APPENDIX L

FIELD REPORT TO MAP POTENTIAL WATERS OF THE UNITED STATES

R E P O R T

FIELD REPORT TO MAP POTENTIAL WATERS OF THE UNITED STATES FOR THE GREGORY CANYON LANDFILL PROJECT

Prepared for

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SECTION 1 INTRODUCTION

This report describes waters of the U.S. mapped by URS Corporation (URS) at the Gregory Canyon Landfill project site. The project site is located in northern San Diego County due south of State Route 76 (SR 76) at a location approximately 3.5 miles east of the intersection for SR 76 with Interstate 5 (I-5). The project location is shown in Figure 1. URS focused its efforts in the general vicinity of proposed project facilities, including the landfill, two borrow/stockpile areas, and a bridge crossing of the San Luis Rey River.

Methods used to delineate waters of the U.S. are described in Section 2.0 of this report. The results of mapping waters of the U.S. are described in Section 3.0. Literature cited is presented in Section 4.l0. Tables and figures are presented in separate sections. Appendices A and B contain representative photos of the project area. Appendices C and D contain wetland data sheets prepared during site surveys. Large plates are attached at the end of this report.

SECTION 2 METHODS

2.1 DETERMINATION OF WATERS OF THE UNITED STATES

The project study area has the potential to contain waters of the U.S., including wetlands and other waters of the U.S. subject to jurisdiction pursuant to Section 404 of the Federal Clean Water Act to support future permitting through the U.S. Army Corps of Engineers (Corps) and other agencies. Waters of the U.S. were mapped based on the presence of an ordinary high water mark (OHWM) or the boundary of adjacent wetlands defining their limits as provided at 33 CFR 328.3 and 328.4:

Section 328.3 - Definitions.

For the purpose of this regulation these terms are defined as follows:

*a. The term **"waters of the United States"** means*

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 shellfish 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.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR

123.11(m) which also meet the criteria of this definition) are not waters of the United States.

8. *Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.*

b. *The term **"wetlands"** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*

c. *The term **"adjacent"** means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands."*

d. *The term **"high tide line"** means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.*

e. *The term **"ordinary high water mark"** means that line on the shore established by the fluctuations 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.*

f. *The term **"tidal waters"** means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.*

Section 328.4 - Limits of jurisdiction.

a. ***Territorial Seas.*** *The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)*

b. ***Tidal Waters of the United States.*** *The landward limits of jurisdiction in tidal waters:*

1. *Extends to the high tide line, or*

2. *When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.*

c. ***Non-Tidal Waters of the United States.*** *The limits of jurisdiction in non-tidal waters:*

1. *In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or*

2. *When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.*

3. *When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.*

Guidance from the Corps (2001), *Final Summary Report: Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest*, was also used. Guidance of relevance to this delineation includes consideration that: *"In dryland fluvial systems typical of the desert areas, the most common physical characteristics indicating the OHWM for a channel usually include, but are not limited to: a clear natural scour line impressed on the bank; recent bank erosion; destruction of native terrestrial vegetation; and the presence of litter and debris. For many small desert wash systems, the presence of continuous well-developed upland vegetation in the stream channel is a good indicator that it only conveys surface flow during extremely large storm events and, as a result, would not usually constitute a jurisdictional water of the United States."*

Federal wetlands were mapped based on the presence of wetland hydrology, wetland vegetation, and hydric soils pursuant to guidance from the Federal Manual for Delineating Wetlands (Corps 1987). The project area includes both wetlands within the limits of an OHWM and adjacent wetlands that occur adjacent the limits of waters of the U.S. as defined above. As described in Section 3.0, Federal wetlands on the project site are limited the San Luis Rey River corridor.

2.2 SURVEYS

All surveys were overseen by Bill Magdych, Ph.D. (Professional Wetland Scientist No. 195) of URS. Dr. Magdych participated in a site reconnaissance survey on March 11, 2004 with representatives from Gregory Canyon, Ltd. and Mr. David Barrows. There had been heavy local rains within a few weeks of this survey. Surveys to map waters of the U.S. were performed by URS on April 6 and 8, 2004. These latter mapping surveys were performed by Dr. Magdych, Jim Rocks (botanist), and Ellen Howard (biologist) of URS. Soil pits were excavated at various locations to determine the presence or absence of wetland hydrology and hydric soil conditions. GPS waypoints were collected at various locations, including the locations of soil pits for reference purposes. Differential GPS with sub-meter accuracy was not used. The published accuracy of the GPS units used is approximately 50 feet for non-WAAS enabled points, and approximately 10 feet for WAAS enabled points. The GPS unit used was an IPAQ-based system with a Fortuna Clip-on Bluetooth receiving unit that allowed display of aerial photographs on the display screen along with GPS positional information. These GPS points were used as collateral information in mapping wetland boundaries. Additional collateral information included color aerial photos from March 2002 at scales of 1 inch = 200 feet and 1 inch = 500 feet, and topographic contour

maps. Photos were taken at representative locations, generally at the GPS waypoints, to assist in boundary determinations and documentation of findings. Boundaries were mapped in the field and refined in the office based on comparison of the various collateral material.

SECTION 3 RESULTS

3.1 SAN LUIS REY RIVER

This study area includes the San Luis Rey River corridor at the vicinity of the proposed bridge crossing. This area was surveyed on April 8, 2004. Waypoints 1 through 34 from April 8 were taken at various locations in the river corridor and at the edge of the primary floodplain at key areas of interest. Refer to Figures 2 and 3, and Plates 1 and 2 for the locations of these waypoints. Representative photos taken at these locations are presented in Appendix A. Table 1 lists details for each location. The San Luis Rey River consists of a central channel with wetlands within the limits of the OHWM for the river. The north side of the river is bounded by a terrace that may be a historic fill within the floodplain or a protected natural terrace. The south side of the river consists of an OHWM, adjacent wetlands, and a series of upland terraces that are natural features. The boundaries of waters of the U.S., which are all wetlands in this case, are mapped on Figures 2 and 3, and Plates 1 and 2. Indicators of the OHWM and wetlands were distinct within this study area. These conditions are typical of this reach of the San Luis Rey River.

Waypoints 18-20 were taken along the edge of the San Luis Rey River at a high terrace on the south side of the river. This location is in the vicinity of the downslope end of Gregory Canyon adjacent the San Luis Rey River. The was no OHWM associated with the swale from Gregory Canyon at the limit of the southern OHWM to the San Luis Rey River. This location is an old terrace of the river that is dominated by older riparian trees (willows and cottonwood); however, the understory on the terrace supports upland species. There were no indicators of wetland hydrology or hydric soils on the terrace, which was 5 to 10 feet above the San Luis Rey River at its lowest elevation. The San Luis Rey River had a clear OHWM in this area. Therefore, there is no channel associated with Gregory Canyon in this area that is a waters of the U.S.

3.2 GREGORY CANYON AND BORROW/STOCKPILE SITES

This study area included the greater area of Gregory Canyon and nearby areas that are designated for use as borrow/stockpile sites for the planned landfill. This study area included the lands within the project area that are south of the San Luis Rey River corridor. Portions of the landform with the potential to contain waters of the U.S., such as erosion features and rills, were closely examined. This area was surveyed in detail on April 6, 2004. Refer to Figure 2 and Plate 1 for the reference numbers (waypoint numbers) and locations of GPS waypoints taken at key survey locations on this date. Representative photos taken at these locations are presented in Appendix A. Table 2 lists details for each location. Datasheets completed at some reference points are presented in Appendix C. No waters of the U.S., including potential Federal wetlands, were identified within this study area.

Ten waypoints (numbers 1 through 10) were taken at key reference points within the main body of Gregory Canyon on April 6, 2004, beginning at the downslope end of the canyon and working up the canyon to its highest elevations. The canyon contains an approximate central broad swale, with a localized central swale within this broad area. Waypoint 1 is located north of the planned project facilities within the localized central swale. No OHWM is present at this location. This area has older trees and shrubs consisting of cottonwood (Populus fremonti) and mulefat (Baccharis salicifolia); however, the understory is dominated by upland plants. This site did not exhibit indicators of wetland hydrology or

hydric soils. Therefore, waypoint 1 is not waters of the U.S., including wetlands. Similar conditions were observed at waypoints 2 and 3, and these areas are also not wetlands or other waters of the U.S.

Waypoints 4 (a and b), 5, 6, and 7 were similar in nature with respect to the local landform and vegetation, and are within the area of potential effect for the landfill. No OHWM was present and the base and sides of the localized swale was covered with upland non-native grasses. Photos 22 through 24 taken at Waypoint 6 on April 6 clearly show the lack of evidence of water flow and the rocks shown do not show any evidence of flow such as mud marks or polishing. A few coast live oaks (Quercus agrifolia), which are upland trees, and a few isolated shrubs of mulefat and buckwheat (Eriogonum facsiculatum) were present along the swale. There were no indicators of wetland hydrology or hydric soils. There was no evidence of recent flows, even though heavy rains had occurred within a few weeks prior to the survey date, and no evidence of near historic flows that would create a potential OHWM. Therefore, waypoints 4 through 7 are not waters of the U.S.

Waypoint 8 was further up the canyon, in an area of steeper terrain. There was no OHWM present within this area even though it was a localized area of much deeper relative landform incision compared to the areas downstream. The area supports upland coast live oaks, and other upland shrub and herbaceous species. There were no indicators of wetland hydrology or hydric soils. Waypoint 9 is located at a side erosion rill to the main swale. This area also lacked an OHWM or wetland indicators. Waypoint 10 was located near the head of the canyon, and also lacked an OHWM or wetland indicators. Therefore, waters of the U.S. are not present within Gregory Canyon.

Waypoints 11 through 17 were located in a localized swale to the west of the main canyon within an a proposed borrow/stockpile site for the landfill. These areas did not have OHWMs and were dominated by upland scrub species (mixed coastal sage scrub and chaparral species), and both upland non-native and native grasses. Wetland indicators for vegetation, hydrology, and soils were not present at these locations. Therfore, this area does not contain waters of the U.S.

