

Delineation of Jurisdictional Waters and Wetlands
Oak Hills Marketplace
Yucaipa, San Bernardino County, California

Yucaipa, California, USGS 7.5-Minute Topographic Quadrangle Map
Unsectioned San Bernardino Grant, Township 2 South, Range 2 West

Prepared for:

Palmer General Corporation
32335 Live Oak Canyon Road
Redlands, CA 92373

Contact: David Palmer

Prepared by:

Michael Brandman Associates
621 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408
909.884.2255

Contact: Linda Archer, Project Biologist
Tom Mullen, Regulatory Specialist



Surveys Conducted on: December 8, 2005
Report Date: August 11, 2006, Revision Date: December 12, 2006

TABLE OF CONTENTS

Section 1: Summary	1
1.1 - Subject Waterway(s)	1
1.2 - Location and Existing Uses.....	1
1.3 - Brief Description of Project.....	1
1.4 - Jurisdictional Areas	1
1.5 - Endangered Species.....	2
1.6 - Historical Preservation	2
1.7 - Environmental Documentation	2
Section 2: Introduction	3
2.1 - Project Location	3
2.2 - Project Description	3
2.3 - Purpose and Need for the Project.....	8
Section 3: Environmental Setting	9
Section 4: Jurisdictional Methodology	12
4.1 - Pre-Survey Investigation	12
4.2 - Field Investigation	12
Section 5: Jurisdictional Assessment Results	13
5.1 - Jurisdictional Areas	13
5.2 - Drainage Descriptions.....	13
5.2.1 - Wildwood Creek	13
5.2.2 - Yucaipa Creek.....	16
5.2.3 - Unnamed Tributary.....	17
5.3 - Jurisdictional Impacts.....	17
5.3.1 - Wildwood Creek	17
5.3.2 - Yucaipa Creek.....	19
5.3.3 - Unnamed Tributary.....	19
Section 6: Permits/Agreements Processing	20
6.1 - USACE Permit Program.....	20
6.1.1 - Individual Permit.....	20
6.2 - Compliance with the Endangered Species Act	20
6.2.1 - Presence/Non-Presence of Federally Endangered Species	20
6.3 - Compliance with the Historic Preservation Act	21
6.3.1 - Presence/Absence of Cultural Resources.....	21
6.4 - Compliance with Section 401 of the Clean Water Act.....	21
6.5 - Compliance with Section 1602 of the California Fish and Game Code	21
Section 7: Mitigation Measures	22
7.1 - Avoidance, Minimization and Mitigation Recommendations	22
7.1.1 - Jurisdictional Waters	22
7.1.2 - Water Quality.....	22
Section 8: References	23

Appendix A: Site Photographs

Appendix B: Determination of Jurisdictional Wetlands and Waters

Appendix C: Regulatory Compliance

Appendix D: Wetland Data Sheets

LIST OF TABLES

Table 1: Jurisdictional Areas 15
Table 2: Jurisdictional Impacts..... 19

LIST OF EXHIBITS

Exhibit 1: Regional Location Map..... 4
Exhibit 2: Local Vicinity USGS Map 5
Exhibit 3: Local Vicinity Aerial Map 6
Exhibit 4: Oak Hills Marketplace Site Plan 7
Exhibit 5: USDA Soils Map..... 11
Exhibit 6: Drainage Location Map 14
Exhibit 7: Jurisdictional Impacts Map 18

SECTION 1: SUMMARY

Applicant Name:

Palmer General Corporation
32335 Live Oak Canyon Road
Redlands, CA 92373
909.446.8888
Contact: David Palmer

Agent Name:

Michael Brandman Associates
621 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408
909.884.2255
Contact: Erinn Johnson, Regulatory Specialist

1.1 - SUBJECT WATERWAY(S)

The Property (Project Site or Site) contains three drainage features consisting of a main drainage feature, a tributary to the main feature, and a secondary drainage. All three drainages meet the criteria for jurisdiction by the United States Army Corps of Engineers (USACE), California Department of Fish and Game (CDFG), and Regional Water Quality Control Board (RWQCB). Two of the three features contain riparian vegetation. Total jurisdictional area includes 3.6 acres of USACE waters of the United States and 11.5 acres of CDFG jurisdictional streambed.

1.2 - LOCATION AND EXISTING USES

The Project Site is located south of Interstate 10 (I-10), and west of Live Oak Canyon Road, in the City of Yucaipa, San Bernardino County, California. The Project Site is depicted in the southeastern portion of the unsectioned San Bernardino Grant in Township 2 South, Range 2 West of the Yucaipa, California, United States Geological Survey (USGS) 7.5 minute topographic quadrangle map.

1.3 - BRIEF DESCRIPTION OF PROJECT

The proposed project will include the development of the Oak Hills Marketplace, a retail center, associated infrastructure, and a detention basin/multi-use area.

1.4 - JURISDICTIONAL AREAS

The Project Site contains a total of 3.6 acres of waters of the United States and 11.5 acres of jurisdictional streambed subject to regulation by the USACE and CDFG.

1.5 - ENDANGERED SPECIES

No federally or state-listed endangered or threatened species were observed onsite. However, suitable habitat occurs for 3 sensitive plant species, 1 sensitive plant community, and 11 wildlife species.

1.6 - HISTORICAL PRESERVATION

A cultural resources report is currently being prepared and will be provided upon completion.

1.7 - ENVIRONMENTAL DOCUMENTATION

Environmental documentation is currently being prepared per the California Environmental Quality Act (CEQA). It will be provided upon approval.

SECTION 2: INTRODUCTION

2.1 - PROJECT LOCATION

The Project Site is located south of Interstate 10 (I-10) in the City of Yucaipa, San Bernardino County, California (Exhibit 1). More specifically, I-10 forms the northern boundary of the Project Site and Live Oak Canyon Road forms the western boundary of the Project Site (Exhibit 2). The Project Site is depicted in the southeastern portion of the unsectioned San Bernardino Grant in Township 2 South, Range 2 West of the Yucaipa, California, USGS 7.5 minute topographic quadrangle (Exhibit 3). The Project Site's elevation ranges from approximately 2,000 to 2,160 feet above mean sea level.

The northwestern portion of the Project Site, north of the main drainage feature, is utilized as a Christmas tree farm and a pumpkin patch. The southern portion of the Site, south of the main drainage feature is undeveloped pastureland used for cattle grazing. The eastern portion of the Site, north of the main drainage, is undeveloped open space with no specific land use. Adjacent land uses consist of residential development and I-10 to the north, undeveloped land and low-density residential development to south, east, and west. The Project Site is also within the central portion of a current City of Yucaipa initiated 1200-acre Specific Plan planning effort, which consists of approximately 1400 residential units and 270 acres of commercial land.

2.2 - PROJECT DESCRIPTION

The proposed project consists of the construction of Oak Hills Marketplace, a retail center, and associated infrastructure, the realignment of Wildwood Creek, and the construction of a detention basin/multi-use area just east of the retail center. These three components comprise the Project Site surveyed for this delineation (Exhibit 4).



