FOOTHILL PARKWAY
WESTERLY EXTENSION PROJECT
CITY OF CORONA, CALIFORNIA

Delineation of
State and Federal Jurisdictional Waters

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September 27, 2007
10-104629

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Delineation of State and Federal Jurisdictional Waters

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.

RBF CONSULTING

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September 27, 2007

Executive Summary

At the request of the City of Corona (City), RBF Consulting (RBF) has prepared this Delineation of Jurisdictional Waters for the Foothill Parkway Westerly Extension project, located in the City of Corona, County of Riverside, State of California. This delineation was conducted on September 19, 2007, to document the regulatory authority of the U.S. Army Corps of Engineers (USACE), Santa Ana Regional Water Quality Control Board (RWQCB), and California Department of Fish and Game (CDFG) pursuant to the Federal Clean Water Act (CWA), California Porter-Cologne Water Quality Control Act, and California Fish and Game Code. The project area was surveyed pursuant to the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE, 2006), to identify evidence of hydrology, hydrophytic vegetation, and hydric soils; and the *Field Guide to Lake and Streambed Alteration Agreements Section 1600-1607* (CDFG, 1994) to identify evidence of streambed(s) and associated riparian vegetation.

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 the following permits prior to commencement of any construction activities within the delineated jurisdictional areas: USACE 404 Individual Permit (IP), RWQCB 401 Water Quality Certification and Report of Waste Discharge (ROWD), and CDFG 1602 Streambed Alteration Agreement (SAA). Table ES-1, Summary Table, indicates each regulatory agency and their corresponding jurisdiction.

TABLE ES-1. Summary Table

Agency	Permit Required?	Permit Type	Jurisdictional Impact Acreage	
			Temporary	Permanent
USACE	Yes	404 IP	3.01	1.62
RWQCB	Yes	401 Certification	3.01	1.62
		ROWD	0.00	0.03
CDFG	Yes	1602 SAA	3.01	6.76

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.

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LIST OF EXHIBITS

TABLES

APPENDIX

ACRONYMS

BGS	Below Ground Surface
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
CZMP	California Zone Management Plan
EPA	Environmental Protection Agency
FAC	Facultative Vegetation
FACU	Facultative Upland Vegetation
FACW	Facultative Wetland Vegetation
GPS	Global Positioning System
IP	Individual Permit
MSL	Mean Sea Level
NRCS	Natural Resources Conservation Service
NOD	Notice of Determination
NWP	Nationwide Permit
OBL	Obligate Wetland Vegetation
OHWM	Ordinary High Water Mark
OU	Operable Unit
RBF	RBF Consulting
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SBBM	San Bernardino Base and Meridian
SWANCC	Solid Water Agency of Northern Cook County
UPL	Obligate Upland Vegetation
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFS	Unites States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Section 1 Introduction and Purpose

This delineation was prepared for the City of Corona (City), in order to delineate the U.S. Army Corps of Engineers' (USACE), Santa Ana Regional Water Quality Control Board's (RWQCB), and California Department of Fish and Game's (CDFG) jurisdictional authority for drainages located within the Foothill Parkway Westerly Extension project, herein referred to as the project site.

The project site is located immediately adjacent to the Cleveland National Forest, in the City of Corona and unincorporated County of Riverside, California (Section 3, 4, and 10, T.4S, R.7W, and Section 33, T.3S R.7W; San Bernardino Base and Meridian [SBBM]) (refer to Exhibits 1 and 2). The project site is generally located south of State Route 91 (SR-91) and west of Interstate 15 (I-15). Specifically, the project site extends westerly from the existing Foothill Parkway terminus approximately 600 feet west of Skyline Drive to Green River Road, for a distance of approximately two miles (refer to Exhibit 3, *Project Site*). On-site access is provided via Skyline Drive and Green River Road.

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 roadway extension is situated along the northeastern base of the Santa Ana Mountains and transects both private and public properties within the City of Corona and unincorporated County of Riverside. The proposed alignment is located adjacent to the Cleveland National Forest under jurisdiction of the United States Forest Service (USFS). The proposed alignment traverses undeveloped terrain generally in an east/west direction. Topography on-site generally ranges from gently sloping terraces transected by ravines in the eastern and western portions of the alignment, to steep mountainous terrain in the central portion of the alignment. Elevations range from approximately 800 to 1,300 feet above mean sea level (msl). Land uses surrounding and adjacent to the Project alignment include residential uses, vacant properties, limited agricultural uses, and USFS property.

