JURISDICTIONAL DELINEATION REPORT

SACRAMENTO TRAP RANGE PROPERTY

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SACRAMENTO TRAP RANGE PROPERTY

CITY OF SACRAMENTO SACRAMENTO COUNTY, CALIFORNIA

FEBRUARY 2005
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6/16/06

Prepared For:

CITY OF SACRAMENTO
Economic Development Department
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INTRODUCTION

This report presents the results of a delineation of waters of the United States, including wetlands, which potentially may be regulated by the U.S. Army Corps of Engineers under the authority of Section 404 of the Federal Clean Water Act. The study area for this delineation of waters of the United States is a site currently occupied by the Sacramento Trap Range.

LOCATION

The approximately 20.4-acre study area is located in Section 31, Township 9 North, Range 5 East, Sacramento County, California. The parcel can be found at UTM 639,386.23 M E; 4,276,969.62 M N (Zone 10) and is portrayed on the Rio Linda, California 7. 5 Minute Series Quadrangle. Figure 1 is a vicinity map.

The site can be reached by driving east on Business 80 and exiting north at Fulton Avenue. The study area is situated to the north of the west-bound off-ramp of Business 80, and to the east of Fulton Avenue.

METHODOLOGY

This delineation was performed in accordance with the 1987 **"Corps of Engineers Wetlands Delineation Manual"**[1] and Sacramento District's **"Minimum Standards for Acceptance of Preliminary Wetlands Delineations"** dated November 30, 2001. Corps' regulations (33 CFR 328) were used to determine the presence of waters of the United States other than wetlands. The **"National List of Plant Species That Occur in Wetlands: California (Region 0)"**[2] was used to determine the wetland indicator status of plants observed in the study area.

Field surveys were initially conducted on February 8, 2005. Wetland polygons, channels, and data point locations were surveyed utilizing a Trimble GPS Data Logger with sub-meter accuracy. The original delineation map was prepared by digitizing these features and layering the GPS survey data over a May 2002, ortho-aerial photography. The study area was again surveyed on June 1, 2006 to update the delineation based on 2006 climatic conditions. An