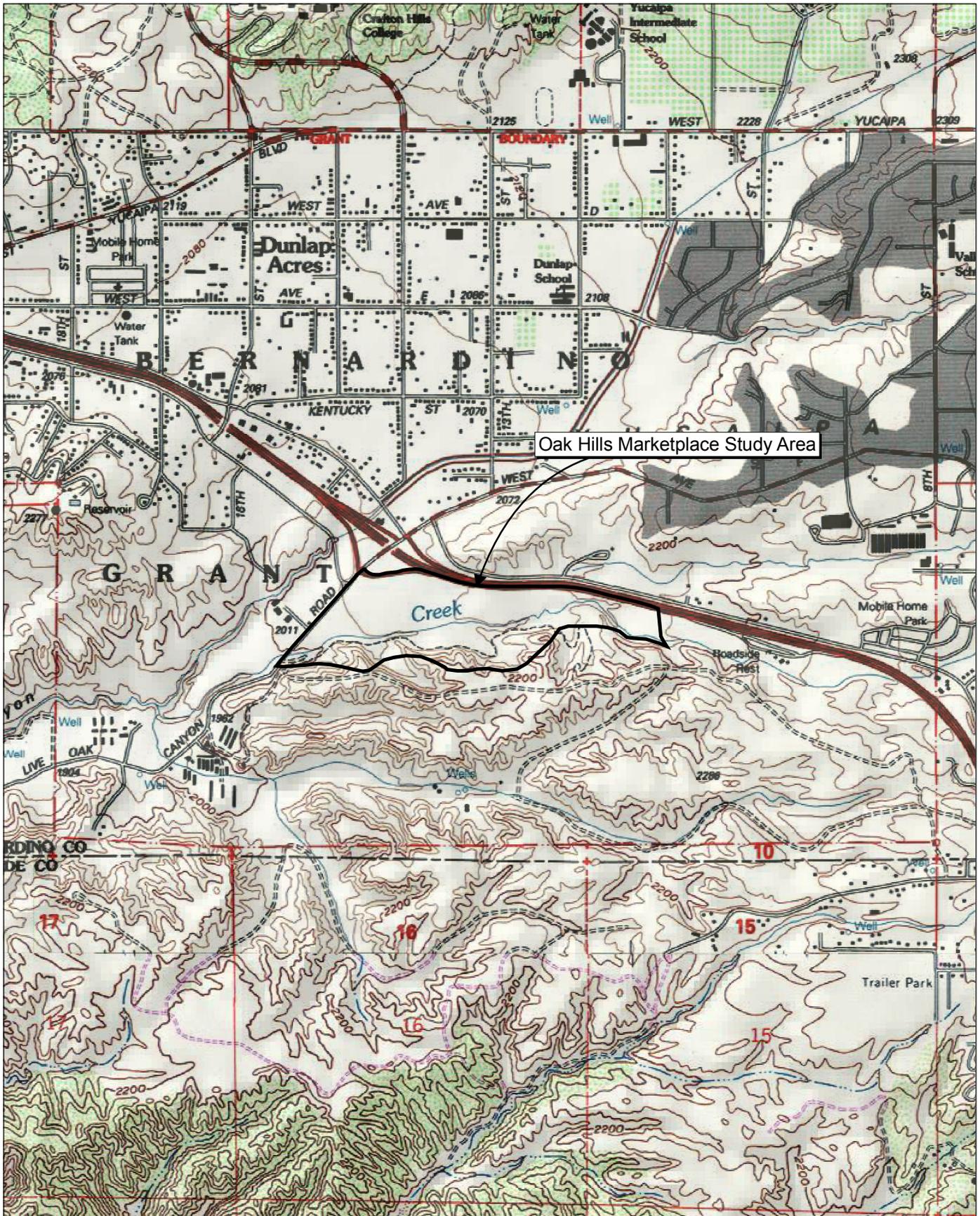
Source: Census 2000 Data, The CaSIL, MBA GIS 2005.



Michael Brandman Associates
22600002 • 04/2006 | 1_regional.mxd



Exhibit 1 Regional Location Map



Source: TOPO! USGS Yucaipa (1996) and El Casco (1976) 7.5' DRG.



Michael Brandman Associates
 22600002 • 04/2006 | 2_local_usgs.mxd

Exhibit 2 Local Vicinity USGS Map

PALMER GENERAL CORPORATION • OAK HILLS MARKETPLACE
 DELINEATION OF JURISDICTIONAL WATERS AND WETLANDS



Source: Google Earth Pro! 2005.

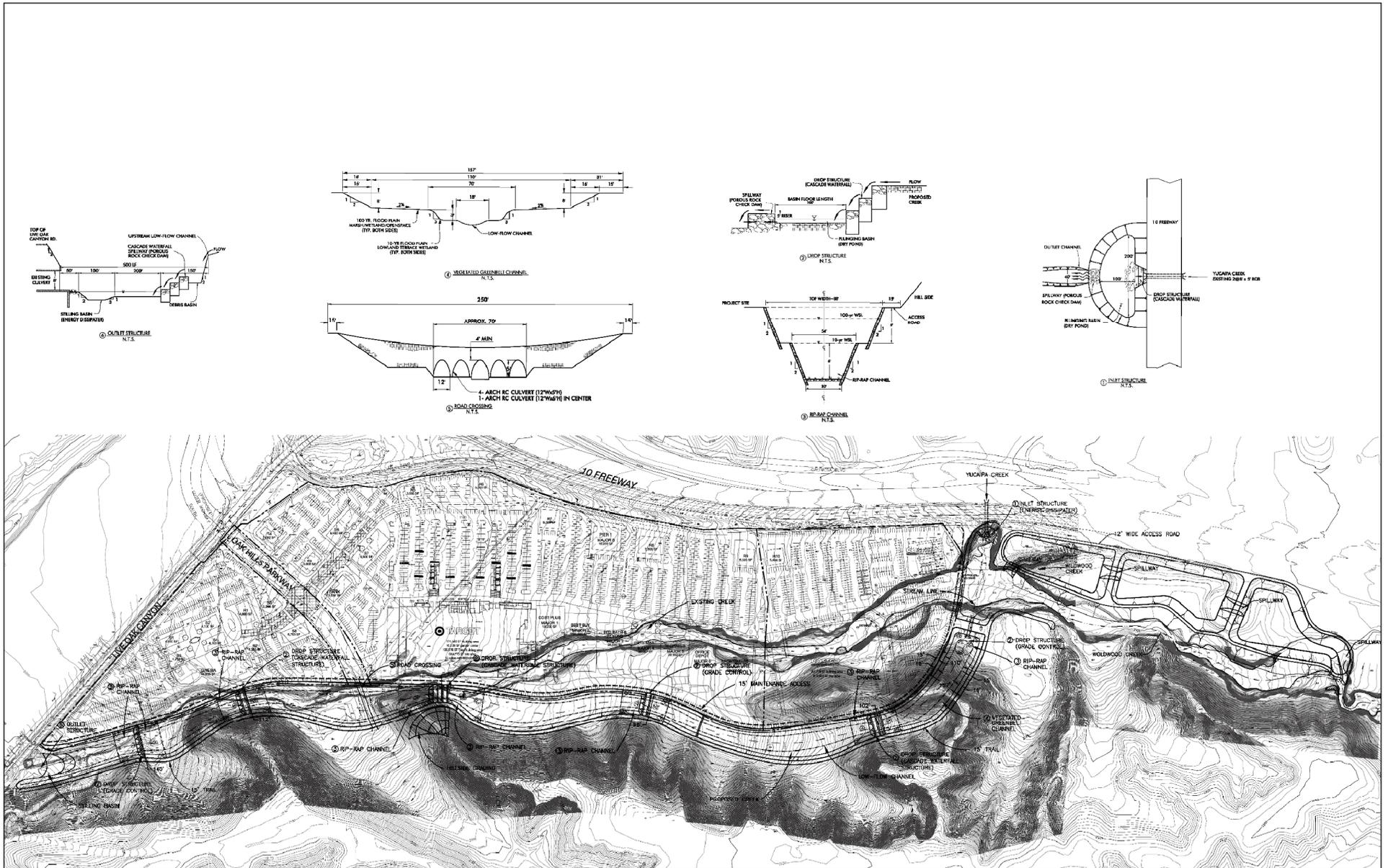


Michael Brandman Associates

22600002 • 04/2006 | 3_local_aerial.mxd

Exhibit 3 Local Vicinity Aerial Map

PALMER GENERAL CORPORATION • OAK HILLS MARKETPLACE
DELINEATION OF JURISDICTIONAL WATERS AND WETLANDS



Source: Fusco Engineering Dec. 2005.

2.3 - PURPOSE AND NEED FOR THE PROJECT

The primary purpose and need for the project is to respond to the need for retail facilities in the area to service the local community. Because the Project Site contains a drainage feature, this assessment of waters of the United States and waters of the State was prepared. The assessment includes an evaluation of USACE jurisdiction, pursuant to Section 404 of the federal Clean Water Act (CWA); CDFG jurisdiction, pursuant to Section 1600 of the California Fish and Game Code (CFG Code); and RWQCB jurisdiction under Section 401 of the federal CWA and the state Porter-Cologne Water Quality Act.

SECTION 3: ENVIRONMENTAL SETTING

The Project Site is located in the Yucaipa Valley between the Crafton Hills to the north and the Badlands to the southwest. The Project Site is located within the San Timoteo Creek watershed. Wildwood Creek is the main drainage feature in the vicinity. It should be noted that the USGS topographic quadrangle refers to Wildwood Creek as Yucaipa Creek; however, local convention and the Thomas Brothers Guide refers to it as Wildwood Canyon Creek and that is the convention followed in this report.

Yucaipa Creek, located north of Wildwood Creek, is a tributary to Wildwood Canyon. It should be noted that the USGS topographic quadrangle shows this creek as an unnamed tributary; however, local convention refers to it as Yucaipa Creek and that is the convention followed in this report. Yucaipa Creek collects flows from the mountains to the east, continues southwest through the City of Yucaipa and flows into Wildwood Creek within the Project Site.

Wildwood Creek flows from Wildwood Canyon to the east, through the Project Site, and ultimately drains to San Timoteo Creek to the west. San Timoteo Creek continues through Redlands and ultimately drains to the Santa Ana River northwest of Redlands.