FOOTHILL PARKWAY WESTERLY EXTENSION
• JURISDICTIONAL DELINEATION

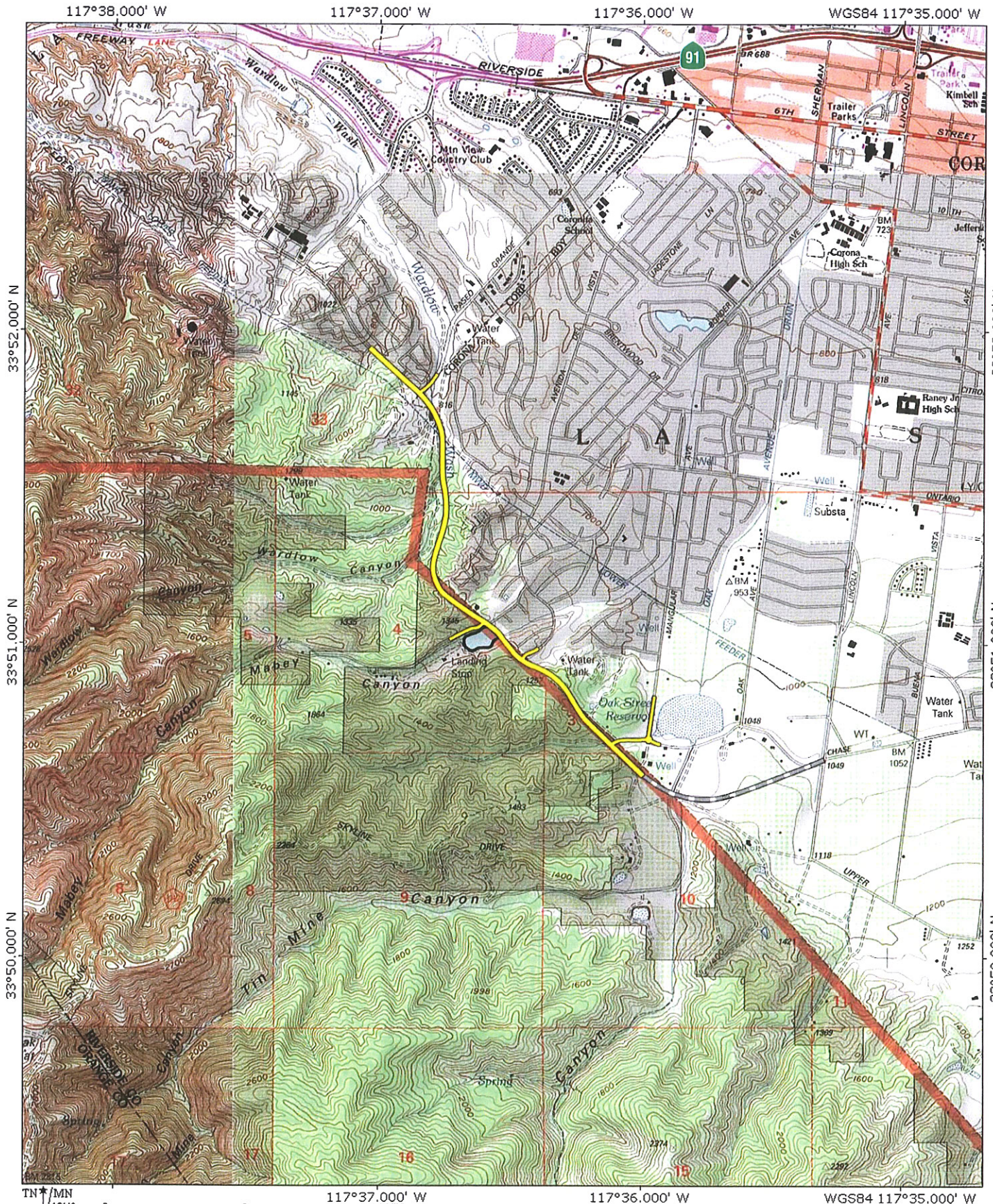
Regional Vicinity

not to scale

RBF CONSULTING

9/25/07 JN 10-104629-13012

Exhibit 1



RBF CONSULTING

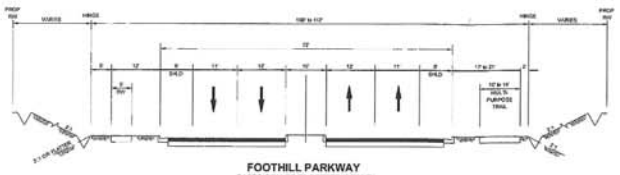
0 2500'
APPROXIMATE

9/27/07 JN 10-104629-13012

FOOTHILL PARKWAY WESTERLY EXTENSION
• JURISDICTIONAL DELINEATION

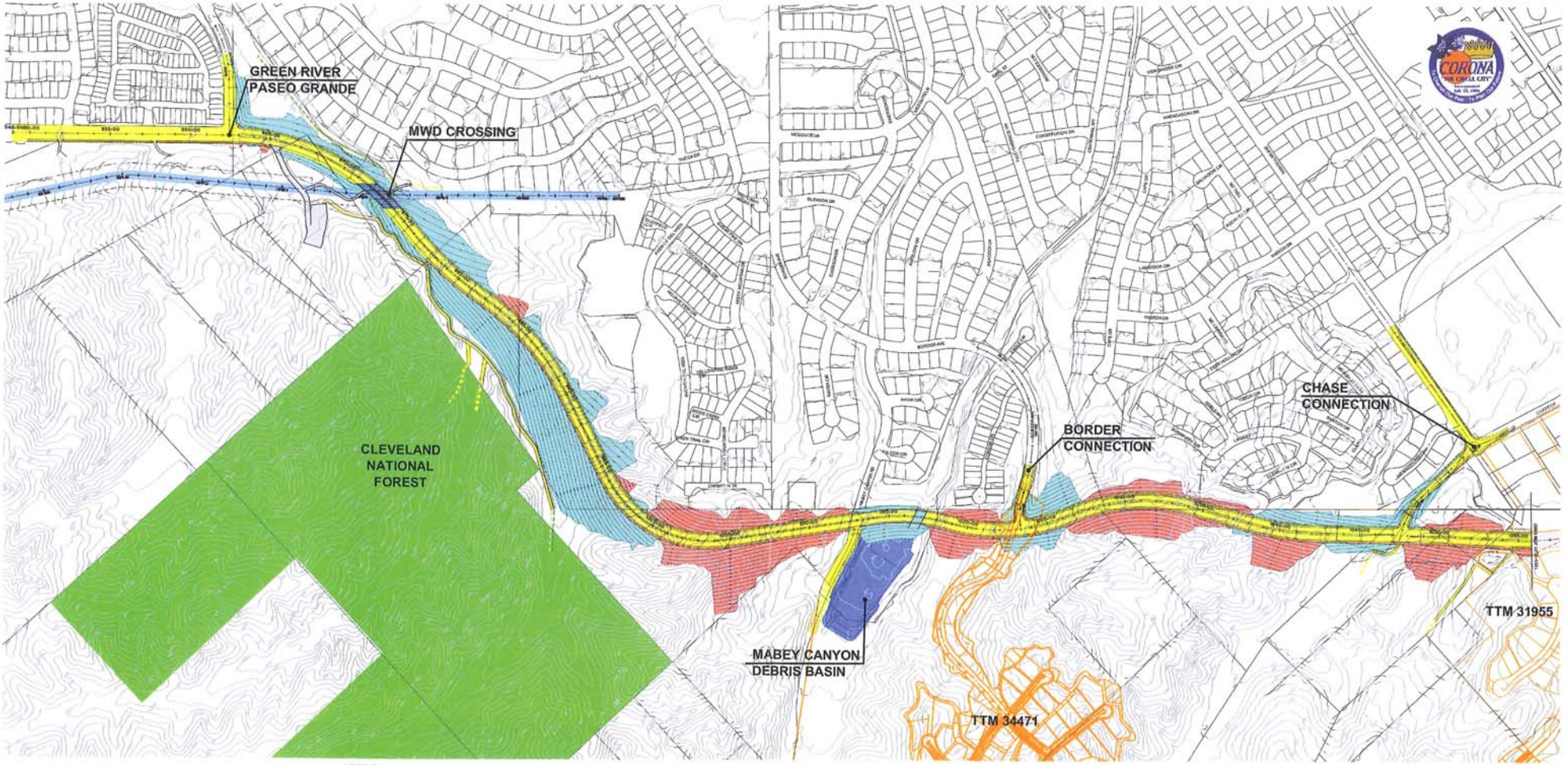
Site Vicinity

Exhibit 2



FOOTHILL PARKWAY
PASEO GRANDE TO BORDER AVENUE
964+00 TO 1022+74

FOOTHILL PARKWAY
BORDER AVENUE TO SKYLINE DRIVE
1023+97 TO 1055+82.91



LEGEND:

- ROADWAY IMPROVEMENTS
- CUT AREA
- FILL AREA
- MWD LINE
- BASIN IMPROVEMENTS
- PROPOSED DEVELOPMENTS

RBF CONSULTING

0 600' APPROXIMATE

9/25/07 JN 10-104629-13012

FOOTHILL PARKWAY WESTERLY EXTENSION • JURISDICTIONAL DELINEATION

Project Site

Exhibit 3

1.2 PROJECT DESCRIPTION

The proposed project would involve the westerly extension of Foothill Parkway as a four-lane roadway from approximately 600 feet west of skyline Drive to Green River Road. At skyline Drive, the roadway would veer to the west into unincorporated Riverside County and continue in an east/west direction along the City/County boundary. The alignment would then curve to the north and connect to Green River Road in the vicinity of Paseo Grande. The Project will be designed to protect the existing 108-inch MWD feeder line located approximately 1,000 feet southeast of Paseo Grande. Roadway improvements would require right-of-way acquisition for new landscaping, roadway improvements (curb, shoulders, travel lanes, and landscaped medians), slopes, and drainage facilities. The Project also includes a new signalized intersection at Paseo Grande, and two possible additional signalized intersections at the proposed Border Avenue and Chase Drive. The City proposes to extend and connect two existing local collector streets, Border Avenue and Mangular Avenue/Chase Drive, to facilitate north/south local access to Foothill Parkway.

Section 2 Summary of Regulations

There are three (3) key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The USACE 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, the 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 UNITED STATES ARMY CORPS OF ENGINEERS

The USACE 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 USACE and Environmental Protection Agency (EPA) define "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.

Wetlands, a subset of jurisdictional waters, are jointly defined by the USACE 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*.

The USACE's regulatory program continues to evolve due to court rulings associated with litigation. The following court cases have further defined the USACE's jurisdiction:

2.1.1 SWANCC

A significant change in wetland regulation occurred on January 9, 2001, when the U.S. Supreme Court issued the decision on *Solid Water Agency of Northern Cook County v. USACE* (SWANCC). The SWANCC decision limited the scope of the USACE's Section 404 CWA regulatory permitting program as applied to isolated waters. The U.S. Supreme Court struck down the USACE'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." All isolated conditions should be approved by the USACE prior to the application process.

2.1.2 Rapanos

The June 19, 2006, U.S. Supreme Court decision on the *Rapanos v. United States* case has further limited the definition of "wetlands" and "waters of the United States" under the CWA. The Rapanos decision was a 4-1-4 decision in which four justices advocated a narrower interpretation of the Clean Water Act to hold that "waters of the United States" excludes intermittent or ephemeral streams and wetlands without a continuous surface connection to navigable waters.

The USACE and EPA came out with a memorandum on June 5, 2007, in order to provide guidance in implementing the U.S. Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (jointly hereafter Rapanos), which addresses the jurisdiction over waters of the United States under the CWA. In accordance with the Rapanos Decision, the agencies will continue to assert jurisdiction over traditional navigable water (TNW) and all wetlands adjacent to TNWs; however, jurisdiction can be

asserted over a waters, including wetlands, that is not a TNW by meeting either of the following standards:

(1) Relatively permanent (i.e., flows year-round, or at least seasonally) non-navigable tributaries of TNW and wetlands with a continuous surface connection with such tributaries.

(2) Certain adjacent and non-navigable tributaries that are not relatively permanent. This requires a case-by-case "significant nexus" analysis to determine whether waters and their adjacent wetlands are jurisdictional. A "significant nexus" may be found where waters, including adjacent wetlands, affect chemical, physical or biological integrity of TNWs.

2.2 REGIONAL WATER QUALITY CONTROL BOARD

The nine (9) Regional Boards have the responsibility 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 (includes SWANCC and Rapano conditions) and to all waters of the United States, including wetlands.

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 USACE 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. There is no longer separation between private/public notifications (previously 1601/1603). Fish and Game Code Sections 1600-1616 establish a fee based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

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 USACE. While they closely resemble the limits described by USACE 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.

Any of the below criteria could be applicable in determining what constitutes a stream depending on the potential for the proposed activity to adversely affect fish and other stream-dependent wildlife resources.

(1) The term stream can include intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (United States Geological Survey maps, USGS), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.

(2) Biological components of a stream, may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system.

(3) As a physical system, a stream not only includes water (at least on an intermittent or ephemeral basis), but also a bed or channel, a bank and/or levee, instream features such as logs or snags, and various flood plains depending on the return frequency of the flood event being considered (i.e. 10, 50, or 100 years, ect.).

(4) The lateral extent of a stream can be measured in several ways depending on a particular situation and the type of fish or wildlife resource at risk. The following criteria are presented in order from the most inclusive to the least inclusive:

   (a) The flood plain of a stream can be the broadest measurement of a stream's lateral extent depending on the return frequency of the flood event used. For most flood control purposed, the 100-year flood plain exists for many streams. *However, the 100-year flood plain may include significant amounts of upland or urban habitat and therefore may not be appropriate in many cases.*

   (b) The outer edge of riparian vegetation is generally used as the ling of demarcation between riparian and upland habitats and is therefore a reasonable and identifiable boundary for the lateral extent of a stream. In most cases, the use of this criterion should result in protecting the fish and wildlife resources at risk.

   (c) Most streams have a natural bank which confines flows to the bed or channel except during flooding. In some instances, particularly on smaller streams or dry washes with little or no riparian habitat, the bank should be used to mark lateral extent of a stream.

   (d) A levee or other artificial stream bank would also be used to mark the lateral extent of a stream. However, in many instances, there can be extensive areas of valuable riparian habitat located behind a levee.

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 USACE, 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 USACE, 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 USACE will not issue its authorization until the RWQCB completes the Section 401 Water Quality Certification. Processing of the 401 Certification with the RWQCB and 1602 SAA with the CDFG can occur concurrently with the USACE permit process, since the agencies can utilize the same information and analysis. A ROWD is required by the RWQCB if SWANCC or Rapanos waters are present. Applications to both the RWQCB and the CDFG require submittal of a valid California Environmental Quality Act (CEQA) document along with the application.

Section 3 Methodology

Analysis presented in this document consists of field surveys and verification of current conditions conducted on September 19, 2007. While in the field, jurisdictional areas were recorded onto a base map at an approximate scale of 1"= 200' using the topographic contours and visible landmarks as guidelines. Data points were taken with a Trimble Geo XT Ground Positioning System (GPS) with ESRI Arc Pad 6.0/7.0 in order to record and identify specific jurisdictional OHWM areas, soil pits, picture locations, and drainage features. This data was then transferred via USB port as a .shp file and added to the project's jurisdictional map and included in the delineation report.

3.1 WATERS OF THE U.S. AND STATE WATERS

The limits of the USACE'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))." An OHWM can be determined by the observation of a natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; presence of litter and debris; wracking; vegetation matted down, bent, or absent; sediment sorting; leaf litter disturbed or washed away; scour; deposition; multiple observed flow events; bed and banks; water staining; and/or change in plant community. The RWQCB shares USACE jurisdictional methodology, unless SWANCC or Rapanos conditions are present. In the latter case, the RWQCB considers such drainages to be jurisdictional. The CDFG's jurisdiction is defined to the top of bank of the stream/channel or to the limit (outer dripline) of the adjacent riparian vegetation.