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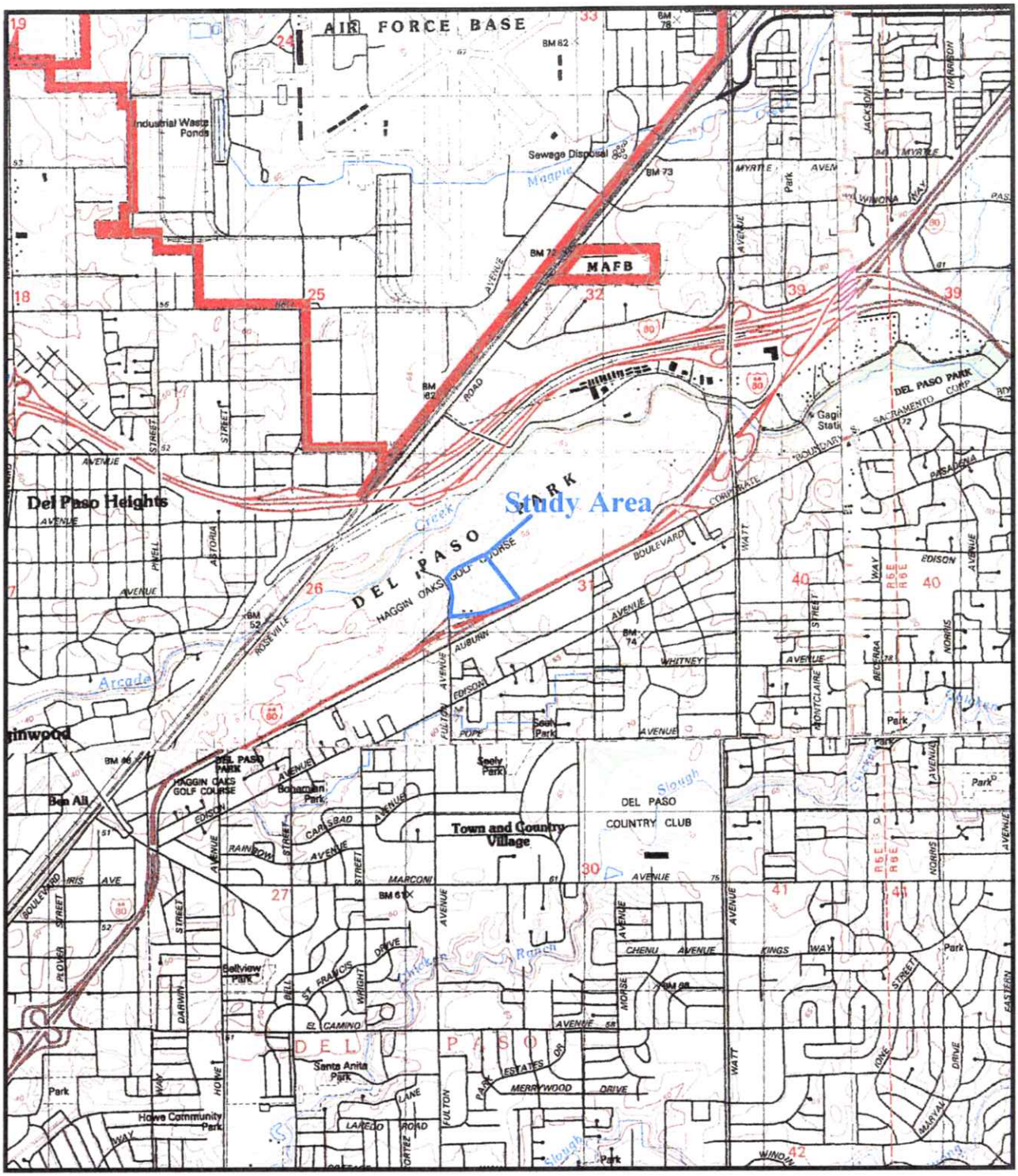
[1] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station. Vicksburg, Miss.

[2] Reed, P.B. 1988. National List of Plant Species That Occur In Wetlands: California (Region 0). Biological Report 88(26.10). May 1988. National Ecology Research Center, National Wetlands Inventory, U.S. Fish & Wildlife Service, St. Petersburg, Florida.

Figure 1

Sacramento Trap Range Property Vicinity Map



N

Source: USGS Rio Linda, California 7.5 Minute Quadrangle. N.T.S.

additional seasonal wetland swale was surveyed at that time and the delineation map was revised accordingly.

Detailed data on vegetation, soils, and hydrology characteristics were taken in the field. Data sheets documenting the basis for determining which areas are wetland or upland are provided in Appendix A.

GENERAL SITE CONDITIONS

The study area is situated on gently rolling terrain at an elevation of approximately 65 feet. The Haggin Oaks Golf Course occupies most of the abutting lands to the west, north, and east, while Business 80 lies directly to the south. Most of the surrounding land uses are commercial or urban in nature. The site drains to the northwest towards Arcade Creek, which bisects the golf course and flows to the west. The study area houses an operating trap range that was established in 1915. The facility's parking lots, buildings, and shooting stations are located on the western half of the parcel.

Construction of the shooting range and the trap club's practice of periodically scraping the site to recover lead shot have significantly modified the site's original topography and degraded the plant communities.

The dominant plant community within the study area is non-native annual grasslands. The most common plant species are non-native annual forbs and grasses such as soft chess (*Bromus mollis*), medusa-head (*Taeniatherum caput-medusae*), cut-leaf geranium (*Geranium dissectum*), rip-gut brome (*Bromus diandrus*), and filaree (*Erodium botrys*). Other common species include wild oats (*Avena sp.*), perennial rye (*Lolium perenne*), winter vetch (*Vicia villosa*), and black mustard (*Brassica nigra*).

The study area contains several water features including a pair of channels and three seasonal wetlands. Surface water leaving the site flows through culverts onto Haggin Oaks Golf Course to Arcade Creek to the west. Arcade Creek flows into the Natomas East Main Drainage Canal, which is tributary to the navigable Sacramento River.

