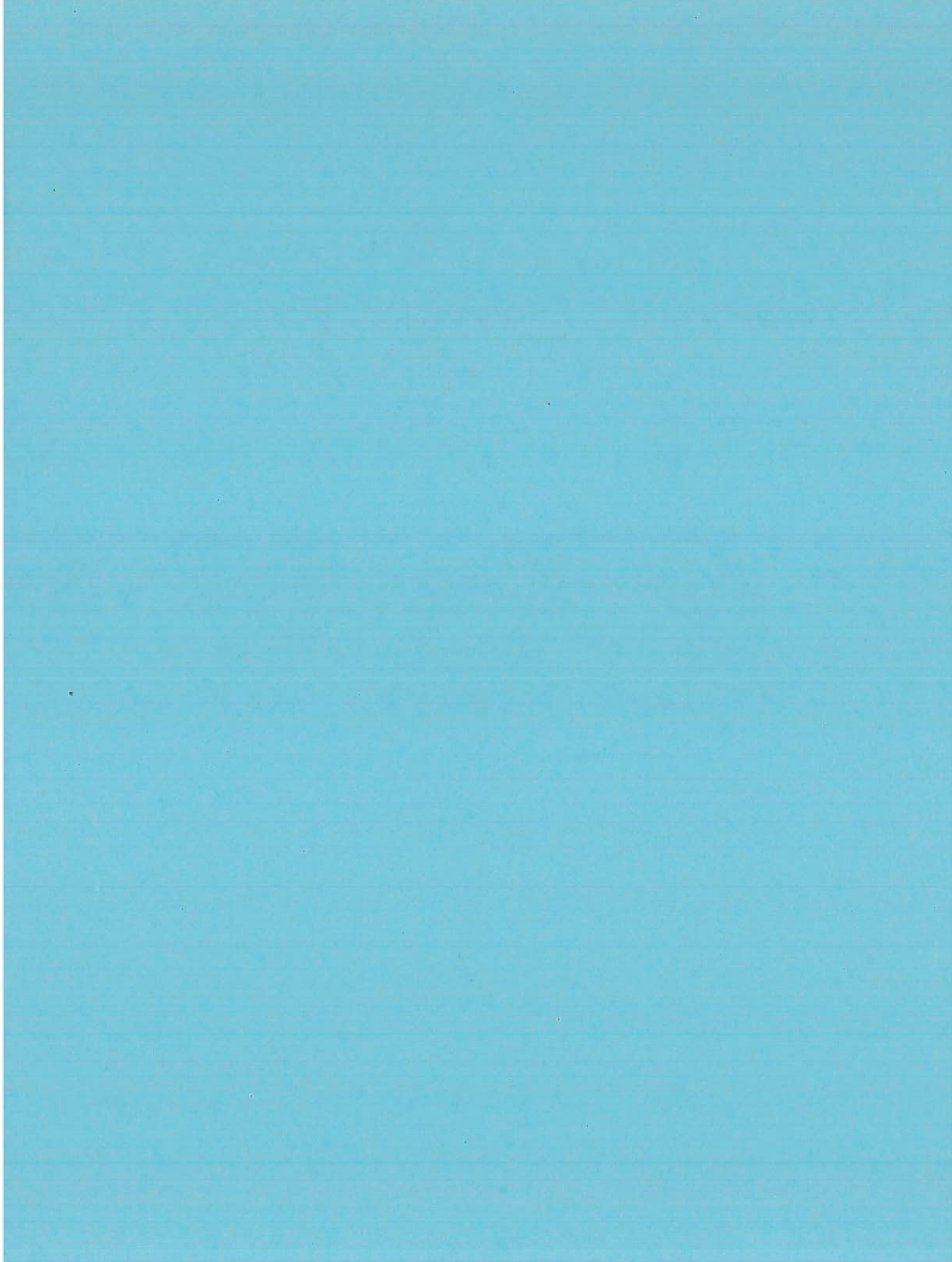
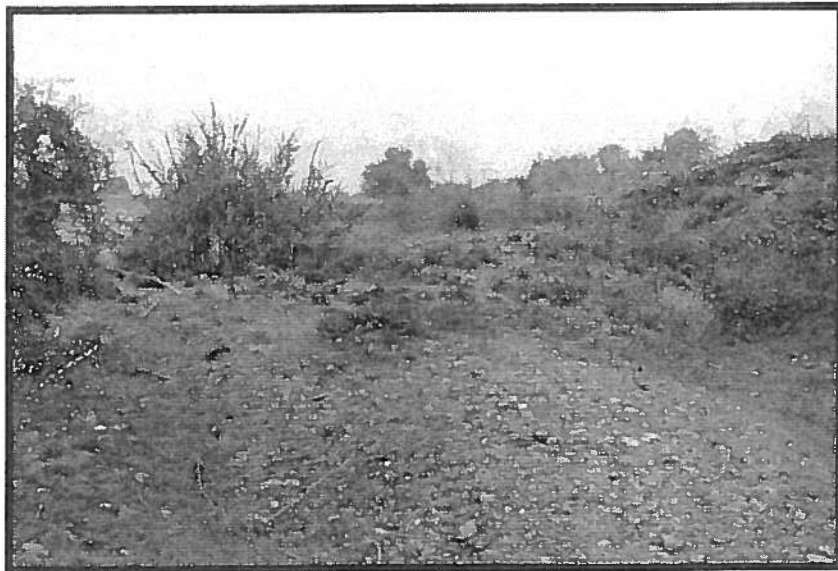


Appendix F
Jurisdictional Delineation



DELINEATION OF JURISDICTIONAL WATERS

Grijalva Park Extension at Santiago Creek
Orange County, California



Prepared For:

City of Orange
300 E. Chapman Ave.
Orange, CA 92866
Contact: Mr. Majid Farhat
714/744-7222

Prepared By:

RBF Consulting
14725 Alton Parkway
Irvine, California 92618
Contact: Mr. Richard Beck
949/855-3687

July 8, 2005
JN 10-104274



July 8, 2005

Mr. Majid Farhat
City of Orange
300 E. Chapman Avenue
Orange, California 92866

**SUBJECT: DELINEATION OF JURISDICTIONAL WATERS
Grijalva Park Extension at Santiago Creek**

Dear Mr. Farhat:

On behalf of RBF Consulting (RBF), we are pleased to submit this Delineation of Jurisdictional Waters for the above referenced project. The enclosed delineation was conducted on May 3, 2005 to document the regulatory authority of the U.S. Army Corps of Engineers' (ACOE), California Department of Fish and Game (CDFG), and California Regional Water Quality Control Board (RWQCB) pursuant to the Federal Clean Water Act (CWA) and California Fish and Game Code. The project area was surveyed pursuant to the ACOE *1987 Wetland Delineation Manual*, to identify evidence of hydrology, hydrophytic vegetation, and hydric soils.