SECTION 4 LITERATURE CITED

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

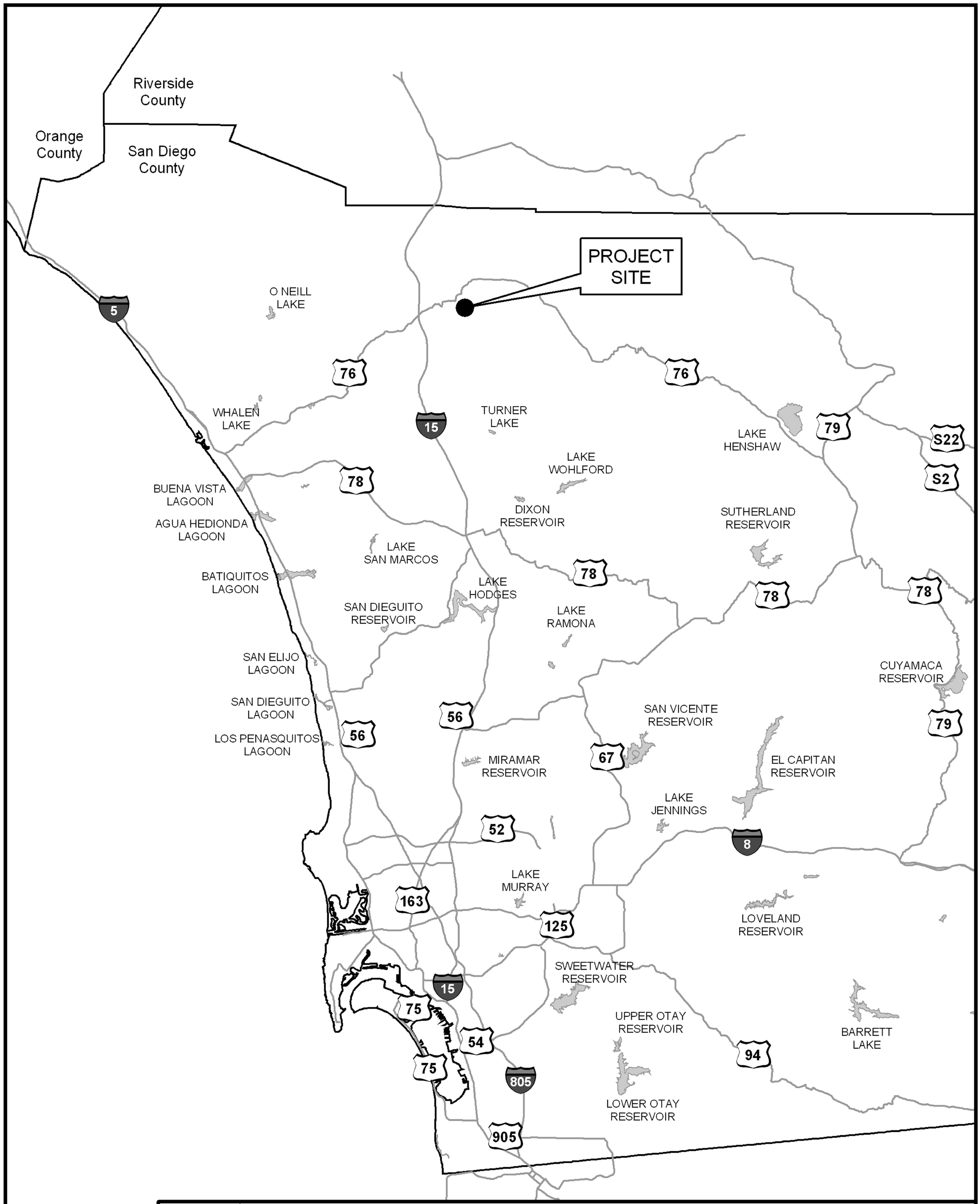
Corps, 2001. Final Summary Report: Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest. U.S. Army Corps Engineers, South Pacific Division.

Table 1
Survey Waypoints from April 8, 2004
for the Gregory Canyon Landfill Project

Longitude	Latitude	Waypoint	Soil Pit?	Comment
-117.115305	33.346426	1	Y	Wetland
-117.115235	33.346306	2	Y	Non-wetland within overall wetland, area included within wetland boundaries
-117.115256	33.346196	3	Y	Wetland
-117.115093	33.345930	4	Y	Not wetland, at boundary
-117.115111	33.345731	5		Not wetland, at boundary
-117.115846	33.345554	6		Wetland
-117.115846	33.345554	7		Wetland
-117.115713	33.345578	8	Y	Wetland
-117.115686	33.345536	9	Y	Not wetland, at boundary
-117.115571	33.345458	10	Y	Upland
-117.115448	33.345331	11	Y	Wetland at boundary
-117.115408	33.345348	12		Upland
-117.114966	33.345855	13		Upland
-117.114668	33.346061	14		Upland
-117.114450	33.346218	15		Upland
-117.114076	33.346305	16		Upland
-117.113513	33.346451	17		Upland
-117.111796	33.347468	18	Y	Upland
-117.111743	33.347493	19		Upland
-117.112023	33.347473	20		Upland
-117.112176	33.347441	21		Upland
-117.112595	33.347437	22		Upland
-117.113336	33.347343	23		Upland
-117.113895	33.347473	24		Upland
-117.114615	33.347028	25		Upland
-117.114995	33.346350	26		Upland
-117.116713	33.344495	27	Y	Upland
-117.116713	33.344495	28		Upland
-117.113568	33.340578	29		Upland
-117.116795	33.339260	30		Upland
-117.117316	33.338631	31		Upland
-117.115636	33.346518	32		Upland
-117.115530	33.346801	33		Upland
-117.114595	33.347938	34		Upland

Table 2
Survey Waypoints from April 6, 2004
for the Gregory Canyon Landfill Project

Longitude	Latitude	Waypoint	Soil Pit?	Comment
-117.110366	33.347020	1	Y	No OHWM; No wetland
-117.110388	33.346350	2	Y	No OHWM; No wetland
-117.109973	33.345805	3	Y	No OHWM; No wetland
-117.110065	33.345565	4a	Y	No OHWM; No wetland
-117.109891	33.345267	4b	Y	No OHWM; No wetland
-117.109535	33.344468	5	Y	No OHWM; No wetland
-117.108320	33.343096	6	Y	No OHWM; No wetland
-117.108291	33.342535	7		No OHWM; No wetland
-117.107870	33.340808	8	Y	No OHWM; No wetland
-117.106573	33.340151	9		No OHWM; No wetland
-117.103916	33.334215	10		No OHWM; No wetland
-117.109003	33.335110	11		No OHWM; No wetland
-117.109385	33.335214	12	Y	No OHWM; No wetland
-117.109853	33.335555	13		No OHWM; No wetland
-117.112343	33.335895	14		No OHWM; No wetland
-117.112523	33.335861	15		No OHWM; No wetland
-117.113188	33.335631	16		No OHWM; No wetland
-117.114833	33.335020	17		No OHWM; No wetland



SOURCES: SANDAG (Roads, Lakes, Rivers), CDFG (Counties Boundaries).

PROJECT LOCATION
GREGORY CANYON

URS

4.25 0 4.25 8.5 Miles

SCALE: 1" = 8.5 miles (1:538,560)

CHECKED BY: MS	DATE: 5-18-04	FIG. NO:
PM: BM	PROJ. NO: 27654025.00020	1

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SOURCES:
AirPhotoUSA
(March 2002 Aerial).

SURVEY WAYPOINTS WITHIN THE ENTIRE STUDY AREA AND MAP OF WATERS OF THE U.S. GREGORY CANYON

URS

500 0 500 1000 Feet

SCALE: 1" = 1000' (1:12000)

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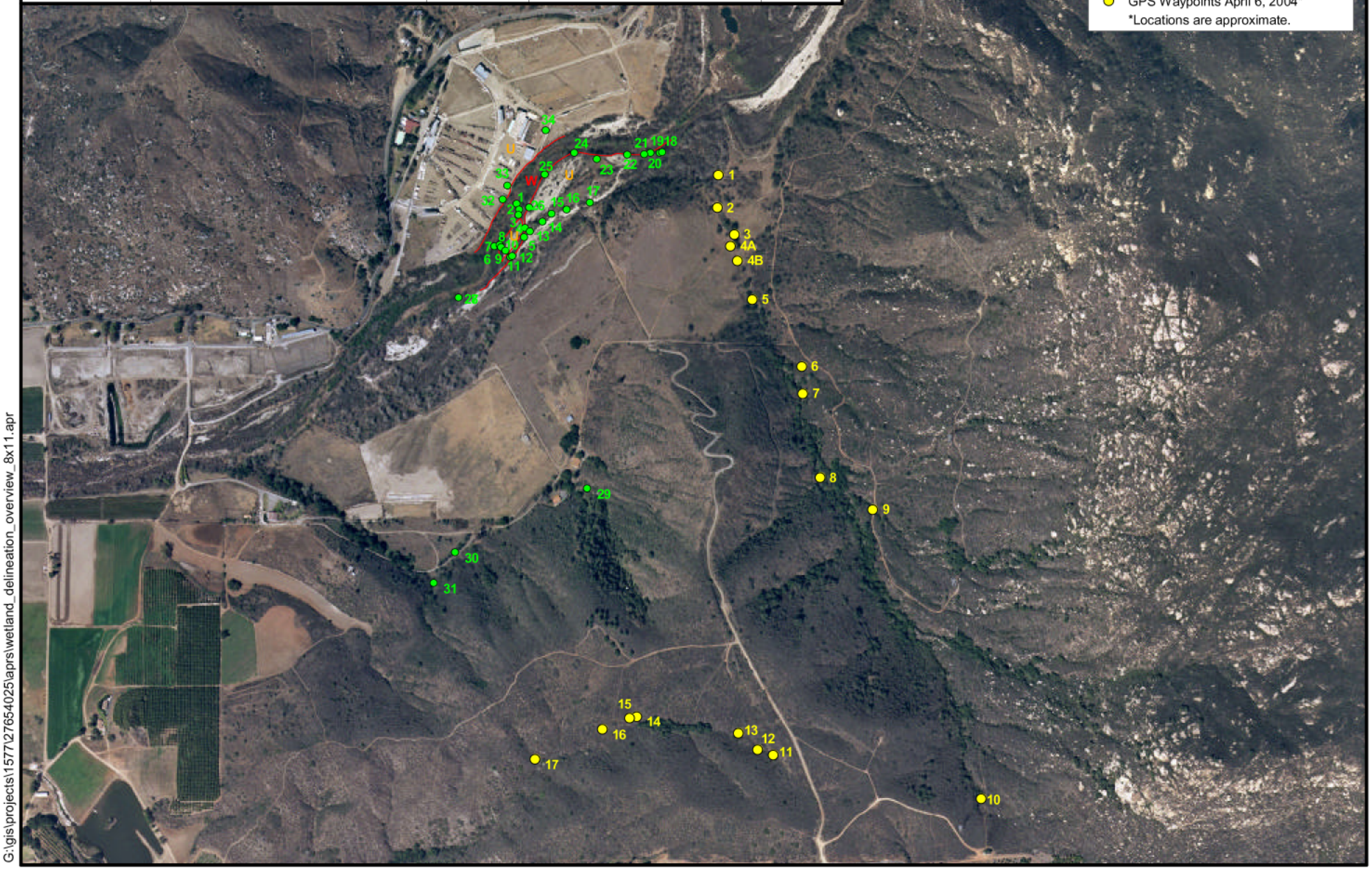

G:\gis\projects\1577\27654025\aprs\wetland_delineation_overview_8x11.apr

SOURCES:
AirPhotoUSA
(March 2002 Aerial).