According to the "Soil Survey of Sacramento County, California" four different soil map units occur within the study area. The first is San Joaquin fine sandy loam, 0 to 3% slopes (211), which is a moderately deep, moderately well drained soil derived from granitic rocks at an

elevation of 20 to 90 feet. It was formed in alluvium and possesses a hardpan at about 17 inches. San Joaquin fine sandy loam, 3-8% (212) is the second map unit within the study area. It also is a moderately deep, moderately well drained soil overlying a hardpan. Like the previous soil, it was derived from granitic rock in alluvium. The third type is Urban Land (227), which is typically covered by 90% impervious surface. In this case, the map unit is composed of asphalt and fill associated with Business 80 which parallels the southern edge of the study area. The last mapped soil is Xerarents-Urban land-San Joaquin complex, 0-5% slopes (240). This unit is approximately 45% Xerarents, 25% Urban land, and 15 % San Joaquin soil. Xerarents are moderately deep to very deep and well drained with a weakly cemented hardpan at 60 inches. Approximately 15% of this unit is typically composed of inclusions of Clear Lake soils (usually in basins), Galt soils and Durixeralfs (on low terraces), and Red Bluff and Redding soils (on high dissect terraces).

Though none of the above soils are listed in the June 1991, "Hydric Soils of the United States," Galt inclusions associated with 240 and Dierssen inclusions associated with 212 are classified as hydric in the Natural Resources Conservation Service's dated March 17, 1992. Figure 2 is showing soil mapping units within the study area.

Field characterization of soil types within the study area is problematic due to routine scraping of the site. This on-going practice has been regularly performed by the trap club to collect lead shot, and has probably resulted in truncated soil profiles.