This report presents RBF's best effort at determining the jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies. However, as with any jurisdictional delineation, only the regulatory agencies can make a final determination of jurisdiction. Generally, this would be a written concurrence in the form of a Jurisdictional Determination (JD) letter.

Please note that based on a detailed review of current site conditions, our research has indicated that it will be necessary for the project applicant to successfully obtain a CDFG 1602 Lake and Streambed Alteration Agreement prior to construction activities. Impacts to ACOE jurisdictional areas are not anticipated based on the most recent design plans. Please do not hesitate to contact me at 949/855-3687, or rbeck@rbf.com, should you or your staff has any questions.

Sincerely,

A handwritten signature in cursive script that reads 'Richard Beck'.

Richard Beck, REA
Regulatory Manager
Planning and Environmental Services

A handwritten signature in cursive script that reads 'Bruce R. Grove Jr.'.

Bruce R. Grove Jr., REA
Senior Associate
Planning and Environmental Services

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 Alton Parkway, Irvine, CA 92618-2027 ■ P.O. Box 57057, Irvine, CA 92619-7057 ■ 949.472.3505 ■ Fax 949.472.8373

Offices located throughout California, Arizona & Nevada ■ www.RBF.com

printed on recycled paper

DELINEATION OF JURISDICTIONAL WATERS

Grijalva Park Extension at Santiago Creek Orange County, California

The undersigned certify that this report is a complete and accurate account of the findings and conclusions of a jurisdictional "waters of the U.S." (including wetlands) and "waters of the State" determination for the above-referenced project.



Richard Beck

Richard Beck
Regulatory Manager, REA
Planning and Environmental Services

Bruce R. Grove, Jr.

Bruce R. Grove, Jr.
Senior Associate, REA
Planning and Environmental Services

July 2005

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION AND PURPOSE	1
1.1 Project Site Background.....	1
1.2 Project Description	1
2.0 SUMMARY OF REGULATIONS.....	4
2.1 Army Corps of Engineers	4
2.2 Regional Water Quality Control Board	5
2.3 California Department of Fish and Game.....	5
2.4 Activities Requiring Permits.....	6
3.0 METHODOLOGY.....	7
3.1 Vegetation	7
3.2 Hydrology	8
3.3 Soils	8
3.4 Literature Review.....	8
4.0 SITE CONDITIONS.....	12
4.1 Vegetation	12
4.2 Hydrology	12
4.3 Soils	12
5.0 FINDINGS	14
5.1 U.S. Army Corps of Engineers Determination.....	14
5.2 California Regional Water Quality Control Board Determination	14
5.3 California Department of Fish and Game (1602) Determination.....	14
6.0 REGULATORY APPROVAL PROCESS	16
6.1 Army Corps of Engineers	16
6.2 Regional Water Quality Control Board	16
6.3 California Department of Fish and Game.....	17
6.4 Global Recommendations	17
7.0 REFERENCES	18
LIST OF EXHIBITS	
1. Regional Vicinity.....	2
2. Site Vicinity.....	3
3. Site Photographs.....	13
4. Jurisdictional Map.....	15
TABLE	
1. Topographic Summary.....	9
2. Project Site Summary.....	11
APPENDIX	
A. Wetland Data Forms	
B. Jurisdictional Map Pocket	

1.0 INTRODUCTION AND PURPOSE

This delineation was prepared for the City of Orange (City) in order to delineate the U.S. Army Corps of Engineers' (ACOE), Regional Water Quality Control Board's (RWQCB), and California Department of Fish and Game's (CDFG) jurisdictional authority for drainages located within Grijalva Park Extension at Santiago Creek, herein referred to as the project site.

The project site is located within the City of Orange, County of Orange, State of California (T.4S, R.9W, SBBM) (refer to Exhibit 1, *Regional Vicinity Map*, and Exhibit 2, *Site Vicinity Map*). More specifically, the project site is located along Santiago Creek, east of State Route 55 (SR-55), north of Chapman Avenue, and extends from Spring Street north to Walnut Avenue. On-site access is generally provided via Spring Street.

This delineation has been designed to document the authority of the regulatory agencies, the methodology undertaken by RBF Consulting (RBF) to document jurisdictional authority, and the findings made by RBF within the boundaries of the project site. This report presents our best effort at determining the jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies; however, only the regulatory agencies can make a final determination of jurisdictional boundaries.

