

## 4.11 STORMWATER/WATER QUALITY

The focus of the following analysis is related to whether the proposed project has the potential to substantially degrade surface water quality. Potential groundwater quality impacts are discussed in Section 4.7, Groundwater Quality, of this SEIR/EIS.

In addition to the 2005 PEIR and its reference documents, and other reference documents, the following references were used in the preparation of this section of the SEIR/EIS:

- California Regional Water Quality Control Board, Santa Ana Region, *Nonpoint Source Program Strategy and Implementation Plan, 1998-2013 (PROSIP)*. (Available at the California Water Quality Control Board or at [http://www.waterboards.ca.gov/water\\_issues/programs/nps/planning\\_implementation.shtml](http://www.waterboards.ca.gov/water_issues/programs/nps/planning_implementation.shtml), accessed on December 3, 2009.)
- California Regional Water Quality Control Board, Santa Ana Region, *Water Quality Control Plan Santa Ana River Basin, 1995*. (Available at [http://www.waterboards.ca.gov/santaana/water\\_issues/programs/basin\\_plan/index.shtml](http://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.shtml), accessed on August 11, 2009.) (Basin Plan)

### 4.11.1 Setting/Affected Environment

The RCF project site is located in Santa Ana River Watershed which is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). (**Figure 4.11-1, Santa Ana River Watershed**). The Santa Ana River is the major surface water body within the Santa Ana Watershed. It conveys water approximately 69 miles from the San Bernardino Mountains to the Pacific Ocean through San Bernardino, Riverside, and Orange Counties. The river drains between the Chino Hills and the rugged Santa Ana Mountains, through the narrow Santa Ana Canyon, southwest of the project site. It then emerges from the canyon and flows through the coastal plain to empty into the Pacific Ocean.

The SARWQCB has divided the Santa Ana River (SAR) geographically into six reaches, all of which vary in width, disturbance, and reliability of water source (Basin Plan). Reach 3, Reach 4, and Reach 5 are the portions of the SAR in proximity to the RCF project (**Figure 4.11-1**).

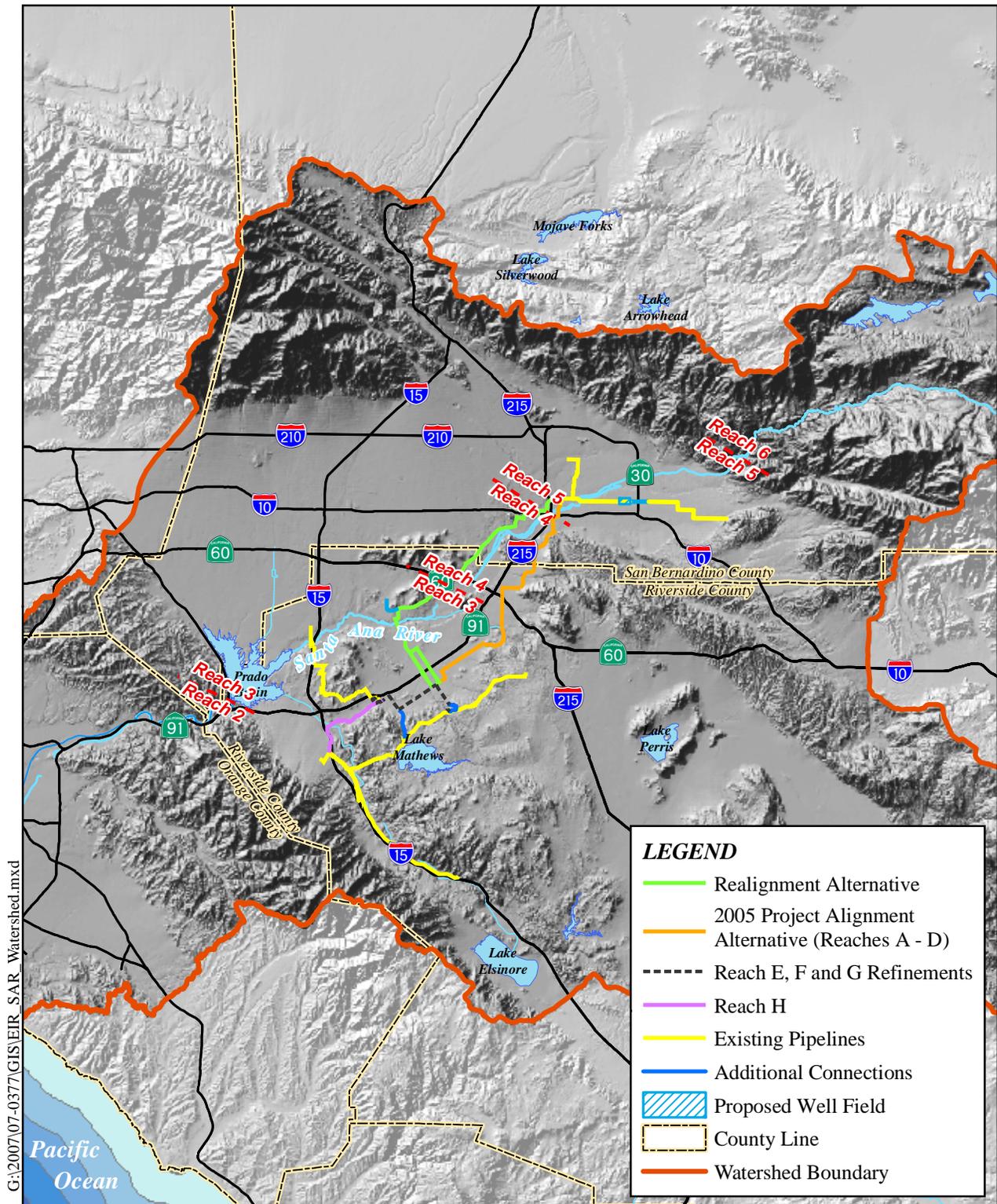
- **Reach 5** extends from Seven Oaks Dam to the San Jacinto Fault in the City of San Bernardino (Bunker Hill Dike), which marks the downstream edge of the Bunker Hill groundwater basin. Most of this reach tends to be dry, except as a result of storm flows, and the channel is largely operated as a flood control facility. East Warm Creek and West Warm Creek, both improved for flood control, connect to the Santa Ana River at the lower end of Reach 5. The extreme lower end of this reach includes rising water and intermittently, San Timoteo Creek flows.
- **Reach 4** includes the river from the Bunker Hill Dike down to Mission Boulevard Bridge in the City of Riverside. Until about 1985, rising water from upstream and wastewater discharges percolated and the lower part of the reach was dry. Flows are now perennial,

but may not remain so as new projects are built. Much of this reach is also operated as a flood control facility.

- **Reach 3** extends from the Mission Boulevard Bridge in Riverside to the Prado Dam. A number of tributaries feed into the Santa Ana River within Reach 3; several of these tributaries (Sunnyslope Channel, Tequesquite Arroyo, and Anza Park Drain) are supported by rising groundwater near the Mission Boulevard Bridge and the upstream limit of Reach 3, which is called the Riverside Narrows. The Riverside Narrows is an important breeding and nursery area for native fish such as the Santa Ana Sucker. From the Riverside Narrows to Prado Basin, the Santa Ana River is generally in a natural and unmodified state. Water levels are generally shallow, temperatures are warm, and the channel bottom is dominated by shifting sands, creating only limited habitat for aquatic organisms.

The project site is located east and northeast of the Prado Basin, which encompasses a large area of undisturbed, dense riparian wetland and is the largest wetland in Southern California. Upstream from the Prado Basin, there are approximately 465 acres of constructed wetlands. The Prado Basin was established to provide water storage and flood control for Orange County. Water that is high in nitrates, primarily from agricultural land uses in the Chino Basin, is diverted from the Santa Ana River, treated within the Prado Basin constructed wetlands in order to reduce nitrogen levels, and then discharged back into the Santa Ana River. The Prado Basin wetland area is rich in both plant and animal life, and serves as a habitat for rare, threatened, and endangered species.

Surface water quality may be impacted by both point source and non-point source (NPS) discharges of pollutants. Point source discharges are regulated through NPDES permitting. Non-point source pollution is now considered to be the leading cause of water quality impairments in the state, as well as the entire nation. Non-point source pollution is not as readily quantifiable as pollution that is derived from point sources, since it occurs through numerous diffuse sources. Rain water, snowmelt, or irrigation water can pick up and transport pollutants as it moves across land or paved surfaces, and these pollutants may ultimately be discharged into streams, lakes, oceans, and groundwater. Urban areas and agriculture are both considered to substantially contribute to non-point source pollution in surface waters. As rainfall or irrigation waters intercept pollutants in the landscape, these pollutants may be transported in contaminated runoff and enter streams, lakes, and oceans. Pollutants associated with urban areas include fertilizers, pesticides, fecal coliform, and sediments.

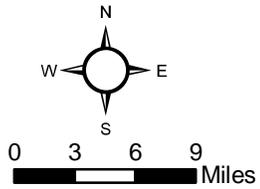


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Sources: USGS DLG's, DEM's;  
 Santa Ana Watershed  
 Project Authority, 2001.

**LEGEND**

- Realignment Alternative
- 2005 Project Alignment Alternative (Reaches A - D)
- Reach E, F and G Refinements
- Reach H
- Existing Pipelines
- Additional Connections
- Proposed Well Field
- County Line
- Watershed Boundary



**Figure 4.11-1**  
**Santa Ana River Watershed**

### **4.11.2 Summary of 2005 Project Alignment Certified Program EIR for Riverside-Corona Feeder Project**

Stormwater and water quality, other than as it related to groundwater quality, was not addressed in the original 2005 Certified Program EIR (2005 PEIR). Potential impacts associated with impacts to stormwater were addressed through project design and adherence to regulation, as discussed in the Final PEIR response to comments received from the San Bernardino County Department of Public Works and as summarized below.

As stated in the Initial Study for the 2005 Project Alignment PEIR, construction of the proposed project has the potential to result in the discharge of sediment and construction by-products. This will be minimized however, with the preparation and implementation of a National Pollutant Elimination System (NPDES) construction permit from the Regional Water Quality Control Board which requires that a storm water pollution prevention plan (SWPPP) be prepared prior to construction activities. The SWPPP will incorporate applicable Best Management Practices (BMPs).

The 2005 Project Alignment consists of a pump station, up to 20 well sites and a 30-mile underground pipe. Surfaces around and above the pipe, wells and pump station will be returned to their current condition so the project will have minimal or no post-construction affect on storm water runoff.

Because the 2005 Project Alignment PEIR was programmatic, no areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance, or other outdoor work/staging areas were analyzed as a part of the project.

As stated in Section III-3 of the 2005 Project Alignment PEIR, proposed pipeline installation will involve micro tunneling beneath the Santa Ana River and boring under other streams and drainage features. At the programmatic level of analysis, it was not known if construction would be performed within the definable bed, bank, or channel of the Santa Ana River. Even if this situation occurred, a Regional Water Quality Control Board Dewatering Permit would be required for wastewater discharge resulting from ground dewatering activities associated with tunneling. WMWD is expected to comply with all waste discharge permit requirements, therefore, it was determined that no significant impact related to waste discharge or beneficial uses of receiving waters is expected.

Infrastructure to be constructed as part of the project will not significantly alter any existing drainage patterns, flow velocity or volume of storm water runoff since the condition following installation of the pipeline will reflect conditions prior to pipeline construction. The portions of the proposed pipeline that will be constructed underneath the Santa Ana River and underneath several drainages will be required to comply with encroachment permit requirements of the County of San Bernardino Flood Control District and will be subject to Regional Water Quality Control Board discharge requirements. Therefore, impacts are considered less than significant.

### 4.11.3 Analysis of the Riverside-Corona Feeder Project Alternatives

The following discussion evaluates the potential stormwater and water quality impacts associated with the 2005 Project Alignment Alternative, the Realignment Alternative and the Realignment Alternative with Additional Connections (Preferred Alternative).

#### Thresholds of Significance

Western Municipal Water District has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, Western Municipal Water District's "Environmental Checklist" for the subject project (see Appendix A of this document) indicates that impacts related to stormwater and water quality may be considered potentially significant if the project would:

- violate any water quality standards or waste discharge requirements.
- otherwise substantially degrade water quality.

However for the purposes of the following analysis of potential stormwater and surface water quality impacts, these two thresholds have been combined into a single threshold more precisely related to the proposed project that states:

- *Impacts to surface water quality may be considered significant if construction or operation of the proposed project would violate water quality standards or otherwise substantially degrade water quality.*

#### Related Regulations

##### *Federal*

##### Clean Water Act

The Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of the waters in the United States. The CWA also directs states to establish water quality standards for all waters of the United States and to review and update such standards on a triennial basis. Other provisions of the CWA related to basin planning include Section 208, which authorizes the preparation of waste treatment management plans, and Section 319, which mandates specific actions for the control of pollution from nonpoint sources. The EPA has delegated responsibility for implementation of portions of the CWA to the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs), including water quality control planning and control programs, such as the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program is a set of permits designed to implement the CWA that applies to various activities that generate pollutants with potential to impact water quality.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Section 304(a) requires EPA to publish water quality criteria that accurately reflects the later scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Section 303(c)(2)(b) of the CWA requires states to adopt numerical water quality standards for toxic pollutants for which EPA has published water quality criteria and which reasonably could be expected to interfere with designated uses of a water body.

### NPDES Permit Program

In 1972, the Federal Water Pollution Control Act (Clean Water Act) was amended to prohibit the discharge of pollutants to waters of the United States unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The Clean Water Act focused on tracking point sources, primarily from waste water treatment facilities and industrial waste discharges, and required implementation of control measures to minimize pollutant discharges. The Clean Water Act was amended again in 1987, adding Section 402(p), to provide a framework for regulating municipal and industrial storm water discharges. In November 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish requirements for specific categories of industries, including construction projects that encompass greater than or equal to 5 acres of land. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to 1 acre. The regulations require that storm water and non-storm water runoff associated with construction activity, which discharges either directly to surface waters or indirectly through municipal separate storm sewer systems (MS4s), must be regulated by NPDES permit.

Discharge of wash water resulting from cleaning and disinfection of the proposed pipelines and tanks may require a National Pollutant Discharge Elimination System (NPDES) permit from the California Regional Water Quality Control Board (RWQCB), Santa Ana Region. A state general NPDES permit for construction-period storm water discharges will also be required. Under current regulations, any construction site of one acre or more will also be subject to the Stormwater Pollution Prevention Plan requirements of the state general NPDES permit for construction-period storm water discharges. These permits require Best Management Practices that minimize the introduction of sediments and other pollutants into surface waters.

### *State*

#### Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface waters and groundwaters) and directs the RWQCB to develop regional Basin Plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative. The Water Quality Control Plan for the Santa Ana River Basin is designed to preserve and enhance

the quality of water resources in the Santa Ana Region for the benefit of present and future generations. The purpose of the plan is to designate beneficial uses of the region's surface waters and groundwaters, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives.

All projects resulting in discharges, whether to land or water, are subject to Section 13263 of the California Water Code and are required to obtain approval of Waste Discharge Requirements (WDRs) from the RWQCBs. Land and groundwater related WDRs (i.e., non-NPDES WDRs) regulate discharges of process and wash-down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits.

#### National Pollution Discharge Elimination System (NPDES) Permits

In California, the SWRCB and its RWQCB's administer the NPDES permit program regulating storm water from construction activities for projects greater than one acre in size. This is known as the General Permit for Storm Water Discharges Associated with Construction Activities, Order No. 99-08-DWQ, NPDES No. CAS000002. The main compliance requirement of the NPDES permits is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to identify potential on-site pollutants, identify and implement appropriate storm water pollution prevention measures to reduce or eliminate discharge of pollutants to surface water from storm water and non-storm water discharges. Storm water best management practices (BMPs) to be implemented during construction and grading, as well as post-construction BMPs, will be outlined in the SWPPP prepared for the proposed Project. Examples of BMPs include: detention basins for capture and containment of sediments, use of silt fencing, sandbags, or straw bales to control runoff and identification of emergency procedures in case of hazardous materials spills.

On September 2, 2009, the California State Water Resources Control Board voted to adopt major revisions to the statewide General Permit for Discharges of Stormwater Associated with Construction Activities (Construction General Permit). The new permit will take effect July 1, 2010 and applies to projects that disturb one or more acres, or projects that disturb less than one acre but are part of a larger common plan of development that disturbs more than one acre in total (e.g., large linear utility projects). The revised permit requires that projects implement a SWPPP that contains specific BMPs and establishes numeric effluent limitations to meet water quality and technology-based standards. It also provides greater clarity so that the public can determine whether permittees are in compliance.

## *Regional*

### Santa Ana River Basin Plan

The Basin Plan sets forth water quality objectives for constituents that could potentially cause an adverse effect or impact on the beneficial uses of water. Specifically, the Basin Plan is designed to accomplish the following:

- Designate beneficial uses for surface and groundwaters;
- Set the narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy;
- Describe implementation programs to protect the beneficial uses of all waters within the region; and
- Describe surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan.

The Basin Plan incorporates by reference all applicable SWRCB and RWQCB plans and policies.

### **Design Considerations/Avoidance**

Other than adherence to required regulations and construction in conformance with NPDES requirements, the RCF project does not propose any unique design considerations that would reduce potential water quality or drainage impacts.

### **Potential Significant Impacts/Environmental Consequences**

***Threshold:** Impacts to surface water quality may be considered significant if construction or operation of the proposed project would violate water quality standards or otherwise substantially degrade water quality.*

The SARWQCB sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the Clean Water Act to include both the beneficial uses of specific water bodies and the levels of water quality that must be met and maintained to protect those uses (water quality objectives). Water quality standards for all surface waters overseen by the SARWQCB are documented in the SARWQCB Basin Plan. Beneficial uses consist of all the various ways that water can be used for the benefit of people and/or wildlife. Nineteen beneficial uses are recognized within the Santa Ana Region. Ten beneficial uses have been designated for surface water bodies in the vicinity of the project site (**Table 4.11-A, Beneficial Uses for Surface Water Bodies in Proximity to the Proposed Project**). All listed water quality objectives governing water quality in inland surface waters were evaluated for potential impacts from development of the proposed project; however, only those numeric and narrative water quality objectives that are most likely to be relevant to the proposed project are listed in **Table 4.11-B, Numeric Water Quality Objectives for Surface Water Bodies in Proximity to the Proposed Project**, respectively. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The

regulatory program of the SARWQCB is designed to minimize and control discharges to surface and groundwater within the region, largely through permitting, such that water quality standards are effectively attained.

**Table 4.11-A, Beneficial Uses for Surface Water Bodies  
in Proximity to the Proposed Project**

<b>Water Body</b>	<b>Beneficial Uses</b>
Santa Ana River Reach 3	AGR, GWR, REC1, REC2, WARM, WILD, RARE, SPWN
Santa Ana River Reach 4	GWR, REC1, REC2, WARM, WILD, SPWN
Santa Ana River Reach 5	MUN, AGR, GWR, REC1, REC2, WARM, WILD, RARE
Prado Basin Management Zone	REC1, REC2, WARM, WILD, RARE
<b>Table 4.11-A Definitions</b>	
AGR	Waters are used for farming, horticulture or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
GWR	Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.
MUN	Waters used for community, military, municipal or individual water supply systems. Uses may also include drinking water supply.
PROC	Waters for industrial process supply. Uses are for industrial activities that are dependent upon water quality. Uses may include process water supply and all uses of water related to product manufacture or food preparation.
REC1	Water contact recreation waters, used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
REC2	Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.
WARM	Warm freshwater habitat waters support warm water ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
RARE	Rare, threatened or endangered species waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under the state or federal law as rare, threatened or endangered.
SPWN	Spawning, reproduction and development waters support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife.

Source: SARWQCB Basin Plan, Table 3-1

**Table 4.11-B, Numeric Water Quality Objectives for  
Surface Water Bodies in Proximity to the Proposed Project**

Water Body	Water Quality Objectives (mg/L)					
	TDS (Total Dissolved Solids)	Hardness (as CaCO <sub>3</sub> )	Na (Sodium)	Cl (Chloride)	TIN (Total Inorganic Nitrogen)	SO <sub>4</sub> (Sulfate)
Santa Ana River Reach 3	700	350	110	140	10	150
Santa Ana River Reach 4	550	---	---	---	10	---
Santa Ana River Reach 5	300	190	30	20	5	60
Prado Basin Management Zone	*	*	*	*	*	*

Source: SARWQCB Basin Plan, Table 4-1

\* Numeric water quality objectives have not been established; therefore, narrative objectives apply. However, regarding the Prado Flood Control Basin, TDS and TIN objectives established for SAR Reach 3 are applicable.

The proposed water transmission pipelines constructed as part of the project will be constructed underground primarily within existing and future road rights-of-way. Wells may be constructed as part of these alternatives. Additionally, the Realignment Alternative with Additional Connections (Preferred Alternative) includes the construction of a water storage reservoir and a booster station as part of the Mockingbird Connection and booster stations as part of Reach G (Refinement) and the Clay Street Connection. These alternatives will not involve discharge of water which would violate long-term implementation of water quality standards or waste discharge requirements. Construction of the proposed facilities may result in the discharge of sediment and construction by-products.

In order to reduce the discharge of pollutants into receiving waters during construction of the proposed development, WMWD will be required to prepare a site-specific Storm Water Pollution Prevention Plan (SWPPP) for each construction phase in accordance with the State Water Resources Control Board's (SWRCB) General Permit for Construction Activities. The General Permit requires the development and implementation of a site-specific SWPPP to identify an effective combination of erosion control and sediment control best management practices (BMPs) to minimize or eliminate the discharge of pollutants into receiving waters. In addition, BMPs for managing sources of non-storm water discharges and waste are required to be identified in the SWPPP. Examples of construction BMPs include silt fencing, gravel bag berms, fiber rolls, and street sweeping. In addition, the SWPPP is required to identify post-construction BMPs, which are permanent features which will be maintained in perpetuity.

Installation of the pipelines may result in the discharge of water resulting from dewatering activities associated jack and bore construction techniques and with pipeline flushing. Should these flows occur, discharges will be performed in accordance with the California Regional Water Quality Control Board, Santa Ana Region Order No. 03-61, which establishes waste discharge requirements for discharges to surface waters that pose an insignificant (De Minimus) threat to water quality, and the National Pollutant Discharge Elimination Systems (NPDES) Permit. **MM Water Qual 1a – 1d** requires best management practices (BMPs) which reduce such potential impacts to less than significant.

For proposed pipelines that cross the Santa Ana River, temporary alteration of drainage patterns may occur. Construction will most likely use trenchless technologies, the primary of which is jack and bore, or an alternative method of horizontal directional drilling. Compliance regulatory requirements and implementation of the NPDES permit will reduce any potential impacts to construction-related discharge. If dewatering activities are necessary during future construction due to locally high groundwater conditions at the time of construction, mitigation measure **MM Water Qual 1e** requires WMWD to obtain California State Water Resources Control Board (SWRCB) dewatering permits for dewatering activities associated with all boring and micro-tunneling and requires implementation of mitigation measures, will reduce potential impacts to water quality to less than significant levels.

Through compliance with the General Construction NPDES permit and implementation of mitigation measure **MM Water Qual 1a – 1e**, water quality standards and waste discharge requirements will not be violated, and water quality will not otherwise be degraded, by the proposed project; therefore, impacts are considered **less than significant**.

### **Proposed Mitigation Measures/Minimization**

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts related to stormwater impacts to below the level of significance.

*Mitigation measure **MM Water Qual 1** has been added by this SEIR/EIS to address potential impacts related to the construction of project alternatives. Mitigation measure **HYD-1** is a mitigation measure established in the Reaches E, F, and G 2008 Refinement EIR which serves as the basis for the mitigation described below.*

**MM Water Qual 1(HYD-1):** WMWD shall require contractors to implement a program of best management practices (BMPs) and best available technologies to reduce potential impacts to water quality that may result from construction activities. To reduce or eliminate construction-related water quality impacts before the onset of construction activities, the construction agent(s) shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General construction permit. Construction activities shall comply with the conditions of this permit that include preparation of a stormwater pollution prevention plan (SWPPP), implementation of BMPs, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMPs shall be implemented to provide effective erosion and sediment control. These BMPs shall be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMPs to be implemented as part of this mitigation measure shall include, but are not limited to, the following:

- a. Temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover would be employed for disturbed areas.

- b. Storm drain inlets on the site and in downstream offsite areas shall be protected from sediment with the use of BMP's acceptable to the construction agent(s), local jurisdictions and the California Regional Water Quality Control Board, Santa Ana Region.
- c. Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events.
- d. No disturbed surfaces shall be left without erosion control measures in place between October 15 and April 15. The construction agent(s) shall file a Notice of Intent with the Regional Board and require the preparation of a SWPPP prior to commencement of construction. The construction agent(s) shall routinely inspect the construction site to verify that the BMP's specified in the SWPPP are properly installed and maintained. The construction agent shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.
- e. Controls on construction site dewatering shall be implemented. If possible, water generated as part of construction dewatering shall be discharged onsite such that there would be no discharge to surface waters. If discharge to surface waters were unavoidable, the construction agent shall obtain coverage under the NPDES General Dewatering Permit prior to commencement of construction. The provisions of this permit are sufficiently protective of water quality to ensure that impacts to surface waters would remain below significance thresholds. During dewatering activities, all permit conditions shall be followed. The construction agent(s) shall routinely inspect the construction site to verify that the BMP's specified in the SWPPP are properly installed and maintained. The construction agent shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.

### **Determination of Significance under CEQA**

Construction of the RCF facilities could release substantial discharge during construction. If unmitigated, impacts to water quality associated with RCF project construction would be potentially significant. However, through compliance with the General Construction NPDES permit and implementation of mitigation measure **MM Water Qual 1a – 1e**, water quality standards and waste discharge requirements will not be violated, and water quality will not otherwise be degraded, by the proposed project and therefore, impacts are considered **less than significant**.

#### **4.11.4 No Project/Action Alternative**

Under the No Project Action/Alternative, no physical changes to the physical environment would occur. The proposed facilities would not be constructed and existing WMWD facilities and sources of water would continue to be operated as under current conditions. Potential effects related to stormwater and surface water quality would be avoided.

## 4.12 TRANSPORTATION AND TRAFFIC

Potential impacts related to an increase in traffic in which is substantial in relation to the existing traffic load and capacity of the street system; which exceeds a level of service standard; results in a change in air traffic patterns; increases hazards due to design features; results in inadequate emergency access or inadequate parking capacity; and potential conflicts with adopted policies, plans or programs supporting alternative transportation were all found to be less than significant in the Initial Study/NOP prepared for this project in 2008 (Appendix A). In response to the Initial Study/NOP, comment letters were received from the City of Riverside Planning Department, City of Colton Engineering Department, City of Colton Planning Department, and the San Bernardino Development Services Department raising concerns over the issue of potentially significant impacts related to congestion that may occur due to project construction activities. In their responses to the Initial Study/NOP the Riverside Transit Agency requested coordination regarding impacts to existing bus routes and the Jurupa Area Recreation and Park District identified potential impacts to trails. The following analysis discusses construction-related traffic congestion and the concerns raised in the responses to the Initial Study/NOP. A summary of the Transportation and Traffic section of the 2005 PEIR (2005 PEIR) for the Riverside-Corona Feeder Project (2005 Project Alignment) is included in the following discussion.

In addition to the 2005 PEIR and its reference documents, and other reference documents, the following references were used in the preparation of this section of the SEIR/EIS:

- Albert A Webb Associates, *Traffic Impact Study Report, Riverside-Corona Feeder Realignment Project*, May 1, 2009. (Appendix I)
- Albert A Webb Associates, *Addendum to Traffic Impact Study Report, Riverside-Corona Feeder Realignment Project*, October 2009. (Appendix I)
- City of Colton, *Final Preliminary General Plan for the City of Colton*, May 5, 1987. (Available at [www.ci.colton.ca.us/CD\\_Plan.html](http://www.ci.colton.ca.us/CD_Plan.html), accessed on December 30, 2008.)
- City of Corona Community Development Department, *City of Corona General Plan*, March 17, 2004. (Available at [www.discovercorona.org/?section=City%20Departments&page=Community%20Development](http://www.discovercorona.org/?section=City%20Departments&page=Community%20Development), accessed on December 28, 2006.)
- City of Rialto Development Services Department, *City of Rialto General Plan*, March 31, 1992. (Available at the City of Rialto Development Services Department – Planning Division.)
- City of Riverside Planning Department, *General Plan 2025*, November, 2007. (Available at [www.riversideca.gov/planning/cityplans.asp](http://www.riversideca.gov/planning/cityplans.asp), accessed on December 28, 2008.)
- City of San Bernardino Development Services Department, Division of Planning, *San Bernardino General Plan*, November 1, 2005. (Available at [www.ci.san-bernardino.ca.us/depts/devserv/planning/default.asp](http://www.ci.san-bernardino.ca.us/depts/devserv/planning/default.asp), accessed on December 28, 2008.)

- County of Riverside, *Riverside County Integrated Project General Plan, County of Riverside*, Adopted October 7, 2003. (Available at [www.rctlma.org/genplan/default.aspx](http://www.rctlma.org/genplan/default.aspx), accessed on December 28, 2008.)
- County of Riverside, *Jurupa Area Land Use Plan*, October 2003. (Available at [www.rctlma.org/genplan/default.aspx](http://www.rctlma.org/genplan/default.aspx), accessed on December 28, 2008.)
- County of Riverside, *Temescal Canyon Area Land Use Plan*, October 2003. (Available at [www.rctlma.org/genplan/default.aspx](http://www.rctlma.org/genplan/default.aspx), accessed on December 28, 2008.)
- County of Riverside, *Lake Mathews/Woodcrest Land Use Plan*, October 2003. (Available at [www.rctlma.org/genplan/default.aspx](http://www.rctlma.org/genplan/default.aspx), accessed on December 28, 2008.)
- County of San Bernardino Land Use Services Department, *San Bernardino 2007 General Plan*, March 13, 2007. (Available at [www.sbcounty.gov/landuseservices/general\\_plan/Default.asp](http://www.sbcounty.gov/landuseservices/general_plan/Default.asp), accessed on December 29, 2008.)

#### 4.12.1 Setting/Affected Environment

The project alternatives are located within the boundaries of the cities of Colton, Corona, Grand Terrace, Redlands, Rialto, Riverside, and San Bernardino, and unincorporated areas of the counties of Riverside and San Bernardino, as shown on **Figure 3.0-3, Proposed Project with Previous Alignment Locations**. The project proposes to place large (up to 72-inches) pipelines in various streets throughout these jurisdictions. Traffic levels and existing congestion varies from street to street.

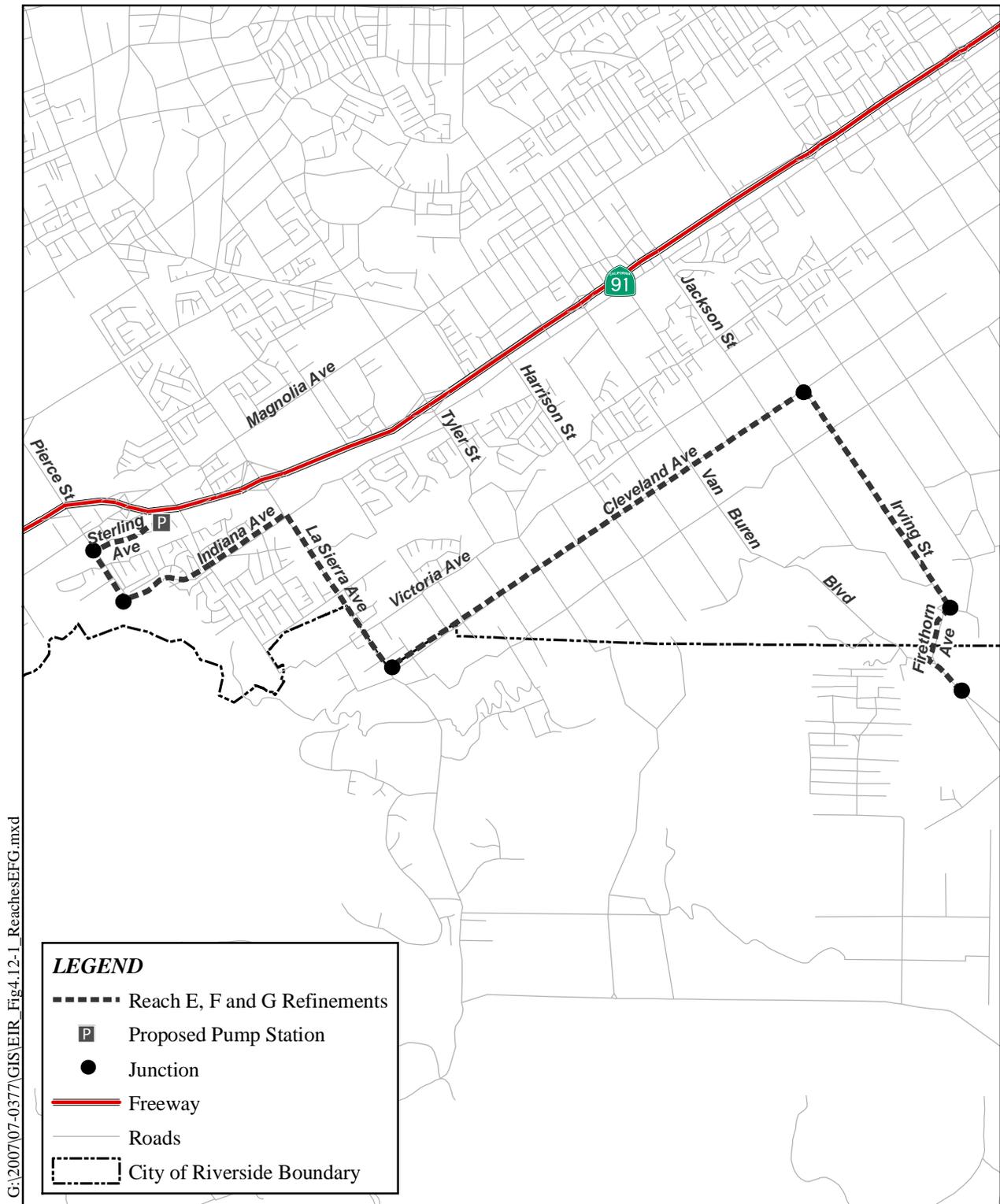
The 2005 Project Alignment Alternative Includes Reaches A through H, with Reach A starting in San Bernardino and Reach H ending in Corona. The majority of this alternative is located within the City of Riverside (Reaches B through H).

The proposed Riverside-Corona Feeder Realignment Alternative separated into two portions referred to as the Northern Reach and the Central Reach, plus generally Reaches E through H of the 2005 Project Alignment. The Northern Reach will span from the intersection of Waterman Avenue and Orange Show Road in the City of San Bernardino to the intersection of Limonite Avenue and Clay Street in unincorporated Riverside County. The Central Reach will span from the intersection of Limonite Avenue and Clay Street in unincorporated Riverside County to connect to the approved Riverside-Corona Feeder alignment near the intersection of Jackson Street and Cleveland Street in the City of Riverside. The project also proposes an optional alignment on a portion of the Central Reach. The optional alignment would change the proposed realignment between the intersection of Jackson Street and Colorado Avenue, in the City of Riverside, and the intersection of Cleveland Avenue and Irving Street, in the City of Riverside.

The Realignment Alternative with Additional Connections (Preferred Alternative) includes all the facilities of the Realignment Alternative plus four additional facilities that include: the Central Feeder Connection, the Clay Street Connection, the Mockingbird Connection and the La Sierra Pipeline Connection.

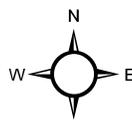
It is intended that the first phase of project construction will include Reaches E, F and G, and the Mockingbird Connection. Reaches E, F and G are illustrated in greater detail on **Figure 4.12-1, Realignment Project – Reaches E, F and G**. The Central Reach alignment is illustrated in greater detail on **Figure 4.12-2, Realignment Project – Central Reach** and the additional facilities' alignments (including the Mockingbird Connection) are shown on **Figure 4.12-3, Realignment Alternative – Additional Connections**.

The proposed project's pipeline will be used to deliver water from the Riverside and San Bernardino County groundwater basins to communities throughout western Riverside County during drought and emergency periods and when water is otherwise unavailable. The completed project is to be located primarily underground within existing road rights-of-way.

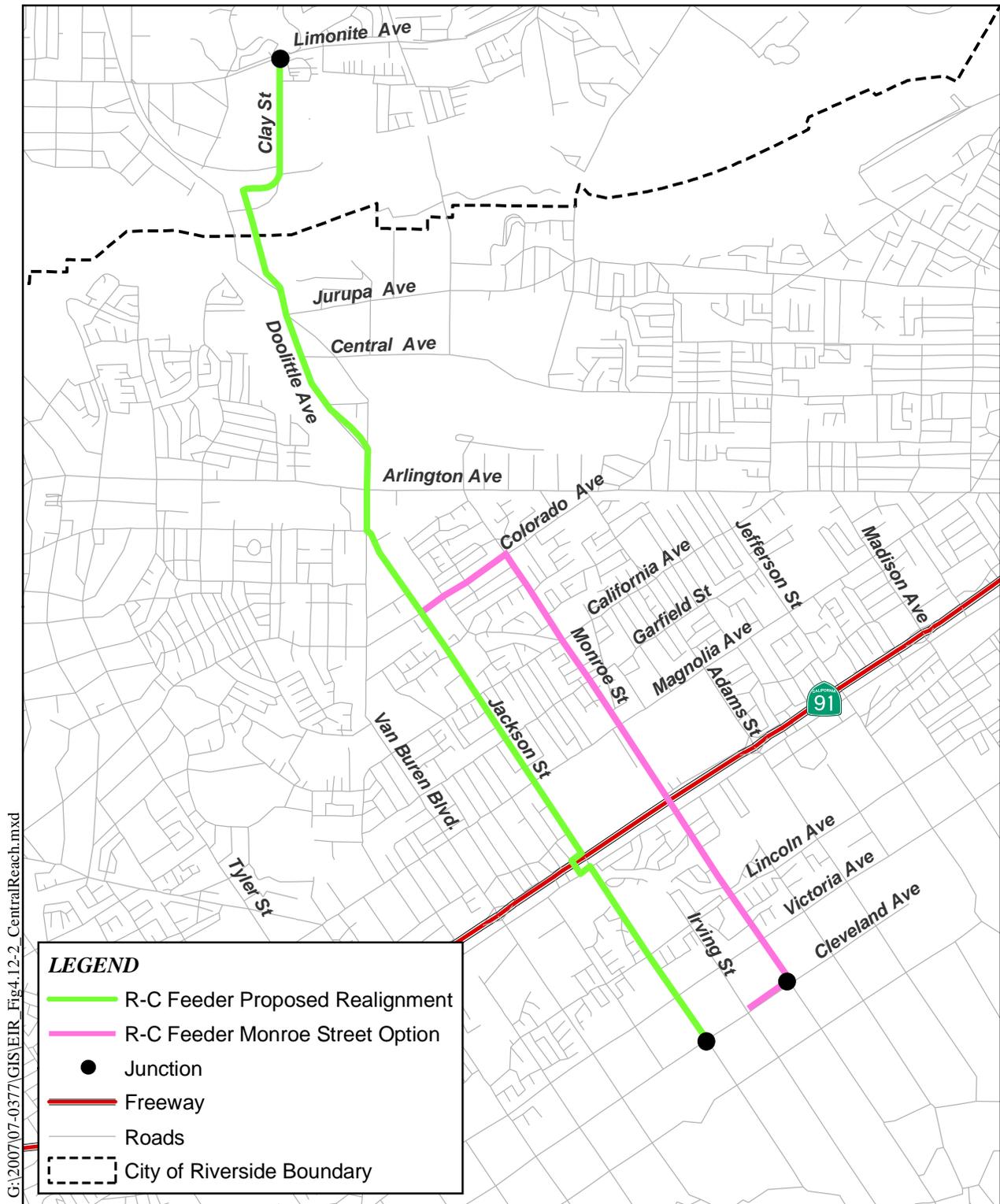


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**Figure 4.12-1  
Realignment Project  
- Reaches E, F and G**

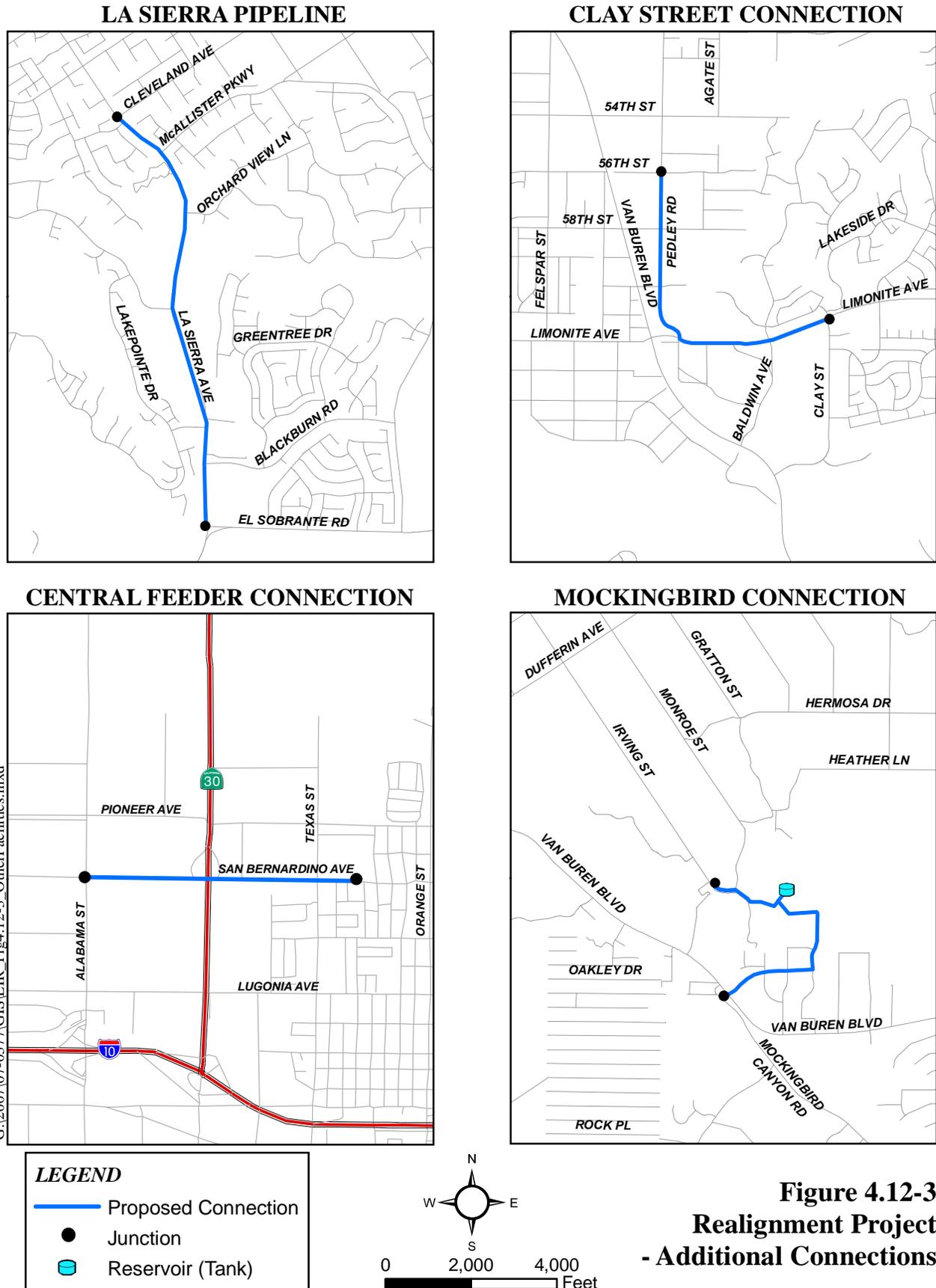


0 2,000 4,000 6,000  
Feet



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**Figure 4.12-2  
Realignment Project  
- Central Reach**



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The pipeline will be manufactured in 40-foot lengths and a typical work day will allow for the installation of approximately 120 feet of pipeline. The construction involved with the installation of the pipelines includes both boring/tunneling and shored open trench construction. Where open trench construction is planned, the shored open trench method is preferred for conditions with minimal allowable construction width and restricted right-of-way. The required construction width for an open trench with shored walls is 30 to 35 feet, to allow for heavy vehicle operation. **Figure 4.12-4, Typical Open Trench Detail** shows the typical detail for this type of construction. An available option to the shored open trench method of construction is open trench construction with flared sidewalls. This method requires greater construction width and is not typical for roadways with minimal right-of-way widths.

A traffic study was prepared for the Central Reach (Traffic Study), which is anticipated as the second phase of construction related to the proposed realignment. The Traffic Study looked at the Central Reach because only Phases 1 and 2 are being analyzed at a project specific level. Phase 1 of the project includes Reaches E, F and G which were already analyzed at a project specific level in the prior EIR for those segments. The Northern Reach is anticipated to be the fourth phase of the project and was not analyzed in the traffic study because the timing of construction is unknown at this time, but will be analyzed in this section at a programmatic level. (See Section 3.8 for a description of project phasing).

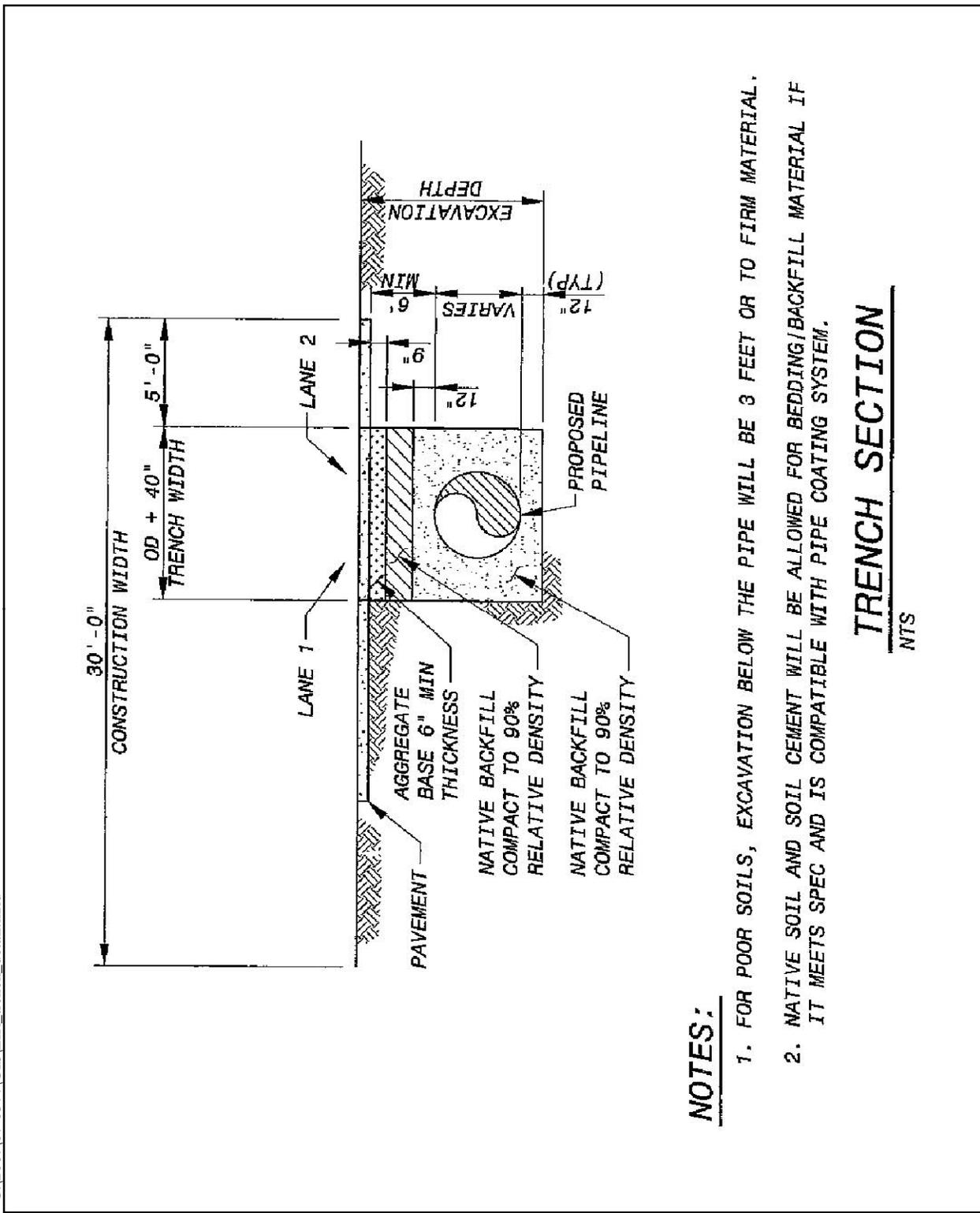
The objectives of the Traffic Study for the Central Reach were to:

- Determine existing traffic conditions in the vicinity of the proposed project.
- Determine the short-term impacts at the study area intersections during the construction of the proposed project.
- Determine if the levels of service (LOS) required by the City of Riverside General Plan and the Riverside County General Plan will be maintained at all affected intersections.

An addendum to the traffic study (Traffic Study Addendum) was prepared in order to evaluate additional project components that are anticipated in earlier phases of the project and that were not included in the Traffic Study's analysis. The Traffic Study Addendum included the project's La Sierra Pipeline Connection, Clay Street Connection, Central Feeder Connection, and Mockingbird Connection components. The objectives of the Traffic Study Addendum were to:

- determine existing traffic conditions in the vicinity of the alignment;
- determine the short-term impacts at the study area intersections due to the installation of the Riverside-Corona Feeder pipelines;
- determine if the LOS required by the Riverside County General Plan and City of Redlands/County of San Bernardino General Plan will be maintained at all affected intersections.

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**NOTES:**

1. FOR POOR SOILS, EXCAVATION BELOW THE PIPE WILL BE 3 FEET OR TO FIRM MATERIAL.
2. NATIVE SOIL AND SOIL CEMENT WILL BE ALLOWED FOR BEDDING/BACKFILL MATERIAL IF IT MEETS SPEC AND IS COMPATIBLE WITH PIPE COATING SYSTEM.

**TRENCH SECTION**  
NTS

**Figure 4.12-4**  
**Typical Open Trench Detail**

The City of Riverside, Riverside County Transportation Department, and City of Redlands/County of San Bernardino<sup>1</sup> require that the Highway Capacity Manual (HCM; Methodologies – Section 3) be used to analyze the LOS. The aforementioned jurisdictions are the only jurisdictions that will have potential traffic impacts associated with the project. Therefore, although the project’s footprint is located within the boundaries of additional jurisdictions, these were the only jurisdictions analyzed in the Traffic Study and Traffic Study addendum.

The HCM evaluates the LOS of intersections based upon the control delay per vehicle. The methodology used to evaluate the intersection level of service differs on whether the intersection is signalized or unsignalized. Levels of service at signalized and unsignalized intersections have been evaluated using Traffix Version 7.9 and Synchro Version 7, which are based upon year 2000 HCM methodologies. **Table 4.12-A, Level of Service (LOS) Standards**, shows the stopped delay criteria used to determine the level of service at intersections.

In order to evaluate traffic conditions for the project analysis year (2013), area-wide growth on the existing roadways was projected. Per discussion with the City of Riverside Transportation Department staff, the Traffic Study and Traffic Study addendum utilized a 2 percent per year growth rate.

**Table 4.12-A  
Level of Service (LOS) Standards**

Level of Service (LOS)	Signalized Intersections: Stopped Delay (seconds/vehicle)	Unsignalized Intersections: Stopped Delay (seconds/vehicle)	Qualitative LOS Description
<b>A</b>	≤ 10	≤ 10	Free flow: Low volumes; high speeds; speed not restricted by other vehicles; all signal cycles clear with no vehicles waiting through more than one signal cycle.
<b>B</b>	> 10 and ≤ 20	> 10 and ≤ 15	Stable flow: Operating speeds beginning to be affected by other traffic; between 1% and 10% of the signal cycles have one or more vehicles waiting through more than one signal cycle during peak traffic periods.
<b>C</b>	> 20 and ≤ 35	> 15 and ≤ 25	Stable Flow, Increased Density: Operating speeds and maneuverability closely controlled by other traffic; between 11% and 30% of the signal cycles have one or more vehicles waiting through more than one signal cycle during peak traffic periods; recommended ideal design standards.
<b>D</b>	> 35 and ≤ 55	> 25 and ≤ 35	Stable Flow, High Density: Tolerable operating speeds; 31% to 70% of the signal cycles have one or more vehicles waiting through more than one signal cycle during peak traffic periods; often used as design standards in urban areas.
<b>E</b>	>55 and ≤ 80	> 35 and ≤ 50	Flow at or Near Capacity: maximum traffic volume an intersection can accommodate; restricted speeds; 71% to 100% of the signal cycles have one or more vehicles waiting through more than one signal cycle during peak traffic periods.
<b>F</b>	> 80	> 50	Forced or Breakdown Flow: Long queues of traffic; unstable flow; stoppages of long duration; traffic volume and traffic speed can drop to zero; traffic volume will be less than the volume occurring at LOS ‘E’ due to decreased speeds.

Source: “Highway Capacity Manual,” Highway Research Board Special Report 209, National Research Council, Washington D.C., 2000.

<sup>1</sup> The intersection that is located within the County of San Bernardino (SR-210 SB Ramps / San Bernardino Avenue) is in an area referred to as the “donut hole” which is regulated by City of Redlands traffic methodology requirements.

The ease with which intersections within the study area handle traffic largely controls the operation of the roadway system as a whole. Therefore, analysis of traffic at study area intersections was used to evaluate the traffic impacts of the project within the Central Reach. Based on the Traffic Study and Traffic Study Addendum, 36 intersections within the study area were evaluated to determine their existing and future levels of service. These intersections are:

1. Clay Street / Limonite Avenue (County of Riverside)
2. Clay Street / Linares Avenue (County of Riverside)
3. Van Buren Boulevard / Jurupa Avenue (City of Riverside)
4. Van Buren Boulevard / Arlington Avenue (City of Riverside)
5. Van Buren Boulevard / Jackson Street (City of Riverside)
6. Jackson Street / Colorado Avenue (City of Riverside)
7. Jackson Street / California Avenue (City of Riverside)
8. Jackson Street / Garfield Street (City of Riverside)
9. Jackson Street / Magnolia Avenue (City of Riverside)
10. Jackson Street / Indiana Avenue (City of Riverside)
11. Jackson Street / Lincoln Avenue (City of Riverside)
12. Jackson Street / Victoria Avenue (City of Riverside)
13. Jackson Street / Colorado Avenue (City of Riverside)
14. Monroe Street / California Avenue (City of Riverside)
15. Monroe Street / Garfield Street (City of Riverside)
16. Monroe Street / Magnolia Avenue (City of Riverside)
17. Monroe Street / Indiana Avenue (City of Riverside)
18. Monroe Street / Lincoln Avenue (City of Riverside)
19. Monroe Street / Victoria Avenue (City of Riverside)
20. La Sierra Avenue / Cleveland Avenue (County of Riverside)
21. La Sierra Avenue / Dufferin Avenue (County of Riverside)
22. La Sierra Avenue / McAllister Parkway (County of Riverside)
23. La Sierra Avenue / Orchard View Lane (County of Riverside)
24. La Sierra Avenue / Lake Knoll Parkway (County of Riverside)
25. La Sierra Avenue / Lake Crest Drive (County of Riverside)
26. La Sierra Avenue / Blackburn Road (County of Riverside)
27. La Sierra Avenue / El Sobrante Road (County of Riverside)
28. Pedley Road / 56th Street (County of Riverside)
29. Pedley Road / 58th Street (County of Riverside)
30. Pedley Road / Limonite Avenue (County of Riverside)
31. Baldwin Avenue / Limonite Avenue (County of Riverside)
32. Clay Street / Limonite Avenue (County of Riverside)
33. Alabama Street / San Bernardino Avenue (County of San Bernardino)
34. SR-210 SB Ramps / San Bernardino Avenue (County of San Bernardino)
35. SR-210 NB Ramps / San Bernardino Avenue (City of Redlands)
36. Texas Street / San Bernardino Avenue (City of Redlands)

The Riverside County General Plan establishes, as a countywide target, a minimum LOS C on all County-maintained roads and conventional state highways. Exceptions allow LOS D on roadways in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections and LOS E in designated community centers to the extent that it supports transit-oriented development and walkable communities.

The City of Riverside General Plan establishes a LOS target of D or better on arterial streets wherever possible. At some key locations, such as city arterial roadways which are used as a freeway bypass by regional through traffic and at heavily traveled freeway interchanges, the City of Riverside General Plan states that a LOS E may be acceptable as determined on a case-by-case basis.

The City of Redlands General Plan establishes an LOS target of C or better as the standard at all intersections presently at LOS C or better. Within the area identified in the City of Redlands General Plan Figure 5.3, including that unincorporated County area identified on City of Redlands General Plan Figure 5.3 as the “donut hole,” maintain LOS C or better; however, accept a reduced LOS on a case by case basis upon approval by four-fifths (4/5ths) vote of the total authorized membership of the City Council. Where the current LOS at a location within the City of Redlands is below the LOS C standard, no development project shall be approved that cannot be mitigated so that it does not reduce the existing LOS at that location except as provided above.

The intersection LOS for existing conditions, as shown in **Table 4.12-B, Existing Level of Service for Study Intersections**, below, are based upon the existing roadway system and the existing AM and PM peak hour intersection volumes. The intersections in bold do not currently meet the applicable LOS criteria. The following five intersections operate at unacceptable levels of service under existing conditions:

- 10. Jackson Street / Indiana Avenue
- 16. Monroe Street / Magnolia Avenue
- 18. Monroe Street / Lincoln Avenue
- 21. La Sierra Avenue / Dufferin Avenue
- 27. La Sierra Avenue / El Sobrante Road

**Table 4.12-B  
Existing Level of Service for Study Intersections**

Intersection	Traffic Control Status <sup>1</sup>	LOS Criteria	AM Peak Hour		PM Peak Hour	
			Delay (Sec)	LOS	Delay (Sec)	LOS
1. Clay Street / Limonite Avenue	Signal	C	30.2	C	33.2	C
2. Clay Street / Linares Avenue	Signal	C	19.6	B	15.4	B
3. Van Buren Boulevard / Jurupa Avenue	Signal	C	19.5	B	21.2	C
4. Van Buren Boulevard / Arlington Avenue (EW)	Signal	D	35.6	D	40.0	D
5. Van Buren Boulevard / Jackson Street	Signal	C	30.8	C	33.1	C
6. Jackson Street / Colorado Avenue	Signal	C	31.8	C	30.9	C
7. Jackson Street / California Avenue	Signal	C	29.8	C	31.1	C
8. Jackson Street / Garfield Street	Signal	C	22.0	C	23.7	C
9. Jackson Street / Magnolia Avenue	Signal	C	33.5	C	29.8	C
<b>10. Jackson Street / Indiana Avenue</b>	<b>Signal</b>	<b>D</b>	<b>66.5</b>	<b>E</b>	<b>34.4</b>	<b>C</b>
11. Jackson Street / Lincoln Avenue	Signal	D	35.5	D	29.0	C
12. Jackson Street / Victoria Avenue	AWSC	C	17.8	C	14.5	B
13. Jackson Street / Colorado Avenue	AWSC	C	12.0	B	11.6	B
14. Monroe Street / California Avenue	Signal	C	29.8	C	27.3	C
15. Monroe Street / Garfield Street	AWSC	C	13.6	B	10.7	B
<b>16. Monroe Street / Magnolia Avenue</b>	<b>Signal</b>	<b>D</b>	<b>68.2</b>	<b>E</b>	<b>30.1</b>	<b>C</b>
17. Monroe Street / Indiana Avenue	Signal	D	35.2	D	30.6	C
<b>18. Monroe Street / Lincoln Avenue</b>	<b>AWSC</b>	<b>D</b>	<b>86.9</b>	<b>F</b>	<b>11.9</b>	<b>B</b>
19. Monroe Street / Victoria Avenue	AWSC	C	14.0	B	11.6	B
20. La Sierra Avenue / Cleveland Avenue	OWSC	C	23.9	C	15.8	C
<b>21. La Sierra Avenue / Dufferin Avenue</b>	<b>OWSC</b>	<b>C</b>	<b>27.4</b>	<b>D</b>	<b>78.2</b>	<b>F</b>
22. La Sierra Avenue / McAllister Parkway	Signal	C	19.7	B	14.8	B
23. La Sierra Avenue / Orchard View Lane	OWSC	C	18.5	C	14.0	B
24. La Sierra Avenue / Lake Knoll Parkway	Signal	C	13.9	B	9.5	A
25. La Sierra Avenue / Lake Crest Drive	Signal	C	13.9	B	9.5	A
26. La Sierra Avenue / Blackburn Road	Signal	C	29.6	C	21.5	C
<b>27. La Sierra Avenue / El Sobrante Road</b>	<b>AWSC</b>	<b>D</b>	<b>14.2</b>	<b>B</b>	<b>40.2</b>	<b>E</b>
28. Pedley Road / 56th Street	TWSC	D	14.6	B	14.2	B
29. Pedley Road / 58th Street	OWSC	C	13.8	B	14.5	B
30. Pedley Road / Limonite Avenue	Signal	D	28.6	C	27.8	C
31. Baldwin Avenue / Limonite Avenue	Signal	D	12.7	B	17.4	B

Intersection	Traffic Control Status <sup>1</sup>	LOS Criteria	AM Peak Hour		PM Peak Hour	
			Delay (Sec)	LOS	Delay (Sec)	LOS
32. Clay Street / Limonite Avenue	Signal	D	30.3	C	33.4	C
33. Alabama Street / San Bernardino Avenue	Signal	C	27.8	C	30.6	C
34. SR-210 SB Ramps / San Bernardino Avenue	Signal	C	20.9	C	31.3	C
35. SR-210 NB Ramps / San Bernardino Avenue	Signal	C	23.8	C	32.6	C
36. Texas Street / San Bernardino Avenue	Signal	C	14.6	B	13.0	B

<sup>1</sup> AWSC = All Way Stop Controlled, OWSC = One Way Stop Controlled, TWSC = Two Way Stop Controlled

The intersection LOS for existing conditions plus ambient growth, as shown in **Table 4.12-C, Existing plus Ambient Growth Level of Service for Study Intersections**, are based upon the existing roadway system, existing AM and PM peak hour intersection volumes and ambient growth (at 2% per year, through year 2013). The six intersections shown in bold will not meet the applicable LOS criteria. This includes the same five intersections that are currently failing under existing conditions, plus one additional intersection; La Sierra Avenue and Cleveland Avenue. The following six intersections are anticipated to fail under existing plus ambient growth conditions:

- 10. Jackson Street / Indiana Avenue
- 16. Monroe Street / Magnolia Avenue
- 18. Monroe Street / Lincoln Avenue
- 20. La Sierra Avenue / Cleveland Avenue
- 21. La Sierra Avenue / Dufferin Avenue
- 27. La Sierra Avenue / El Sobrante Road

**Table 4.12-C**  
**Existing plus Ambient Growth Level of Service for Study Intersections**

Intersection	Traffic Control Status <sup>1</sup>	LOS Criteria	AM Peak Hour		PM Peak Hour	
			Delay (Sec)	LOS	Delay (Sec)	LOS
1. Clay Street / Limonite Avenue	Signal	C	30.6	C	34.2	C
2. Clay Street / Linares Avenue	Signal	C	19.6	B	15.4	B
3. Van Buren Boulevard / Jurupa Avenue	Signal	C	14.4	B	16.3	B
4. Van Buren Boulevard / Arlington Avenue (EW)	Signal	D	34.6	C	36.0	D
5. Van Buren Boulevard / Jackson Street	Signal	C	30.3	C	32.3	C
6. Jackson Street / Colorado Avenue	Signal	C	32.4	C	31.1	C

Intersection	Traffic Control Status <sup>1</sup>	LOS Criteria	AM Peak Hour		PM Peak Hour	
			Delay (Sec)	LOS	Delay (Sec)	LOS
7. Jackson Street / California Avenue	Signal	C	30.1	C	31.7	C
8. Jackson Street / Garfield Street	Signal	C	22.2	C	23.9	C
9. Jackson Street / Magnolia Avenue	Signal	C	34.9	C	30.2	C
<b>10. Jackson Street / Indiana Avenue</b>	<b>Signal</b>	<b>D</b>	<b>88.6</b>	<b>F</b>	<b>36.0</b>	<b>D</b>
11. Jackson Street / Lincoln Avenue	Signal	D	37.0	D	29.0	C
12. Jackson Street / Victoria Avenue	AWSC	C	19.5	C	15.0	B
13. Jackson Street / Colorado Avenue	AWSC	C	13.5	B	12.9	B
14. Monroe Street / California Avenue	Signal	C	30.0	C	27.6	C
15. Monroe Street / Garfield Street	AWSC	C	15.9	C	11.5	B
<b>16. Monroe Street / Magnolia Avenue</b>	<b>Signal</b>	<b>D</b>	<b>93.0</b>	<b>F</b>	<b>31.9</b>	<b>C</b>
17. Monroe Street / Indiana Avenue	Signal	D	37.0	D	30.8	C
<b>18. Monroe Street / Lincoln Avenue</b>	<b>AWSC</b>	<b>D</b>	<b>121.6</b>	<b>F</b>	<b>13.1</b>	<b>B</b>
19. Monroe Street / Victoria Avenue	AWSC	C	14.8	B	11.9	B
<b>20. La Sierra Avenue / Cleveland Avenue</b>	<b>OWSC</b>	<b>C</b>	<b>28.0</b>	<b>D</b>	<b>17.5</b>	<b>C</b>
<b>21. La Sierra Avenue / Dufferin Avenue</b>	<b>OWSC</b>	<b>C</b>	<b>32.6</b>	<b>D</b>	<b>116.0</b>	<b>F</b>
22. La Sierra Avenue / McAllister Parkway	Signal	C	20.5	C	15.5	B
23. La Sierra Avenue / Orchard View Lane	OWSC	C	20.9	C	15.2	C
24. La Sierra Avenue / Lake Knoll Parkway	Signal	C	14.2	B	9.8	A
25. La Sierra Avenue / Lake Crest Drive	Signal	C	14.0	B	9.6	A
26. La Sierra Avenue / Blackburn Road	Signal	C	30.6	C	21.9	C
<b>27. La Sierra Avenue / El Sobrante Road</b>	<b>AWSC</b>	<b>D</b>	<b>16.4</b>	<b>C</b>	<b>56.3</b>	<b>F</b>
28. Pedley Road / 56th Street	TWSC	D	15.4	C	15.1	C
29. Pedley Road / 58th Street	OWSC	C	14.6	B	15.4	C
30. Pedley Road / Limonite Avenue	Signal	D	29.0	C	28.6	C
31. Baldwin Avenue / Limonite Avenue	Signal	D	12.5	B	17.7	B
32. Clay Street / Limonite Avenue	Signal	D	30.6	C	34.3	C
33. Alabama Street / San Bernardino Avenue	Signal	C	28.1	C	31.0	C
34. SR-210 SB Ramps / San Bernardino Avenue	Signal	C	21.2	C	33.8	C
35. SR-210 NB Ramps / San Bernardino Avenue	Signal	C	24.8	C	34.0	C
36. Texas Street / San Bernardino Avenue	Signal	C	15.3	B	13.6	B

<sup>1</sup> AWSC = All Way Stop Controlled, OWSC = One Way Stop Controlled, TWSC = Two Way Stop Controlled

## 4.12.2 Summary of 2005 Certified Program EIR for Riverside-Corona Feeder Project

### Potential Significant Impacts/Environmental Consequences

Transportation and Traffic impacts were addressed in Section II-8 (pp. II-8-1 through II-8-9) of the 2005 PEIR for the Riverside-Corona Feeder Project (2005 Project Alignment), which is hereby incorporated by reference. The following discussion is a summary of the Transportation and Traffic section of the 2005 PEIR:

**Threshold:** *Impact traffic such as to cause a traffic hazard or safety issue.*

The proposed project alignments will be located adjacent to or near sensitive uses that may be especially sensitive to traffic disruption or construction hazards. Schools, especially high schools, have students that arrive via public transportation as well as key times of day when construction equipment could pose traffic disruption and/or safety hazards. Bus stops in general are in locations where bus patrons might be put in danger during heavy construction activities within streets. Hospitals and fire stations need continuous access to be able to provide emergency services. Lack of coordination or consideration for these types of land uses and situations would be considered temporary but significant.

**Threshold:** *Causes an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.*

Traffic increases due to the proposed project will consist of construction worker vehicles and trucks hauling dirt or delivering materials. The numbers of vehicles varies somewhat depending on the type of construction being performed, tunneling/boring or traditional trenching. Assumptions for the most extensive construction activities (Reach A and Reach C) are outlined in Section II-2, Air Quality, of the 2005 PEIR. They include up to 25 workers per day (50 trips), and up to 24 trucks (48 trips) per day, worst case. The workers and trucks will be headed toward a slightly different segment of the construction route each day as construction progresses; therefore no one street segment is impacted continuously for the duration of project construction.

The proposed 30-mile route of the 2005 Project Alignment is located in all types and sizes of streets from busy arterials like Chicago Avenue in Riverside to small two lane roads like Irving Street. Thus, the proposed project's traffic will represent a small increase in relation to the existing traffic in some areas and a larger increase in relation to existing traffic in other locations. In general, however, impacts to traffic from the project will consist of minor (less than 100 trips per day), short-term increases in vehicle trips which will result in a less than significant increase in traffic.

**Threshold:** *Conflict with transportation plans and public transportation service.*

The proposed project will be constructed primarily in road rights-of-way. Impacts to traffic from the project will consist of minor, short-term increases in vehicle trips and delays as a result of pipeline construction. Public transit services use some of the same roadways that will be impacted by project construction. Direct disruption or the need for temporary relocation of one bus route can indirectly affect many more routes. RTA has provided the following list of potential impacts caused by major pipeline construction:

- Bus lines often must be re-routed to other streets due to construction;
- Re-routings significantly affect published schedules. Public notices of changes need to be distributed well in advance so that buses are not missed;
- Construction-caused congestion and slower traffic affects schedules and route connections;
- The above difficulties can “domino” through much of the transit system;
- Bus benches, bus stops, etc. are closed, moved or otherwise made inaccessible and riders are unsure where to safely board the bus or step off the bus;
- Transit agency dispatchers will need to publish numerous driver bulletins as necessary to keep the crew informed of changes to routes and stops. [For example,] in a normal week, perhaps 10 are issued for the entire Western Riverside County RTA service area. A project such as the RCF could quadruple this number.

There are total of 16 bus lines that may be impacted by the proposed project, 13 RTA lines and 3 Omnitrans lines as listed below.

*RTA Lines*

- Route 25 Barton Road from Hunts Lane to Mount Vernon Avenue, in Colton and Grand Terrace
- Route 25 Intersection of Iowa Avenue and Marlborough Avenue to Martin Luther King Boulevard, in Riverside
- Route 25 Michigan Avenue and Barton Road at Omnitrans Transfer Point
- Route 13 Marlborough Avenue from Iowa Avenue to Chicago Avenue in Riverside
- Route 13 Chicago Avenue from Marlborough Avenue to Martin Luther King Boulevard in Riverside
- Route 1 Intersection of Chicago Avenue and 3rd Street in Riverside
- Route 14 Intersection of University Avenue and Chicago Avenue in Riverside
- Route 16 Intersection of University Avenue and Chicago Avenue in Riverside
- Route 25 Intersection of University Avenue and Chicago Avenue in Riverside
- Other Local trolley lines and shuttle buses at the intersection of University Avenue and Chicago Avenue
- Route 208 Intersection of Chicago Avenue and Martin Luther King Boulevard in Riverside
- Route 22 Chicago Avenue from University Avenue to Alessandro Boulevard in Riverside
- Route 20 Intersection of Alessandro Boulevard and Central Avenue in Riverside
- Route 20 Intersection of Chicago Avenue and Arlington Avenue in Riverside
- Route 10 Lincoln Avenue from Horace Street to Adams Street in Riverside
- Route 27 Intersection of Van Buren Boulevard and Cleveland Avenue in Riverside
- Route 1 Magnolia Avenue from Neece Street to Interstate 15 in Corona

- Route 3 Magnolia Avenue from Neece Street to Interstate 15 in Corona

#### *Omnitrans Lines*

- Route 2 Hospitality Lane at Hunts Lane
- Route 200 Barton Road from Waterman Avenue to Preston, and in Grand Terrace along Mt. Vernon and Michigan
- Route 19 Barton Road and Washington

Lack of coordination with or consideration for public transportation would be considered a **temporary but significant impact**.

### **2005 Project Alignment Mitigation Measures**

The following mitigation measures were adopted in the 2005 PEIR and reduce potentially significant impacts related to transportation and traffic:

**MM Trans 1:** Bus stops and signs temporarily removed or closed by the proposed project shall be replaced and posted pursuant to the standards and requirements of the affected transit agency.

**MM Trans 2:** A Traffic Control and Safety Plan shall be prepared for each reach of construction. WMWD shall coordinate with affected transit agencies, schools, fire stations and other affected local jurisdictions on the preparation of each Traffic Control and Safety Plan. Traffic Control and Safety Plans may include, but not be limited to, such things as adjusted hours of construction in certain locations, signs, flagmen, adequate notice of construction schedules, and cones or barriers to detour traffic. The Traffic Control and Safety Plan for each Reach shall be completed and notice/information given to affected sensitive sites at least 30-days prior to the anticipated disruption to be caused by construction.

### **2005 Project Alignment Determination under CEQA**

The 2005 PEIR prepared for the 2005 Project Alignment found that with the implementation of Mitigation measures **MM Trans 1** and **MM Trans 2**, potential temporary significant impacts to transportation services and sensitive uses will be reduced to less than significant levels.

## **4.12.3 Analysis of the Riverside-Corona Feeder Project Realignment Alternatives**

### **Relation of the Realignment Alternatives to the 2005 Project Alignment**

The impacts and findings discussed in the 2005 PEIR related to traffic and transportation impacts are applicable to both the 2005 Project Alignment and the Realignment Alternatives for Reach H. The Realignment Alternatives will substitute a new alignment for that portion of the 2005 Project Alignment identified as Reaches A, B, C, and D, in the 2005 PEIR which is referenced as the Northern and Central Reaches.

The analysis of traffic impacts from construction contained within the 2005 PEIR does not specifically address the proposed realignment for Reaches E, F and G, however. Reaches E, F,

and G were re-evaluated and Reaches F and G were refined slightly in 2007, as analyzed in the *Final Environmental Impact Report for the La Sierra Avenue Water Transmission Pipeline Project* (SCH: 2006101152) which was certified by WMWD on February 20, 2008 (Reaches E, F, and G 2008 Refinement EIR), attached as Appendix J. This refined alignment for Reaches F and G will remain consistent with the 2008 Refinement EIR under both realignment alternatives evaluated herein.

The analysis conducted in this section of the SEIR/EIS is provided to address the Riverside-Corona Feeder Realignment Alternatives. This SEIR, the 2005 PEIR for Reach H and the Reaches E, F, and G 2008 Refinement EIR will provide analysis for the entire length of the project.

### **Thresholds of Significance**

Western Municipal Water District has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, Western Municipal Water District's "Environmental Checklist" for the subject project (see Appendix A of this document) indicates that impacts to transportation and traffic may be considered potentially significant if the project would:

- cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.
- conflict with adopted policies, plans, or programs supporting alternative transportation.

### **Related Regulations**

WMWD's construction workers will be required by WMWD Standard Specifications documents to provide adequate and safe traffic control measures that will both accommodate local traffic and ensure the safety of drivers, pedestrians, and workers. Sections F-13 and F-15 of WMWD's Standard Specifications address Traffic and Access, and Street Closures, Detours, Barricades, respectively. The excerpts from WMWD Standard Specifications below illustrate the level of responsibility that will be required of the contractor for the construction of the RCF project with respect to traffic issues.

#### **F-13 Traffic and Access**

Traffic and access shall comply with Section 7-10 of the "Standard Specifications for Public Works Construction" and "Work Area Traffic Control Handbook" (W.A.T.C.H. Manual) as published by Building News, Inc. The Contractor's operations shall cause no unnecessary inconvenience. The access rights of the public shall be considered at all times. Unless otherwise authorized, traffic shall be permitted to pass through the work, or an approved detour shall be provided. At least one (1) lane on cross streets shall be available at all times for use of vehicles and emergency equipment. Safe and adequate pedestrian and vehicular access shall be provided and maintained to fire hydrants, commercial and industrial establishments of similar nature. Access to these facilities shall be continuous and unobstructed unless otherwise approved by the engineer.

Safe and adequate pedestrian zones and public transportation stops, as well as pedestrian crossings of the work at intervals not exceeding 300 feet, also shall be maintained unless otherwise approved by the engineer.

Vehicular access to driveways shall be maintained to the property line except when necessary construction precludes such access for reasonable periods of time. If backfill has been completed to such extent that safe access may be provided, and the area is opened to local traffic, the Contractor shall immediately clear the street and driveways and provide and maintain access.

The Contractor shall cooperate with the various parties involved in the delivery of mail and the collection and removal of trash and garbage to maintain existing schedules for these services.

#### F-15 Street Closures, Detours, Barricades

The Contractor shall comply with all applicable State, County and City requirements for closure of streets. The Contractor shall provide barriers, guards, lights, signs, temporary bridges, flag persons and watchpersons, advising the public of detours and construction hazards. The contractor shall also be responsible for compliance with additional public safety requirements which may arise during constructions. The Contractor shall furnish and install, and upon completion of the work, promptly remove all signs and warning devices. At least 48 hours in advance of closing, or partially closing, of reopening, any street, alley, or other public thoroughfare, the Contractor shall notify the Police, Fire, Traffic and Engineering Departments of jurisdictional agencies involved, and comply with their requirements. Deviations must first be approved in writing by the engineer.

Additionally, encroachment permits will be required from applicable governing agencies for construction of the pipeline within their jurisdictional rights-of-way. Standard information included in these permits will also address issues associated with short-term traffic impacts. These governing agencies include, but may not be limited to, City of San Bernardino, Caltrans, City of Colton, County of Riverside, County of San Bernardino, City of Rialto, City of Riverside, the Gage Canal Company, and City of Corona. The excerpts below illustrate some of the measures included in Encroachment Permits issued by Riverside County that will need to be addressed by the contractors working on those portions of the RCF project located within unincorporated Riverside County, with respect to traffic issues.

G14. Protection of Traffic: All excavations and work areas shall be properly signed, lighted, and barricaded as deemed necessary by the District Road Maintenance Supervisor or Transportation Department Inspector and in accordance with County Improvement Standards and Specifications, Ordinance Number 461; Section 6 “Public Safety and Convenience” (6.01 through 6.06).

C01. Road Closures: No street shall be closed without expressed approval by the Permit Engineer. A minimum of one lane traffic shall be maintained at all times to provide limited access for the adjoining property owners and emergency vehicles. In the event it is felt by the permittee that there is no alternative to closing a street in order to perform the work, a request by letter complete with detour plans and proposed closure dates must be submitted to the permit engineer, at least four (4) weeks in advance of the

proposed road closure. Road closures, if approved, require a separate permit (no exceptions).

C04. All businesses and property owners affected by the work performed under this permit shall be notified at least 24 hours prior to start of construction. Access to businesses shall be maintained at all times.

C06. At a minimum, temporary traffic control during construction shall conform to the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) and the requirements of the County Traffic Engineer.

C08. All street crossings shall be cut in half-street sections to facilitate the flow of traffic. Under no circumstances shall work be performed on these crossings on Saturdays, Sundays, or holidays.

California Streets and Highways Code Section 890.4 defines bikeways as all facilities that provide primarily for bicycle travel. This section sets forth three categories of bikeways as follows:

- a. Class I bikeways, such as a “bike path,” which provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.
- b. Class II bikeways, such as a “bike lane,” which provide a restricted right-of-way designated for the exclusive or semiexclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.
- c. Class III bikeways, such as an onstreet or offstreet “bike route,” which provide a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists.

### **Design Considerations/Avoidance**

The proposed and alternative alignments are primarily located within street rights-of-way. Since the exact location of the Riverside-Corona Feeder pipeline within any given street will be determined as construction documents are prepared, it is not known what exact encroachment permits will be required. However, boring and tunneling are proposed under Interstate 215, State Route 60, State Route 91, and under some streets and intersections which will reduce traffic impacts from what would have been expected if open trenching across these locations were proposed.

Prior to the completion of a segment’s installation, construction may include backfilling and/or plating of open trenches to allow for traffic to continue using the roadway during times that active construction does not occur.<sup>2</sup>

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<sup>2</sup> Addendum to Traffic Impact Study Report, Riverside-Corona Feeder Realignment Project, October 2009.

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## Potential Significant Impacts/Environmental Consequences

**Threshold:** *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.*

The project is approximately 26.3 linear miles (138,850 linear feet) in length and is described in two Reaches referred to as the Northern Reach and the Central Reach, and as four connections to other regional facilities (Central Feeder Connection, Clay Street Connection, Mockingbird Connection and La Sierra Pipeline).

### *Central Reach*

The Central Reach will span from the intersection of Limonite Avenue and Clay Street, in unincorporated Riverside County, to connect to the alignment near the intersection of Jackson Street and Cleveland Street in the City of Riverside.

The Central Reach of the proposed Riverside-Corona Feeder Realignment begins at the intersection of Limonite Avenue and Clay Street in unincorporated Riverside. The Central Reach continues south under Clay Street from Limonite Avenue and crosses under the Santa Ana River east of Van Buren Boulevard. South of the Santa Ana River, the alignment crosses under Van Buren Boulevard to Doolittle Avenue, continues south under Doolittle Avenue to Van Buren Boulevard, where it continues south under Van Buren Boulevard. The alignment then traverses southeast under Jackson Street to Diana Avenue where it traverses southwest to Wilbur Street, then south under State Route 91. South of State Route 91, the alignment then traverses northeast under Indiana Avenue to Jackson Street, where it then traverses southeast under Jackson Street and connects to the original 2005 project alignment near the intersection of Jackson Street and Cleveland Avenue.

As an option to the Jackson Street alignment, the placement of a portion of the Central Reach would be located under Monroe Street. The Monroe Street alternative alignment would follow the above-described alignment until the intersection of Jackson Street and Colorado Avenue, where it would then traverse northeast under Colorado Avenue to Monroe Street. At Monroe Street, the alignment will continue in a southeast direction to Cleveland Avenue, where it would then traverse southwest under Cleveland Avenue to connect with the original 2005 project alignment at the intersection of Cleveland Avenue and Irving Street.

Construction involved along the Central Reach includes both boring/tunneling and shored open trench construction. Where open trench construction is planned, the shored open trench method is preferred when there is minimal allowable construction width and restricted right-of-way. The required construction width for an open trench with shored walls is 30 to 35 feet, to allow for heavy vehicle operation. An available option to this type of construction is open trench construction with flared sidewalls. Construction may also include backfilling and/or plating the open trench. This will allow for the traffic to continue using the roadway at the time construction does not occur.

The pipeline will be manufactured in 40-foot lengths. A typical work day will allow for the installation of approximately 120 feet of pipeline.

The traffic study for the central reach analyzed nineteen intersections for existing levels of service and existing levels of service with ambient growth. Without future impacts from project construction, three intersections already exceed level of service criteria. Levels of service including the project will temporarily degrade these intersections' level of service, but no additional intersections will permanently exceed the levels of service criteria as a result of the project.

The discussion below identifies each studied intersection within the Central Reach and the phases of project construction that are expected to create an unacceptable level of service for each studied intersection as a result of short term construction impacts:

1. Clay Street / Limonite Avenue (County of Riverside)

- Construction South of the Intersection
- Construction Through the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required.

2. Clay Street / Linares Avenue (County of Riverside)

- Construction North of the Intersection
- Construction South of the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at the intersection, non-peak hour construction and/or additional detours will be required. It is noted that this intersection is expected to operate at an acceptable level of service (LOS) during construction through the intersection.

3. Van Buren Boulevard / Jurupa Avenue (City of Riverside)

The installation of the Riverside-Corona Feeder Realignment Project will include a jack and bore method of construction to cross underneath the intersection of Van Buren Boulevard and Jurupa Avenue. This method will not cause an impact to the intersections during any phases of construction.

4. Van Buren Boulevard / Arlington Avenue (City of Riverside)

- Construction South of the Intersection
- Construction North of the Intersection

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In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required. The installation of the Riverside-Corona Feeder Realignment Project will include a jack and bore method of construction to cross underneath the intersection of Van Buren Boulevard and Arlington Avenue. This method will not cause an impact to the intersections during the construction phase through/underneath the intersection.

5. Van Buren Boulevard / Jackson Street (City of Riverside)

- Construction North of the Intersection
- Construction East of the Intersection
- Construction Through the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required.

6. Jackson Street / Colorado Avenue (City of Riverside)

- Construction South of the Intersection
- Construction North of the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required. This intersection is expected to operate at an acceptable LOS during construction east of the intersection and through the intersection.

7. Jackson Street / California Avenue (City of Riverside)

- Construction South of the Intersection
- Construction North of the Intersection
- Construction Through the South Side of the Intersection
- Construction Through the North Side of the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required.

8. Jackson Street / Garfield Street (City of Riverside)

- Construction South of the Intersection
- Construction North of the Intersection
- Construction Through the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required.

9. Jackson Street / Magnolia Avenue (City of Riverside)

- Construction South of the Intersection
- Construction North of the Intersection
- Construction Through the South Side the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required. This intersection is expected to operate at an acceptable LOS during construction through the north side of the intersection.

10. Jackson Street / Indiana Avenue (City of Riverside)

- Construction South of the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required. This intersection is expected to operate at an acceptable LOS during construction west of the intersection.

11. Jackson Street / Lincoln Avenue (City of Riverside)

- Construction North of the Intersection
- Construction Through the North Side of the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required. This intersection is expected to operate at an acceptable LOS during construction through the south side of the intersection and south of the intersection.

12. Jackson Street / Victoria Avenue (City of Riverside)

The intersection is expected to operate at an acceptable level of service during all four construction phases (south and north of the intersection and through the north and south sides of the intersection).

13. Monroe Street / Colorado Avenue (City of Riverside)

The intersection is expected to operate at an acceptable level of service during both of construction phases (south and west of the intersection).

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14. Monroe Street / California Avenue (City of Riverside)

- Construction Through the South Side of the Intersection
- Construction Through the North Side of the Intersection

In order to achieve satisfactory levels of service during the impacted phases of construction at this intersection, non-peak hour construction and/or additional detours will be required. Acceptable LOS is expected during construction south of this intersection and north of this intersection.

15. Monroe Street / Garfield Street (City of Riverside)

The intersection is expected to operate at an acceptable level of service during both construction phases (south of the intersection and north of the intersection).

16. Monroe Street / Magnolia Avenue (City of Riverside)

The intersection is expected to operate at an acceptable level of service during all four construction phases (south of the intersection, north of the intersection, through the north side of the intersection and through the south side of the intersection).

17. Monroe Street / Indiana Avenue (City of Riverside)

The intersection is expected to operate at an acceptable level of service during all four construction phases (south of the intersection, north of the intersection, through the north side of the intersection and through the south side of the intersection).

18. Monroe Street / Lincoln Avenue (City of Riverside)

The intersection is expected to operate at an acceptable level of service during all four construction phases (south of the intersection, north of the intersection, through the north side of the intersection and through the south side of the intersection).

19. Monroe Street / Victoria Avenue (City of Riverside)

The intersection is expected to operate at an acceptable level of service during four construction phases (south of the intersection, north of the intersection, through the north side of the intersection and through the south side of the intersection).

20. La Sierra Avenue / Cleveland Avenue (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

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21. La Sierra Avenue / Dufferin Avenue (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

22. La Sierra Avenue / McAllister Parkway (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

23. La Sierra Avenue / Orchard View Lane (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

24. La Sierra Avenue / Lake Knoll Parkway (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

25. La Sierra Avenue / Lake Crest Drive (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

26. La Sierra Avenue / Blackburn Road (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

27. La Sierra Avenue / El Sobrante Road (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

28. Pedley Road / 56th Street (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

29. Pedley Road / 58th Street (County of Riverside)

The construction of the project at this intersection will require all movements to be detoured due to insufficient road width to facilitate the required construction width and travel way.

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30. Pedley Road / Limonite Avenue (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

31. Baldwin Avenue / Limonite Avenue (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

32. Clay Street / Limonite Avenue (County of Riverside)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

33. Alabama Street / San Bernardino Avenue (County of San Bernardino)

This intersection is expected to operate at an acceptable level of service during the time of project construction.

34. SR-210 SB Ramps / San Bernardino Avenue (County of San Bernardino)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

35. SR-210 NB Ramps / San Bernardino Avenue (City of Redlands)

In order to achieve satisfactory levels of service during construction at this intersection, non-peak hour construction and/or detours will be required.

36. Texas Street / San Bernardino Avenue (City of Redlands)

The construction of the project at this intersection will require all movements to be detoured due to insufficient road width to facilitate the required construction width and travel way.

Traffic increases due to the proposed project will consist of construction worker vehicles and trucks hauling dirt or delivering materials. The numbers of vehicles varies somewhat depending on the type of construction being performed, tunneling/boring or traditional trenching. The proposed project's traffic will represent a small increase in relation to the existing traffic in some areas and a larger increase in relation to existing traffic in other locations. In general, however, impacts to traffic from the project will consist of minor (less than 100 trips per day) short-term increases in vehicle trips which will be a less than significant increase in traffic.

Based on the traffic study, it is concluded that the traffic impacts generated from the installation of the pipeline along the Central Reach will require non-peak hour construction and/or detours

for 27 of the 36 studied intersections. With implementation of mitigation measure **MM Trans 2**, impacts at study area intersections will be less than significant.

### *Northern Reach*

The Northern Reach will span from the intersections of Waterman Avenue and Orange Show Road in the City of San Bernardino to the intersection of Limonite Avenue and Clay Street in unincorporated Riverside County.

Construction involved along the Northern Reach will be similar to that along the Central Reach and will include both boring/tunneling and shored open trench construction. Where open trench construction is planned, the shored open trench method is preferred when there is minimal allowable construction width and restricted right-of-way. The required construction width for an open trench with shored walls is 30 to 35 feet, to allow for heavy vehicle operation. An available option to this type of construction is open trench construction with flared sidewalls. Construction may also include backfilling and/or plating the open trench. This will allow for the traffic to continue using the roadway at the time construction does not occur.

The pipeline will probably be manufactured in 40 foot lengths. A typical work day will allow for the installation of approximately 120 feet of pipeline.

As the precise alignment of the pipeline and the exact width of the construction zone at each location have not yet been established, the specific area of blockage and the impacts related to the blockage cannot be identified for each affected roadway. The following discussion, therefore, focuses on the impacts which would typically occur during construction of this pipeline.

There are two ways that pipeline construction activities would interface with the roadway network. Construction would either cross a roadway or it would run parallel to a roadway within or adjacent to the public right-of-way. At the locations where the pipeline would run parallel to and/or longitudinally within a roadway, portions of the roadway which are currently used for traffic circulation and/or parking would be temporarily displaced. Detours around each construction zone would be necessary.

Another impact would be the generation of additional traffic on the roadways in the project area as construction workers, equipment delivery trucks, and excavation trucks travel to and from the pipeline construction zone. It is expected that most laborers would be meeting in a staging yard and would be transported to the construction site in the work trucks and pick-up trucks. The impacts of employee traffic on specific streets and intersections cannot be determined as the locations of the staging areas have not been established.

The automobile traffic generated by construction workers would be at two specific times during the day – arriving at the staging areas in the morning and leaving in the afternoon (for a daytime shift). The truck trips would be distributed throughout the day. As compared to the existing traffic volumes on the streets serving the project area, the temporary increase in traffic generated by the construction of the pipeline would be minimal. The impact of automobile traffic and truck trips would be adverse but not significant with the utilization of staging areas, assuming the implementation of mitigation measures below.

Construction of the project's Mockingbird Connection, does not require the analysis of any intersections since the proposed pipeline will not affect any General Plan intersections. At its connection underneath Van Buren Boulevard, a jack and bore method of construction shall be used so construction will not impact the roadway segment. Construction shall be handled so as to continue to allow access to local residents.

With implementation of the following mitigation measures, **MM Trans 2** through **MM Trans 9**, WMWD would be required to provide traffic control plans for the project that detail project impacts, and would also require coordination with affected jurisdictions and other a specific construction methods to be employed; therefore, impacts are considered **less than significant with mitigation**.

***Threshold:** Conflict with adopted policies, plans, or programs supporting alternative transportation.*

#### *Public Transit*

The proposed project will be constructed primarily in road rights-of-way. The primary impact regarding public transit is the effect of pipeline construction on roads in which the Riverside Transit Agency (RTA) and Omnitrans buses travel on roadways that will be physically blocked by construction activities. The loss of lanes on the roadways described would result in disruption to transit service. Buses could continue to operate, as the streets and highways would not be blocked; however, there would be traffic delays and some of the bus stops would be rendered temporarily inaccessible for a period of one to two weeks.

Lack of coordination with or consideration for public transportation would be considered a temporary but potentially significant impact. With implementation of mitigation measures **MM Trans 1** and **MM Trans 10** below, impacts will be reduced to less than significant levels.

#### *Pedestrian/Bicycle Circulation*

As described above, the proposed and alternative alignments of the proposed project are primarily located within street rights-of-way located within the boundaries of the cities of Colton, Redlands, Rialto, Riverside, and San Bernardino, and unincorporated areas of the counties of Riverside and San Bernardino. Pedestrian and bicycle circulation within these jurisdictions, as designed in their general plans, may be affected by the pipeline construction activities if pedestrians are unable to pass through the construction zone or if established bike routes are blocked or eliminated. Potential impacts to pedestrian and bicycle circulation may affect pedestrian and bicycle routes that cross the alignment as well as those that are parallel to the alignment (e.g., sidewalks, shoulders, unpaved paths, and bike trails). The following discussion lists those portions of the proposed project (by road segment) that are identified by Colton, Redlands, Rialto, Riverside, San Bernardino, Riverside County and San Bernardino County as either being the location of designated trails and/or bikeways or as crossing designated trails and/or bikeways.

*City of Colton*

A portion of the Northern Reach of the proposed project traverses through the City of Colton. Construction of that portion of the Northern Reach located within the City of Colton has the potential to affect bicycle routes, identified by Figures 4a and 4b of the City of Colton General Plan’s Circulation Element. Construction of the proposed project within the road segments listed in **Table 4.12-D, City of Colton Bicycle Routes** may potentially impact these identified bicycle routes. The Northern Reach will not parallel or intersection any Regional Multi-Purpose Trails (Class I) within the City of Colton.

**Table 4.12-D  
City of Colton Bicycle Routes**

Roadway Segment	Bicycle Routes
Fairway Drive	Future Class II Bicycle Route
Valley Boulevard	Existing Class II Bicycle Route
La Cadena Drive	Proposed Class II Bicycle Route
Agua Mansa Road	Future Class II Bicycle Route

The Colton General Plan’s Circulation Plan states that “All City of Colton bicycle routes will be established as bicycle lanes which will be striped and signed on the surface streets shown on Figures 4a and 4b. These bicycle routes are classified as Class II bikeways per Caltrans standard.” (p. 23)

Development of the Northern Reach through the City of Colton has the potential to temporarily disrupt the use of any of the Class II Bicycle Routes listed in **Table 4.12-D** that have been established prior to the beginning of construction activities. However compliance with mitigation measures **MM Trans 11** and **MM Trans 12** will reduce the potential impact to below the level of significance.

*City of Corona*

The proposed project does not include construction within the City of Corona. However, a portion of Reach H of the 2005 Project Alignment traverses through the City of Corona, terminating at the intersection of Compton Avenue and Ontario Avenue. Construction of that portion of Reach H has the potential to affect a bicycle trail identified by the city’s general plan. The road segment containing the designated bicycle trail is listed in **Table 4.12-E, City of Corona Bike Trails**. The proposed project will not parallel or intersect any other designated regional or local trails within the City of Corona.

**Table 4.12-E**  
**City of Corona Bike Trail**

<b>Roadway Segment</b>	<b>Bike Trails</b>
Magnolia Avenue	Planned Class III Bike Route

The City of Corona General Plan describes Class III Bike Routes as “designated bike routes noted by signs alongside roadways but without separate striping.” (p. 140) Development of Reach H of the 2005 Project Alignment through the City of Colton has the potential to temporarily disrupt the use of any of the Class III Bike Route listed in **Table 4.12-E** if the bike route has been established prior to the beginning of construction activities. However compliance with mitigation measures **MM Trans 10** and **MM Trans 11** will reduce the potential impact to below the level of significance.

*City of Redlands*

There are no existing or proposed trails within the construction area for the Central Feeder Connection facilities located in San Bernardino County/Redlands.

*City of Rialto*

A portion of the Northern Reach of the proposed project traverses through the City of Rialto. The proposed project will enter the City of Rialto from the City of Colton on Agua Mansa Road and continue southwest in Agua Mansa Road into unincorporated San Bernardino County. There are no designated trails or bikeways along Agua Mansa Road within the City of Rialto.

*City of Riverside*

A portion of the Central Reach of the proposed project traverses through the City of Riverside, including the component referred to as the Mockingbird Connection. Additionally, Reach E, Reach F, Reach G and a portion of Reach H of the 2005 Project Alignment traverses through the City of Riverside. Construction of that portion of the Central Reach located within the City of Riverside has the potential to affect trails and bikeways identified by Figure CCM-6 (Master Plan of Trails and Bikeways) of the City of Riverside General Plan’s Circulation Element. Construction of the proposed project within the road segments listed in **Table 4.12-F, City of Riverside Trails and Bikeways**, may potentially impact these identified trails and bicycle paths.

**Table 4.12-F  
City of Riverside Trails and Bicycle Bikeways**

<b>Roadway Segment</b>	<b>Trails &amp; Bikeways</b>
<b>Central Reach</b>	
Van Buren Boulevard (north of Doolittle Avenue)	Crosses a Class 1 Bike Path/Regional Trail (County), Primary – Equestrian, Bike & Pedestrian Trail and Class 1 Bikeway
Van Buren Boulevard (south of Doolittle Avenue)	Class 2 Bikeway
Jackson Street (north of Diana Avenue)	Class 2 Bikeway
Indiana Avenue	Class 2 Bikeway
Jackson Street (south of Indiana Avenue)	Class 2 Bikeway and crosses a Primary – Equestrian, Bike & Pedestrian Trail and Class 1&2 Bikeway at Victoria Avenue
<b>Monroe Street Alternative</b>	
Colorado Avenue	Class 2 Bikeway
Monroe Street	Class 2 Bikeway
Cleveland Avenue	Class 2 Bikeway and crosses a Primary – Equestrian, Bike & Pedestrian Trail and Class 1&2 Bikeway at Victoria Avenue
<b>Mockingbird Connection</b>	
Irving Street	Connects to Irving Street, Primary – Equestrian, Bike & Pedestrian Trail
Van Buren Blvd.	Crosses a Parkway and crosses Secondary Trails located in Riverside County
<b>2005 Project Alignment – Reach E</b>	
Irving Street	Primary – Equestrian, Bike & Pedestrian Trail
<b>2005 Project Alignment – Reach F</b>	
Cleveland Avenue	Crosses a Primary – Equestrian, Bike & Pedestrian Trail at Irving Street, crosses a Class 2 Bikeway at Van Buren Boulevard, crosses a County Regional Trail at Myers Street, and crosses a Secondary – Equestrian, Bike & Pedestrian Trail at Stewart Street
La Sierra Avenue	Class 2 Bikeway
Indiana Avenue	Class 2 Bikeway
<b>2005 Project Alignment – Reach G</b>	
Reach G will not parallel or intersection any designated trails and bikeways.	
<b>2005 Project Alignment – Reach H</b>	
Indiana Avenue	Class 2 Bikeway

The City of Riverside General Plan’s Circulation and Community Mobility Elements states that:

“The City designates Class I and Class II bicycle facilities throughout the City. The bicycle facilities are shown on Figure CCM-6 (Master Plan of Trails and Bikeways). Class I bikeways provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians. Class II bikeways provide a restricted right-of-way on a roadway's shoulder designated for the exclusive or semi-exclusive use of bicycles. Victoria Avenue’s bike path will continue to be a key Class I facility, with similar routes strongly encouraged as part of developing areas. Currently the City and County trails are not completely coordinated. The County trails plan is a conceptual plan at this time and many of the City’s trails have not yet been built.” (p. CCM-29)

Development of the Central Reach, The Mockingbird Connection, and portions of Reaches E, F and H of the 2005 Project Alignment through the City of Riverside has the potential to temporarily disrupt the use of any of the trails and bikeways listed in **Table 4.12-F** that have been established prior to the beginning of construction activities. However compliance with mitigation measures **MM Trans 11** and **MM Trans 12** will reduce the potential impact to below the level of significance.

*City of San Bernardino*

A portion of the Northern Reach of the proposed project traverses through the City of San Bernardino. Construction of that portion of the Northern Reach located within the City of San Bernardino has the potential to affect bicycle routes, identified by Figure PRT-2 (Concept Trail System) in Chapter 8 (Parks, Recreation and Trails) of the City of San Bernardino General Plan. Construction of the proposed project within the road segment listed in **Table 4.12-G, City of San Bernardino Trail and Bicycle Route** may potentially impact the identified trail and bicycle route.

**Table 4.12-G**  
**City of San Bernardino Trail and Bicycle Route**

Roadway Segment	Trail and Bicycle Route
Orange Show Road	Bicycle Route from near Waterman Avenue Orange Show Road west to E Street. Crosses a designated Regional Multi-Purpose Trail located along Twin Creek Channel

The City of San Bernardino General Plan (pp. 8-11 and 8-12) describes the types of facilities listed in **Table 4.12-G** as:

“**Regional Multi-Purpose Trails.** These multi-purpose trails serve bicycle, pedestrian, and in some cases, equestrian users and provide regional connections. We have the Cajon/Lytle, the Mid-City, Sand Canyon, City Creek, and Loma Linda Connector trails in San Bernardino.

**Bicycle Routes.** We have numerous existing and planned bicycle routes in our Community, both on and off-street. The Bikeway Facilities Master Plan, which was adopted in 1994, describes a process in which we will develop a safe and efficient network of bike paths for recreation and commuter use. The following system, which is derived from the State of California, categorizes bicycle facilities into the following three classifications:

- **Class I Bikeways.** A Class I Bikeway is a dedicated travel-way for bicyclists. The most common applications for Class I Bikeways are along rivers, canals, and utility rights-of-way, within college campuses, or within and between parks. They may also be provided as part of planned developments. Our Class I Bikeways are included in the Multi-Purpose Trails described above and share right-of-way with other users.
- **Class II Bikeways.** Class II Bikeways delineate the right-of-way assigned to bicyclists along roadways. Bike lane signs and pavement markings help define these “bike lanes.”
- **Class III Bikeways.** Class III Bikeways are shared facilities that serve either to provide continuity to other bicycle facilities, or designate preferred routes through high demand corridors. Bike routes are normally shared with motor vehicles on the street, or with pedestrians on sidewalks. In either case, bicycle use is secondary.”

Development of the Northern Reach through the City of San Bernardino has the potential to temporarily disrupt the use of the Bicycle Route located along Orange Show Road, if the bicycle route is established prior to the beginning of construction activities. Compliance with mitigation measures **MM Trans 11** and **MM Trans 12** will reduce the potential impact to below the level of significance. Construction of the Northern Reach will not adversely impact the Regional Multi-Purpose Trail located along Twin Creek Channel due to the planned use of the jack and bore construction method for pipeline construction under the Twin Creek Channel.

#### *County of Riverside*

A portion of the Northern Reach and a portion of the Central Reach of the proposed project traverse through unincorporated Riverside County. Additionally, portions of Reach E, Reach F and Reach H of the 2005 Project Alignment traverse unincorporated Riverside County. Construction of those portions of the Central Reach and the Northern Reach located within the unincorporated portion of Riverside County has the potential to affect trails and bikeways identified by Figure C-7 (Riverside County Trails and Bikeway System) of the County of Riverside General Plan’s Circulation Element. Construction of the proposed project within the road segments listed in **Table 4.12-H, County of Riverside Trails and Bike Paths** may potentially impact these identified trails and bicycle paths.

**Table 4.12-H  
County of Riverside Trails and Bike Paths**

<b>Roadway Segment</b>	<b>Trails/Bike Paths</b>
<b>Northern Reach</b>	
Market Street	Class 1 Bike Path/Regional Trail
Avalon Street	Crosses JARPD designated Class 1 Bike Path/Regional Trail on north side of SR-60
Mission Boulevard	Class 1 Bike Path/Regional Trail
Riverview Drive/Limonite Avenue	Class 1 Bike Path/Regional Trail, Crosses Community Trail at intersection of Limonite Avenue and Riverview Drive and crosses Historic Trail (Juan Bautista de Anza National Trail corridor) east of Clay Street
<b>Central Reach</b>	
Santa Ana River	Crosses Regional Trail along north side of Santa Ana River and Class 1 Bike Path/Regional Trail along south side of Santa Ana River
<b>Clay Street Connection</b>	
Limonite Avenue	Class 1 Bike Path/Regional Trail
Pedley Road	Regional Trail
<b>La Sierra Pipeline Connection</b>	
La Sierra Avenue	Parkway
<b>2005 Project Alignment – Reach E</b>	
Firethorne Avenue	Crosses Regional Trail
<b>2005 Project Alignment – Reach H</b>	
Indiana Avenue	Crosses a Regional Trail near the Riverside city limits and a Class I Bike Path/Regional Trail near the Corona city limits

The County of Riverside General Plan (p. C-44) describes the types of facilities listed in **Table 4.12-H** as:

“Riverside County’s bikeway system is included as part of the County’s circulation system. Planned bicycle routes are shown on the Bikeways and Trails Plan, Figure C-7. The County uses three types of bike path classifications:

**Class I** –Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross-flow minimized.

**Class II** - Provides a striped lane for one-way bike travel on a street or highway.

**Class I Bike Path/Regional Trail (Combination Trail)** - This functions as a regional connector to link all of the major bodies of water in Western Riverside County and to provide the opportunity for long-distance users to take advantage of this system for long one-way or loop type trips. This system may also take advantage of existing or planned

Class I Bike Paths, Regional Trails, and/or Community Trails for several combinations of easements, connections, or links. Bicycles are also allowed on regional and community trails, which allow all types of non-motorized use. However, Class I bike paths and Class II bike lanes are designed for bicycle use only. As with non-motorized trails, a connected system of bikeways is needed to encourage this alternative transportation method among County residents.”

Development of portions of the Northern Reach, the Clay Street Connections and portions of Reaches E and H, through the unincorporated portion of Riverside County has the potential to temporarily disrupt the use of any of the bike paths and regional trails listed in **Table 4.12-H** that have been established prior to the beginning of construction activities. However compliance with mitigation measures **MM Trans 10** and **MM Trans 11** will reduce the potential impact to below the level of significance. The mapped Juan Bautista de Anza National Trail corridor shows the approximate location of the historic trail, but the trail itself does not physically exist in vicinity of the proposed project. Therefore, construction of the Northern Reach will not impact the historic trail. Due to the use of the jack and bore construction method to construction the proposed Central Reach under the Santa Ana River, the proposed project will avoid impacts to the identified Regional Trail and Class 1 Bike Path/Regional Trail located along the Santa Ana River.

*County of San Bernardino*

Construction of that portion of the Northern Reach located within the unincorporated portion of San Bernardino County has the potential to affect a trail identified by the San Bernardino County General Plan Open Space Element. Construction of the proposed project within the road segment listed in **Table 4.12-I, County of San Bernardino Trails** may potentially impact the identified trail. No bicycle facilities are identified along this portion of the Northern Reach.

**Table 4.12-I**  
**County of San Bernardino Trails**

<b>Roadway Segment</b>	<b>Trails</b>
Agua Mansa Road	Crosses a Proposed Regional Trail

Development of the Northern Reach through as unincorporated portion of San Bernardino County has the potential to temporarily disrupt the use of the identified proposed regional trail, if said trail has been established prior to the beginning of construction activities. However compliance with mitigation measures **MM Trans 11** and **MM Trans 12** will reduce the potential impact to below the level of significance.

### **Realignment Alternatives Proposed Mitigation Measures/Minimization**

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts related to traffic and transportation impacts to below the level of significance.

*As described above, the following mitigation measures **MM Trans 1** and **MM Trans 2** set forth in the 2005 Certified Program EIR are still applicable to the proposed Riverside Corona Feeder Pipeline Realignment project. Mitigation measures **MM Trans 1a, 2a, and 3** through **MM Trans 12** have been added in this SEIR/EIS to address potential impacts related to the construction of the realigned pipeline and connection facilities. Mitigation measures TRAF-1 through TRAF-7 are mitigation measures established in the Reaches E, F, and G 2008 Refinement EIR. The measures below mitigate the same issues and provide a consolidated approach to mitigation for all the project alternatives. Thus, the MMs below indicate which measures from the “TRAF” list are addressed by that MM. For example, MM Trans 2a shall be used in lieu of TRAF-1 through TRAF-3 and TRAF 6, which all deal with traffic control plans. Two of the TRAF series mitigation measures are applicable to the entire project and are listed last as MM Trans 13 through MM Trans 14.*

**MM Trans 1:** Bus stops and signs-temporarily removed or closed by the proposed project shall be replaced and posted pursuant to the standards and requirements of the affected transit agency.

**MM Trans 1a:** WMWD shall coordinate the potential temporary closure of bus stops with the affected public transit agency (RTA and/or Omnitrans) to set up and comply with a collection and storage procedure that safeguards any bus stop furniture, such as bus shelters, passenger waiting benches, trash receptacles and bus stop signage, that must be removed prior to commencement of individual construction projects.

**MM Trans 2:** A Traffic Control and Safety Plan shall be prepared for each reach of construction. WMWD shall coordinate with affected transit agencies, schools, fire stations and other affected local jurisdictions on the preparation of each Traffic Control and Safety Plan. Traffic Control and Safety Plans may include, but not be limited to, such things as adjusted hours of construction in certain locations, signs, flagmen, adequate notice of construction schedules, and cones or barriers to detour traffic. The Traffic Control and Safety Plan for each Reach shall be completed and notice/information given to affected sensitive sites at least 30-days prior to the anticipated disruption to be caused by construction.

**MM Trans 2a:** (TRAF-1 through TRAF 3 and TRAF-6): Based on the Traffic Impact Study Report and Traffic Impact Study Report Addendum prepared for the project, it is concluded that the traffic impacts generated from the installation of the pipeline will require implementation of mitigation which may include non-peak hour construction (AM peak hours are 7:00 a.m. to 9:00 a.m., PM peak hours are 4:00 p.m. to 6:00 p.m.), temporary lane closures, temporary lane shifts using channelizing devices, temporary signal phasing modifications, and detours to divert traffic through nearby streets. A Traffic Control and Safety Plan shall be prepared for each reach of project construction. Traffic Control and Safety Plans shall implement recommendations on pages 1-3 through 1-12 of the Traffic Study and 1-3 through 1-6 of the Traffic Study Addendum,

and shall ensure that all vehicular/pedestrian/bike connections are maintained throughout the construction period and may include, but not be limited to, such things as:

- identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow;
- circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone;
- procedures to limit lane closures during peak hours to the extent possible;
- haul routes that would minimize truck traffic on local roadways to the extent possible;
- detours for bicycles and pedestrians in all areas potentially affected by project construction;
- procedures ensuring that open trenches subject to vehicular or pedestrian traffic would be covered at the end of each workday with metal plates capable of accommodating traffic;
- the installation of traffic control devices as specified in the California Manual on Uniform Traffic Control Devices;
- the installation of safety fencing, where needed, to protect pedestrians from construction areas;
- applicable railroad safety and engineering guidelines that would be adhered to when installing pipeline within a railroad right-of-way, and by which all construction crews and project personnel would be trained on applicable railroad safety guidelines prior to commencing work within the railroad right-of-way;
- procedures by which construction vehicles and equipment would not cross the tracks except at established public crossings or as specified by the applicable railroad company;
- developed access plans to be implemented for highly sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, affected jurisdictions shall be asked to identify detours for emergency vehicles, which will then be posted by the contractor. The facility owner or operator shall be notified in advance of the timing, location, and duration of construction activities and the locations of detours and lane closures;
- procedures to store construction materials only in designated areas;
- coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary; and
- plans to restore all roads disturbed during project construction to their preconstruction condition, pursuant to franchise agreements with an applicable jurisdiction.

**MM Trans 3:** Prior to the commencement of each individual construction project, WMWD shall consult with the affected local jurisdiction(s) in order to coordinate project construction with applicable Capital Improvement Projects.

**MM Trans 4:** WMWD shall restrict all necessary lane closures or obstructions along the Northern Reach on major roadways to off-peak periods in urbanized areas to mitigate traffic congestion and delays which would be caused by lane closures during construction and by exploratory excavations. Lane closures must not occur between 7:00 a.m. and 9:00 a.m. and

between 4:00 p.m. and 6:00 p.m., or as directed in writing by the affected public agency. Alternatively, WMWD shall consider nighttime construction in areas where no residences are located within 500 feet, and where traffic impacts could be reduced by avoidance of daytime construction. WMWD shall have a Traffic Management Plan prepared by a registered Traffic Engineer for the Northern Reach, describing which traffic lanes would require closure based on the pipeline location within each street, and where night construction is proposed. This plan shall be approved by each affected local jurisdiction prior to construction and implementation by WMWD.

**MM Trans 5:** Prior to finalizing plans for individual construction projects, WMWD shall identify all land uses along the right-of-way where project construction may adversely affect vehicular access to driveways. Where practicable, WMWD shall install the pipeline in a street location or in a manner which minimizes access problems WMWD shall also develop construction scheduling in a manner that minimizes impacts to businesses or residential areas, scheduling construction to avoid the hours or days of the week during which businesses receive the most customers, and avoiding peak traffic times adjacent to residential areas.

**MM Trans 6:** WMWD shall give written notification to all landowners, tenants, business operators, and residents along the right-of-way of the construction schedule, and shall explain location and duration of the pipeline and construction activities within each street (e.g., which lane/s will be blocked, at what times of day, and on what dates). WMWD shall identify any potential obstructions to driveway access, and if necessary shall make alternative access provisions. The written notification shall include a toll-free telephone number for business coordination and shall encourage affected parties to discuss their concerns with WMWD prior to the start of construction so individual problems and solutions can be identified. Alternative access provisions shall include WMWD-provided signage and alternate parking as provided and approved by local agencies.

**MM Trans 7:** WMWD shall submit the location of proposed staging area(s) to appropriate local jurisdictions for review and approval. WMWD shall state the size of the area, the purpose (e.g., storage of construction equipment and employee parking), the number of vehicles and pieces of equipments to be stored, and the duration (in number of days and number of hours per day) that each staging area will be used.

**MM Trans 8:** WMWD shall provide a shuttle bus service for construction workers from convenient off-street parking areas to the work sites to minimize traffic volumes and parking demand at the work sites. Sufficient off-street parking shall be provided at the bus service staging areas so that adjacent or nearby parking facilities are not adversely affected. Multiple staging areas shall be utilized, if necessary, to reduce traffic impacts on the roadways serving the staging areas. A plan for use of shuttle buses and parking areas shall be submitted to the affected local jurisdictions for review and written approval.

**MM Trans 9:** Based on the Traffic Impact Study Report Addendum prepared for the project, it is concluded that the traffic impacts generated from the installation of the pipeline at the Mockingbird Connection underneath Van Buren Boulevard shall utilize a jack and bore method of construction so that construction will not impact traffic. Construction shall be handled so as to continue to allow access to local residents.

**MM Trans 10:** WMWD shall coordinate in advance with public transit agencies (RTA and Omnitrans) to avoid disruption to transit operations. Public transit agencies which operate bus routes on the roadways potentially affected by the proposed construction activities shall be informed in advance of the pipeline project and the potential impacts at the bus stop locations. Alternative pick-up/drop off locations shall be determined and signed appropriately. WMWD shall document coordination with transit agencies and provide documentation to the public agencies prior to the start of construction.

**MM Trans 11:** WMWD shall provide alternative pedestrian/bicycle access routes and trails to avoid obstruction to pedestrian/bicycle circulation. Where existing pedestrian circulation routes or bike trails would be obstructed by pipeline construction, alternative access routes shall be identified in consultation with the local jurisdiction and signed/marked appropriately.

**MM Trans 12 (TRAF-7):** WMWD shall restore any impacted public street, sidewalks, bikeways and trails to their pre-construction condition, following completion of each individual construction project as mutually agreed between WMWD and the local jurisdiction prior to construction.

**MM Trans 13 (TRAF-4):** Encroachment permits for all work within public rights-of-way shall be obtained from each involved agency prior to commencement of any construction. WMWD shall comply with all traffic control requirements of the affected local agencies.

**MM Trans 14 (TRAF-5):** As required by local jurisdictions, the proposed pipeline shall be jacked under select major intersections to avoid traffic disruption and congestion.

#### **Realignment Alternatives Determination of Significance under CEQA**

As stated in the 2005 PEIR, impacts to traffic and transportation impacts would be less than significant after incorporating **MM Trans 1** and **MM Trans 2**. The 2005 PEIR remains adequate to address potential impacts related to traffic hazards and the mitigation measures contained therein, as described above, will be applicable to the proposed project.

With implementation of mitigation measure **MM Trans 1** through **MM Trans 14**, impacts to traffic and transportation will be **less than significant**.

#### **4.12.4 No Project/Action Alternative**

The No Project/Action does not cause any revisions or action therefore no traffic impacts will result.

## 4.13 CUMULATIVE IMPACTS

### Introduction

The California Environmental Quality Act (CEQA) requires that an EIR examine the cumulative impacts associated with a project, in addition to project-specific impacts. The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone (CEQA Guidelines Section 15130(b)).

As stated in the CEQA Guidelines, an EIR “shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable (Section 15130(a)). “Cumulatively considerable” means that “the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130” (Section 15065(c)). Section 15355 of the CEQA Guidelines states that “cumulative impacts” occur from “...the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through fair share fee-payment programs designed to alleviate the cumulative impact. The EIR must examine “reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project” (CEQA Guidelines Sections 15130(a)(3) and 15130(b)(5)).

CEQA Guidelines Section 15130(b)(1) requires that a discussion of cumulative impacts be based on either a list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

This SEIR utilizes the “summary of projections,” or “plan” approach and/or the “list” approach in the cumulative analysis, as described below. Section 15130(d) of the CEQA Guidelines states that, “Previously approved land use documents such as general plans, specific plans, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impact analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have been adequately addressed, as defined in Section 15152(f), in a certified EIR for that plan.” Additionally, if a cumulative impact was adequately addressed in a prior EIR for a community or regional level plan, and the project is consistent with that plan

or action, then an EIR for such a project should not further analyze that cumulative impact. (Section 15130(e) of the CEQA Guidelines)

Council on Environmental Quality regulations implementing NEPA state that a cumulative impact “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” (40 CFR 1508.7)

There are two distinct types of impacts associated with the RCF project; temporary construction-related and operations. Construction-related impacts are primarily associated with the actual location of construction so the “list” of other reasonably foreseeable project’s approach will be used for cumulative construction impacts. Capital Improvement Plans (CIPs) and websites for various public agencies were reviewed including: City and County of San Bernardino; cities of Rialto, Colton, Redlands; San Bernardino Valley Municipal Water District; riverside Public Utilities, and Inland Empire Utility Agency; to determine likely projects that may be anticipated along the route of the RCF.

Operations-related impacts would be primarily related to the groundwater basins which the project will affect. The cumulative evaluation of operations impacts will be based on the “plan” method outlined under CEQA. In this case, the most appropriate “plans” to use as a basis for analysis are the basin management plans associated with the San Bernardino Groundwater Basin (Basin Area) and the Chino Groundwater Basin (Chino Basin), and the court judgments that affect each basin. These documents are utilized because the geographic area addressed in the documents encompasses the groundwater basins associated with project operations in San Bernardino and Riverside counties and include other water supply related projects and city general plan data that could be potentially impacted by the project’s contribution to cumulative impacts. The other operations-related issue is greenhouse gas emissions as they relate to energy consumption required to pump water.

### **Cumulative Impact Setting - Construction-Related**

As stated above, the CIP and projects lists on websites were checked for reasonably foreseeable major projects within the vicinity of RCF. No future projects were identified in the immediate vicinity however, both Riverside and San Bernardino have indicated that projects have been recently completed near Van Buren Boulevard and the SAR, and Orange Show Road and the I-215, respectively. In addition, individual custom homes are being and will be built within approved Tract No. 34059 adjacent to the Mockingbird Connection facilities; however, the timing of custom home construction is speculative.

Although not directly adjacent to the project alignment, the IEUA (in conjunction with WMWD and City of Ontario) will be constructing the Chino Desalter Phase 3 project between now and 2015, which includes wells and pipelines in the Jurupa and Eastvale areas of Riverside County and the cities of Chino and Ontario in San Bernardino County.

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## **Cumulative Impact Setting - Operations-Related**

This cumulative analysis setting discussion describes the range of issues covered by the Draft Upper Santa Ana Integrated Watershed Plan - An Integrated Regional Water Management Plan (IRWMP) and the Western Judgment for the Basin Area, and the Optimum Basin Management Program (OBMP) PEIR and the Chino Judgment for the Chino Basin. Because these documents describe potential project related and cumulative impacts over time in each basin and the court-ordered parameters within which each basin must operate, background information is included below that describes the existing condition the operating strategies of these groundwater basins, as analyzed/required by these documents. This information facilitates a full understanding of the scope of change envisioned within the cumulative impact area of which the project is a part and upon which the below analysis of cumulative impacts is based.

### **San Bernardino Groundwater Basin**

For the Upper Santa Ana River Watershed, an Integrated Regional Water Management Plan (IRWMP) is being prepared, consistent with SAWPA's larger plans, by the Upper Santa Ana Water Resources Association (Association) to address major water management issues. San Bernardino Valley Municipal Water District (Valley District), as the regional water agency, agreed to lead the planning effort. The main benefit of the IRWMP is the development of a process for managing the San Bernardino Basin Area. (See also Section 2.1, Background, for more information about SAWPA.)

The Association is composed of nine agencies in the Upper SAR watershed that share a common concern for the region's surface and groundwater resources. In 2005, the Association formed a Regional Water Management Group for the purpose of developing an IRWM Plan. The Regional Water Management Group is called the Technical Advisory Committee (TAC).

The geographic area of the portion of the Santa Ana River (SAR) watershed that the IRWMP encompasses includes Big Bear Lake and the headwaters of the SAR until it reaches the Riverside Narrows and includes the cities and communities of San Bernardino, Yucaipa, Redlands, Highland, Rialto, Colton, Grand Terrace, Loma Linda, and Riverside. This covers 824 square miles, approximately 30 percent of the total Santa Ana River watershed, and is located in San Bernardino and Riverside Counties. The climate in the area is characterized by relatively hot, dry summers and cool winters with intermittent precipitation.

The San Bernardino Basin Area (Basin Area) is the focus of the Upper Santa Ana River Watershed IRWMP and plays a central role in the water supply for communities within the region. (See Sections 4.6.1 for detailed descriptions of the Basin Area.) An objective of this IRWMP is to develop tools that might be used by water agencies to manage the groundwater levels in the Pressure Zone (also known as the area of historic high groundwater or AHHG) to reduce the risk of liquefaction in the area. Specific Basin Management Objectives are developed to manage the Basin Area in order to reduce the associated risks and computer models are being used to evaluate the various water management strategies which may be effective.

Three management objectives have been developed during the IRWM planning process.

1. Improve water supply reliability during drought periods and reduce liquefaction.
2. Protect water quality and maximize conjunctive use opportunities.
3. Provide ecosystem restoration and environmental improvement.

This IRWMP was developed in coordination with Western, San Jacinto River Watershed Council, and SAWPA, and will become part of the SAWPA regional plan for the SAR watershed. A representative from SAWPA participated in the TAC meetings. Although not a member of the TAC, a representative from WMWD was also invited to, and attended, the regular meetings of the TAC.

To ensure adequate reliable water supply for the communities in the Upper SAR watershed during a prolonged drought, the overall basin management strategy will be to operate the basin under the “Tilted Basin Concept” such that the basin would begin a drought period in “as full as possible” condition. Keeping the basin relatively full and operating a conjunctive management program according to the “Tilted Basin Concept” also provides the added flexibility to reduce imports from the SWP when water quality is less desirable. This overarching management strategy will be followed by the TAC as they complete the basin management plan process.

### **The 1969 Western Judgment**

Production of groundwater from the Basin Area as well as recharge with imported water are regulated by a court judgment that was entered in 1969 in the case of Western Municipal Water District of Riverside County, et al., vs East San Bernardino County Water District, et al., Riverside County Superior Court No. 78426 (Western Judgment).

The Western Judgment, among other provisions, determines the rights of certain Plaintiffs to extract groundwater from an area described in the Judgment as the San Bernardino Basin Area (Basin Area). This area includes the groundwater basins in San Bernardino County that are above the Bunker Hill Dike in the Santa Ana River Watershed, but excludes the Yucaipa, San Timoteo, Oak Glen and Beaumont Basins. The plaintiffs holding such rights are the City of Riverside including those rights acquired as successor to the Riverside Water Company and The Gage Canal Company; the Riverside Highland Water Company; the Elsinore Valley Municipal Water District as successor to the rights of the Agua Mansa Water Company and the Meeks & Daley Water Company; and the Regents of the University of California (collectively “Plaintiffs”).

The Western Judgment provides for a Watermaster, consisting of a committee composed of two persons appointed by the Court, one nominated by San Bernardino Valley Municipal Water District (SBVMWD) and one by Western Municipal Water District (WMWD). The Watermaster is charged with the responsibility of administering the Western Judgment, and all subsequent orders of the Court made pursuant to the Court’s continuing jurisdiction. The Watermaster is required to file with the Court annual reports which include, among other information,

summaries of extractions by all parties pumping water from the Basin Area, groundwater level measurements, and an accounting of all credits and obligations in the groundwater basin.

The Western Judgment provides that extractions may be made in addition to those determined by the Western Judgment, pursuant to agreement between SBVMWD and WMWD. The Western Judgment allowed extractions on an annual basis of 167,238 acre-feet by parties other than the plaintiffs and 64,862 acre-feet by the plaintiffs, for a total of 232,100 acre-feet. The Western Judgment further provides that nothing therein shall preclude SBVMWD, WMWD or any other party from exercising such rights as they may have or obtain under law to spread, store underground and recapture imported water, provided that any such use of underground storage capacity of the Basin Area shall not interfere with any replenishment program of the Basin Area.

In addition to certain enumerated matters, the Western Judgment provides that the Court retains jurisdiction over other matters not specifically set forth which might occur in the future, and which would be of benefit to the parties in the utilization of groundwater within the Basin Area.

### **Chino Groundwater Basin**

The Chino Groundwater Basin (“Chino Basin”) is another groundwater basin within the SAR watershed to which the project will connect. The *Optimum Basin Management Program, Chino Basin Dry-Year Yield Program Expansion* was completed in December 2008 (OBMP Expansion). The sufficiency of the Chino Basin includes the availability of recharge water and recharge capacity for purposes of maintaining the safe yield of the Chino Basin consistent with the OBMP Expansion and Chino Basin Judgment. (See Sections 4.6.1 for detailed descriptions of the Chino Basin.) Recharge water includes imported water supplied by the Metropolitan Water District of Southern California (MWD), recycled water and stormwater. The OBMP Expansion addresses the use of recharge water, including projections with respect to availability and recharge capacity.

The groundwater modeling prepared for the Chino Basin OBMP Expansion evaluated groundwater production requirements during “put” or “take” years with the latest groundwater pumping projections for the Chino Basin. The result of the groundwater modeling iterations was that the WMWD proposed maximum “take” was reduced from 10,000 acre-feet/year to 5,000 acre-feet/year.

The geographic area of the Santa Ana River (SAR) watershed that the OBPM Expansion is bounded by: the San Gabriel Mountains and the Cucamonga Basin on the north; the Rialto-Colton Basin, Jurupa Hills, and the Pedley Hills on the east; the La Sierra area and the Temescal basin on the south; and the Chino Hills, Puente Hills, and the Pomona and Claremont Basins on the west. This covers about 235 square miles, approximately 10 percent of the total Santa Ana River watershed, and is located in San Bernardino and Riverside counties. The climate in the area is characterized by relatively hot, dry summers and cool winters with intermittent precipitation.

Since 2000, total stormwater recharge in the Chino Basin has averaged approximately 3,700 acre-feet per year; with total storm water recharge during 2004 – 05 being approximately 1,400

acre-feet and during 2005 – 06 being approximately 13,000 acre-feet. State Water Project (SWP) water for artificial recharge is currently available to the region from MWD. MWD delivers SWP water into the Chino Basin from the Foothill Feeder, flowing from east to west across the northern half of the Chino Basin. During fiscal years 2004 – 05 and 2005 – 06, total SWP recharge in the Chino Basin was approximately 12,300 and 34,600 acre-feet, respectively. The aggregate average SWP water recharge that has occurred since the OBMP was implemented is approximately 12,300 acre-feet per year. During fiscal years 2004-05 and 2005-06, total recycled water recharge in the Chino Basin was approximately 160 and 1,300 acre-feet, respectively. The aggregate average recycled water recharge that has occurred since the OBMP was implemented is approximately 440 acre-feet per year. The total supplemental water recharge, consisting of imported and recycled waters was approximately 12,500 acre-feet during fiscal year 2004 – 05 and 36,000 acre-feet during fiscal year 2005 – 06. The aggregate average supplemental water recharge that has occurred since the OBMP was implemented is approximately 12,800 acre-feet per year (OBMP 2006 State of the Basin Report, pp. 3-6, 3-7.)

### **The 1978 Chino Basin Judgment**

The groundwater rights and storage capacity within the Chino Basin were established by San Bernardino Superior Court Case No. 164327 in *Chino Basin Municipal Water District v. City of Chino*, et al. in 1978, now designated No. RCV 51010 (Chino Basin Judgment). In the Chino Basin Judgment, the Chino Basin Watermaster was appointed to administer and enforce the provisions of the Judgment and any subsequent instructions or orders of the Court.

The Chino Basin Judgment declared that the safe yield of the Chino Basin is 140,000 acre-feet per year. The safe yield is allocated among three pools as follows:

- (1) Overlying Agricultural Pool (dairy farmers and the State of California): 82,800 acre-feet per year
- (2) Overlying Non-Agricultural Pool (industrial users): 7,366 acre-feet per year
- (3) Appropriative Pool (water for municipalities and other government agencies): 49,834 acre-feet per year

An additional 5,000 acre-feet per year (200,000 acre-feet per year of controlled overdraft, averaged over 40 years) is allocated to the Appropriative Pool, which defines the safe yield per the Chino Basin Judgment as 145,000 acre-feet per year. Parties are allowed to pump in excess of the safe yield as needed, provided replenishment water is later purchased and restored to the basin. Groundwater not pumped by the agricultural users (Overlying Agricultural Pool) is re-allocated to the Appropriative Pool for municipal use.

The Superior Court mandated that the Chino Basin Watermaster develop an Optimum Basin Management Plan (OBMP). The OBMP, developed in 1998, established primary management goals to address issues, needs and interests of the water producers in Chino Basin, including four primary goals: (1) enhance basin water supplies, (2) protect and enhance water quality, (3) enhance management of the basin, and (4) equitably finance the OBMP (OBMP). In July 2000, the Watermaster's planning process culminated with the adoption of the Peace Agreement that

ended over 15 years of litigation within the Chino Basin. (See prior paragraphs for discussion of current the OBPM Expansion.

### **Global Climate Change and Water Conservation**

The cumulative setting for global climate change is in fact, global; and since the Earth's climate is determined by the complex interaction of different components of the Earth and its atmosphere, it is not possible to discern whether the presence or absence of GHG emitted by the project would result in any measurable impact that would cause climate change. As a reasonable basis for cumulative analysis, the state will be used as a framework and setting.

Water systems in California do account for a measurable percentage of electricity use and the proposed project will incrementally contribute to this system. For water projects such as the Riverside Corona Feeder, energy used to pump water is the primary generator of GHG emissions. "Energy represents the largest controllable cost of providing water or wastewater services to the public. California water and wastewater agencies spend more than \$500 million each year on energy costs."<sup>1</sup> Water systems are estimated to use approximately 7 percent of the state's total annual electricity usage. Metropolitan Water District (MWD) estimates that energy requirements to deliver water to residential customers in Southern California total as much as 33 percent of total average household electricity use.<sup>2</sup>

Although there is considerable potential to improve the energy efficiency of water and wastewater utilities in California, California has the fourth lowest per capita rate of energy consumption as compared to other states (California Dept. of Energy 1999). Among the 19 most populous states – those with more than five million people – California ranks second lowest in per capita consumption, behind New York.<sup>3</sup>

The California Air Resources Board (CARB) Scoping Plan calls for a reduction in California's GHG emissions of approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. However, the majority of the reduction measures address areas such as Vehicle Efficiency, Low Carbon Fuel Standards, California Cap-and-Trade Program, High-Speed Rail, and Sustainable Forests, and as such, are not applicable to the project, and would not help reduce GHG emissions from the project. The CARB reduction measure for Water has the goal to "continue efficiency programs and use cleaner energy sources to move and treat water." In addition, WMWD addresses efficient use of water resources through implementation of its Updated Integrated Regional Water Management Plan (See Section 6.0 pgs 16-17 of this document for discussion of WMWD IRWMP.).

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<sup>1</sup> California Energy Commission Website. (Available at <http://www.energy.ca.gov/process/water/index.html>, accessed on 9-24-10)

<sup>2</sup> Awwa Research Foundation and California Energy Commission, *Water and Wastewater Industry energy Efficiency: A Research Roadmap*, prepared by McGuire Environmental Consultants, 2004, pp. 1. (Available at <http://www.energy.ca.gov/2004publications/CEC-500-2004-901/CEC-500-2004-901.PDF> accessed on 9-24-10)

<sup>3</sup> Awwa Research Foundation and California Energy Commission, *Water and Wastewater Industry energy Efficiency: A Research Roadmap*, prepared by McGuire Environmental Consultants, 2004, pp. 5. (Available at <http://www.energy.ca.gov/2004publications/CEC-500-2004-901/CEC-500-2004-901.PDF> accessed on 9-24-10)

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## Assessment of Cumulative Impacts

*This section summarizes the cumulative impacts for each environmental topic that is evaluated in this SEIR/EIS resulting from implementation of the No Action/Project Alternative, the 2005 Project Alignment Alternative, the Realignment Alternative and the RCF Realignment Alternative with Additional Connections (Preferred Alternative), and to indicate the severity of the impacts and their likelihood of occurrence.*

### No Action/Project Alternative

Under the No Action/Project Alternative potential impacts associated with the construction the RCF project will be avoided. For this reason, this alternative will not contribute incremental impacts to any impacts, regarding the below-discussed issues, with the possible exception of groundwater. Therefore, this alternative will have no cumulative impacts and is not discussed below except in the Groundwater Levels and Groundwater Quality sections.

### Aesthetics/Visual

#### *2005 Project Alignment Alternative*

The 2005 Project Alignment would potentially impact the Designed Landscaping along Victoria Avenue within the City of Riverside. Loss of the historic landscape along Victoria Avenue would be considered significant both aesthetically and historically. In addition, sensitive Vernacular Landscapes also exist adjacent to the proposed pipeline alignment. Such landscapes include palm rows and citrus trees within the California Citrus State Historic Park and other streets within the City of Riverside's Greenbelt area. Other jurisdictions that may have Vernacular Landscapes that include citrus trees and windrows adjacent to (sometimes within) road rights-of-way where this pipeline is proposed to be located include the County of Riverside in the Highgrove area and Grand Terrace. Loss of mature natural riparian vegetation within the Santa Ana River, at the proposed Santa Ana River crossing, would be considered potentially significant both aesthetically and biologically. However, the potential impacts will be temporary, occurring during project construction; and through implementation of the mitigation measures set forth in Section 4.1 (Aesthetics/Visual) of this SEIR/EIS which are designed to evaluate and replace existing trees and landscaping, as appropriate, potential significant scenic/aesthetic impacts due to the loss of trees and landscaping will be reduced to less than significant levels.

Other projects which may happen to be under construction at the time the RCF is being constructed could cause similar temporary impacts, but the 2005 Project Alignment Alternative would not contribute to any loss caused by other projects. Following construction of the 2005 Project Alignment, project-specific visual impacts will cease to exist. Therefore, this alternative will not contribute to an adverse cumulative impact on aesthetic/visual resources and there will be no cumulative impacts related to aesthetics.

*Realignment Alternative*

Construction of the Realignment Alternative consists primarily of the construction of pipelines within existing paved rights-of-way or utility rights-of-way and across some developed parking lots. Jack and bore construction technique will be used for the Central Feeder crossing of the Santa Ana River and thereby avoiding visual impacts upon the Santa Ana River. The most sensitive aesthetic resource that may be impacted by this alternative is the Designed Landscaping along Victoria Avenue within the City of Riverside. This alternative will cross Victoria Avenue at its intersection with either Jackson Street or Monroe Street. Loss of the historic landscape along Victoria Avenue would be considered significant both aesthetically and historically. In addition, sensitive Vernacular Landscapes also exist adjacent to the proposed pipeline alignment. Such landscapes include palm rows and citrus trees within the California Citrus State Historic Park and other streets within the City of Riverside's Greenbelt area. Other jurisdictions that may have Vernacular Landscapes that include citrus trees and windrows adjacent to (sometimes within) road rights-of-way where this pipeline is proposed to be located include the County of San Bernardino and City of Redlands. However, implementation of the mitigation measures set forth in Section 4.1 (Aesthetics/Visual) of this SEIR/EIS will reduce potential impacts to less than significant levels.

Other projects which may happen to be under construction at the time the RCF is being constructed could cause similar temporary impacts, but the Realignment Alternative would not contribute to any loss caused by other projects. Following completion, all of these pipelines will be located underground and therefore will have no impact upon the visual character or quality of the site and its surroundings. Therefore, this alternative will not contribute to an adverse cumulative impact on aesthetic/visual resources and there will be no cumulative impacts related to aesthetics.

*Realignment Alternative with Additional Connections (Preferred Alternative)*

The analysis of the potential aesthetics-related cumulative impacts of the Realignment Alternative with Additional Connections (Preferred Alternative) is the same as that described above for the Realignment Alternative.

In addition to the facilities described in that analysis above, the Preferred Alternative Mockingbird Connection includes the construction of a reservoir and related booster station in addition to proposed pipeline. The Clay Street Connection also includes a booster station. In order to reduce the visual impact of the reservoir, the reservoir will be buried by backfilling soil against the sides of the reservoir in order to recreate a natural hillside appearance to the reservoir. This design feature is required by the mitigation measures set forth in Section 4.1 (Aesthetics/Visual) of this SEIR/EIS, which also require pump/booster stations to be enclosed and/or screened with landscaping, walls or fencing. Implementation of the mitigation measures will reduce potential impacts to less than significant levels.

Other projects which may happen to be under construction at the time the RCF is being constructed could cause similar temporary impacts, but the Realignment Alternative would not contribute to any loss of landscaping caused by other projects. Following completion, all of the

pipelines will be located underground and therefore will have no impact upon the visual character or quality of the site and its surroundings. The less than significant aesthetic impacts of the reservoir and booster stations will not contribute to an adverse cumulative impact on aesthetic/visual resources and therefore this alternative will have no cumulative impacts related to aesthetics.

### **Air Quality/Climate Change**

#### *2005 Project Alignment Alternative*

It was determined that the 2005 Project Alignment would contribute to a cumulatively considerable short-term impact during construction due to the scale of the 2005 Project Alignment (length, pipe sizes, and necessary construction techniques) even with the implementation of mitigation measures and a Statement of Overriding Considerations was adopted for significant air quality impacts when the 2005 PEIR was certified. However, it was determined that the 2005 Project Alignment would not result in a cumulatively considerable long-term impact once the project is operational because the Alignment is a pipeline and few automobiles that produce such pollutants will be used during project operation. Long-term air quality impacts were considered less than significant.

The release of GHG in general and CO<sub>2</sub> specifically into the atmosphere is not of itself an adverse environmental affect. It is the affect that increased concentrations of GHG including CO<sub>2</sub> in the atmosphere has upon the Earth's climate (i.e., climate change) and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although air quality modeling can estimate a project's incremental contribution of CO<sub>2</sub> into the atmosphere, it is not feasible to determine whether or how an individual project's relatively small incremental contribution (on a global scale) might translate into physical effects on the environment. Since the Earth's climate is determined by the complex interaction of different components of the Earth and its atmosphere, it is not possible to discern whether the presence or absence of GHG emitted by the project would result in any measurable impact that would cause climate change.

Additionally, the 2005 Project Alignment Alternative's short-term and long-term emissions of GHG were found to be relatively small and not cumulatively considerable based on the AQMD screening threshold for industrial projects. Therefore, the project's contribution to cumulative GHG emissions is not considerable and impacts on global climate change are considered less than significant.

#### *Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

As discussed in Section 4.2 (Air Quality/Climate Change) of this SEIR/EIS, the portion of the South Coast Air Basin within which the RCF project is located is designated as a non-attainment area for ozone, PM-10, and PM-2.5 under state and federal standards. In evaluating the cumulative effects of this alternative, Section 21100(e) of CEQA states that "previously approved land use documents including, but not limited to, general plans, specific plans, and

complaints. If records indicate that equipment does not meet the requirements of this measure, the equipment in question shall be serviced, retrofitted or replaced.

**MM Noise 4:** (*NOISE-3*): The buildings housing pump stations shall be insulated and contain sound attenuation materials to meet local noise standards.

(For ease of review, **MM Trans 6** is repeated here and in Section 4.11.)

**MM Trans 6:** WMWD shall give written notification to all landowners, tenants, business operators, and residents along the right-of-way of the construction schedule, and shall explain location and duration of the pipeline and construction activities within each street (e.g., which lane/s will be blocked, at what times of day, and on what dates). WMWD shall identify any potential obstructions to driveway access, and if necessary shall make alternative access provisions. The written notification shall include a toll-free telephone number for business coordination and shall encourage affected parties to discuss their concerns with WMWD prior to the start of construction so individual problems and solutions can be identified. Alternative access provisions shall include WMWD-provided signage and alternate parking as provided and approved by local agencies.

#### **Determination of Significance under CEQA**

As discussed previously, although the proposed project would create temporary noise that could potentially affect sensitive receptors, the project is exempt from regulatory compliance in all seven of the affected jurisdictions and because construction noise is temporary, it is considered **less than significant**. However, implementation of mitigation measures **MM Noise 1** through **MM Noise 3**, and **MM Trans 6** will help to minimize construction-related noise impacts upon sensitive receptors.

Impacts will come from construction noise only; ongoing operation of the proposed project will not result in adverse noise impacts. Although the design of the project proposes to use concrete block structures to house pump stations which would reduce potential noise impacts adequately, **MM Noise 4** requires that whatever the construction of such housings, that noise attenuation is incorporated to ensure less than significant operating impacts.

#### **4.10.4 No Project/Action Alternative**

Since no construction or operations of the project would occur, not potential noise impacts would result.

## Biological Environment

### *2005 Project Alignment Alternative*

The 2005 Project Alignment was found to have potential direct impacts to: Santa Ana River woolly-star, slender-horned spinyflower, arroyo southwestern toad, least Bell's vireo, southwestern willow flycatcher, San Bernardino kangaroo rat, and Santa Ana sucker Critical Habitat; and less than significant impacts to white-tailed kite, coastal California gnatcatcher, bald eagle, and Stephens' kangaroo rat. Sensitive riparian habitat was identified in several locations along the 2005 Project Alignment including southern willow scrub and mule-fat scrub. Where the alignment crosses under the Santa Ana River, the vegetation community was characterized by dense riparian thickets dominated by arroyo willow and red willow. However, segments of the proposed 2005 Project Alignment Alternative that extend across the Santa Ana River and other watered areas are planned to include jack and boring underneath the waterways where feasible. This would avoid impacts to the waterways, associated riparian vegetation, and habitat for sensitive species. The majority of pipelines will be constructed within the existing roadways, where feasible, thus avoiding impacts to biological resources which may be located adjacent to the roads such as habitats for Stephens' kangaroo rat, and California gnatcatcher.

The majority of the 2005 Project Alignment Alternative facilities would be underground and would not have long-term impacts on biological resources. Temporary impacts upon biological resources, as summarized in detail in Section 4.3, Biological Environment, herein, would be mitigated to below the level of significance through implementation of the mitigation measures set forth in that section. Through implementation of these mitigation measures, this alternative's contribution to potential cumulative impacts to the biological environment would be fully mitigated. Therefore, this alternative's contribution to a cumulative biological environment impact would be less than considerable, and the cumulative biological impact would be less than significant.

### *Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

Several special-status plant species were found to have limited potential to occur within the various reaches of the Realignment Alternatives including California satintail, chaparral sand-verbena, Parry's spinyflower, prairie wedge grass, Robinson's pepper-grass, and smooth tarplant. The California satintail and prairie wedge grass were determined to have limited occurrence potential at the proposed Santa Ana River crossing. No special-status animal species were observed within the proposed RCF realignment during field studies; however, 26 special-status animal species have the potential to occur within the study areas. These include the federally-listed coastal California gnatcatcher, Delhi Sands flower-loving fly, least Bell's vireo, Santa Ana sucker, and southwestern willow flycatcher. Other special-status species with potential to occur include the American badger, arroyo chub, burrowing owl, San Diego horned lizard, golden eagle, loggerhead shrike, long-eared owl, Los Angeles pocket mouse, northwestern San Diego pocket mouse, orange-throated whiptail, Santa Ana speckled dace, southern grasshopper mouse, southwestern pond turtle, two-striped garter snake, western yellow-billed cuckoo, yellowbreasted

chat, white-tailed kite, northern red-diamond rattlesnake, San Diego black-tailed jackrabbit, and yellow warbler.

The California Natural Diversity Database includes records of Delhi sands flower-loving fly within the immediate vicinity of the proposed project and the Northern Reach of the Realignment Alternatives supports approximately 70 acres of potentially suitable fly habitat. Stephens' kangaroo rats and coastal California gnatcatcher have the potential to occur on or adjacent to the Mockingbird Connection and the La Sierra Pipeline project areas. Segments of the proposed Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative) that extend across the Santa Ana River and other watered areas are planned to include jack and boring underneath the waterways where feasible. This would avoid impacts to the waterways, associated riparian vegetation, and habitat for sensitive species. The La Sierra pipeline will be constructed within the existing roadway all work, including staging areas and spoil storage, will occur within the existing roadway. This will avoid impacts to Stephens' kangaroo rat and California gnatcatcher habitat.

Based on the biological resource evaluations discussed in Section 4.3 (Biological Environment) and after implementation of the mitigation measures, avoidance, and minimization approaches set forth in that section are implemented, potential adverse impacts associated with special-status species; both plant and wildlife, as well as special-status communities/habitats, will be reduced to a less than significant level. Additionally, with the exception of the Mockingbird Connection's reservoir and booster station, the Clay Street Connection's booster station, and potential wells, the proposed Realignment Alternatives would consist mainly of temporary construction impacts. After construction, the disturbed area would be returned to level soil conditions and be allowed to return to its natural state. Through implementation of the mitigation measures set forth in Section 4.3, these alternatives' contribution to potential cumulative impacts to the biological environment would be fully mitigated.

Other projects which may happen to be under construction at the time the RCF is being constructed could cause similar temporary impacts, but the Realignment Alternatives would not contribute to a net loss of conserved habitat or otherwise contribute considerably to significant biological impacts that might be caused by other projects. Therefore, these alternatives' contribution to cumulative biological environment impacts would be less than considerable, and the cumulative biological impact would be less than significant.

### **Cultural Resources/Paleontology**

#### *2005 Project Alignment Alternative*

The 2005 Project Alignment would bisect, or lie within the immediate vicinity of a total of five historic sites. In addition, palm rows and citrus trees within the California Citrus State Historic Park and other streets in the City of Riverside Greenbelt area would be affected. Potential impacts to the Riverside Canal will be avoided because the alignment parallels the canal. Impacts related to the AT&SF Railroad and to the Southern Pacific Railroad are less than significant due to ineligibility for listing on both the state and federal levels. The relative significance of the historic Gage Canal where this alternative crosses in the cities of Colton and Grand Terrace has

not been established. In Riverside County, this alternative would cross under the Gage Canal at a point where the Canal is open and intact, rendering protection from adverse impacts necessary and potentially significant without mitigation. Impacts to the landscaping along Victoria Avenue, as well as other landscaping within the Riverside Greenbelt and California Citrus State Historic Park, are potentially significant without mitigation. The 2005 Project Alignment does not impact known archaeological resources, but the project area has a moderate likelihood of containing unknown archaeological resources. There are areas where native soils may be exposed, such as at the Santa Ana River crossing, Springbrook Wash, and in the Mockingbird Canyon area. Therefore this alternative could affect those unknown resources during construction and operation, especially in those areas, and impacts were considered significant without mitigation. There is a low potential for the discovery of unknown human remains. However, since human remains may become uncovered unexpectedly during construction, impacts were considered significant without mitigation.

Implementation of the mitigation measures set forth in Section 4.4 (Cultural Resources/Paleontology) of this SEIR/EIS would ensure that implementing this alternative would not incrementally contribute to any significant cumulative impacts upon important cultural resources in the project region and that this alternative's contribution to potential cumulative impacts to cultural resources would be fully mitigated. Therefore, this alternative's contribution to a cumulative cultural resources impact would be less than considerable, and the cumulative cultural resources impact would be less than significant.

*Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

The proposed Realignment Alternatives would cross, or be within the immediate vicinity of five known historic resources. As discussed in Section 4.4 of this SEIR/EIS, seven additional cultural resources in the vicinity of the Realignment Alternatives facilities were identified during cultural resource surveys of the project area. Segments of the Realignment Alternatives have been designed to avoid potential project impacts to historic resources by requiring construction at certain canal and railway crossings (UPRR and Rancho Avenue, Riverside Canal and Agua Mansa Road, Riverside Canal and Jackson Street and Monroe Street and Riverside Canal) to be done using jack-and-bore tunneling, rather than traditional surface trenching.

These Realignment Alternatives will not impact known archaeological resources. Other areas where previously and newly recorded sites have been identified within the Area of Potential Effect, as well as the Santa Ana River crossing and the southernmost section of these alternative's central reach have also been identified as having high to moderate potential for buried cultural resources. Due to the expected presence of unknown archaeological resources within the project area, these alternatives have the potential to have an adverse effect in the significance of an archaeological resource. These alternatives could affect unknown resources during construction and impacts would be considered significant without mitigation. There is a low potential for the discovery of unknown human remains. However, since human remains may become uncovered unexpectedly during construction, impacts were considered significant without mitigation. There is also the potential for impacts related to unique paleontological

resources during construction of facilities associated with the Realignment Alternative with Additional Connections (Preferred Alternative).

Implementation of the mitigation measures set forth in Section 4.4 (Cultural Resources/Paleontology) of this SEIR/EIS would ensure that implementing these alternatives would not incrementally contribute to any significant cumulative impacts upon important cultural/paleontological resources in the project region and that either of these alternatives' contribution to potential cumulative impacts to cultural resources would be fully mitigated. Therefore, these alternatives' contribution to a cumulative cultural resources impact would be less than considerable, and the cumulative cultural resources impact would be less than significant.

## **Energy**

### *2005 Project Alignment Alternative*

The energy-consuming components of the 2005 Project Alignment consist of a 2,500 horsepower (hp) pump station designed to lift water from the City of Riverside's Waterman Pipeline into the 2005 Project Alignment Alternative which operates at an hydraulic gradient line (HGL) of 1250±, and up to twenty (20) 350 HP x 2,200 gallons per minute (GPM) new or existing groundwater production wells to be located within the San Bernardino Basin Area.

The estimated annual electricity consumption from the 2005 Project Alignment Alternative is approximately 19,664 MWh per year. This estimated level of consumption represents approximately 1.76 percent of the electricity used in San Bernardino and Riverside Counties by utilities for agriculture and water pumps (0.065 percent of the total electricity consumed in Riverside/San Bernardino Counties). The increase in electricity consumption from the 2005 Project Alignment Alternative is not a considerable increase and is not expected to result in adverse cumulative impacts to the existing power supply.

The 2005 Project Alignment does not cause a substantial increase in energy consumed compared to regional use for similar purposes or consumption in the region as a whole, therefore, it does not result in a substantial increase in the use of fossil fuels such as coal and natural gas which are used to produce the power. This alternative will not have a significant project-related energy impact and the potential increase in electricity usage within Riverside and San Bernardino Counties is not cumulatively considerable. Therefore, this alternative's cumulative energy impacts are less than significant.

### *Realignment Alternative*

The Realignment Alternative includes the Pump Station and 20 wells already included as part of the 2005 Project Alignment, and an additional pump station and hydroelectric station. The Realignment Alternative is estimated to consume approximately 20,973 MWh per year. Due to the electricity generated by the Sterling Hydroelectric Station, the electricity consumption from the Realignment Alternative is similar to the electricity consumption from the 2005 Project Alignment Alternative and only results in an additional 226 MWh per year. The total estimated

electricity consumption during 2007 within the Riverside County and San Bernardino County for utilities, including the uses proposed by this alternative, was 1,115,629.206 megawatt hours. Total electricity use for the two counties in 2007 was approximately 30,149,990 megawatt hours. ([www.ecdms.energy.ca.gov/utilbynaicselec.aspx](http://www.ecdms.energy.ca.gov/utilbynaicselec.aspx)) The estimated increase in the use of electricity as a result of this alternative would be approximately 1.78 percent of the total electricity used by utilities for agricultural and water pumping and 0.066 percent of the total energy used in Riverside and San Bernardino Counties.

The Realignment Alternative does not cause a substantial increase in energy consumed compared to the 2005 Project Alignment Alternative, regional use for similar purposes, or consumption in the region as a whole, therefore, it does not result in a substantial increase in the use of fossil fuels such as coal and natural gas which are used to produce the power. This alternative will not have a significant project-related energy impact and the potential increase in electricity usage within Riverside and San Bernardino Counties is not cumulatively considerable. Therefore, this alternative's cumulative energy impacts are less than significant.

#### *Realignment Alternative with Additional Connections (Preferred Alternative)*

Sources of energy use by WMWD for the Realignment Alternative with Additional Connections (Preferred Alternative) include electrically driven pump stations and wells. The Sterling Hydroelectric Station which will be constructed as part of this alternative will generate electricity contributing approximately 1,113 MWh per year to the electrical grid. The electricity demand for the Realignment Alternative with Additional Facilities (Preferred Alternative) is 42,154.38 MWh per year which is not expected to result in adverse impacts related to electricity in the long term. The total estimated electricity consumption during 2007 within the Riverside County and San Bernardino County for utilities, including the uses proposed by this alternative, was 1,115,629.206 megawatt hours. Total electricity use for the two counties in 2007 was approximately 30,149,990 megawatt hours. ([www.ecdms.energy.ca.gov/utilbynaicselec.aspx](http://www.ecdms.energy.ca.gov/utilbynaicselec.aspx)) The estimated increase in the use of electricity as a result of this alternative would be approximately 3.68 percent of the total electricity used by utilities for agricultural and water pumping and 0.14 percent of the total energy used in Riverside and San Bernardino Counties.

The increase in electricity consumption from the Preferred Alternative is not a considerable increase when considered with other reasonably foreseeable projects and is not expected to result in adverse cumulative impacts to the existing power supply. The Preferred Alternative does not cause a substantial increase in energy consumed compared to regional use for similar purposes or consumption in the region as a whole, therefore, it does not result in a substantial increase in the use of fossil fuels such as coal and natural gas which are used to produce the power.

### **Groundwater Levels**

#### *No Project/No Action Alternative*

Groundwater levels in the Basin area will be at similar or slightly higher levels with the implementation of the project than without the project. In other words, there is less of a change in Total Inflow minus Total Outflow generated by the project than with the No Project scenario.

In general, lower storage conditions tend to reduce concerns about water levels being too high in the Area of Historic High Groundwater (AHHG) but cause pumping problems for wells located up-slope from the AHHG. High storage conditions have the opposite effect. Water agencies in the Basin Area have generally agreed on an approach whereby water levels in the forebay areas should be stabilized at acceptable elevations by management of recharge of local and imported water while water levels in the AHHG should be controlled to acceptable elevations by pumping, including when necessary, pumping in excess of local water supply needs. The proposed project alternatives would help to implement that approach and contribute positively in the cumulative response to water level issues in the basin but the No Project/No Action Alternative would not.

As there would be no recharge or extraction associated with the No Project/Action Alternative, no effects would result to groundwater levels from this alternative. Water reliability would not be improved without the project however, and imported supplies may not be available to some water agencies located north of the Santa Ana River.

Although the Western Judgment would allow for the management activities outlined above, without the project, the No Project/No Action Alternative would result in fewer options about how water is moved out of the forebay area to reduce water levels in the AHHG.

#### *2005 Project Alignment Alternative*

As discussed in detail in Section 4.6 (Groundwater Levels) of this SEIR/EIS, the 2005 Project Alignment Alternative includes additional replenishment of State Water Project water in amounts which are substantially less than the historical range of storage fluctuations in the San Bernardino Groundwater Basin Area (Basin Area). Annual rates of recharge at any time by the proposed project will be limited by State Water Project water availability as well as coordinated efforts to manage the basin. The replenished water would be extracted by wells located in or near the Area of Historic High Groundwater (AHHG) at a rate of up to 40,000 ac-ft per year, which is about 15% of the current rates of extraction in the basin, with actual rates depending upon the need for the water as well as upon Basin Area conditions.

A hydrologic analysis was completed to analyze the groundwater impacts of this alternative. The modeling takes into account the known operations of the basin and at the time (i.e. all cumulative groundwater operations-related projects). This analysis shows that the combined recharge and extraction operations described as part of the 2005 Project Alignment Alternative, when combined with cumulative groundwater extraction and recharge in the Basin Area, could help stabilize water levels in the upper part of the Basin Area, where recharge occurs, and help prevent undesirably high water levels in the AHHG. The 2005 Project Alignment Alternative, if operated under the modeled conditions, will not result in significant adverse impacts to groundwater levels. Since such modeling is based on assumptions regarding water availability which are speculative and cannot be guaranteed due to weather and SWP water availability, mitigation measures are necessary to require ongoing modeling, planning and reporting of operating plans as cumulative conditions change and shall be implemented as operating actions associated with this and other future projects are adjusted and created over time. In addition, all actions within the Basin Area are subject to the Western Judgment. With mitigation and actions in accordance with the Western Judgment, potential impacts to groundwater levels (safe yield)

from the proposed project would not be significant. Therefore, this alternative will not contribute to a cumulative adverse impact upon groundwater levels and the cumulative water level impacts will be less than significant.

*Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

Section 4.6 (Groundwater Levels) of this SEIR/EIS discusses in detail the potential impacts of the Realignment Alternative and the Realignment Alternative with Additional Connections (Preferred Alternative). A hydrologic analysis was completed to analyze the groundwater impacts of these alternatives. The modeling takes into account the known operations of the basin and at the time (i.e. all cumulative groundwater operations-related projects). This analysis shows that during the model period 2007-2032, the cumulative groundwater pumping for the baseline run range from 206,100 acre-ft to 308,300 acre-ft, with an average of 258,600 acre-ft/yr. The baseline recharge consists of Santa Ana River diversions and the Valley District's Replenishment Obligations. The baseline artificial recharge ranges from 8,200 acre-ft to 144,000 acre-ft, with an average of 87,700 acre-ft. Groundwater level fluctuations reflect hydrological wet and dry cycles. The results of recharge and extraction modeling show that the Realignment Alternative and the Realignment Alternative with Additional Connections (Preferred Alternative) will have a lower level of groundwater pumping and artificial recharge than that projected for the 2005 Project Alignment Alternative. As a result, there total changes in groundwater storage within the Basin Area will be less than previously projected. Additionally, the total reduction in groundwater storage will be less under both Realignment Alternatives than would occur under Baseline (No Project) conditions. Therefore, it can be concluded that under these alternatives, if operated under the modeled conditions, there will be no significant impact on groundwater levels within the Basin Area. Since such modeling is based on assumptions regarding water availability which are speculative and cannot be guaranteed due to weather and SWP water availability, mitigation measures are necessary to require ongoing modeling, planning and reporting of operating plans as cumulative conditions change and shall be implemented as operating actions associated with this and other future projects are adjusted and created over time. In addition, all actions within the Basin Area are subject to the Western Judgment. With mitigation and actions in accordance with the Western Judgment, potential impacts to groundwater levels (safe yield) from the proposed project would not be significant.

Additionally, these Realignment Alternatives include a maximum groundwater extraction of 5,000 AF/YR from the Chino Basin. However, as described in Section 4.6 of this SEIR/EIS, this extraction would be consistent with the provisions of the Chino Basin Watermaster's Optimum Basin Management Plan and in accordance with the analysis contained within the *Optimum Basin Management Program, Chino Basin Dry-Year Yield Program Expansion, Project Development Report, Volume I*. Pursuant to that analysis, no significant effects related to groundwater levels within the Chino Basin are anticipated as a result of implementation of the Realignment Alternative and the Realignment Alternative with Additional Connections (Preferred Alternative). In addition, all actions within the Chino Basin are subject to the Chino Judgment. With mitigation and actions in accordance with the Chino Judgment, potential impacts to groundwater levels (safe yield) from the proposed project would not be significant.

Because these alternatives will have no significant effects related to groundwater levels based upon groundwater modeling that analyzed cumulative impacts upon groundwater levels, and because mitigation measures require ongoing modeling, planning and reporting of operating plans, and the stipulations of the Chino Judgment, these alternatives will not contribute to a cumulative adverse impact upon groundwater levels and the cumulative water level impacts will be less than significant.

### **Groundwater Quality**

#### *No Project/No Action Alternative*

Due to the increased groundwater gradient resulting from the project alternatives' recharge and extraction, the rate of subsurface flow is increased and the Newmark and Muscoy plumes are cleaned up more quickly under RCF Project conditions than under No Project conditions. The footprint of the Newmark and Muscoy plumes was smaller at the end of the forecast period for the RCF Project operation than for the No Project condition. Seven wells that would be contaminated under No Project Condition would avoid contamination due to project implementation. Therefore, the No Project/No Action Alternative would contribute to adverse impacts to the water quality of the basin. Cumulatively, these impacts are not considerable.

#### *2005 Project Alignment Alternative*

The potential impact of the 2005 Project Alignment Alternative is discussed in Section 4.7 (Groundwater Quality) of this SEIR/EIS. The recharge water to be used for this alternative is generally of an equal or better quality than that of the receiving water resulting in, through dilution, water within the Basin Area of generally equal or higher quality than presently exists. Therefore, no water quality standards will be exceeded by the proposed direct addition of the imported water and direct environmental effects to groundwater quality will be less than significant due to the quality of the water being used for recharge being similar or better than the quality of the receiving water.

A hydrologic analysis was completed to analyze the groundwater quality impacts of this alternative. The modeling takes into account the known operations of the basin and at the time (i.e. all cumulative groundwater operations-related projects). The transport model results indicated that operation of 2005 Project Alignment Alternative could result in a small lateral movement of the Newmark and Muscoy plumes which is different than for the No Project condition. The model predicts that such differences in movement would cause five additional wells for a brief period of time to degrade to values greater than 5 µg/l of PCE, and 7 additional wells to improve in quality to less than 5 µg/l.

The indirect effect of this alternative's replenishment and extraction of water to/from the Basin Area is its potential effect on existing groundwater pollution plumes. Water added to the Basin Area (recharge) and extracted from the Basin Area has the potential to move the polluted groundwater depending on timing and location of recharge or extraction. Although project-related recharge and/or extraction may cause changes in the pollution plumes, it is not possible to predict where, when or to what extent those changes might occur due to the programmatic level

of the project operations. Future unknowns such as natural recharge and extraction unrelated to this alternative would also have potential impacts on pollution plumes. The lack of specific details concerning the amount and location of pumping and recharge activities associated with this alternative makes it speculative to try to predict how significant these activities may be for the water quality of the basin. Nevertheless, if operated under the modeled conditions and in compliance with the mitigation measures set forth in Section 4.7 and the Western Judgment, potential adverse impacts upon groundwater quality would be reduced to less than significant levels.

*Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

Section 4.7 (Groundwater Quality) of this SEIR/EIS discusses in detail the potential groundwater quality impacts of the Realignment Alternative and the Realignment Alternative with Additional Connections (Preferred Alternative). The quality of imported State Water Project water remains of equal or better quality than the existing Basin Area water quality and therefore, the potential direct groundwater quality impacts for these alternatives will be less than significant.

A hydrologic analysis was completed to analyze the groundwater quality impacts of these alternatives. The modeling takes into account the known operations of the basin and at the time (i.e. all cumulative groundwater operations-related projects). The results of hydrologic modeling show that these alternatives, will not adversely impact the contamination plumes within the Basin Area. This modeling also shows no change in the Norton and Redland-Crafton TCE plume areas as a result of project construction. Therefore, if operated under the modeled conditions, indirect groundwater quality impacts related to these alternatives will be less than significant. Since such modeling is based on assumptions regarding water availability which are speculative and cannot be guaranteed due to weather and SWP water availability, mitigation measures are necessary to require ongoing modeling, planning and reporting of operating plans as cumulative conditions change and shall be implemented as operating actions associated with this and other future projects are adjusted and created over time. In addition, all actions within the Basin Area are subject to the Western Judgment. With mitigation and actions in accordance with the Western Judgment, potential impacts to groundwater quality from the proposed project would not be significant.

Additionally, these Realignment Alternatives include a maximum groundwater extraction of 5,000 AF/YR from the Chino Basin. However, as described in Section 4.7 of this SEIR/EIS, this extraction would be consistent with the provisions of the Chino Basin Watermaster's Optimum Basin Management Program and in accordance with the analysis contained within the *Optimum Basin Management Program, Chino Basin Dry-Year Yield Program Expansion, Project Development Report, Volume I*. Pursuant to that analysis, no significant impacts related to groundwater quality within the Chino Basin are anticipated as a result of implementation of the Realignment Alternative and the Realignment Alternative with Additional Connections (Preferred Alternative). In addition, all actions within the Chino Basin are subject to the Chino Judgment. Since operations will be in accordance with the OBMP Expansion and Chino Judgment, potential impacts to groundwater quality from the proposed project would not be significant.

Because these alternatives can be shown to have no significant effects related to groundwater quality based upon groundwater modeling that analyzed cumulative impacts upon groundwater quality and these alternatives are subject to mitigation measures that require ongoing monitoring, planning and reporting; the IRWMP and OBMP Expansion; and both the Western and Chino Judgments, these alternatives will not contribute considerably to a cumulative adverse groundwater quality impact and the cumulative groundwater quality impacts will be less than significant.

## **Hazards and Hazardous Waste/Materials**

### *2005 Project Alignment Alternative*

The 2005 Project Alignment will pass across or will be within the vicinity of 26 hazardous materials sites under various regulatory statutes. Current conditions at these sites do not pose a threat to human health or the environment. With the exception of the currently closed Corona Disposal Site, the 2005 Project Alignment will not cross any of the above sites. Rather, it would be constructed in road rights-of-way, avoiding the hazardous materials sites. Although no significant impacts related to the 26 sites were anticipated, common types of contamination could be encountered during construction of the 2005 Project Alignment resulting from leaking underground storage tanks (LUST), poor chemical handling, and accidental or intentional unauthorized chemical releases. However, these impacts would be reduced to less than significant levels through the implementation of the mitigation measures set forth in Section 4.8 (Hazards and Hazardous Waste/Materials) and through compliance with federal, state and local regulations governing the removal and transportation of hazardous soils. Because the effects of this alternative will be fully mitigated, it will not have a cumulatively considerable contribution to cumulative impacts associated with hazards and hazardous waste/materials and cumulative impacts will be less than significant.

### *Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

The Realignment Alternatives will pass across or will be within the vicinity of approximately 160 hazardous materials sites under various regulatory statutes. Although no significant impacts related to these sites) are anticipated, common types of contamination could be encountered during construction of the proposed project resulting from LUST, poor chemical handling, and accidental or intentional unauthorized chemical releases. However, these impacts would be reduced to less than significant levels through the implementation of the mitigation measures set forth in Section 4.8 (Hazards and Hazardous Waste/Materials) and through compliance with federal, state and local regulations governing the removal and transportation of hazardous soils.

A portion of the Northern Reach in unincorporated Riverside County and most of the Central Reach and the Clay Street Connection of the Realignment Alternatives are located within proximity to Riverside Municipal Airport. Depending on the elevation at individual construction sites, the distance from Riverside Municipal Airport runways, and the height of construction equipment; future development of portions of the Realignment Alternatives may encroach into Federal Aviation Regulations Part 77 imaginary surfaces, creating a potential hazard to aircraft.

However, these impacts would be reduced to less than significant levels through the implementation of the mitigation measures set forth in Section 4.8 (Hazards and Hazardous Waste/Materials) and through compliance with FAA regulations.

Because the effects of these alternatives will be fully mitigated, they will not have cumulatively considerable contributions to cumulative impacts associated with hazards and hazardous waste/materials and cumulative impacts will be less than significant.

### **Land Use**

#### *2005 Project Alignment Alternative, Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

The proposed 2005 Project Alignment Alternative, Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative) will be constructed primarily within existing road rights-of-way. Therefore, pursuant to paragraphs (d) and (e) of Section 53091 of the California Government Code, the proposed project is exempt from county and city building and zoning ordinances. The proposed RCF facilities will not be inconsistent with existing General Plan land use designations, goals, or policies. Therefore, the proposed project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; no impact/effect will result from the action.

Future growth within the unincorporated areas of San Bernardino and Riverside counties and the cities of San Bernardino, Colton, Corona, Grand Terrace, Redlands, Rialto, and Riverside has been anticipated in these jurisdictions' general plans, as discussed in Section 4.9 (Land Use) of this SEIR/EIS. The significant of the cumulative environmental impacts of growth in these jurisdictions were addressed in the general plans and their respective CEQA compliance documents and were considered when those general plans were adopted. The proposed RCF facilities are regional facilities that will be used to deliver water from the San Bernardino Groundwater Basin and the Chino Groundwater Basin to communities throughout western Riverside and San Bernardino counties during drought and emergency periods and when water is otherwise available. These facilities will not extend water service into areas not currently served by water purveyors within the project area, and therefore will not affect any existing impediments to growth within the local jurisdictions. These alternatives will have less than significant impacts upon land use and therefore would have a less than considerable contribution to cumulative land use impacts. Because additional growth in the unincorporated areas of San Bernardino and Riverside counties and the cities of San Bernardino, Colton, Corona, Grand Terrace, Redlands, Rialto, and Riverside has been planned for by local general plans and because these alternatives will not have cumulatively considerable contributions to cumulative impacts, there will not be a significant cumulative impact on land use.

## Noise

### *2005 Project Alignment Alternative, Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

As discussed in Section 4.10 (Noise) of this SEIR/EIS, implementation of the 2005 Project Alignment Alternative, Realignment Alternative or the Realignment Alternative with Additional Connections (Preferred Alternative) could result in temporary and intermittent construction-related noise levels that would exceed the applicable standards at nearby sensitive receptors. Construction of any of the alternatives would be temporary in nature and exempt from noise regulations in all seven of the affected jurisdictions. Current research suggests there will not be additional major construction projects in the vicinity. Potential construction-related noise impacts will be fully mitigated to less than significant levels through implementation of the mitigation measures set forth in Section 4.10, which require notification of potentially impacted sensitive receivers, and limit the hours of construction required by regulations and practices within the affected jurisdictions.

Ambient noise levels tend to increase over time as areas urbanize bringing more vehicles and people. The project's pipeline component will be placed entirely underground and inherently does not generate noise. Additionally, the reservoir component, once operational, also inherently does not generate noise. The two pump stations (at the Clay Street and Mockingbird Connections) will be fully contained within masonry block enclosures. Therefore, no contribution to cumulative ambient noise increases, if they occur, will result from the project.

Because the construction noise effects of these alternatives will be fully mitigated and there are no significant sources of operational noise, the alternatives will not have cumulatively considerable contributions to cumulative noise impacts and cumulative noise impacts will be less than significant.

## Stormwater/Water Quality

### *2005 Project Alignment Alternative, Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

Project-related construction activities will be short-term in nature and limited geographically to each construction project that implements each alternative. As discussed in Section 4.11 (Stormwater/Water Quality) of this SEIR/EIS, the potential water quality impacts of construction activities will be minimized through compliance with established regulatory programs, requiring control of erosion and sedimentation at construction sites (State General NPDES permit and Regional Board Order 99-08 for construction-period stormwater discharges). The program will require the development of a Stormwater Pollution Prevention Plan (SWPPP), which requires installation of erosion control and sedimentation control devices throughout the project area for the entire construction phase. This will serve to protect water resources throughout the project area from pollution caused by project construction. Consequently, the construction-related water quality impacts of the 2005 Project Alignment Alternative, the Realignment Alternative and the Realignment Alternative with Additional Connections (Preferred Alternative) will be less than

significant and will not result in a cumulatively considerable impact upon water quality. Cumulative water quality impacts will be less than significant.

### **Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access**

#### *2005 Project Alignment Alternative, Realignment Alternative and Realignment Alternative with Additional Connections (Preferred Alternative)*

These alternatives to the RCF Project would result in potentially significant impacts due to construction-related traffic increases related to construction worker vehicles and trucks hauling dirt or delivering materials and due to disruptions in existing traffic patterns during construction within road rights-of-way. The numbers of vehicles varies somewhat depending on the type of construction being performed, tunneling/boring or traditional trenching. The proposed project's traffic will represent a small increase in relation to the existing traffic in some areas and a larger increase in relation to existing traffic in other locations. In general, however, impacts to traffic from the project will consist of minor (less than 100 trips per day) short-term increases in vehicle trips which will be a less than significant increase in traffic. Furthermore, these impacts will be reduced to less than significant levels through compliance with the mitigation measures set forth in Section 4.12 (Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access) of this SEIR/EIS, which require the preparation of a Traffic Control and Safety Plan each construction project associated with these alternatives, construction during non-peak traffic hours, and notification to landowners, tenants, business operators, and residents along the right-of-way of the construction schedule. Through implementation of these mitigation measures, these alternatives' contribution to potential cumulative traffic-related impacts will be fully mitigated. Therefore, these alternatives' contribution to cumulative impacts would be less than considerable, and the cumulative traffic impacts would be less than significant.

## **5.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) EVALUATION**

### **5.1 COASTAL BARRIER RESOURCES ACT**

The Coastal Barrier Resources Act, Public Law 97-348 (96 Stat. 1653; 16 U.S.C. 3501 *et seq.*), enacted October 18, 1982, designated various undeveloped coastal barrier islands, depicted by specific maps, for inclusion in the Coastal Barrier Resources System. Areas so designated were made ineligible for direct or indirect federal financial assistance that might support development, including flood insurance, except for emergency life-saving activities.<sup>1</sup> According to the United States Fish and Wildlife Services, Coastal barriers are unique land forms that provide protection for diverse aquatic habitats and serve as the mainland's first line of defense against the impacts of severe coastal storms and erosion. Located at the interface of land and sea, the dominant physical factors responsible for shaping coastal land forms are tidal range, wave energy, and sediment supply from rivers and older, pre-existing coastal sand bodies.

At its nearest point, the current adopted pipeline alignment for the Riverside-Corona Feeder Reach H, which is consistent for all Alternatives, is located approximately 35 linear miles from the closest coastline. Therefore, since the project is not located within a Coastal Zone, the Coastal Barrier Resources Act is not applicable.

### **5.2 COASTAL ZONE MANAGEMENT ACT**

The Coastal Zone Management Act became law on October 27, 1972 (Public Law 92-583, 16 U.S.C. 1451-1456). The Coastal Zone Management Act encourages states/tribes to preserve, protect, develop, and where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats.<sup>2</sup>

At its nearest point, the project is located approximately 35 linear miles from the closest coastline. Therefore, since the project is not located within a Coastal Zone Management Area, the Coastal Zone Management Act is not applicable.

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<sup>1</sup> Accessed at <http://www.fws.gov/laws/lawsdigest/coasbar.html> on 12/3/2009.

<sup>2</sup> Accessed at [http://www.nps.gov/history/local-law/FHPL\\_CstlZoneMngmt.pdf](http://www.nps.gov/history/local-law/FHPL_CstlZoneMngmt.pdf) and <http://www.epa.gov/agriculture/lzma.html#Summary%20of%20Coastal%20Zone%20Management%20Act%20and%20Amendments> on 12/3/09.

### 5.3 FARMLAND PROTECTION POLICY ACT

Congress passed the Agriculture and Food Act of 1981 (Public Law 97-98) containing the Farmland Protection Policy Act (FPPA), Subtitle I of Title XV, Section 1539-1549. According to the United States Department of Agriculture, the Farmland Protection Policy Act is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that—to the extent possible—federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland.<sup>3</sup>

The linear pipeline and the rights-of-way within which the pipeline will be contained will traverse through or adjacent to several scattered portions of land designated by the California Department of Conservation as being considered Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance and Unique Farmland, as indicated on **Figure 5.3-1, Farmlands**. However, being located underground, and within established and already disturbed rights-of-way, this component of the project will not permanently disturb or occupy surface area in a way that it could not be used for farming purposes once the project is operational. Other portions of pipeline that will fall outside of road rights-of-way will be installed either underground or in a manner that will likewise not negate future farming uses.

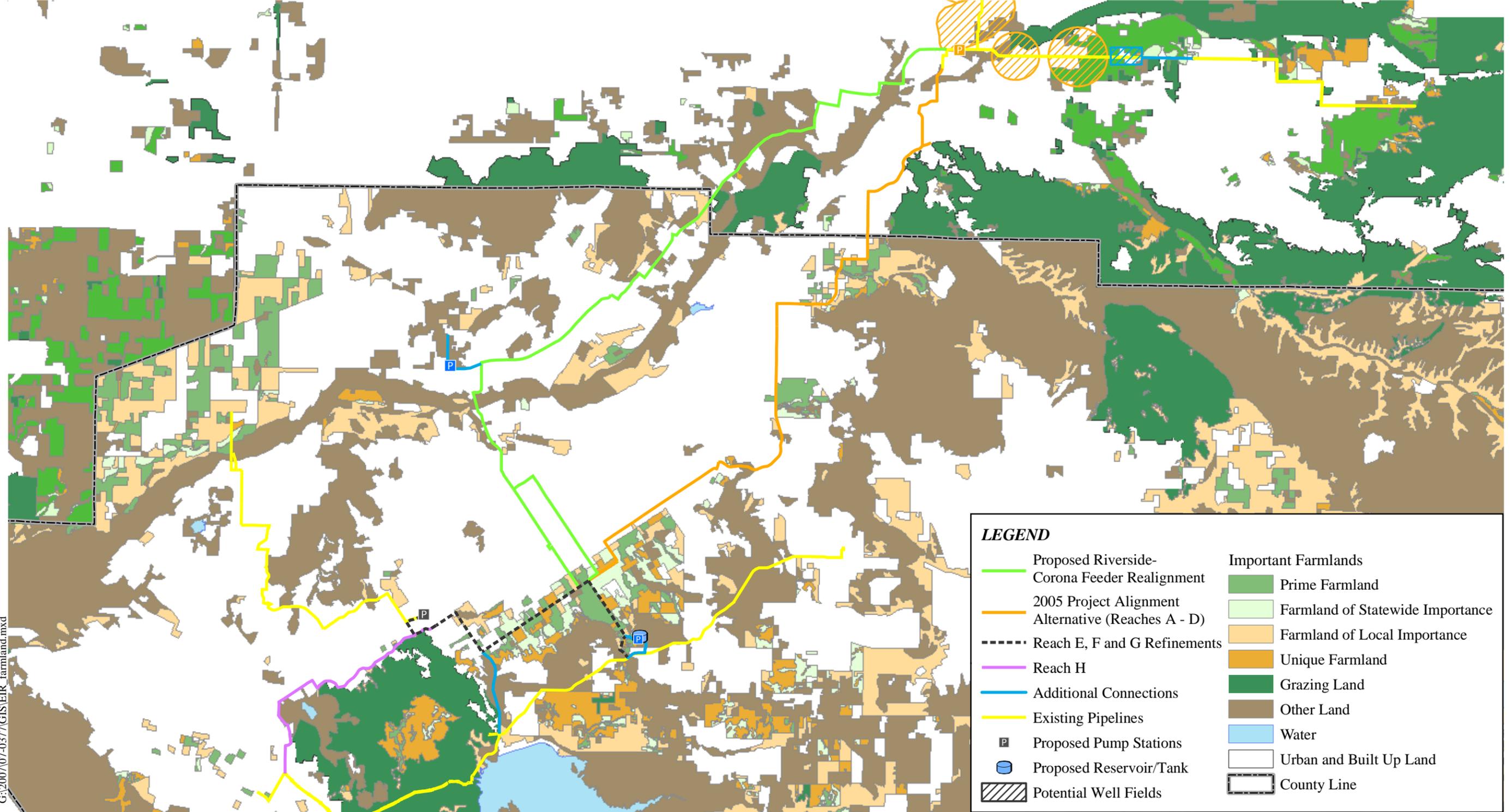
Permanent aboveground components of the project will include pump stations, a reservoir/tank and potential wells. The pump stations are anticipated to occupy a maximum area of one acre each; however, as indicated on **Figure 5.3-1**, the four proposed pump stations are located on land designated as Other Land, and Urban and Built Up Land. Additionally, the reservoir/tank site, located at the south end of Reach E, is within land designated as Other Land. Therefore, these sites will not cause any unnecessary or irreversible conversion of farmland to non-agricultural uses, as required by the Farmland Protection Policy Act.

Some of the land within the well field sites, located on the northeast end of the alignment in San Bernardino County and the cities of San Bernardino and Redlands, is designated as Prime Farmland. A completed well will occupy a maximum surface area of 50 feet by 50 feet. Therefore, even if a well site were to be located within Prime Farmland, the amount of land converted to non-agricultural uses will be negligible.

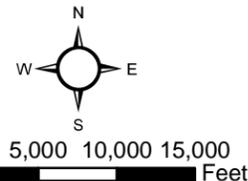
Therefore, the project will not convert farmland to non-agricultural uses pursuant to the Farmland Protection Policy Act.

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<sup>3</sup> Accessed at <http://www.nrcs.usda.gov/programs/fppa/> on 12/3/09.



Source: California Dept. of Conservation, FMMP, 2004 (Riverside Co.) and 2006 (San Bernardino Co.)



**Figure 5.3-1  
Farmlands**

## 5.4 FLOODPLAINS

Pursuant to Executive Order 11988 (42 F.R. 26951), as described below, an evaluation of the proposed project's potential effects due to encroachment into a floodplain is discussed in this section.

In addition to the 2005 Program EIR (2005 PEIR) and its reference documents, and other reference documents; the following references were used in the preparation of this section of the SEIR/EIS:

- FEMA Flood Insurance Rate Maps, *Riverside County, California and Incorporated Areas, Panels 45, 65, 702, 705, 706, 715, 720, 726 and 728 of 3805, Map Numbers 06065C0045G, 06065C0065G, 06065C0702G, 06065C0705G, 06065C0706G, 06065C0715G, 06065C0720G, 06065C0726G, and 06065C0728G, Effective Date August 28, 2008.* (Available at <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>, accessed on November 25, 2009.)
- FEMA Flood Insurance Rate Maps, *San Bernardino County, California and Incorporated Areas, Panel 8683, 8686 and 8687 of 9400, Map Numbers 06071C8683H, 06071C8686H and 06071C8687H, Maps Revised August 28, 2008.* (Available at <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>, accessed on November 25, 2009.)
- Executive Order 11988, *Floodplain Management*, 42 F.R. 26951, 3 CFR, 1997 Comp., p. 117. (Available at <http://www.fema.gov/library/viewRecord.do?id=1395>, accessed on December 4, 2009.)
- FEMA, *Definitions*. (Available at <http://www.fema.gov/business/nfip/19def2.shtm#E>, accessed on December 4, 2009.)
- National Oceanic and Atmospheric Administration, *Definitions*. (Available at <http://www.weather.gov/glossary/index.php?letter=f>, accessed on December 4, 2009.)

### 5.4.1 Setting/Affected Environment

The project site is located in the Santa Ana River Watershed, which is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). The Santa Ana River is the major surface water body within the Santa Ana Watershed. It conveys water approximately 69 miles from the San Bernardino Mountains to the Pacific Ocean through San Bernardino, Riverside, and Orange Counties. The river drains between the Chino Hills and the rugged Santa Ana Mountains, through the narrow Santa Ana Canyon, southwest of the project site. It then emerges from the canyon and flows through the coastal plain to empty into the Pacific Ocean.

The Federal Emergency Management Agency (FEMA) defines a floodplain as, “any land area susceptible to being inundated by flood waters from any source,” this includes areas around a stream or river that frequently flood during heavy rain. The 100-year floodplain is the area around the streams and rivers that will be under water whenever the 100-year storm occurs. In

hydrologic terms, the National Oceanic and Atmospheric Administration defines a floodway is “the channel of a river or stream and those parts of the flood plains adjoining the channel, which are reasonably required to carry and discharge the floodwater or flood flow of any river or stream.” The principal floodplain within the project area is associated with the Santa Ana River and its tributaries. (Figure 5.4-1, FEMA Floodplains)

## 5.4.2 Analysis of the Riverside-Corona Feeder Project Realignment Alternatives

### Thresholds of Significance

Western Municipal Water District (WMWD) has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, WMWD’s “Environmental Checklist” for the proposed project (see Appendix A of this document) indicates that impacts related to floodplains may be considered potentially significant if the project would:

- expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or place within a 100-year flood hazard area structures which would impede or redirect flood flows.

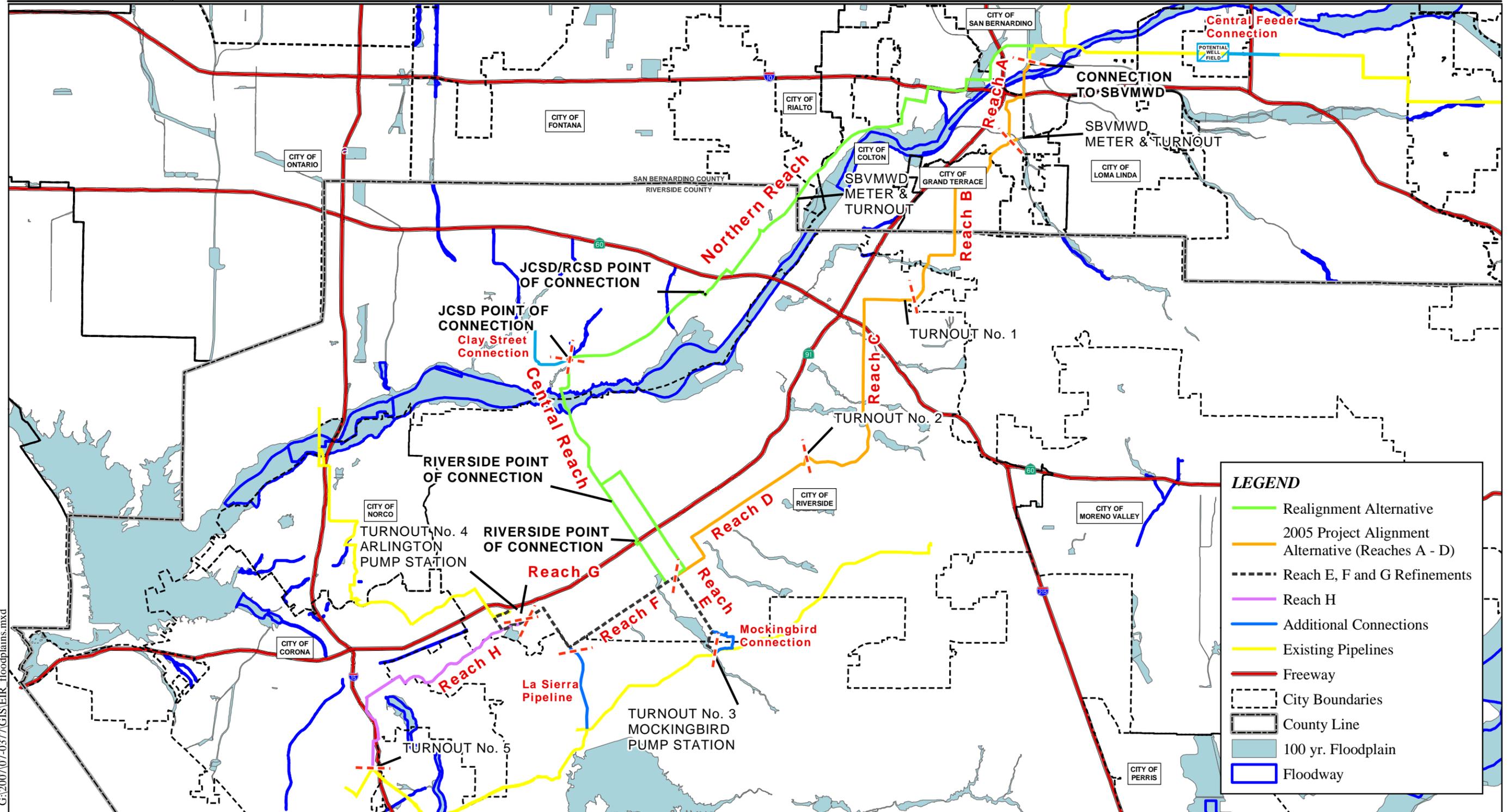
### Related Regulations

#### *Executive Order 11988*

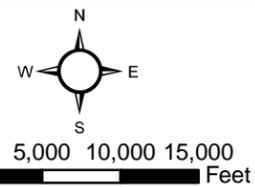
Executive Order 11988 entitled “Floodplain Management” dated May 24, 1977, directs federal agencies to enhance floodplain values, to avoid development in floodplains whenever there is a practicable alternative, and to avoid to the extent possible adverse impacts associated with occupancy or modification of floodplains.

### Design Considerations/Avoidance

Segments of the 2005 Project Alignment Alternative, the Realignment Alternative, and the Realignment Alternative with Additional Connections (Preferred Alternative) that extend across the Santa Ana River and other watered areas are planned to include jack and boring underneath the waterways where feasible. The location where boring techniques will be utilized for construction of the 2005 Project Alignment Alternative are described in Section 3.0 (Project Alternatives) of this SEIR/EIS and the location where jack and bore techniques will be used in the two Realignment Alternatives are listed in **Table 3.0-C, Summary of Major Pipeline Crossings North to South**. This would avoid impacts to the floodways and associated floodplains.



Source: FEMA DFIRM, 2008



**Figure 5.4-1**  
**FEMA Floodplains**

## Potential Significant Impacts/Environmental Consequences

***Threshold:** Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or place within a 100-year flood hazard area structures which would impede or redirect flood flows.*

### 2005 Project Alignment Alternative

Reach A of the 2005 Project Alignment encroaches into the 100-year floodplain where it crosses the Santa Ana River. The Santa Ana River crossing would begin near a point north of the Santa Ana River, near the intersection of Warm Creek Bypass maintenance road and the City of Riverside's, Rice-Thorne Pipeline, in the City of San Bernardino and would extend southerly across the Santa Ana Riverbed. Although micro-tunneling construction techniques have been identified for this crossing; due to the preliminary nature of the 2005 Project Alignment, geologic conditions under the Santa Ana River are not known in detail for the proposed crossing location in Reach A. Should micro-tunneling techniques become infeasible due to geologic conditions under the Santa Ana River; open trench construction methods would be used for this Reach at the Santa Ana River crossing location. The Reach A pipeline and potentially the related bore pits would be within the floodway at this location. Use of boring techniques to cross under the Santa Ana River will avoid construction-related impacts upon the floodways and 100-year floodplain. If open trench technique is used due to geologic conditions, the trenches will temporarily impact the floodway and floodplain and will be restored to its original condition following pipeline construction. This temporary impact will be less than significant.

Reach B of the 2005 Project Alignment crosses under Spring Brook Wash and its associated 100-year floodplain where the alignment crosses the Spring Brook drainage along the Gage Canal siphon south of Spring Street in the City of Riverside (FEMA Map No. 06065C0065G). At this location, boring techniques will be utilized to avoid impacts to this drainage.

That portion of Reach C of the 2005 Project Alignment located within Chicago Avenue in the City of Riverside crosses three drainages with identified 100-year floodplains. These drainages are located south of Massachusetts Avenue (University Wash), north of Prince Albert Drive (Box Springs Wash) and north of Central Avenue (Tequesquite Arroyo) (FEMA Map No. 06065C0726G and FEMA Map No. 06065C0728G). Open trench construction is planned for these portions of Reach C. However, although the trenches will temporarily impact the floodplains, they will be restored to their original conditions following pipeline construction. These temporary impacts will be less than significant.

Reach D of the 2005 Project Alignment is not located within proximity to designated floodways or floodplains. Therefore, construction of this reach will have no floodplain-related impacts.

A small portion of the southern section of Reach E of the 2005 Project Alignment within Firethorn Avenue crosses the 100-year floodplain for Mockingbird Canyon Wash south of where the wash crosses under Van Buren Boulevard. That portion of Reach E located within Van Buren Boulevard north of Mockingbird Canyon Road parallels, but is outside of, the Mockingbird

Canyon Wash floodplain (FEMA Map No. 06065C0720G). Open trench construction is planned for these portions of Reach E. However, although the trenches will temporarily impact the floodplains, they will be restored to their original conditions following pipeline construction. These temporary impacts will be less than significant.

Reaches F and G of the 2005 Project Alignment are not located within proximity to designated floodways or floodplains. Therefore, construction of these reaches will have no floodplain-related impacts.

Additionally, although not located within a 100-year floodplain, a portion of Reach H located within Indiana Avenue between Fillmore Street and Pierce Street is immediately north of an identified 100-year floodplain (FEMA Map No. 06065C0715H); thus, construction of Reach H will not impact floodplains or floodways.

Where construction of the 2005 Project Alignment Alternative utilizes micro-tunneling/boring techniques to cross identified floodways and 100-year floodplains (Reaches A and B), excavation and use of the bore pits would be temporary and the bore pit sites would be restored to their original condition immediately following construction of the pipeline. Use of boring techniques for portions of this alternative will avoid construction-related impacts upon floodways and/or 100-year floodplains.

Where open trench construction techniques are utilized, the trenches will temporarily impact the above-described floodplains, all of which will be restored to their original condition following pipeline construction. This temporary impact will be less than significant.

The proposed 2005 Project Alignment Alternative pipeline will not add any structures or fill to the floodplain that will increase the 100-year water surface elevations. Implementation of Reach A of the 2005 Project Alignment Alternative will not raise the existing base flood elevations, and will not result in any significant change in flood risks or damage. No long-term effects from the construction or operation of these facilities are anticipated. Therefore, this alternative will not expose people or structures to a significant risk of loss, injury or death involving flooding and will not place structures within a 100-year flood hazard area (100-year floodplain) which would impede or redirect flood flows.

### **Realignment Alternative**

The Realignment Alternative's Northern Reach pipeline crosses or is in close proximity to the 100-year flood plain in four locations as discussed in the following paragraphs.

A portion of the Northern Reach pipeline is located within the 100-year floodplain associated with Warm Creek where the pipeline crosses Warm Creek within Fairway Drive in the City of Colton. Boring techniques will be used to construct the pipeline under Warm Creek. The bore pits and the proposed pipeline for this crossing are located within the floodway at this location, as are the portions of the pipeline within Fairway Drive, both east and west of Warm Creek. (FEMA Map No. 06071C8683H). Use of boring techniques to cross under Warm Creek will avoid construction-related impacts upon the floodways and 100-year floodplain. If the open

trench technique is used due to geologic conditions, the trenches will temporarily impact the floodway and floodplain and will be restored to its original condition following pipeline construction. This temporary impact will be less than significant.

A portion of the Northern Reach located within Agua Mansa Road west of Rancho Avenue and east of Riverside Avenue within the City of Colton is located along the edge of the 100-year floodplain associated with the Santa Ana River (FEMA Map No. 06071C8687H and FEMA Map No. 06071C8686H). This segment of the pipeline is located outside of the Santa Ana River floodway and its construction and operation will not impact this floodway. Open trench construction is planned for a segment of the Northern Reach. However, the trench will only temporarily impact the edge of the floodplain and the trench will be restored to its original condition following pipeline construction. This temporary impact will be less than significant.

The portion of the Northern Reach pipeline within Limonite Avenue in unincorporated Riverside County crosses the Sunnyslope channel just east of Pacific Avenue. This flood control facility is identified as a floodway (FEMA Map No. 06065C706G). Boring techniques will be used to construct the under the channel and avoid potential impacts thereto.

The Northern Reach pipeline within Limonite Avenue east of Clay Street and the Realignment Alternative's Central Reach pipeline in Clay Street south of Limonite Avenue are adjacent to the drainage identified by FEMA as the "1001 Ranch Drain West Tributary." North of Limonite Avenue, this drainage is identified as floodway and adjacent 100-year floodplain, while west of Clay Street the drainage is identified as only having a 100-year floodplain. The 100-year discharge at this location is contained within a culvert under Limonite Avenue and Clay Street (FEMA Map No. 06065C702G). Construction of this portion of the Northern Reach will be located within the Limonite Avenue and Clay Street rights-of-way and outside of the identified floodway and floodplain. Therefore, construction of these portions of the Northern and Central Reaches will have no floodplain-related impacts.

The Central Reach crosses under the Santa Ana River near Van Buren Boulevard. At this location, boring techniques will be utilized to construct the proposed pipeline and avoid impacts at this location. According to the Flood Insurance Rate Map (FIRM) for this area (FEMA Map No. 06065C0705G), the bore pits and the proposed pipeline for this crossing, including the pipeline along the north side of Van Buren Boulevard are located within the Santa Ana River floodway. Use of boring techniques to cross under the Santa Ana River will avoid construction-related impacts upon the floodways and 100-year floodplain, although the construction and use of the bore pits will temporarily impact the floodway and floodplain and will be restored to its original condition following pipeline construction. This temporary impact will be less than significant. Use of open trench construction for the pipeline along the north side of Van Buren Boulevard will temporarily impact the floodplains, however, the trench will be restored to its original condition following pipeline construction. This temporary impact will be less than significant.

In addition to the Northern and Central Reaches, the Realignment Alternative includes refinements for Reaches E, F, and G, and the original alignment of Reach H from the 2005 Project Alignment. The potential floodplain impacts associated with Reach E and Reach H are

discussed above as part of the 2005 Project Alignment Alternative discussion. That analysis is also applicable to the potential impacts related to those reaches as part of the Realignment Alternative.

Where the Realignment Alternative utilizes boring techniques for construction to cross identified floodways and 100-year floodplains, the excavation and use of the bore pits would be temporary and the bore pit sites would be restored to their original condition immediately following pipeline construction. Use of boring techniques for the above-described portions of the Northern and Central Reaches, this alternative will avoid construction-related impacts upon floodways and 100-year floodplains. Where open trench construction techniques are utilized, the trenches would temporarily impact the above-described floodplains; which would be restored to their original condition following pipeline construction. The proposed Realignment Alternative's pipeline will not add any structures or fill to the floodplain that will increase the 100-year water surface elevation. Implementation of the Realignment Alternative will not raise the existing base flood elevation and will not result in any significant change in flood risks or damage. No long-term effects from the construction or operation of the Realignment Alternative facilities are anticipated. Therefore, the Realignment Alternative will not expose people or structures to a significant risk of loss, injury or death involving flooding and will not place structures within a 100-year flood hazard area (100-year floodplain) which would impede or redirect flood flows.

#### **Realignment Alternative with Additional Connections (Preferred Alternative)**

The analysis of the potential floodplain-related impacts of the Realignment Alternative with Additional Connections (Preferred Alternative) is the same as that described above for the Realignment Alternative. In addition to the facilities described in that analysis, the proposed Mockingbird Connection will avoid the small encroachment into a 100-year floodplain of that portion of Reach E within Firethorn Avenue. However, the Mockingbird Connection will cross under Van Buren Boulevard to connect to WMWD's existing Mockingbird Booster Station, which is located within the mapped 100-year floodplain for Mockingbird Canyon Wash (FEMA Map No. 06065C0720G). Micro-tunneling or other boring techniques will be used to install that portion of the Mockingbird Connection that crosses under Van Buren Boulevard. Regarding the Mockingbird Connection, the excavation and use of the bore pits would be temporary and the bore pit sites would be restored to their original condition immediately following pipeline construction. Use of boring techniques for portions of this alternative will avoid construction-related impacts upon floodways and/or 100-year floodplains.

Implementation of the Realignment Alternative with Additional Connections (Preferred Alternative) will not raise the existing base flood elevation, and will not result in any significant change in flood risks or damage. No long-term effects from the construction or operation of these facilities are anticipated. Therefore, the Realignment Alternative with Additional Connections will not expose people or structures to a significant risk of loss, injury or death involving flooding and will not place structures within a 100-year flood hazard area (100-year floodplain) which would impede or redirect flood flows.

### **Realignment Alternatives Proposed Mitigation Measures/Minimization**

Since there are impacts to floodplains are less than significant, no mitigation is required.

### **Realignment Alternatives Determination of Significance under CEQA**

None of the alternatives analyzed will expose people or structures to a significant risk of loss, injury or death involving flooding and will not place structures within a 100-year flood hazard area (100-year floodplain) which would impede or redirect flood flows. Therefore, there will be no significant impacts related to floodplains.

### **5.4.3 No Action/Project Alternative**

Under the No Action/Project Alternative, none of the proposed pipelines and related facilities will be constructed. Local drainage within the project area will remain unchanged. Therefore, this alternative will not expose people or structures to a significant risk of loss, injury or death involving flooding and will not place structures within a 100-year flood hazard area (100-year floodplain) which would impede or redirect flood flows.

## **5.5 INDIAN TRUST LANDS**

Indian Trust Lands are areas for which the United States holds title in trust for the benefit of a federally recognized American Indian tribe (tribal trust land) or for an individual American Indian (individual trust land). The USBR is a water management agency with numerous programs, initiatives, and activities, to help the Western States, Native American Tribes, and others meet new water needs and balance the multitude of competing uses of water in the West. The Bureau of Reclamations' (BOR) mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures through water delivery obligations, water conservation, water recycling and reuse, and developing partnerships with our customers, states, and Indian Tribes.<sup>4</sup> At its nearest point, the project is located approximately three linear miles from the closest Tribal Land identified by the Bureau of Land Management. Additional Tribal Lands are located approximately 22 miles to the east of the project site. The San Bernardino Basin is adjudicated and no tribal water rights are held under the judgment.<sup>5</sup>

Therefore, since the project is not located on land for which the United States holds title in trust for the benefit of an American Indian tribe, and no tribal water rights are held in the basin that will be utilized for conjunctive use, the project will have no effect on Indian Trust Land or water rights.

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<sup>4</sup> Accessed at <http://www.epa.gov/region09/nepa/bru-rec.html> on 12/4/09.

<sup>5</sup> Annual Report of the Western-San Bernardino Watermaster for Calendar Year 2002.

## 5.6 SAFE DRINKING WATER ACT

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. SDWA authorizes the United States Environmental Protection Agency (US EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems then work together to make sure that these standards are met. Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap. SDWA applies to every public water system in the United States.<sup>6</sup> The responsibility for making sure these public water systems provide safe drinking water is divided among U.S. EPA, states, tribes, water systems, and the public. SDWA provides a framework in which these parties work together to protect this valuable resource. U.S. EPA sets national standards for drinking water based on sound science to protect against health risks, considering available technology and costs. The National Primary Drinking Water Regulations set enforceable maximum contaminant levels for particular contaminants in drinking water or requires ways to treat water to remove contaminants. Each standard also includes requirements for water systems to test for contaminants in the water to make sure standards are achieved. States, or U.S. EPA acting as a primacy agent, make sure water systems test for contaminants, review plans for water system improvements, conduct on-site inspections and sanitary surveys, provide training and technical assistance, and take action against water systems not meeting standards.

To ensure that drinking water is safe, SDWA sets up multiple barriers against pollution. These barriers include: source water protection, treatment, distribution system integrity, and public information. Public water systems are responsible for ensuring that contaminants in tap water do not exceed the standards. Water systems treat the water, and must test their water frequently for specified contaminants and report the results to states. If a water system is not meeting these standards, it is the water supplier's responsibility to notify its customers. Many water suppliers now are also required to prepare annual reports for their customers.<sup>7</sup> The City of San Bernardino is subject to such EPA SDWA requirements with respect to the Newmark contamination plume, therefore, the operation of the project is very important with respect to groundwater quality in the Basin Area.

Section 4.7, Groundwater Quality, includes an analytical discussion on potential groundwater-related issues associated with the project site. Five pollution plumes have been identified within the San Bernardino Groundwater Basin and eleven pollution plumes within the Chino Groundwater Basin; these pollution plumes are detailed in Section 4.7. The section concludes

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<sup>6</sup> Accessed at <http://www.nps.gov/nrcr/programs/rtca/nri/states/ca2.html> on 12/3/09.

<sup>7</sup> Accessed at [http://www.epa.gov/ogwdw000/sdwa/pdfs/fs\\_30ann\\_sdwa\\_web.pdf](http://www.epa.gov/ogwdw000/sdwa/pdfs/fs_30ann_sdwa_web.pdf) on 12/3/09.

that impacts related to groundwater quality are less than significant because: a) the quality of imported water from the State Water Project remains of equal or better quality than that of the existing San Bernardino Groundwater Basin Area water quality; b) a 2009 hydrologic analysis found that the project would not have a significant impact on groundwater quality; c) the potential impacts that new well sites might have on the environment will be addressed through normal well permitting procedures and subsequent CEQA compliance; d) WMWD's extraction from the Chino Basin would be consistent with the provisions of the Chino Basin Watermaster's Optimum Basin Management Program and in accordance with the analysis contained within the *Optimum Basin Management Program, Chino Basin Dry-Year Yield Program Expansion, Project Development Report, Volume I*; and e) mitigation measure MM GWQ 1 requires operating strategies to be tested and an operating plan to be developed that defines parameters of replenishment and extraction, while MM GWQ 2 requires project operation modifications (including mitigation measures) to reduce impacts if MM GWQ 1's modeling suggests that the replenishment and pumping regime of the project would result in significant impacts.

Therefore, with adherence to existing regulations and the mitigation measures detailed in Section 4.7, the project's water system will meet the requirements of the SWDA.

## 5.7 ENVIRONMENTAL JUSTICE

An evaluation of the potential effects upon environmental justice due to the relocation of the 2005 Project Alignment Project is discussed in this section pursuant to Executive Order 12898.

In addition to the 2005 Certified PEIR (2005 PEIR) and its reference documents, and other reference documents, the following references were used in the preparation of this section of the SEIR/EIS:

- Council on Environmental Quality, *Environmental Justice, Guidance Under the National Environmental Policy Act*, December 10, 1997. (Available at <http://www.epa.gov/compliance/resources/policies/ej/index.html>, accessed on November 25, 2009.) (CEQ 1997)
- Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, February 11, 1994. (Available at [www.epa.gov/fedreg/eo/eo12898.pdf](http://www.epa.gov/fedreg/eo/eo12898.pdf), accessed on November 20, 2009.)
- U.S Census Bureau, *Poverty Thresholds for 2008 by Size of Family and Number of Related Children Under 18 Years*. (Available at <http://www.census.gov/hhes/www/poverty/threshld.html>, accessed on November 24, 2009.)

### 5.7.1 Setting/Affected Environment

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority and Low Income Population (1994), includes the following agency responsibilities in regard to addressing environmental justice in minority and low income populations:

To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands. (Section 1-101)

The specific populations identified under EO 12898 are examined here along with the potential of effects on these populations from construction and operation of the proposed project. Minorities are defined as individuals who are members of the following population groups: Native American or Alaska Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. To classify as a minority population, an area must have a population of these groups that exceeds 50 percent of the total population, or the minority population percentage of the affected area should be meaningfully greater than the minority population percentage in the general population or appropriate unit of geographical analysis (CEQ 1997).

The Council on Environmental Quality (CEQ) guidance recommends that low-income populations in an affected area be identified using data on income and poverty from the U.S. Census Bureau (CEQ 1997). Low-income populations are groups with an annual income below the poverty threshold, which was \$22,025 for a family of four for calendar year 2008.

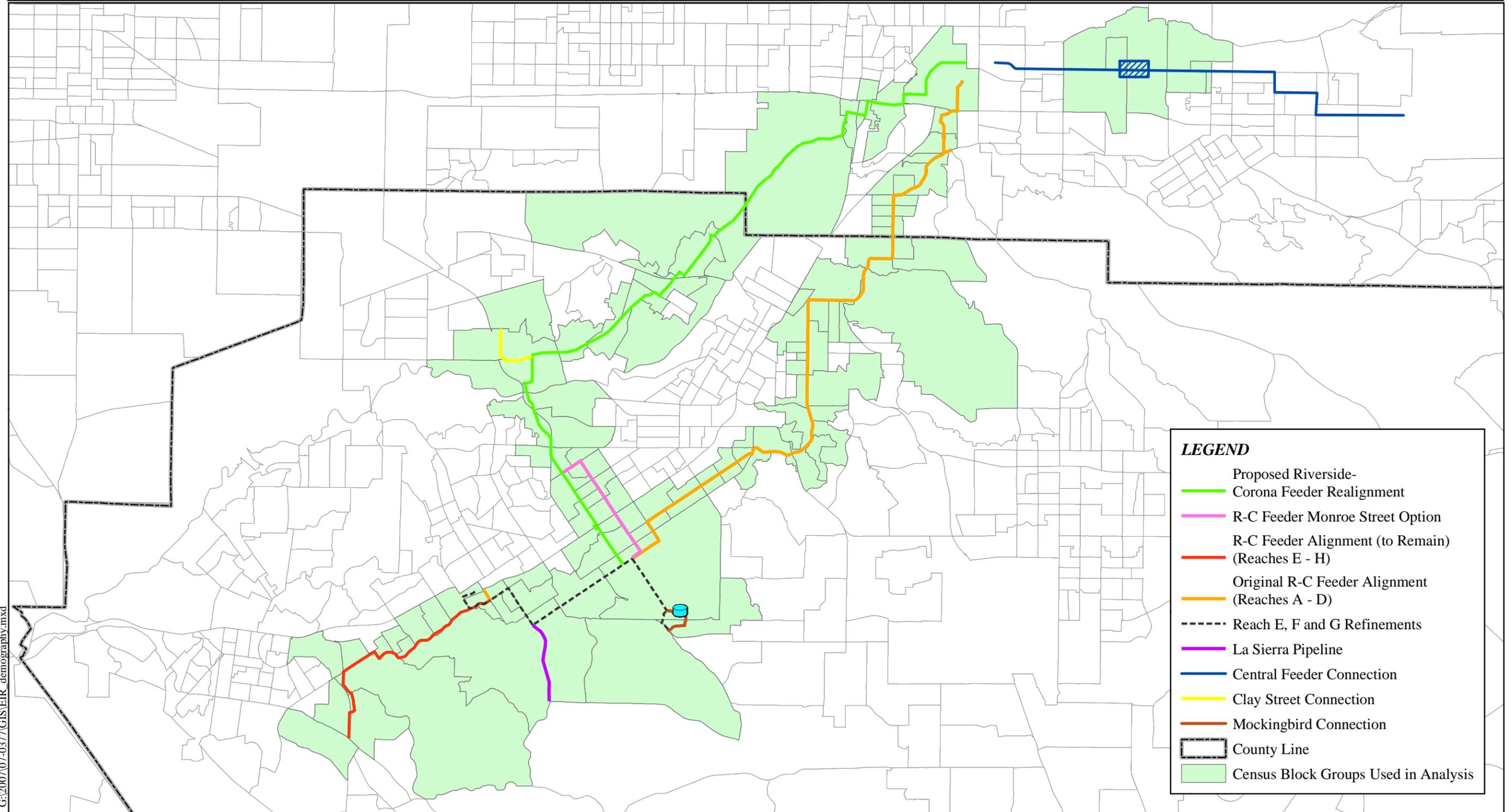
### **Methods and Assumptions**

Demographic data from the U.S. Census Bureau 2000 census was collected to characterize the minority populations that are adjacent to the 2005 Project Alignment and the Project Alternatives. The low-income data was collected from the U.S. Census Bureau for the 2009 fiscal year and is displayed as the total number of persons below the moderate income threshold. Census data are compiled at different levels based on geographic location ranging from individual states, counties, census tracts, block groups, and blocks. For the analysis of the 2005 Project Alignment and the Project Alternatives, block group data was used to determine the minority and low-income populations, and is shown in **Figure 5.7-1, Census Block Groups**. The data presented in **Table 5.7-A**, below, shows the overall composition and makeup of both minority and non-minority populations, and low-income populations for the affected counties, as well as statewide and national populations.

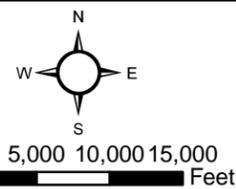
**Table 5.7-A**  
**County, State, and National Population**  
**and Low-Income Distributions**

<b>Location</b>	<b>Total Population</b>	<b>White (percent)</b>	<b>Black (percent)</b>	<b>American Indian/ Alaska Native (percent)</b>	<b>Asian (percent)</b>	<b>Native Hawaiian/ Pacific Islander (percent)</b>	<b>Hispanic or Latino (percent)</b>	<b>Low-Income (percent)</b>
San Bernardino Co.	1,709,434	58.9	9.1	1.2	4.7	0.3	39.2	43.12
Riverside Co.	1,545,387	65.6	6.2	1.2	3.7	0.3	36.2	41.53
California	33,871,648	59.5	6.7	1.0	10.9	0.3	32.4	43.16
U.S.	281,180,438	75.1	12.2	0.8	3.6	< 0.1	12.5	41.80

Note: Percentage values do not equal 100 % of the population due to multi-race reporting.



Sources: County of Riverside, 2008; ESRI, 2008



**Figure 5.7-1**  
**Census Block Groups**

## 5.7.2 Potential Significant Impacts/Environmental Consequences

### 2005 Project Alignment Alternative

**Table 5.7-B** shows the population and low-income distribution for the 2005 Project Alignment. Under the 2005 Project Alignment Alternative, minority and low-income populations are located in proximity to these facilities. All of the minority population percentages are below the 50 percent threshold, as defined in the Guidance for EO 12898 (CEQ 1997). The low-income population percentage is lower than the averages from the county, state, and national data. Therefore, no disproportionately high or adverse impacts are anticipated to minority or low-income populations. Construction activities may cause temporary aesthetic, air quality, water quality, noise, and transportation impacts to the general population. However, after implementation of the mitigation measures, avoidance, and minimization approaches identified in Section 4.0 of this SEIR/EIS, short-term impacts to aesthetics, water quality, noise, and transportation will be reduced to less than significant levels. Short-term beneficial impacts from the project may include an increase in employment opportunities and/or supplemental income through job creation during the construction process.

**Table 5.7-B**  
**2005 Project Alignment Alternative**  
**Population and Low-Income Distributions**

<b>Population and Low-Income Distribution</b>	<b>Percentage</b>
White	60.5
Black	7.8
American Indian/Alaska Native	0.9
Asian	6.5
Native Hawaiian/Pacific Islander	0.3
Hispanic or Latino	35.9
Low-Income	34.7

Note: Percentage values do not equal 100 % of the population due to multi-race reporting.

### Realignment Alternative

**Table 5.7-C** shows the population and low-income distribution for the Realignment Alternative. Under the Realignment Alternative, minority and low-income populations are located in proximity to these facilities. All of the minority population percentages are below the 50 percent threshold as defined in the Guidance for EO 12898 (CEQ 1997). The low-income population is not substantially different from the county, state, or national data. Therefore, no disproportionately high and adverse impacts are anticipated to minority or low-income populations. Construction activities may cause temporary aesthetic, air quality, water quality, noise, and transportation impacts to the general population. However, after the mitigation measures, avoidance, and minimization approaches identified in Section 4.0 of this SEIR/EIS are implemented, short-term impacts to aesthetics, water quality, noise, and transportation will be reduced to less than significant levels. Short-term beneficial impacts from the project may include an increase in employment opportunities or supplemental income through job creation during the construction process.

**Table 5.7-C**  
**Realignment Alternative Population**  
**and Low-Income Distributions**

<b>Population and Low-Income Distribution</b>	<b>Percentage</b>
White	57.4
Black	6.5
American Indian/Alaska Native	1.4
Asian	3.1
Native Hawaiian/Pacific Islander	0.3
Hispanic or Latino	47.7
Low-Income	47.2

Note: Percentage values do not equal 100 % of the population due to multi-race reporting.

### Realignment Alternative with Additional Connections (Preferred Alternative)

**Table 5.7-D** shows the population and low-income distribution for the Realignment Alternative with Additional Connections. Under the Realignment Alternative with Additional Connections, minority and low-income populations are located in proximity to these facilities. All of the minority population percentages are below the 50 percent threshold as defined in the Guidance for EO 12898 (CEQ 1997). The low-income population percentages are similar to the county, state, or national data. Therefore, no disproportionately high or adverse impacts are anticipated to minority or low-income populations. Construction activities may cause temporary aesthetic, air quality, water quality, noise, and transportation impacts to the general population. However, after implementation of the mitigation measures, avoidance, and minimization approaches identified in Section 4.0 of this SEIR/EIS, short-term impacts to aesthetics, water quality, noise, and transportation will be reduced to less than significant levels. Short-term beneficial impacts from

the project may include an increase in employment opportunities and/or supplemental income through job creation during the construction process.

**Table 5.7-D**  
**Realignment Alternative with Additional**  
**Connections Population and Low-Income Distributions**

<b>Population and Low-Income Distribution</b>	<b>Percentage</b>
White	59.5
Black	6.4
American Indian/Alaska Native	1.2
Asian	4.0
Native Hawaiian/Pacific Islander	0.3
Hispanic or Latino	43.7
Low-Income	42.5

Note: Percentage values do not equal 100 % of the population due to multi-race reporting.

### **No Action Alternative**

Under the No Action Alternative, no physical changes to the environment would occur. The proposed facilities would not be constructed, and existing WMWD facilities and sources of water would continue to be operated as under current conditions. Potential effects related to environmental justice would be avoided.

## **5.8 WILD AND SCENIC RIVERS ACT**

The passage of Public Law 90-542 (the Wild and Scenic Rivers Act of 1968) by Congress called for the identification of potential wild, scenic, and recreational river areas within the nation. In partial fulfillment of Section 5(d), National Park Service maintains the Nationwide Rivers Inventory as a national listing of potentially eligible river segments. A river segment may be listed on the National Rivers Inventory if it is free-flowing and has one or more "outstandingly remarkable values."<sup>8</sup> The project alternatives cross the Santa Ana River, however, the four Santa Ana River segments listed on the United States Department of Interior National Rivers Inventory, are located in the mountainous region to the northeast of the project and are not in the project vicinity.<sup>9</sup>

Therefore, because the project is not located on or near a body of water listed in the United States Department of the Interior National Rivers Inventory, the Wild and Scenic Rivers Act is not applicable.

<sup>8</sup> <http://www.ncrc.nps.gov/rtca/nri/hist.html>

<sup>9</sup> <http://www.nps.gov/ncrc/programs/rtca/nri/states/ca2.html>

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## **6.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) EVALUATION**

### **6.1 DETERMINING SIGNIFICANCE UNDER CEQA**

Section 9112 of the Omnibus Public Land Management Act of 2009 (Public Law 111-11, 123 Stat. 991), signed by the President on March 30, 2009, authorized the Secretary of the Interior, in cooperation with Western Municipal Water District (WMWD), to participate in the planning, design, and construction of the RCF project. This authority has been delegated to the U.S. Bureau of Reclamation (USBR). Therefore, the RCF project is subject to federal as well as and state environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The USBR is the Lead Agency under NEPA for the EIS, while WMWD is the Lead Agency for the SEIR/EIS under CEQA.

One of the differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an Environmental Impact Study (EIS) or some lower level of environmental documentation will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to “significantly affect the quality of the human environment.” (42 U.S.C. sec 4332(C)) The determination of significance is based on the context and intensity of the impact (40.CFR sec 1508.27). Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, requires the CEQA lead agency (WMWD) to identify each “significant effect on the environment” resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report (EIR) must be prepared. [Public Resources Code, section 21080(d)]. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. (CEQA Guidelines, section 15126.2) In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR (CEQA Guidelines, section 15065). There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA.

### **6.2 DISCUSSION OF SIGNIFICANCE OF IMPACTS**

The scope of this SEIR/EIS covers the issues of Aesthetics/ Visual, Air Quality/Climate Change, Biological Environment, Cultural Resources/Paleontology, Energy, Groundwater Levels, Groundwater Quality, Hazards and Hazardous Waste/Materials, Land Use, Noise, Stormwater/Water Quality, Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access. An analysis of each project alternative was conducted to determine if there would be an impact related to each of these environmental issues. This review included a determination as to whether an impact occurring from the implementation of an

alternative would be rated as significant under CEQA. The following discussion summarizes the significance of the temporary, long-term, and cumulative environmental impacts of the RCF project alternatives under CEQA, based on the full analysis provided in Section 4.0 of this SEIR/EIS.

### **6.3 SIGNIFICANCE OF IMPACTS UNDER CEQA**

#### **6.3.1 No Action/Project Alternative**

**Aesthetics/ Visual:** No effect.

**Air Quality/Climate Change:** No effect.

**Biological Environment:** No effect.

**Cultural Resources/Paleontology:** No effect.

**Energy:** No effect.

**Groundwater Levels:** No effect.

**Groundwater Quality:** No effect.

**Hazards and Hazardous Waste/Materials:** No effect.

**Land Use:** No effect.

**Noise:** No effect.

**Stormwater/Water Quality:** No effect.

**Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access:** No effect.

#### **6.3.2 2005 Project Alignment Alternative**

**Aesthetics/ Visual:** This alternative has the potential to result in the loss or significant damage to existing Designed, Vernacular Landscapes, and/or natural riparian vegetation that function as scenic resources. However, with the implementation of mitigation measures set forth in Section 4.1 (Aesthetics/Visual) of this SEIR/EIS, which are designed to evaluate and replace existing trees and landscaping, as appropriate, potential significant scenic/aesthetic impacts due to the loss of mature trees and landscaping will be reduced to **less than significant levels**.

**Air Quality/Climate Change:** The 2005 Project Alignment Alternative is consistent with the Air Quality Management Plan (AQMP) and thus, **less than significant** without mitigation.

The 2005 Project Alignment Alternative would have **significant** short-term air impacts during construction due to the scale of the 2005 Project Alignment (length, pipe sizes, and necessary construction techniques) even with the implementation of mitigation measures set forth in Section 4.2 (Air Quality/Climate Change) of this SEIR/EIS.

The 2005 Project Alignment would not result in a cumulatively considerable long-term impact related to criteria pollutants once the project is operational because the Alignment is a pipeline and few automobiles that produce the majority of such pollutants will be used during project operation. Long-term air quality impacts were considered **less than significant** without mitigation.

For purposes of the EIS, the Preferred Alternative was evaluated for conformity with the federal Clean Air Act and was found to have de minimus effects. The 2005 Project Alignment Alternative has lower construction emissions and less operational energy use than the Preferred Alternative, therefore this alternative would have **de minimus effects** also.

Although not originally evaluated in the 2005 PEIR, greenhouse gas (GHG) emissions were evaluated in this SEIR. Due to the short-term nature of construction and the relatively small quantity of construction-related CO<sub>2</sub> emissions, the resulting impacts on global climate change from construction are considered **less than significant**.

Long-term emissions of GHG were found to be consistent with the California Air Resources Board (CARB) scoping plan which results in **less than significant** impacts associated with that threshold.

The 2005 Project Alignment includes one pump station and up to 20 wells (only 5 operating at one time). The total CO<sub>2</sub> emissions for this alternative would not exceed the CARB and SCAQMD draft GHG thresholds for industrial projects resulting in **less than significant** GHG impacts.

**Biological Environment:** The majority of the 2005 Project Alignment Alternative facilities would be underground and would not have long-term impacts on biological resources. Temporary and cumulative impacts upon biological resources would be mitigated to **below the level of significance** through implementation of the mitigation measures set forth in Section 4.3 (Biological Environment) of this SEIR/EIS.

**Cultural Resources/Paleontology:** The 2005 Project Alignment Alternative would bisect, or lie within the immediate vicinity of a total of five historic sites. In addition, palm rows and citrus trees within the California Citrus State Historic Park and other streets in the City of Riverside Greenbelt area would be affected. The 2005 Project Alignment does not impact known archaeological resources, but the project area has a moderate likelihood of containing unknown archaeological resources and a low potential of containing fossil remains. However, with implementation of the mitigation measures set forth in Section 4.4 (Cultural Resources/Paleontology) of this SEIR/EIS, impacts to historical resources and to previously

unknown potentially-significant archaeological and paleontological resources would be less than significant. This alternative's cumulative cultural resources impact would be **less than significant**.

**Energy:** The level of consumption by the 2005 Project Alignment Alternative is small, substantially less than one (1) percent of total consumption in the two-county region. The implementation of MMs Air 5 and 6 will reduce the projected level of consumption of this alternative further. Neither the City of Riverside nor SCE commented on possible shortages in electricity supplies with respect to the proposed project during the NOP/NOI comment period. Based on the varied sources and level of power supplies available to SCE and City of Riverside, and WMWD's implementation of its IRWMP, it is anticipated that the estimated levels of consumption will result in a less than significant adverse effect on local and regional energy supplies and less than significant amounts of fossil fuels will be consumed. . Therefore, the 2005 Project Alignment Alternative will have **less than significant project-related or cumulative impacts** related to energy.

**Groundwater Levels:** Groundwater levels in the Basin Area will be at similar or slightly higher levels with the implementation of the 2005 Project Alignment Alternative than without the project. In other words, there is less of a change in Total Inflow minus Total Outflow generated by the project than with the No Project scenario. In general, lower storage conditions tend to reduce concerns about water levels being too high in the Area of Historic High Groundwater (AHHG) but cause pumping problems for wells located up-slope from the AHHG. High storage conditions have the opposite effect. Water agencies in the Basin Area have generally agreed on an approach whereby water levels in the forebay areas should be stabilized at acceptable elevations by management of recharge of local and imported water while water levels in the AHHG should be controlled to acceptable elevations by pumping, including, when necessary, pumping in excess of local water supply needs. The proposed project would help to implement that approach. The 2005 Project Alignment Alternative's direct and cumulative impacts related to groundwater levels would **not be significant**. No mitigation measures are necessary. However the implementation of the mitigation measures required for potentially significant water quality impacts will ensure that future impacts to groundwater levels are avoided. Therefore, with implementation of mitigation measure MM GWL 2 (Revised), impacts to groundwater levels (safe yield) from the 2005 Project Alignment Alternative would be **less than significant**.

**Groundwater Quality:** Direct project-related environmental effects to groundwater quality will be **less than significant** due to the quality of the water being used for recharge being similar or better than the quality of the receiving water. No mitigation measures are required.

Indirect project-related environmental effects to groundwater quality result through changes in the location and/or speed of migration of pollution plumes. Operation of 2005 Project Alignment Alternative could result in a small lateral movement of the Newmark and Muscoy plumes. Such differences in movement would cause five additional wells for a brief period of time to degrade to values greater than 5 µg/l of PCE, and 7 additional wells to improve in quality to less than 5 µg/l. Nevertheless, compliance with the mitigation measures set forth in Section 4.7 (Groundwater Quality) of this SEIR/EIS would reduce the potential impacts upon groundwater quality to **less than significant** levels.

**Hazards and Hazardous Waste/Materials:** The 2005 Project Alignment will pass across or will be within the vicinity of 26 hazardous materials sites under various regulatory statutes. Although no significant impacts related to the 26 sites are anticipated, common types of contamination could be encountered during construction of the 2005 Project Alignment resulting from leaking underground storage tanks (LUST), poor chemical handling, and accidental or intentional unauthorized chemical releases. However, these impacts would be reduced to **less than significant levels** through the implementation of the mitigation measures set forth in Section 4.8 (Hazards and Hazardous Waste/Materials) and through compliance with federal, state and local regulations governing the removal and transportation of hazardous soils.

**Land Use:** The 2005 Project Alignment will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. The 2005 Project Alignment facilities will not extend water service into areas not currently served by water purveyors within the project area, and therefore will not eliminate any existing impediments to growth associated with lack of water service within the local jurisdictions. This alternative will have **no effect** upon land use and therefore would have a less than considerable contribution to cumulative land use impacts.

**Noise:** Because the RCF Project is exempt from regulatory compliance in all of the affected jurisdictions, it was not analyzed in the 2005 PEIR. Implementation of the 2005 Project Alignment Alternative would result in similar noise impacts as those discussed below under the Realignment Alternatives which result in **less than significant** noise impacts.

**Stormwater/Water Quality:** Potential water quality impacts of construction activities were not analyzed within the 2005 PEIR other than to acknowledge that they would be minimized through compliance with established regulatory programs, requiring control of erosion and sedimentation at construction sites (e.g., NPDES, SWPPP). Through compliance with regulation, the 2005 Project Alignment Alternative's construction-related water quality impacts were determined to be **less than significant**.

**Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access:** The 2005 Project Alignment Alternative would result in potential temporary significant impacts to transportation services and sensitive uses due to construction-related traffic increases and due to disruptions in existing traffic patterns during construction within road rights-of-way. These project-related and cumulative impacts will be reduced to **less than significant** levels through compliance with the mitigation measures set forth in Section 4.12 (Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access) of this SEIR/EIS.

### 6.3.3 Realignment Alternative (Jackson Street or Monroe Street options)

**Aesthetics/ Visual:** The most sensitive aesthetic resource that may be impacted by this alternative is the Designed Landscaping along Victoria Avenue within the City of Riverside. This alternative will cross Victoria Avenue at its intersection with either Jackson Street or Monroe Street. Loss of the historic landscape along Victoria Avenue would be considered significant both aesthetically and historically. However, implementation of the mitigation

measures set forth in Section 4.1 (Aesthetics/Visual) of this SEIR/EIS will reduce potential impacts to **less than significant levels**. Following completion, all of the RCF pipelines will be located underground and therefore will have **no long-term or cumulative impact** upon the visual character or quality of the site and its surroundings.

**Air Quality/Climate Change:** Less than significant air impacts without mitigation due to consistency with the Air Quality Management Plan (AQMP).

The short-term construction emissions from the Realignment Alternative will exceed the applicable SCAQMD daily regional significance thresholds for NO<sub>x</sub> and PM-10. Short-term construction will also exceed applicable LST thresholds for NO<sub>x</sub>, PM-10 and PM-2.5. Therefore, the air quality impacts from construction of the Realignment Alternative are considered regionally and locally **significant**. Even though the short-term construction of the project is shown to be significant on a regional level, these impacts are temporary and will no longer exist once the project is operational.

The Realignment Alternative would not result in a cumulatively considerable long-term impact once the project is operational because the Alignment is a pipeline and few automobiles that produce such pollutants will be used during project operation. Long-term air quality impacts were considered **less than significant**.

For purposes of the EIS, the Preferred Alternative was evaluated for conformity with the federal Clean Air Act and was found to have de minimus effects. The Realignment Alternative has lower construction emissions than the Preferred Alternative, therefore this alternative would have **de minimus effects** also.

Although not originally evaluated in the 2005 PEIR, greenhouse gas (GHG) emissions were evaluated in this SEIR. Due to the short-term nature of construction and the relatively small quantity of construction-related CO<sub>2</sub> emissions, the resulting impacts on global climate change are considered **less than significant**. Long-term emissions of GHG were found to be consistent with the California Air Resources Board (CARB) scoping plan which results in **less than significant impacts** associated with that threshold. The Realignment Alternative includes two pump stations and up to 20 wells (only 5 operating at one time). The total CO<sub>2</sub> emissions for this alternative would not exceed the CARB and SCAQMD draft GHG thresholds for industrial projects resulting in **less than significant** GHG impacts.

**Biological Environment:** Based on the biological resource evaluations discussed in Section 4.3 (Biological Environment) of this SEIR/EIS and after implementation of the mitigation measures, avoidance, and minimization approaches identified set forth in that section are implemented, potential adverse impacts associated with candidate, sensitive, or special-status species; both plant and wildlife, as well as special-status communities/habitats, including wetlands, will be reduced to a **less than significant level**. After construction, the disturbed area would be returned to level soil conditions and be allowed to return to its natural state. Through implementation of the mitigation measures set forth in Section 4.3, this alternative's contribution to potential cumulative impacts to the biological environment would be fully mitigated and the cumulative biological impacts would be **less than significant**. Due to the nature and location of the project (primarily underground), and mitigation established to avoid nesting birds, etc., potential adverse

impacts to the movement of native resident or migratory fish or wildlife species or corridors and nursery sites will be **less than significant**.

The project traverses both Riverside and San Bernardino counties. Riverside County has an adopted the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), San Bernardino County has not. The project does not conflict with the MSHCP although it does cross three criteria cells in the vicinity of the Santa Ana River. The project is also located within the Stephens' kangaroo rat (SKR) HCP in Riverside County, but is not located within a core reserve area. After mitigation, the project is consistent with both HCPs in Riverside County so impacts are **less than significant**.

**Cultural Resources/Paleontology:** The Realignment Alternative (Jackson Street or Monroe Street options) would bisect, or lie within the immediate vicinity of known historic sites. In addition, palm rows within San Bernardino County and palm rows and citrus trees within the City of Riverside would potentially be affected. This alternative will not impact known archaeological resources or disturb human remains, but the project area has a moderate likelihood of containing unknown archaeological resources and a moderate to high potential of containing fossil remains. However, with implementation of the mitigation measures set forth in Section 4.4 (Cultural Resources/Paleontology) of this SEIR/EIS, impacts to historical resources and to previously unknown potentially-significant archaeological and paleontological resources or human remains would be **less than significant**. This alternative's contribution to a cumulative cultural resources impact would be less than considerable, and the cumulative cultural resources impact would be **less than significant**.

**Energy:** The level of consumption by the Realignment Alternative (Jackson Street or Monroe Street options) is small, substantially less than one (1) percent of total consumption in the two-county region. Due to the electricity generated by the Sterling Hydroelectric Station, the electricity consumption from the Realignment Alternative is similar to the electricity consumption from the 2005 Project Alignment Alternative, with a difference of only an additional 226 MWh per year. The implementation of MM Air 5 and 6 will reduce the projected level of consumption of the Preferred Alternative further. Neither the City of Riverside nor SCE commented on possible shortages in electricity supplies with respect to the proposed project during the NOP/NOI comment period. Based on the varied sources and level of power supplies available to SCE and City of Riverside, and WMWD's implementation of its IRWMP, it is anticipated that the estimated levels of consumption will result in a less than significant adverse effect on local and regional energy supplies and energy. The Realignment Alternative does not cause a substantial increase in energy consumed compared to the 2005 Project Alignment Alternative, regional use for similar purposes, or consumption in the region as a whole, therefore, it does not result in a substantial increase in the use of fossil fuels such as coal and natural gas which are used to produce the power; therefore the Realignment Alternative (Jackson Street or Monroe Street options) will have **less than significant project-related or cumulative impacts** related to energy.

**Groundwater Levels:** The Realignment Alternative is substantially the same as the 2005 Project Alignment Alternative with respect to groundwater recharge and extraction. Implementation of this alternative would have substantially the same **less than significant impacts** upon groundwater levels as those described above for the 2005 Project Alignment Alternative. In light

of the updated groundwater modeling prepared as part of this SEIR/EIS (Appendix F), it can be concluded that with implementation of mitigation measure MM GWL 2 (Revised) as described in Section 4.6, impacts to groundwater levels will be **less than significant**.

**Groundwater Quality:** The Realignment Alternative includes project-related extraction and recharge facilities which are substantially the same as the 2005 Project Alignment Alternative. Implementation of this alternative would have substantially the same **less than significant impacts** upon groundwater quality as those described above for the 2005 Project Alignment Alternative.

**Hazards and Hazardous Waste/Materials:** The Realignment Alternative (Jackson Street or Monroe Street options) will pass across or will be within the vicinity of approximately 160 hazardous materials sites under various regulatory statutes. Although no significant impacts related to these sites are anticipated, common types of contamination could be encountered during construction of the proposed project resulting from LUST, poor chemical handling, and accidental or intentional unauthorized chemical releases. However, these impacts would be reduced to **less than significant levels** through the implementation of the mitigation measures set forth in Section 4.8 (Hazards and Hazardous Waste/Materials) and through compliance with federal, state and local regulations governing the removal and transportation of hazardous soils.

A portion of the Northern Reach in unincorporated Riverside County and most of the Central Reach are located within proximity to Riverside Municipal Airport. However, construction-related impacts due to proximity to the airport would be reduced to **less than significant levels** through the implementation of the mitigation measures set forth in Section 4.8 and through compliance with FAA regulations.

**Land Use:** The Realignment Alternative (Jackson Street or Monroe Street options) will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. The Realignment Alternative (Jackson Street or Monroe Street options) facilities will not extend water service into areas not currently served by water purveyors within the project area, and therefore will not eliminate any existing impediments to growth due to lack of water service within the local jurisdictions. This alternative will have **no effects** upon land use and therefore would have a less than considerable contribution to cumulative land use impacts.

**Noise:** Implementation of the Realignment Alternative (Jackson Street or Monroe Street options) could result in temporary and intermittent construction-related noise levels that would exceed the applicable standards at nearby sensitive receptors. Although the project would create temporary noise, the project is exempt from regulatory compliance in all seven of the affected jurisdictions and because construction noise is temporary, it is considered **less than significant**. However, implementation of mitigation measures **MM Noise 1** through **MM Noise 3**, and **MM Trans 6** will help to minimize construction-related noise impacts upon sensitive receptors.

Impacts will come from construction noise only; ongoing operation of the proposed project will not result in adverse noise impacts. Although the design of the project proposes to use concrete

block structures to house pump stations which would reduce potential noise impacts adequately, **MM Noise 4** requires that whatever the construction of such housings, that noise attenuation is incorporated to ensure that operations of the Realignment Alternative will have **no long-term or cumulative noise impacts**.

**Stormwater/Water Quality:**

Construction of the RCF facilities could release substantial discharge during construction. If unmitigated, these temporary impacts to water quality associated with RCF project construction would be potentially significant. However, through compliance with the General Construction NPDES permit and implementation of mitigation measure MM Water Qual 1a – 1e, water quality standards and waste discharge requirements will not be violated, and water quality will not otherwise be degraded, by the proposed project and therefore, impacts are considered **less than significant**. Long-term and cumulative water quality impacts will be **less than significant**.

**Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access:** The Realignment Alternative (Jackson Street or Monroe Street options) would result in potential temporary significant impacts to transportation services and sensitive uses due to construction-related traffic increases and due to disruptions in existing traffic patterns during construction within road rights-of-way. These project-related and cumulative impacts will be reduced to **less than significant** levels through compliance with the mitigation measures set forth in Section 4.12 (Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access) of this SEIR/EIS.

### **6.3.4 Realignment Alternative with Additional Connections (Preferred Alternative)**

**Aesthetics/ Visual:** The potential impacts of this alternative are substantially the same as those described above for the Realignment Alternative (Jackson Street or Monroe Street options). Following completion, all of the RCF pipelines will be located underground and therefore will have **no impact** upon the visual character or quality of the site and its surroundings. Potential visual impacts related to the Clay Street Connection's booster station and the Mockingbird Connection's reservoir and booster station will be subject to design considerations and mitigation measures that reduce their potential impact to **less than significant levels**.

**Air Quality/Climate Change:** Less than significant air impacts without mitigation due to consistency with the Air Quality Management Plan (AQMP) would result. Because the Realignment Alternative with Additional Connections (Preferred Alternative) is substantially the same as the Realignment Alternative (Jackson Street or Monroe Street options), implementation of this alternative would have substantially the same regionally and locally **significant** construction-related air quality impacts, **less than significant** long-term and cumulative air quality impacts as those described above for the Realignment Alternative (Jackson Street or Monroe Street options). However, it should be noted that the level of impact will be minimally greater (e.g., higher potential daily construction emissions) due to the addition of a reservoir, booster stations and wells as part of this alternative.

For purposes of the EIS, the Preferred Alternative was evaluated for conformity with the federal Clean Air Act and was found to have de minimus effects. The Realignment Alternative has lower

construction emissions than the Preferred Alternative, therefore this alternative would have **de minimus effects** also.

Although not originally evaluated in the 2005 PEIR, greenhouse gas (GHG) emissions were evaluated in this SEIR. Due to the short-term nature of construction and the relatively small quantity of construction-related CO<sub>2</sub> emissions, the resulting impacts on global climate change are considered **less than significant**. Long-term emissions of GHG were found to be consistent with the California Air Resources Board (CARB) scoping plan which results in **less than significant impacts** associated with that threshold. The Preferred Alternative includes four pump stations and up to 20 wells (only 5 operating at one time). The total CO<sub>2</sub> emissions for this alternative would exceed the CARB and SCAQMD draft GHG thresholds for industrial projects; although there are no thresholds for infrastructure projects of this nature. The exact reductions in energy consumption provided by the mitigation measures is not known so to be conservative GHG impacts are evaluated against the industrial threshold and considered **significant** and unavoidable.

**Biological Environment:** The Realignment Alternative with Additional Connections (Preferred Alternative) has the same potential biological impacts as the Realignment Alternative (Jackson Street or Monroe Street options) in locations where it is the same as the Realignment Alternative (Jackson Street or Monroe Street options) which result in **less than significant** impacts as described above and in Section 4.3. The Additional Connections portions of the Preferred Project result in additional impacts including the potential to adversely affect Stephens' kangaroo rats and coastal California gnatcatcher which have the potential to occur on or adjacent to the Mockingbird Connection and the La Sierra Pipeline Connection areas. With mitigation measures implemented, these potential impacts will be mitigated to **less than significant levels**.

**Cultural Resources/Paleontology:** Because the Realignment Alternative with Additional Connections (Preferred Alternative) is substantially the same as the Realignment Alternative (Jackson Street or Monroe Street options), implementation of this alternative would have substantially the same **less than significant** impacts to cultural resources, paleontological resources or human remains as those described above for the Realignment Alternative (Jackson Street or Monroe Street options). One archaeological site is known to exist near the Mockingbird Connection facilities, but it will not be adversely impacted by the project as described in Section 4.4 with **less than significant** effects resulting after mitigation.

**Energy:** The Realignment Alternative with Additional Facilities Preferred Alternative) includes the Sterling hydroelectric station, which will convert the potential energy of an elevated water supply to electricity. With incorporation of mitigation measures MM Energy 1, and MMs Air 5 and 6, hydroelectric energy will be generated at the Mockingbird and Clay Street pump stations, solar power will be produced, and efficient pumps are required. This generation of electricity by the project contributes to meeting the energy conservation goals of decreasing reliance on fossil fuels and increasing reliance on renewable energy sources. Additionally, the level of consumption by this alternative is small, substantially less than one (1) percent of total consumption in the two-county region. Neither the City of Riverside nor SCE commented on possible shortages in electricity supplies with respect to the proposed project during the NOP/NOI comment period. Based on the varied sources and level of power supplies available to SCE and City of Riverside, and WMWD's implementation of its IRWMP, it is anticipated that

the estimated levels of consumption will result in a **less than significant** adverse effect on local and regional energy supplies and fossil fuels..

**Groundwater Levels:** The results of recharge and extraction modeling show that the Realignment Alternative with Additional Connections will have a lower level of groundwater pumping and artificial recharge than that projected for the 2005 Project Alignment Alternative. As a result, the total changes in groundwater storage within the Basin Area will be less than previously projected. This alternative will have **no significant impacts** related to groundwater levels based upon groundwater modeling that analyzed project-related and cumulative impacts upon groundwater levels. However the mitigation measures required for potentially significant water quality impacts will ensure that future impacts to groundwater levels are avoided. Therefore, with implementation of mitigation measure MM GWL 2 (Revised) impacts to groundwater levels (safe yield) from the proposed project **would be less than significant**

**Groundwater Quality:** Direct project-related environmental effects to groundwater quality will be **less than significant** due to the quality of the water being used for recharge being similar or better than the quality of the receiving water. No mitigation measures are required.

A hydrologic analysis was completed to analyze the project-related and cumulative groundwater quality impacts of the Realignment Alternative with Additional Connections. The results of hydrologic modeling show that this alternative, will not adversely impact the contamination plumes within the Basin Area. This modeling also shows no change in the Norton and Redland-Crafton TCE plume areas as a result of project construction. Therefore, indirect groundwater quality impacts related to this alternative will be **less than significant** following implementation of the mitigation measures set forth in Section 4.7 (Groundwater Levels) of this SEIR/EIS.

**Hazards and Hazardous Waste/Materials:** Because the Realignment Alternative with Additional Connections (Preferred Alternative) is substantially the same as the Realignment Alternative (Jackson Street or Monroe Street options), implementation of this alternative would have substantially the same **less than significant impacts** related to hazards and hazardous waste/materials as those described above for the Realignment Alternative (Jackson Street or Monroe Street options). It is noted that in addition to the Central Reach, the Clay Street Connection of this alternative is also within proximity to the Riverside Airport.

**Land Use:** Because the Realignment Alternative with Additional Connections (Preferred Alternative) is substantially the same as the Realignment Alternative (Jackson Street or Monroe Street options), implementation of this alternative would have substantially the same effect on land use designations as those described above for the Realignment Alternative (Jackson Street or Monroe Street options) , which result in **no effect**.

**Noise:** Because the Realignment Alternative with Additional Connections (Preferred Alternative) is substantially the same as the Realignment Alternative (Jackson Street or Monroe Street options), implementation of this alternative would have substantially the same **less than significant impacts** construction-related noise impacts and **no long-term or cumulative noise impacts** as those described above for the Realignment Alternative (Jackson Street or Monroe Street options), with mitigation measures described in Section 4.10 implemented.

**Stormwater/Water Quality:** Because the Realignment Alternative with Additional Connections (Preferred Alternative) is substantially the same as the Realignment Alternative (Jackson Street or Monroe Street options), implementation of this alternative would have substantially the same **less than significant** stormwater/water quality impacts after mitigation as those described above for the Realignment Alternative (Jackson Street or Monroe Street options).

**Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access:** Because the Realignment Alternative with Additional Connections (Preferred Alternative) is substantially the same as the Realignment Alternative (Jackson Street or Monroe Street options), implementation of this alternative would have substantially the same **less than significant** transportation and traffic-related impacts as those described above for the Realignment Alternative (Jackson Street or Monroe Street options).

## 6.4 MITIGATION MEASURES FOR SIGNIFICANT IMPACTS UNDER CEQA

As discussed above, a number of avoidance, minimization, and mitigation measures were developed to address the potential adverse impacts of the 2005 Project Alignment Alternative, the Realignment Alternative and the Realignment Alternative with Additional Connections. Most impacts can be reduced below a level of significance with mitigation while short-term air quality will still be significant and unavoidable after mitigation. Impacts associated with greenhouse gas emissions remain significant for the Preferred Alternative, as well. Section 1.0, Summary, and Section 4.0, Affected Environment, Environmental Consequences and Avoidance, Minimization and/or Mitigation Measures provide the complete language of each avoidance, minimization, and mitigation measure applicable to these three alternatives, and provides the environmental mitigation measures that will be adopted by WMWD at the time it certifies the Final SEIR/EIS. Those measures are listed below by environmental topic.

- Aesthetics/ Visual: Mitigation Measures **MM Aes 1** through **MM Aes 6**
- Air Quality/Climate Change: Mitigation Measures **MM Air 1** through **3**, **MM Air 3a** and **4a**, and **MM Air 5** and **6** and implementation of local, state, and federal regulations
- Biological Environment: Mitigation Measures **MM Bio 1** through **MM Bio 26** and implementation of local, state, and federal regulations
- Cultural Resources/Paleontology: Mitigation Measures **MM Cult 1** through **MM Cult 13** and implementation of local, state, and federal regulations
- Energy: Mitigation Measure **MM Energy 1**
- Groundwater Levels: Mitigation Measures **MM GWL 2 (Revised)** and compliance with legal judgments and contractual requirements
- Groundwater Quality: Mitigation Measures **MM GWQ 2 Revised** and compliance with legal judgments and contractual requirements
- Hazards and Hazardous Waste/Materials: Mitigation Measures **MM Haz 1** through **MM Haz 10** and implementation of local, state, and federal regulations
- Land Use: No mitigation measures required

- Noise: Mitigation Measures **MM Noise 1** through **MM Noise 4** and **MM Trans 6**  
Stormwater/Water Quality: Mitigation Measure **MM Water Qual 1a** through **MM Water Qual 1e** and compliance with local, state, and federal regulations
- Traffic and Transportation/Pedestrian and Bicycle Facilities/Emergency Access: Mitigation Measures **MM Trans 1, 1a, 2, 2a** and **3** through **14**.

## 6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines, Section 15126.6(e)(2), requires the identification of the environmentally superior alternative compared to the “proposed project.” From a CEQA perspective, the “proposed project” is the Realignment Alternative with Additional Connections (Preferred Alternative). Of the alternatives evaluated herein, the No Action/Project Alternative is the environmentally superior alternative with respect to reducing impacts created by the proposed RCF project. The CEQA Guidelines also require the identification of another environmentally superior alternative if the No Action/Project Alternative is selected as the environmentally superior alternatives.

The 2005 Project Alignment Alternative would have slightly greater aesthetics/visual and historic resource impacts than the Realignment Alternative (Jackson Street or Monroe Street options) or Realignment Alternative with Additional Connections (Preferred Alternative) due to its greater impact upon Victoria Avenue (listed on the National Register) in the City of Riverside. Although determined to be less than significant with mitigation, the 2005 Project Alignment would also have slightly greater groundwater quality impacts than the Realignment Alternative with Additional Connections (Preferred Alternative), due to minor changes in the pollution plumes within the San Bernardino Groundwater Basin. The 2005 Alignment Alternative would have fewer potential impacts regarding the biological environment because it does not traverse areas with Delhi soils which could be potential Delhi Sands flower-loving fly habitat, however, all potential impacts can be avoided or mitigated. The 2005 Project Alignment Alternative is located further from the Riverside Airport, and therefore would present less than significant impacts related to airport proximity. However, because this alternative: does not have the ability to meet the broader project objectives of connecting to JCSD, the Chino Basin, and other regional water facilities that assist with conjunctive use management strategies; includes well locations and operations which have a greater chance of impacting groundwater quality than the proposed project; and has aesthetic impacts which could be greater; it is not considered the environmentally superior or preferred alternative.

The Realignment Alternative would have slightly lesser aesthetics/visual and historic resource impacts than the 2005 Project Alignment Alternative and the same as the Realignment Alternative with Additional Connections (Preferred Alternative) due to its lesser impact upon Victoria Avenue (listed on the National Register) in the City of Riverside. Although determined to be less than significant with mitigation, the Realignment Alternative would have slightly greater groundwater quality impacts than the Realignment Alternative with Additional Connections (Preferred Alternative), due to minor changes in the pollution plumes within the San Bernardino Groundwater Basin which are avoided in the Preferred Alternative with the option to use the proposed new well field located adjacent to the Central Feeder Connection. The Realignment Alternative would have the same potential impacts as the proposed

project/Preferred Alternative regarding the portion of the alignment where it traverses areas with Delhi soils which could be potential Delhi Sands flower-loving fly habitat, however, all potential impacts can be avoided or mitigated. The Realignment Alternative has lesser potential biological resource impacts associated with above-ground facilities (i.e., reservoir/tank and pump stations) than the proposed project. The Realignment Alternative and the Realignment Alternative with Additional Connections (Preferred Alternative) are located adjacent to the Riverside Airport, and therefore would present greater less than significant impacts related to airport proximity than the 2005 Project Alignment, but the same as each other. This alternative meets some aspects of the broader project objectives of connecting to JCSD, the Chino Basin, and other regional water facilities but not to the full extent that the proposed project does. Solely based on potential environmental impacts, the Realignment Alternative could be considered the environmentally superior. However, because potential impacts associated with the Realignment Alternative are basically the same as the proposed project and it includes well locations and operations which have a greater chance of impacting groundwater quality than the proposed project/Preferred Alternative, it is not considered the preferred alternative.

The Realignment Alternative with Additional Connections (Preferred Alternative) is substantially the same as the Realignment Alternative (Jackson Street or Monroe Street options); therefore these two alternatives would have substantially the same environmental impacts, except the Realignment Alternative with Additional Connections would have slightly greater (less than significant) aesthetic/visual, biological, and energy impacts due to the inclusion of additional reservoir, booster station and well facilities; but would reduce potential groundwater quality issues compared to either of the other two action alternatives. Therefore, because the Realignment Alternative with Additional Connections meets all project objectives; creates no additional potential significant adverse impacts which cannot be avoided or reduced to less than significant levels; and reduces potential impacts to groundwater quality, it is considered the Preferred Alternative.

Due to the fact that the 2005 Project Alignment Alternative will have greater aesthetics/visual and groundwater quality impacts than the Realignment Alternatives, it is not considered to be the environmentally superior alternative. However, since the Realignment Alternative (Jackson Street or Monroe Street options) will have slightly fewer impacts than the Realignment Alternative with Additional Connections (Preferred Alternative), it is considered to be the most environmentally superior alternative.

## 6.6 CONSISTENCY WITH REGIONAL PLANS

California Environmental Quality Act, Section 15125(d), requires an Environmental Impact Report to discuss any inconsistencies between the proposed project and applicable general and regional plans. Consistencies and inconsistencies of the Riverside-Corona Feeder Project (2005 Project Alignment) with existing regional water plans were addressed in Section I-5 (pp. I-5-1 through I-5-2) of the 2005 Certified Program EIR (2005 PEIR) for the 2005 Project Alignment, which are hereby incorporated by reference.

A discussion of the proposed project's consistency with applicable city and county general plans is contained in Section 4.8 (Land Use and Planning) of this SEIR/EIS. Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is contained in Section 4.3 (Biological Resources) of this SEIR/EIS. The Air Quality Section of this SEIR/EIS (Section 4.2) discusses consistency with the applicable Air Quality Management Plan. The purpose of this section is to discuss the proposed project's consistency with applicable regional water plans.

In addition to the 2005 PEIR and its reference documents, and other reference documents, the following references were used in the preparation of this section of the SEIR/EIS:

- Upper Santa Ana Water Resources Association, *Upper Santa Ana River Watershed Integrated Regional Water Management Plan*, November 2007. (Available at San Bernardino Valley Municipal Water District.)
- Western Municipal Water District, *Updated Integrated Regional Water Management Plan Report*, May 2008. (Available at <http://www.wmwd.com/irwmp-weump.htm>, accessed on July 30, 2009.)

### 6.6.1 Summary of 2005 Certified Program EIR for Riverside-Corona Feeder Project

The 2005 PEIR reviewed the consistency of the Riverside-Corona Feeder Project (2005 Project Alignment) with the San Bernardino Valley Municipal Water District Regional Water Facilities Master Plan and California's Colorado River Water Use Plan (California 4.4 Plan). The following discussion is a summary of the 2005 PEIR as it relates to project consistency with those documents.

#### San Bernardino Valley Municipal Water District Regional Water Facilities Master Plan

As part of the Riverside-Corona Feeder (RCF) Project, WMWD is proposing to recharge water purchased from the Metropolitan Water District into the San Bernardino Basin Area and then withdraw it as needed. The water would be extracted from the San Bernardino Basin Area via 20 new or existing wells and would be delivered into the RCF Project. This pipeline would bring water to areas located south and west of the San Bernardino Basin Area.

The RCF Project is a part of a larger conjunctive use and management plan for the San Bernardino Basin Area which is outlined in the San Bernardino Valley Municipal Water District

(SBVMWD) Regional Water Facilities Master Plan. As presented below, the 2005 Project Alignment is also consistent with the SBVMWD Master Plan water resource management objectives and strategies regarding water supply reliability, controlling high ground water, optimizing the use of imported water, and groundwater management.

#### *Improve Water Supply Reliability*

Availability of water in the region is subject to the impacts of drought, contamination, natural disasters, political and institutional differences, and regulatory actions. Coordinated use of multiple sources would increase the reliability of the water supply system.

#### *Control High Groundwater*

The San Bernardino Basin provides an excellent opportunity to increase the capture of local water, as well as optimize the use of imported water through increased replenishment in the groundwater basin. However, to take full advantage of the replenishment potential, the adverse impacts associated with high groundwater levels in the lower end of the basin must be controlled through an effective groundwater level management strategy.

The RCF Project can be utilized to transport water out of the area of historic high groundwater, thus providing an additional outlet for water when groundwater levels become too high in the lower end of the basin.

#### *Optimize Use of Imported Water*

Imported water supplies can be halted or severely cut back as a result of drought, natural disaster, aqueduct maintenance or repairs. Reliance on imported water to meet immediate or instantaneous demands renders local purveyors vulnerable to these external factors. Using imported water to supplement the overall long-term water supply for an area as opposed to relying solely on imported water to meet peak demands will reduce the vulnerability to these outside factors.

As part of the RCF Project, imported water will be used to replenish the Basin when available, and extracted when needed.

#### *Groundwater Management*

Groundwater production has been, and will continue to be, the principal means by which many of the local water purveyors meet demand in SBVMWD. Currently, over 80 percent of the total annual supply in SBVMWD's service area consists of groundwater production. Effective management of the groundwater basins to maximize yield, while minimizing the impacts of high groundwater and addressing water quality, requires the implementation of sometimes conflicting operating objectives including: 1) those oriented towards maximizing water levels and storage volumes; 2) those geared to preserving and improving water quality; and 3) those aimed at increasing the basin yield and maximizing groundwater production. Depending on the objective, different strategies may be proposed under specific conditions and basin management must achieve a balance between objectives.

In support of this policy, WMWD intends to conduct replenishment and extraction operations in cooperation with other water agencies who recharge water in and/or extract water from groundwater basins located within the San Bernardino Basin Area, including the parties to the Judgment in the case of Western Municipal Water District of Riverside County, et al. v East San Bernardino County Water District, et al., Riverside Superior Court No. 78426 ("Judgment"), and in compliance with that Judgment.

*California's Colorado River Water Use Plan (California 4.4 Plan)*

In late 1996 the Secretary of the Interior, Bruce Babbitt, issued a strongly worded directive to California to reduce its over-reliance on the Colorado River. Noting that other lower basin states such as Arizona and Nevada would soon be using their full entitlements, California was urged to come up with a strategy to live with its legal allotment of 4.4 million acre feet per year. A framework for that strategy, formally known as California's Colorado River Water Use Plan (California 4.4 Plan), was drafted and released in 1997. The plan laid out an array of programs and actions to wean California from its reliance on surplus Colorado River water without major disruption to local economies or to the state's water supply. The RCF Project is consistent with the following goals outlined in the draft 4.4 Plan:

- Develop water replenishment and conjunctive use programs to increase normal and dry year water supplies;
- Encourage water exchanges;
- Implement administrative actions necessary for effective use and management of water supplies;
- Encourage improved reservoir management and operations;
- Develop drought and surplus water management plans; and
- Encourage coordinated project operations for increased water supply yield and groundwater management.

## **2005 Project Alignment Determination under CEQA**

The 2005 PEIR prepared for the 2005 Riverside-Corona Feeder Project Alignment found that the RCF Project was consistent with the San Bernardino Valley Municipal Water District Regional Water Facilities Master Plan and California's Colorado River Water Use Plan (California 4.4 Plan).

## **6.6.2 Analysis of the Riverside-Corona Feeder Project Realignment Alternatives**

### **Relation of the Realignment Alternatives to the 2005 Project Alignment**

The impacts and findings discussed in the 2005 PEIR related to consistency with regional plans are applicable to both the 2005 Project Alignment and the current realignment project, as appropriate. The proposed project will substitute a new alignment for that portion of the 2005 Project Alignment identified as Reaches A, B, C, and D in the 2005 PEIR. The analysis of

regional water plans contained within the 2005 PEIR does not specifically address regional plans adopted since completion of the 2005 PEIR. However, the analysis conducted in this section of the SEIR/EIS will be provided to make the previous EIR adequate for the entire Riverside-Corona Feeder Project.

### **Thresholds of Significance**

Western Municipal Water District (WMWD) has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, WMWD's "Environmental Checklist" for the subject project (see Appendix A of this document) indicates that impacts to consistency with regional plans may be considered potentially significant if the project would:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

### **Environmental Impacts before Mitigation**

***Threshold:** Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.*

As described above, the proposed project's consistency with applicable city and county general plans is contained in Section 4.9 (Land Use and Planning) of this SEIR/EIS. Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is contained in Section 4.3 (Biological Resources) of this SEIR/EIS. The Air Quality Section of this SEIR/EIS (Section 4.2) discusses consistency with the applicable Air Quality Management Plan. The purpose of this section is to discuss the proposed project's consistency with applicable regional water plans.

#### *WMWD's Updated Integrated Regional Water Management Plan*

WMWD completed an Integrated Regional Water Management Plan (IRWMP) in October 2006. Since that time there have been many developments related to regional water planning. These developments include preparation of a Draft Water Conservation Master Plan for WMWD, release of a Drought Shortage Allocation Plan by the Metropolitan Water District of Southern California (MWD), judicial decisions affecting availability of State Water Project (SWP), and the publication of Integrated Regional Water Management Plans for neighboring regions. Furthermore, in November 2006, California voters passed Proposition 84, a bond measure specifically addressing Integrated Regional Management Plans. In response to these events, an update of the IRWMP was completed in May 2008.

The purpose of the IRWMP for the WMWD service area is to continue to address long range water quantity, quality, and environmental planning needs within WMWD's service area. The

essence of the IRWMP is the identification and evaluation of water management strategies that could increase local water supply, thereby improving water supply reliability. Additionally, the IRWMP addresses local and regional water quality, environmental and disadvantaged community issues. The IRWMP also includes discussion of other regional planning efforts that impact water management within the WMWD service area as well as compilation of estimates of water demands by member agencies, water supplies (e.g., local groundwater, recycled water, surface water, and imported water) available to the agencies, and means to coordinate investments in water management, as appropriate, between agencies.

The objectives of the IRWMP are to prepare a comprehensive document to describe WMWD, its member agencies and the local and regional water planning issues; identify and evaluate programs on a regional basis that provide water supply reliability for dry periods as well as short-term MWD outages, address regional surface water, groundwater quality, and environmental concerns particularly as they intersect with water supply, and provide operational redundancy especially for MWD outages; and provide an on-going process with which to evaluate and compare water supply and other water management strategies.

#### *Consistency of the Riverside-Corona Feeder Project with the IRWMP*

The IRWMP identifies approximately 90 proposals for evaluation and inclusion in the IRWMP. The RCF Project was evaluated and included in the IRWMP. The IRWMP recognizes that the RCF Project will reduce the WMWD dependency on imported water by banking water in the upper areas of the Santa Ana River basin as well as by facilitating conveyance of desalted groundwater from the Arlington and Chino Basin Desalters to WMWD's service area. In addition, the project could convey desalted water from the City of Riverside Downtown Groundwater Treatment Plant Project which will provide desalted water from the Riverside South Basin. The Chino Basin Dry Year Yield Study and Chino II Desalter Expansion will augment the Chino Desalter supplies to the Riverside-Corona Feeder.

Table 5-2 in the IRWMP shows that the RCF Project meets the California Water Plan strategy of "Improve Operational Efficiency and Transfers" as a "conveyance" project; and the "Increase Water Supply" strategy as a "Conjunctive Management & Groundwater Storage" and "Desalination – Brackish and Seawater" project. IRWMP Table 5-3 shows that the RCF Project meets the IRWMP objectives of "New Water Supply," "Basin Water Quality" and "Operational Flexibility (potable)."

IRWMP also determined that the RCF project incorporates the IRWMP strategies of water supply reliability, groundwater management in the San Bernardino Basin Area (SBBA), use of imported water for aquifer storage in the SBBA to increase the yields for State Water Project water, and the provision of the opportunity to better utilize existing/expanded desalters.

Based upon the inclusion of the RCF project within the list of projects evaluated by the IRWMP and the IRWMP determination that the RCF Project meets IRWMP objectives and strategies, it can be concluded that the proposed project is consistent with the IRWMP.

*Upper Santa Ana Watershed Integrated Regional Water Management Plan*

In 2005, the Upper Santa Ana Water Resources Association (Association) agreed to develop an Integrated Regional Water Management Plan (IRWM Plan) to address major water management issues for the communities of the Upper Santa Ana River Watershed. The main benefit of the plan was the development of a process for managing the San Bernardino Basin Area (SBBA). A secondary benefit was to identify regional projects and to receive grant funding for these projects. The plan was developed through the participation of water managers and stakeholders and was finalized in November 2007.

The IRWM Plan Area (Region) covers 852 square miles, approximately 32 percent of the total Santa Ana River watershed, and is primarily located in San Bernardino and Riverside Counties. The Region includes Big Bear Lake, the cities and communities of San Bernardino, Yucaipa, Redlands, Highland, Rialto, Mentone, Colton, Grand Terrace, Loma Linda, Beaumont, and Riverside.

The primary purpose of the IRWM Plan is to assist local agencies with developing tools for optimizing the management and use of the region's water resources while protecting the groundwater basins from water quality degradation and the threat of liquefaction. The implemented IRWM Plan will reduce reliance on imported water during the drought periods and optimize the use of both native and imported supplies to help meet water demands even during extended periods of below-average precipitation. The IRWM Plan sets forth three principal objectives: Water Supply Reliability Improvement, Water Quality Protection, and Ecosystem Restoration and Environmental Improvement.

Water Supply Reliability Improvement

Improving water supply reliability is the primary objective of the IRWM Plan. This objective was formulated to ensure that a reliable water supply is available for the region through 2030. Given the variability of the State Water Project (SWP) supplies, one of the region's water supply reliability goals as set forth in the IRWM Plan is to optimize the use of SWP supplies to be able to reduce its reliance on the SWP during drought periods. Various water management strategies and projects are identified and evaluated in the IRWM Plan to achieve water supply reliability objectives. Because surface water management and groundwater resources management of the region are critical and inseparable components of water supply reliability, "surface water management and groundwater management" are considered a subset of the broader water supply reliability objective.

### Protect and Enhance Water Quality Objective

The goal of this objective is to protect the quality of the region's surface water and groundwater resources. To ensure reasonable protection, the water management strategies for the basin should be consistent with and contribute to the water quality objectives for the region, such as the Santa Ana Regional Water Quality Control Plan and the SAWPA IRWM Plan. The water quality objective is designed to address issues specific to the region. Groundwater management is currently influenced by the presence of contamination plumes. Most of these plumes resulted from historic military and industrial operations in the region.

### Ecosystem Restoration and Environmental Improvement Objective

Protecting and restoring, where possible, the ecological functions of the watershed is an objective for the region. The IRWM Plan provides a framework for the integration and coordination of ecosystem and environmental improvement strategies relating to flood management, recreation and public access, and land use planning. The purpose of this framework is to enable stakeholders to coordinate and advance strategies to improve the ecological health of the watershed and, in the process, improve public awareness, access, stewardship, and enjoyment of this region's most valued water resources.

### Consistency of the Riverside-Corona Feeder Project with the IRWM Plan

The IRWM Plan identifies and evaluates over 100 projects proposed to implement the water management strategies identified in the IRWM Plan. The Riverside-Corona Feeder Project was evaluated and was identified as a Tier 1a project that addresses two of the plan's objectives. Table 5-2 in the IRWM Plan shows that the Riverside-Corona Feeder project meets the IRWM Plan objective of "Water Supply Reliability" as a primary objective and meets the IRWM Plan objective subset of "Surface Water and Groundwater Management" as a secondary objective. Additionally, the RCF Project was identified as supporting "conveyance and intertie", and water supply strategies.

As discussed in more detail in Section 4.6 (Groundwater Quality) of this SEIR/EIS, it is the intent to operate the RCF Project (water replenishment and extraction), in order to assure that recharge and extraction operations maintain but do not exacerbate water level or water quality problems.

Due to the recognition of the RCF Project as an implementing project in the IRWM Plan and the intent to assure that water level or water quality problems are not exacerbated by the RCF Project, it can be concluded that the proposed project is consistent with the IRWM Plan.

**Proposed Mitigation Measures**

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). It is determined that the proposed project is consistent with applicable regional water plans; and therefore, potential impacts related to consistency with regional plans will be less than significance. Consequently, mitigation measures specifically related to this issue are not required.

**Summary of Environmental Effects after Mitigation Measures are Implemented**

The proposed project is consistent with all applicable regional water plans and therefore potential impacts of the project related to consistency with regional plans will be less than significant. Mitigation measures are not required to reduce potential impacts from the proposed project to a level that is less than significant.

## 7.0 LONG-TERM IMPLICATIONS OF THE PROJECT

### 7.1 SIGNIFICANT IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES IF THE PROPOSED ACTION SHOULD BE IMPLEMENTED

The NEPA, Section 102(2)(c)(v) and 40 CFR 1502.16 require that an EIS include a discussion of the irreversible and irretrievable commitments of resources which may result, should the project be implemented. Similarly, the State CEQA (21158(a) and the CEQA Guidelines (Section 15126.2(c)) require a discussion of the significant irreversible environmental changes which would be involved if the project should be implemented.

A resource commitment is considered *irreversible* when direct and indirect impacts from its use limit future use options. Irreversible commitments apply primarily to the use of nonrenewable resources, such as fossil fuels, manufactured structural materials, and land converted to long-term use for structures or other human activities. The proposed above-ground facilities and the energy and materials required to build and operate all project facilities represent irreversible commitments of resources.

A resource commitment is considered *irretrievable* when it causes lost production or use of renewable resources such as timber, rangeland or wildlife habitat. For this project, the temporary disturbance of chaparral and riparian habitats will not result in irretrievable commitments of resources because the areas of disturbance will be relatively small and during construction of pipelines only which will be short in duration in any given location. Agricultural production may be affected by construction of the Mockingbird Connection through an existing citrus grove, but replacement of citrus trees, if necessary, is required by **MM Aes 1** and **MM Aes 2** so no long-term loss will result. A maximum of 40,000 acre feet of water per year could be consumed as drinking water, but this may allow for the production and use of recycled water for other purposes.

For the proposed alternatives, most resource commitments are neither irreversible nor irretrievable and none result in significant irreversible environmental changes. Most impacts are short-term and temporary. Others that may have a longer effect can be reduced through appropriate measures. The project alternatives, with the exception of the No-Project alternative, would make use of approximately the same types and quantities of resources. Those resources that may have a possible irreversible or irretrievable commitment are discussed below.

The project and alternatives, with the exception of the No-Project alternative, would result in the irreversible and irretrievable commitment of energy and material resources during project construction, operation and maintenance, and would include the following:

- construction materials such as sands, gravels, concrete, asphalt, steel and glass;
- human labor for project construction, operation and maintenance;
- land area committed to above-ground project facilities (approx. 5 acres); and

- energy expended in the form of electricity, gasoline, diesel fuel and oil for equipment and transportation vehicles that would be needed for project construction, operation and maintenance.
- water resources could be consumed during construction, although water for construction use would be temporary and largely limited to on-site concrete mixing and dust abatement activities.

In general, the impact to biological resources from project construction and operation would not constitute an irreversible and irretrievable commitment of resources. Site-specific and species-specific analyses and mitigation conducted for the project can be found in Section 4.3 and indicate that the project would not result in adverse effects to entire populations.

Clearing of rights-of-way within designated alternatives corridors and on other lands outside of rights-of-way will result in the direct loss of vegetation which will be replanted as required by the local jurisdiction and by mitigation measures. While habitat would be impacted during construction within the rights-of-way under all but the No Project/Action Alternative, implementation of the mitigation measures (such as habitat avoidance or restoration) identified in this SEIR/EIS would further reduce or avoid ecological impacts.

## **7.2 GROWTH INDUCING IMPACTS OF THE PROPOSED ACTION**

The project alternatives vary in terms of the location of constructed facilities, but the purpose and need for the action remain consistent among the alternatives. The only potential growth inducing aspect of the project is related to water delivery, which is consistent among all the alternatives except the No Project/Action Alternative. Therefore, the discussion of growth inducing impacts from the 2005 Alignment PEIR generally applies to all the alternatives. It is hereby incorporated by reference and summarized below (see Section III-4 of the 2005 Alignment PEIR).

Consistent with the stated purposes of the RCF, the proposed project alignment and/or any alternatives presented herein are/is expected to result in water supply reliability for beneficial uses in WMWD's service area as well as other jurisdictions which may transport water via the RCF. Redundancy in WMWD's distribution system will be increased by the project.

Although such a water storage, conveyance, and distribution project may have the potential to remove obstacles to growth and/or provide water service to areas not previously served, it will not result directly in population or economic growth. Actual growth is approved at the local level where land use policies and decisions are made by local elected and appointed officials. In an area where growth occurs, such environmental factors are considered within the framework of local land use and regulatory decisions. Future development in any jurisdiction is influenced by many factors, only one of which is the reliability of the water supply. Other factors include such things as General Plan policies and zoning ordinances; the availability of community services and infrastructure, such as sewers, streets and libraries; employment opportunities; and maintenance costs.

This proposed project is not required for any specific development proposal or even a particular level of development in any given area. Growth is projected to occur throughout the region with

or without this project. WMWD looks at local agency projections for growth when formulating its long-term plans, which include the reliability provided by this project.

## 8.0 CONSULTATION AND COORDINATION

Western Municipal Water District (WMWD) and the Bureau of Reclamation (USBR) have engaged and consulted with agencies, stakeholders, and the general public. These consultations assisted in determining the scope of the SEIR/EIS, identifying the range of alternatives and mitigation measures, and defining the potential environmental impacts and their significance. Consultation included informal agency communications, formal interagency meetings and public meetings. WMWD and USBR will continue to solicit public and agency input on the project by encouraging review of this SEIR/EIS. As noted earlier, WMWD is the lead agency pursuant to CEQA and USBR is the lead agency pursuant to NEPA.

This section of the SEIR/EIS summarizes public and agency involvement activities undertaken by WMWD and USBR that have been conducted to date for this project, which satisfy NEPA and CEQA requirements for public scoping and agency consultation and coordination. Appendix A, “Notices and Distribution List” presents the federal, state, and local agencies, organizations and individuals receiving a copy of the draft SEIR/EIS.

### 8.1 NOTICE OF PREPARATION AND NOTICE OF INTENT

The potential environmental impacts of the 2005 Project Alignment were analyzed in the *Final Programmatic Environmental Impact Report for the Western Municipal Water District Riverside-Corona Feeder Project*, SCH: 2003031121 (2005 PEIR) which was certified on May 18, 2005. The Notice of Preparation (NOP) for the 2005 PEIR was circulated in March of 2003. The 2005 Project Alignment NOP was distributed directly to over 150 public agencies, property owners and interested parties. A notice advising the availability of that NOP was posted with both the Riverside County Clerk and San Bernardino County Clerk on March 28, 2003 and the State Clearinghouse on March 27, 2003 for a 30-day comment period.

An Initial Study was prepared by WMWD to assess the potential for the proposed RCF Realignment Project to result in significant environmental impacts. An NOP, which included the Initial Study, was circulated to 169 responsible agencies and interested parties and nine public libraries on or about July 30, 2008. A notice advising of the availability of that NOP was posted by the Riverside County Clerk and the San Bernardino County Clerk from July 31, 2008 until August 29, 2008. The NOP was posted at the California State Clearinghouse on July 31, 2008. Pursuant to Section 15082 of the State CEQA Guidelines, recipients of the NOP were requested to provide responses within 30 days after their receipt of the NOP. Copies of the NOP (including the Initial Study) and the NOP distribution list are located in Appendix A. Copies of comments regarding the NOP received by WMWD are also included in Appendix A.

The following is a summary of the comments regarding the NOP for the proposed RCF Realignment Project received by WMWD and a description of the issues to be resolved. Reference is provided to where the issue is addressed in this SEIR/EIS. The thresholds used to determine whether or not effects are significant are included in the “Thresholds of Significance” section for each topic discussion in this SEIR/EIS.

**a. July 31, 2008 South Coast Air Quality Management District**

This letter states that any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project be identified. The SCAQMD identifies appropriate methodology for evaluating air quality impacts and requests that when circulated to the SCAQMD, that electronic versions of any air quality modeling and air quality technical documents be included. Potential air quality impacts are addressed in Section 4.2 (Air Quality/Climate Change) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**b. August 5, 2008 Soboba Band of Luiseño Indians**

This letter requests further government to government consultation, copies of archaeological and/or cultural resource documentation and the presence of cultural resource monitor(s) during any ground disturbance activities. The issues raised in this letter are addressed in Section 4.4 (Cultural Resources/Paleontology) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**c. August 8, 2008 Morongo Band of Mission Indians**

The Morongo Band of Mission Indians requested that, should human remains be encountered during grading and other construction excavation, work in the vicinity shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code Section 7050.5. This letter also requested a cessation of work in the immediate vicinity of any Native American cultural resources discovered during project development/construction and consultation with a qualified archaeologist; and, if significant Native American cultural resources are discovered, that the Morongo Band of Mission Indians be consulted. The issues and procedures raised in this letter are addressed in Section 4.4 (Cultural Resources/Paleontology) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**d. August 12, 2008 Caltrans Division of Aeronautics**

The Caltrans Division of Aeronautics identified that a portion of the proposed project is within Van Buren Boulevard, adjacent to the west end of the Riverside Municipal Airport. The Division of Aeronautics identifies Federal Aviation Regulation, Part 77 (regarding structural hazards on or near airports) as potentially being applicable to the proposed project. The issues related to construction in proximity to the airport are addressed in Section 4.8 (Hazards and Hazardous Materials) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**e. August 15, 2008 Riverside Transit Agency (RTA)**

The RTA letter acknowledged attendance and discussion of their concerns regarding interference with transit stops and transit service at the August 11, 2008 Scoping Session. RTA requested that it be informed of the construction schedule and precise location of the pipeline within the affected roadways and coordination regarding closure and temporary relocation of bus stops. An analysis of this issue and appropriate mitigation measures are discussed in Section 4.12 (Transportation and Traffic) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**f. August 18, 2008 Riverside County Fire Department**

The Riverside County Fire Department acknowledged receipt of the NOP and had no comments.

**g. August 18, 2008 Jurupa Area Recreation and Park District**

The Jurupa Area Recreation and Park District identified several trails that may be impacted by the proposed project. The identification of trails in proximity to the proposed project and any potential impacts to those trails are discussed in Section 4.12 (Transportation and Traffic) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**h. August 18, 2008 San Bernardino Municipal Water Department**

The San Bernardino Municipal Water Department (SBMWD) states that there have been “significant developments in the water supply landscape” including multiple dry years in California, court decisions affecting delivery of state project water deliveries and increasing attention to global climate change, since the programmatic EIR was certified. SBMWD requested that the SEIR/EIS review the underlying concept of withdrawing water supply in the San Bernardino Basin Area and moving it to Riverside County. SBMWD also wanted be sure that withdrawals from the groundwater basin would have no negative impact to the “Western non-Plantiffs and the Newmark Groundwater Superfund Site.” To the extent possible at the programmatic level, these issues are addressed in Section 4.6 (Groundwater Levels), Section 4.7 (Groundwater Quality) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**i. August 21, 2008 City of Fontana Community Development Department – Planning Division**

The City of Fontana Community Development Department – Planning Division acknowledged receipt of the NOP and had no comments.

**j. August 21, 2008 San Bernardino Development Services Department**

The San Bernardino Development Services Department’s letter identified potential detrimental impacts to circulation on City of San Bernardino streets, as well as access to the city from Interstate 215. The city stated that traffic and circulation impacts of this project require a full analysis of traffic and circulation impacts during construction and as needed for maintenance and repairs. A discussion of alternative routes though the City of San Bernardino was requested. To the extent possible at the programmatic level, these issues are addressed in Section 4.10 (Transportation and Traffic) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**k. August 26, 2008 Colton Engineering Department**

The Colton Engineering Department requested that the SEIR/EIS evaluate the potential for the project to affect traffic and the city’s proposed Capital Improvement Projects. The Engineering Department also advised that a Traffic Control Plan will be required as part of the city’s permitting process. To the extent possible at the programmatic level, these issues are addressed

in Section 4.10 (Transportation and Traffic) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**l. August 26, 2008 Riverside County Flood Control District**

This letter states that the SEIR/EIS should fully evaluate any potential impacts to Riverside County Flood Control District facilities. For the purposes of procuring an encroachment permit from the District, the District requires demonstration of compliance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Flood Control District requests that the SEIR include a MSHCP consistency assessment. Impacts related to the Flood Control District's facilities are addressed in Section 1.0 (Summary) and Section 3.0 (Project Alternatives) and issues related to the MSHCP are addressed in Section 4.3 (Biological Environment) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**m. August 27, 2008 City of Riverside Planning Department**

The City of Riverside Planning Department requested that the SEIR/EIS analyze short-term construction-related air quality impacts and the project's potential traffic impacts due to lane closures during construction. This letter also requested that all references to the City of Riverside's plans and documents reflect the most recently adopted documents. General Plan land use designations are discussed in Section 4.8 (Land Use) of this SEIR/EIS. Potential air quality impacts are addressed in Section 4.2 (Air Quality/Climate Change) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS. Potential traffic-related impacts are discussed at a project level for the Central Reach and at programmatic level for the Northern Reach in Section 4.10 (Transportation and Traffic) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**n. August 29, 2008 Southern California Edison**

In their letter, Southern California Edison (SCE) requests notification should the project impact SCE facilities or its related land use rights. This letter does not identify any environmental issues that require analysis within the SEIR/EIS.

**o. September 2, 2008 City of Colton Planning Department**

The City of Colton Planning Department requested that the SEIR/EIS provide aerial photos, exhibits, and site plans at large enough scales, so that Colton's staff can review the pipeline's impacts on existing land uses. This letter requested that the EIR discuss potential impacts and provide mitigation measures affecting traffic flows within the city, construction-related noise impacts, biological issues relevant to Colton, and impacts to Colton's groundwater resources. The City of Colton Planning Department also requested that the EIR contain a discussion of the City of Colton General Plan designations. A discussion of alternatives and coordination with the city were also requested. These issues are addressed in Section 3.0 (Project Alternatives), Section 4.3 (Biological Environment), Section 4.6 (Groundwater Levels), Section 4.9 (Land Use), Section 4.10 (Noise), Section 4.12 (Transportation and Traffic) and Section 8.0 (Consultation and Coordination) of this SEIR/EIS.

**p. September 2, 2008 County of San Bernardino Department of Public Works**

This letter identifies that permits may be required if there is any encroachment on San Bernardino County Flood Control District facilities. The Department of Public Works recommended that the project be constructed to avoid placement of obstructions within any drainage course and to avoid altering the direction, elevation, or capacity of any existing drainage course. This letter also recommended that impacts upon identified biological resources be addressed. Impacts related to Flood Control District facilities are addressed in Section 1.0 (Summary) and Section 3.0 (Project Alternatives) and issues related to biological resources are addressed in Section 4.3 (Biological Environment) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**q. September 10, 2008 State Department of Toxic Substances Control**

The Department of Toxic Substances Control (DTSC) requested that the project alignment be reviewed for potentially contaminated sites, the applicable databases be investigated, and that appropriate remediation, if any is required, be conducted in compliance with state laws. These issues are addressed in Section 4.8 (Hazards and Hazardous Materials) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

**r. September 19, 2008 Pechanga Band of Luiseño Indians**

The Pechanga Band asserts that portions of the project area are part of the northern portion of its aboriginal territory. In this letter, the Pechanga Band indicates that there is a strong likelihood that subsurface resources may be discovered during ground disturbing activities. The Pechanga Band believes that a thorough cultural resources assessment be required as part of the SEIR/EIS process. The Pechanga Band requests that it continue to be involved in all assessment and evaluation of potential cultural resources within the SEIR/EIS. The issues and procedures raised in this letter are addressed in Section 4.4 (Cultural Resources/Paleontology) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

USBR published the Notice of Intent (NOI) in the Federal Register on February 24, 2010. An electronic version of the NOI and a scoping document that described the proposed project and alternatives and the range of issues to be evaluated, were made available for agency and public review at <http://www.usbr.gov/lc/social/envdocs.html>. Copies of comments regarding the NOI received by USBR are also included in Appendix A.

The following is a summary of the comments regarding the NOI for the proposed RCF Realignment Project received by USBR and a description of the issues to be resolved. Reference is provided to where the issue is addressed in this SEIR/EIS.

**s. March 26, 2010 City of Riverside Planning Department**

Comments were previously provided to WMWD on August 27, 2008 which the City of Riverside Planning Department indicated are still valid and effective in addition to comments provided in supplemental letter dated March 26, 2010. The city requested that the SEIR/EIS analyze both short-term construction-related air quality impacts and the project's potential traffic

impacts due to lane closures during construction, and that all references to the City of Riverside's plans and documents reflect the most recently adopted documents. The city also indicated that an alternative alignment be analyzed as well as impacts to emergency services resulting from construction of the project in the SEIR/EIS. General Plan land use designations are discussed in Section 4.8 (Land Use) of this SEIR/EIS. Potential air quality impacts are addressed in Section 4.2 (Air Quality/Climate Change) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS. Potential traffic and emergency services related impacts are discussed in Section 4.12 (Transportation and Traffic) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS. Alternative alignments are discussed in Section 1.0 (Summary) and Section 3.0 (Project Alternatives).

**t. March 23, 2010 County of San Bernardino Department of Public Works**

This letter identifies that permits may be required if there is any encroachment on San Bernardino County Flood Control District facilities and that U.S. Army Corps of Engineers (ACOE) approval may be required for any work near the Santa Ana River. The Department of Public Works also recommended that the project be constructed to avoid altering the direction, elevation, or capacity of any existing drainage course and that adequate provisions for intercepting and conducting drainage around or through the site areas not adversely affect adjacent or downstream properties. This letter also recommended that the most recent FEMA floodplain regulations be incorporated. Impacts related to Flood Control District facilities are addressed in Section 1.0 (Summary), Section 3.0 (Project Alternatives), Section 4.11 (Stormwater/Water Quality) and impacts related to ACOE are discussed in Section 4.3 (Biological Resources), of this SEIR/EIS.

**u. March 8, 2010 Soboba Band of Luiseño Indians**

This letter requests government to government consultation, the presence of Native American Monitor(s) from Soboba Band Luiseño Indians during any ground disturbance activities and that proper procedures be taken and requests of the tribe be honored. The issues raised in this letter are addressed in Section 4.4 (Cultural Resources/Paleontology) of this SEIR/EIS.

**v. March 9, 2010 South Coast Air Quality Management District**

This letter states that any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project be identified. The SCAQMD identifies appropriate methodology for evaluating air quality impacts and requests that when circulated to the SCAQMD, that electronic versions of any air quality modeling and air quality technical documents be included. Potential air quality impacts are addressed in Section 4.2 (Air Quality/Climate Change) and Section 4.13 (Cumulative Impacts) of this SEIR/EIS.

## **8.2 PUBLIC SCOPING MEETINGS**

A Scoping meeting was held for the 2005 Project Alignment as recommended in Section 15083 of the CEQA Guidelines to which all NOP recipients were invited. Two responsible agencies, Riverside Transit Agency and Elsinore Valley Municipal Water District, attended the meeting held on April 9, 2003. Issues raised included impacts on public transportation and groundwater.

Subsequent to the circulation of the NOP for the proposed RCF Realignment Project and in accordance with Section 15082(c)(1) and Section 15083 of the CEQA Guidelines, a public scoping meeting was held on Monday, August 11, 2008 at 4:00 p.m. at the Western Municipal Water District Administrative Offices. One responsible agency, Riverside Transit Agency, attended the meeting and raised concerns regarding potential impacts on public transportation and requested coordination of construction activities with RTA's Bus Operations Section.

In the NOI published by the USBR, acknowledgement of the prior CEQA Scoping meeting was given with no additional scoping meetings planned to avoid duplication with State and local procedures.

### **8.3 ADDITIONAL STEPS IN THE ENVIRONMENTAL REVIEW PROCESS**

In accordance with CEQA and NEPA review requirements, this SEIR/EIS will be circulated for public and agency review and comment for a 45-day period following the publication of the Notice of Availability (NOA) of the SEIR/EIS in the *Federal Register* and the filing of the Notice of Completion (NOC) with the California State Clearinghouse. As required by CEQA Section 21092.3, a copy of the NOC will also be posted with the Riverside and the San Bernardino County Clerks. Written comments from the public, reviewing agencies, and stakeholders will be accepted during the 45-day comment period. Following consideration of these comments by WMWD and USBR, a Final SEIR/EIS will be prepared, noticed, and circulated per CEQA and NEPA requirements. The Final SEIR/EIS will include responses to all comments. WMWD and USBR will use the Final SEIR/EIS when considering approval of the proposed project/action and will issue a Notice of Determination (NOD)/Record of Decision (ROD) documenting that decision. The NOD/ROD will be posted with the California State Clearinghouse, the Riverside County Clerk and the San Bernardino County Clerk.

## 9.0 REFERENCES

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## LOCATION WHERE REFERENCES CAN BE FOUND

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