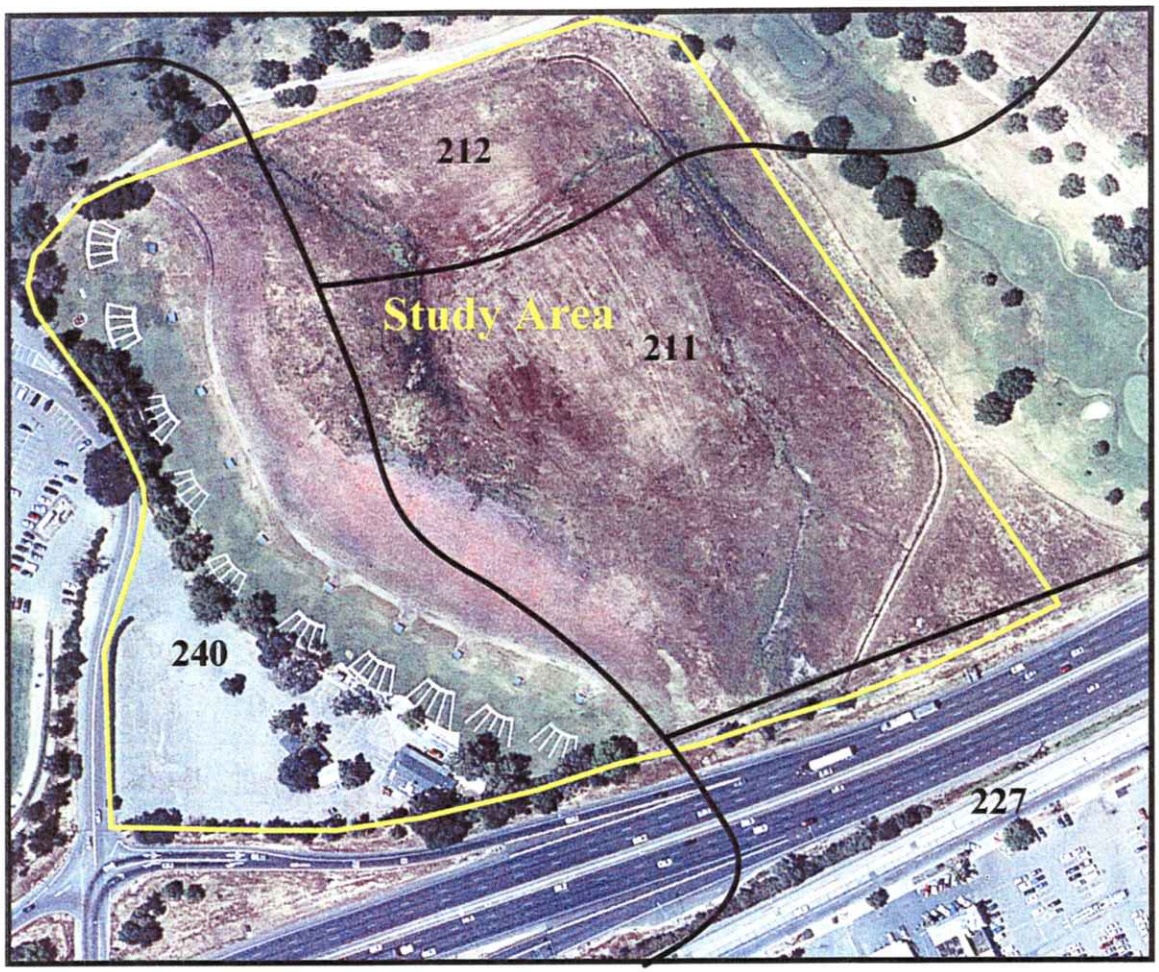
FINDINGS

We identified a total of 0.8240 acre of waters and wetlands in the study area. This total was comprised of 0.6246 acre of seasonal wetland swales and 0.1994 acre of excavated channel. Appendix B provides a delineation map showing the study area boundary, location of representative data points, and location and size of wetlands and other waters of the United States. Appendix C provides a list of plant species observed in the study area including their status as wetland indicator species.

Four seasonal wetland swales with a combined area of approximately 0.6246 acre were delineated. Wetland swales typically occur in linear sloping drainages that lack a defined bed and bank, but support a relatively homogenous wetland plant community. Dominant plants within these seasonal wetlands include perennial rye (*Lolium perenne*), iris-leaf rush (*Juncus xiphioides*), toad rush (*Juncus bufonius*) and Mediterranean barley (*Hordeum hystix*); common

Figure 2

Sacramento Trap Range Property Soils Map
Sacramento County, California



Map Symbol	Mapping Unit	Subgroup	Drainage Class
211	San Joaquin fine sandy loam, 0-3% slopes	Abruptic Durixeralfs	Well drained
212	San Joaquin fine sandy loam, 3-8% slopes	Abruptic Durixeralfs	Well drained
227	Urban land	N.A.	N.A.
240	Xerarents-Urban land-San Joaquin complex, 0-5% slopes	Xerarents/N.A./ Abruptic Durixeralfs	Well drained/N.A./ Well drained

Source: USDA, Soil Conservation Service. April 1993. Soil Survey of Sacramento County, California. N.T.S.

associate plants include Fitch's spikeweed (*Hemizonia fitchii*), and curly dock (*Rumex crispus*). Soils in these areas are sandy loams with matrices of approximately 10YR 3/1 with common, distinct mottles (10YR 3/4), and aquic moisture regime. Wetland hydrology indicators included observed ponding and algal matting.

SW4 is the seasonal wetland that was delineated in June 2006. At the time of the original field survey, this wetland did not exhibit the requisite vegetation and hydrology indicators to be delineated as wetlands. SW4 did exhibit these indicators in June 2006. It is our opinion that the reason for this is that the precipitation during the winter and spring of 2006 was substantially above normal while the precipitation preceding the 2004 field survey was approximately normal. Because of this, it is quite possible that this area may not exhibit wetland characteristics in years where the rainfall is normal or less than normal. Nonetheless, we delineated as a wetland because Corps of Engineers staff have indicated that they verify wetland delineations based on the observed conditions at the time the delineation is verified.