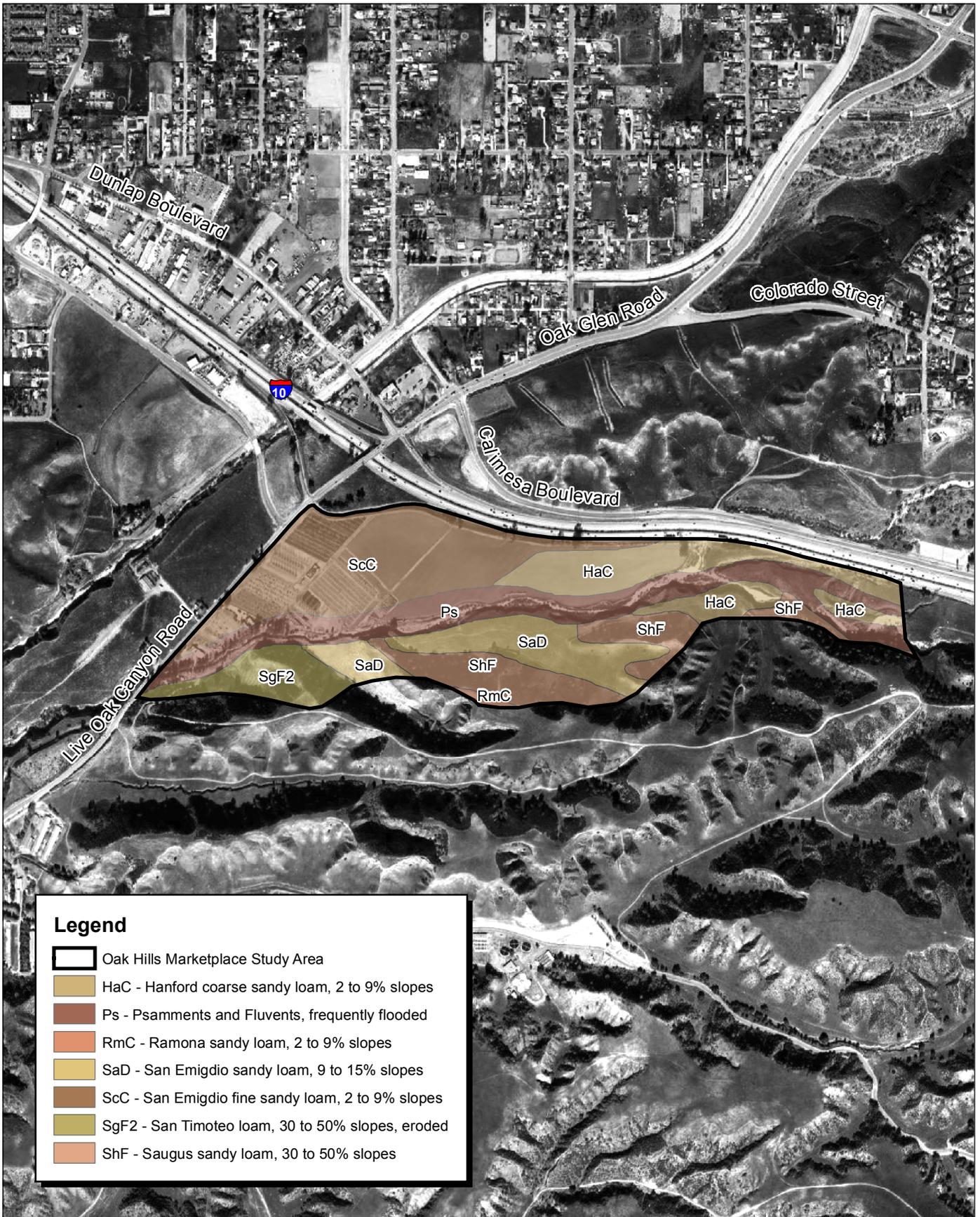
Two-thirds of the Project Site lies north of Wildwood Creek and is a Christmas tree farm and pumpkin patch. The remainder of the Project Site is undeveloped ranch pastures. The Project Site north of Wildwood Creek is relatively flat and the undeveloped portion consists of non-native grassland and remnant coastal sage scrub. The Project Site south of Wildwood Creek consists of gently rolling hills with non-native grassland, open oak woodland, and southern mixed chaparral communities. The Project Site elevation ranges from 2,000 feet to approximately 2,220 feet above mean sea level. Surrounding land uses consist of residential development and I-10 to the north, undeveloped land to the east, undeveloped land and rural residential to the south and west.

The Project Site contains seven different soil series. A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other important characteristics. Soils series present on the Project Site include (USDA 1978):

- Hanford coarse sandy loam
- Psammments and fluvents
- Ramona sandy loam

- San Emigdio sandy loam
- San Emigdio fine sandy loam
- San Timoteo loam
- Saugus sandy loam

Wildwood Creek and the unnamed tributary are mapped as Psamments and fluvents, frequently flooded (Exhibit 5). Yucaipa Creek is mapped as Hanford coarse sandy loam.



Legend

- Oak Hills Marketplace Study Area
- HaC - Hanford coarse sandy loam, 2 to 9% slopes
- Ps - Psamments and Fluvents, frequently flooded
- RmC - Ramona sandy loam, 2 to 9% slopes
- SaD - San Emigdio sandy loam, 9 to 15% slopes
- ScC - San Emigdio fine sandy loam, 2 to 9% slopes
- SgF2 - San Timoteo loam, 30 to 50% slopes, eroded
- ShF - Saugus sandy loam, 30 to 50% slopes

Source: Google Earth Pro! 2005 and US Dept. of Agriculture Soils Data.



SECTION 4: JURISDICTIONAL METHODOLOGY

4.1 - PRE-SURVEY INVESTIGATION

Prior to the field visit, an aerial photograph of the Project Site was compared with the Yucaipa, California, USGS 7.5-minute topographic quadrangle map to identify drainage features as indicated from topographic changes or visible drainage patterns. The United States Department of Agriculture (USDA) Soil Survey Map for the area was reviewed to identify the soil series that occur on the Project Site.

4.2 - FIELD INVESTIGATION

MBA Biologist, Linda Archer, completed a survey consistent with the USACE's *1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands*, on December 8, 2005. Weather conditions during the assessment survey included partly cloudy skies with a temperature of 66 degrees Fahrenheit with winds ranging from 0 to 5 mph. The survey was conducted from 0830 until 1330 hours.

The survey was conducted on foot and all potentially jurisdictional features within the Project Site were systematically inspected to record existing conditions and to determine the jurisdictional limits. Width measurements for federal jurisdiction were taken from bank to bank at the ordinary high water mark (OHWM) within the Site. Associated riparian vegetation coverage previously indicated on aerial photographs was verified during the site visit. Width measurements for state jurisdiction were taken at the outer drip line of associated riparian vegetation. Information regarding drainage characteristics such as an identifiable channel bed and bank or changes in soils or vegetation were recorded and then transferred to standardized data sheets for clarity and consistency (Appendix D).

Width and length measurements were entered into Geographical Information System (GIS) Arcview software to identify the location and dimensions of jurisdictional areas. The Arcview application was then used to compute state and federal jurisdiction in acres. Acreage computations were verified using a 200 scale aerial photograph and field data.

SECTION 5: JURISDICTIONAL ASSESSMENT RESULTS

The following section describes the jurisdictional assessment area, including findings related to vegetation, topography, soils, hydrology, and wetland criteria for each of the onsite drainage features.

5.1 - JURISDICTIONAL AREAS

The three drainage features observed onsite were determined to be under the jurisdiction of the USACE, CDFG, and RWQCB. The main drainage feature, Wildwood Creek, crosses under I-10 via culverts and generally flows in a westerly direction from the eastern boundary of the Project Site and exits through a culvert under Live Oak Canyon Road at the southwest corner of the Project Site. From there it connects to San Timoteo Canyon. San Timoteo Canyon ultimately flows to the Santa Ana River northwest of Redlands, which flows to the Pacific Ocean providing the necessary connectivity to waters of the United States to be under the jurisdiction of the USACE.

