional area

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:
ponded 2-13 to 2-21

pond dries for shrimp [illegible]

SOILS

Map Unit Name (Series and Phase): Myford sandy loam 15 to 30% slopes
Drainage Class: moderately drained
Taxonomy (Subgroup): Typic Palexeralfs
Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10YR 4/2	7.5 YR 4/6	many faint mottles	silty clay

very compacted difficult to auger

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

ponded 2-13/01 to 2-21-01

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/28/6
Applicant/Owner: TCA	County: OR
Investigator: TC	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: FE49
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FE OP 35

South of stockpond

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. L. mexicanus		facW	9.		
2. Spalum distichum		OBL	10.		
3. typha sp		OBL	11.		
4. [illegible] spicata (fringes)		facW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: throughout channel surface [illegible] is [illegible] periodically at data pt no surface [illegible] meet for hydrology

SOILS

Map Unit Name (Series and Phase): Myford sandy loam 15-30% slopes

Drainage Class: well drained

Taxonomy (Subgroup): Typic Palexeralfs

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR 4/2	5YR 4/6	abundant/distinct	sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/28/01
Applicant/Owner: TCA	County: OR
Investigator: IC	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: Confluence CP20
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FEOP 36

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Silix goodingii		OBL	9.		
2. Baccharis salicifolia		facW	10.		
3. Isoloma menzesii		upl	11.		
4. Bromus diandrus/hordeaceus		upl	12.		
5. Lolium multiflorum		fac	13.		
6. Polygonum monspeliensis		facW	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: 4/6 66% hydrophytes - meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name (Series and Phase): Myford Sandy loam 15 to 30% slope

Drainage Class: mod. well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Typic Palexeralfs

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR 4/2	5YR 4/6	few/~20% mottle	sandy clay
				* or large [illegible]	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Unimpaired meets for soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: J.C	Date: 8/28/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: E-324 Transect ID: Plot ID: FEOP 37

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible]		FACW	9.		
2. Histichis spicata		FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: none 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators: → part of southend
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name (Series and Phase): Botella clay loam 9 to 15% slope Drainage Class: well drained

Taxonomy (Subgroup): Pachic Argixerolls Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 4/2	5YR 4/6	50%/distinct	silty clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

meets hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: Young	Date: 8-30-01 County: OR State: CA
Do Normal Circumstances exist on the site? **Yes** No Is the site significantly disturbed (Atypical Situation)? Yes **No** Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Community ID: Christianitos site 1 Transect ID: Plot ID: FCOP 38

Christianitos near Co[illegible] CP 39/40.

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Polypogon Monspeliensis	H	FACW	9.		
2. Xanthium Strumerium	H	FAC+	10.		
3. Eleocharis	H	FACW	11.		
4. Juncus sp	H	FACW	12.		
5. Cyperus sp	H	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/5 = 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other X No Recorded Data Available Field Observations: Depth of Surface Water: / (in.) Depth to Free Water in Pit: / (in.) Depth to Saturated Soil: / (in.)	Wetland Hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits X Drainage Patterns in Wetlands Secondary Indicators (2 or more required): X Oxidized Root Channels in Upper 12 Inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)

Remarks: Broad, Shallow depression in channel.

SOILS

Map Unit Name (Series and Phase): Botella loam 2 to 9% slope
Drainage Class: well drained
Taxonomy (Subgroup): Pachic Argixerolls
Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 4/3	7.5YR 3/4	Many, distinct	Coarse Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: Redox Concentrations in Sandy Soil.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	(Yes)	No	
Hydric Soils Present?	(Yes)	No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: S. Young & P. Schorr	Date: 7.16.01 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: Map 9 Plot ID: P1 Fence 40

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Urtica dioica	H	FACW	9.		
2. Typha angustifolia	H	OBL	10.		
3. Cyperus sp.	H	FACW	11.		
4. Plantago Sp.	H	FACW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/4 = 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	/	(in.)
Depth to Free Water in Pit:	0	(in.)
Depth to Saturated Soil:	0	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Saturated to Surface From groundwater Seep w/in Channel.

