

◆ *Proposed Project Detail:*

The proposed project includes the installation of 1,500 linear feet (LF) of gravity sewer pipeline beginning near the existing OCSD pump station near Carbon Canyon Road and heading south towards the Dam. This section of pipeline will be constructed using standard trenching methods with a depth of pipe approximately 10 feet. Prior to reaching the Dam, the pipeline is proposed to turn westward and continue for an additional 1,300 LF. This section of pipeline will be installed using a micro-tunneling method. Portions of this pipeline will reach 100 feet deep. At this point, the pipeline will be on property owned by Aera Energy. The remaining 1,700 LF of pipeline will again head south and be installed using standard trenching methods. The pipeline will terminate on the north side of the Rose Drive right-of-way, where it will connect to an existing OCSD sewer pipeline. The estimated

diameter on the proposed pipeline is 21 inches. The design of the proposed Carbon Canyon Dam Sewer line will conform to the OCSD “design and Construction Requirements for Sanitary Sewers”.

2.0 SUMMARY OF REGULATIONS

There are three (3) key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (Corps) Regulatory Program regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA), and Section 10 of the Rivers and Harbors Act. Our State agencies, the California Department of Fish and Game (CDFG) regulates activities under the Fish and Game Code Section 1600-1607, and the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and the California Porter-Cologne Act.

2.1 Army Corps of Engineers

The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the Clean Water Act (CWA). The Corps 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 Corps' 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 Corps 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 a decision, *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers et al* (SWANNC). The SWANNC decision limits the scope of the Corps' Section 404 CWA regulatory permitting program as applied to isolated waters. The Supreme Court struck down the Corps' 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.” Hence, discussions within this document strive to be “up-to-date” with the latest regulations and decisions, which guide the regulatory process. RBF's jurisdictional findings and opinion are to be considered preliminary, until review and concurrence by the Corps and CDFG have been achieved.

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 Corps 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 SWANNC era, with respect to the State’s authority over isolated waters. Generally, in the absence of a 404 Corps Permit, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge. 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.

Additionally, the Porter-Cologne addresses *actual* and *potential* impacts to waters of the State. The RWQCB regulates those projects, even if outside a waterbody, that may have *indirect* impacts to the waterbody and its beneficial uses. Each of the Region’s Basin Plans identify approximately twenty-three (23) beneficial uses for specific State waterbodies, which include but are not limited to: drinking, swimming, industrial and agricultural water supply, and the support of fresh and saline aquatic habitats.

It should also be noted that the California Environmental Quality Act (CEQA) gives the RWQCB and CDFG authority to require minimization of and mitigation for projects that will impact waters of the State.

2.3 California Department of Fish and Game

The State of California regulates activities in rivers, streams, and lakes pursuant to Sections 1600-1607 of the California Fish and Game Code. Section 1603 of the Fish and Game Code requires any person (private) who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or use materials from a streambed to notify the Department before beginning the project. Similarly, under Section 1601 of the Fish and Game Code, before any *State or local governmental agency or public utility* begins a construction project that will: 1) divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; 2) use materials from a streambed; or 3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake, it must first notify the Department of the proposed project. This notification process is referred to as a Streambed Alteration Agreement (SAA).

Jurisdictional limits of the CDFG are not as clearly defined by regulation as those of the Corps. While they closely resemble the limits described by Corps 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 the 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 Corps, the RWQCB, and the CDFG before any development could commence on the project site. Both *permanent* and *temporary* impacts are regulated and would trigger the need for permits.

There are two (2) different permit categories utilized by the Corps, 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 Corps 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 Corps permit process, since the agencies can utilize the same information and analysis. Applications to both the RWQCB and the CDFG requires submittal of a valid CEQA document along with the application.

3.0 METHODOLOGY

Prior to visiting the site, RBF Consulting (RBF) conducted a review of available literature to identify areas that *may* fall under an agency's jurisdiction.

U.S. Army Corps of Engineers (Corps) jurisdictional wetlands are delineated using the methods outlined in the Corps of Engineers *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.