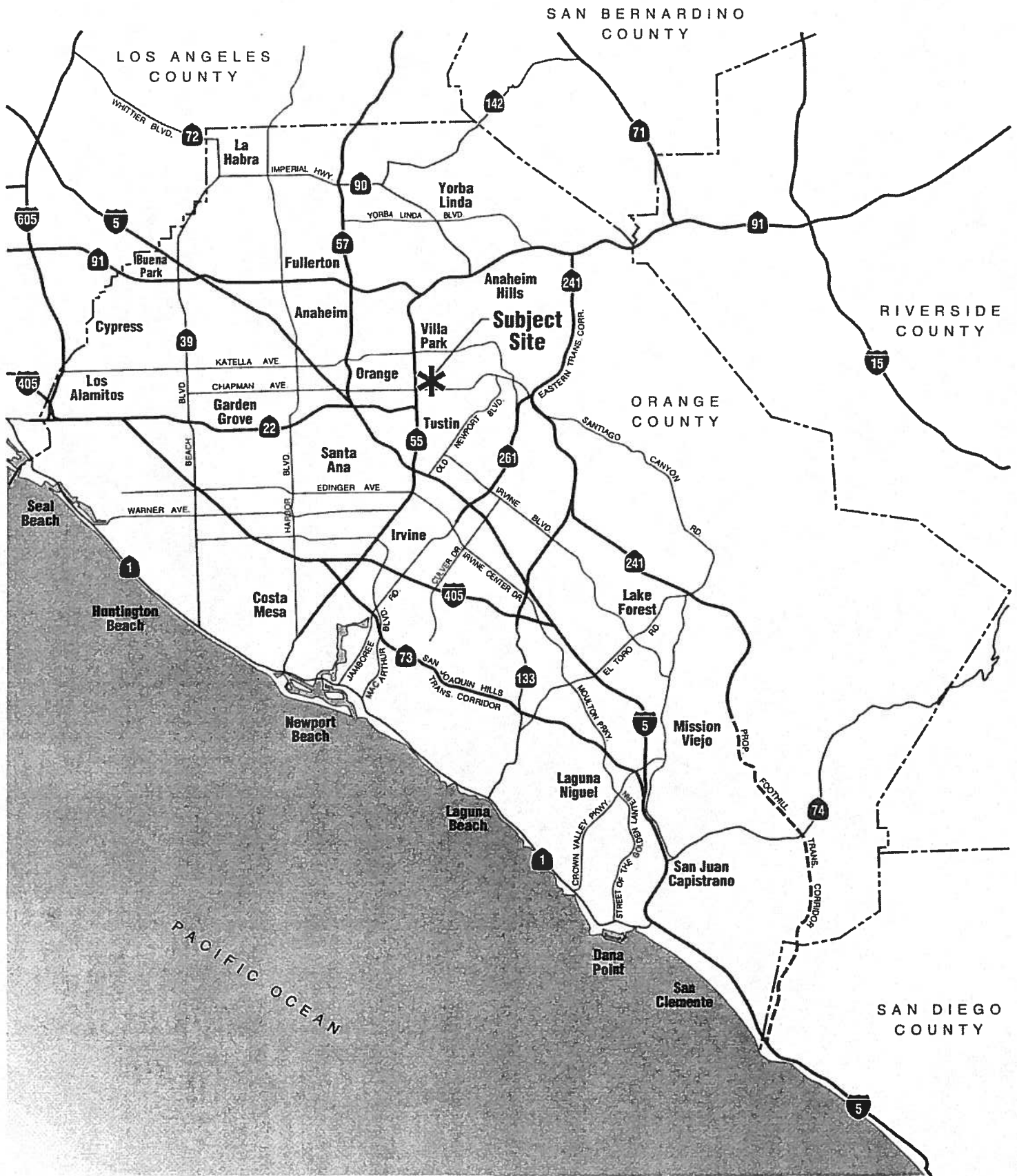
1.1 Project Site Background

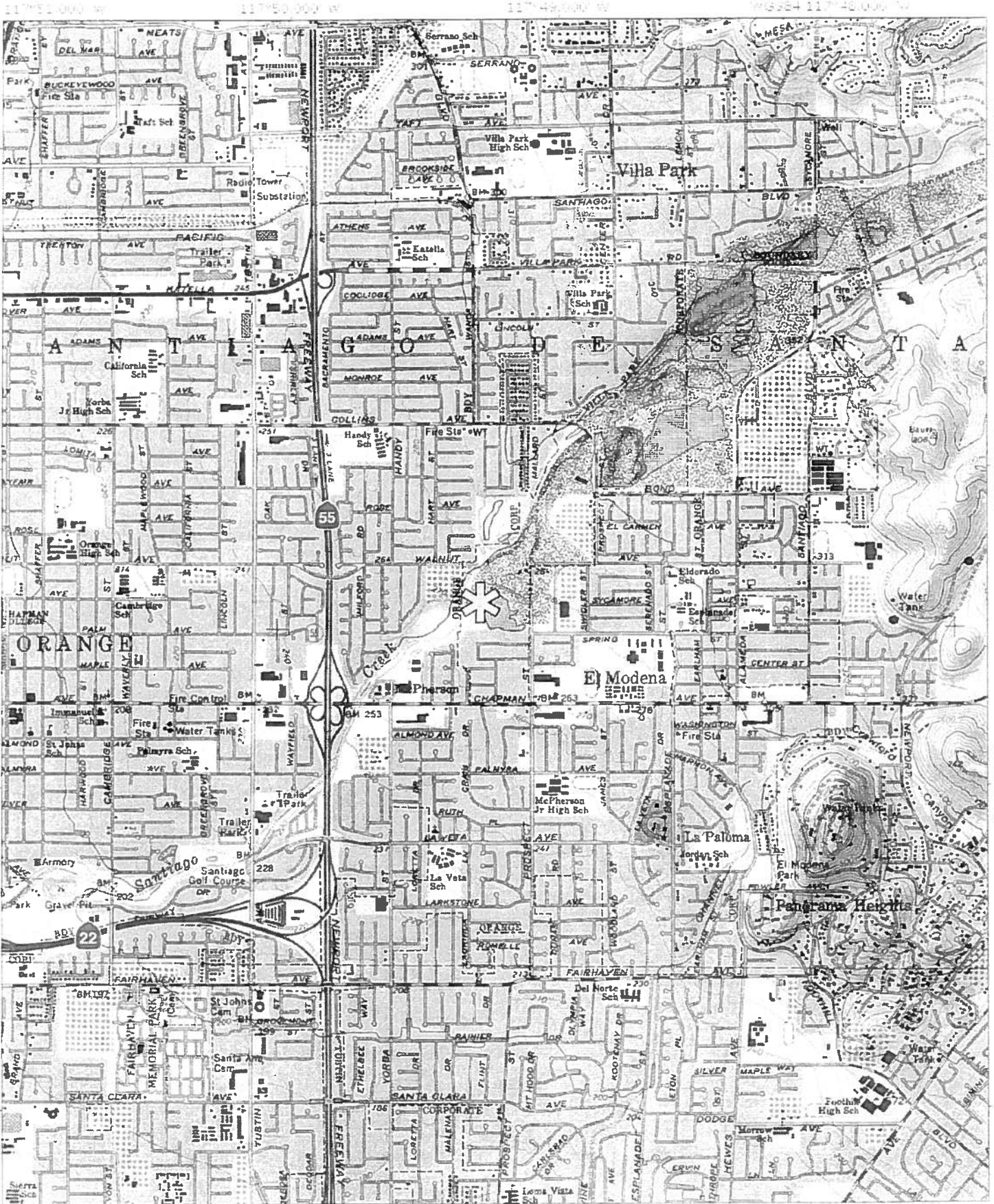
The project site consists of a polygon shaped property bounded by Santiago Creek along the western edge and Prospect Street to the east. The approximate 27-acre project site is currently undeveloped vacant land with few unimproved dirt roads that traverse the project site. Elevations on-site range from approximately 220 feet above mean sea level (msl) to approximately 280 feet above msl. Surrounding land uses consist of residential uses to the north, open space/recreational uses to the east, commercial uses to the south, and residential uses to the west.

1.2 Project Description

The proposed project would involve the grading of the site; closure of a former onsite landfill (including construction of a landfill cap and slope revetment at Santiago Creek); construction of a 30,000 square foot Gymnasium/Sports Center; a 10,800 square foot Community Building; a 47,300 square foot Aquatic Center (two outdoor pools); a 10,000 square foot skatepark; and a passive use area containing a picnic structure, restroom building, tot-lot, outdoor amphitheatre and trails/walkways. Parking areas, internal circulation, and access from Walnut Avenue would also be provided.

Construction of the proposed improvements would be phased dependent on funding. Phase I is proposed for completion in 2007 and includes mass grading of the site, closure of the landfill, construction of the gymnasium, and internal circulation and parking improvements. Phase II would include construction of all other amenities and is proposed to be completed in 2010.





117°51.000' W 117°53.000' W 117°48.000' W WGS84 117°48.000' W

1000 FEET 0 100 METERS

Source: From TCRP ©2001 (Rawl Geographic Holdings - www.rgh.com)

 Subject Site

GRIJALVA PARK • JURISDICTIONAL DELINEATION
Site Vicinity

2.0 SUMMARY OF REGULATIONS

There are three (3) key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The ACOE Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA), and Section 10 of the Rivers and Harbors Act. Of the State agencies, CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the RWQCB pursuant to Section 401 of the CWA and the California Porter-Cologne Act.