3.2 WETLANDS

USACE jurisdictional wetlands are delineated using the methods outlined in the USACE *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (2006). The methodology set forth in the Interim Regional Supplement 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. Both RWQCB

and CDFG jurisdictional wetlands encompass that of the USACE. In the field, vegetation, soils, and evidence of hydrology were examined via the methodology listed below:

3.2.1 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). In general, hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during growing season. Hydrophytic vegetation decisions are based on the assemblage of plant species growing on a site, rather than the presence or absence of particular indicator species. Vegetation strata are sampled separately when evaluating indicators of hydrophytic vegetation. A stratum for sampling purposes is defined as having 5 percent or more total plant cover. The following vegetation strata are recommended for use across the Arid West:

- *Tree Stratum:* Consists of woody plants 3 inches or more in diameter at breast height (DBH);
- *Sapling/shrub stratum:* Consists of woody plants less than 3 inches in DBH, regardless of height;
- *Herb stratum:* Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size; and,
- *Woody vines:* Consists of all woody vines, regardless of size.

The following indicators are applied in the sequence presented. Hydrophytic vegetation is present if any of the indicators is satisfied.

Indicator 1 – Dominance Test

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. 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; and,

- *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.

Indicator 2 – Prevalence Index

The prevalence index is used to determine whether hydrophytic vegetation is present on sites where indicators of hydric soil and wetland hydrology are present but the vegetation initially fails the dominance test. The prevalence index takes in consideration all plant species in the community, not just a few dominants. The prevalence index is a weighted-average wetland indicator status of all plant species in the sampling plot, where each indicator status category is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5) and weighing is abundance (percent cover). Hydrophytic vegetation is present if the prevalence index is 3.0 or less.

Indicator 3 – Plant Morphological Adaptations

Plant morphological adaptations can be used to distinguish certain wetland plant communities in the Arid West, when indicators of hydric soil and wetland hydrology are present. Some hydrophytes develop easily recognized physical characters, or morphological adaptations, when they occur in wetland areas. Common morphological adaptations include, but are not necessarily limited to, adventitious roots and shallow root systems developed on or near the soil surface. To apply this indicator, these morphological features must be

observed on more than 50 percent of the individuals of a FACU species living in an area where indicators of hydric soil and wetland hydrology are present.

3.2.2 Hydrology

Wetland hydrology indicators are presented in four (4) groups, which include:

Group A – Observation of Surface Water or Saturated Soils

Group A is based on the direct observation of surface water or groundwater during the site visit.

Group B – Evidence of Recent Inundation

Group B consist of evidence that the site is subject to flooding or ponding, although it may not be inundated currently. These indicators include water marks, drift deposits, sediment deposits, and similar features.

Group C – Evidence of Recent Soil Saturation

Group C consist of indirect evidence that the soil was saturated recently. Some of these indicators, such as oxidized rhizopheres surrounding living roots and the presence of reduced iron or sulfur in the soil profile, indicate that the soil has been saturated for an extended period.

Group D – Evidence from Other Site Conditions or Data

Group D consist of vegetation and soil features that indicate contemporary rather than historical wet conditions, and include shallow aquitard and the FAC-neutral test.

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. 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.

3.2.3 Soils

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 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.

Once in the field, soil characteristics are verified by digging soil pits along each transect to a depth of at least 16 inches; in areas of high sediment deposition, soil pit depth may be increased. 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 organic accumulation; iron reduction, translocation, and accumulation; and sulfate reduction are also recorded.

Hydric soil indicators are present in three (3) groups, which include:

All Soils

All soils refers to soils with any USDA soil texture. Hydric soil indicators within this group include histosol, histic epipedon, black histic, hydrogen sulfide, stratified layers, 1 cm muck, depleted below dark surface, and thick dark surface.

Sandy Soils

Sandy soils refers to soil materials with a USDA soil texture of loamy fine sand and coarser. Hydric soil indicators within this group include sandy mucky mineral, sandy gleyed matrix, sandy redox, and stripped matrix.

Loamy and Clayey Soils

Loamy and clayey soils refers to soil materials with a USDA soil texture of loamy very fine sand and finer. Hydric soil indicators within this group include loamy mucky mineral, loamy gleyed matrix, depleted matrix, redox dark surface, depleted dark surface, redox depressions, and vernal pools.

3.3 SWANCC WATERS

The term "isolated waters" is generally applied to waters/wetlands that are not connected by surface water to a river, lake, ocean, or other body of water. In the presence of isolated conditions, the RWQCB and CDFG take jurisdiction via the OHWM/streambed and/or the 3-parameter wetland methodology utilized by the USACE.

3.4 RAPANOS WATERS

The agencies will assert jurisdiction over non-navigable, not relatively permanent tributaries and their adjacent wetlands where such tributaries and wetlands that have a significant nexus to a TNW. The flow characteristics and functions of the tributary itself in combination with the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of the TNWs. Factors considered in the significant nexus evaluation include:

(1) The consideration of hydrologic factors including, but not limited to, the following:

- volume, duration, and frequency of flow, including consideration of certain physical characteristics of the tributary
- proximity to the TNW
- size of the watershed
- average annual rainfall
- average annual winter snow pack

(2) The consideration of ecologic factors including, but not limited to, the following:

- the ability for tributaries to carry pollutants and flood waters to TNWs
- the ability of a tributary to provide aquatic habitat that supports a TNW
- the ability of wetlands to trap and filter pollutants or store flood waters
- maintenance of water quality

Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) and ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water, are generally not considered jurisdictional waters.

In the presence of Rapanos drainage conditions, the RWQCB and CDFG take jurisdiction via the OHWM and/or the 3-parameter wetland methodology utilized by the USACE. RBF evaluates each drainage condition and records the data on a Preliminary Jurisdictional Determination Form (refer to the Appendix).

Section 4 Literature Review

Review of relevant literature and materials often aids in preliminarily identifying areas that may fall under an agency's jurisdiction. The following resources have been reviewed and utilized in the preparation of this delineation:

- California Regional Water Quality Control Board, Santa Ana River Basin, Water Quality Control Plan, 1995.
- City of Corona, General Plan, March 2004. http://www.ci.corona.ca.us/depts/planning/GPupdate/gp_list.cfm.
- Eagle Aerial, Aerial Photograph, 2006.
- Natural Resources Conservation Services, Hydric Soils List of California, 1995. http://soils.usda.gov/soil_use/hydric/main.htm.
- U.S. Department of Agriculture, Natural Resources Conservation Service, Western Riverside Area, California Soil Survey, 1971.
- U.S. Department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, Flood Insurance Rate Map No. 06002451355B, 0602500010D, and 0602500005F. http://msc.fema.gov.
- U.S. Fish and Wildlife Service, Department of Habitat and Resource Conservation, Wetland Geodatabase, http://wetlandsfws.er.usgs.gov/NWI/index.html.
- U.S. Geological Survey, 7.5 Minute Series Topographic Quadrangle, Corona South, CA, 1997.

A summary of RBF's literature review is provided below (refer to Section 8.0 for a complete list of references used during the course of this delineation):

4.1 USGS TOPOGRAPHIC QUADRANGLE

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.

Most topographic maps are made from aerial photos and, due to errors in photo interpretation, some streams which should be shown as "blue-line" or "dashed blue-line" are

not shown. Even the most detailed topographic maps (7.5 minute) do not show all streams. Maps showing a larger area (15 minute) show fewer streams. If a stream has a substantial flow or will have substantial flow during the wet season, if the bed shows signs of scour, if it is large enough to provide fish spawning and/or nursery habitat during the winter and spring of the year, or possesses riparian and/or wetland habitat, it can come under jurisdictional areas whether or not the stream course is designated as a blue-line stream on a map.

Based on the USGS Corona South, California Quadrangle, the project site primarily consists of vacant land located within the City of Corona and unincorporated Riverside County, west of I-15. Oak Street Reservoir is located to the north of the project site. On-site topography ranges from approximately 800 to 1,320 feet above msl and gently slopes to the northeast. The surrounding uses consist of residential uses and open space. The Cleveland National Forest is noted south of the project site. One (1) debris basin is noted in the central portion of the project site. Four (4) blueline streams, including Wardlow Wash, traverse the project site in a north/south direction. The three (3) unnamed drainages flow to Temescal Creek, which is tributary to Prado Dam (TNW). Wardlow Wash flows to the Santa Ana River, just below Prado Dam, which is tributary to the Pacific Ocean (TNW). No on-site pits, ponds, or lagoons were noted during the review of the USGS topographic map.

TABLE 1. Topographic Summary

Map Name	Corona South, California
Map Year	1997
Map Provider	USGS
Property Elevation (feet)	800 to 1,320 feet above msl
Property Slope Type	Sloping
Property Slope Direction	North
Map Contour Interval (feet)	40

4.2 AERIAL PHOTOGRAPH

Prior to the September 19, 2007 site visit, RBF reviewed an existing aerial photograph, provided by Eagle Aerial (2006), 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 primarily of the open space. Upland and riparian vegetation appear to be present on-site. Several drainages are noted traversing the project site. One (1) debris basin is noted in the central portion of the site.

Surrounding uses consist of open space and residential uses. No ponding was noted during the aerial photograph review.