Corps non-wetland waters of the U.S. are delineated based on the limits of the ordinary high water mark (OHWM) as determined by erosion, the deposition of vegetation or debris, and changes in the vegetation. The California Department of Fish and Game's (CDFG) 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 January 20, 2003. While in the field, jurisdictional areas were recorded onto a base map at an approximate scale of 1"= 150' 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

Cover of vegetation is estimated and are 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* (FWS, 1988/1996). 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., cattails 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 Soils

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 the 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.

3.3 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.

3.4 Literature Review

RBF conducted a review of USGS topographic maps (Quadrangle *Yorba Linda, California*, photorevised 1981); *aerial photographs*, provided by Eagle Aerial (2002); the *Soil Survey of Orange*



County and Western Riverside County, California (dated 1978); and the State of California Hydric Soils List, (dated 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 blueline streams, riparian vegetation on Geographic Information System (GIS) maps 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, Yorba Linda, California (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. Based on the USGS Yorba Linda, California Quadrangle, photorevised in 1981, on-site topography is approximately 500 feet above mean sea level (msl). Carbon Canyon Creek (blueline stream) is located within the vicinity of the proposed pipeline alignment. A portion of the project is located within the Carbon Canyon Dam, designed for 100-year flood events. Dry flow, and a lake created for park users, appeared to be the only water flow noted within the dam area during the January 20, 2003 field visit.

◆ Aerial Photograph: Prior to the field visit, RBF reviewed current aerial photographs, provided by Eagle Aerial (2002) for the project site. Aerial photographs are a useful tool during the delineation process to identify high probability drainages and riparian vegetation prior to the site visit. According to the aerial photograph, a portion of the project site primarily consists of an existing stream channel, which extends in a northwestern direction. Is located within Carbon Canyon Dam. Dense vegetation, along with development (parking lots, structures) is visible to the northeast of the project site.

◆ Soil Survey, Orange County and Western Riverside County, California (1978): On-site soils were researched prior to the January 20, 2003 field visit. The presence of hydric soils were initially investigated by comparing the mapped soil series for the site to the County list of hydric soils. According to the *Orange County and Western Riverside County Soil Survey*, dated 1978, a portion of the proposed project site (within the Carbon Canyon Dam) **IS CLASSIFIED AS AN INTERMITTENT RESERVOIR, THEREFORE, NO SOIL CLASSIFICATION FOR THE SUBJECT SITE HAS BEEN ASSIGNED. THE SOUTHWESTERN PORTION OF THE PROPOSED ALIGNMENT IS WITHIN THE ALLUVIUM ASSOCIATION, WHICH IS STRONGLY SLOPING TO STEEP, WELL DRAINED CLAYS ON SANDY FoothILLS. THREE (3) SOIL SERIES ARE LOCATED WITHIN THE BOUNDARIES OF THE PROPOSED PROJECT AND ARE BRIEFLY DESCRIBED BELOW:**

SANDY CLAY LOAM, 15 TO 30 PERCENT SLOPES WITH THIS MODERATELY STEEP SOIL GENERALLY OCCURS ON HILL RIDGES. IF THE SOIL IS DARK, HUMUS IS HIGH AND THE EROSION HAZARD IS HIGH. GENERALLY, THE SOILS CONSIST OF GRAYISH BROWN SANDS TO SILTS.

SANDY CLAY LOAM, 30 TO 75 PERCENT SLOPES, SLOPES WITH THIS VERY STEEP SOIL GENERALLY HAS SOUTHWESTWARD SLOPES. AS MUCH AS 75 PERCENT OF THE

ORIGINAL SURFACE LAYER HAS BEEN LOST IN AREAS THAT HAVE BEEN CULTIVATED, OVER GRAZED, OR BURNED BECAUSE OF WIND, FIRE, AND GULLY EROSION. IF THE SOIL IS BARE, RUNOFF IS RAPID AND THE EROSION HAZARD IS HIGH. GEOMORPHIC EROSION IS ACTIVE, AND SOIL SLIPPING IS COMMON.

WYFORD SANDY LOAM, 0 TO 30 PERCENT SLOPES, ERODED WYFORD THIS STRONGLY SLOPING TO MODERATELY STEEP SOIL GENERALLY OCCURS ON THE SIDE SLOPES OF TERRACES. THE SOIL IS SHALLOW DUE TO EROSION AND THE SUBSOIL IS EXPOSED. IF THE SOIL IS BARE, RUNOFF IS RAPID AND THE EROSION HAZARD IS HIGH. GENERALLY THE SOIL SERIES CONSISTS OF BROWN SANDY LOAMS AND CLAYS 17.3 TO 41.3, 0.13 AND 10.0-17.3.