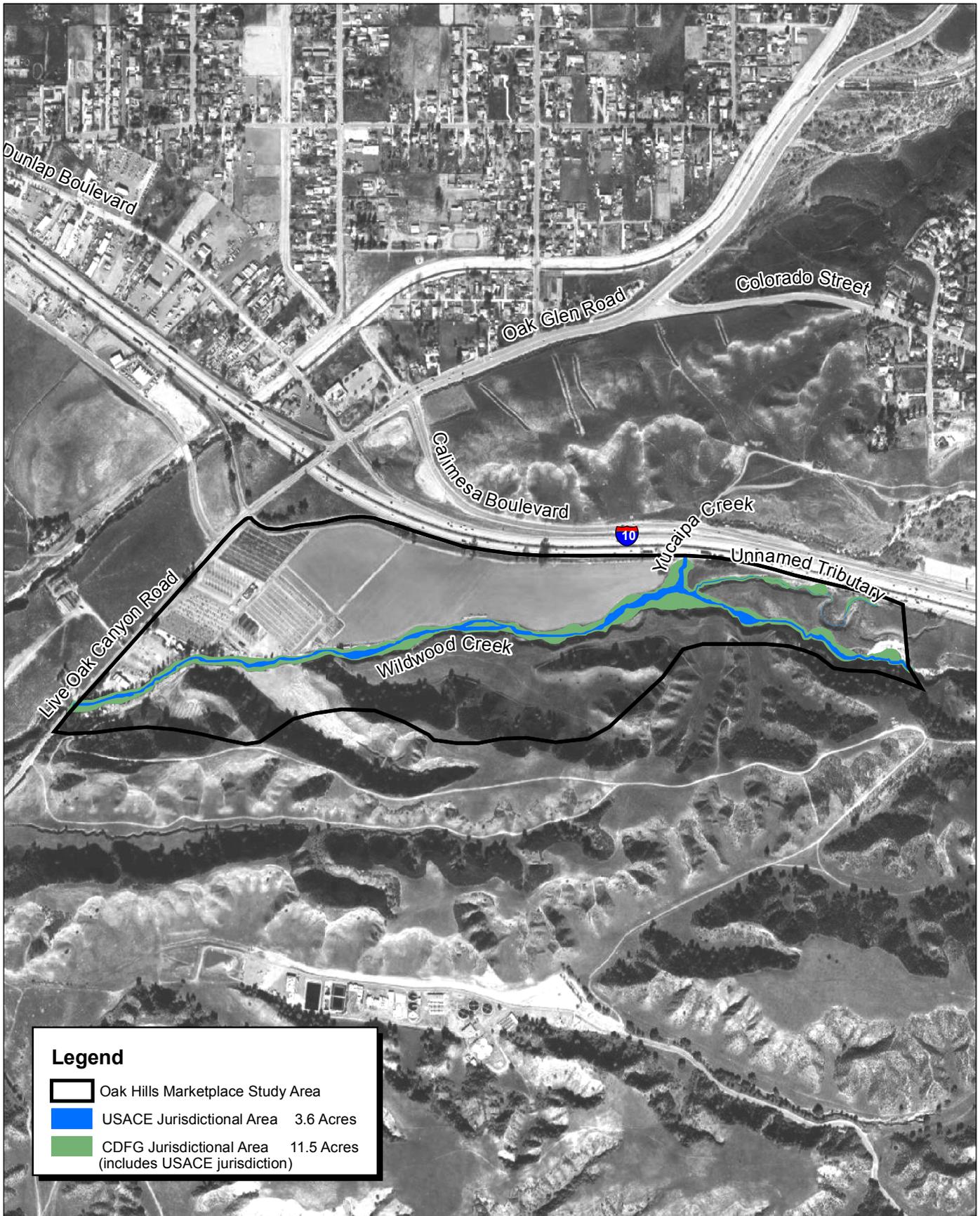
The north-south trending tributary, referred to in this report as Yucaipa Creek, is shown on the USGS topographic quadrangle as an unnamed blue-line stream that flows in a northeast to southwest fashion through the City of Yucaipa, crosses under the I-10 via a culvert, and connects to the main feature on the Project Site. The third feature is an east to west flowing unnamed tributary to Wildwood Creek that originates on the eastern end of the Project Site and connects to Wildwood Creek east of Yucaipa Creek. The Project Site contains a total of 3.7 acres of non-wetland waters of the United States under the jurisdiction of the USACE and 11.5 acres under the jurisdiction of the CDFG.

5.2 - DRAINAGE DESCRIPTIONS

There are three drainage features within the Project Site (Exhibit 6). Representative photos of the drainages can be found in Appendix A and a floral compendium is provided in Appendix C. Please refer to Table 1.

5.2.1 - Wildwood Creek

Wildwood Creek is a deeply incised braided ephemeral channel that flows east to west along the southern end of the Project Site. It originates in Wildwood Canyon at the base of the mountains east of the Project Site, flows onsite from an undeveloped soft-bottom channel for a total of 3,766 linear feet, and exits the Project Site via a culvert beneath Live Oak Canyon Road at the southwest end of the Site.



Source: Google Earth Pro! 2005, and MBA Field Survey.



Exhibit 6 Jurisdictional Areas Map

Table 1: Jurisdictional Areas

Drainage Feature	Linear Feet	USACE/RWQCB		CDFG
		Non-wetland	Wetland	
Wildwood Creek	5,817	3.3	0.0	10.1
Yucaipa Creek	223	0.2	0.0	0.5
Unnamed Tributary	1,435	0.1	0.0	0.9
Total	7,475	3.6	0.0	11.5

The Creek continues west of Live Oak Canyon Road, ultimately flowing to San Timoteo Canyon, which continues northwest to the Santa Ana River. Wildwood Creek within the Site has a well-defined bed and bank with the OHWM ranging from 12 to 80 feet. Wildwood Creek meets the criteria for wetland hydrology.

The center of the Creek is essentially devoid of vegetation along its entire length. In the central and eastern segments of the Creek, stands of mule fat (*Baccharis salicifolia*) and ruderal (weedy) species such as tree tobacco (*Nicotiana glauca*) occur along the terraces within the drainage. In the eastern portion of the Creek, the upper terraces also contain small, isolated stands of Riversidean alluvial fan sage scrub (RAFSS) dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and scale-broom (*Lepidospartum squamatum*), as well as tree tobacco and short-podded mustard (*Hirschfeldia incana*). The eastern end of the channel is deeply incised with unvegetated cliffs on either side. The vegetation associated with upland areas above the southern bank of the drainage, consists of stands of open oak woodland, non-native grassland, and southern mixed chaparral. The upland areas above the north bank contain non-native grassland and Riversidean sage scrub.

At the western end, the channel is not as deeply incised and trees such as eucalyptus (*Eucalyptus* spp.), pines (*Pinus* sp.), oaks (*Quercus* spp.), sycamores (*Platanus racemosa*), and tree of heaven (*Ailanthus altissima*) have been planted along the upland edge of the drainage feature. The banks of the drainage also contain small stands of mule fat and ruderal vegetation. The majority of the Creek does not meet the criteria for hydrophytic vegetation. However, the upper terraces dominated by mule fat do meet the hydrophytic vegetation criteria.

The soils are mapped as Psamments and Fluvents, frequently flooded, which is defined as sandy and gravelly material in intermittent streambeds consisting of cobbles, stones, and boulders. The survey confirmed the presence of this soil throughout Wildwood Creek within the Project Site. The drainage

contains sandy soil with no organic streaking. There are no hydric soil indicators within the portion of the drainage feature within the Project Site.

Wildwood Creek is under the jurisdiction of the USACE due to the evidence of flows and connection to a “waters of the United States.” CDFG jurisdiction extends to the edge of the mule fat at the eastern end of the Creek. At the western end, CDFG jurisdiction extends to the edge of the tree canopy of those trees considered associated with the riparian system. USACE jurisdiction for Wildwood Creek totals 3.3 acres (5,817 linear feet) and CDFG jurisdiction totals 10.1 acres. There are no wetlands within Wildwood Creek.

5.2.2 - Yucaipa Creek

Yucaipa Creek is an ephemeral stream that flows in a northeast to southwest direction through the City of Yucaipa. It is shown on the USGS topographic quadrangle as an unnamed blue-line stream that originates within the City of Yucaipa, collects flows from the mountains to the east, and flows southwesterly through the City of Yucaipa. Flows continue under I-10 via a culvert and connect to Wildwood Creek within the Project Site. The portion of Yucaipa Creek within the Project Site totals 157 linear feet and has an OHWM of approximately 30 feet. Yucaipa Creek meets the criteria for wetland hydrology.

The center of Yucaipa Creek within the Project Site is largely unvegetated and the terraces contain mule fat, tree tobacco, and castor bean (*Ricinus communis*). The terraces meet the hydrophytic vegetation criteria.

The soils are mapped as Hanford coarse sandy loams defined as well-drained soils formed in recent granitic alluvium. The survey confirmed the presence of well-drained soils; however, more consistent with the soils of Wildwood Creek consisting of cobbles, stones, and boulders. The portion of Yucaipa Creek within the Project Site does not meet the hydric soils criteria for wetlands.

Yucaipa Creek is under the jurisdiction of the USACE due to the hydrologic connectivity to a navigable “waters of the United States.” CDFG jurisdiction extends to the edge of the mule fat along the terraces. USACE jurisdiction for Yucaipa Creek totals 0.2 acres (223 linear feet) and CDFG jurisdiction totals 0.5 acre. There are no wetlands within Yucaipa Creek due to the failure to meet all three criteria required to be considered a wetland.

5.2.3 - Unnamed Tributary

The third feature within the Project Site is an unnamed intermittent ephemeral tributary to Wildwood Creek. It originates at the east end of the study area, collecting runoff from the adjoining upland areas, and joining Wildwood Creek just east of Yucaipa Creek. It contains an intermittent OHWM ranging from 1.5 to 2.5 feet. The unnamed tributary meets the criteria for wetland hydrology.