SURVEY WAYPOINTS AT THE SAN LUIS REY RIVER ON APRIL 8, 2004 AND MAP OF WATERS OF THE U.S. GREGORY CANYON

URS

150 0 150 300 Feet

SCALE: 1" = 300' (1:3600)

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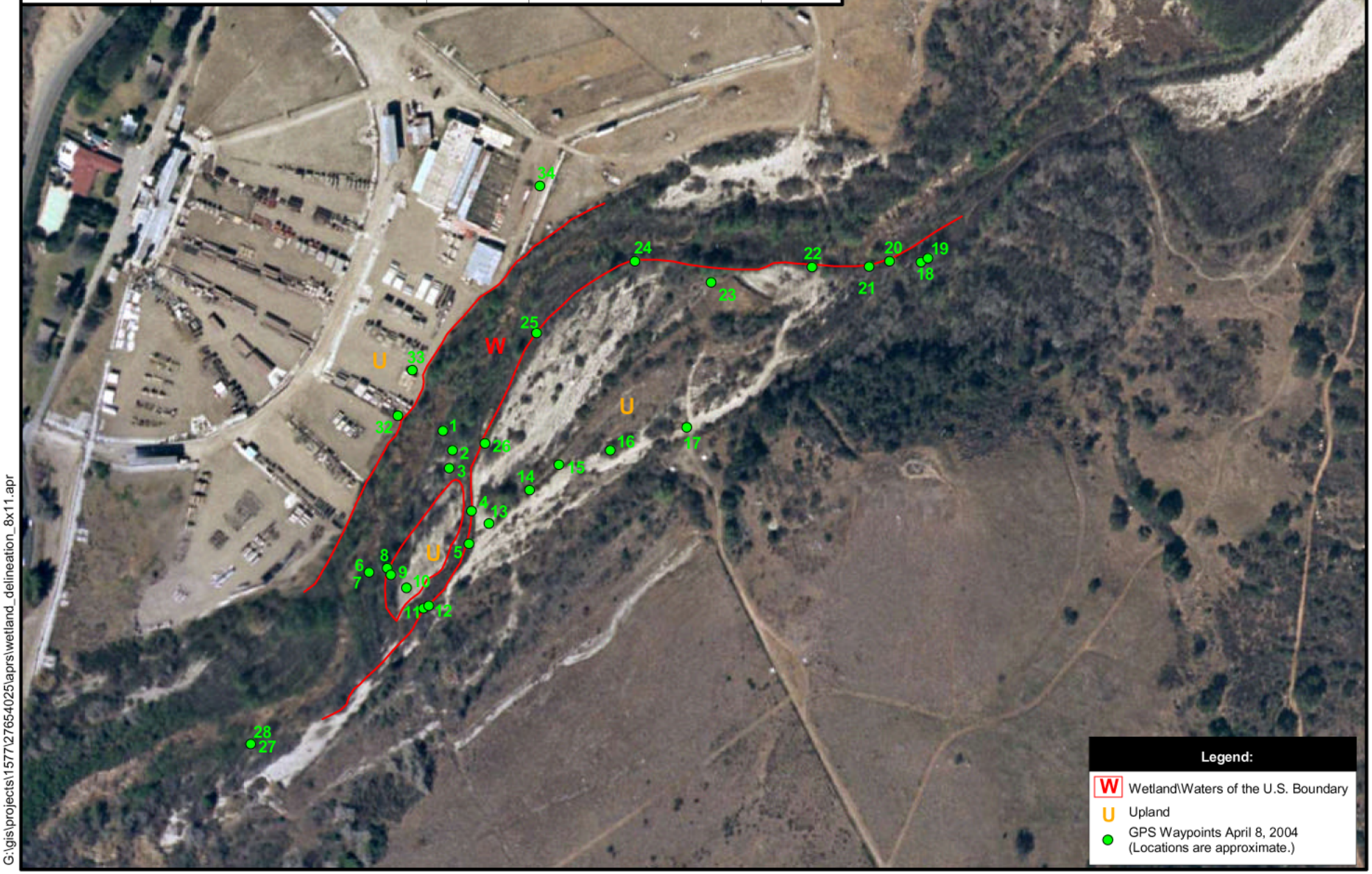