4.3 SOIL SURVEY

On-site soils were researched prior to the September 19, 2007 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 in 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 *Western Riverside Area, California Soil Survey*, dated 1971, the proposed project site is situated on the Monserate-Arlington-Exeter association. The Monserate-Arlington-Exeter association is well drained, nearly level to moderately steep soils that have a surface layer of sandy loam to loam and are shallow to deep to a hardpan. Five (5) soil series are reported within the boundaries of the project site, and consist of the following:

Cortina gravelly course sandy loam, 2 to 8 percent slopes (CnC): This gently sloping to moderately sloping soil on alluvial fans and valley fills. The profile is similar to the one described as typical of the series. The Cortina series are somewhat excessively drained and excessively drained soils formed in alluvium from metasedimentary rocks. In a typical profile, the surface layer is grayish-brown (10YR 5/2) course sandy loam, about 10 inches thick. Permeability is rapid in this soil. The available water holding capacity is 3.75 to 5.0 inches. Runoff is slow to medium, and the hazard of erosion is slight to moderate. This soil is used for dryland pasture, grain, range, irrigated citrus, and homesites. *Subgroup: Typic Xerofluvents.*

Garretson gravelly very fine sandy loam, 2 to 8 percent slopes (GdC): This gently to moderately sloping soil occurs on alluvial fans. The profile is similar to the one described as typical of the series. The Garretson series consists of well drained soils developed in alluvium made up chiefly of metasedimentary materials. In a typical profile, the surface layer is brown (10YR 5/3) and yellowish-brown (10YR 5/4) gravelly very fine sandy loam and gravelly loam, about 29 inches thick. Permeability is moderate. The available water holding capacity is 5.0 to 7.5 inches. Runoff is slow to medium, and the hazard of erosion is slight to moderate. This soil is used for

irrigated citrus, truck crops, alfalfa, pasture, grain, and homesites. *Subgroup: Typic Xerorthents.*

Perkins gravelly loam, 8 to 15 percent slopes, eroded (PgD2): Moderately deep and deep gullies have been formed in this soil. There are small areas of deposition. The profile is similar to the one described as typical of the series except for it is eroded. The Perkins series consists of well drained soils on alluvial fans and terraces. Typically, the surface layer is brown (7.5YR 5/4) gravelly loam about 12 inches thick. Permeability is slow. The available water holding capacity is 6.5 to 7.5 inches. Runoff is rapid, and the hazard of erosion is high. This soil is used for irrigated citrus, dryland grain and pasture, and nonfarm purposes. *Subgroup: Mollic Haploxeralfs.*

Rough broken land (RuF): This land type consists of alluvial materials that are remnants of old alluvial fans and terraces. These fans and terraces have been dissected by drainages to such an extent that areas of recognizable soils cannot be mapped. Slopes range form 30 to 50 percent. The materials in this land type are mainly form acid igneous tocks, such as granite, granodiorite, gneiss, and mica-schist. They are slightly acid to moderately alkaline, pale brown or grayish-brown to brown or dark grayish-brown; and intermittently effervescent. The main uses for this land are for wildlife habitat and watershed.

Terrace escarpments (TeG): This land type consists of variable alluvium on terraces or barrancas. Small areas of recently deposited alluvium may be nest the bottom of the escarpments. This land type may have exposed "rim pan," gravel, cobblestone, stones, or large boulders in variable quantities. Approximately one-fourth of the acreage is made up of eroded spots and active gullies that head toward the terrace top. This land is unaltered alluvial outwash derived from granite, gabbro, metamorphosed sandstone, sandstone, or mica-schist. It has various profiles that are commonly truncated. The material is light grayish-brown to brown in color and slightly acid to neutral in reaction.

Based on the Soil Survey, the soil series present on the project site may have the potential to have hydric soil characteristics (refer to Section 5.0, Site Conditions, for a discussion of on-site soils).

4.4 HYDRIC SOILS LIST OF CALIFORNIA

RBF reviewed the Hydric Soils List of California, provided by the NRCS, 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 the list, none of the above-mentioned soil series are listed as hydric.

4.5 LOCAL CLIMATE

The local climate consists of mild winters and hot summers. Most of the rainfall (as in all of Southern California) occurs during winter and early spring. The winter low temperatures can get cold enough for frost, with rare snowfall seen on the local foothills. Winter days are pleasant, with the mercury staying around 70 degrees Fahrenheit (occasionally warming into the 80s). Summertime is hot, with highs averaging in the low 90s. During the hottest months, daytime temperatures in Corona often exceed 100 degrees. For the purposes of this delineation, the growing season is considered to be 365 days a year. Table 2 identifies additional on-site physical setting characteristics.

4.6 FLOOD ZONE

According to the existing FEMA flood maps, portions of the project site are located within the 100-year flood zone. The proposed project site consists of several drainages, including Wardlow Wash, tributary to the Santa Ana River.

4.7 GENERAL PLAN

Some local agencies have ordinances with respect to wetlands and streams. No local ordinances (mandatory buffers or in-kind replacement) regarding wetlands and streams were noted within the City of Corona General Plan.

4.8 ADDITIONAL RESOURCES

According to the *Biological Technical Report* (BonTerra Consulting, August 2007), vegetation types and other areas occurring on the property include coastal sage scrub, alluvial, coastal sage scrub/chaparral, coastal sage scrub/ruderal, chaparral, non-native grassland, riparian forest, oak woodland, ruderal, ornamental, developed/ruderal, disturbed, and developed areas. Vegetation types located on-site within the drainage areas include:

Coastal Sage Scrub: This vegetation contains a mix of shrubs and herbaceous species. The dominant native perennial species on the project site include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), orange-bush monkey flower (*Mimulus aurantiacus*), giant wild rye (*Leymus condensatus*), and deerweed (*Lotus scoparius*).

Alluvial: This area is dominated by scale-broom (*Lepidospartum squamatum*) and California buckwheat.

Chaparral: This vegetation type is a mix of chaparral species including chamise, hoaryleaf ceanothus, laurel sumac, scrub oak, hairy lilac (*Ceanothus oliganthus*), toyon (*Heteromeles arbutifolia*), sugar bush (*Rhus ovata*), and Our Lord's candle (*Yucca whipplei*).

Non-native Grassland: These areas are dominated by black mustard (*Brassica nigra*), Russian thistle (*Salsola tragus*), and red brome (*Bromus madritensis*).

Riparian Forest: These areas include southern cottonwood-willow riparian forest, mule fat scrub, southern coast live oak riparian forest, and California sycamore-coast live oak riparian forest. The southern cottonwood-willow riparian forest vegetation type is co-dominated by Fremont cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), narrow-leaved willow (*Salix exigua*), lance-leaved willow (*Salix lucida*), mule fat (*Baccharis salifolia*), and western false indigo (*Amorpha fruticosa*). The active stream channel in this vegetation type is rocky with little vegetation. Mule fat scrub vegetation type is dominated by mule fat with scattered upland species including scale-broom, California sagebrush, and California buckwheat. The southern coast live oak riparian forest is dominated by coast live oak trees (*Quercus agrifolia*). Other species present in this area include toyon, laurel sumac, and poison oak (*Toxicodendron diversilobium*). The California sycamore-coast live oak riparian forest is dominanted by coast live oak and western sycamore (*Platanus racemosa*). The understory is moderate in quality due to mountain bikes and horseback riding, and contains western false indigo, mule fat, California brickellbush *(Brickellia californica*), thickleaf yerba santa (*Eriodictyon crassifolium*), scale-broom, and tarragon (*Artemisia dracunculus*).

Oak Woodland: These areas are dominated by coast live oak. The oaks in the oak woodland vegetation type occur in drier upland areas, such as adjacent to a riparian area, and are therefore not a component of the riparian forest described above.

Ruderal: Species present in ruderal areas include non-native species and weedy native species. On the project site, these species include tree tobacco (*Nicotiana glauca*), Bermuda grass (*Cydnodon dactylon*), telegraph weed (*Heterotheca grandifolia*), black mustard, Russian thistle, red brome, and castor bean (*Ricinus communis*).

Developed: These areas consist of the concrete areas in the Mabey Canyon Debris Basin, a concrete-lined channel, existing paved roads, and residential and water district structures.

TABLE 2. Project Site Summary

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	
Reported Wetland/Riparian Buffers per General Plan		X	

Section 5 Site Conditions

As described in Section 1.0, the proposed project is located within the City of Corona, County of Riverside. Refer to Sections 5.1 and 5.2, below, for discussion with respect to the three (3) wetland parameters or evidence of water flow defined in Section 3.0. Refer to Exhibit 4, *On-Site Photographs*, for representative photographs taken throughout the project site.

5.1 DRAINAGES

Approximately four (4) drainages were noted on-site during the September 19, 2007 site visit. No water flow was noted within the project site; the drainages appear to be ephemeral, in that they contain water only during storm events. Evidence of an OHWM was noted within the drainages typically via sediment deposits, drift and debris lines, and erosional cuts. Generally, the OHWM varied in width, dependent on the water flow, range of slopes, and soil types on-site. Table 3, *Drainage Summary*, indicates the approximate drainage length and OHWM.

5.1.1 Drainage A

Drainage A, located in the southern portion of the project site, flows east into Oak Street Reservoir and is tributary to Temescal Creek. Temescal Creek flows to Prado Dam, a TNW. Drainage A consists mainly of an unvegetated concrete channel; however, a small portion consists of ornamental and alluvial vegetation. The width of Drainage A is approximatley 40 feet, and total length of is approximately 909 feet. Drainage A contains approximately 0.83-acre of USACE, RWQCB, and CDFG jurisdiction.

5.1.2 Drainage B

Drainage B, located in the central portion of the project site, flows east towards Mabey Canyon drainge and is tributary to Temescal Creek. Temescal Creek flows to Prado Dam, a TNW. Vegetation within the area surrounding Drainage B consists mainly of chaparral, with limited coastal sage scrub and oak woodland. The width of Drainage B ranges from approximately 2 to 3 feet. The total length of Drainage B is approximately 660 feet and contains approximately 0.03-acre of RWQCB and CDFG jurisdiction.

Typical view of the project site.

View looking west at the on-site concrete channel (Drainage A) in the southern portion of the project site.

View looking south at Drainage D in the northern portion of the project site.

View Drainage B in the central portion of the project site.

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9/25/07 JN 10-104629-13012

FOOTHILL PARKWAY WESTERLY EXTENSION • JURISDICTIONAL DELINEATION

On-Site Photographs

Exhibit 4

5.1.3 Drainage C

Drainage C, which includes the Mabey Canyon Debris Basin and drainage, is located in the central portion of the project site, north of Drainage B. Drainage C flows east to Temescal Creek, which is tributary to Prado Dam, a TNW. Vegetation within Drainage C consists of ruderal, coastal sage scrub, ornamental vegetation, and developed area. Drainage C (including the basin) contains approximately 3.05-acres of USACE, RWQCB, and CDFG jurisdiction.

5.1.4 Drainage D

Drainage D (Wardlow Wash) is located in the northern portion of the project site, and extends north to the Santa Ana River. The width of Drainage D ranges from approximately 2 to 50 feet. The wash has a rocky bottom, and vegetation consists mainly of chaparral, non-native grassland, ruderal, riparian forest, and alluvial habitat. The total length of Drainage D (including its tributary) is approximately 4,686 feet and contains approximately 0.75-acre of USACE and RWQCB jurisdiction and 5.86-acres of CDFG jurisdiction.