The western portion of the drainage is dominated by mule fat with scattered tree tobacco. Mexican elderberry (*Sambucus mexicana*) occurs scattered throughout the drainage. The eastern portion of the feature contains Riversidean sage scrub dominated by California buckwheat. The western portion of the drainage meets the criteria for hydrophytic vegetation.

The soils are mapped as Psamments and Fluvents and Hanford coarse sandy loams. The soils observed are consistent with coarse sandy loam. The drainage feature contains sandy soils with no organic streaking. No portion of the tributary contains soils that meet the criteria for hydric soils.

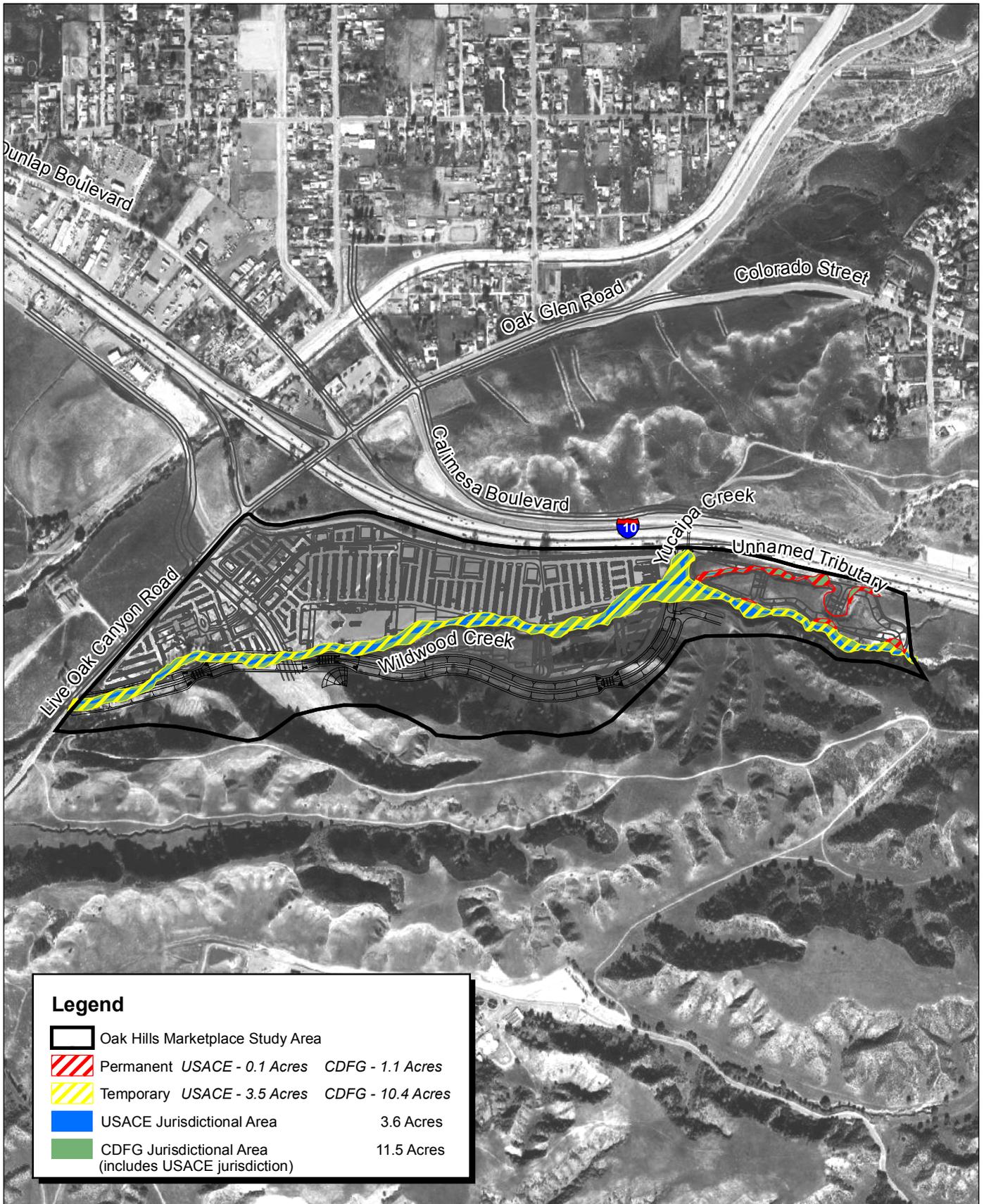
The tributary is under the jurisdiction of the USACE due to the evidence of flows and a hydrologic connection to a navigable “waters of the United States.” CDFG jurisdiction extends to the edge of the mule fat along the eastern end and to the edge of the elderberry scattered throughout the drainage. USACE jurisdiction for the tributary totals 0.1 acre (1,435 linear feet) and CDFG jurisdiction totals 0.9 acre. There are no wetlands within the unnamed tributary.

5.3 - JURISDICTIONAL IMPACTS

The proposed project consists of a partial realignment of Wildwood Creek, development of a retail center, and the creation of a detention basin/multi-use area. Total temporary impacts to the three drainages would include 3.5 acres of non-wetland waters of the United States and 10.4 acres of jurisdictional streambed. Total permanent impacts to the three drainages include 0.1 acres of non-wetland waters of the United States and 1.1 of jurisdictional streambed (Exhibit 7 and Table 2).

5.3.1 - Wildwood Creek

The realignment of Wildwood Creek would temporarily impact 2,841 linear feet of Wildwood Creek, including 0.0 acres of non-wetland waters of the United States and 9.9 acres of jurisdictional streambed. The development of the detention basin/multi-use area would result in permanent impacts to 381 linear feet, including 0.0 acre of non-wetland waters of the United States and 0.4 acre of jurisdictional streambed.



Source: Sikand Engineering (Mar. 2006)
 Google Earth Pro! 2005, and MBA Field Survey.



Michael Brandman Associates
 22600002 • 12/2006 | 7_impacts.mxd

Exhibit 7 Jurisdictional Impacts Map

Table 2: Jurisdictional Impacts

Drainage Feature	Linear Feet - permanent	USACE				CDFG	
		Temporary		Permanent		Temporary	Permanent
		Non-Wetland	Wetland	Non-wetland	Wetland		
Wildwood Creek	381	3.3	0	0.0	0	9.9	0.4
Yucaipa Creek	0	0.2	0	0.0	0	0.5	0.0
Unnamed Tributary	1,468	0.0	0	0.1	0	0.0	0.7
Total	1,849	3.5	0	0.1	0	10.4	1.1

5.3.2 - Yucaipa Creek

The development of the retail center would temporarily impact 209 linear feet of Yucaipa Creek, including 0.2 acres of USACE non-wetland waters of the United States and 0.5 acres CDFG jurisdictional streambed.

5.3.3 - Unnamed Tributary

The creation of the detention basin/multi-use area would permanently impact the unnamed tributary for a total of 1,468 linear feet, including 0.10 acre of USACE non-wetland waters of the United States and 0.70 acre of CDFG jurisdictional streambed.

SECTION 6: PERMITS/AGREEMENTS PROCESSING

The proposed project impacts waters of the United States and CDFG jurisdictional streambed and associated riparian habitat, subject to the jurisdiction of both USACE and CDFG, respectively. The following discussion identifies the project-specific regulatory clearance requirements of each process.

6.1 - USACE PERMIT PROGRAM

The USACE has two permitting programs for a project, the Nationwide Permit (NWP) or Individual Permit program, depending on the magnitude of impacts to waters of the United States. Generally speaking, a project qualifies for the NWP program when impacts to waters of the United States are less than or equal to 0.5 acres of ephemeral drainage feature. When impacts exceed 0.5 acres, the project is required to obtain an IP for impacts to waters of the United States.

6.1.1 - Individual Permit

The project as proposed will require processing under an Individual Permit for impacts to waters of the United States over 0.5 acre. An Individual Permit requires an assessment of potential environmental impacts associated with filling 0.5 acres or more of USACE jurisdiction as per the National Environmental Pollution Act (NEPA). The average processing time for an individual permit by the USACE is currently 180 to 270 days upon acceptance of a completed application.

6.2 - COMPLIANCE WITH THE ENDANGERED SPECIES ACT

The USACE, in administering the Section 404 permitting program, requires that any endangered species potentially affected by a proposed project be reported with the permit application, pursuant to the Endangered Species Act. Therefore, the presence of sensitive plant or animal species must be determined prior to submittal of a Section 404 application.

6.2.1 - Presence/Non-Presence of Federally Endangered Species

MBA prepared a biological assessment in March 2006. No federally listed plant or wildlife species were found onsite.

6.3 - COMPLIANCE WITH THE HISTORIC PRESERVATION ACT

The USACE, in administering the Section 404 permitting program, requires that any archaeological sites potentially affected by a proposed project be reported with the permit application, pursuant to the federal National Historic Preservation Act. Therefore, the presence of significant cultural resources must be determined prior to submittal of the Section 404 application.