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16+	C	high Chroma	—	NONE	Coarse Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- X Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Meets hydric Soil Criteria based on Saturated Condition ~~at upper~~ to Surface in July.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: ETC Applicant/Owner: ICA Investigator: Syang & DiSchert	Date: 7.17.01 County: OR State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: Map 9 Plot ID: B2 FeOP 41

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Typha SP.	H	OBL	9.		
2. Eleocharis acicularis	H	OBL	10.		
3. Cyperus SP.	H	FACW	11.		
4. Juncus Rugulosis	H	OBL	12.		
5. Epilobium Ciliatum	H	FACW	13.		
6. Nasturtium SP.	H	OBL	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/6 = 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: ~6 (in.) Flowing Low-Flow Channel

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Located w/in Flow Low Flow Channel w/ Cattail, etc.

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2+	O	Chroma 1	organics		Muck
2-16+	A	—	—	—	Clean Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- X Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- X High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Mucky organic layer above alluvial Sands.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Corridor	Date: 7-17-01
Applicant/Owner: TCA	County: OR
Investigator: S. Young & P. Schaaf	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: Map 9
Is the area a potential Problem Area? Yes No	Plot ID: F1
(If needed, explain on reverse.)	Fen? 42

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix goodingii	T	OBL	9.		
2. Salix lasiolepis	T	FACW	10.		
3. Typha sp.	H	OBL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 3/3 = 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	~2	(in.)
Depth to Free Water in Pit:	0	(in.)
Depth to Saturated Soil:	0	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Stormwater outlet, Sediment deposition from Construction above.

SOILS

Map Unit Name (Series and Phase): Sorrento loam 2 to 9% slopes Drainage Class: well drained

Taxonomy (Subgroup): Calcic Haploxerolls Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6+	A	Chroma ≤ 2	—	—	SCL

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Meets hydric Soil Criteria based on Low Chroma & Sulfitic Odor.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 9/4/01
Applicant/Owner: TCA	County: OR
Investigator: TChlup	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: F (map 9)
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: [illegible] edge of willow wetland
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: EDP 43

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis		FacW	9.		
2. Picris echioides		fac	10.		
3. ambrosia [illegible]		fac	11.		
4. toxicodendron diversilobum		upl	12.		
5. xanthium strumarium		fact	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 80%

Remarks: hydrophytic Veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: / (in.)

Depth to Free Water in Pit: / (in.)

Depth to Saturated Soil: / (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: pit 6 feet North of inundated stre bed

SOILS

Map Unit Name (Series and Phase): Somerset loam 2 to 9% slopes Drainage Class: well drained

Taxonomy (Subgroup): Calcic Haploxeralfs Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
6-12		5YR4/1	none		clay
0-6		high chroma	none		silt

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets for hydric soils

adequate organics not present within indicate prolonged saturati

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC
Applicant/Owner: TCA
Investigator: JC/SP

Date: 8/31/01
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: CP47 FG-30
Transect ID:
Plot ID: FCUP 44

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. tamarix sp		FAC
2. polypogon monspeliensis		FACW
3. distichlis spicata		FACW
4. xanthium strumarium		FAC+
5. ragweed & ambrosia psilostachia		FAC
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:
meets for veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 2 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: at surface 0 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:
meets for hydrology

SOILS

Map Unit Name (Series and Phase): Diablo clay 9 to 15% 2 to 9% slopes

Drainage Class: Wildrained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): Chromic Pelloxererts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10Y 3/1 Gley 1	none		mucky loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- X High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets for hydric soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

organic soil whole thing black

organics - black streaks unfg. wish / steel grey reduced iron

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC
Applicant/Owner: FCA
Investigator: Schlup/S. Young

Date: 8/31/01
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: Cl47a FC-30a
Transect ID:
Plot ID: FCOP 45

VEGETATION

concave depression

Dominant Plant Species	Stratum	Indicator
1. typha domingensis		OBL
2. distichlis spicata		FacW
3. Sonchus oleraceus		NI
4. melilotus alba		FacU
5. baccharis salicifolia		FacW
6. amyg willow/Salix lasiolepis		FacW
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/6 = 66%

Remarks: veg continues downstream to confluence
meets for hydrophytic veg

✓ picture for riverbank #5

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 8 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- X Inundated Independent
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: meets for hydrology

SOILS

Map Unit Name (Series and Phase): terrace escarpments

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10YR/1 gley 1	7.5YR 4/6	many/prominent	sandy clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- X Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:
meets for soils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

few 5/10
common ~15-20% / faint distinct concentrated

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: T Chlup, S. Young	Date: 8/31/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: CPVM16a FEVM16 Transect ID: Plot ID: FE OP 46

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Xanthium strumanum		Fac+	9.		
2. J. mexicanus		FacW	10.		
3. Bassaris salicifolia fringe		FacW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: look at fairy shrimp survey observed to pond 2/21/01 to 4/9/01

SOILS

Map Unit Name (Series and Phase): terrace escarpment

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	A	10YR 3/1	7.5YR 4/6	many/prominent	

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: Hydric based on soil indicators also yarded 2-21-01 to 4-8-01

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TAA Investigator: Schlup, C. Young	Date: 8/31/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: CP/M16 FEVM17 Transect ID: Plot ID: FEOP 47

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Xanthium Strumarium		Fac+	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meet for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: / (in.)

Depth to Free Water in Pit: / (in.)

Depth to Saturated Soil: / (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Observed to pond 2/13/01 to 5/15/01

SOILS

Map Unit Name (Series and Phase): terrace escarpment

Drainage Class: _____

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	N 2.5/1 gley 1	w/mottles	few/distinct	clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: Hydric based on soil indicators also ponded 2-13-01 to 5-1-01

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/31/01
Applicant/Owner: TCA	County: OR
Investigator: I Chlup / S. Young	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: CPVM16 FEVM18
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FE OP 48

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. xanthium strumarium		fact	9.		
2. brassica nigra		upl	10.		
3. alkali mallow Malvella leprosa		fac	11.		
4. gnathalium luteo-album		facw	12.		
5. polypogon monspeliensis		facw	13.		
6. echinachloa sp		≥facw	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/6 83%

Remarks: meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands depressional area

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: However, not observed to pond in Spring 2001 during fairy shrimp surveys (observed to pond in 1995)

SOILS

Map Unit Name (Series and Phase): Alamosa clay 30 to 50% slopes Drainage Class: well drained

Taxonomy (Subgroup): typic Chromoxererts Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	CHROMA < 2	w/mottles		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: hydric based on low chroma mottles/2

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC
Applicant/Owner: TCA
Investigator: Ichikawa, Young

Date: 8/31/01
County: Or
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: CFVPM17 FEVM19
Transect ID:
Plot ID: Feop 49

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Xanthium strumarium		fac+
2. brassica nigra		upl
3. alkali mallow malvella leprosa		fac
4. gnaphalium tuteo-album		facW
5. polypogon monspeliensis		facW
6. echinochloa		Zfacw
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/6 83%

Remarks: meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____(in.)

Depth to Free Water in Pit: _____(in.)

Depth to Saturated Soil: _____(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands depressional area

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: observed to pond 2-21-01 to 4-4-01

SOILS

Map Unit Name (Series and Phase): alamont clay 30 to 50% slope

Drainage Class: well drained

Field Observations Confirm Mapped Type? Yes No

Taxonomy (Subgroup): typic Chromoxerents

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	chroma <2	w/ mottle		

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric based on low chroma & mottle

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes No

Remarks:

Approved by HQ USACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/23/01
Applicant/Owner: TCA	County: OR
Investigator: IC/Scott Holbrook	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: San Mateo
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: Underbridge I-5
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: FEOP So

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cyperus sp.		≥ FacW	9.		
2. Salix lasiolepis		FacW	10.		
3. J. mexicanus		FacW	11.		
4. Red willow Salix laevigata		FacW+	12.		
5. epilobium ciliatum		FacW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for hydrophytic vegetati

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: / (in.)

Depth to Free Water in Pit: / (in.)

Depth to Saturated Soil: 6 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: pit on fringe of flowing creek meets for hydrology

SOILS

Map Unit Name (Series and Phase): Ruerwash

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2	A	5Y 4/2	2.5Y 6/6	few/faint	silty clay loam ~~coarse sand~~
2-6	B	mineral grains	10YR 5/8	common/distinct	coarse sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or (Low-Chroma) Colors
- X Concretions
- X High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: meets for hydric soils

WETLAND DETERMINATION

		(Circle)
Hydrophytic Vegetation Present?	(Yes) No	
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	
Is this Sampling Point Within a Wetland?	(Yes) No	

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: [illegible]	Date: [illegible]/01
Applicant/Owner: [illegible]	County: [illegible]
Investigator: [illegible]	State: CA
Do Normal Circumstances exist on the site? Yes No	Community ID: [illegible]
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID:
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: Feop 52

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix lasiolepis	T	FacW	9.		
2. baccharis salicifolia		FacW	10.		
3. Solanum sp.		NI - Fact	11.		
4. echinochloa sp		≥ FacW	12.		
5. polygonum lapathifolium		OBL	13.		
6. [illegible] californicus		OBL	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks: > 5/6 hydrophytic

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- X Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): ~~[illegible]~~ tidal flats

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A			none	silty sand
					C

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- X Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: observed [illegible] hydric

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No (Circle)	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Hydric soils assumed w/ expectation of constantly high water table in rainy season (more than 30 consecutive days most years) ⇒ aquic or peraquic moisture regime

Approved by HQ USACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC	Date: 8/31/01
Applicant/Owner: TCA	County: OR
Investigator: Ichlup/S. Young	State: OR
Do Normal Circumstances exist on the site? (Yes) No	Community ID: Sonneratia wetland Site B
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: FCOP S3
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. blackwells		OBL	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks: No understory vegetation CWD/litter cover

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water:	/	(in.)
Depth to Free Water in Pit:	/	(in.)
Depth to Saturated Soil:	/	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands depressions

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: soils damp / algal mats

SOILS

Map Unit Name (Series and Phase): tidal flats

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	2.5Y 3/1	7.5YR 4/6	common/prominent	fine sand to clay, laminated
12-16					sand interbedded

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: layers of fine sand interbedded w/ silt layers & buried organics/detritus material

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC
Applicant/Owner: TCA
Investigator: I Chilup

Date: 9/5/01
County: OR
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: CPVM18 FEVM20
Transect ID:
Plot ID: FEO° S4

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. [illegible]		FACW
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: pending 2-13-01 to 2-21-01 ap.

SOILS

Map Unit Name (Series and Phase): Visalia sandy loam 2 to 5 % slopes Drainage Class: _____

Taxonomy (Subgroup): Pachic Haploxerolls Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
					Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: ponding 7 than 7 days minimum observed ponded flow 2-13 to 2-21

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: TChlup	Date: 9/5/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: CPVP A FEVP3 Transect ID: Plot ID: FEOP 55

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. [illegible] monspeliensis		FacW	9.		
2. Spergularia bocconii		fac	10.		
3. Hypochaeris glabra		upl	11.		
4. [illegible] salicifolia		facW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks: meet for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: / (in.)

Depth to Free Water in Pit: / (in.)

Depth to Saturated Soil: / (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: observed to be ponded from 2-13 to 2-21/01

see fairy shrimp data

SOILS

Map Unit Name (Series and Phase): Visalia sandy loam 2 to 5% slope
Drainage Class: _____
Taxonomy (Subgroup): Pachic Haploxerolls
Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
surface		10YR3/2	5YR4/6	few, many distinct	sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: ponded for a minimum of 7 days: from 2-13/01 to 2/21/01

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: FTC Applicant/Owner: TCA Investigator: Ichlup	Date: 9/5/01 County: OR State: CA
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: CPV5P FEVP4 Transect ID: Plot ID: FEOP 56

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Rumex crispus		facw	9.		
2. polypogon monspeliensis		FacW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: meets for hydrophytic veg

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: ___ (in.)

Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands depress

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: observed ponded from 2-13 to 2-21

refer to fairy shrimp survey data

for pong info

SOILS

Map Unit Name (Series and Phase): Visalia sandy loam 2 to 5 % slopes — Drainage Class: _____

Taxonomy (Subgroup): Pachic Haploxerolls — Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		7.5YR 4/2		almost	clay loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- X Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: minimum of 7 days saturation - observed ponded from 2-13/01 to 2/21/0

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

FE/7-7

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Donna O'Neil Conservancy	Date: 6·4·04
Applicant/Owner: TCA	County: OR
Investigator: S. Young & D. Moskovitz	State: CA
Do Normal Circumstances exist on the site? **Yes** No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes **No**	Transect ID:
Is the area a potential Problem Area? Yes **No** (If needed, explain on reverse.)	Plot ID: 1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cyperus eragrostis	H	FACW	9.		
2. Salix laseolepis	T/S	FACW	10.		
3. Rubus urisinus	H	FAC	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 3/3 = 100%

Remarks: Meets Vegetation Criteria.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 2" (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- X Water Marks
- X Drift Lines
- X Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Meets hydrology criteria. Located w/in channel. Vegetated across channel floor & standing/slowly flowing wtr. present.