2.1 Army Corps of Engineers

The ACOE has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The ACOE and Environmental Protection Agency (EPA) recently clarified and simplified the definition of "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) Replacing any portion of a water of the United States with dry land; or (ii) Changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." The term "waters of the United States" includes the following:

- (1) all waters that have, are, or may be used in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide;
- (2) wetlands;
- (3) all waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds; the use, degradation or destruction of which could affect interstate or foreign commerce;
- (4) all impoundments of water mentioned above;
- (5) all tributaries of waters mentioned above;
- (6) the territorial seas; and
- (7) all wetlands adjacent to the waters mentioned above.

Under this definition, and in the absence of wetlands, the limits of the ACOE's jurisdiction in non-tidal waters extend to the ordinary high water mark (OHWM), which is defined as "*...that 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* (33 CFR §328.3(e))."

Wetlands, a subset of jurisdictional waters, are jointly defined by the ACOE and EPA as "*those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions* (33 CFR §328.3(b))". Wetlands generally include swamps, marshes, bogs, and similar areas. The process in which jurisdictional areas (if any) are identified is further discussed in Section 3.0, *Methodology*.

It should be noted that a major change in wetland regulation occurred on January 9, 2001, when the U.S. Supreme Court issued the decision, *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers et al* (SWANCC). The SWANCC decision limited the scope of the ACOE's Section 404 CWA regulatory permitting program as applied to isolated waters. The Supreme Court struck down the ACOE's jurisdictional authority over isolated, non-navigable, intrastate waters that are not tributary or adjacent to navigable waters or tributaries (i.e., wetland conditions). Overall, the Court held that Congress did not intend for isolated, non-navigable water conditions to be covered within Section 404 of the CWA, since they are not considered to be true "waters of the U.S."

2.2 Regional Water Quality Control Board

The RWQCB is the primary agency responsible for protecting water quality in California. The RWQCB regulates discharges to surface waters under the Federal CWA and the California Porter-Cologne Water Quality Control Act. The RWQCB's jurisdiction extends to all waters of the State and to all waters of the United States, including wetlands (isolated and non-isolated conditions).

Section 401 of the CWA gives the RWQCB the authority to regulate through 401 Certification any proposed federally permitted activity, which may affect water quality. Among such activities are discharges of dredged or fill material permitted by the ACOE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide "certification that there is reasonable assurance that an activity which may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on a finding that the proposed discharge will comply with water quality standards, of which are found as numeric and narrative objectives in each of the nine (9) Regional Board's Basin Plan.

The Porter-Cologne Water Quality Control Act gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne has become an important tool in the post SWANCC era, with respect to the State's authority over isolated waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge (should there be no Section 404 nexus). Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB also interprets this to *include fill* discharged into water bodies.

2.3 California Department of Fish and Game

Historically, the State of California regulated activities in rivers, streams, and lakes pursuant to Sections 1600-1607 of the California Fish and Game Code. Legislation that took effect on January 1, 2004 repealed Fish and Game Code sections 1600-1607 and added Fish and Game Code sections 1600-1616. The most important issue to note with this change is that now there is no separation between private/public notifications (previously 1601/1603). Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify the CDFG before beginning any activity that will do one or more of the following:

- 1) substantially obstruct or divert the natural flow of a river, stream, or lake;
- 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or

- 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

This notification process is referred to as a 1602 Streambed Alteration Agreement (SAA). Fish and Game Code section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state.

Jurisdictional limits of the CDFG are not as clearly defined by regulation as those of the ACOE. While they closely resemble the limits described by ACOE regulations, they include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFG takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation.

2.4 Activities Requiring Permits

Any development proposal that involves impacting drainages, streams, or wetlands on the site through filling, stockpiling, conversion to a storm drain, channelization, bank stabilization, road or utility line crossings, or any other modification would require permits from the ACOE, the RWQCB, and the CDFG before any development could commence on the project site. Both *permanent* and *temporary* impacts are regulated and would therefore trigger the need for permits.

There are two (2) different permit categories utilized by the ACOE, which include either a Nationwide Permit (NWP) or Individual Permit (IP). The specific permit required is primarily based on project description and jurisdictional impacts. The ACOE will not issue its authorization until the RWQCB completes the Section 401 Water Quality Certification. Processing of the 401 Certification with the RWQCB and SAA with the CDFG can occur concurrently with the ACOE permit process, since the agencies can utilize the same information and analysis. Applications to both the RWQCB and the CDFG require submittal of a valid California Environmental Quality Act (CEQA) document along with the application.

3.0 METHODOLOGY

Prior to visiting the project site, RBF conducted a review of United States Geological Survey (USGS) topographic maps, *aerial photographs*, biological technical studies, and the *State of California Hydric Soils List*, (dated 1995), to identify areas that *may* fall under an agency's jurisdiction (refer to Section 3.4, *Literature Review*, for a complete discussion).

ACOE jurisdictional wetlands are delineated using the methods outlined in the *ACOE Wetland Delineation Manual* (1987). The methodology set forth in the 1987 Manual is based on the following three (3) indicators that are normally present in wetlands: (1) hydrology providing permanent or periodic inundation by groundwater or surface water, (2) hydric soils, and (3) hydrophytic vegetation. In order to be considered a wetland, an area must exhibit at least minimal hydric characteristics within these three parameters. As described in Section 2.0, ACOE non-wetland waters of the U.S. are delineated based on the limits of the OHWM as determined by erosion, the deposition of vegetation or debris, and changes in the vegetation. The RWQCB shares ACOE jurisdiction, unless isolated conditions are present. In the presence of isolated conditions, the RWQCB takes jurisdiction via the OHWM and/or the 3-parameter wetland methodology utilized by the ACOE. CDFG's jurisdiction is defined to the top of bank of the stream/channel or to the limit of the adjacent riparian vegetation.

Analysis presented in this document consists of field surveys and verification of current conditions conducted on May 3, 2005. While in the field, jurisdictional areas were recorded onto a base map at an approximate scale of 1"= 80' using the topographic contours and visible landmarks as guidelines. Once in the field, vegetation, soils, and evidence of hydrology were examined via the methodology listed below:

3.1 Vegetation

Nearly 5,000 plant types in the United States may occur in wetlands. These plants, known as hydrophytic vegetation, are listed in regional publications of the U.S. Fish and Wildlife Service (USFWS). Cover of vegetation is estimated and is ranked according to their dominance. Species that contribute to a cumulative total of 50% of the total dominant coverage, plus any species that comprise at least 20% (also known as the "50/20 rule") of the total dominant coverage are recorded on a wetland data sheet (included in Appendix A, *Wetland Data Forms*). Wetland indicator status is assigned to each species using *The List of Plant Species that Occur in Wetlands* (USFWS, 1988). If greater than 50% of the dominant species from all strata were Obligate, Facultative-wetland, or Facultative species, the criteria for wetland vegetation was considered to be met. Plant indicator status categories are described below:

- ◆ **Obligate Wetland (OBL):** Plants that occur almost always (estimated >99 percent) in wetlands under natural conditions, but which may also occur rarely (estimated <1 percent) in non-wetlands (i.e., cattail or pickleweed).
- ◆ **Facultative Wetland (FACW):** Plants that occur usually (estimated >67 to 99 percent) in wetlands, but also occur (estimated 1 to 33 percent) in non-wetlands (i.e., mulefat or willow).
- ◆ **Facultative (FAC):** Plants with similar likelihood (estimated 33 to 67 percent) of occurring in both wetlands and non-wetlands.