6.3.1 - Presence/Absence of Cultural Resources

A cultural resources assessment will be performed onsite prior to submittal of an application for a Section 404 permit from the USACE. The report will be provided upon completion.

6.4 - COMPLIANCE WITH SECTION 401 OF THE CLEAN WATER ACT

In connection with notification to the USACE under Section 404 of the CWA, pursuant to 33 CFR Part 330, a written request for Section 401 water quality certification must be submitted to the RWQCB to ensure that no degradation of water quality will result from the proposed project. RWQCB Section 401 certification must be issued prior to commencement of any activity that might affect water quality.

Urban runoff has been shown to contain potentially high levels of heavy metals, oil, and grease, as well as silt and organic loads, plastics and other general trash, and bacterial populations. Additionally, improper use of chemicals for landscape maintenance may have a detrimental effect on water quality.

6.5 - COMPLIANCE WITH SECTION 1602 OF THE CALIFORNIA FISH AND GAME CODE

A Streambed Alteration Agreement is required per Section 1602 of the California Fish and Game Code prior to any alteration of a streambed or riparian habitat. The processing time for a 1602 permit is approximately 90 days, assuming a complete application is submitted. Mitigation to offset the potential impacts to waters of the State is proposed in Section 8 of this document.

SECTION 7: MITIGATION MEASURES

7.1 - AVOIDANCE, MINIMIZATION AND MITIGATION RECOMMENDATIONS

The following measures are general guidelines applicants can use to avoid, minimize and mitigate any impacts to waters, riparian vegetation, and water quality associated with implementation of a proposed project.

7.1.1 - Jurisdictional Waters

Mitigation is required by USACE and CDFG to offset any impacts to waters of the United States and jurisdictional streambeds. Types of mitigation normally accepted by agencies may include the creation, restoration, and/or enhancement of like in-kind habitat and/or purchase of mitigation credits through an approved mitigation bank. A Habitat Mitigation and Monitoring Plan (HMMP) is generally prepared and submitted to USACE and CDFG for approval prior to mitigation implementation.

Mitigation and/or compensation measures to protect fish, wildlife, and plant resources will be established to provide on-site non-wetland habitat. The realigned slopes of Wildwood Creek channel will be seeded and allowed to revegetate.

7.1.2 - Water Quality

The RWQCB requires the implementation of Best Management Practices (BMP) to prevent deterioration of water quality caused by construction activities and project operation. Compliance with Section 402 (Stormwater Pollution Prevention Plan) of the CWA will be required as administered by the RWQCB. Water pollution control measures incorporated into project design, construction, and operations would establish compliance with current National Pollutant Discharge Elimination System (NPDES) regulations and reduce cumulative impacts to the watershed to less than significant.

The water quality pre-treatment plan will be provided by the project engineer, upon completion.

SECTION 8: REFERENCES

California, State of. 1989. *Fish And Game Code*.

Department of Army. 1986 (Nov 13). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. *Federal Register*. 51(219): 41206-231.7.

Department of Army. 2000 (Mar 9). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. *Federal Register*. Vol. 65 No. 47: 12818-899.

Department of Army. 2002 (Jan 15). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. *Federal Register*. Vol. 67 No. 10: 2020-2095.

Department of Army-South Pacific Division. 2001 (June). *Guidelines for Jurisdictional Delineations for Waters of the United States In the Arid Southwest*.

Federal Interagency Committee For Wetland Delineation. 1987. *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Services, and USDA Soil Conservation Service. Washington, DC. Cooperative Technical Publication.

Kollmorgen Corporation. 1975. Munsell Soil Color Charts. Macbeth Division of Kollmorgen Corporation, Baltimore, MD.

Reed, P.B. 1988. *National List of Plant Species That Occur In Wetlands: California (Region 0)*. National Wetlands Inventory, U.S. Fish and Wildlife Service Biological Report 88 (26.9).

Sharp, R.P. 1976. *Geology Field Guide to Southern California*. Kendall/Hunt Publishing Company, Dubuque, Iowa.

USDA (United States Department of Agriculture). 1978. *Soil Survey of Southwestern San Bernardino County, California*. Department of the Interior. Washington D.C.: US Government Printing office.

USFWS (United States Fish And Wildlife Service). 1988 (May). *National List of Plant Species that Occur in Wetlands: California (Region 0)*. Biological Report 88(26.10). Washington, DC.

USGS (United States Geological Survey). 1996. *Yucaipa, California 7.5-Minute Topographic Quadrangle Map*. Department of the Interior. Washington D.C.: US Government Printing office.

Appendix A: Site Photographs



Photograph 1: Facing south towards Yucaipa Creek (foreground) and Wildwood Creek (background).



Photograph 2: Facing north towards culvert under I-10 Freeway.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

22600002 • 04/2006 | A_site_photos_1and2.cdr

Appendix A Site Photographs 1 and 2



Photograph 3: Facing west at western end of unnamed tributary.



Photograph 4: Facing east within unnamed tributary.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

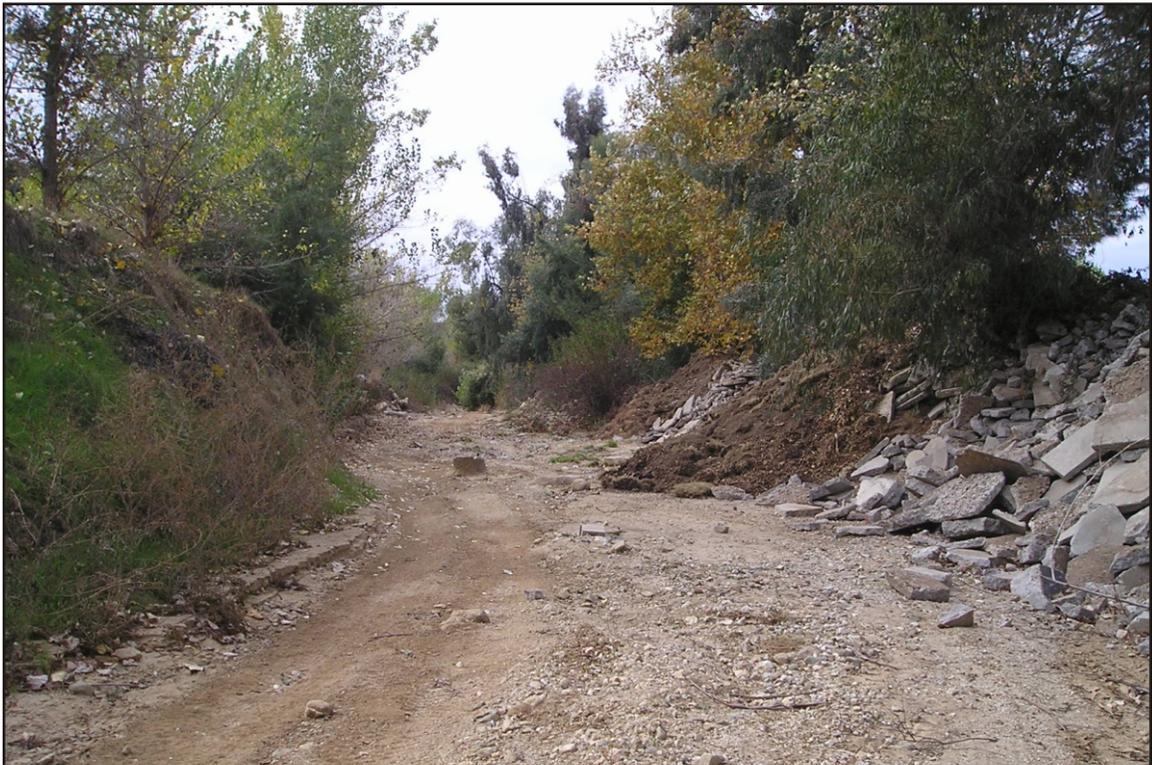
22600002 • 04/2006 | A_site_photos_3and4.cdr

Appendix A Site Photographs 3 and 4

PALMER GENERAL CORPORATION • OAK HILLS MARKETPLACE
DELINEATION OF JURISDICTIONAL WATERS AND WETLANDS



Photograph 5: Facing west at western end of unnamed tributary.



Photograph 6: Facing east within unnamed tributary.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

22600002 • 04/2006 | A_site_photos_5and6.cdr

Appendix A Site Photographs 5 and 6

PALMER GENERAL CORPORATION • OAK HILLS MARKETPLACE
DELINEATION OF JURISDICTIONAL WATERS AND WETLANDS



Photograph 7: Facing west towards pipes under Live Oak Canyon Road.



Photograph 8: Facing north towards northern banks of Wildwood Creek.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

22600002 • 04/2006 | A_site_photos_7and8.cdr

Appendix A Site Photographs 7 and 8



Photograph 9: Facing east within project site south of Wildwood Creek.