G:\gis\projects\1577\27654025\aprs\wetland_delineation_8x11.apr

Photo 1. Waypoint 1

Photo 2. Waypoint 1

Photo 3. Waypoint 1

Photo 4. Waypoint 1 soil pit

Photo 5. Waypoint 2

Photo 6. Waypoint 2

Photo 7. Waypoint 2

Photo 8. Waypoint 2 soil pit

Photo 9. Waypoint 3

Photo 10. Waypoint 3 soil pit

Photo 11. Waypoint 4

Photo 12. Waypoint 4

Photo 13. Waypoint 4

Photo 14. Waypoint 4

Photo 15. Waypoint 4

Photo 16. Waypoint 4

Photo 17. Waypoint 5

Photo 18. Waypoint 5

Photo 19. Waypoint 6

Photo 20. Waypoint 6

Photo 21. Waypoint 6

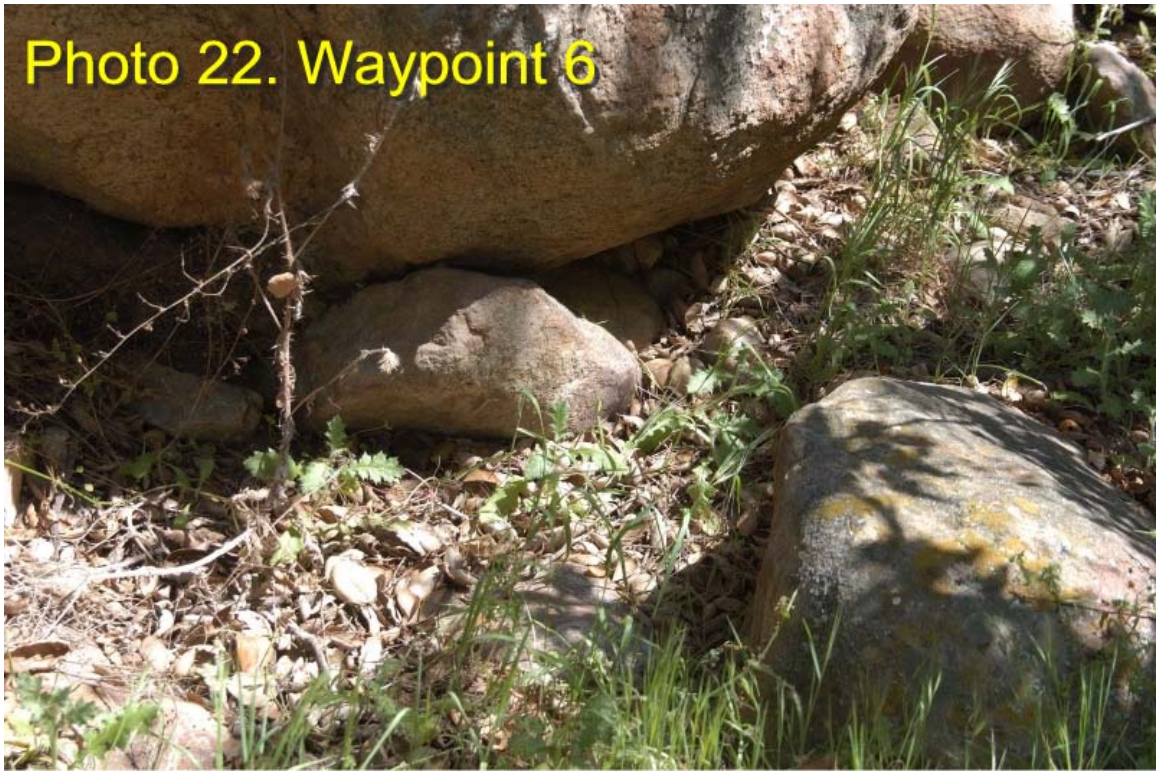


Photo 22. Waypoint 6

Photo 23. Waypoint 6

Photo 24. Waypoint 6

Photo 25. Waypoint 7

Photo 26. Waypoint 7

Photo 27. Waypoint 8

Photo 28. Waypoint 8

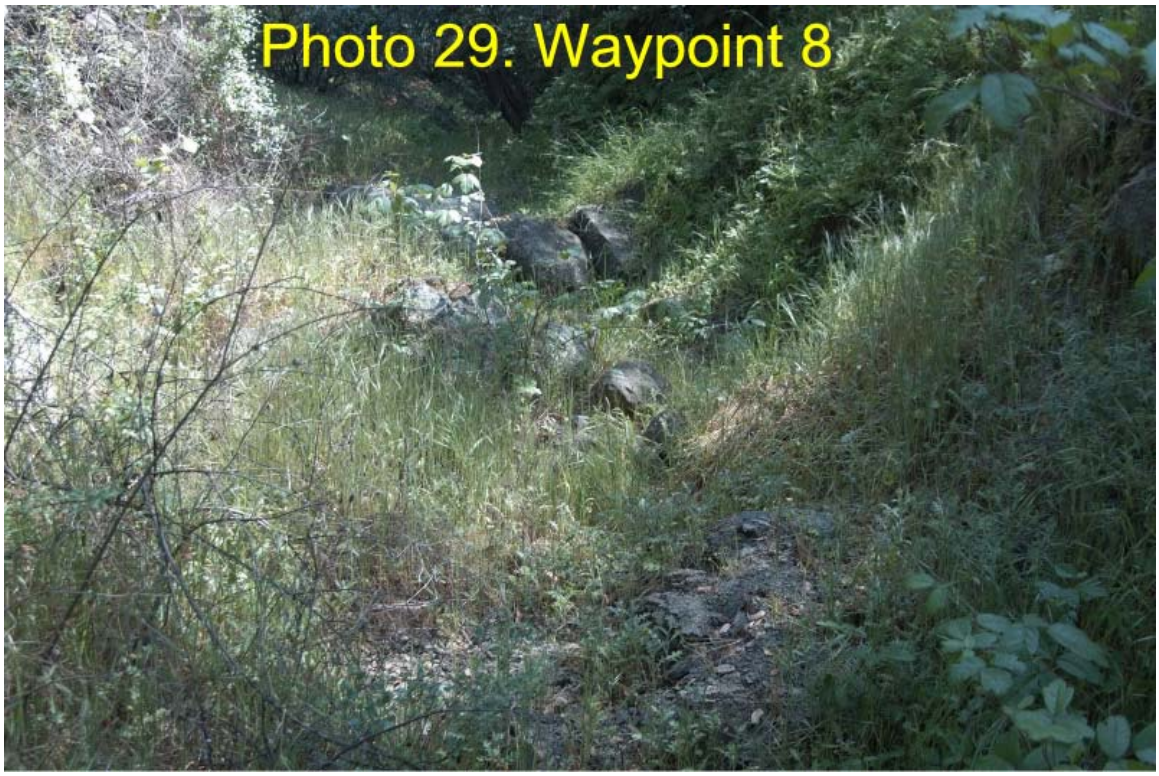


Photo 29. Waypoint 8

Photo 30. Waypoint 8