TABLE 3. Drainage Summary

Drainage	Drainage Length (ft.)	OHWM Width (ft.)	USACE Acreage	RWQCB Acreage	CDFG Acreage*
A	909	40	0.83	0.83	0.83
B	660	2 - 3	0.00	0.03	0.03
C	267	5	3.05	3.05	3.05
D	4,686	2 - 50	0.75	0.75	5.86
Totals	**6,522**	**NA**	**4.63**	**4.66**	**9.77**

* Includes riparian vegetation.

5.2 WETLANDS

No soil pits were warranted within the project site during the September 19, 2007 site visit due to the scoured wash conditions and/or the lack of dominant hydrophitic vegetation within the majority of the project site. Vegetation within the project site consisted mainly of upland vegetation with sparse mulefat, oak and cottonwood woodlands. Generally, soils within the boundaries of the project site were found to be consistent with those previously mentioned (i.e., gravelly loams) during the literature review in Section 4.3. No wetlands were noted within the boundaries of the project site.

Section 6 Findings

This delineation was prepared for the City in order to delineate the USACE, RWQCB, and CDFG jurisdictional authority for drainages located within the Foothill Parkway Westerly Extension project site. 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.

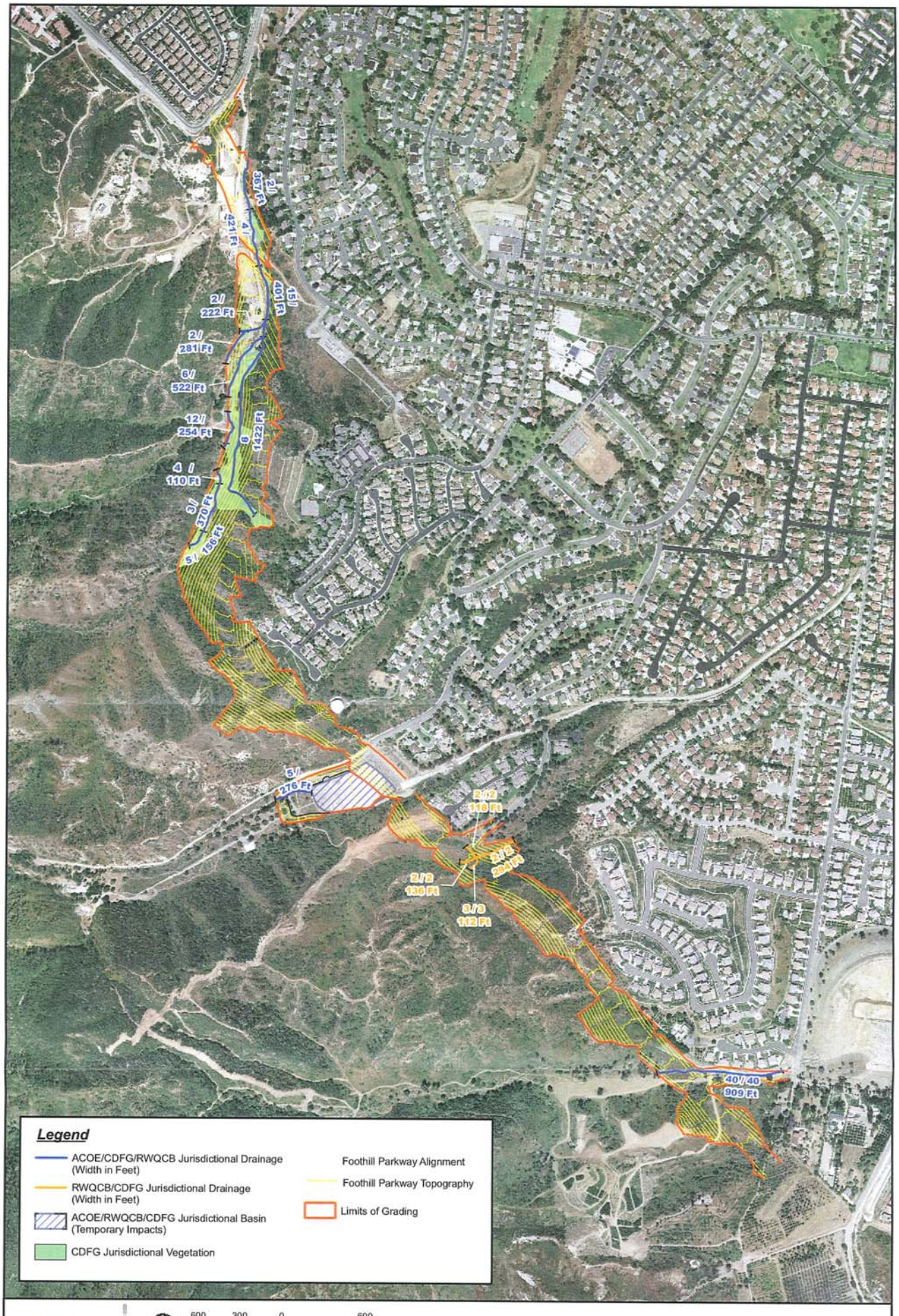
6.1 U.S. ARMY CORPS OF ENGINEERS DETERMINATION

6.1.1 Wetland Determination

As previously noted in Section 2.1, an area must exhibit all three (3) of the wetland parameters described in the USACE Wetland Delineation Manual to be considered a jurisdictional wetland. Based on the results of the literature review and field investigations, it was determined that no portion of the project site contained all three parameters. Based on the literature review and observation made during the field visit, no hydric soils are present within the project site and hydrophytic vegetation is limited (typically not dominant). Based on the site conditions, no USACE jurisdictional wetlands are present.

6.1.2 "Waters of the U.S." (Non-Wetland) Determination

Evidence of hydrology was noted within the project site and consisted of sediment deposits, erosional features, and debris lines. The on-site drainages appear to be ephemeral and contain water flow only during storm events. Three (3) of the on-site drainages (Drainage A, C, and D) were determined to have a significant nexus to the TNW and are considered jurisdictional by the USACE. Drainage B was determined not to have a significant nexus to the TNW, as it is a small 2-foot ephemeral drainage with limited upland vegetation. For the jurisdictional determination of each drainage refer to *Preliminary Jurisdictional Determination Forms*, located in the Appendix. Approximately 4.63-acres of USACE "waters of the U.S." are located within the boundaries of the project site (refer to Exhibit 5, *Jurisdictional Map*). Approximately **3.01-acres** will be temporarily impacted and **1.62-acres** will be permanently impacted by the proposed project.


2/ 367 Ft
4/ 421 Ft
15/ 401 Ft
2/ 222 Ft
2/ 281 Ft
6/ 522 Ft
12/ 254 Ft
9 1422 Ft
4/ 110 Ft
3/ 370 Ft
5/ 156 Ft
5/ 276 Ft
2/2 118 Ft
2/2 294 Ft
2/2 136 Ft
3/3 112 Ft
40/40 909 Ft
Legend
ACOE/CDFG/RWQCB Jurisdictional Drainage (Width in Feet)
RWQCB/CDFG Jurisdictional Drainage (Width in Feet)
ACOE/RWQCB/CDFG Jurisdictional Basin (Temporary Impacts)
CDFG Jurisdictional Vegetation
Foothill Parkway Alignment
Foothill Parkway Topography
Limits of Grading
600 300 0 600
Feet
RBF CONSULTING GIS
FOOTHILL PARKWAY WESTERLY EXTENSION
JURISDICTIONAL MAP
EXHIBIT 5
M:\Mdata\10104629-a\GIS\Foot_Hill_Delineation_11x17P.mxd 9/26/2007 -- JM

6.2 REGIONAL WATER QUALITY CONTROL BOARD DETERMINATION

The RWQCB jurisdiction follows that of the USACE; however, it also includes the on-site Rapanos drainage (Drainage B). Approximately 4.66-acres of RWQCB jurisdiction are located within the boundaries of the project site. Approximately **3.01-acres** will be temporarily impacted and **1.65-acres** will be permanently impacted by the proposed project.

6.3 CALIFORNIA DEPARTMENT OF FISH AND GAME DETERMINATION

All four (4) on-site drainages are considered jurisdictional by the CDFG. The CDFG jurisdiction is similar to the USACE jurisdiction, but also encompasses riparian vegetation (to the outer dripline) when present. Approximately 9.77-acres of CDFG jurisdiction are located within the boundaries of the project site. Approximately **3.01-acres** will be temporarily impacted and **6.76-acres** will be permanently impacted by the proposed project.

Section 7 Regulatory Approval Process

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

7.1 U.S. ARMY CORPS OF ENGINEERS

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

Section 404 Permit Identification:

Based on the amount of jurisdictional area present within the boundaries of the project site (greater than ½-acre), it is anticipated that the proposed improvements can be authorized via an Individual Permit (IP). The following provides a brief description of a typical IP process; however, each permit process is unique and may require additional steps and subsequent information dependent upon the amount of impacts and/or level of controversy. An IP usually has a 30-day comment period under public noticing, though the time limit can be as short as 15 days. Processing time generally takes 9-12 months, but it is not uncommon for the processing time to last 1-3 years depending on the complexity and size of the project project. The IP process generally involves a Pre-Application Field Meeting; submittal of a Department of Army Permit Application (ENG FORM 4345) and associated environmental documentation (e.g., jurisdictional delineation, site plans, project purpose, location, duration, etc.); submittal of a Pre-Construction Notification (PCN); consultations with other agencies (as appropriate); a Section 404(B)(1) Alternatives Analysis and compliance determination; and a final ACOE permit decision. Prior to issuance of the ACOE permit, a CWA Section 401 Water Quality Certification from the RWQCB must be obtained.

Obtaining the Section 401 Water Quality Certification can result in substantial delays in issuing an ACOE permit. To avoid unreasonable delays in ACOE permit processing, the following actions are recommended. In cases where the ACOE has finished its evaluation of a permit proposal and the only action remaining is the issuance of the Section 401 Certification, the ACOE should send a provisional permit to the applicant. Sending a provisional permit completes the ACOE action on the proposal and notifies the applicant of the need to obtain a Section 401 Certification from the appropriate State certifying agency before the Section 404 permit is valid. The provisional permit also places the only remaining action with the certifying agencies, properly focusing the applicant on the State.