Photograph 10: Facing northeast within eastern portion of project site.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

22600002 • 04/2006 | A_site_photos_9and10.cdr

Appendix A Site Photographs 9 and 10

PALMER GENERAL CORPORATION • OAK HILLS MARKETPLACE
DELINEATION OF JURISDICTIONAL WATERS AND WETLANDS

**Appendix B:
Determination of Jurisdictional Wetlands and Waters**

DETERMINATION OF JURISDICTIONAL WETLANDS AND WATERS

Jurisdictional Criteria

The *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (1987) sets forth three mandatory criteria and a number of non-mandatory field indicators to use in evaluating whether or not an area is a jurisdictional wetland. The three mandatory criteria are hydrophytic vegetation, hydric soils, and wetland hydrology. The following paragraphs discuss the mandatory criteria, the field indicators, and other reference materials used to determine if each criterion has been met at the Project Site.

Hydrophytic Vegetation

Hydrophytic vegetation is defined as plant life growing in water, soil, or substrate that is at least periodically deficient in oxygen because of excessive water content. The United States Fish and Wildlife Service (USFWS) has published the *National List of Plant Species That Occur in Wetlands*, and divided plants into four groups based on their “wetland indicator status:”

1. Obligate wetland plants (OBL) that occur almost always in wetlands under natural conditions
2. Facultative wetland plants (FACW) that usually occur in wetlands but occasionally are found in upland areas
3. Facultative plants (FAC) that are equally likely to occur in wetlands as well as upland
4. Facultative upland plants (FACU) that usually occur in upland areas but occasionally are found in wetlands

An area has hydrophytic vegetation when, under normal circumstances, more than 50 percent of the composition of dominant plant species from all strata are obligate wetland (OBL), facultative wetland (FACW) and/or facultative species (FAC).

Hydric Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. “Long enough” generally means 1 week during the growing season and soils that are saturated for this period usually support hydrophytic vegetation. The criteria for establishing the presence of hydric soils vary among different types of soils and between normal circumstances, disturbed areas, and problem areas. Due to their wetness during the growing season, hydric soils usually develop certain morphological

properties that can be readily observed in the field. Prolonged anaerobic soil conditions typically lower the soil redox potential, causing a chemical reduction of some soil components, mainly iron oxides and manganese oxides. This reduction is typically reflected by the presence of iron or manganese concretions, gleying or mottling. Other field indicators of hydric soils include the presence of sulfidic material, an aquic or peraquic moisture regime, or a spodic horizon. All organic soils, with the exception of Folists, are classified as hydric soils.

Wetland Hydrology

Wetland hydrology is permanent or periodic inundation, or soil saturation for a significant period during the growing season. Numerous factors influence the wetness of an area, including precipitation, stratigraphy, topography, soil permeability, and plant cover. At certain times of the year in most wetlands, and in certain types of wetlands at most times, wetland hydrology is quite evident, since surface water or saturated soils may be observed. Yet, in many instances, especially along the uppermost boundary of wetlands, hydrology is not readily apparent. Despite this limitation, hydrologic indicators can be useful for confirming that a site with hydrophytic vegetation and hydric soils still exhibits wetland hydrology. While hydrologic indicators are sometimes diagnostic of the presence of wetlands, they are generally either operationally impracticable, as in the case of recorded data, or technically inaccurate, as in the case of some field indicators, for delineating wetland boundaries.

The following hydrologic indicators, while not necessarily indicative of hydrologic events during the growing season or in wetlands alone, do provide evidence that inundation or soil saturation has occurred at some time:

- Visual observation of inundation
- Visual observation of soil saturation
- Oxidized channels (rhizospheres) associated with living roots and rhizomes
- Water marks
- Drift lines
- Waterborne sediment deposits
- Water-stained leaves
- Surface scoured areas
- Morphological plant adaptations
- Hydric soil characteristics

Appendix C: Regulatory Compliance

REGULATORY COMPLIANCE

SENSITIVE PLANT AND WILDLIFE SPECIES

Sensitive species are native species that have been accorded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Endangered Species Act

The United States Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (ESA). The ESA provides a process for listing species as either threatened or endangered, and methods of protecting listed species. The ESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its known geographic range. A “threatened” species is a species that is likely to become endangered. A “proposed” species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

ESA §9 prohibits “take” of threatened or endangered species. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. Take can include disturbance to habitats used by a threatened or endangered species during any portion of its life history. The presence of any federally threatened or endangered species in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the ESA, the USFWS may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

California Endangered Species Act

The California Department of Fish and Game (CDFG) administers the California Endangered Species Act (CESA). The State of California considers an “endangered” species one whose prospects of survival and reproduction are in immediate jeopardy. A “threatened” species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A “rare” species is one present in such small numbers throughout its portion of its known geographic range that it may become endangered if its present environment worsens. The rare species designation applies to California native plants. State threatened and endangered species are fully protected against take, as defined above. The term “species of special concern” is an informal designation used by CDFG for some declining wildlife

species that are not state candidates for listing. This designation does not provide legal protection, but signifies that these species are recognized as sensitive by CDFG.

California Native Plant Society

The California Native Plant Society (CNPS) is a California resource conservation organization that has developed an inventory of California's sensitive plant species. This inventory summarizes information on the distribution, rarity, and endangerment of California's vascular plants. The inventory is divided into four lists based on the rarity of the species. In addition, the CNPS provides an inventory of plant communities that are considered sensitive by the state and federal resource agencies, academic institutions, and various conservation groups. Determination of the level of sensitivity is based on the number and size of remaining occurrences as well as recognized threats.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States (U.S.) except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs.

California Fish and Game Code - §3503 and §3511

The CDFG administers the California Fish and Game Code (CFG Code). There are particular sections of the CFG Code that are applicable to natural resource management. For example, §3503 of the CFG Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. CFG Code §3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey such as hawks and owls, and their eggs and nests from any form of take. CFG Code §3511 lists fully protected bird species where the CDFG is unable to authorize the issuance of permits or licenses to take these species.

JURISDICTIONAL WATERS AND WETLANDS

Impacts to natural drainage features and wetland areas are regulated by the United States Army Corp of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFG based upon the policies and regulations discussed below.

United States Army Corp of Engineers Regulations

Federal Clean Water Act - §404

The USACE administers §404 of the federal Clean Water Act (CWA). This section regulates the discharge of dredge and fill material into waters of the U.S. USACE has established a series of nationwide permits that authorize certain activities in waters of the U.S., if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acre of waters of the U.S. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. USACE also has discretionary authority to require an Environmental Impact Statement for projects that result in impacts to an area between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

Waters of the United States

Waters of the U.S., as defined in the Code of Federal Regulations (CFR) §328.3, include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sand-flats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, waters of the U.S., with at least intermittently flowing water or tidal influences, are demarcated by an ordinary high water mark (OHWM). The OHWM is defined in CFR §328.3(e) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. In this region, the OHWM is typically indicated by the presence of an incised streambed with defined bank shelving.

In June 2001, the USACE South Pacific Division has issued *Guidelines for Jurisdictional Delineations for Waters of the United States in the Arid Southwest*. The purpose of this document was to provide background information concerning physical characteristics of dryland drainage systems. These guidelines were reviewed and used to identify jurisdictional drainage features within the Project Site.

Wetlands

According to the USACE *Wetlands Delineation Manual, Technical Report*, three criteria must be satisfied to classify an area as a jurisdictional wetland:

1. A predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation)

2. Soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils)
3. Permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology)

Wetland vegetation is characterized by vegetation in which more than 50 percent of the composition of dominant plant species are obligate wetland, facultative wetland, and/or facultative species that occur in wetlands. As a result of the 2001 Solid Waste Agency of North Cook County (SWANCC) case, a wetland must show connectivity to a stream course in order for such a feature to be considered jurisdictional. Although wetland criteria was used to identify if areas were considered wetlands, the exact limits of jurisdiction were not measured based on the standard wetland delineation protocol as described in the 1987 USACE manual.

United States Army Corp of Engineers Regulated Activities

The USACE regulates the discharge of dredged or fill material including, but not limited to, grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. Activities that generally do not involve a regulated discharge, if performed specifically in a manner to avoid discharges, include driving pilings, drainage channel maintenance, temporary mining and farm/forest roads, and excavating without stockpiling.

Regional Water Quality Control Board Regulations

Clean Water Act - §401

Per §401 of the CWA, “any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a §404 permit, applicants must apply for and receive a §401 water quality certification from the RWQCB.

Porter-Cologne Water Quality Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the state” (water code §13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (water code §13050 (e)).

Regional Water Quality Control Board Regulated Activities

Under §401 of the CWA, the RWQCB regulates all activities that are regulated by the USACE. Additionally, under the Porter-Cologne Water Quality Act, the RWQCB regulates all activities, including dredging, filling, or discharge of materials into waters of the state that are not regulated by the USACE due to a lack of connectivity with a navigable water body and/or lack of an OHWM.

California Department of Fish and Game Regulations

California Fish and Game Code - §1600 to §16003

The CFG Code mandates that “it is unlawful for any person to substantially divert or obstruct the natural flow or substantially changes the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity.” CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources.