Approximately 0.1994 acre of channel is mapped within the study area. This feature displays a distinct bed and bank and an ordinary high water mark characterized by shelving and the destruction of terrestrial vegetation. Dominant plants observed within the channel include cattails (*Typha angustifolia*) and perennial rye. Common associate plants include dallis grass (*Paspalum dilatatum*) and Bermuda grass (*Cynodon dactylon*). Observed wetland hydrological indicators include ponded water and algal matting. The soils are sandy loams with matrices of 5YR 3/1 without mottles.

The delineated areas represent those features that can be considered potentially jurisdictional waters of the United States because of their physical and biological characteristics. Whether they are, in fact, jurisdictional also depends on their hydrologic relationship to downstream waters. The Corps of Engineers maintains jurisdiction under the Section 404 of the Clean Water Act over navigable waters of the United States, interstate waters, their tributaries and wetlands adjacent to these waters.

All of the delineated wetlands and the excavated ditch exit the study area through a culvert and flow onto Haggin Oaks Golf Course and eventually into Arcade Creek. Arcade Creek flows into the Natomas East Main Drainage Canal, which is tributary to the navigable Sacramento River. Based on this, it appears that the delineated wetlands and excavated ditch are part of a tributary system to navigable waters of the United States and, therefore, would be considered jurisdictional by the Corps of Engineers.

These conclusions represent the professional opinion of Gibson & Skordal, LLC. Ultimately, the Corps of Engineers is responsible for determining the jurisdictional status of features within the study area.

APPENDIX A

DATA FORMS

ROUTINE WETLAND DETERMINATION
DATA FORM

Project/Site: Sacramento Trap Range
Applicant/Owner: City of Sacramento
Investigator(s): TS/MH

Date: 8 Feb 05
City/County: Sacramento
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: Aerial signature
Transect ID: 1
Data Point ID: DP1

VEGETATION

Plant Species Dominant (D) - Associate (A)		Stratum	Indicator
1. Aira caryophyllea	D	H	UPL
2. Lolium perenne	D	H	FAC
3. Geranium dissectum	A	H	UPL
4. Brassica nigra	A	H	UPL
5. Bromus diandrus	A	H	UPL
6. Vicia villosa	A	H	--
7. Rumex crispus	A	H	FACW-
8.			

Plant Speices Dominant (D) - Associated (A)	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 1/2 = 50%

Remarks:

HYDROLOGY

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

___ No Recorded Data Available

Field Observations:

Depths 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/Organic Detritus
- ___ 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 indicators present.

Map Unit Name (Series and Phase): San Joaquin fine sandy loam 0-3% slopes

Drainage Class: Well drained

Field Observations

Taxonomy (Subgroup): Abruptic Durixeralfs

Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
6-8	10YR 3/2	NA	None	Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretion in upper 3 inches
- ___ 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 indicators present

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No)

Wetland Hydrology Present? Yes (No)

Hydric Soils Present? Yes (No)

Is this Data Point Within a Wetland? Yes (No)

Remarks: Data point #1

ROUTINE WETLAND DETERMINATION
DATA FORM

Project/Site: Sacramento Trap Range	Date: 8 Feb 05
Applicant/Owner: City of Sacramento	City/County: Sacramento
Investigator(s): TS/MH	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID: Aerial photo signature
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 2
Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Data Point ID: DP 2

VEGETATION

Plant Species Dominant (D) - Associate (A)		Stratum	Indicator
1. Lolium perenne	D	H	FAC
2. Bromus mollis	D	H	FACU-
3. Lactuca serriola	A	H	FAC
4. Bromus diandrus	A	H	UPL
5. Rumex crispus	A	H	FACW-
6.			
7.			
8.			