SOILS

Map Unit Name
(Series and Phase): _____ Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A	2.5Y 3/2	—	—	Muck Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- X High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: Saturated for very long duration.
Meets hydric Soils Criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TCA/San Mateo Creek Applicant/Owner: / Investigator: D. Moskowitz, D. Schore	Date: [illegible] County: Orange State: CA
Do Normal Circumstances exist on the site? **Yes** No Is the site significantly disturbed (Atypical Situation)? Yes **No** Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: ~~[illegible]~~ SanMa[illegible] 5m2 Transect ID: Plot ID: FCOP 51

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix Lucida		OBL	9.		
2. Salix Lasiolepis		FACW	10.		
3. Typha Domenicensis		OBL	11.		
4. Cirsus Americanus		OBL	12.		
5. Eliocuris Acicularis		OBL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 5/5 = 100% of Dom are FAC or Wetter

Remarks: Meet Criteria for Hydrophytic Veg.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: \ (in.)

Depth to Free Water in Pit: \ (in.)

Depth to Saturated Soil: \ (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ✓ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Meets for Hydrology

SOILS

Map Unit Name (Series and Phase): Riverwash

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A1	10yr 4/3	No Mottles		Coarse Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ✓ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

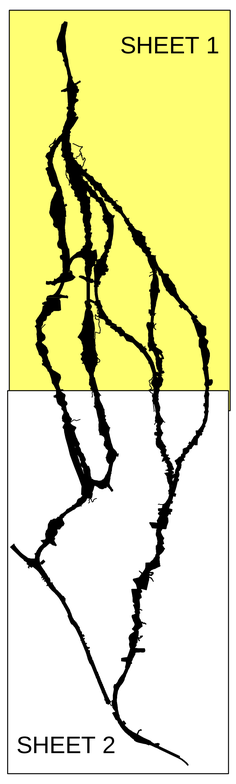
Is this Sampling Point Within a Wetland? (Circle) Yes No

Remarks:

Approved by HQUSACE 3/92

San Juan/San Mateo Creek SAMP Delineation of Riparian Resources and Waters of the US and SOCTIIP 2004 Delineation

KEY MAP



700 350 0 700 Feet

Legend

- Combined Ultimate Grading Limits
- SOCTIIP 2004 Isolated Waters
- SOCTIIP 2004 Waters
- Sample Refined Grading Limits
- SAMP First Order Ephemeral Drainages

SAMP Delineation

- Water Resource
- 99-100%
- 67-98%
- 33-66%
- 2-32%
- <2%
- Unregulated Upland
- Mitigation
- San Juan/San Mateo Watershed Boundary

FE/C/7-WETLAND 1
FE/C/7-1
FE/C/7-WETLAND 2
FE/C/7-2
FE/C/7-3
FE/C/7-4
FE/7-1
C-1
FE/7- 2
FE-1
C-WETLAND 1
C-2
C-3
FE-2
FE-WETLAND 1
FE-2A
FE-POND 1
FE-2B
FE-3
7-1
7-2
FE-4
FE-WETLAND 2
C-4
CANADA CHIQUITA
FE-5
FE-6
7-3
FEW-1
C-5
C-WETLAND 2
7-4
7-5
7-6
C-6
C-SAN JUAN CREEK
7-7
7-SAN JUAN CREEK
FE-7
FEM-1
C-POND 1
C-6B
7-8
FEM-2
FEM-3
FEM-VM7
FEM-VM8
FEM-VM9
FEM-VM10
FEM-6
FEM-8 (FEM-9)
FEM-VM11
FEM-VM12
FEM-5
FEM-4
FEM-POND 1 FEM-SEEP-1
7-9
7-11
FEM-SAN JUAN CREEK
C-7
C-8
7-10
7-12
FEW- SAN JUAN CREEK
C-9
C-9
FEM-10
7-13
FEW-2
FE/7-3
C-10
7-14
C-11
FE/7-3
FEM-11
FE/7-4
FE/7-5
7-15
FE/7-6
FEM-12
C-12
FEM-13
7-16
FEM-14

San Juan/San Mateo Creek SAMP Delineation of Riparian Resources and Waters of the US and SOCTIIP 2004 Delineation

Legend

- Combined Ultimate Grading Limits
- SOCTIIP 2004 Isolated Waters
- SOCTIIP 2004 Waters
- Sample Refined Grading Limits
- SAMP First Order Ephemeral Drainages

SAMP Delineation

- Water Resource
- 99-100%
- 67-98%
- 33-66%
- 2-32%
- <2%
- Unregulated Upland
- Mitigation
- San Juan/San Mateo Watershed Boundary

700 350 0 700 Feet

SHEET 1

SHEET 2

KEY MAP

FE/7-7
FEM-15
FEM-16
FE/7-8
FEM-17
C-13
SEGUNDA DESHECHA
FE/7-8A
FE/7-9
FE/7-8B
GABINO CREEK
FEM-18
CRISTIANITOS
FEM-19
FE/7-10
FEM-20
FE/7-11
FE/7-12
FE/7-VM17
FE/7-13
FE/7-14
FE/7-VM16
FE/7-VM18
FE/7-VM19
FE/7-15
FE/7-16
FE/7-17
FE/7-18
FE/7-19
FE/7-20
FE/7-21
FE/7-22
FE/7-23
FE/7-24
FE/7-25
FE/7-SAN MATEO CREEK
FE/7-SAN MATEO MARSH-EAST OF I5
FE/7-SAN MATEO MARSH
FE/7-VM20
FE/7-VP3
FE/7-SAN ONOFRE CREEK
FE/7-VP4
FE/7-VP7
FE/7-VP8
FE/7-VP5
FE/7-VP6
FE/7-POND 2
FE/7-POND 1
FE/7-VP9
FE/7-VP12
C-14
SEGUNDA DESHECHA

c:GIS PROJECTS/0019-9FOOT/2004delineation/080604CorpsSouthSAMP.mxd July 13, 2004 (IC)

ACOE-SAMP
Hydrogeomorphic Overlay and SOCTIIP 2004 Delineation

KEY MAP

SHEET 1

SHEET 2

700 350 0 700 Feet

Legend

- Combined Ultimate Grading Limits
- SOCTIIP 2004 Isolated Waters
- SOCTIIP 2004 Waters
- Sample Refined Grading Limits
- SAMP First Order Ephemeral Drainages

SAMP Hydrogeomorphic Surfaces

- Non-Floodplain Dissected
- Bankfull Floodplain
- Active Floodplain
- Floodplain Terrace
- San Juan/San Mateo Watershed Boundary

FE/C/7-WETLAND 1
FE/C/7-1
FE/C/7-WETLAND 2
FE/C/7-2
FE/C/7-3
FE/C/7-4
FE/7-1
C-1
FE/7- 2
FE-1
C-WETLAND 1
C-2
C-3
FE-2
FE-WETLAND 1
FE-2A
FE-POND 1
FE-2B
FE-3
7-1
7-2
FE-4
FE-WETLAND 2
C-4
FE-5
CANADA CHIQUITA
FE-6
FEW-1
7-3
C-5
C-WETLAND 2
7-4
7-3
7-5
7-6
FE-7
FEM-1
C-6
7-7
C-SAN JUAN CREEK
7-SAN JUAN CREEK
C-POND 1
C-6B
FEM-2
FEM-3
FEM-VM7
FEM-VM8
FEM-VM9
FEM-VM10
FEM-6
FEM-8
FEM-9
FEM-VM11
FEM-VM12
FEM-5
FEM-POND 1
FEM-SEEP 1
FEM-4
7-8
7-9
7-11
FEM-SAN JUAN CREEK
C-7
C-8
7-10
7-12
FEW- SAN JUAN CREEK
C-9
C-9
FEM-10
FEW-2
7-13
C-10
FE/7-3
7-14
C-11
FE/7-3
FEM-11
FE/7-4
FE/7-5
7-15
FE/7-6
FEM-12
C-12
FEM-13
7-16
FEM-14

ACOE-SAMP
Hydrogeomorphic Overlay and SOCTIIP 2004 Delineation

700 350 0 700 Feet

Legend

- Combined Ultimate Grading Limits
- SOCTIIP 2004 Isolated Waters
- SOCTIIP 2004 Waters
- Sample Refined Grading Limits
- SAMP First Order Ephemeral Drainages

SAMP Hydrogeomorphic Surfaces

- Non-Floodplain Dissected
- Bankfull Floodplain
- Active Floodplain
- Floodplain Terrace
- San Juan/San Mateo Watershed Boundary