- ◆ *Facultative Upland (FACU)*: Plants that occur sometimes (estimated 1 to <33 percent) in wetlands, but occur more often (estimated >67 to 99 percent) in non-wetlands.
- ◆ *Obligate Upland (UPL)*: Plants that occur rarely (estimated 1 percent) in wetlands, but occur almost always (estimated >99 percent) in non-wetlands under natural conditions.

3.2 Hydrology

If wetland vegetation criteria is met, the presence of wetland hydrology is evaluated at each transect by recording the extent of observed surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil test pits. In addition, indicators of wetland or riverine hydrology are recorded including the OHWM, drift lines, rack, debris, and sediment deposits. The lateral extent of the hydrology indicators are used as a guide for locating soil pits for evaluation of hydric soils and jurisdictional areas. In portions of the stream where the flow is divided by multiple channels with intermediate sand bars, the entire area between the channels is considered within the OHWM and the wetland hydrology indicator is considered met for the entire area.

3.3 Soils

There are approximately 2,000 named soils in the United States that occur in wetlands. Such soils, called hydric soils, have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season.

Once in the field, soil characteristics are verified by digging soil pits along each transect to a depth of at least 16 inches. Soil pit locations are usually placed within the drainage invert or within adjoining vegetation. At each soil pit, the soil texture and color are recorded by comparison with standard plates within a *Munsell Soil Chart* (1994). Munsell Soil Charts aid in designating color labels to soils, based by degrees of three simple variables-hue, value, and chroma. Any indicators of hydric soils, such as redoximorphic features, buried organic matter, organic streaking, reduced soil conditions, gleyed or low-chroma soils, or sulfuric odor are also recorded. A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions (as previously listed) in the upper 16 inches. The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. Soils that are sufficiently wet because of artificial measures are included in the concept of hydric soils. It should also be noted that the limits of wetland hydrology indicators are used as a guide for locating soil pits. If any hydric soil features are located, progressive pits are dug moving laterally away from the active channel until hydric features are no longer present within the top 16 inches of the soil profile.

3.4 Literature Review

As previously mentioned, RBF conducted a review of USGS topographic maps, *Orange, California Quadrangle, photorevised 1981*; *aerial photographs*, provided by Eagle Aerial (2004); the *Soil Survey of Orange County and Western Part of Riverside County, California*; and the *State of California Hydric Soils List*, (1995) prior to visiting the site. Review of relevant literature and materials often help preliminarily identify areas that *may* fall under an agency's jurisdiction. Examples of relevant information include, USGS blue-line streams, vegetation map or aerial

photographs, and hydric soils as listed within the U.S. Department of Agriculture (USDA) Soil Surveys. A summary of RBF's literature review is provided below (refer to *Section 7.0*, for a complete list of references used during the course of this delineation):

- ◆ ***USGS Topographic Quadrangle, Orange, CA (Photorevised 1981):*** The USGS maps show geological formations and their characteristics, describing the physical setting of an area through contour lines and major surface features including lakes, rivers, streams, buildings, landmarks, and other factors that may fall under an agency's jurisdiction. Additionally, the maps depict topography through color and contour lines, which are helpful in determining elevations and latitude and longitude within a project site.

Table 1
Topographic Summary

Map Name	Orange, California Quadrangle
Map Year	Photorevised 1981
Map Provider	USGS
Property Elevation (feet)	220-280 feet above msl
Property Slope Type	Relatively flat
Property Slope Direction	Southwest
Map Contour Interval (feet)	20

The project site primarily consists of vacant land located northeast of the State Route 55 (SR-55) and State Route 22 (SR-22) interchange. Based on the USGS Orange, California Quadrangle, photorevised 1981, the onsite topography ranges from approximately 220 to 280 feet above mean sea level (msl). One (1) USGS blue line stream, Santiago Creek, is located within the boundaries of the project site, which generally runs in a northeast to southwest direction. No additional onsite lakes, marshes, or swamps were noted during the review of the USGS topographic map. The existing landfill appears to be present via photorevisions.

- ◆ ***Aerial Photograph:*** Prior to the May 3, 2005 field visit, RBF reviewed an existing aerial photograph, provided by Eagle Aerial (flown in 2004) for the project site. Aerial photographs can be useful during the delineation process, as the photographs often indicate drainages and vegetation (i.e. riparian vegetation) present within the boundaries of the project site (if any).

According to the aerial photograph, the project site consists of disturbed vacant land covered by scrub habitat. The Santiago Creek appears to be unchannelized from Palmyra north to Walnut Avenue; however, it is noted that the creek is a concrete channel from Walnut Avenue to Collins Avenue. Several existing improved and unimproved roadways are located adjacent to the project site. Surrounding off-site uses primarily consist of residential and commercial units, and recreational areas. Santiago Creek continues to flow off-site to the southwest.

- ◆ **Soil Survey: Orange County and Western Part of Riverside County, California (1978):** On-site and adjoining soils were researched prior to the May 3, 2005, field visit. The presence of hydric soils is initially investigated by comparing the mapped soil series for the site to the County list of hydric soils. Soil surveys furnish soil maps and interpretations originally needed giving technical assistance to farmers and ranchers; in guiding other decisions about soil selection, use, and management; and in planning research and disseminating the results of the research. In addition, soil surveys are now heavily utilized in order to obtain soil information within respect to potential wetland environments and jurisdictional areas (i.e., soil characteristics, drainage, and color).

According to the Orange County and Western Part of Riverside County, California Soil Survey, dated 1978, the proposed project site is situated on three (3) soil associations, the Metz-San Emigdio association, the Sorrento-Mocho association, and the Myford association. The Metz-San Emigdio association consists of nearly level, somewhat excessively drained and well-drained, calcareous loamy sands and fine sandy loams on alluvial fans and flood plains. The Sorrento-Mocho association consists of nearly level to moderately sloping, well-drained sandy loams, loams, or clay loams on alluvial fans and flood plains. The Myford association consists of nearly level to moderately steep, moderately well drained sandy loams that have a strongly developed subsoil; on terraces. In addition to general soil associations, the project site is underlain by four (4) soil series. The following is a brief description of the soil series, which underlie the proposed project site:

Pits (185): Pits are open excavations from which soil and underlying material, mostly sand and gravel, have been removed for construction. Present land use is construction material, idle land, or ground water recharge if these areas are in a streambed.