Plant Speices Dominant (D) - Associated (A)	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 1/2 = 50%

Remarks:

HYDROLOGY

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

___ No Recorded Data Available

Field Observations:

Depths 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/Organic Detritus
- ___ 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 indicators present

Map Unit Name (Series and Phase): San Joaquin fine sandy loam 0-3% slopes

Drainage Class: Well drained

Taxonomy (Subgroup): Abruptic Durixeralfs

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5	10YR 3/2 to 2/2	N/A	None	Loam
>5	10YR 3/2	10YR 3/4	Common / Distinct	Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretion in upper 3 inches
- ___ 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 MnO_2 stains / No indicators present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No)	Is this Data Point Within a Wetland?	Yes (No)
Wetland Hydrology Present?	Yes (No)		
Hydric Soils Present?	Yes (No)		

Remarks: DP#2

ROUTINE WETLAND DETERMINATION
DATA FORM

Project/Site: Sacramento Trap Range	Date: 8 Feb 05
Applicant/Owner: City of Sacramento	City/County: Sacramento
Investigator(s): TS/MH	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID: Ditch
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 3
Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Data Point ID: DP 3A

VEGETATION

Plant Species Dominant (D) - Associate (A)	Stratum	Indicator	Plant Speices Dominant (D) - Associated (A)	Stratum	Indicator
1. Typha sp. D	H	OBL	9.		
2. Salix gooddingii D	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-). $\frac{2}{2} = 100\%$

Remarks:

YDROLOGY

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

__ No Recorded Data Available

ield Observations:

Depths of Surface Water: 2 (in.)

epth 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/Organic Detritus
- __ 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:

Map Unit Name (Series and Phase): San Joaquin fine sandy loam 0-3% sloped

Drainage Class: Well drained

Taxonomy (Subgroup): Abruptic Durixeralfs

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8	5YR 3/1	N/A	none	Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ✓ Sulfidic Odor
- ✓ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretion in upper 3 inches
- ___ 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
Wetland Hydrology Present?	(Yes)	No
Hydric Soils Present?	(Yes)	No

Is this Data Point Within a Wetland? (Yes) No

Remarks: Det point 3A

ROUTINE WETLAND DETERMINATION
DATA FORM

Project/Site: Sacramento Trap Range	Date: 8 Feb 05
Applicant/Owner: City of Sacramento	City/County: Sacramento
Investigator(s): TS/MH	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID: Upland adjacent to ditch
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 3
Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Data Point ID: 3B

VEGETATION

Plant Species Dominant (D) - Associate (A)	Stratum	Indicator	Plant Speices Dominant (D) - Associated (A)	Stratum	Indicator
1. Bromis mollis D	H	FACU-	9.		
2. Bromis diandrus D	H	UPL	10.		
3. Vicia villosa	H	—	11.		
4. Brassica nigra	H	UPL	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0/2 = 0%

Remarks:

HYDROLOGY

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

___ No Recorded Data Available

Field Observations:

Depths 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/Organic Detritus
- ___ 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: * Possible rhizospheres

Map Unit Name (Series and Phase): San Joaquin fine sandy loam 0-3% slopes

Drainage Class: Well drained

Taxonomy (Subgroup): Abruptic Durixeralfs

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
8	10YR 3/2 to 3/3	10YR 3/4	common/distinct	Sandy-loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretion in upper 3 inches
- ___ 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)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Data Point Within a Wetland? Yes (No)

Remarks: DP 3B

ROUTINE WETLAND DETERMINATION DATA FORM

Project/Site: Sacramento Trap Range	Date: 8 Feb 05
Applicant/Owner: City of Sacramento	City/County: Sacramento
Investigator(s): TS/MH	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID: Seasonal wetland swale
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 4
Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Data Point ID: DP 4A

VEGETATION

Plant Species Dominant (D) - Associate (A)	Stratum	Indicator	Plant Speices Dominant (D) - Associated (A)	Stratum	Indicator
1. Juncus xiphioides D	H	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-). 1/1 = 100%

Remarks:

HYDROLOGY

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

___ No Recorded Data Available

Field Observations:

Depths of Surface Water: 3 (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/Organic Detritus
- ___ 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:

Map Unit Name (Series and Phase): San Joaquin fine sandy loam 0-3% slopes

Drainage Class: Well drained

Taxonomy (Subgroup): Abruptic Durixeralfs

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
6-8	10YR 3/1	10YR 3/4	Comm/Distinct	Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ✓ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretion in upper 3 inches
- ___ 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	Is this Data Point Within a Wetland? (Yes) No
Wetland Hydrology Present?	(Yes)	No	
Hydric Soils Present?	(Yes)	No	

Remarks: DP 4A

ROUTINE WETLAND DETERMINATION
DATA FORM

Project/Site: Sacramento Trap Range	Date: 8 Feb 05
Applicant/Owner: City of Sacramento	City/County: Sacramento
Investigator(s): TS/MH	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID: Adjacent to sens. wetland
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID: 4
Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Data Point ID: 4B

VEGETATION

Plant Species Dominant (D) - Associate (A)	Stratum	Indicator	Plant Speices Dominant (D) - Associated (A)	Stratum	Indicator
1. Bromus diandrus D	H	UPL	9.		
2. Juncus xiphioides D	H	OBL	10.		
3. Geranium dissectum	H	UPL	11.		
4. Brassica nigra	H	UPL	12.		
5. Lupinus fetus	H	UPL	13.		
6. Bromus mollis	H	FACU-	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 1/2 = 50%

Remarks:

HYDROLOGY

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

___ No Recorded Data Available

Field Observations:

Depths 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/Organic Detritus
- ___ 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 indicators present.

Map Unit Name (Series and Phase): San Joaquin fine sandy loam 0-3% slopes

Drainage Class: Well drained

Taxonomy (Subgroup): Abruptic Durixeralfs

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
6-8	10YR3/3	10YR3/4	Common / Faint	Sandy loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretion in upper 3 inches
- ___ 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 MnO_2 staining / No indicators present

WETLAND DETERMINATION

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

Is this Data Point Within a Wetland? Yes (No)

Remarks: OP 4B

APPENDIX B

WETLAND DELINEATION MAP

APPENDIX C

PLANT LIST

PARTIAL LIST OF PLANTS OBSERVED ON THE SACRAMENTO TRAP RANCH PROPERTY AND THEIR STATUS AS WETLAND INDICATOR SPECIES

Scientific Name	Common Name	Status [1&2]
Avena fatua	wild oats	UPL
Bidens sp.	beggar's tick	---
Brassica nigra	black mustard	UPL
Bromus diandrus	rip-gut grass	UPL
Bromus mollis	soft chess	FACU-
Centaurea solstitialis	yellow star-thistle	UPL
Cirsium vulgare	bull thistle	FACU
Cynodon dactylon	Bermuda grass	FAC
Cyperus eragrostis	tall flatsedge	FACW
Eleocharis macrostachya	creeping spikerush	OBL
Erodium botrys	filaree	UPL
Geranium dissectum	cut-leaf geranium	UPL
Hemizonia fitchii	Fitch's spikeweed	UPL
Hordeum hystrix	Mediterranean barley	FAC
Juncus bufonius	toad rush	FAC+
Juncus xiphioides	iris-leaf rush	OBL
Lactuca serriola	prickly lettuce	FAC
Lolium perenne (L. multiflorum)	perennial ryegrass	FAC*
Paspalum dilatatum	dallis grass	FAC
Plantago lanceolata	English plantain	FAC-
Polypogon monspeliensis	annual rabbit-foot grass	FACW+
Quercus lobata	valley oak	FAC*
Quercus wislizenii	interior live oak	UPL
Rumex crispus	curly dock	FACW-
Salix hindsiana (S. sessilifolia)	sandbar willow	FACW
Taeniatherum caput-medusae	medusa-head	UPL
Typha angustifolia	narrow-leaf cattail	OBL
Vicia villosa	winter vetch	---

[1] Reed, P.B. 1988. National List of Plant Species That Occur in Wetlands: California (Region 0). Biological Report 88(26.10) May 1988. National Ecology Research Center, National Wetland Inventory, U.S. Fish and Wildlife Service, St. Petersburg, Fl.

[2] OBL = obligate; FACW = facultative wetland; FAC = facultative; FACU = facultative upland; UPL = upland; and NI = no indicator.