KEY MAP

SHEET 1

SHEET 2

FE/7-7
FE/7-8
FE/7-8A
FE/7-9
FE/7-8B
FE/7-10
FE/7-11
FE/7-12
FE/7-13
FE/7-14
FE/7-15
FE/7-16
FE/7-17
FE/7-18
FE/7-19
FE/7-20
FE/7-21
FE/7-22
FE/7-23
FE/7-24
FE/7-25
FE/7-SAN MATEO CREEK
FE/7-SAN MATEO MARSH
FE/7-SAN MATEO MARSH-EAST OF I5
FE/7-SAN ONOFRE CREEK
FE/7-VM16
FE/7-VM17
FE/7-VM18
FE/7-VM19
FE/7-VM20
FE/7-VP3
FE/7-VP4
FE/7-VP5
FE/7-VP6
FE/7-VP7
FE/7-VP8
FE/7-VP9
FE/7-POND 1
FE/7-POND 2
FE/7-VP12
FEM-15
FEM-16
FEM-17
FEM-18
FEM-19
FEM-20
GABINO CREEK
CRISTIANITOS
C-13
SEGUNDA DESHECHA
C-14
SEGUNDA DESHECHA

c:GIS PROJECTS/0019-9FOOT/2004delineation/080644CorpsSouthSAMPHGM.mxd July 13, 2004 (IC)

SOCTIIP AERIAL OVERLAY

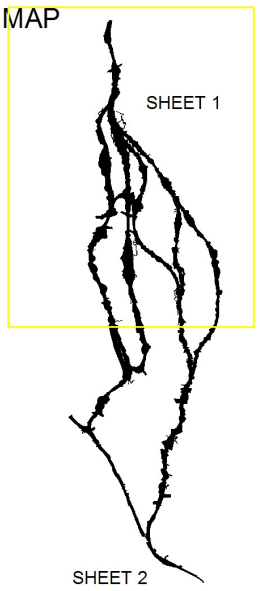
Legend

- Combined Ultimate Grading Limits
- Sample Refined Grading Limits
- San Juan/San Mateo Watershed Boundary

N
W E
S

700 350 0 700 Feet

KEY MAP



Assumed to be dry in a 100-year event

c:GIS PROJECTS\0019-9FOOT\2004delineation\080604AerialNorth.mxd August 6, 2004 (IC)

SOCTIIP AERIAL OVERLAY

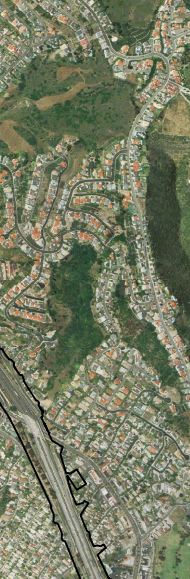
SEGUNDA DESHECHA

N

700 350 0 700 Feet

Legend

- Combined Ultimate Grading Limits
- Sample Refined Grading Limits
- San Juan/San Mateo Watershed Boundary



KEY MAP

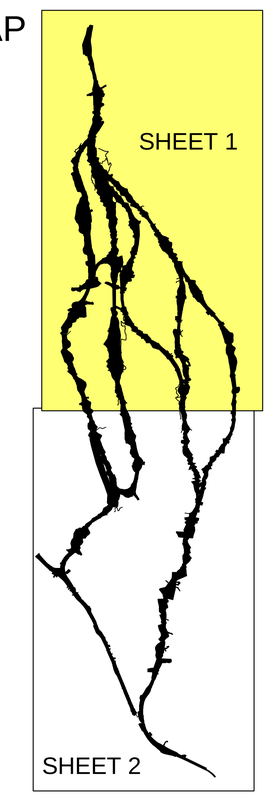
c:GIS PROJECTS/0019-9FOOT/2004delineation/0713044CorpsSouthSAMPHGM.mxd July 13, 2004 (IC)

SOCTIIP JURISDICTIONAL DELINEATION: 8/09/04 CORPS

Legend

- Combined Ultimate Grading Limits
- OHWM ("w" indicates wetland)
- Wetland Data Sheets
- No OHWM, Bed or Bank
- Jurisdictional Wetland
- Isolated wetland
- Non-verified 1995 Data provided by MBA
- Verified Data Provided by Rancho Mission Viejo
- Isolated Waters
- Jurisidictonal Waters
- Sample Refined Grading Limits
- Non-jurisdictional Feature