7.2 REGIONAL WATER QUALITY CONTROL BOARD

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 (includes SWANCC and Rapanos conditions), including wetlands. The following permits will be required prior to construction.

7.2.1 Section 401 Water Quality Certification

For an USACE 404 permit to be approved, 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 USACE, 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 USACE 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 USACE. 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 received.

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 Best Management Practices (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 and type of impacts.

7.2.2 Report of Waste Discharge

The U.S. Supreme Court's ruling in the Rapanos Decision has no bearing on the California Porter-Cologne Act. Thus, since Porter-Cologne was enacted, California always retains authority to regulate discharges of waste into any waters of the state, regardless of whether the USACE has concurrent jurisdiction under Section 404. Since one (1) of the on-site drainages is determined to have no significant nexus (Rapanos drainage), a Report of Waste Discharge (ROWD) pursuant to California Water Code Section 13260 would be required from the RWQCB. Section 13260 states that persons discharging or proposing to discharge waste that could affect the quality of the waters of the State, other than into a community sewer system, shall file a ROWD containing information which may be required by the appropriate RWQCB.

All dischargers regulated under waste discharge requirements (WDRs) permits must pay an annual fee. The RWQCB has within 30 days of receipt of the application form and any supplemental documents to notify you whether your application is complete. If your application is incomplete, the RWQCB representative will send you a detailed list of discharge specific information necessary to complete the application process. The completion date of your application is normally the date when all required information, including the fee, is received by the RWQCB. The annual fee is determined by the RWQCB based on an evaluation of proposed discharge.

7.3 CALIFORNIA DEPARTMENT OF FISH AND GAME

The on-site drainages (streambeds) and associated riparian vegetation would be considered jurisdictional by the CDFG; therefore, a 1602 Streambed Alteration Agreement (SAA) must be obtained prior to any jurisdictional impact. A SAA is technically not a permit. It is a legally binding contract in which two parties, the project proponent (applicant) and the CDFG, mutually agree to a particular course of action. The CDFG does not have the discretionary authority to decide not to negotiate a SAA or submit to binding arbitration. However, the CDFG has the duty to propose avoidance or mitigation measures which limit the project as necessary to prevent adverse impacts to fish and wildlife resources.

Upon a formal notification, 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 SAA as described below.

If a SAA is required, the CDFG may require an onsite inspection, and 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 Application fee associated with the notification package varies and is dependent upon the total cost of the project and type of Agreement (i.e., Regular or Long-Term).

7.4 GLOBAL RECOMMENDATIONS

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 USACE, 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.

Section 8 References

The following references were utilized during preparation of this Delineation of State and Federal Jurisdictional Waters:

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Faber, Phyllis M., and Robert F. Holland, *Common Riparian Plants of California*, Pickleweed Press, 1996.

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Site Visit conducted on September 19, 2007.

Thomas Brothers Map, San Bernardino and Riverside Counties, 2007.

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, *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*, 2006.

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

U.S. Department of Agriculture, Natural Resources Conservation Service, Western Riverside Area, California Soil Survey, 1971.

U.S. Department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, Flood Insurance Rate Map No. 06002451355B, 0602500010D, and 0602500005F. http://msc.fema.gov.

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APPENDIX: RBF Preliminary Jurisdictional Determination Forms

RBF CONSULTING

PRELIMINARY JURISDICTIONAL DETERMINATION FORM **DATE 9 / 18 / 07**

PROJECT Foothill Parkway Westerly Extension Project **DRAINAGE A**

Portions of the form left blank are not applicable.

SECTION I: BACKGROUND INFORMATION

A. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **California** County: **Riverside** City: **Corona**

Center coordinates of site (lat/long in degree decimal format): Lat. **33°50'42" North,**

Long . **117°36'03" West**

Name of nearest waterbody: **Temescal Creek**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Prado Dam**

Name of watershed or Hydrologic Unit Code (HUC): **Santa Ana River Watershed, HUC 801.25 (Temescal Creek)**

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different JD form.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There ☐ appear to be; ☒ appear not to be; ☐ appear to be and appear not to be; "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☐ Waters subject to the ebb and flow of the tide.

☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There ☒ appear to be; ☐ appear not to be; ☐ appear to be and appear not to be "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):**
      - ☐ TNWs, including territorial seas
      - ☐ Wetlands adjacent to TNWs
      - ☐ Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs (e.g, at least 3 months continuous flow)
      - ☒ Non-RPWs that flow directly or indirectly into TNWs (e.g., ephemeral drainages)
      - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      - ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      - ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      - ☐ Impoundments of jurisdictional waters
      - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**

      Non-wetland waters: length: **909 ft.** width: **40 ft.**

      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:

      - ☐ 1987 Delineation Manual
      - ☐ Arid West Supplement
      - ☒ Established by OHWM
      - ☐ Established by Outer Continental Shelf Limits
      - ☐ Seaward limit of the territorial seas within 3-mile baseline
      - ☐ Established by mean (average) high waters
      - ☐ Established by Corps navigation study
      - ☐ Not established at this time
      - ☐ not applicable

      Elevation of established OHWM (if known):

2. **Non-regulated waters/wetlands (check if applicable):**

   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional (e.g., swales, ditches). Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW (OFFICE SECTION)

(i) General Area Conditions:

Watershed size: **2,800** square miles

Drainage area:

Average annual rainfall: **12** inches

Average annual snowfall: **0** inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 or more tributaries before entering TNW.

Project waters are ☐ 1 (or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **TNW**.

Project waters are ☐ 1 (or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **RPW**.

Project waters are ☐ (1 or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **TNW**.

Project waters are ☐ (1 or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **RPW**.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW: **Unnamed drainage flows directly to Temescal Creek which flows directly to Prado Dam**

Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural

☐ Artificial (man-made). Explain:

☒ Manipulated (man-altered / some portions of drainage improved).
Explain: **Sandy wash turn into concrete channel.**

Tributary properties with respect to top of bank (estimate):

Average width: **40 feet**

Average depth: **10 feet**

Average side slopes: ☐ Vertical (1:1 or less) ☒ 2:1 ☐ 3:1 ☐ 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☐ Silts	☒ Sands	☒ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain:		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Mainly concrete drainage**

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: ☒ relatively straight ☐ meandering

Tributary gradient (approximate average slope): **1%**

(c) Flow:

Tributary provides for: ☐ Seasonal flow ☐ Intermittent but not seasonal flow ☒ Ephemeral flow

Estimate average number of flow events in review area/year: ☐ 1 ☐ 2-5 ☒ 6-10 ☐ 11-20 ☐ 20 (or greater)

Describe flow regime: **Critical**

Other information on duration and volume:

Surface flow is: ☐ discrete ☒ confined ☐ discrete and confined ☐ overland sheetflow

Characteristics:

Subsurface flow: ☐ yes ☐ no ☒ unknown Explain findings:

Tributary has (check all that apply):

- ☐ Bed and banks
- ☒ OHWM (check all indicators that apply):
  - ☐ clear, natural line impressed on the bank
  - ☐ changes in the character of soil
  - ☐ shelving
  - ☐ vegetation matted down, bent, or absent
  - ☐ leaf litter disturbed or washed away
  - ☐ sediment deposition
  - ☒ water staining
  - ☐ other (list):
  - ☒ the presence of litter and debris
  - ☐ destruction of terrestrial vegetation
  - ☐ the presence of wrack line
  - ☐ sediment sorting
  - ☐ scour
  - ☐ multiple observed or predicted flow events
  - ☐ abrupt change in plant community
- ☐ Discontinuous OHWM. Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- ☐ High Tide Line indicated by:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☐ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: **No water present.**

Identify specific pollutants, if known:

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW *(If no adjacent wetlands are present, then skip to Section C)*

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: ☐ Intermittent flow ☐ Ephemeral Flow ☐ Perennial Flow

☐ No flow Explain:

Surface flow is: ☐ Discrete ☐ Confined ☐ Discrete and confined ☐ Overland sheetflow

☐ Not present

Characteristics:

Subsurface flow: ☐ Yes ☐ No ☐ Unknown Explain findings:

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain:

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are ☐ 1 ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **TNW**.

Project waters are ☐ 1 ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **TNW**.

Flow is from: ☐ Wetland to navigable waters ☐ Navigable waters to wetlands

☐ Wetland to/from navigable waters ☐ No flow

Estimate approximate location of wetland as within the ☐ 2-year or less ☐ 2-5 year ☐ 5-10 year ☐ 10-20 year ☐ 20-50 year ☐ 50-100 year ☐ 100-500 year ☐ 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width):

☐ Vegetation type/percent cover. Explain:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☐ Other environmentally-sensitive species. Explain findings:

☐ Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more)

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW? **Yes**
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW? **No**
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs? **No**

- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW? **Yes**

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:

   Tributary does have a significant nexus to the TNW as it is a flood control facility/channel that conveys water flow into a larger basin.

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

   ☐ TNWs: linear feet width (ft), Or, acres.

   ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

   ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:

   ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

3. **Non-RPWs that flow directly or indirectly into TNWs.**

   ☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters in the review area:
   Tributary waters: length: **909 ft.** width: **40 ft.**

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

   ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

   ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

☐ Demonstrate that impoundment was created from "waters of the U.S.," or

☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

☐ which are or could be used for industrial purposes by industries in interstate commerce.

☐ Interstate isolated waters. Explain:

☐ Other factors. Explain:

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

☐ Tributary waters: linear feet width (ft).

☐ Other non-wetland waters: acres.

Identify type(s) of waters:

☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☐ Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name:

☒ USDA Natural Resources Conservation Service Soil Survey. Citation:

☒ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s):

☒ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Eagle Aerial,

or ☒ Other (Name & Date): On-Site Photographs (35mm)

☐ Previous determination(s). File no. and date of response letter:

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

RBF CONSULTING

PRELIMINARY JURISDICTIONAL DETERMINATION FORM **DATE 9 / 18 / 07**

PROJECT Foothill Parkway Westerly Extension Project **DRAINAGE B**

Portions of the form left blank are not applicable.