Furthermore, CDFG jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFG jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFG definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFG does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

California Department of Fish and Game Regulated Activities

The CDFG regulates activities that involve diversions, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources.

**Appendix D:
Wetland Data Sheets**

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Yucaipa Creek</u> Transect ID: _____ Plot ID: <u>WP1</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Nicotiana glauca</u>	<u>S</u>	<u>FAC</u>	10.	_____	_____	_____
3.	<u>Ricinus communis</u>	<u>S</u>	<u>FACU</u>	11.	_____	_____	_____
4.	_____	_____	_____	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

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

Remarks: Bed of channel scoured, little vegetation. Mulefat and tree tobacco along terraces; CDFG 25'4"

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 2'6"	

SOILS

Map Unit Name (Series and Phase):		Hanford coarse sandy loams		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

SOILS

Map Unit Name (Series and Phase):		Hanford coarse sandy loams		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Remarks:											

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Mulefat Scrub</u> Transect ID: <u>Unnamed tributary</u> Plot ID: <u>WP4</u>

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1.	<u>Baccharis salicifolia</u>	<u>I</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Nicotiana glauca</u>	<u>S</u>	<u>FAC</u>	10.	_____	_____	_____
3.	<u>Ricinus communis</u>	<u>S</u>	<u>FACU</u>	11.	_____	_____	_____
4.	_____	_____	_____	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

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

Remarks: Banks densely vegetated with mulefat; CDFG 25'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 1.5'	

SOILS

Map Unit Name (Series and Phase):		Hanford coarse sandy loams		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Mulefat Scrub</u> Transect ID: <u>Unnamed tributary</u> Plot ID: <u>WP6</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Sambucus mexicana</u>	<u>T</u>	<u>FACU</u>	10.	_____	_____	_____
3.	<u>Eriogonum fasciculatum</u>	<u>S</u>	_____	11.	_____	_____	_____
4.	_____	_____	_____	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

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

Remarks: Transition to upland community; elderberry scattered CDFG 40'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 1.5'	

SOILS

Map Unit Name (Series and Phase):		Hanford coarse sandy loams		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:				

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Wildwood Creek</u> Transect ID: _____ Plot ID: <u>WP7</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Nicotiana glauca</u>	<u>S</u>	<u>FAC</u>	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: Bed of channel scoured, little vegetation. Mulefat and tree tobacco along terraces; CDFG 46'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 12'4"	

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

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

Project Site: <u> Oak Hills Marketplace </u> Applicant/Owner: <u> Palmer General Corporation, David Palmer </u> Investigator: <u> Linda Archer </u>	Date: <u> 12/8/2005 </u> County: <u> San Bernardino </u> State: <u> CA </u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u> Wildwood Creek </u> Transect ID: _____ Plot ID: <u> WP8 </u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u> Baccharis salicifolia </u>	<u> S </u>	<u> FACW </u>	9.	_____	_____	_____
2.	<u> Nicotiana glauca </u>	<u> S </u>	<u> FAC </u>	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: Bed of channel scoured, little vegetation. Mulefat and tree tobacco along terraces; CDFG 109'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 27'2"	

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Wildwood Creek</u> Transect ID: _____ Plot ID: <u>WP9</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Nicotiana glauca</u>	<u>S</u>	<u>FAC</u>	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: Bed of channel scoured, little vegetation. Mulefat and tree tobacco along terraces; CDFG 175'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 80'6" (at tributary)	

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Wildwood Creek</u> Transect ID: _____ Plot ID: <u>WP10</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Nicotiana glauca</u>	<u>S</u>	<u>FAC</u>	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: Bed of channel scoured, little vegetation. Mulefat and tree tobacco along terraces; CDFG 95'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 29'	

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:				

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Wildwood Creek</u> Transect ID: _____ Plot ID: <u>WP12</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Nicotiana glauca</u>	<u>S</u>	<u>FAC</u>	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: Bed of channel scoured, little vegetation. Channel forms loop with island of vegetation in middle as well as along terraces. CDFG 68'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 32'9" main channel; loop OHWM 6'	

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:				

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Wildwood Creek</u> Transect ID: _____ Plot ID: <u>WP13</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Nicotiana glauca</u>	<u>S</u>	<u>FAC</u>	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: Bed of channel scoured, little vegetation. Mulefat and tree tobacco along terraces; CDFG 92'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 16'	

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

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

Project Site: <u> Oak Hills Marketplace </u> Applicant/Owner: <u> Palmer General Corporation, David Palmer </u> Investigator: <u> Linda Archer </u>	Date: <u> 12/8/2005 </u> County: <u> San Bernardino </u> State: <u> CA </u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u> Wildwood Creek </u> Transect ID: _____ Plot ID: <u> WP14 </u>

VEGETATION

	<u>Dominant Plant Species</u>	<u>Stratum</u>	<u>Indicator</u>		<u>Dominant Plant Species</u>	<u>Stratum</u>	<u>Indicator</u>
1.	<u> Baccharis salicifolia </u>	<u> S </u>	<u> FACW </u>	9.	_____	_____	_____
2.	<u> Nicotiana glauca </u>	<u> S </u>	<u> FAC </u>	10.	_____	_____	_____
3.	<u> Platanus racemosa </u>	<u> T </u>	<u> FACW </u>	11.	_____	_____	_____
4.	_____	_____	_____	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

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

Remarks: Bed of channel scoured, little vegetation. Sycamores along banks; mulefat and tree tobacco along terraces; CDFG 67'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 52'	

SOILS

Map Unit Name (Series and Phase):		Psammets and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:				

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

Project Site: <u> Oak Hills Marketplace </u> Applicant/Owner: <u> Palmer General Corporation, David Palmer </u> Investigator: <u> Linda Archer </u>	Date: <u> 12/8/2005 </u> County: <u> San Bernardino </u> State: <u> CA </u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u> Wildwood Creek </u> Transect ID: _____ Plot ID: <u> WP15 </u>

VEGETATION

	<u>Dominant Plant Species</u>	<u>Stratum</u>	<u>Indicator</u>		<u>Dominant Plant Species</u>	<u>Stratum</u>	<u>Indicator</u>
1.	<u> Eucalyptus </u>	<u> T </u>	<u> NI </u>	9.	_____	_____	_____
2.	<u> Platanus racemosa </u>	<u> T </u>	<u> FACW </u>	10.	_____	_____	_____
3.	<u> Quercus agrifolia </u>	<u> T </u>	_____	11.	_____	_____	_____
4.	_____	_____	_____	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

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

Remarks: Bed of channel scoured, little vegetation. Sycamores, oaks, eucalyptus, pines planted along banks; CDFG 54'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 24'	

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy, cobbly					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Wildwood Creek</u> Transect ID: _____ Plot ID: <u>WP16</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Eucalyptus</u>	<u>T</u>	<u>NI</u>	9.	_____	_____	_____
2.	<u>Platanus racemosa</u>	<u>T</u>	<u>FACW</u>	10.	_____	_____	_____
3.	<u>Quercus agrifolia</u>	<u>T</u>	_____	11.	_____	_____	_____
4.	<u>Ailanthus altissima</u>	<u>T</u>	_____	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

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

Remarks: Bed of channel scoured, little vegetation. Sycamores, oaks, eucalyptus, pines, tree of heaven planted along banks; CDFG 90'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 11'10"	

SOILS

Map Unit Name (Series and Phase):		Psammments and Fluvents		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators; soils sandy					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:				

SOILS

Map Unit Name (Series and Phase):		Hanford coarse sandy loams		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks:			

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

Project Site: <u>Oak Hills Marketplace</u> Applicant/Owner: <u>Palmer General Corporation, David Palmer</u> Investigator: <u>Linda Archer</u>	Date: <u>12/8/2005</u> County: <u>San Bernardino</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Pepper trees</u> Transect ID: <u>Unnamed tributary</u> Plot ID: _____

VEGETATION

	<u>Dominant Plant Species</u>	<u>Stratum</u>	<u>Indicator</u>		<u>Dominant Plant Species</u>	<u>Stratum</u>	<u>Indicator</u>
1.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>FACW</u>	9.	_____	_____	_____
2.	<u>Schinus terebinthifolius</u>	<u>T</u>	<u>NI</u>	10.	_____	_____	_____
3.	<u>Eriogonum fasciculatum</u>	<u>S</u>	_____	11.	_____	_____	_____
4.	<u>Sambucus mexicana</u>	<u>T</u>	<u>FACU</u>	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

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

Remarks: Primarily sage scrub community; large patch of pepper trees CDFG 60'

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks: OHWM 1.5'	

SOILS

Map Unit Name (Series and Phase):		Hanford coarse sandy loams		Drainage Class: _____	
Taxonomy (Subgroup):		_____		Field Observations Confirmed Mapped Type? Yes X No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: No hydric soil indicators					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Remarks:											