- ◆ *Hydric Soils List of California (1995):* RBF reviewed the *Hydric Soils List of California*, provided by the Natural Resources Conservation Service (NRCS), dated December 15, 1995 in an effort to verify whether or not on-site soils are considered to be hydric. According to list, the above-mentioned soil series is not listed as hydric.

4.0 SITE CONDITIONS

Carbon Canyon Regional Park is a 124-acre park located in the City of Brea, County of Orange, California. The local climate is characterized as a Mediterranean climate, with an average temperature of 70 degrees and approximately 15.85 inches of rain per year. Access to the site is available via the visitors entrance located on Carbon Canyon Road. The park includes picnic areas, restrooms, barbecues, a 4-acre fishing lake, equestrian trails, hiking trails, paved bike trails, lighted tennis courts, multi-use fields, volleyball courts and play equipment. The Carbon Canyon Dam is an earthen dam that is used for flood control purposes. The project-affected portion of the Aera Energy parcel is primarily open space, with oil drilling and interim agricultural uses.

The Park contains primarily ornamental landscaping and annual grassland. The Aera property (southwest portion of the alignment) contains chaparral, coastal sage, annual grassland and agricultural fields. Elevations in the project area range from approximately 525 feet above mean sea level (msl) to approximately 420 feet above msl at the project area's southern terminus. Refer to *Sections 4.1 through 4.3*, below, for a detailed discussion of on-site conditions. Also, refer to Exhibit 3, *Site Photographs*.

4.1 Vegetation

The project site comprises several varieties of both native and non-native vegetation types, with many of the native areas having scattered ornamental species. The majority of the project site is located on the western slope of Carbon Canyon Dam. Coastal sage scrub, chaparral, grasslands, agricultural

fields, and ornamental species are located throughout the proposed alignment. Little riparian vegetation was observed on-site; however, riparian vegetation (consisting of willows and arundo) was noted to the east of the project site. Jurisdictional drainages located within the boundaries of the project site appeared to contain little to no native vegetation. Ornamental vegetation primarily comprised the northeastern portion of the proposed alignment, adjacent to the existing pump station. Dominant species included turf grasses, Peruvian pepper, jacaranda, gum, and London plane. Overall, it appeared that hydrophytic/riparian vegetation did not comprise the majority of the vegetation on-site. Refer to Appendix B, *Biological Constraints Survey*, for detailed discussion with respect to on-site vegetation.

4.2 Soils

Generally, the on-site soil samples taken from soil pits 1 and 2 consisted of sandy loams. The soils contained no hydric indicators and were, therefore, not considered hydric. No mottling, streaking, odor, or water was present. Since the majority of the proposed project is located on a slope, it appeared that the soils do not become inundated or saturated for a significant duration. It should also be noted that sprinklers were noted within the vicinity to support the landscaped ornamental vegetation which surrounded the pump house, fence line, and culvert improvements to the east and south.

4.3 Hydrology

No steady water flow was noted within the boundaries of the project site during the January 20, 2003 field visit. However, evidence of an ordinary high water mark (OHWM) was observed within drainages, indicated by "carved" or "eroded" banks along the northern and central portion of the project site. The drainages are ephemeral tributaries to Carbon Canyon Creek and are anticipated to contain water flow during storm events.

Site photos

5.0 FINDINGS

This delineation has been designed to document the regulatory authority of the U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game's (CDFG) jurisdiction pursuant to the Federal Clean Water Act (CWA) and the State Fish and Game Code. 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 jurisdictional boundaries within a project site/property. Jurisdictional boundaries are broken down specifically by agency and are described below.

5.1 Wetland Determination (Corps)

As previously noted in Section 2.1, an area must exhibit **all three (3)** of the wetland parameters described in the *Corps Wetland Delineation Manual* to be considered a jurisdictional wetland. Based on the results of the field investigations, it was determined that no portion of the project site contained all three parameters. Based on the site conditions, no jurisdictional wetlands are present.

5.2 "Waters of the U.S.," Non-Wetland Determination (Corps)

Areas within the proposed project site exhibited water flow and evidence of hydrology (scouring and cut) sufficient to document the ordinary high water mark (OHWM), thus meeting the criteria for Corps jurisdictional waters (non-wetland). RBF delineated the proposed impact areas (i.e., access, temporary work areas, and the proposed trench line) for the Carbon Canyon Dam Sewer Pipeline Project. Therefore, any drainages noted within the delineated boundaries are assumed to be impacted by the proposed project.

Based on the results of the field observations and data collection, RBF identified 0.019-acres of Corps jurisdictional "waters of the U.S." (non-wetland) within the proposed project site. The on-site drainages are ephemeral. Based upon the project description, it was also concluded that all of the Corps

jurisdictional areas (0.019-acres) will be impacted by the proposed project. The impacts associated with the pipeline alignment are considered to be temporary impacts. Refer to the Appendix C, *Jurisdictional Map*, for an illustration of the project site and jurisdictional areas.

5.3 California Department of Fish and Game Determination

As mentioned above, RBF delineated the proposed project site boundaries, which adjoin the western side of Carbon Canyon Dam on January 20, 2003. The CDFG jurisdiction extended from was identical to the Corps' jurisdictional boundaries. Based upon the project description, it was concluded that all of the CDFG jurisdictional areas (0.019-acres) will be impacted by the proposed project. As with the Corps', the impacts associated with the pipeline alignment are considered to be temporary impacts.

6.0 CONCLUSION OF 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 (Corps)

The Corps regulates discharges of dredged fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA). Since improvements associated with the proposed project will result in the discharge of material within the Corps' jurisdiction, a permit will be required from the Los Angeles District Office.

Utilizing the most current development plans, and based on the amount of jurisdictional impacts (0.019-acre temporary impacts), it is anticipated that the proposed improvements can be authorized via a Corps General Nationwide Permit (NWP). More specifically, it is RBF's professional opinion that the project can be authorized via NWP 12, *Utility Line Activities*. Generally, the NWP program takes approximately 4-6 months processing time. It is also recommended that the Corps be contacted so that a written concurrence can be obtained. Prior to issuance of any Corps permit, a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB) must be obtained.

6.2 Regional Water Quality Control Board (RWQCB)

For the Corps 404 NWP to be approved, a 401 Water Quality Certification from the Santa Ana RWQCB will be required. The RWQCB requires that a California Environmental Quality Act (CEQA) compliance certification be obtained prior to starting the Corps permit process. Processing time should not exceed sixty (60) days following submission of a complete application (determination of what constitutes a complete application is made by the RWQCB). 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 Best Management Practice's (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 of \$2,250.00 for projects that impact one (1) acre or less.

6.3 California Department of Fish and Game (CDFG)

As noted in Section 5.3, on-site drainages within the project site meet the CDFG's definition as streambed and thus would be regulated by the Department. Since improvements associated with the proposed project will impact CDFG Jurisdiction, a 1601 Streambed Alteration Agreement (SAA) must be obtained. The CDFG Agreement will require a \$1,390.50 fee and approximately 45 days processing time. CEQA compliance is necessary in order for the SAA to be issued.

7.0 REFERENCES

- Aerial Photograph, provided by Eagle Aerial, 2002.
- Army Corps of Engineers (ACOE) Wetland Delineation Manual, 1987.
- Biological Constraints Survey, prepared by BonTerra Consulting, December 2002.
- Common Riparian Plants of California, Pickleweed Press 1996.
- Common Wetland Plants of Coastal California, Pickleweed Press 1996.
- Hydric Soils List of California, provided by the Natural Resources Conservation Service, http://soils.usda.gov/soil_use/hydric/states/main.htm, revised December 15, 1995.
- Munsell Soil Color Charts, 1994.
- National List of Vascular Plant Species that Occur in Wetlands, U.S. Fish and Wildlife Service, 1988/1996.
- Site Visit, conducted on January 20, 2003.
- Soil Survey, Orange County and Western Part of Riverside County, California, 1978.
- Thomas Brothers Map, Los Angeles and Orange Counties, 2003.
- USGS Topographic Map, Yorba Linda, California Quadrangle, 1981.