Riverwash (191): Riverwash consists of areas of unconsolidated alluvium, generally stratified and varying widely in texture, recently deposited by intermittent streams, and subject to frequent changes through stream overflow. These are sandy, gravelly, cobbly, and bouldery deposits that support little or no vegetation. Runoff is generally rapid, and the erosion hazard is high. Deposition and removal of fresh alluvium are common. Riverwash has little or no agricultural value. Present use is watercourses, ground water recharge, sand and gravel pits, and wildlife habitat.

San Emigdio fine sandy loam, 0 to 2 percent slopes (194): This nearly level soil generally occupies alluvial fans on flood plains and along stream channels. It has the profile described as typical of the series. About 5 percent of this mapping unit is included areas of Metz loamy sand, 5 percent Hueneme fine sandy loam, 3 percent Mocho sandy loam, and 2 percent Soboba gravelly loam sand. If the soil is bare, runoff is slow and the erosion hazard is slight. Available water capacity is 7.0 to 9.0 inches. This soil is used for citrus, row crops, field crops, and urban development.

Soboba gravelly, loamy sand, 0 to 5 percent slopes (197): This nearly level to gently sloping soil generally occurs as long, narrow areas along stream channels. It has the profile described as typical of the series. About 10 percent of this mapping unit is included areas of a soil that is dominantly very gravelly sandy loam throughout but is otherwise similar to this Soboba soil; 5 percent Corralitos loamy sand; 7 percent Riverwash; and 5 percent Soboba soils that have a gravelly very fine sandy loam

overwash. If the soil is bare, runoff is slow and the erosion hazard is slight. Present land use is citrus, pasture, range, and wildlife habitat.

Based on the Orange County and Western Part of Riverside County, California Soil Survey, none of the soil series present on-site appear to have hydric soil characteristics. Soil pits were dig throughout the subject site to verify the list findings (refer to Section 4.2, *Site Conditions-Soils*, for a discussion of on-site-soils).

- ◆ Hydric Soils List of California (1995): RBF reviewed the Hydric Soils List of California, provided by the Natural Resources Conservation Service (NRCS), and dated December 15, 1995 in an effort to verify whether or not on-site soils are considered to be hydric. Lists of hydric soils along with soil survey maps are good off-site ancillary tools to assist in wetland determinations, but as expected, they are not a substitute for on-site investigations. According to list, none of the above-mentioned soil series are listed as hydric.
- ◆ Local Climate: The local climate is typical of a mild Mediterranean climate. Winters are cool and moist with mild wintertime temperatures averaging in the mid 60's. Summers are mild, warm, and dry with average temperatures between the mid 80's or the mid 90's. Maximum summer temperatures seldom exceed 90° F, and nights are generally cool throughout the year. Winter temperatures seldom drop below freezing. Average annual rainfall for the region is approximately 15.85 inches and nearly all falls in winter. For the purposes of this delineation, the growing season is considered to be 365 days a year. Table 2, below, identifies additional on-site physical setting characteristics.
- ◆ Groundwater Depth: According to the past delineations within the City of Orange and surrounding areas, groundwater depths within the area are approximately 40 to 50 feet below ground surface (bgs).
- ◆ Flood Zone: According to existing FEMA flood maps, portions of the project site appear to be within the 100-year flood zone.

Table 2
Project Site Summary

Is the Project Site...	Yes	No	Unknown
within a 100-year floodplain?	X		
a blue line stream?	X		
within the California Coastal Zone?		X	
reported groundwater level <6 feet bgs?		X	

4.0 SITE CONDITIONS

As described in Section 1.0, the proposed project is located in central Orange County, within the City of Orange. On-site access is generally provided via Spring Street. As identified during the literature review and confirmed by the site visit, Santiago Creek is channelized north of the project site, and is a gravel/cobble wash south of Walnut Avenue to Palmyra Avenue. Refer to Sections 4.1 through 4.3, below, for detailed discussion with respect to the three (3) parameters defined in Section 3.0.

4.1 Vegetation

Vegetation on the project site consists of disturbed willow scrub, disturbed mule fat scrub, planted riparian vegetation, oak tree, ruderal, disturbed, and ornamental. Developed areas also occur on the project site. Riparian vegetation exists in the northern edge of the project site at Walnut Avenue. This area has apparently been replanted with numerous native species including western sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), toyon (*Heteromeles arbutifolia*), wild rose (*Rosa californica*), black sage, and California sagebrush (*Artemisia californica*). Oak tree vegetation exists in the east-central portion of the project site and consists of coast live oak (*Quercus agrifolia*) and ornamental oaks (*Quercus* sp.).

4.2 Hydrology

No flow was noted within the project site during the May 3, 2005. Santiago Creek is considered to be intermittent/ephemeral. Santiago Creek contains water during storm events; however, Santiago Creek also contains flows that originate from upstream recharge basins and surrounding urban uses to the north. Evidence of an OHWM was noted within Santiago Creek via sediment deposits and erosion cuts. Generally, the OHWM varied in width primarily due to a variety of terrain, which is disturbed, steep, and rocky.

4.3 Soils

Two (2) soil pits were dug during the May 3, 2005, site visit. On-site soil samples confirmed soils identified during the literature review. On-site soils consisted of coarse to fine sandy loams and cobble. No hydric soil indicators (e.g., streaking, odor) were noted within the soil samples. Due to the lack of dominant riparian and hydrophytic vegetation, no additional "formal" soil pits were warranted during the May 3, 2005, site visit.

6.0 REGULATORY APPROVAL PROCESS

The following is a summary of the various permits, agreements, and certifications required before construction activities take place within the above-mentioned jurisdictional areas.

6.1 U.S. Army Corps of Engineers (ACOE)

The ACOE regulates discharges of dredged fill materials into "waters of the United States" pursuant to Section 404 of the CWA. A federal permit will be required from the ACOE Regulatory Branch-Santa Ana District Office since improvements associated with the proposed channel improvements will result in the discharge of material within the ACOE's jurisdiction.

At this time, no ACOE 404 permit appears to be required. The proposed improvements were found to fall outside of the jurisdictional OHWM. However, should temporary or permanent impacts occur within the OHWM, a permit would be required. Assuming the jurisdictional impacts would be less than ½-acre and 500 linear feet, it is anticipated that the proposed improvements can be authorized via Nationwide Permit (NWP) 13, *Bank Stabilization*, prior to ACOE jurisdictional impact. Should ACOE impacts surpass ½-acre (permanent impacts), or pursuant to ACOE direction, authorization via a different permit may be required. Refer to Appendix B, for a summary of Nationwide Permit 13.

NWP processing time generally takes 4-6 months and involves a Pre-Application Field Meeting and submittal of a formal application. The application submittal typically includes environmental documentation (e.g., jurisdictional delineation, site plans, project purpose, location, duration, etc.), a Pre-Construction Notification (PCN); and consultations with other agencies (as appropriate). Prior to issuance of the ACOE permit, a CWA Section 401 Water Quality Certification from the RWQCB must be obtained. At this time, no application fee is required for the ACOE permit process.

6.2 Regional Water Quality Control Board (RWQCB)

At this time, no water quality certification appears to be required as a result of avoiding the OHWM of Santiago Creek. However as discussed in Section 6.1, should impacts occur within the ACOE's jurisdiction a 401 Water Quality Certification from the Santa Ana RWQCB will be required. The RWQCB also requires that CEQA compliance be obtained prior to obtaining the 401 Certification.

Once an application has been deemed complete, the RWQCB has between 60 days and 1 year in which to make a decision. According to regulations of the ACOE, the State has 60 days from the date of receipt of a valid request for water quality standards certification (33 CFR Section 325.2 (b) (1) (ii)). The ACOE district engineer may specify a longer (up to one year) or shorter time, if he or she determines that a longer or shorter time is reasonable (33 CFR Section 325.2 (b) (1) (ii)). If processing and review of the 401 application will take more than 60 days, the RWQCB will request additional time from the ACOE. Please note that even when an application has been deemed complete, the RWQCB has the option of denial without prejudice. This is not a reflection on the project, but a means to stop the clock until the required information has been required.

As required by 23 California Code of Regulations (CCR) § 3858 (a), the RWQCB is required to have a *minimum 21-day public comment period* before any action is taken on a 401 application.

The period closes when the RWQCB acts on the 401 application. The public comment period does not close after a certain number of days because proposed projects tend to change through the 401 process and the public is allowed to review and comment on the changed project. The public comment period starts as soon as an application has been received. Additionally, the RWQCB requires that water quality concerns related to urban storm water runoff be addressed. Any 401 Certification application submitted to the RWQCB should incorporate the use of BMPs for the treatment of pollutants carried by storm water runoff in order to be considered a complete application. The RWQCB also requires a 401 Certification Application Fee, which is dependent on the amount of impacts.

6.3 California Department of Fish and Game (CDFG)

As noted within this delineation, Santiago Creek would be considered jurisdictional by the CDFG. A 1602 Streambed Alteration Agreement (SAA) must be obtained prior to any jurisdictional impact.

After the CDFG is notified, the CDFG will determine whether the notification package (application) is complete. The CDFG will make this determination within 30 calendar days of receiving the notification package if the application is for a regular agreement (i.e., an agreement for a term of five years or less). However, the 30-day time period does *not* apply to notifications for long-term agreements (i.e., agreements for a term greater than five years). Once the notification package is deemed complete, the CDFG will process a Draft Agreement as described below.

If a SAA is required, the CDFG conducts an onsite inspection, if necessary, and prepares a draft agreement. The draft agreement will include measures to protect fish and wildlife resources while conducting the project. For regular agreements, the CDFG will submit a draft agreement to the applicant within sixty (60) calendar days after the notification is deemed complete. Again, the 60-day time period does not apply to notifications for long-term agreements, since these are often large or complex projects.

The applicant then has 30 calendar days to notify the CDFG whether the measures in the draft agreement are acceptable. After the CDFG receives the signed draft agreement, it will make it final by signing it. The CDFG Agreement will require a \$1390.50 fee and CEQA compliance is necessary in order for the SAA to be issued.

6.4 Global Recommendations

Agency Concurrence and Pre-Application Field Meeting:

It is highly recommended that the delineation be forwarded to each of the regulatory agencies for their concurrence. Once the delineation is approved, RBF has found it extremely beneficial and pro-active to have an on-site meeting with the ACOE, RWQCB, and CDFG to discuss potential permitting strategies and mitigation opportunities (if any). In short, these Pre-Application Field Meetings often help streamline the permitting process.

7.0 REFERENCES

Aerial Photograph, provided by Eagle Aerial 2004.

Biological Constraints Analysis, prepared by BonTerra Consulting, dated April 27, 2005.

California Department of Fish and Game, Lake and Streambed Alteration Program,
<http://www.dfg.ca.gov/1600/index.html>

California Quadrangle, Orange, CA, Photorevised 1981.

Common Riparian Plants of California, Pickleweed Press 1996.

Common Wetland Plants of Coastal California, Pickleweed Press 1996.

Munsell Soil Color Charts, 1994.

National List of Vascular Plant Species that Occur in Wetlands, U.S. Fish and Wildlife Service,
1988.

Natural Resources Conservation Services, Hydric Soils List of California, 1995.
http://soils.usda.gov/soil_use/hydric/main.htm

Site Visit conducted on May 3, 2005.

Soil Survey, Orange County and Western Part of Riverside County, California, 1978.

Thomas Brothers Map, Los Angeles and Orange Counties, 2005.

U.S. Army Corps of Engineers, Los Angeles District Regulatory Program,
<http://www.spl.usace.army.mil/>

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

U.S. Army Corps of Engineers, Wetland Delineation Manual, 1987.

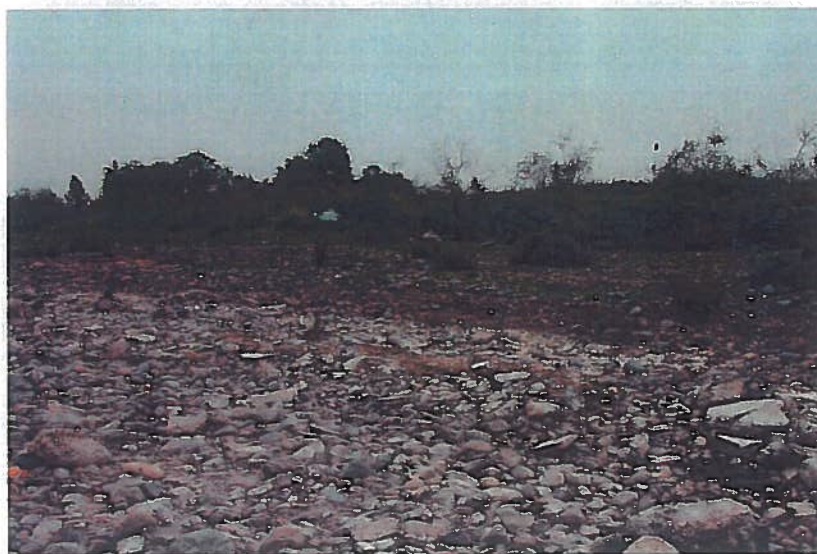
U.S. Fish and Wildlife Service, <http://endangered.fws.gov/consultations/index.html>



View of cobble and scoured Santiago Creek.



View of disturbed Grijalva site.



View looking at existing bank between Santiago Creek and the project site.

Appendix

A) Wetland Data Forms

DATA FORM

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site	Santiago Creek / Grijalva Park	Date	
Applicant / Owner	City of Orange	County	ORANGE
Investigator	R. Beck / K. Hurley	State	CA
Do Normal Circumstances exist on the site?	YES NO	Community ID	—
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID	—
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 mulefat	Shrub.	FACW	9		
2 Arundo	NA	—	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-) < 30%.

Remarks

Some mulefat, stressed. Arundo present in invert.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks) <input type="checkbox"/> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs (Reviewed) <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available		WETLAND HYDROLOGY INDICATORS Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input checked="" type="checkbox"/> Drift Lines / Debris <input checked="" type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands	
FIELD OBSERVATIONS			
Depth of Surface Water	None	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	716.0	(in)	<input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches
Depth to Saturated Soil	716.0	(in)	<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)

B) Nationwide Permit Summary



U S Army Corps of
Engineers
Sacramento District

Nationwide Permit Summary

33 CFR Part 330; Issuance of Nationwide
Permits – January 15, 2002, including
Correction – February 13, 2002

13. Bank Stabilization. Bank stabilization activities necessary for erosion prevention provided the activity meets all of the following criteria:

- a. No material is placed in excess of the minimum needed for erosion protection;
- b. The bank stabilization activity is less than 500 feet in length;
- c. The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line;
- d. No material is placed in any special aquatic site, including wetlands;
- e. No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any wetland area;
- f. No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and,
- g. The activity is part of a single and complete project.

Bank stabilization activities in excess of 500 feet in length or greater than an average of one cubic yard per running foot may be authorized if the permittee notifies the District Engineer in accordance with the "Notification" General Condition 13 and the District Engineer determines the activity complies with the other terms and conditions of the NWP and the adverse environmental effects are minimal both individually and cumulatively. This NWP may not be used for the channelization of waters of the US. (Sections 10 and 404)

A. General Conditions. The following general conditions must be followed in order for any authorization by an NWP to be valid:

1. **Navigation.** No activity may cause more than a minimal adverse effect on navigation.
2. **Proper Maintenance.** Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

3. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

4. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

5. **Equipment.** Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

6. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state or tribe in its Section 401 Water Quality Certification and Coastal Zone Management Act consistency determination.

7. **Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

8. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9. **Water Quality.**

(a) In certain states and tribal lands an individual 401 Water Quality Certification must be obtained or waived (See 33 CFR 330.4(c)).

(b) For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the state or tribal 401 certification (either generically or individually) does not require or approve water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more than minimal adverse effect on water quality). An important component of water quality management includes stormwater management that

(b) Contents of Notification: The notification must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), Regional General Permit(s), or Individual Permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP (Sketches usually clarify the project and when provided result in a quicker decision.);
- (4) For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 40, 41, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));
- (5) For NWP 7 (Outfall Structures and Maintenance), the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed;
- (6) For NWP 14 (Linear Transportation Projects), The PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the US and a statement describing how temporary losses of waters of the US will be minimized to the maximum extent practicable;
- (7) For NWP 21 (Surface Coal Mining Activities), the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan, if applicable. To be authorized by this NWP, the District Engineer must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing;
- (8) For NWP 27 (Stream and Wetland Restoration Activities), the PCN must include documentation of the prior condition of the site that will be reverted by the permittee;
- (9) For NWP 29 (Single-Family Housing), the PCN must also include:

- (i) Any past use of this NWP by the Individual Permittee and/or the permittee's spouse;
 - (ii) A statement that the single-family housing activity is for a personal residence of the permittee;
 - (iii) A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring ¼-acre or less will not require a formal on-site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than ¼-acre in size, formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See paragraph 13(f));
 - (iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;
- (10) For NWP 31 (Maintenance of Existing Flood Control Facilities), the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five year (or less) maintenance plan. In addition, the PCN must include all of the following:
- (i) Sufficient baseline information identifying the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;
 - (ii) A delineation of any affected special aquatic sites, including wetlands; and,
 - (iii) Location of the dredged material disposal site;
- (11) For NWP 33 (Temporary Construction, Access, and Dewatering), the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources;
- (12) For NWPs 39, 43 and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization for losses of waters of the US were achieved on the project site;

- (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or
- (3) that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the US will occur until the District Engineer has approved a specific mitigation plan.
- (e) Agency Coordination: The District Engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
- For activities requiring notification to the District Engineer that result in the loss of greater than ½-acre of waters of the US, the District Engineer will provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to NMFS within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.
- (f) Wetland Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps (For NWP 29 see paragraph (b)(9)(iii) for parcels less than ¼-acre in size). The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.
- 14. **Compliance Certification.** Every permittee who has received NWP verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include:
 - (a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;
 - (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.
- 15. **Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre).
- 16. **Water Supply Intakes.** No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.
- 17. **Shellfish Beds.** No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.
- 18. **Suitable Material.** No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the CWA).
- 19. **Mitigation.** The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

23. Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

24. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

25. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the US are not authorized by NWP's 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the US may be authorized by the above NWP's in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the USFWS or the NMFS has concurred in a determination of compliance with this condition.

(b) For NWP's 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWP's only after it is determined that the impacts to the critical resource waters will be no more than minimal.

26 Fills Within 100-Year Floodplains. For purposes of this General Condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

(a) Discharges in Floodplain; Below Headwaters. Discharges of dredged or fill material into waters of the US within the mapped 100-year floodplain, below headwaters (i.e. five cfs), resulting in permanent above-grade fills, are not authorized by NWP's 39, 40, 42, 43, and 44.

(b) Discharges in Floodway; Above Headwaters. Discharges of dredged or fill material into waters of the US within the FEMA or locally mapped floodway, resulting in permanent above-grade fills, are not authorized by NWP's 39, 40, 42, and 44.

(c) The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.

27. Construction Period. For activities that have not been verified by the Corps and the project was commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12-months after such date (including any modification that affects the project).

For activities that have been verified and the project was commenced or under contract to commence within the verification period, the work must be completed by the date determined by the Corps.

For projects that have been verified by the Corps, an extension of a Corps approved completion date may be requested. This request must be submitted at least one month before the previously approved completion date.

B. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWP's do not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.
3. NWP's do not grant any property rights or exclusive privileges.
4. NWP's do not authorize any injury to the property or rights of others.
5. NWP's do not authorize interference with any existing or proposed Federal project.

C. Regional Conditions for Nationwide Permits – Sacramento District

I. Regional Conditions to be applied across the entire Sacramento District:

1. Nationwide Permits 14, 29, 39, 40, 41, 42, and 44 are withdrawn from used in histosols, including fens. For the used of all other nationwide permits in fens, project proponents are required to notify the Corps using the notification or PCN procedures of the nationwide permit program (General Condition 13). This will be a "Corps only" notification.

2. For all activities using any existing and proposed nationwide permits, mitigation that is required by special condition must be completed before or concurrent with project construction. Where project mitigation involves the use of a mitigation bank or in-lieu fee, payment must be made to the bank or fee-in-lieu program before commencing construction of the permitted activity.

3. For all nationwide permits requiring notification, except 27, the applicant must provide a written statement to the district engineer explaining how avoidance and minimization of losses of waters of the United States were achieved on the project site.