Photo 31. Waypoint 8

Photo 32. Waypoint 8

Photo 33. Waypoint 9

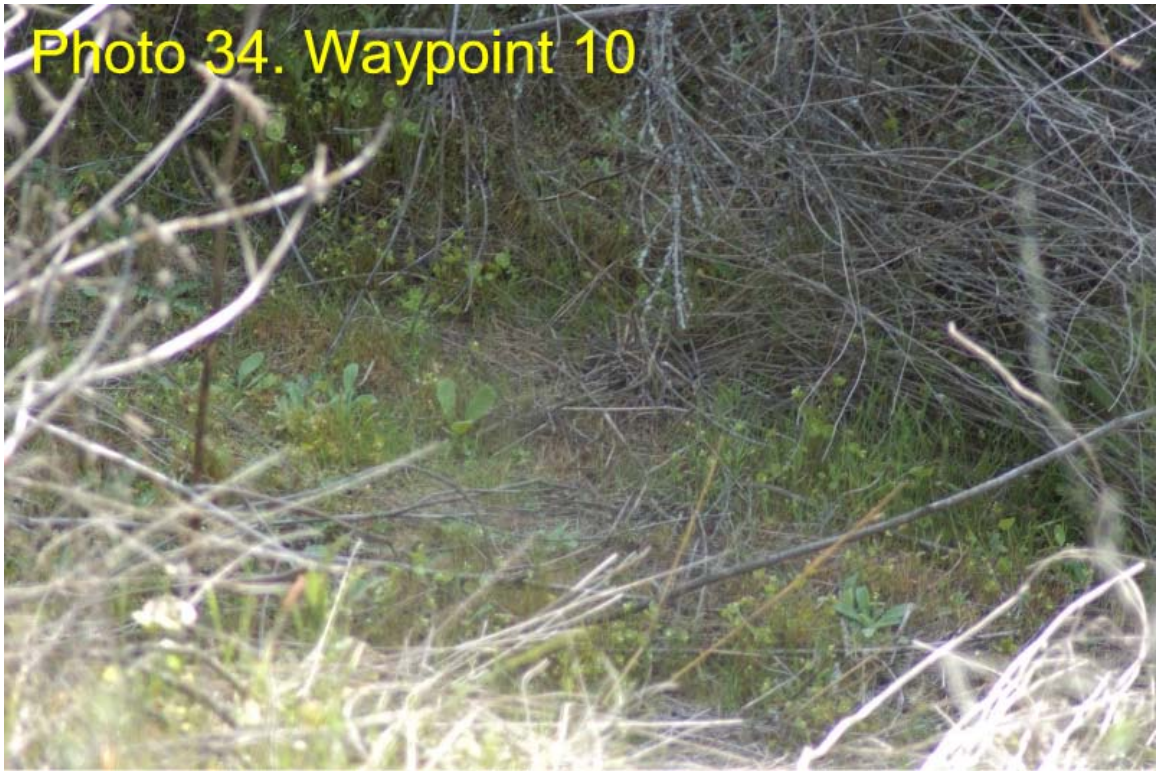


Photo 34. Waypoint 10

Photo 35. Waypoint 11

Photo 37. Waypoint 13

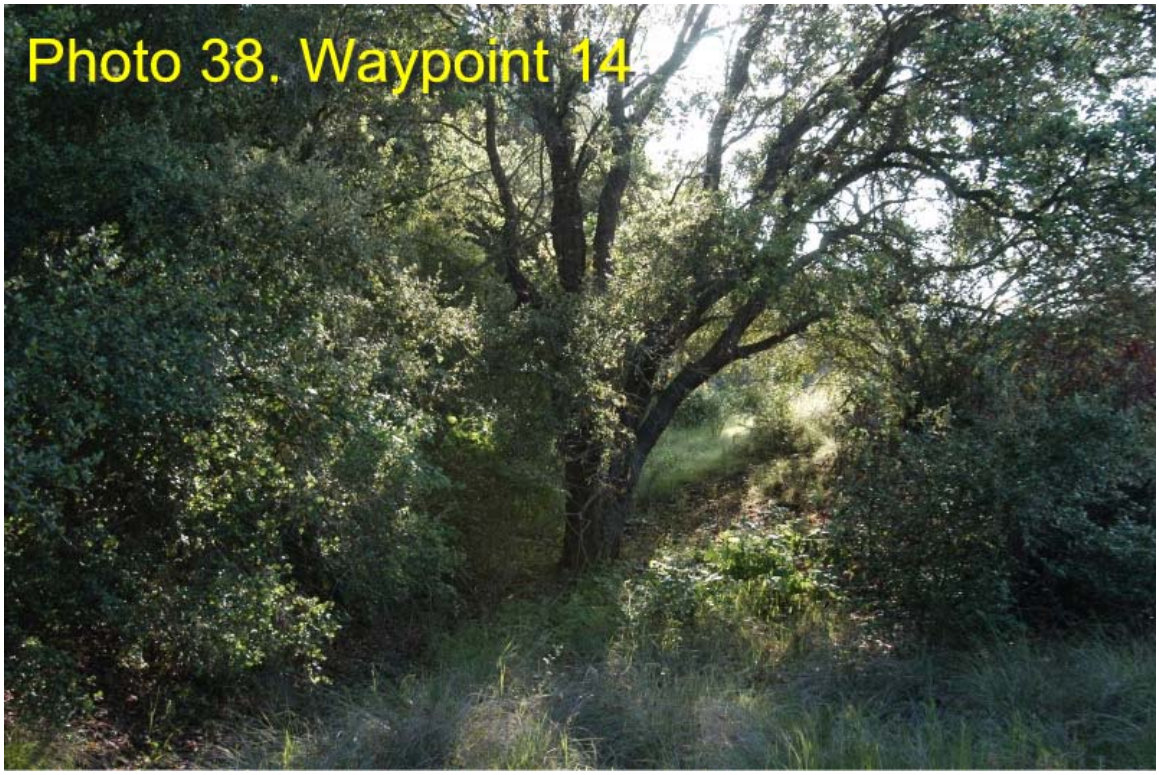


Photo 38. Waypoint 14

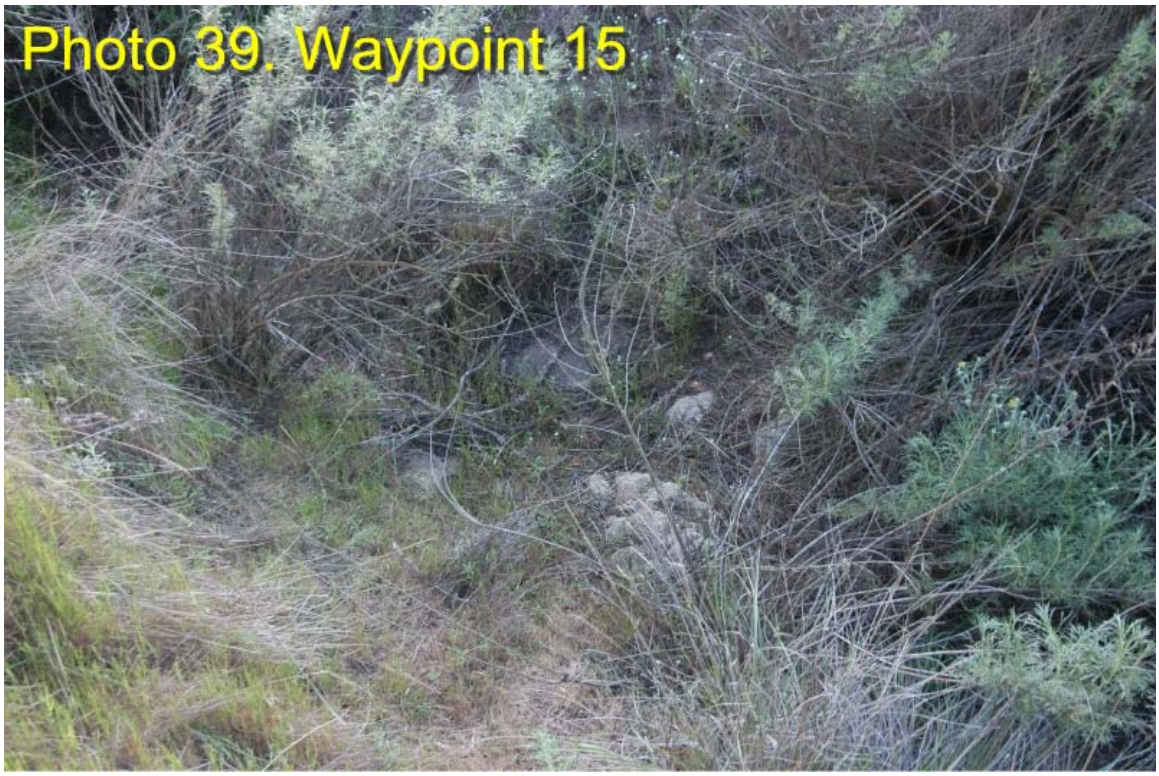


Photo 39. Waypoint 15

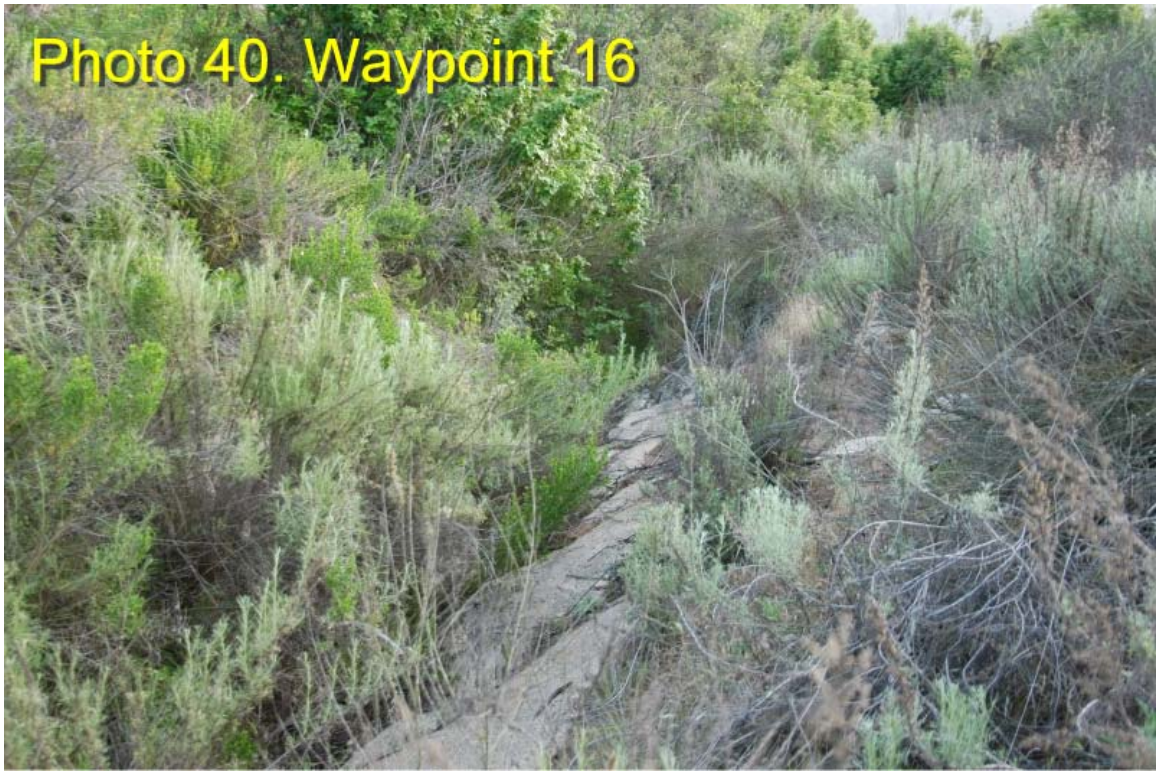


Photo 40. Waypoint 16

Photo 41. Waypoint 17

Photo 1. Waypoint 1

Photo 2. Waypoint 1

Photo 3. Waypoint 2

Photo 4. Waypoint 2 soil pit

Photo 5. Waypoint 3

Photo 6. Waypoint 3 soil pit

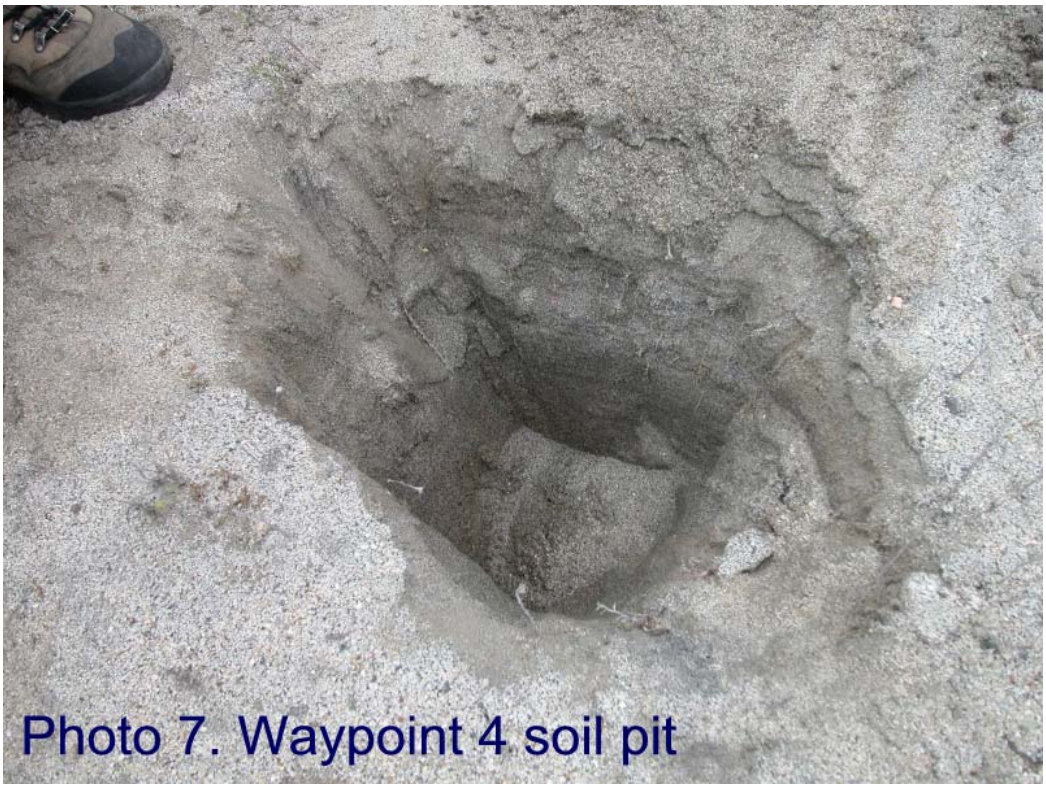


Photo 7. Waypoint 4 soil pit

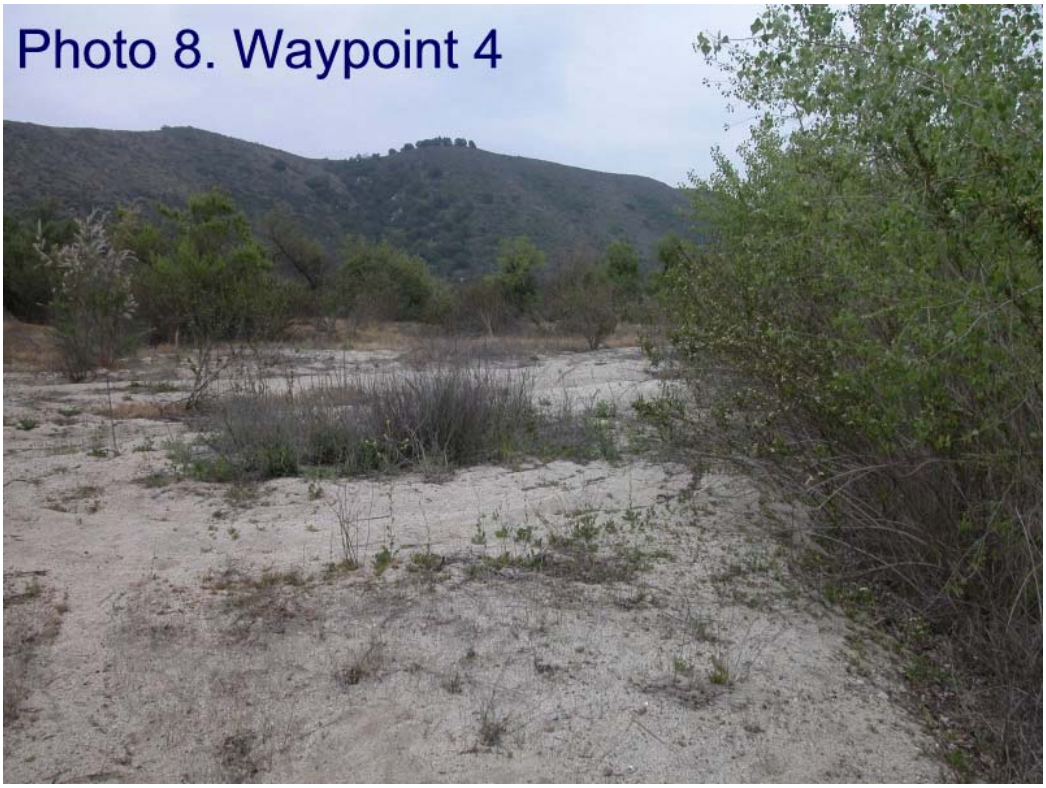


Photo 8. Waypoint 4

Photo 9. Waypoint 5

Photo 10. Waypoint 6

Photo 11. Waypoint 7

Photo 12. Waypoint 7 adventitious roots

Photo 13. Waypoint 8 (between 8 and 9)

Photo 14. Waypoint 8 (between 8 and 9)
soil pit

Photo 15. Waypoint 8 soil pit

Photo 16. Waypoint 8

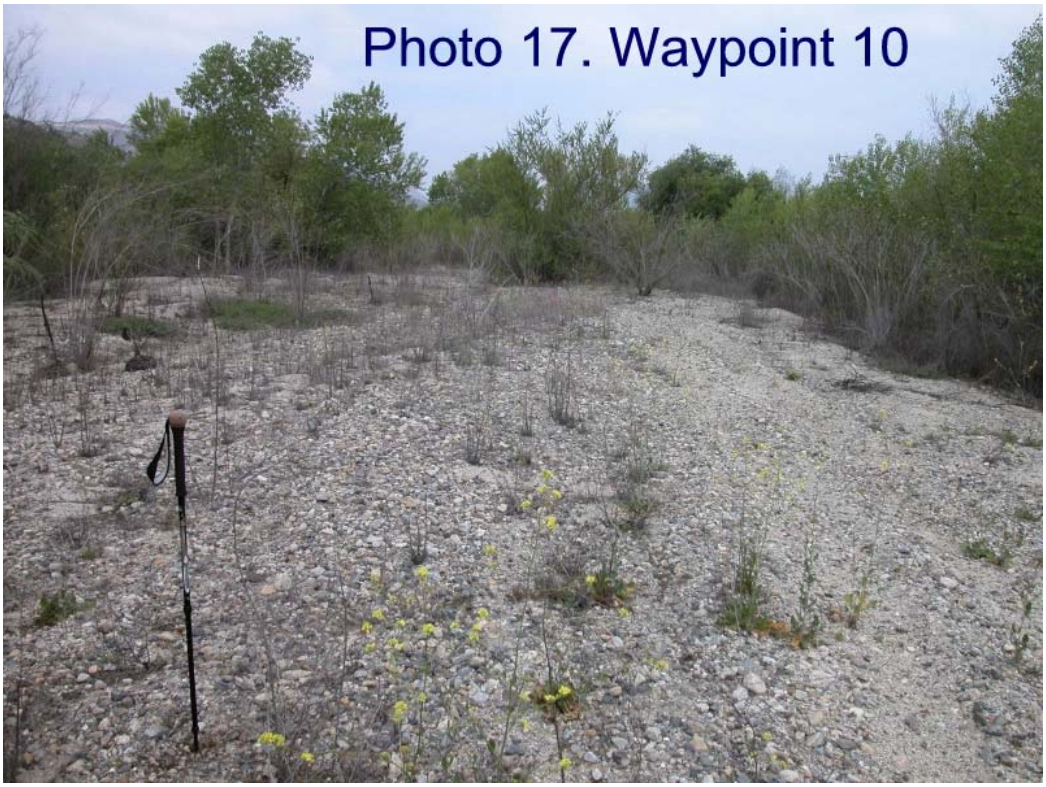


Photo 17. Waypoint 10

Photo 18. Waypoint 10 soil pit

Photo 19. Waypoint 11

Photo 20. Waypoint 11 soil pit

Photo 21. Waypoint 12

Photo 22. Waypoint 18

Photo 23. Waypoint 18 soil pit

Photo 24. River edge near Waypoint 19

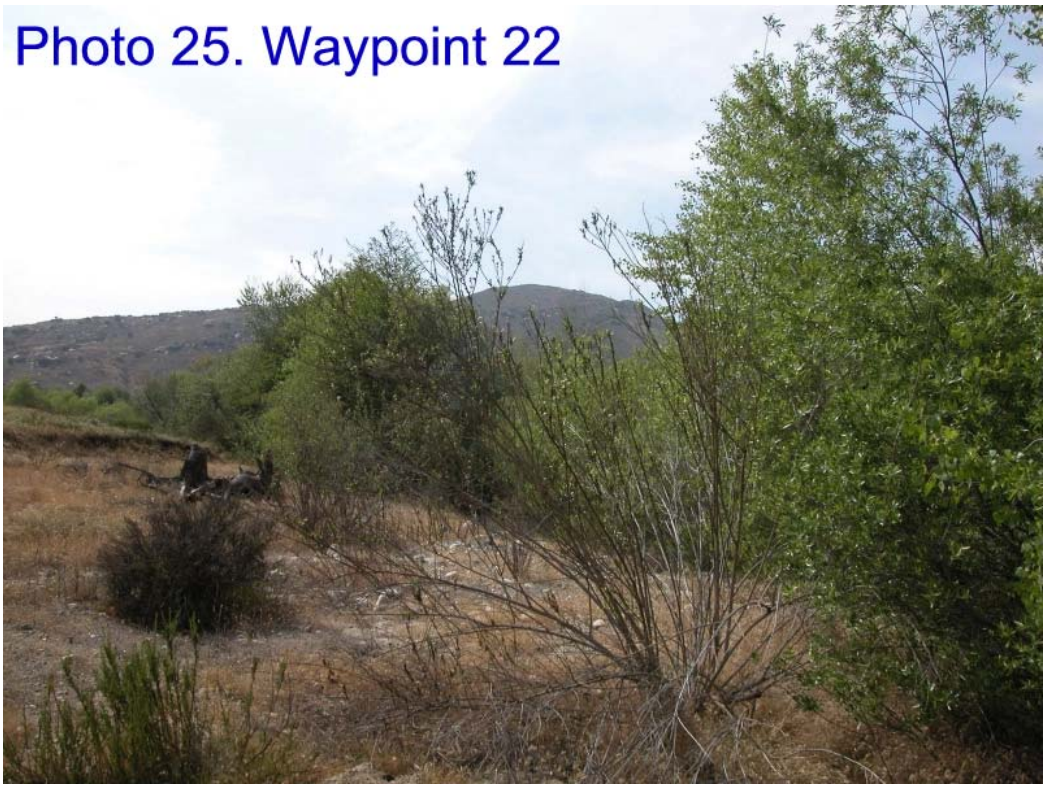


Photo 25. Waypoint 22

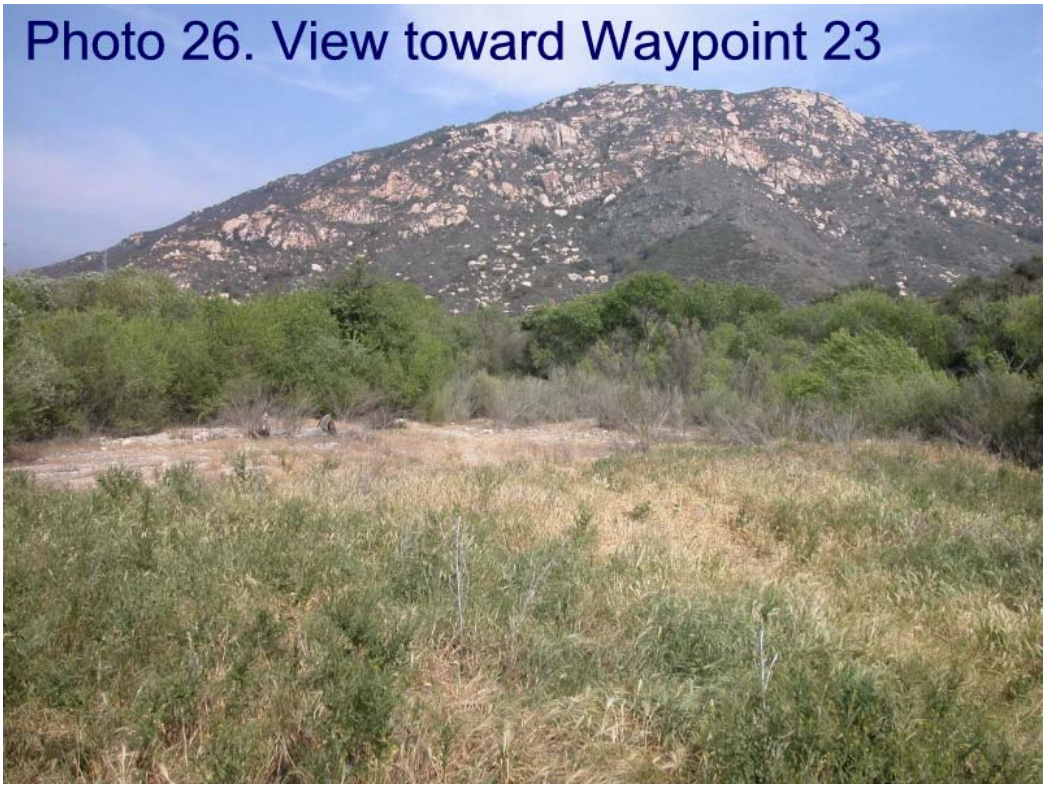


Photo 26. View toward Waypoint 23

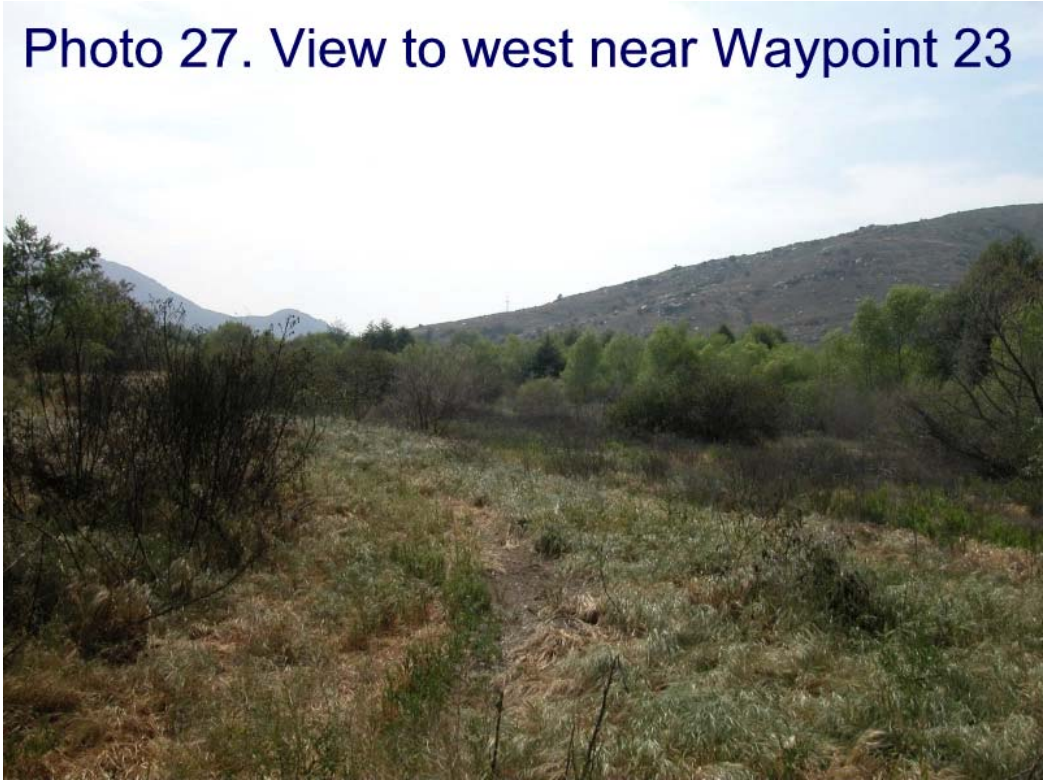


Photo 27. View to west near Waypoint 23

Photo 28. Waypoint 25

Photo 29. Waypoint 26

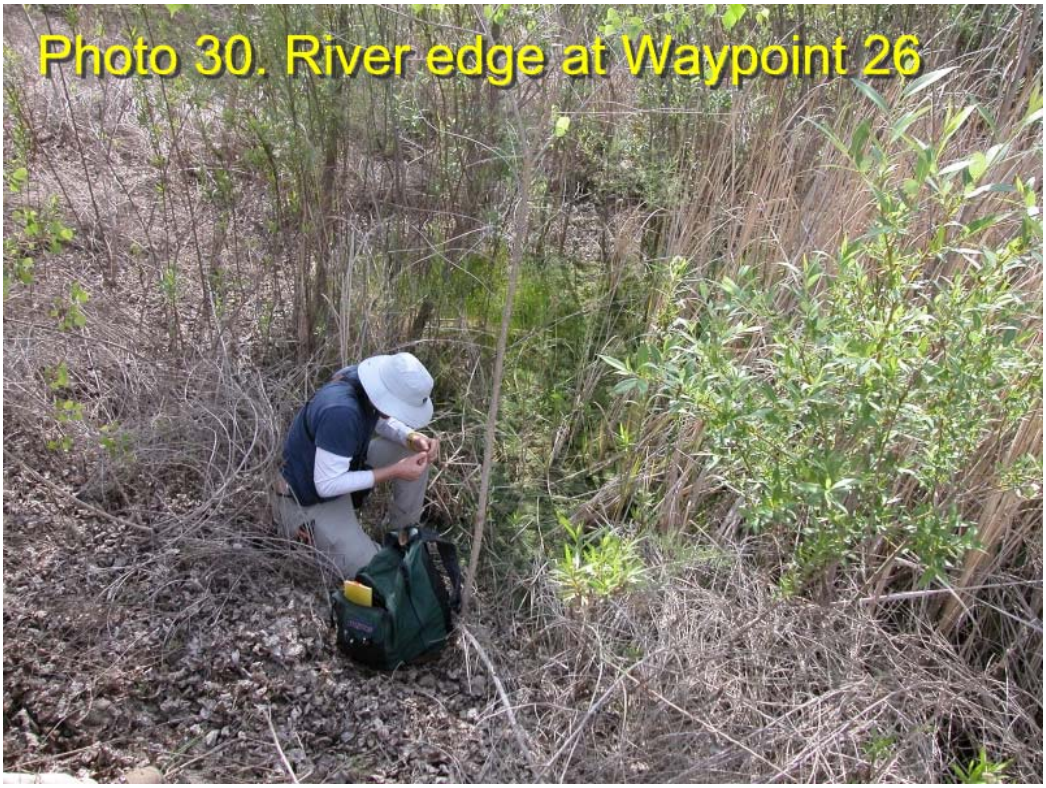


Photo 30. River edge at Waypoint 26

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 1

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Baccharis salicifolia*	S	FACW	9		
2	*Populus fremontii*	T	FACW	10		
3	*Silybum marianum*	S	NI	11		
4				12		
5				13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T = 20%, S = 70%

Remarks: Opening at fenceline; upland grasses are present above swail, down terrace. *Bromus diandrus, Artemisia douglasiana, Anthriscus caucalis*

HYDROLOGY

☐ Recorded Data (Descripe 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	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: no hydrology, no OHWM. Soil dry, absolutely no indicators.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):				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.
14 in.		10YR 4/4	none	none	Sandy Loam

HYDRIC SOIL INDICATORS

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

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 2

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Baccharis salicifolia*	T	FACW	9		
2	*Populus fremontii*	T	FACW	10		
3	*Bromus diandrus*	H	NI	11		
4	*Salix lasiolepis*	T	FACW	12		
5	*Sambucus mexicana*	T	FAC	13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T = 95%

Remarks: Bromus growing across bottom of depression. Oak tree seedling (*Quercus agrifolia*). Understory clearly upland.

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	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: No indicators - no OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
14 in.		10YR 4/4	none	none	Sandy Loam

HYDRIC SOIL INDICATORS

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

Remarks: No hydric soils.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes ☑ No

Remarks: Tree layer is dominated by old hydrophytes. Herb layer and recent growth is upland.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 3

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Salix lasiolepis*	T	FACW	9		
2	*Populus fremontii*	T	FACW	10		
3	*Salix goodingii*	T	OBL	11		
4	*Artemisia douglasiana*	H	FACW	12		
5	*Bromus diandrus*	H	NI	13		
6	*Agrostis exarata*	H	FACW	14		
7	*Marah macrocarpus*	H	NI	15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T =70%; H = 10%

Remarks: Good cover of Bromus diandrus in swale bottom with Artemisia douglasiana; Large Quercus agrifolia associated with swale bottom immed. upgradie

HYDROLOGY

☐	Recorded Data (Descripe 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		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: No hydrology - no OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
14 in.		10YR 4/4	none	none	Sandy Loam

HYDRIC SOIL INDICATORS

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

Remarks: No hydric soils.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes ☑ No

Remarks: This area is at upgradient end of Mulefat, Willow Riparian.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 4a, 4b

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species		Stratum	Indicator
1	*Bromus diandrus*	H	NI	9	*Bromus hordeaceus*	H	NI
2	*Eriogonum fasiculatum*		NI	10			
3	*Baccharis salicifolia*	T	FACW	11			
4	*Hirschfeldia incana*	H	NI	12			
5	*Cryptantha intermedia*	H	NI	13			
6	*Centaurium muehlenbergii*	H	NI	14			
7	*Heteromeles arbutifolia*	H	NI	15			
8	*Camissonia bistorta*	H	NI	16			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T =5%

Remarks: Some vegetation throughout, no clear aquatic channel. Fairly old CA buckwheat growing in channel. Low percentage of mulefat. Primrose.