SECTION I: BACKGROUND INFORMATION

A. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **California** County: **Riverside** City: **Corona**

Center coordinates of site (lat/long in degree decimal format): Lat. **33°51'01" North,**

Long . **117°36'37" West**

Name of nearest waterbody: **Temescal Creek**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Prado Dam**

Name of watershed or Hydrologic Unit Code (HUC): **Santa Ana River Watershed, HUC 801.25 (Temescal Creek)**

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different JD form.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There ☐ appear to be; ☒ appear not to be; ☐ appear to be and appear not to be; "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☐ Waters subject to the ebb and flow of the tide.

☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There ☒ appear to be; ☐ appear not to be; ☐ appear to be and appear not to be "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):**
      - ☐ TNWs, including territorial seas
      - ☐ Wetlands adjacent to TNWs
      - ☐ Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs (e.g, at least 3 months continuous flow)
      - ☒ Non-RPWs that flow directly or indirectly into TNWs (e.g., ephemeral drainages)
      - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      - ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      - ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      - ☐ Impoundments of jurisdictional waters
      - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**

      Non-wetland waters: length: **660 ft.** width: **2-3 ft.**

      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:

      - ☐ 1987 Delineation Manual
      - ☐ Arid West Supplement
      - ☒ Established by OHWM
      - ☐ Established by Outer Continental Shelf Limits
      - ☐ Seaward limit of the territorial seas within 3-mile baseline
      - ☐ Established by mean (average) high waters
      - ☐ Established by Corps navigation study
      - ☐ Not established at this time
      - ☐ not applicable

      Elevation of established OHWM (if known):

2. **Non-regulated waters/wetlands (check if applicable):**

   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional (e.g., swales, ditches). Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW (OFFICE SECTION)

(i) General Area Conditions:

Watershed size: **2,800** square miles

Drainage area:

Average annual rainfall: **12** inches

Average annual snowfall: **0** inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 or more tributaries before entering TNW.

Project waters are ☐ 1 (or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **TNW.**

Project waters are ☐ 1 (or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **RPW.**

Project waters are ☐ (1 or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **TNW.**

Project waters are ☐ (1 or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **RPW.**

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW: **Unnamed drainage flows directly to Temescal Creek which flows directly to Prado Dam**

Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural

☐ Artificial (man-made). Explain:

☐ Manipulated (man-altered / some portions of drainage improved). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: **2 feet**

Average depth: **1 feet**

Average side slopes: ☐ Vertical (1:1 or less) ☐ 2:1 ☒ 3:1 ☐ 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☐ Silts	☒ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain:		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: ☒ relatively straight ☐ meandering

Tributary gradient (approximate average slope): **3 %**

(c) Flow:

Tributary provides for: ☐ Seasonal flow ☐ Intermittent but not seasonal flow ☒ Ephemeral flow

Estimate average number of flow events in review area/year: ☐ 1 ☐ 2-5 ☒ 6-10 ☐ 11-20 ☐ 20 (or greater)

Describe flow regime: **Critical**

Other information on duration and volume:

Surface flow is: ☐ discrete ☒ confined ☐ discrete and confined ☐ overland sheetflow

Characteristics:

Subsurface flow: ☐ yes ☐ no ☒ unknown Explain findings:

Tributary has (check all that apply):

- ☐ Bed and banks
- ☒ OHWM (check all indicators that apply):
  - ☐ clear, natural line impressed on the bank
  - ☐ changes in the character of soil
  - ☐ shelving
  - ☐ vegetation matted down, bent, or absent
  - ☒ leaf litter disturbed or washed away
  - ☐ sediment deposition
  - ☐ water staining
  - ☐ other (list):
  - ☐ the presence of litter and debris
  - ☐ destruction of terrestrial vegetation
  - ☐ the presence of wrack line
  - ☐ sediment sorting
  - ☒ scour
  - ☐ multiple observed or predicted flow events
  - ☐ abrupt change in plant community
- ☐ Discontinuous OHWM. Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- ☐ High Tide Line indicated by:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☐ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: **No water present.**

Identify specific pollutants, if known:

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW** *(If no adjacent wetlands are present, then skip to Section C)*

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: ☐ Intermittent flow ☐ Ephemeral Flow ☐ Perennial Flow

☐ No flow Explain:

Surface flow is: ☐ Discrete ☐ Confined ☐ Discrete and confined ☐ Overland sheetflow

☐ Not present

Characteristics:

Subsurface flow: ☐ Yes ☐ No ☐ Unknown Explain findings:

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain:

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are ☐ 1 ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **TNW**.

Project waters are ☐ 1 ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **TNW**.

Flow is from: ☐ Wetland to navigable waters ☐ Navigable waters to wetlands

☐ Wetland to/from navigable waters ☐ No flow

Estimate approximate location of wetland as within the ☐ 2-year or less ☐ 2-5 year ☐ 5-10 year ☐ 10-20 year ☐ 20-50 year ☐ 50-100 year ☐ 100-500 year ☐ 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width):

☐ Vegetation type/percent cover. Explain:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☐ Other environmentally-sensitive species. Explain findings:

☐ Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more)

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW? **Yes**

- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW? **No**

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs? **No**

- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW? **No**

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:

   Tributary does not have a significant nexus to the TNW, as it is ephemeral and approximately 2 feet in width. The drainage is mainly unvegetated, while limited portions consist of non-riparian species similar to the surrounding upland areas.

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

   ☐ TNWs: linear feet width (ft), Or, acres.

   ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

   ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:

   ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

3. **Non-RPWs that flow directly or indirectly into TNWs.**

   ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

   ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

☐ Demonstrate that impoundment was created from "waters of the U.S.," or

☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

☐ which are or could be used for industrial purposes by industries in interstate commerce.

☐ Interstate isolated waters. Explain:

☐ Other factors. Explain:

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

☐ Tributary waters: linear feet width (ft).

☐ Other non-wetland waters: acres.

Identify type(s) of waters:

☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☐ Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☒ Non-wetland waters (i.e., rivers, streams): length: **660 ft.** width: **2-3 ft.**

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name:

☒ USDA Natural Resources Conservation Service Soil Survey. Citation:

☒ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s):

☒ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Eagle Aerial,

or ☒ Other (Name & Date): On-Site Photographs (35mm)

☐ Previous determination(s). File no. and date of response letter:

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

RBF CONSULTING

PRELIMINARY JURISDICTIONAL DETERMINATION FORM **DATE 9 / 18 / 07**

PROJECT Foothill Parkway Westerly Extension Project **DRAINAGE C**

Portions of the form left blank are not applicable.

SECTION I: BACKGROUND INFORMATION

A. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **California** County: **Riverside** City: **Corona**

Center coordinates of site (lat/long in degree decimal format): Lat. **33°51'36" North,**

Long . **117°36'45" West**

Name of nearest waterbody: **Mabey Canyon Basin and Drainage**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Prado Dam**

Name of watershed or Hydrologic Unit Code (HUC): **Santa Ana River Watershed, HUC 801.25 (Temescal Creek)**

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different JD form.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There ☐ appear to be; ☒ appear not to be; ☐ appear to be and appear not to be; "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☐ Waters subject to the ebb and flow of the tide.

☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There ☒ appear to be; ☐ appear not to be; ☐ appear to be and appear not to be "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):**
      - ☐ TNWs, including territorial seas
      - ☐ Wetlands adjacent to TNWs
      - ☐ Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs (e.g, at least 3 months continuous flow)
      - ☒ Non-RPWs that flow directly or indirectly into TNWs (e.g., ephemeral drainages)
      - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      - ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      - ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      - ☐ Impoundments of jurisdictional waters
      - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**

      Non-wetland waters: length: **276 ft.,** width: **5 ft. (drainage)** and **XX acres (basin)**

      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:

      - ☐ 1987 Delineation Manual
      - ☐ Arid West Supplement
      - ☒ Established by OHWM
      - ☐ Established by Outer Continental Shelf Limits
      - ☐ Seaward limit of the territorial seas within 3-mile baseline
      - ☐ Established by mean (average) high waters
      - ☐ Established by Corps navigation study
      - ☐ Not established at this time
      - ☐ not applicable

      Elevation of established OHWM (if known):

2. **Non-regulated waters/wetlands (check if applicable):**

   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional (e.g., swales, ditches). Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW (OFFICE SECTION)

(i) General Area Conditions:

Watershed size: **2,800** square miles

Drainage area:

Average annual rainfall: **12** inches

Average annual snowfall: **0** inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 or more tributaries before entering TNW.

Project waters are ☐ 1 (or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **TNW.**

Project waters are ☐ 1 (or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **RPW.**

Project waters are ☐ (1 or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **TNW.**

Project waters are ☐ (1 or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more*) aerial (straight) miles* from **RPW.**

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW: **Mabey Canyon Basin and drainage flows directly to Temescal Creek which flows directly to Prado Dam**

Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural

☐ Artificial (man-made). Explain:

☒ Manipulated (man-altered / some portions of drainage improved). Explain: **Basin with drainage.**

Tributary properties with respect to top of bank (estimate):

Average width: **5 feet (draiange)**

Average depth: **1 feet (drainage)**

Acreage: **XX acre (basin)**

Average side slopes: ☐ Vertical (1:1 or less) ☒ 2:1 ☐ 3:1 ☐ 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☐ Silts	☒ Sands	☒ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☒ Other. Explain: **riprap**		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: ☒ relatively straight ☐ meandering

Tributary gradient (approximate average slope): **1 %**

(c) Flow:

Tributary provides for: ☐ Seasonal flow ☐ Intermittent but not seasonal flow ☒ Ephemeral flow

Estimate average number of flow events in review area/year: ☐ 1 ☐ 2-5 ☒ 6-10 ☐ 11-20 ☐ 20 (or greater)

Describe flow regime: **Critical**

Other information on duration and volume:

Surface flow is: ☐ discrete ☒ confined ☐ discrete and confined ☐ overland sheetflow

Characteristics:

Subsurface flow: ☐ yes ☐ no ☒ unknown Explain findings:

Tributary has (check all that apply):