KEY MAP



700 350 0 700 Feet

FE/C/7-WETLAND 1
FE/C/7-1
FE/C/7-WETLAND 2
FE/C/7-2
FE/C/7-3
FE/C/7-4
FE/7-1
C-1
FE/7- 2
FE-1
C-WETLAND 1
C-2
C-3
FE-2
FE-WETLAND 1
FE-2A
FE-POND 1
FE-2B
FE-3
7-1
7-2
C-4
FE-4
FE-WETLAND 2
CANADA CHIQUITA
FE-5
FE-6
7-3
C-5
FEW-1
7-4
C-WETLAND 2
C-6
7-5
7-6
FE-7
FEM-1
C-SAN JUAN CREEK
Assumed to be connected in a 100-year event
C-6B
C-POND 1
7-7
7-SAN JUAN CREEK
7-8
FEM-2
FEM-3
FEM-VM7
FEM-VM8
FEM-VM9
FEM-VM10
FEM-VM11
FEM-VM12
FEM-POND 1
FEM-SEEP 1
FEM-SAN JUAN CREEK
7-9
7-11
C-7
C-8
C-9
7-10
7-12
FEW- SAN JUAN CREEK
FEM-10
7-13
FEW-2
FE/7-3
C-10
7-14
FEM-11
C-11
7-15
FE/7-4
FE/7-5
FE/7-6
FEM-12
C-12
7-16
FEM-13
FEM-14

SOCTIIP JURISDICTIONAL DELINEATION: 8/09/04 CORPS

700 350 0 700 Feet

Legend

- Combined Ultimate Grading Limits
- Sample Refined Grading Limits
- OHWM ("w" indicates wetland)
- Wetland Data Sheets
- No OHWM, Bed or Bank
- Jurisdictional Wetland
- Jurisidictonal Waters
- Isolated wetland
- Isolated Waters
- Non-verified 1995 Data provided by MBA
- Verified Data Provided by Rancho Mission Viejo

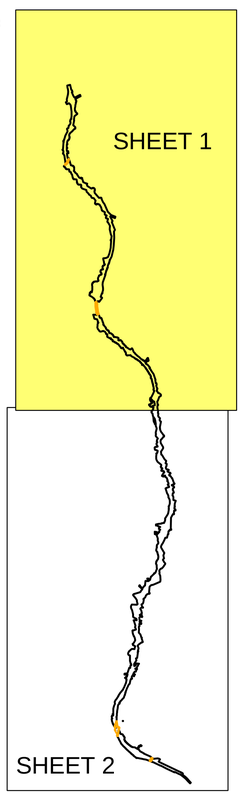
KEY MAP

c:GIS PROJECTS/0019-9FOOT/2004delineation/080604CorpsSouth.mxd July 13, 2004 (IC)

SOCTIIP JURISDICTIONAL DELINEATION: 8/9/04 CDFG

700 350 0 700 Feet

KEY MAP



Legend

- Streambed Width ("R" indicates Riparian)
- No OHWM, Bed or Bank
- Unvegetated Streambed
- Riparian Vegetation
- Non-verified 1995 Data provided by MBA
- Verified Data Provided by Rancho Mission Viejo
- Grading Limits
- Temporary Impact Limits

c:GIS PROJECTS/0019-9FOOT/2004delineation/080604CDFGNorth.mxd June 11, 2004 (IC)

SOCTIIP JURISDICTIONAL DELINEATION: 8/9/04 CDFG

700 350 0 700 Feet

Legend

- Streambed Width ("R" indicates Riparian)
- No OHWM, Bed or Bank
- Unvegetated Streambed
- Riparian Vegetation
- Non-verified 1995 Data provided by MBA
- Verified Data Provided by Rancho Mission Viejo
- Grading Limits
- Temporary Impact Limits

KEY MAP

SHEET 1

SHEET 2

C-13

Segunda Deshecha

C-14

Segunda Deshecha

FE/7-7

FE/7-8

FE/7-8A

FE/7-8B

FE/7-9

FE/7-10

FE/7-11

FE/7-12

FE/7-13

FE/7-14

FE/7-15

FE/7-16

FE/7-17

FE/7-18

FE/7-19

FE/7-20

FE/7-21

FE/7-22

FE/7-23

FE/7-24

FE/7-25

FE/7-SAN MATEO CREEK

FE/7-SAN MATEO MARSH

FE/7-SAN MATEO MARSH-EAST of I5

FE/7-SAN ONOFRE CREEK

GABINO CREEK

CRISTIANITOS

FEM-15

FEM-16

FEM-17

FEM-18

FEM-19

FEM-20