HYDROLOGY

☐ Recorded Data (Descripe 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	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: No hydrology - no OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
4 in. (4a)		10YR 3/4			Sandy Loam
6 in. (4b)		10YR 3/4	5YR 4/6	Rare/Medium	Loamy DCG

HYDRIC SOIL INDICATORS

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

Remarks: 4a. Rocky topsoil -Hard thin layer at 4in, may be associated with well line nearby; white powdery substance, very fine grained, concrete-like, ultra-fine. 4b.: Pit could not be dug due to large rocks. Mottle close to surface in root structure.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☑ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks: No OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 5

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Quercus agrifolia*	T	NI	9		
2	*Baccharis salicifolia*	H	FACW	10		
3	*Rhus diversaloba*	T	NI	11		
4	*Artemisia californica*	H	NI	12		
5	*Eriophyllum confertiflorum*	H	NI	13		
6	*Claytonia parvaflora*	H	FAC	14		
7	*Bromus diandrus*	H	NI	15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC):

Remarks: Vegetation consistent throughout swale. CA sagescrub; Oaks outside swale.

HYDROLOGY

☐ Recorded Data (Descripe 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	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: No hydrology - no OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
8 in.		10YR 4/4	none	none	Coarse sand

HYDRIC SOIL INDICATORS

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

Remarks: Hard bedrock layer impeads digging. Coarse sand resulted from decomposing granite.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes ☑ No

Remarks: No OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 6

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Adenostoma fasciculatum*	H	NI	9		
2	*Cryptantha intermedia*	H	NI	10		
3	*Eriogonum fasciculatum*	H	NI	11		
4	*Claytonia parviflora*	H	NI	12		
5	*Heteromeles arbutifolia*	H	NI	13		
6	*Melica imperfecta*	H	NI	14		
7	*Xylococcus bicolor*	H	NI	15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 0%

Remarks:

HYDROLOGY

☐ Recorded Data (Descripe 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	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: Short area with cut, erosion rill with upland vegetation - no OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.

HYDRIC SOIL INDICATORS

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

Remarks: Soil pit not excavated, second observation point for waypoint 6.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes ☑ No

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 6 and 7

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Quercus agrifolia*	T	NI	9		
2	*Rhus diversiloba*	T	NI	10		
3	*Rhamnus illicifolia*	H	NI	11		
4	*Bromus rubens*	H	NI	12		
5				13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 0%

Remarks: Wypt 7: Sim conditions, just upstream with BroDia, MuhRig, RhuDiv, QueAgr, RhuTri, HazSqu. No channel.

HYDROLOGY

☐ Recorded Data (Descripe 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	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: None - no OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):				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.
1 in.		10YR 5/4-4/4	10 YR 4/4	none	Coarse sand

HYDRIC SOIL INDICATORS

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

Remarks: Soil pit not excavated, second observation point for waypoint 6.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☑ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 8

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species		Stratum	Indicator
1	*Rhus diversiloba*	T	NI	9	*Anthriscus caucalis*		
2	*Bromus diandrus*	H	NI	10			
3	*Vitis californica*	H	FACW	11			
4	*Carduus pycnocephalus*		NI	12			
5	*Adiantum jordani*		NI	13			
6	*Polypody californica*		NI	14			
7	*Rhus frilobata*		NI	15			
8	*Claytonia parviflora*		FAC	16			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): <5%

Remarks: Steep, rocky drainage. No OWHM.

HYDROLOGY

☐ Recorded Data (Descripe 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	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: No wetland hydrology; no OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):				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.
8 in.		10YR 4/3		none	Decomposed granite, very coarse sand particles.

HYDRIC SOIL INDICATORS

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

Remarks: Soil pit not excavated, second observation point for waypoint 6.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☑ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 12

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species		Stratum	Indicator
1	*Claytonia parviflora*		NI	9			
2	*Mimulus aurantiacus*		NI	10			
3	*Bromus rubens*		NI	11			
4	*Rhamnus illicifolia*		NI	12			
5	*Centaurea melitensis*		NI	13			
6				14			
7				15			
8				16			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC):

Remarks: CSS on slopes

HYDROLOGY

☐ Recorded Data (Descripe 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	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: No wetland hydrology; no OHWM.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):				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.
12 in.		10YR 3/3	none	none	Coarse sand with organics
5 in.		10YR 2/2	none	none	Organic layer, not completely decomposed

HYDRIC SOIL INDICATORS

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

Remarks: Soil pit not excavated, second observation point for waypoint 6.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☑ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks: Erosion rill, no OHWM. Discontinuous rill. This pit excavated in localized hole.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/8/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 1

inorganic, coarse sand

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Salix lasolepis*	T	FACW	9		
2	*Populus fremontii*	T	FACW	10		
3	*Bacchris salicifolia*	S	FACW	11		
4	*Salix exigua*	S	OBL	12		
5	*Ambrosia psilostachya*	H	FAC	13		
6	*Salix goodingii*	T	OBL	14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T=70%; S=30%:

Remarks: Understory mostly dense leaf litter, very sparse *Ambrosia psilostachya*

HYDROLOGY

☐ Recorded Data (Descripe 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	11	(in)
Depth to Saturated Soil	11	(in)

Remarks:

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)

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
1		10 YR 2/2			Coarse sands
1 to 11		10 YR 2/2			organic seams within the inorganic sands
1 to 11		10 YR 7/2			inorganic, coarse sand

HYDRIC SOIL INDICATORS

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

Remarks: Faint remnants of organic matter in the coarse sands. Soil indicators not strong, but aquic moisture regime present

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No		
Wetland Hydrology Present?	☑ Yes	☐ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☑ Yes	☐ No	☑ Yes	☐ No

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill			Date:	4/8/2004
Applicant/Owner:				County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard			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? (If needed, explain on reverse)		☐ Yes	☑ No	Plot ID:	Waypoint 2

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species		Stratum	Indicator
1	*Baccharis salicifolia*	T	FACW	9			
2	*Salix exigua*	S	OBL	10			
3	*Populus fremontii*	T	FACW	11			
4	*Hirschfeldia incana*	H	NI	12			
5	Bare ground		NI	13			
6	*Melilotus indica*	H	NI	14			
7				15			
8				16			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T=65%; S=5%; H=0%

Remarks: This pit is 10 feet south of WYPT 2. It is a slight step up in elevation from WYPT 2.

HYDROLOGY

☐ Recorded Data (Descripe 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	15	(in)
Depth to Saturated Soil	15 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)

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
0-12/14 in		10 YR 5/3			
12-16 in range		10 YR 2/2			seam of oxidized sand

HYDRIC SOIL INDICATORS

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

Remarks: The seam of oxidized material may be the root/water level interface where regular water saturation occurs.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes ☑ No

Remarks: This is a borderline area, the wetland boundary is near here.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill			Date:	4/8/2004
Applicant/Owner:				County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard			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? (If needed, explain on reverse)		☐ Yes	☑ No	Plot ID:	Waypoint 3

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Salix goodingii*	T	OBL	9		
2	*Salix exigua*	T	OBL	10		
3	*Tamarix ramosissima*	T	FAC	11		
4	*Baccharis salicifolia*	S	FACW	12		
5				13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T= 60%; S=10%

Remarks:

HYDROLOGY

☐ Recorded Data (Descripe in Remarks)	**WETLAND HYDROLOGY INDICATORS**
☐ Stream, Lake, or Tide Gauge	Primary Indicators:
☐ Aerial Photographs	☐ Inundated
☐ Other	☑ Saturated in Upper 12 inches
	☐ Water Marks
	☐ Drift Lines
☐ No Recorded Data Available	☐ Sediment Deposits
FIELD OBSERVATIONS	☐ Drainage Patterns in Wetlands
	Secondary Indicators (2 or more Required):
Depth of Surface Water: none (in)	☐ Oxidized Root Channels in Upper 12 inches
	☐ Water-Stained Leaves
Depth to Free Water in Pit: 11 (in)	☐ Local Soil Survey Data
	☐ FAC-Neutral Test
Depth to Saturated Soil: 11 (in)	☐ Other (Explain in Remarks)

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
0-11		10 YR 2/2			coarse sand, silt, organics
6			10 YR 4/6	RARE-LOW	coarse sand, silt, organics
11+		10 YR 5/1			Coarse sand

HYDRIC SOIL INDICATORS

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

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	☑ Yes	☐ No	☑ Yes ☐ No

Remarks: Series of sandbars and depressions toward the south; this spot is in a depression. Distinct differences exist between soil layers, suggesting a stable base ground water level.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill			Date:	4/8/2004
Applicant/Owner:				County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard			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? (If needed, explain on reverse)		☐ Yes	☑ No	Plot ID:	waypoint 4

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Salix exigua*	T	OBL	9		
2	*Chaenactis glabriuscula*	H	NI	10		
3	*Faligo gallica*	H	NI	11		
4	*Bromus rubens*	H	NI	12		
5	*Hirchfeldia incana*	H	NI	13		
6	*Erodium cicutarium*	H	NI	14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T=5%

Remarks: Mostly bare ground

HYDROLOGY

☐ Recorded Data (Descripe in Remarks)	**WETLAND HYDROLOGY INDICATORS**
☐ Stream, Lake, or Tide Gauge	Primary Indicators:
☐ Aerial Photographs	☐ Inundated
☐ Other	☐ Saturated in Upper 12 inches
	☐ Water Marks
	☐ Drift Lines
☐ No Recorded Data Available	☐ Sediment Deposits
FIELD OBSERVATIONS	☐ Drainage Patterns in Wetlands
	Secondary Indicators (2 or more Required):
Depth of Surface Water: none (in)	☐ Oxidized Root Channels in Upper 12 inches
	☐ Water-Stained Leaves
Depth to Free Water in Pit: none (in)	☐ Local Soil Survey Data
	☐ FAC-Neutral Test
Depth to Saturated Soil: none (in)	☐ Other (Explain in Remarks)

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
14		10 YR 6/2			Medium sand

HYDRIC SOIL INDICATORS

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

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☑ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks: Location is 10 feet from edge of a terrace, at a higher elevation than the prior points.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/8/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 8

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Salix lasiolepis*	T	FACW	9		
2	*Salix exigua*	S	OBL	10		
3	*Bacchris salicifolia*	S	FACW	11		
4	*Populus fremontii*	T	FACW	12		
5	*Salix goodingii*	T	OBL	13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T=80%; S=10%

Remarks: Dense leaf litter exists in the understory, with no herbacious cover.

HYDROLOGY

☐ Recorded Data (Descripe 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	11	(in)
Depth to Saturated Soil	11	(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:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
1 to 2		10 YR 2/1			Silty Clay
2 to 10		10 YR 6/1	7.5 YR 5/6	Medium high/medium	Coarse sand

HYDRIC SOIL INDICATORS

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

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	☑ Yes	☐ No	☑ Yes ☐ No

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill	Date:	4/6/2004
Applicant/Owner:		County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard	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? (If needed, explain on reverse)	☐ Yes ☑ No	Plot ID:	Waypoint 9

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Bacchris salicifolia*	S	FACW	9		
2	*Salix lasiolepis*	T	FACW	10		
3	*Salix goodingii*	T	OBL	11		
4	*Populus fremontii*	T	FACW	12		
5				13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): S=20%

Remarks:

HYDROLOGY

☐ Recorded Data (Descripe in Remarks)
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

Remarks: Soil pit is halfway between waypoint 8 and 9.

☐ No Recorded Data Available

FIELD OBSERVATIONS

Depth of Surface Water	none	(in)
Depth to Free Water in Pit	18	(in)
Depth to Saturated Soil	18	(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:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
0-18		10 YR 6/2			Coarse sand
18+		10 YR 6/1			Coarse sand

HYDRIC SOIL INDICATORS

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

Remarks: Soil consists of light mineral sands resulting in low chroma colors

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks: Soil pit is halfway between waypoint 8 and 9.

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill			Date:	4/8/2004
Applicant/Owner:				County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard			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? (If needed, explain on reverse)		☐ Yes	☑ No	Plot ID:	Waypoint 10

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species		Stratum	Indicator
1	*Hirchfeldia incana*	H	NI	9			
2	*Hypochaeris glabrata*	H	NI	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: Mostly bare ground exists

HYDROLOGY

☐ Recorded Data (Descripe 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	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:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
0-18		10 YR 6/2			Medium sand, gravel, and small cobbles

HYDRIC SOIL INDICATORS

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

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☑ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill			Date:	4/8/2004
Applicant/Owner:				County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard			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? (If needed, explain on reverse)		☐ Yes	☑ No	Plot ID:	Waypoint 11

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Salix exigua*	T	OBL	9		
2	*Salix laevigata*	T	FACW	10		
3	*Bacchris salicifolia*	T	FACW	11		
4	*Populus freimontii*	T	FACW	12		
5	*Salix goodingii*	T	OBL	13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T=100%

Remarks:

HYDROLOGY

☐ Recorded Data (Descripe in Remarks)	**WETLAND HYDROLOGY INDICATORS**
☐ Stream, Lake, or Tide Gauge	Primary Indicators:
☐ Aerial Photographs	☐ Inundated
☐ Other	☐ Saturated in Upper 12 inches
	☐ Water Marks
☐ No Recorded Data Available	☐ Drift Lines
FIELD OBSERVATIONS	☐ Sediment Deposits
	☐ Drainage Patterns in Wetlands
Depth of Surface Water: none (in)	Secondary Indicators (2 or more Required):
	☐ Oxidized Root Channels in Upper 12 inches
Depth to Free Water in Pit: 12.5 (in)	☐ Water-Stained Leaves
	☐ Local Soil Survey Data
	☐ FAC-Neutral Test
Depth to Saturated Soil: 12.5 (in)	☐ Other (Explain in Remarks)

Remarks: Probably has seasonal hydrology

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
0-11		10 YR 6/2		RARE/LOW	Coarse sand
11+		10 YR 6/2		RARE/LOW	Coarse sand

HYDRIC SOIL INDICATORS

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

Remarks: The rare mottling observed could not accuretly be assigned a Munsell color.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No		
Wetland Hydrology Present?	☑ Yes	☐ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☑ Yes	☐ No	☑ Yes	☐ No

Remarks: In a high flow channel; likely meets wetland parameter on a seasonal basis

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill			Date:	4/8/2004
Applicant/Owner:				County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard			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? (If needed, explain on reverse)		☐ Yes	☑ No	Plot ID:	Waypoint 18

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Artemisia douglasiana*	H	FAC	9		
2	*Bacchris salicifolia*	T	FACW	10		
3	*Populus fremontii*	T	FACW	11		
4	*Salix lasiolepis*	T	FACW	12		
5	*Salsola tragus*	H	NI	13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T=50%

Remarks: Downward erosion of the main channel has left theis area perched well above the present river with remnat riparian trees and upland understory.

HYDROLOGY

☐ Recorded Data (Descripe 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	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:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):		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.
0-10		10 YR 5/2			fine sand
10		10 YR 4/3			fine sand

HYDRIC SOIL INDICATORS

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

Remarks: Layer present at 10 inches

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes ☑ No

Remarks: Pit is on an old raised terrace relative to the river, but no hydrology is present

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

Project/Site:	Gregory Canyon Landfill			Date:	4/8/2004
Applicant/Owner:				County:	San Diego
Investigator:	Bill Magdych, Jim Rocks, Ellen Howard			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? (If needed, explain on reverse)		☐ Yes	☑ No	Plot ID:	waypoint 27

VEGETATION

Dominant Plant Species		Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1	*Salix exigua*	T	OBL	9		
2	*Bacchris salicifolia*	S	FACW	10		
3	*Populus fremontii*	T	FACW	11		
4				12		
5				13		
6				14		
7				15		
8				16		

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): T= 70%

Remarks: High amount of bare ground

HYDROLOGY

☐ Recorded Data (Descripe in Remarks)	**WETLAND HYDROLOGY INDICATORS**
☐ Stream, Lake, or Tide Gauge	Primary Indicators:
☐ Aerial Photographs	☐ Inundated
☐ Other	☐ Saturated in Upper 12 inches
	☐ Water Marks
	☐ Drift Lines
☐ No Recorded Data Available	☐ Sediment Deposits
FIELD OBSERVATIONS	☐ Drainage Patterns in Wetlands
	Secondary Indicators (2 or more Required):
Depth of Surface Water: none (in)	☐ Oxidized Root Channels in Upper 12 inches
	☐ Water-Stained Leaves
Depth to Free Water in Pit: none (in)	☐ Local Soil Survey Data
	☐ FAC-Neutral Test
Depth to Saturated Soil: none (in)	☐ Other (Explain in Remarks)

Remarks:

DATA FORM

ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineations Manual)

SOILS

Map Unit Name (Series and Phase):				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.
0-18		10 YR 6/2			coarse sand

HYDRIC SOIL INDICATORS

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

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☑ Yes	☐ No		
Wetland Hydrology Present?	☐ Yes	☑ No	Is this Sampling Point Within a Wetland?	
Hydric Soils Present?	☐ Yes	☑ No	☐ Yes	☑ No

Remarks: Wetland edge is 20ft. to the north.

SOURCES: AirPhotoUsa
(March 2002 Aerial).

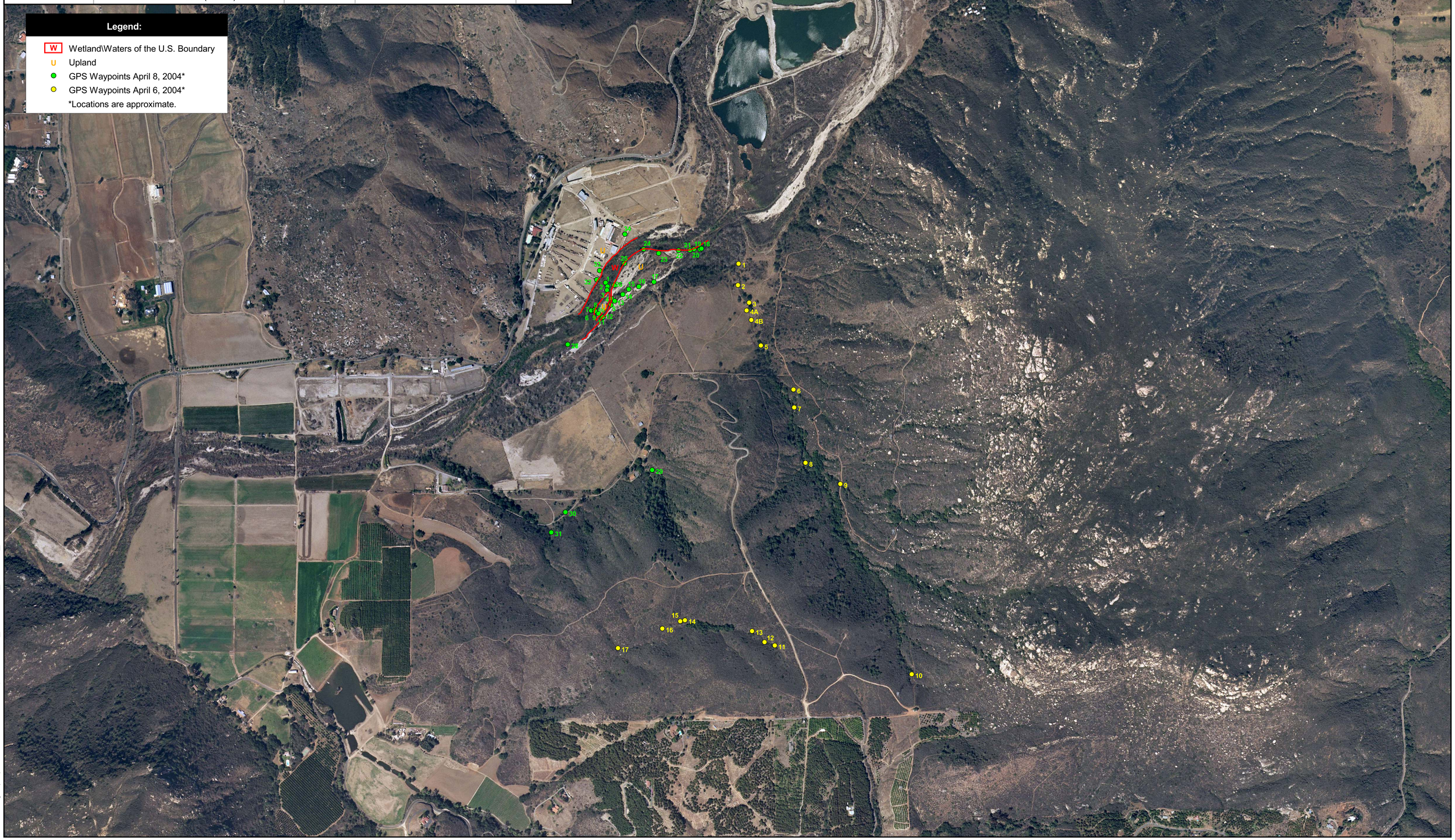
SURVEY WAYPOINTS WITHIN THE ENTIRE STUDY AREA AND MAP OF WATERS OF THE U.S. GREGORY CANYON

URS

250 0 250 500 750 1000 Feet

SCALE: 1" = 500' (1:6000)

CHECKED BY: MS	DATE: 5-17-04	PLATE NO: 1
PM: BM	PROJ. NO: 27654025.00020	



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SOURCES: AirPhotoUsa
(March 2002 Aerial).

SURVEY WAYPOINTS AT THE SAN LUIS REY RIVER ON APRIL 8, 2004 AND MAP OF WATERS OF THE U.S. GREGORY CANYON

URS

100 0 100 200 300 400 Feet
SCALE: 1" = 200' (1:2400)

CHECKED BY: MS	DATE: 5-17-04	PLATE NO:
PM: BM	PROJ. NO: 27654025.00020	2

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