- [x] Bed and banks
- [x] OHWM (check all indicators that apply):
  - [ ] clear, natural line impressed on the bank
  - [ ] changes in the character of soil
  - [ ] shelving
  - [ ] vegetation matted down, bent, or absent
  - [ ] leaf litter disturbed or washed away
  - [ ] sediment deposition
  - [ ] water staining
  - [ ] other (list):
  - [ ] the presence of litter and debris
  - [ ] destruction of terrestrial vegetation
  - [ ] the presence of wrack line
  - [ ] sediment sorting
  - [x] scour
  - [ ] multiple observed or predicted flow events
  - [ ] abrupt change in plant community
- [ ] Discontinuous OHWM. Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- [ ] High Tide Line indicated by:
  - [ ] oil or scum line along shore objects
  - [ ] fine shell or debris deposits (foreshore)
  - [ ] physical markings/characteristics
  - [ ] tidal gauges
  - [ ] other (list):
- [ ] Mean High Water Mark indicated by:
  - [ ] survey to available datum;
  - [ ] physical markings;
  - [ ] vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: **No water present.**

Identify specific pollutants, if known:

(iv) Biological Characteristics. Channel supports (check all that apply):

- [ ] Riparian corridor. Characteristics (type, average width):
- [ ] Wetland fringe. Characteristics:
- [ ] Habitat for:
  - [ ] Federally Listed species. Explain findings:
  - [ ] Fish/spawn areas. Explain findings:
  - [ ] Other environmentally-sensitive species. Explain findings:
  - [ ] Aquatic/wildlife diversity. Explain findings:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW *(If no adjacent wetlands are present, then skip to Section C)*

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: ☐ Intermittent flow ☐ Ephemeral Flow ☐ Perennial Flow

☐ No flow Explain:

Surface flow is: ☐ Discrete ☐ Confined ☐ Discrete and confined ☐ Overland sheetflow

☐ Not present

Characteristics:

Subsurface flow: ☐ Yes ☐ No ☐ Unknown Explain findings:

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain:

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are ☐ 1 ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **TNW**.

Project waters are ☐ 1 ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **TNW**.

Flow is from: ☐ Wetland to navigable waters ☐ Navigable waters to wetlands

☐ Wetland to/from navigable waters ☐ No flow

Estimate approximate location of wetland as within the ☐ 2-year or less ☐ 2-5 year ☐ 5-10 year ☐ 10-20 year ☐ 20-50 year ☐ 50-100 year ☐ 100-500 year ☐ 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii)Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width):

☐ Vegetation type/percent cover. Explain:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☐ Other environmentally-sensitive species. Explain findings:

☐ Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more)

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW? **Yes**

- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW? **No**

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs? **No**

- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW? **Yes**

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:

   Tributary does have a significant nexus to the TNW as it is a flood control basin that affects water quality, volume, and flow to the down stream Prado Dam (TNW).

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

   ☐ TNWs: linear feet width (ft), Or, acres.

   ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

   ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:

   ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

3. **Non-RPWs that flow directly or indirectly into TNWs.**

   ☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters in the review area:
   Tributary waters: length: **276 ft.**, width: **5 ft.** and **XX-acre (basin)**

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

   ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

   ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is

directly abutting an RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

☐ Demonstrate that impoundment was created from "waters of the U.S.," or

☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

☐ which are or could be used for industrial purposes by industries in interstate commerce.

☐ Interstate isolated waters. Explain:

☐ Other factors. Explain:

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

☐ Tributary waters: linear feet width (ft).

☐ Other non-wetland waters: acres.

Identify type(s) of waters:

☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☐ Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name:

☒ USDA Natural Resources Conservation Service Soil Survey. Citation:

☒ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s):

☒ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Eagle Aerial,

or ☒ Other (Name & Date): On-Site Photographs (35mm)

☐ Previous determination(s). File no. and date of response letter:

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

RBF CONSULTING

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

DATE 9 / 18 / 07

PROJECT Foothill Parkway Westerly Extension Project

DRAINAGE D

Portions of the form left blank are not applicable.

SECTION I: BACKGROUND INFORMATION

A. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **California** County: **Riverside** City: **Corona**

Center coordinates of site (lat/long in degree decimal format): Lat. **33°50'57" North,**

Long . **117°36'25" West**

Name of nearest waterbody: **Wardlow Wash**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Santa Ana River Reach 1/ Pacific Ocean**

Name of watershed or Hydrologic Unit Code (HUC): **Santa Ana River Watershed, HUC 801.11 (Reach 2)**

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different JD form.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There ☐ appear to be; ☒ appear not to be; ☐ appear to be and appear not to be; "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☐ Waters subject to the ebb and flow of the tide.

☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There ☒ appear to be; ☐ appear not to be; ☐ appear to be and appear not to be "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):**
      - ☐ TNWs, including territorial seas
      - ☐ Wetlands adjacent to TNWs
      - ☐ Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs (e.g, at least 3 months continuous flow)
      - ☒ Non-RPWs that flow directly or indirectly into TNWs (e.g., ephemeral drainages)
      - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      - ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      - ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      - ☐ Impoundments of jurisdictional waters
      - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**

      Non-wetland waters: length: **4,686 ft.** width: **2-50 ft.**

      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:

      - ☐ 1987 Delineation Manual
      - ☐ Arid West Supplement
      - ☒ Established by OHWM
      - ☐ Established by Outer Continental Shelf Limits
      - ☐ Seaward limit of the territorial seas within 3-mile baseline
      - ☐ Established by mean (average) high waters
      - ☐ Established by Corps navigation study
      - ☐ Not established at this time
      - ☐ not applicable

      Elevation of established OHWM (if known):

2. **Non-regulated waters/wetlands (check if applicable):**

   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional (e.g., swales, ditches). Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW (OFFICE SECTION)

(i) General Area Conditions:

Watershed size: **2,800** square miles

Drainage area:

Average annual rainfall: **12** inches

Average annual snowfall: **0** inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 or more tributaries before entering TNW.

Project waters are ☐ 1 (or less) ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☒ 30 (or more) *river miles* from **TNW**.

Project waters are ☐ 1 (or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **RPW**.

Project waters are ☐ (1 or less) ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☒ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **TNW**.

Project waters are ☐ (1 or less) ☐ 1-2 ☒ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **RPW**.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW: **Wardlow Wash flows directly to the Santa Ana River which flows directly to the Pacific Ocean**

Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural

☐ Artificial (man-made). Explain:

☐ Manipulated (man-altered / some portions of drainage improved). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: **25 feet**

Average depth: **1 feet**

Average side slopes: ☐ Vertical (1:1 or less) ☐ 2:1 ☒ 3:1 ☐ 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☐ Silts	☒ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain:		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: ☒ relatively straight ☐ meandering

Tributary gradient (approximate average slope): **1%**

(c) Flow:

Tributary provides for: ☐ Seasonal flow ☐ Intermittent but not seasonal flow ☒ Ephemeral flow

Estimate average number of flow events in review area/year: ☐ 1 ☐ 2-5 ☒ 6-10 ☐ 11-20 ☐ 20 (or greater)

Describe flow regime: **Critical**

Other information on duration and volume:

Surface flow is: ☐ discrete ☒ confined ☐ discrete and confined ☐ overland sheetflow

Characteristics:

Subsurface flow: ☐ yes ☐ no ☒ unknown Explain findings:

Tributary has (check all that apply):

- ☐ Bed and banks
- ☒ OHWM (check all indicators that apply):
  - ☐ clear, natural line impressed on the bank
  - ☐ changes in the character of soil
  - ☐ shelving
  - ☐ vegetation matted down, bent, or absent
  - ☐ leaf litter disturbed or washed away
  - ☒ sediment deposition
  - ☐ water staining
  - ☐ other (list):
  - ☐ the presence of litter and debris
  - ☐ destruction of terrestrial vegetation
  - ☐ the presence of wrack line
  - ☐ sediment sorting
  - ☒ scour
  - ☐ multiple observed or predicted flow events
  - ☐ abrupt change in plant community
- ☐ Discontinuous OHWM. Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- ☐ High Tide Line indicated by:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☐ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: **No water present.**

Identify specific pollutants, if known:

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☒ Riparian corridor. Characteristics (type, average width): **Mulefat, willow, sycamore**
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW *(If no adjacent wetlands are present, then skip to Section C)*

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: ☐ Intermittent flow ☐ Ephemeral Flow ☐ Perennial Flow

☐ No flow Explain:

Surface flow is: ☐ Discrete ☐ Confined ☐ Discrete and confined ☐ Overland sheetflow

☐ Not present

Characteristics:

Subsurface flow: ☐ Yes ☐ No ☐ Unknown Explain findings:

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain:

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are ☐ 1 ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *river miles* from **TNW**.

Project waters are ☐ 1 ☐ 1-2 ☐ 2-5 ☐ 5-10 ☐ 10-15 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more) *aerial (straight) miles* from **TNW**.

Flow is from: ☐ Wetland to navigable waters ☐ Navigable waters to wetlands

☐ Wetland to/from navigable waters ☐ No flow

Estimate approximate location of wetland as within the ☐ 2-year or less ☐ 2-5 year ☐ 5-10 year ☐ 10-20 year ☐ 20-50 year ☐ 50-100 year ☐ 100-500 year ☐ 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width):

☐ Vegetation type/percent cover. Explain:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☐ Other environmentally-sensitive species. Explain findings:

☐ Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15-20 ☐ 20-25 ☐ 25-30 ☐ 30 (or more)

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW? **Yes**
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW? **No**
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs? **No**

- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW? **Yes**

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:

   Tributary (Wardlow Wash) has a significant nexus to the TNW as it is a larger on-site drainage and contains riparian habitat.

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

   ☐ TNWs: linear feet width (ft), Or, acres.

   ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

   ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:

   ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

3. **Non-RPWs that flow directly or indirectly into TNWs.**

   ☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters in the review area:
   Tributary waters: length: **4,686 ft.** width: **ranges 2-50 ft.**

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

   ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

   ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

☐ Demonstrate that impoundment was created from "waters of the U.S.," or

☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

☐ which are or could be used for industrial purposes by industries in interstate commerce.

☐ Interstate isolated waters. Explain:

☐ Other factors. Explain:

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

☐ Tributary waters: linear feet width (ft).

☐ Other non-wetland waters: acres.
Identify type(s) of waters:

☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☐ Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource:

☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name:

☒ USDA Natural Resources Conservation Service Soil Survey. Citation:

☒ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s):

☒ FEMA/FIRM maps:

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Eagle Aerial,

or ☒ Other (Name & Date): On-Site Photographs (35mm)

☐ Previous determination(s). File no. and date of response letter:

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: