WESTERN MUNICIPAL WATER DISTRICT

DRAFT ENVIRONMENTAL IMPACT REPORT

LA SIERRA AVENUE
WATER TRANSMISSION PIPELINE PROJECT

State Clearinghouse No. 2006101152

Prepared for:

Western Municipal Water District
Post Office Box 5286
Riverside, California 92517-5286

Prepared by:

K.S. Dunbar & Associates, Inc.
Environmental Engineering
3035 Calle Frontera
San Clemente, California 92673-3012
(949) 366-2089
FAX: (949) 366-5315
E-mail: ksdpe@cox.net

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K.S. DUNBAR & ASSOCIATES

PREFACE

During July 2004, Western Municipal Water District (WMWD) published and subsequently adopted its Draft Program Environmental Impact Report (PEIR) for the Western Municipal Water District, Riverside – Corona Feeder Project State Clearinghouse No. 2003031121 which was prepared by Albert A. Webb Associates.

The purpose of the Riverside – Corona Feeder (RCF) Project is to convey potable water from the San Bernardino Basin Area to serve the needs of WMWD and other water purveyors within WMWD's service area. The proposed RCF Project will allow WMWD to improve water supply reliability with less dependence upon the direct delivery of water from The Metropolitan Water District of Southern California (MWD) Mills Filtration Plant. The proposed infrastructure will allow WMWD to purchase State Water Project water from MWD during wet years for use during dry years.

The PEIR describes the RCF Project as a conveyance facility with approximately 30 miles of major feeder pipeline capable of delivering up to 40,000 acre-feet per year of groundwater at 100 cubic feet per second (cfs) from the San Bernardino Basin Area to WMWD's customers and to water purveyors within its service area. Other project elements in the PEIR include several turnouts along the major feeder, a 2,500 horsepower (hp) pump station and 20 new or existing wells.

The La Sierra Avenue Water Transmission Pipeline is a refinement of Reaches E, F, and G as described in the PEIR.

The California Environmental Quality Act Guidelines §15150 permits an EIR to incorporate all of portions of other documents which are public records or are generally available to the public. Where all or part of another document is incorporated by reference, the incorporated language is considered to be set forth in full as part of the text of the EIR, provided that it is briefly summarized where possible in the EIR, or briefly described if the data or information cannot be summarized. The EIR must also describe the relationship between itself and the incorporated part of the referenced documents.

This document incorporates by reference the PEIR referenced above. Copies of the incorporated document are available to the public for inspection during regular business hours at WMWD's office which is located at:

450 E Alessandro Boulevard
Riverside, California 92508

The PEIR concluded that the proposed project might result in potentially significant impacts to the following resources: aesthetics, air quality, biological resources, cultural resources, hazards and hazardous materials, groundwater supply and water quality, public transportation, and traffic. The PEIR also concluded that the proposed project is expected

to result in significant cumulative impacts related to air quality. These issues and mitigation measures to reduce the impacts were all addressed in the PEIR.

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CHAPTER 1
INTRODUCTION

INTRODUCTION

The following Draft Environmental Impact Report (DEIR) evaluates the potential environmental impacts associated with the construction and operation of the La Sierra Avenue Water Transmission Pipeline Project (Project). The Project consists of the construction of a potable water pipeline, with standard appurtenances, from Western Municipal Water District's (WMWD's) Arlington Desalter Water Purification Facility near the extensions of Sterling and Fillmore Streets in the City of Riverside to its water distribution system located at Mockingbird Canyon Drive and Van Buren Boulevard (Mockingbird Canyon Pump Station), together with the construction of a water pumping plant to lift water from the lower elevation of the Arlington Desalter to higher elevations within WMWD's retail service area and a hydroelectric generating facility to conserve energy for use at the Arlington Desalter when water is supplied from the Mills Gravity Pipeline to communities at lower elevations.

The California Environmental Quality Act (CEQA), Public Resources Code §21000 et seq., requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. WMWD is the lead agency for this project and has prepared this DEIR to address the potentially significant adverse environmental impacts associated with the proposed Project.

LEAD AGENCY

The Lead Agency is the "public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment" (Public Resources Code §21067). It was determined that WMWD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as Lead Agency [State CEQA Guidelines §15051(b)]. The proposed Project requires discretionary approval from WMWD for construction of the new facilities. Once WMWD approves the project by certifying the EIR, construction can proceed pending receipt of all required regulatory approvals.

RESPONSIBLE AGENCIES

The State CEQA Guidelines §15381 defines a "responsible agency" as: "a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration". For purposes of CEQA, "responsible agencies include all public agencies other than the lead agency that have discretionary

approval authority over the project." Responsible agencies include: the California Regional Water Quality Control Board, Santa Ana Region; California Department of Health Services, Riverside County Transportation Department; Riverside County Flood Control and Water Conservation District; and the City of Riverside.

TRUSTEE AGENCIES

§15386 of the State CEQA Guidelines defines "Trustee Agency" as a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. For the purposes of the proposed Project, Trustee Agencies include the California Department of Fish and Game with regard to the fish and wildlife of the state, to designated rare or endangered native plants, and to game refuges, ecological reserves, and other areas administered by the department. Other Trustee Agencies which do not have jurisdiction over the proposed Project include: the State Lands Commission, the State Department of Parks and Recreation, and the University of California.

PROJECT PURPOSE AND OBJECTIVES

The goal and purpose of the Project is to improve the reliability of WMWD's water supply to its own retail customers and to its wholesale purveyors; to reduce risk of water service interruptions; to reduce possible water shortages during dry years; and to reduce dependence upon the direct delivery of imported water during dry year conditions.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE

The basic purposes of CEQA as set forth in §15002 of the State CEQA Guidelines are:

1. *Inform the governmental decision-makers and the public about the potential significant environmental effects of proposed activities.*

2. *Identify the way that environmental damage can be avoided or significantly reduced.*

3. *Prevent significant avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds changes to be feasible.*

4. *Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.*

The first three purposes of CEQA fall within the province of the EIR. The fourth purpose is completed by the Lead Agency after its consideration and approval of the final EIR and at the time it makes its decision on the Project, mitigation measures, or alternatives.

CONTENTS OF AN EIR

An EIR is defined in §15362 of the State CEQA Guidelines as being a detailed statement prepared under CEQA describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects. The contents of an EIR are discussed in CEQA Article 9 commencing with §15120.

This section specifies that a draft EIR shall contain the information required by §§15122 through 15131. The topic of each of these sections is cited below:

Guidelines	Topic
§15122	Table of Contents or Index
§15123	Summary
§15124	Project Description
§15125	Environmental Setting
§15126	Consideration and Discussion of Environmental Impacts a. Significant Environmental Effects of the Proposed Project. b. Significant Environmental Effects Which Cannot be Avoided if the Proposal is Implemented. c. Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Project Should it be Implemented. d. Growth Inducing Impact of the Proposed Project. e. The Mitigation Measures Proposed to Minimize the Significant Effects. f. Alternatives to the Proposed Project.
§15127	Limitations on Discussion of Environmental Impact
§15128	Effects Not Found to be Significant
§15129	Organizations and Persons Consulted
§15130	Discussion of Cumulative Impacts
§15131	Economic and Social Effects

ADEQUACY OF AN EIR

The standards for adequacy of an EIR cited in §15151 of the State CEQA Guidelines are as follows:

> *An EIR should be prepared with sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental*

effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

DEIR REVIEW AND CONSIDERATION PROCESS

The DEIR for the proposed Project will be subject to a 45-day review period. Interested individuals, organizations and agencies can provide written comments on the document during the review period.

During the public review period, the DEIR will be circulated for review by responsible agencies and trustee agencies. Prior to the preparation of the DEIR, a Notice of Preparation (NOP) was prepared and distributed to trustee and responsible agencies for their comment. A copy of the NOP is provided in Appendix A of this document. Chapter 21 contains a summary of the written comments submitted in response to the NOP as well as WMWD's responses to those comments. Copies of the actual comment letters are provided in Appendix B of this document.

Comments and questions on the DEIR received during the review period will be compiled in a Consultation Summary document. Copies of the Consultation Summary document will be provided to all who commented at least 10 days prior to certification of the Final Environmental Impact Report (FEIR). The DEIR and Consultation Summary document will constitute the FEIR for the proposed Project.

After examining the FEIR, WMWD will determine whether or not to certify that the FEIR is adequate and has been completed in compliance with CEQA. It should be noted that certification of an EIR does not constitute project approval; rather, it is a necessary step that precedes project approval. WMWD will consider the information in the FEIR in determining whether the proposed Project or reasonable alternatives should be approved, modified, or rejected.

In order for a Lead Agency to approve a project (after certifying the FEIR), it must prepare written findings for each significant adverse environmental effect identified in the EIR. Findings must be accompanied by a brief explanation of the rationale for each significance determination and should indicate that either: (1) changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant effects on the environment; (2) those changes or alterations are the responsibility and jurisdiction of another public agency and have been, or can be, adopted by that agency; or (3) specific economic, legal, social, technological or other considerations, including the consideration for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

INTENDED USE OF THIS EIR

USE OF THIS EIR BY THE WESTERN MUNICIPAL WATER DISTRICT

WMWD, as the Lead Agency, is the public agency responsible for implementing the proposed Project and fulfilling the requirements of CEQA via preparation of appropriate environmental documents for the proposed project. This EIR was prepared by K.S. Dunbar & Associates, Inc., Environmental Engineering. It will be used by WMWD during the decision-making process for the proposed Project. The EIR may also be used to satisfy the requirements of other agencies having jurisdiction over any of the proposed Project components that are eventually approved for implementation.

APPROVALS FOR WHICH THIS DEIR WILL BE USED

The following responsible and trustee agencies may also use this document in their decision-making process concerning the proposed Project.

California Regional Water Quality Control Board, Santa Ana Region
General Permit for Storm Water Discharges Associated with Construction Activity

General Permit for Dewatering Activities, if necessary

California Department of Fish and Game
Streambed Alteration Agreement, if necessary

California Department of Health Services
Water Supply Permit

Riverside County Transportation Department
Encroachment Permit

Riverside County Flood Control and Water Conservation District
Encroachment Permit

City of Riverside
Encroachment Permit

LEAD AGENCY DECISIONS SUBJECT TO CEQA

WMWD must make several decisions regarding the proposed Project that are subject to the requirements of CEQA. These decisions will include, but are not limited to, the following:

a. Review the DEIR and direct preparation of the FEIR[1].
b. Certify the FEIR in accordance with §15090 of the State CEQA Guidelines.
c. Make Findings in accordance with §15091 of the State CEQA Guidelines.
d. Adopt a Statement of Overriding Considerations for the Project in accordance with §15093 of the State CEQA Guidelines.
e. Adopt mitigation measures and a Mitigation Monitoring and Reporting Program for the Project.
f. Approve the Project in accordance with §15092 of the State CEQA Guidelines.
g. Authorize financing of the Project.

DOCUMENT AVAILABILITY

The Draft Environmental Impact Report is available for review at the following locations:

Western Municipal Water District
www.wmwd.com

Western Municipal Water District
450 E Alessandro Boulevard
Riverside, California 92508
(951) 789-5000

[1] NOTE: In accordance with §15132 of the State CEQA Guidelines, the FEIR will consist of the DEIR plus a supplement. The supplement will consists of the comments and recommendations received on this DEIR; a list of persons, organizations, and public agencies commenting on this DEIR; WMWD's responses to significant environmental points raised in the review and consultation process; and any other information added by WMWD.

CHAPTER 2
PROJECT DESCRIPTION

PIPELINE

The La Sierra Avenue Pipeline would convey potable water between WMWD's Arlington Desalter Water Purification Facility and its water transmission facilities (Mockingbird Canyon Pump Station) near the intersection of Van Buren Boulevard and Mockingbird Canyon (Figure 2-1).

At the present time, there is one main alternative alignment being considered as well as two possible subsets. These are discussed in the following paragraphs.

The main alternative would begin at a new pump station to be constructed near WMWD's Arlington Desalter at 11615 Sterling Avenue in the City of Riverside. The pipeline alignment would follow Sterling Avenue in a westerly direction to its intersection with Pierce Street. It would then follow Pierce Street in a southeasterly direction to its intersection with Indiana Avenue. Along Pierce Street, the alignment would cross under the Arlington Channel. It would then follow Indiana Avenue in a northeasterly direction to its intersection with La Sierra Avenue. It would then follow La Sierra Avenue in a southeasterly direction to its intersection with Cleveland Avenue. It would then follow Cleveland Avenue in a northeasterly direction until its intersection with Irving Street. It would then follow Irving Street in a southeasterly direction to its intersection with Firethorn Avenue. It would then generally follow Firethorn Avenue in a southwesterly direction to its intersection with Van Buren Boulevard. Due to the steepness and tight turns along a portion of Firethorn Avenue it would be necessary to leave the public right-of-way for a portion of this alignment segment. It would then follow Van Buren Boulevard in a southeasterly direction to WMWD's Mockingbird Canyon Pump Station.

One subset to this alignment, would also begin at a new pump station to be constructed near WMWD's Arlington Desalter. It would then follow Sterling Avenue in a westerly direction to its intersection with Pierce Street. It would then follow Pierce Street in a southeasterly direction to its intersection with Indiana Avenue. It would then follow Indiana Avenue in a northeasterly direction to its intersection with Fillmore Street. It would then follow Fillmore Street in a southeasterly direction of its intersection with Arizona Avenue. It would then follow Arizona Avenue in a northeasterly direction to its intersection with La Sierra Avenue. From that point on, the alignment would be the same as the main alternative.

A second subset would also follow the same alignment as above between the Arlington Desalter and the intersection of Fillmore Street and Arizona Avenue. At this point, the alignment would extend along Fillmore Street in a southeasterly direction to its intersection with Victoria Avenue. Within this portion of the alignment, it would be necessary to cross under the Riverside Canal. It would then follow Victoria Street in a

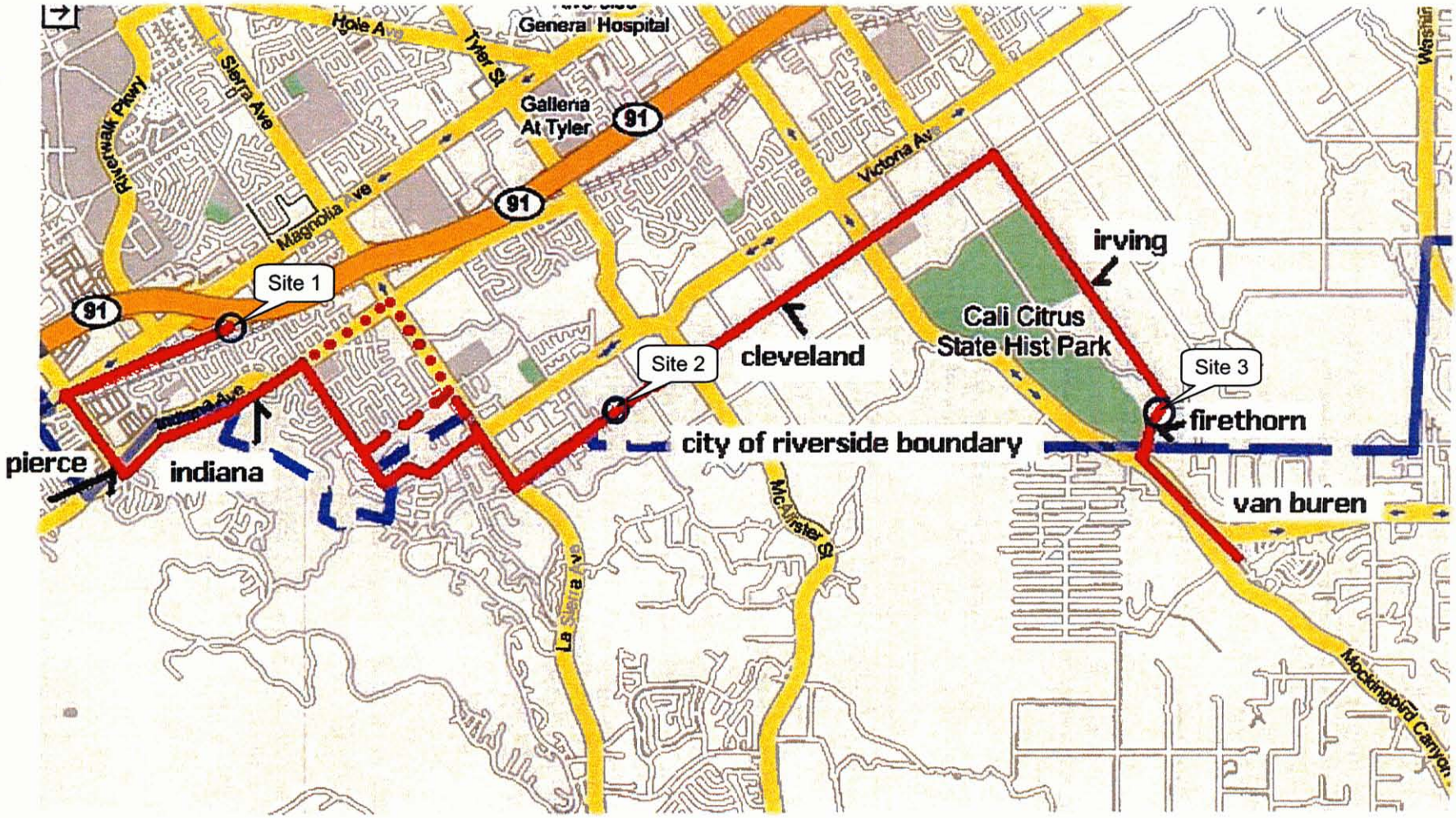

FIGURE 2-1
WMWD La Sierra Avenue Pipeline Route

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northeasterly direction to its intersection with La Sierra Boulevard. From that point on, the alignment would be the same as the main alternative.

PUMP STATION

The pump station would typically be used when the Mills Water Treatment Plant was out of service for maintenance. Therefore, it would only run a few weeks each year. The pump station would contain either 2,000 horsepower of natural gas engines and 2,000 horsepower of electric motors, or 4,000 horsepower of electric motors to drive the pumps. More detailed information on the pump station is provided in Table 2-1.

TABLE 2-1
STERLING PUMP STATION FACILITY

Location	On Sterling Avenue or extension of Sterling Avenue at Pierce St near the Arlington Desalter at 11615 Sterling Street
Foot Print	70 feet x 100 feet
Pump Lift	570 feet (from approx. 680 ft to 1250 ft USGS hydraulic grade line)
Horsepower at 75% efficiency	4000 horsepower at 45 cubic feet per second at 570 feet of lift

HYDROELECTRIC FACILITY

The water elevation at the Mills Plant is approximately 1630 feet USGS; thus there is the opportunity to conserve energy with the construction of a hydroelectric generating facility at the proposed pump station near the Arlington Desalter. The La Sierra Avenue Pipeline would be constructed with a pipe wall thickness capable of sustaining pressure created by elevation differences of 660 feet. The pipeline design would support energy conservation as the water drops approximately 300 feet (after friction losses) from approximately 1,340 feet hydraulic grade line after pressure reduction near Mockingbird Canyon Road and Van Buren Boulevard to a hydraulic grade created by the Jurupa Community Services District water tank and pipeline of approximately 1,000 feet elevation.

More detailed information on the hydroelectric facility is provided in Table 2-2

TABLE 2-2
STERLING HYDRO STATION

Location	Near the Arlington Desalter at 11615 Sterling Street
Foot Print	70 feet x 100 feet
Available Energy for Conservation	300 feet
Kilowatts Generated at 35% efficiency	265 kw at 30 cubic feet per second at 300 feet of head

CHAPTER 3
AESTHETICS

ENVIRONMENTAL SETTING

The proposed underground pipeline would generally follow Sterling Avenue in a westerly direction until its intersection with Pierce Street, thence along Pierce Street in a southeasterly direction to its intersection with Indiana Avenue. It would then follow Indiana Avenue in a northeasterly direction to its intersection with La Sierra Avenue. It would then follow La Sierra Avenue in a southeasterly direction to its intersection with Cleveland Avenue. It would then follow Cleveland Avenue in a northeasterly direction until its intersection with Irving Street. It would then follow Irving Street in a southeasterly direction to its intersection with Firethorn Avenue. It would then generally follow Firethorn Avenue in a southwesterly direction to its intersection with Van Buren Boulevard. Due to the steepness and tight turns along a portion of Firethorn Avenue it would be necessary to leave the public right-of-way for a portion of this alignment segment. It would then follow Van Buren Boulevard in a southeasterly direction to WMWD's Mockingbird Canyon Pump Station. As discussed in Chapter 2, there are two subsets to this scenario; however, they are all within public rights-of-way.

The pump station and hydroelectric generation facility would be constructed near WMWD's Arlington Desalter that is in a light industrial business park setting.

There are no designated State scenic highways or any eligible State scenic highways in the project area. However, the City of Riverside has designated several parkways within the City and the northern part of its Sphere of Influence that meet local criteria for designation as scenic routes. These parkways include La Sierra Boulevard stretching from the Santa Ana River in the north to the Lake Mathews area in the south. La Sierra Boulevard is a prime thoroughfare for Western Riverside.

A portion of the proposed pipeline alignment would be constructed immediately adjacent to the State of California Department of Parks and Recreation's California Citrus State Historic Park located within the City of Riverside. The primary goal of this park is to preserve the citrus industry-related landscape and interpret it for the public.

Data used for this section were obtained from various sources including the Riverside County General Plan and the City of Riverside General Plan. Full bibliographical entries for all reference material are contained at the end of this section.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds are based on Appendix G of the 2007 State CEQA Guidelines. According to the State CEQA Guidelines, implementation of the proposed Project could result in potentially significant impacts if the Project would do any of the following:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- Substantially degrade the existing visual character or quality of the site and its surroundings.
- Create a new source of light and glare that would adversely affect day or nighttime views in the area.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Have a substantial adverse effect on a scenic vista?					X
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X		
c. Substantially degrade the existing visual character or quality of the site and its surroundings?					X
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?					X

a. **No Impact.** As shown in Photos 3-1 through 3-6, the proposed project would not affect a scenic vista as there are none within the project area with the exception of the California State Historic Park. Construction activities would not affect the park.

In general, construction activities would be temporary and localized, and improvements, once completed would be located mostly underground and mostly within designated public rights-of-way. Although the appurtenances, pump station and hydroelectric facility would be above ground, they would not affect a scenic vista. Therefore, there are no anticipated impacts and no mitigation is required.

b. **Less than Significant with Mitigation Incorporated.** Caltrans has not designated scenic highways or view corridors within the project area. However, the City of Riverside has designated La Sierra Boulevard as a scenic route. The proposed pipeline would be located underground and would not affect scenic resources or historic buildings. The appurtenances, pump station and hydroelectric facility would be above ground but would not affect scenic resources or historic buildings as none are in the project area.

However, the underground pipeline would be constructed in Irving Street which is adjacent to the State of California Department of Parks and Recreation's California Citrus State Historic Park located within the City of Riverside. The primary goal of this park is to preserve the citrus industry-related landscape and interpret it for the public. Although it is not anticipated that tree removal would be necessary, State permits and approvals would be required if the proposed project required removal of the citrus and/or palm trees which line Irving Street.

The City of Riverside also has requirements related to the removal of street trees. Its General Plan 2010 includes Community Enhancement goals and policies to "support and maintain the community's existing character, [and] to preserve resources that contribute positively to that character". Policy 19.4 addresses the City's commitment to street tree preservation and replacement.

> *The City should support the retention of existing street trees and should, where appropriate, require developers to supplement those trees with additional landscaping, emphasizing plant material that epitomizes Southern California, particularly citrus and palm trees, in accordance with City landscape standards.*

The County of Riverside Municipal Code Title 12.24 deals with the issue of tree removal in all situations. Permits are typically required; however, Section 12.24.040 exempts from such requirements "any activities conducted by a public utility, subject to the jurisdiction of the public utilities commission or any other constituted public agency, where, to construct and maintain safe operation of facilities under their jurisdiction, trees are removed, pruned, topped or braced."

Although every effort will be made to avoid the removal of trees, should it become necessary to remove trees during construction of the pipeline, strict adherence to the mitigation measures at the end of this section would reduce the impacts to a less-than-significant level.

c. **No Impact.** The project would not substantially degrade the existing visual character or quality of the project site or its surroundings. The pipeline would be constructed within existing public rights-of-way or within previously disturbed areas. The appurtenances, pump station and hydroelectric facility would also be constructed within previously disturbed areas. Therefore, no significant landscaping would be removed. Construction of the project would allow implementation of planned development in the area that could result in a substantial change to the existing character of the area. However, such planned development would be designed to be compatible with the existing development and the goals of the applicable general plans.

The split face block buildings housing the natural gas engines, electrical pumps and hydroelectric facility would be similar in design to other pumping stations owned and operated by WMWD. As shown in Chapter 2, the footprint of these buildings would be approximately 70 feet by 100 feet. Landscaping will be incorporated into the project design to soften the appearance of the buildings and incorporate the buildings into the existing setting.

Therefore, there would be no impacts anticipated and no mitigation is required.

d. **No Impact.** The project would include security lighting at the pump station, hydroelectric facility and other appurtenances. However, there would be no potential light and glare problems as the project design will be in compliance with California Code of Regulations, Title 24, Part 6, Section 132 to insure that all outdoor lighting is directed to the specific location intended for illumination to limit spillover. In addition, all lighting will be shielded. Therefore, there would be no impacts anticipated and no mitigation is required.

MITIGATION MEASURES

WMWD should implement the following mitigation measures to reduce the aesthetic impacts to a less-than-significant level.

AES-1

Plants and trees removed or damaged by the proposed project shall be replaced pursuant to standards and requirements of each jurisdiction within which the loss or damage occurs.

AES-2

The location of all mature trees, palms and other landscaping shall be noted on the construction drawings that will be prepared for this project to facilitate review and proper permitting by the affected jurisdiction. Generally, a mature wood tree is considered to have a diameter of 8 to 10 inches or more at 4½ feet above the ground.

A palm tree is considered to be mature at 25 feet or more in height. Citrus trees are mature when commercial levels of fruit-bearing occur at about 5 to 7 years.

AES-3

If construction activities that require digging are located closer than eight feet from a mature palm (over 25 feet in height), a certified arborist shall evaluate the specific palm(s) to determine if the palm can remain in place, be relocated successfully or if project redesign may be warranted. If the palm must be removed, replacement shall be pursuant to the requirements of the jurisdiction within which the palm(s) is/are located.

AES-4

If construction activities that require digging are located closer than thirty feet from the drip line[1] of a mature wood tree, a certified arborist shall evaluate the specific tree(s). The arborist will recommend the course of action most likely to preserve the tree including, but not limited to, trimming to help with stability, no action and the tree remains in place as is, project redesign, or the means to achieve a successful relocation. If the tree must be removed, replacement shall be pursuant to the requirements of the jurisdiction within which the tree(s) is/are located.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the above recommended mitigation measures would reduce the aesthetic impacts due to the loss of trees and landscaping to less than significant levels.

REFERENCES

California Department of Transportation. *List of Scenic Highways in California.* www.dot.ca.gov, 10/15/06.

City of Riverside. *Riverside General Plan,* adopted September 13, 1994. Note the City is currently in the process of updating this plan.

County of Riverside. *Riverside County General Plan*, adopted October 7, 2003.

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

[1] The area measured from the trunk of the tree outward to a point at the perimeter of the outermost branch structure of the tree.

CHAPTER 4
AGRICULTURAL RESOURCES

ENVIRONMENTAL SETTING

The pipeline alignment would be almost entirely within existing public rights-of-way. The lands within existing rights-of-way are not zoned by either the County or City.

The project area contains land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as evidenced by the vast orange groves along Van Buren Boulevard, Cleveland Avenue and Irving Street including the State's California Citrus State Historic Park. The remainder of the project area is currently either urban or undeveloped. The undeveloped area is not utilized for agricultural purposes.

A portion of the Project along the undeveloped portion of Cleveland Avenue is also agricultural land. However, at the present time it is devoid of vegetation.

Data used to prepare this section were taken from several sources. Full bibliographic entries are provided at the end of this chapter.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on agricultural resources if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

- Conflict with existing zoning for agricultural use, or a Williamson Act contract.

- Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Environmental Analysis

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. *Would the Project:*					
a. Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?					X
c. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?					X

a. No Impact. Construction of the project would not result in impacts to Prime Farmland or Farmland of Statewide Importance as there are none within the project alignment.

b. No Impact. The proposed Project is primarily within existing roadway rights-of-way, either within the roads or immediately adjacent to them. As such, zoning would not apply to these segments. Therefore, there would be no conflict with agricultural zoning or a Williamson Act Contract.

c. No Impact. Implementation of the proposed Project would not involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

MITIGATION MEASURES

There were no agricultural resources impacts identified; therefore, no mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

There are no agricultural resources impacts associated with the La Sierra Avenue Water Transmission Pipeline Project.

REFERENCES

City of Riverside, *Riverside General Plan,* adopted September 13, 1994. Note the City is currently in the process of updating this plan.

Riverside County Board of Supervisors, *Riverside General Plan*, adopted October 7, 2003.

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

CHAPTER 5
AIR QUALITY

ENVIRONMENTAL SETTING

CLIMATE

The climate of Southern California is primarily influenced by topography and the position and the strength of the East Pacific High Pressure Area that influences wind flow, rainfall patterns and ocean currents. Generally, rainfall is low in the winter due to this high pressure system. As shown in Table 5-1, about 89 percent of the precipitation falls from November through April with maximums occurring usually in February. The annual precipitation averages about 10 inches.

TABLE 5-1
PRECIPITATION NORMALS IN PROJECT AREA[1]
(12/1/27 TO 6/30/07)

MONTH	PRECIPITATION, INCHES
January	1.99
February	2.29
March	1.69
April	0.80
May	0.23
June	0.05
July	0.05
August	0.15
September	0.20
October	0.42
November	0.87
December	1.51
Annual	10.25

[1] Riverside Fire Station 3 (047470)

Source: Western Regional Climate Center
(www.wrcc.dri.edu, 11/05/07

The project area's proximity to the Pacific Ocean combined with varying topography and winds greatly influence temperatures within the area. As shown in Table 5-2 the average

maximum temperature is about 94°F in July and August and the average minimum temperature is about 40°F in January and December.

TABLE 5-2
AVERAGE TEMPERATURES IN PROJECT AREA[1]
(12/1/27 TO 6/30/07)

MONTH	MAXIMUM	MINIMUM
January	66.7	39.7
February	68.4	41.5
March	71.5	43.5
April	75.8	47.1
May	80.4	51.8
June	86.8	55.8
July	94.3	60.4
August	94.5	60.6
September	91.0	57.5
October	82.9	51.1
November	74.3	43.5
December	67.9	39.7
Annual	79.5	49.3

[1] Riverside Fire Station 3 (047470)

Source: Western Regional Climate Center
(www.wrcc.dri.edu, 10/05/07)

REGIONAL AIR QUALITY

Ambient air quality is affected by both the rate and location of pollutant emissions and by meteorological conditions that influence the local and regional dispersal of pollutants. Atmospheric conditions such as wind speed and direction and air temperature gradients combined with local topography provide the link between air pollutant emissions and air quality.

The proposed Project is within the South Coast Air Basin (SCAB), which incorporates approximately 12,000 square miles, consisting of four counties (i.e., San Bernardino, Riverside, Los Angeles, and Orange) including some portions of what used to be the Southeast Desert Air Basin that includes the Beaumont-Banning area. Nearly half of California's population, which generates about one-third of the State's total criteria pollutant emissions, lives within the SCAB.

Planning for the attainment and maintenance of both federal and state air quality standards in the project area is the responsibility of the South Coast Air Quality Management District (SCAQMD).

AIR POLLUTANTS

Pollutants regulated by the State and federal Clean Air Acts fall under three categories:

- criteria air pollutants
- toxic air contaminants, and
- global warming and ozone depleting gases.

Pollutants in each of these categories are monitored and regulated differently. Criteria air pollutants are measured by sampling concentrations in the air; toxic air contaminants are measured at the source and in the general atmosphere, and global warming and ozone-depleting gases are not monitored but are subject to federal and regional policies that call for their reduction and eventual phaseout *(www.aqmd.gov, 10/18/06).* California's landmark global warming legislation, AB 32, requires that the State's greenhouse gas emissions be reduced to 1990 levels by 2020. Emissions trading is being considered for achieving the requirements of AB 32 *(www.aqmd.gov, 4/21/07).*

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health. Those standards have been set at levels to protect the human health with an adequate margin of safety.

The following paragraphs describe the source and health effects of the criteria pollutants. In addition, Table 5-3 lists the primary emission sources of the criteria pollutants and some of the harmful effects of the pollutants.

TABLE 5-3
PRIMARY SOURCES AND EFFECTS OF CRITERIA POLLUTANTS

POLLUTANT	SOURCE	PRIMARY HEALTH EFFECTS
Lead (Pb)	Contaminated soil	Impairment of blood function and nerve construction. Behavioral and hearing problems in children.
Sulfur Dioxide (SO_2)	Combustion of sulfur-containing fossil fuels. Smelting of sulfur-bearing metal ores. Industrial processes.	Plant injury. Reduced visibility. Deterioration of metals, textiles, leather, finishes, coatings, etc. Irritation of eyes. Reduced lung function. Aggravation of respiratory diseases (asthma, emphysema).
Carbon Monoxide (CO)	Incomplete combustion of fuels and other carbon-containing substances, such as motor vehicle	Plant injury. Reduced visibility. Deterioration of metals, textiles,

POLLUTANT	SOURCE	PRIMARY HEALTH EFFECTS
	exhaust. Natural events, such as decomposition of organic matter.	leather, finishes, coatings, etc. Irritation of eyes. Reduced lung function. Aggravation of respiratory diseases (asthma, emphysema).
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust. High temperature stationary combustion. Atmospheric reactions.	Reduced plant growth. Reduced visibility. Aggravation of respiratory illness. Formation of acid rain.
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	Plant leaf injury. Irritation of eyes. Aggravation of respiratory and cardiovascular diseases. Impairment of cardiopulmonary function.
Respirable Particulate Matter (PM_{10})	Secondary combustion of solid fuels. Construction activities. Industrial processes. Atmospheric chemical reactions.	Soiling. Reduced visibility. Aggravation of the effects of gaseous pollutants. Increased cough and chest discomfort. Reduced lung function. Aggravation of respiratory and cardio-respiratory diseases.
Fine Particulate Matter ($PM_{2.5}$)	Secondary combustion of solid fuels. Construction activities. Industrial processes. Atmospheric chemical reactions.	Soiling. Reduced visibility. Aggravation of the effects of gaseous pollutants. Increased cough and chest discomfort. Reduced lung function. Aggravation of respiratory and cardio-respiratory diseases.

Source: SCAQMD, 1999

LEAD

Lead (Pb) in the atmosphere occurs as particulate matter. The combustion of leaded gasoline was the primary source of lead emissions. Other sources of lead include the manufacturing of batteries, paint, ink, ceramics, and ammunition and secondary lead smelters. With the phase-out of leaded gasoline, secondary lead smelters and battery recycling and manufacturing facilities are becoming lead emission sources of greater concern.

Prolonged exposure to lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with

decrements in neurobehavioral performance (including IQ performance, psychomotor performance and reaction time) and growth. Lead is classified as a probable human carcinogen with an EPA weight-of-evidence classification of B2.

SULFUR DIOXIDE

Sulfur dioxide (SO_2) is a colorless gas with a pungent, irritating odor. Sulfur dioxide is created by the combustion of sulfur containing fuels. This substance is known to oxidize to sulfur trioxide, which combines with moisture in the atmosphere to form a sulfuric acid mist. Sulfur dioxide damages and irritates lung tissue and accelerates corrosion of materials.

CARBON MONOXIDE

The automobile and other types of motor vehicles are the primary source of carbon monoxide (CO). This gas is colorless and odorless which adds to its danger. In high concentrations, carbon monoxide can cause physiological and pathological changes, and ultimately death, by incapacitating the red blood cells and interfering with their ability to carry oxygen to body tissues.

NITROGEN DIOXIDE

Nitrogen dioxide (NO_2) is a by-product of fuel combustion. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but nitric oxide reacts quickly to form nitrogen dioxide, creating the mixture of nitric oxide and nitrogen dioxide commonly called NO_x. Nitrogen dioxide acts as an acute irritant and, in equal concentrations, is more injurious than nitric oxide. At atmospheric concentrations, however, nitrogen dioxide is only potentially irritating. There is some indication of a relationship between nitrogen dioxide and chronic pulmonary fibrosis. Some increase in bronchitis in children (two to three years old) has been observed at concentrations below 0.3 ppm. Nitrogen dioxide absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. Nitrogen dioxide also contributes to the formation of suspended particulate matter.

OZONE

Ozone (O_3) is one of a number of substances called photochemical oxidants that are formed when reactive organic compounds and nitrogen oxides, both byproducts of the internal combustion engine, react in the presence of ultraviolet sunlight. Ozone may pose its worst health threat to those who already suffer from respiratory diseases. However, ozone also hurts healthy people. In the past, those effects were thought to be limited to more difficult breathing during work and exercise. However, research has shown that children residing in areas of high ozone concentrations experience a loss in lung function.

RESPIRABLE PARTICULATE MATTER LESS THAN 10 MICRONS IN DIAMETER (PM_{10})

Respirable particulate matter (PM_{10}) consists of extremely small suspended particles or droplets 10 microns or smaller in diameter that can lodge in the lungs contributing to respiratory problems. PM_{10} arises from such sources as road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations, and windstorms. It is also formed in the atmosphere from nitrogen dioxide and sulfur dioxide reactions with ammonia. PM_{10} scatters light and significantly reduces visibility.

Particulates pose a serious health hazard, alone or in combination with other pollutants. More than half of the smallest particles inhaled will be deposited in the lungs and can cause permanent lung damage. Fine particulates can also have a damaging effect on health by interfering with the body's mechanism for clearing the respiratory tract or by acting as a carrier of an absorbed toxic substance.

FINE PARTICULATE MATTER ($PM_{2.5}$)

Fine particulate matter ($PM_{2.5}$) is defined as particulate matter with a diameter less than 2.5 microns and is a subset of PM_{10}. It consists mostly of products from the reaction of NO_x and SO_2 with ammonia, secondary organics, and finer dust particles.

AMBIENT AIR QUALITY STANDARDS

The current ambient air quality standards are provided in Table 5-4.

TABLE 5-4
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

POLLUTANT	AVERAGING TIME	CALIFORNIA	FEDERAL	
		CONCENTRATION	PRIMARY	SECONDARY
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m³)	--	Same as primary standard.
	8 hour	0.07 ppm (137 µg/m³)	0.08 ppm (157 µg/m³)	
Respirable Particulate Matter (PM_{10})	24 hour	50 µg/m³	150 µg/m³	Same as primary standard.
	Annual Arithmetic Mean	20 µg/m³	--	
Fine Particulate Matter ($PM_{2.5}$)	24 hour	No separate standard.	35 µg/m³	Same as primary standard.
	Annual Arithmetic Mean	12 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10 mg/m³)	9.0 ppm (10mg/m³)	None.
	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	
Nitrogen Dioxide (NO_2)*	Annual Arithmetic Mean	0.030 ppm (56 µg/m³)	0.053 ppm (100 µg/m³)	Same as primary standard.
	1 hour	0.18 ppm (338 µg/m³)	---	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	---	0.030 ppm (80 µg/m³)	---
	24 hour	0.04 ppm (105 µg/m³)	0.14 ppm (365 µg/m³)	---
	3 hour	---	---	0.5 ppm (1300 µg/m³)
	1 hour	0.25 ppm (655 µg/m³)	---	---
Lead	30 day Average	1.5 µg/m³	---	---
	Calendar Quarter	---	1.5 µg/m³	Same as primary standard.
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 kilometer—visibility of 10 miles or more due to particles when relative humidity is less than 70 percent.	No Federal Standards.	
Sulfates	24 hour	25 µg/m³		
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m³)		
Vinyl Chloride	24 hour	0.01 ppm (26 µg/m³)		

* The Nitrogen Dioxide ambient air quality standard was amended on February 22, 2007, to lower the 1-hr standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. These changes become effective after regulatory changes are submitted and approved by the Office of Administrative Law, expected later this year.

Source: California Air Resources Board (2/22/07); www.arb.ca.gov (11/05/07)

AMBIENT AIR QUALITY DATA

The California Air Resources Board (ARB) provides ambient air quality data for most air basins in the State. A summary of the data available for the greater project area is provided in Tables 5-5 and 5-6.

TABLE 5-5
OZONE TRENDS SUMMARY
RIVERSIDE-RUBIDOUX

YEAR	DAYS > STANDARD			1-HR OBSERVATIONS		8-HR AVERAGES		EPDC	YEAR COVERAGE
	1-HR		8-HR.						
	STATE	NATIONAL	NATIONAL	MAXIMUM	3-YR 4TH HIGH	MAXIMUM	3-YR AVE 4TH HIGH		
2006	45	8	30	0.151	0.141	0.117	0.109	0.141	99
2005	46	2	32	0.144	0.157	0.129	0.112	0.150	96
2004	59	8	35	0.141	0.157	0.114	0.113	0.156	98
2003	80	18	62	0.169	0.157	0.140	0.112	0.157	99
2002	56	12	35	0.155	0.143	0.124	0.108	0.148	95
2001	41	7	33	0.143	0.140	0.119	0.106	0.139	100
2000	42	3	26	0.140	0.166	0.112	0.114	0.171	100
1999	38	3	22	0.142	0.166	0.110	0.118	0.175	98
1998	70	32	57	0.195	0.187	0.169	0.127	0.188	98
1997	89	13	52	0.187	0.187	0.129	0.129	0.188	90

Notes: All concentrations expressed in parts per million.
The Expected Peak Day Concentration (EPDC) is calculated based on data for 3 successive years, listed by the last year of the 3 year period. EPDC represents the ozone concentration expected to occur once per year.

Source: ARB, 2007 (www.arb.ca.gov, 11/05/07)

TABLE 5-6
PM_{10} TRENDS SUMMARY
RIVERSIDE-RUBIDOUX

YEAR	EST. DAYS > STD.		ANNUAL AVERAGES		3-YR AVERAGE		HIGH 24-HR AVERAGE		EPDC	YEAR COVERAGE
	NAT'L	STATE	NAT'L	STATE	NAT'L	STATE	NAT'L	STATE		
2006	0.0	213.7	55.1	52.7	54	53	109.0	106.0	124.3	100
2005	0.0	198.2	51.8	50.4	54	55	123.0	119.0	152.2	100
2004	0.0	210.1	54.8	53.5	56	56	137.0	133.0	152.7	100
2003	6.2	201.4	55.6	55.1	58	56	164.0	159.0	--	100
2002	0.0	228.1	58.1	56.2	60	56	130.0	126.0	--	100
2001	0.0	240.2	63.3	62.9	65	72	136.0	136.0	160.9	100
2000	0.0	247.6	59.1	60.1	63	72	139.0	139.0	156.8	100
1999	0.0	261.2	72.2	72.2	66	72	153.0	153.0	156.3	100
1998	0.0	--	58.7	--	53	65	116.0	116.0	157.8	97
1997	5.8	256.9	65.6	65.3	43	69	163.0	163.0	228.7	95

Notes: All concentrations expressed in micrograms per cubic meter.
The Expected Peak Day Concentration (EPDC) is calculated based on data for 3 successive years, listed by the last year of the 3 year period. EPDC represents the ozone concentration expected to occur once per year.

Source: ARB, 2007 (www.arb.ca.gov, 11/05/07)

The ARB has designated the SCAB as non-attainment for the State ozone standard, the State PM_{10} standard and the State $PM_{2.5}$ standard. In addition, the U.S. Environmental Protection Agency has designated the South Coast Air Basin as non-attainment for the federal ozone standard, the federal carbon monoxide standard and the federal PM_{10} standard.

Data used to prepare this section were taken from several sources. Full bibliographic entries are provided at the end of this chapter.

REGULATORY SETTING

FEDERAL REGULATORY FRAMEWORK

The U.S. Environmental Protection Agency (EPA) is responsible for enforcing the many federal environmental and hazardous waste laws. California is under the jurisdiction of EPA Region IX with offices in San Francisco. The federal 1970 Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The federal Clear Air Act Amendments of 1990 (1990 CAAA) made major changes in deadlines for attaining National Ambient Air Quality Standards (NAAQS) and in actions required of areas of the nation that exceeded these standards. Under the CAA, state and local agencies in areas that exceed the NAAQS are required to develop state implementation plans (SIP) to show how they will achieve the NAAQS for ozone by specific dates (42 USC 7409, 7411). The EPA's responsibility to control air pollution in individual states is primarily to review submittals of SIPs that are

prepared by each state. Failure of California's state and local agencies to develop a SIP by the statutory deadline resulted in a series of lawsuits and appeal that began in 1990.

On April 15, 2004, EPA issued Clean Air Ozone Rules of 2004. This new rule, issued at the same time new designations on attainment and nonattainment were issued, replaces the 1-hour ozone standard with the 8-hour ozone standard and outlines a process for reducing ground level ozone pollution.

STATE OF CALIFORNIA REGULATORY FRAMEWORK

In California, the California Air Resources Board (ARB) is responsible for preparing and enforcing the federally-required SIP in an effort to achieve and maintain NAAQS and State Ambient Air Quality Standards (SAAQS) which were developed as part of the California Clean Air Act (CCAA) adopted in 1988. SAAQS for criteria pollutants equal or surpass NAAQS and include other pollutants for which there are no NAAQS. In addition, ARB is responsible for assigning air basin attainment and nonattainment designations in California. Air basins are designated as being in attainment if the levels of a criteria pollutant meet the SAAQS for the pollutant and are designated as being in nonattainment if the level of a criteria pollutant is higher than the SAAQS.

ARB is the oversight agency responsible for regulating statewide air quality, but implementation and administration of SAAQS is delegated to several regional air pollution control districts (APCD) and air quality management districts (AQMD). These districts have been created for specific air basins and have principal responsibility for:

- developing plans to meet SAAQS and NAAQS;
- developing control measures for non-vehicular sources of air pollution necessary to achieve and maintain SAAQS and NAAQS;
- implementing permit programs established for the construction, modification, and operation of air pollution sources;
- enforcing air pollution statutes and regulations governing non-vehicular sources; and
- developing employer-based trip reduction programs.

To regulate air pollutant emissions within California, the State has been divided into 15 air basins based upon similar meteorological and geographic conditions and consideration for potential boundary lines whenever practicable. The project area is within the South Coast Air Basin.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The South Coast Air Quality Management District (SCAQMD) is responsible for controlling emissions primarily from stationary sources of air pollution. These can include anything from large power plants and refineries to the corner gas station. There are about 28,000 such businesses operating under SCAQMD permits. Many consumer products are also considered stationary sources; these include house paint, furniture varnish, and thousands of products containing solvents that evaporate into the air. Also 23% of this area's ozone-forming air pollution comes from stationary sources, both businesses and residences. The other 77% comes from mobile sources—mainly cars, trucks and buses, but also construction equipment, ships, trains and airplanes. Emission standards for mobile sources are established by state or federal agencies, such as the California Air Resources Board and the U.S. Environmental Protection Agency, rather than by local agencies such as the SCAQMD.

SCAQMD develops and adopts an Air Quality Management Plan (AQMP), which serves as the blueprint to bring this area into compliance with federal and State clean air standards. Rules are adopted to reduce emissions from various sources, including specific types of equipment, industrial processes, paints and solvents, even consumer products. Permits are issued to many businesses and industries to ensure compliance with air quality rules. SCAQMD staff conducts periodic inspections to ensure compliance with these requirements.

The latest Air Quality Management Plan was adopted in 2007. It is a regional and multi-agency effort (SCAQMD, California Air Resources Board, Southern California Association of Governments, and the U.S. Environmental Protection Agency). State and federal planning requirements include developing control strategies, attainment documentation, reasonable further progress, and maintenance plans.

The 2007 AQMP also incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. The 2007 AQMP was adopted by SCAQMD on June 1, 2007 and by the California Air Resources Board on September 27, 2007 as part of the SIP.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

While the final determination of whether or not a project is significant is within the purview of the lead agency pursuant to §15064 of the State CEQA Guidelines, the SCAQMD recommends that the following quantitative air pollution thresholds be used by the lead agencies in determining whether the proposed project could result in a significant impact. If the lead agency finds that the proposed project has the potential to exceed these air pollution thresholds, the project should be considered significant. These thresholds have been defined by the SCAQMD for the SCAB based on scientific data that SCAQMD has obtained and factual data within the federal and State Clean Air Acts. Because the project is located with the SCAB and current air quality in the project area is typical of the air basin as a whole, these thresholds are considered valid and reasonable. Each of these threshold criteria is discussed below:

Thresholds for Emissions Related to Construction Activities

Projects in the SCAB with construction-related emissions that exceed any of these thresholds[1] should be considered significant:

- Oxides of Nitrogen (NO_x): 100 pounds per day.
- Volatile Organic Compounds (VOC): 75 pounds per day.

[1] www.aqmd.gov (11/05/07)

- Carbon Monoxide (CO): 550 pounds per day.
- Particulate Matter (PM_{10}): 150 pounds per day.
- Particulate Matter ($PM_{2.5}$): 55 pounds per day.
- Oxides of Sulfur (SO_x): 150 pounds per day.
- Lead (Pb): 3 pounds per day.

THRESHOLDS FOR EMISSIONS RELATED TO OPERATION OF A PROJECT

Specific criteria for determining whether the potential air quality impacts of a project's operation are significant are set forth in the SCAQMD CEQA Air Quality Handbook. The criteria for these emissions thresholds include compliance with the State and National air quality standards and conformity with the existing Air Quality Management Plan (AQMP) for the SCAB. The daily operational emissions "significance" thresholds[2] are:

- Oxides of Nitrogen (NO_x): 55 pounds per day.
- Volatile Organic Compounds (VOC): 55 pounds per day.
- Carbon Monoxide (CO): 550 pounds per day.
- Particulate Matter (PM_{10}): 150 pounds per day.
- Particulate Matter ($PM_{2.5}$): 55 pounds per day.
- Oxides of Sulfur (SO_x): 150 pounds per day.
- Lead (Pb): 3 pounds per day.

LOCALIZED SIGNIFICANCE THRESHOLDS

In accordance with SCAQMD's Governing Board's direction, the staff developed the localized significance threshold (LST) methodology and mass rate look-up tables, which were formally adopted by the Governing Board on October 3, 2003 for voluntary use by other public agencies. The mass rate LST look-up tables are only applicable to the following criteria pollutants: oxides of nitrogen (NO_x), carbon monoxide (CO) and particulate matter less than 10 microns in aerodynamic diameter (PM_{10}). The mass rate look-up tables were developed for each source receptor area (SRA) and can be used on a

[2] www.aqmd.gov (11/05/07)

voluntary basis by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts. LST's represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each SRA. For PM_{10} LST's, mass rate look-up tables were derived based on requirements in SCAQMD's Rule 403, Fugitive Dust.

The use of LST's is voluntary, to be implemented at the discretion of local public agencies acting as lead agencies pursuant to the CEQA or NEPA. The LST's established for construction of the La Sierra Avenue Water Transmission Pipeline Project are as follows[3] *(SCAQMD, February 2005)*

- Oxides of Nitrogen (NO_x): 144 pounds per day.
- Carbon Monoxide (CO): 418 pounds per day.
- Particulate Matter (PM_{10}): 1 pound per day.

For projects that emit toxic air contaminants (TACs) or for projects with a sensitive receptor within one-quarter mile of a facility that emits TACs, the California Air Resources Board recommends that a health risk assessment (HRA) be conducted. If the HRA determines that the TAC emissions either individually or cumulatively result in an individual cancer risk exceeding ten in one million, it is considered a significant impact.

These threshold criteria are used in this DEIR in determining significance of air quality impacts.

Environmental Analysis

	Sources[4]	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. *Would the Project:*					
a. Conflict with or obstruct implementation of the applicable air quality plan?	1				X

[3] Allowable emissions based on a one acre area of disturbance and a distance of 25 meters to the nearest receptor.
[4] Numerical sources are shown in Chapter 23, References.

	Sources[4]	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	2	X			
c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	3, 4	X			
d. Expose sensitive receptors to substantial pollutant concentrations?		X			
e. Create objectionable odors affecting a substantial number of people?					X

a. No Impact. A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds growth estimates included in applicable air quality management plans [i.e., SCAQMD's 2007 Air Quality Management Plan (AQMP)]. The AQMP is based on general plans from local jurisdictions, which includes the City of Riverside and Riverside County's General Plan. The AQMP accounts for development that would occur as a result of implementation of these local general plans. The proposed Project is consistent with the AQMP in that it would serve development approved in these general plans.

b. Potentially Significant Impact.

Construction-Related Impacts

Heavy construction equipment such as backhoes, loaders, trucks, tractors and other equipment powered by internal combustion engines would emit various levels of air pollutants. It is anticipated that the kinds of construction equipment to be used at each construction site are provided in Table 5-7.

TABLE 5-7
TYPICAL HEAVY CONSTRUCTION EQUIPMENT LIST

EQUIPMENT	NUMBER	UTILIZATION FACTOR
Compressor	1	0.8
Concrete Saw	1	0.1
Pavement Breaker	1	0.1
Backhoe/Loader	1	0.6
Dump Trucks	2	0.8
Utility Trucks	2	0.8
Crane	1	0.1
Dozer	1	0.5
Hydraulic Excavator	1	0.8
Water Truck	1	0.4
Compactor	1	0.1
Sweeper	1	0.1
Paver	1	0.1
Welder	1	0.5
Generator Set	1	0.5
Pickups	4	1.0

SCAQMD has also developed heavy equipment emission factors to assist in the preparation of environmental documents. These emission factors for the above equipment are presented in Table 5-8.

TABLE 5-8
EXHAUST EMISSION FACTORS FOR CRITERIA POLLUTANTS
(POUNDS PER HOUR)

EQUIPMENT	CO	NO_X	PM_{10}	SO_X	VOC
Compressor	0.3782	0.7980	0.0563	0.0007	0.1232
Concrete Saw	0.4411	0.7263	0.0610	0.0007	0.1460
Pavement Breaker	0.4616	0.9857	0.0681	0.0008	0.1479
Backhoe/Loader	0.4063	0.7746	0.0599	0.0008	0.1204
Dump Truck	0.7499	2.7256	0.0989	0.0027	0.2730
Utility Truck	0.7499	2.7256	0.0989	0.0027	0.2730
Crane	0.6011	1.6100	0.0715	0.0014	0.1778
Dozer	1.5961	3.2672	0.1409	0.0025	0.3644
Hydraulic Excavator	0.2828	0.3249	0.0727	0.0013	0.1695
Water Truck	0.7499	2.7256	0.0989	0.0027	0.2730
Compactor	0.0263	0.0328	0.0021	0.0001	0.0052
Sweeper	0.5575	0.9678	0.0778	0.0009	0.1830
Paver	0.5874	1.0796	0.0769	0.0009	0.1963
Welder	0.2309	0.3102	0.0288	0.0003	0.0882
Generator Set	0.3461	0.6980	0.0430	0.0007	0.1075
Pickups (pounds per mile)	0.01054844	0.00110288	0.00008505	0.00001075	0.00107919

Notes: Emission factors based on a mid-construction year of 2008.
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter
SO_X = oxides of sulfur
VOC = volatile organic compounds
Pickup Emission Factors Based on Highest (Most Conservative) EMFAC 2007 (Version 2.3)

Source: www.aqmd.gov (4/21/07)

Based on the equipment list shown in Table 5-7 and the emission factors shown in Table 5-8, estimated emissions from the heavy equipment to be on the job site are shown in Table 5-9.

Table 5-9
Estimated Emissions from Heavy Construction Equipment After Mitigation
(pounds per day)[1]

Equipment	CO	NO_x	PM_{10}	$PM_{2.5}$[2]	SO_x	VOC
Compressor	2.42	5.11	0.36	0.32	0.00	0.79
Concrete Saw	0.35	0.58	0.05	0.04	0.00	0.12
Pavement Breaker	0.37	0.79	0.05	0.04	0.00	0.12
Backhoe/Loader	1.95	3.72	0.29	0.26	0.00	0.58
Dump Truck	9.60	34.89	1.27	1.13	0.03	3.49
Utility Truck	9.60	34.89	1.27	1.13	0.03	3.49
Crane	0.48	1.29	0.06	0.05	0.00	0.14
Dozer	6.38	13.07	0.56	0.50	0.01	1.46
Hydraulic Excavator	1.81	2.08	0.47	0.42	0.01	1.08
Water Truck	0.90	8.72	0.32	0.28	0.01	0.87
Compactor	0.60	0.03	0.00	0.00	0.00	0.00
Sweeper	0.21	0.77	0.06	0.05	0.00	0.18
Paver	0.45	0.86	0.06	0.05	0.00	0.16
Welder	2.35	1.24	0.12	0.11	0.00	0.35
Generator Set	0.92	2.79	0.17	0.15	0.00	0.43
Pickups[3]	2.11	0.22	0.01	0.01	0.00	0.22
Totals	40.51	**111.05**	**5.11**	**4.54**	0.11	13.45
Threshold Limits[4]	550	100	150	55	150	75
Localized Significance Thresholds[5]	144	418	1	3	--	--

[1] Based on the assumption that the equipment operates eight hours per day.

[2] Based on the assumption that $PM_{2.5}$ emissions are 89 percent of PM_{10} emissions for combustion sources. *(SCAQMD, October 2006).*

[3] Based on EMFAC 2007 (version 2.3) emission factors and the assumption that each pickup truck travels 50 miles per day.

[4] Construction-related threshold limits developed by SCAQMD to determine significance.

[5] Localized significance thresholds developed by SCAQMD to determine localized significance.

As can be seen by the data in Table 5-9, emissions from heavy construction equipment would be considered less than significant based on SCAQMD's construction-related threshold criteria with the exception of oxides of nitrogen. Particulate emissions (both PM_{10} and $PM_{2.5}$) also exceed SCAQMD's localized significance thresholds. Therefore, based on SCAQMD's threshold criteria, oxides of nitrogen emissions would be considered a potentially significant impact. In addition, based on SCAQMD's localized significance threshold criteria, particulate emissions from construction would also be considered a potentially significant impact.

Vehicles owned by construction workers would be an additional source of air pollutants. An estimate of emissions based on 10 worker vehicles per day of which

100 percent are pickup trucks (gross vehicle weight of 8,500 pounds or less) with an average round trip of 30 miles is presented in Table 5-10.

TABLE 5-10
CONSTRUCTION WORKER COMMUTE VEHICLE EMISSIONS

	POLLUTANT (POUNDS PER DAY)					
	CO	NO_x	PM_{10}	$PM_{2.5}$	SO_x	VOC
Totals[1]	3.16	0.33	0.03	0.02	0.00	0.00
Threshold Limits[2]	550	100	150	55	150	75
Localized Significance Thresholds[3]	418	144	1	3	N/A	N/A

[1] Based on EMFAC 2007 (version 2.3) emission factors and the assumption that each pickup truck travels 30 miles per day.

[2] Construction-related threshold limits developed by SCAQMD to determine significance.

[3] Localized significance thresholds developed by SCAQMD to determine localized significance.

As can be seen by the data in Table 5-10, exhaust emissions from commuter traffic to and from the job site would not be sufficient to have any local adverse effect.

Installation of the proposed Project would create fugitive dust emissions. SCAQMD estimates that 26.4 pounds per acre per day of fugitive dust emissions from construction activities on disturbed soil. Based on this estimate and an exposed area of 1 acre per day, the estimated fugitive dust emissions from grading, etc., would be 26.4 pounds per day. If the soil is kept damp, this estimate can be reduced by half resulting in approximately 13.2 pounds per day of fugitive dust from the construction activities. The estimated fugitive dust emissions are below the SCAQMD's construction-related threshold criteria for significance but above the SCAQMD's local significance thresholds. SCAQMD also estimates that the $PM_{2.5}$ emissions in fugitive dust is equal to 21 percent of the PM_{10} emissions in fugitive dust *(SCAQMD, October 2006)*. Therefore, the $PM_{2.5}$ emissions in the fugitive dust would equal 2.77 pounds per day which is below SCAQMD's localized significance threshold.

The total estimated emissions from the installation of the proposed Project are shown in Table 5-11.

TABLE 5-11
TOTAL ESTIMATED CONSTRUCTION EMISSIONS AFTER MITIGATION
(POUNDS PER DAY)

EMISSION SOURCE	EMISSIONS (POUNDS PER DAY)					
	CO	NO_X	PM_{10}	$PM_{2.5}$	SO_X	VOC
Heavy Construction Equipment	41	111	5	5	0	13
Worker Commute Vehicles	3	0	0	0	0	0
Fugitive Dust	0	0	13	3	0	0
Total Construction Emissions	44	**111**	**18**	**8**	0	13
Threshold Criteria[1]	550	100	150	55	150	75
Localized Significance Thresholds[2]	144	418	1	3	--	--

[1] Threshold limits developed by SCAQMD to determine significance.

[2] Localized significance thresholds developed by SCAQMD to determine localized significance.

As shown in Table 5-11 the total estimated emissions from the installation of the proposed Project would not exceed the construction-related threshold criteria for significance with the exception of oxides of nitrogen emissions. The localized significance threshold for particulate matter (both PM_{10} and $PM_{2.5}$) would be exceeded. Therefore, based on these threshold criteria, construction of the proposed Project would be a potentially significant impact with respect to air quality.

Operational-Related Impacts

The new facilities would include one pump station that could be fueled by natural gas. Under the worst-case scenario, this pump station would have an installed horsepower rating of 4,000 (one-half natural gas and one-half electric). SCAQMD has also developed emission factors for the consumption of natural gas. Those factors are:

- Carbon monoxide (CO): 20.0 pounds per million cubic feet of gas burned.
- Oxides of nitrogen (NO_x): 120 pounds per million cubic feet of gas burned.
- Particulate matter (PM_{10}): 0.2 pounds per million cubic feet of gas burned.
- Oxides of sulfur (SO_x): negligible.
- Volatile organic compounds (VOC): 5.3 pounds per million cubic feet of gas burned.

Based on the worst case scenario of the pump station running at full capacity for a 24-hour period, the estimated emissions would be as shown in Table 5-12.

TABLE 5-12
ESTIMATED EMISSIONS FOR OPERATION OF NATURAL GAS ENGINES AT PUMP STATION
(POUNDS PER DAY)

	CO	NO_x	PM_{10}	$PM_{2.5}$	SO_x	VOC
Pump Station, 2,000 hp	7.21	43.20	0.08	0.07	0.00	1.90
Threshold Limits[1]	550	55	150	55	150	55

[1] Operational threshold limits developed by SCAQMD (www.aqmd.gov 11/05/07)

As can be seen by the data in Table 5-12 emissions from operation of the pump station, even under the worst-case scenario, would be considered less than significant by SCAQMD's threshold criteria.

Routine maintenance of the facilities would insure proper operation of the facilities and reduce impacts. This would include approximately one trip per week to the project facilities. The amount of emissions from one pickup trip per week would be considered less than significant by any threshold criteria.

Toxic Air Contaminants (TACs)

The combustion of diesel fuel produces diesel particulate matter as a byproduct. Diesel particulate matter has been identified by the California Air Resources Board (ARB) as a toxic air contaminant (TAC). While TACs can have long-term and/or short-term effects, diesel TAC has been shown by the ARB to have little or no short-term impact.

The ARB determined that the chronic impact of diesel particulate matter was of more concern than the acute impact in the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines *(ARB 2000)*. In that document, ARB noted that "Our analysis shows that the potential cancer risk from inhalation is the critical path when comparing cancer and non-cancer risk. In other words, a cancer risk of 10 cases per million from the inhalation of diesel particulate matter (PM) will result from diesel PM concentrations that are much less than the diesel PM or TAC concentrations that would result in chronic or acute non-cancer hazard index values of 1 or greater." Consequently, any analysis of diesel TAC should focus on the long-term, chronic cancer risk posed by diesel emissions. Chronic cancer risk is normally measured by assessing what the risk to an exposed individual from a source of TACs would be if the exposure occurred over 70 years. Diesel emissions related to the proposed Project would only occur over a two to three year period. Therefore, the impact would be considered less than significant and no further analysis is required.

c. **Potentially Significant Impact.** The ARB has designated the SCAB as non-attainment for the State ozone standard, the State PM_{10} standard and the State $PM_{2.5}$ standard. In addition, the Environmental Protection Agency has designated the SCAB as non-attainment for the federal ozone standard, the federal carbon monoxide standard, and the federal PM_{10} standard. The proposed project would generate

emissions during the construction phase. As shown in Table 5-11 the total estimated emissions from the installation of the proposed Project would exceed the significance thresholds for oxides of nitrogen and the localized significance thresholds for particulate matter. Therefore, based on these threshold criteria, construction of the proposed Project would be a potentially significant impact with respect to air quality.

d. **Potentially Significant Impact.** As shown in Table 5-11, construction emissions are considered significant by the SCAQMD's localized significance threshold criteria.

   As shown above, emissions associated with operation of the pipeline would be considered less than significant by SCAQMD's threshold criteria.

e. **No Impact.** The proposed project is a domestic water supply facility. Therefore, neither construction nor operation of the project would create or cause objectionable odors.

MITIGATION MEASURES

The following mitigation measures are recommended to reduce the impacts to air quality.

AIR-1

WMWD should include the following mitigation measures in its standard construction specifications:

- Maintain construction equipment engines by keeping them properly tuned.
- Use clean and low-sulfur fuel for equipment.
- Do not idle trucks onsite for more than 10 minutes at a time.
- Provide particulate traps and oxidation catalysts on construction equipment.
- Spread soil binders on site, where appropriate, unpaved roads and staging areas.
- Water site and equipment in the morning and evening.
- Suspend grading activities during first and second stage smog alerts and during high winds in accordance with SCAQMD Rule 403 requirements.
- If necessary, wash off trucks leaving the site.
- Cover haul trucks.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the above mitigation measures would not reduce the air quality impacts with respect to oxides of nitrogen and particulate matter to a level of less than

significant. Therefore, the project would have short-term significant impacts to air quality but less than significant long-term impacts to air quality.

REFERENCES

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SCAQMD. 2006. Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds. October.

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CHAPTER 6
BIOLOGICAL RESOURCES

ENVIRONMENTAL SETTING

A field survey for special-status plants and animals and their habitats was completed by K.S. Dunbar & Associates, Inc., along the La Sierra Avenue alignment and its subsets on 19 September 2006. In addition, other potential biological constraints were evaluated, for example, the occurrence of wetlands and nest sites for raptors (i.e., birds of prey). Prior to conducting the field survey, a list of potential special-status taxa and habitats was developed based on occurrence records from the region surrounding the site and complied by the California Department of Fish and Game in the California Natural Diversity Database (NDDB) (on file in WMWD's offices). Figure 6-1 illustrates those species and habitats recorded for the project region. These species and habitats were the focus of the field survey. The County of Riverside's Western Riverside County Multiple Species Habitat Conservation Plan was also researched.

During the field survey, the occurrence of plants and animals along the proposed alignments was recorded. The alignments were examined and characterized as to their suitability to support the special-status plants and animals listed in the NDDB. A narrative discussion of the field survey follows.

The La Sierra Avenue Pipeline would be constructed entirely within existing paved road alignments except for three locations illustrated on Figure 6-2 as Sites 1, 2, and 3. Except for these three locations, the pipeline project would not impact special status plants, animals, or their habitats and would not interfere with any habitat linkages, corridors, or conflict with any adopted conservation plan.

SITE 1

Site 1 is a vacant lot wedged between Sterling Avenue at State Highway 91 (Figure 6-3). This site is the proposed location of the new pump station and hydroelectric facility near the Arlington Desalter. The lot is fenced, leveled, and covered with gravel aggregate. The annual ruderal vegetation that was sporadic on the site had been mowed. Forensic botanical evidence indicated that the site once supported a few native and exotic annual grasses and forbs, including black mustard (*Brassica nigra*), Mediterranean barley (*Hordeum marinum* spp. *gussoneanum*), turkey mullein (*Eremocarpus setigerus*), and wild oat (*Avena fatua*). The site was very noisy due to the highway and had accumulated a significant amount of trash. There was no evidence of wildlife use, for example, rodent burrows.

Based on the evidence available, Site 1 does not and could not currently support any special-status plants, animals, or their habitats.

FIGURE **6-1**
WMWD La Sierra Avenue Pipeline Route

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FIGURE 6-2
WMWD La Sierra Avenue Pipeline, Arizona/Victoria Details

D51063.01

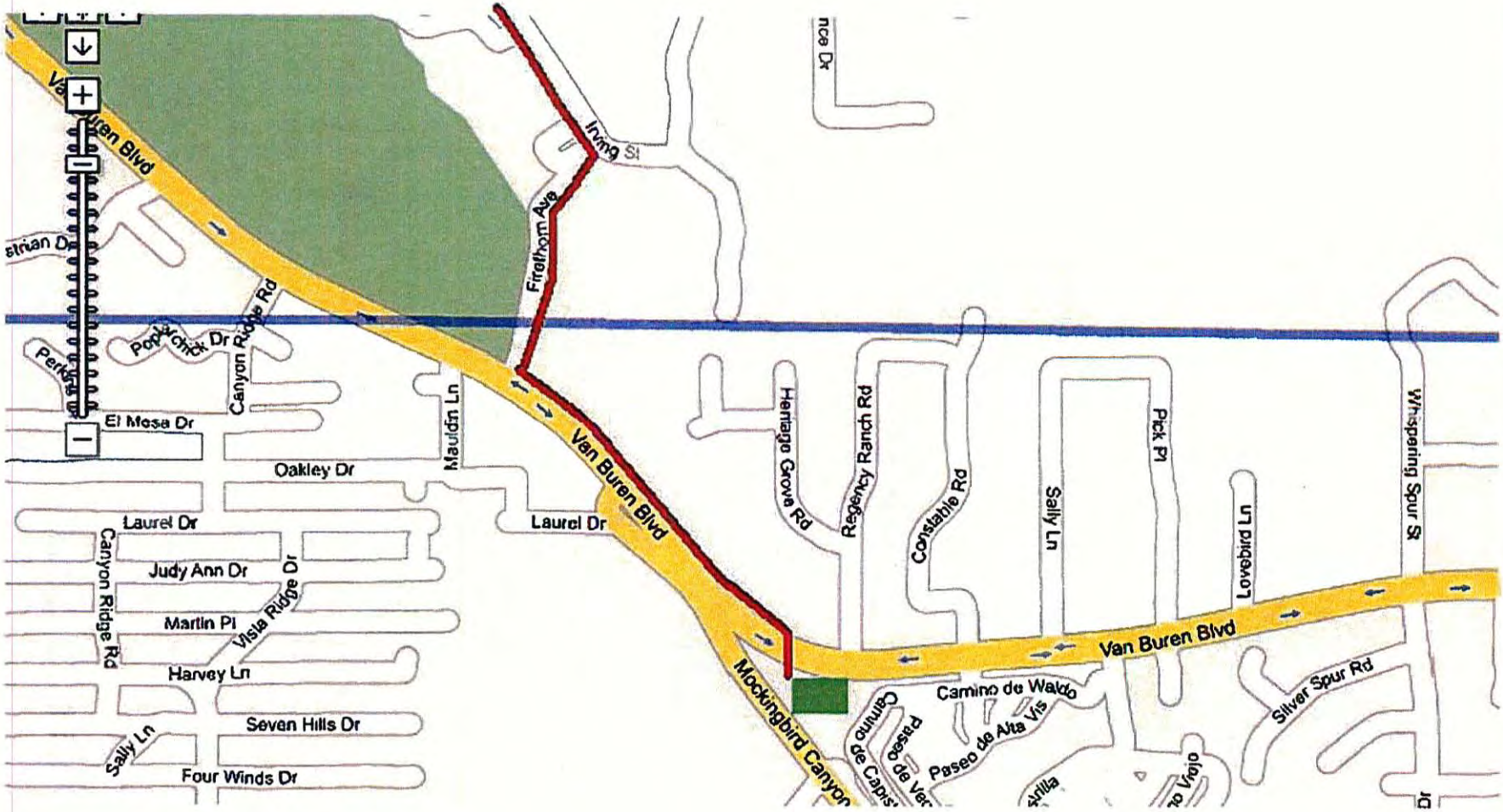

FIGURE 6-3
WMWD La Sierra Avenue Pipeline, Firehorn Details

D51063.01

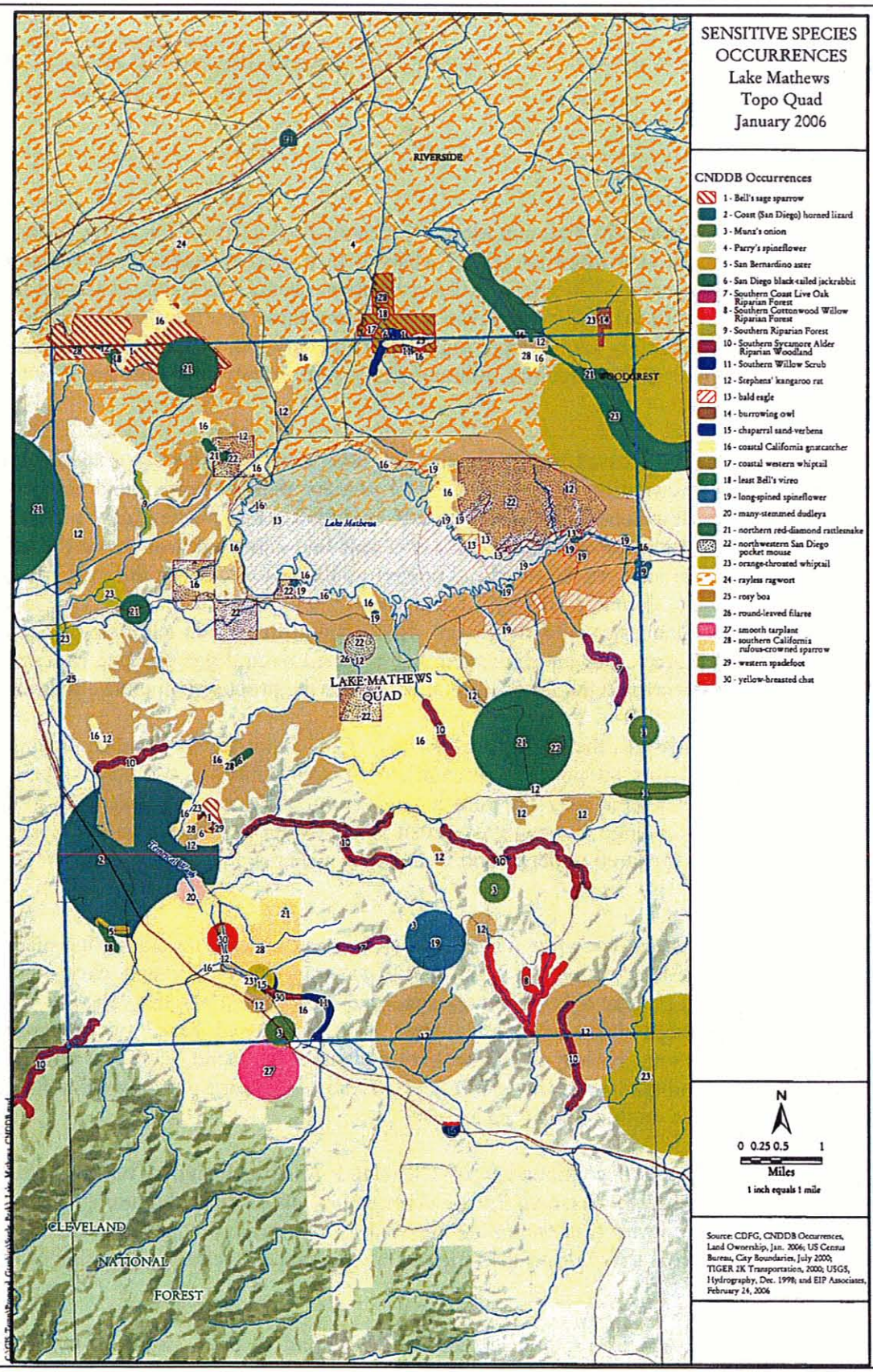

FIGURE 6-4
Sensitive Species Occurances

SITE 2

Traveling in a northeasterly direction along Cleveland Avenue from La Sierra Avenue, the street terminates at a large lot (field) adjacent to a private residence driveway at 10700 Cleveland Avenue. Cleveland Avenue resumes on the other side of the lot at a private residence at 10605 Cleveland Avenue. Between these two locations the pipeline would cross approximately 1,000 feet of highly disturbed ground, including one unnamed drainage that appears to be perennial, although the source of the water flow could not be determined.

The lot that would be crossed by the pipeline has been nearly completely graded and is largely devoid of vegetation (Figure 6-4). The primary plant species found along the alignment at those few non-graded locations is the exotic Russian thistle (*Salsola tragus*). A single small fan palm (*Washingtonia* sp.) was near the alignment growing at the base of a power pole that supports an overhead powerline that also traverses the lot. The lot appears to support a commercial plant nursery operation based on the observations of palm trees in containers near the alignment. In addition, there were large stockpiles of soil in the general area. Signage indicated that a buried natural gas pipeline (Southern Trails Pipeline) also crosses the lot in close proximity to the proposed pipeline alignment.

At the eastern boundary of the lot adjacent to 10605 Cleveland Avenue, a small unnamed drainage is located that supported a streamflow of approximately 0.5 cubic feet per second. The water source may be from a large commercial nursery located upslope and/or the extensive orange (*Citrus*) groves that are in the area. Downstream, the water in this drainage disappeared underground to the stormwater drainage system at Victoria Avenue.

Adjacent to this small watercourse were found shrubs and trees of several exotic plants, including pepper tree (*Schinus* sp.), fan palm (*Washingtonia* sp.), and castor bean (*Ricinus communis*) (Figure 6-5). The only apparently native tree was the yellow willow (*Saliz lutea*), although this species may have been introduced based on its typical geographic distribution. Nearby additional exotic plants were found, including gum tree (*Eucalyptus* sp.), and giant reed (*Arundo donax*). Extensive orange groves were adjacent to Cleveland Avenue on this side of the lot.

Wildlife observed at the continuation of Cleveland Avenue included turkey vulture (*Cathartes aura*), English sparrow (*Passer domesticus*), unidentified hummingbird, and California ground squirrel (*Spermophilus beecheyi*). The ground squirrels were living among concrete rubble that formed the terminus of Cleveland Avenue on this side of the lot.

Also continuing along the eastern segment of Cleveland Avenue were the overhead powerline and the underground gas line noted previously.

FIGURE **6-5**
Site 2. View from Clevelnad Avenue looking northeastward.

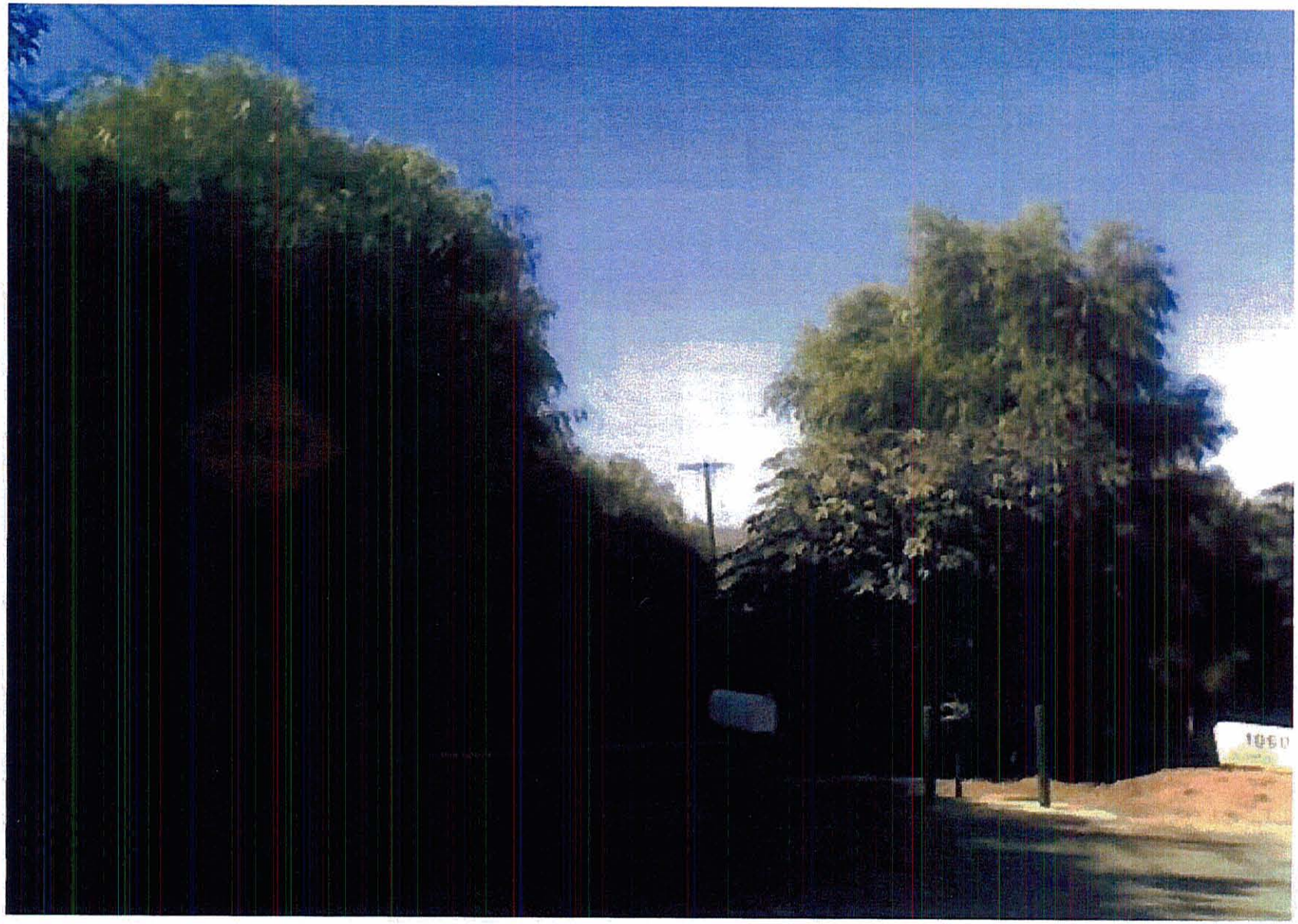

FIGURE **6-6**
Site 2. View from Cleveland Avenue looking southwestward.

D51063.01

The highly disturbed environment of the graded lot located between the two sections of Cleveland Avenue and the absence of native plant species except for the willow tree, indicates that the construction of the proposed pipeline across the lot would not result in impacts to special-status plants, animals, or their habitats. No such species or habitats are located along the alignment. The presence of the small drainage will require that a Streambed Alteration Agreement be obtained from the California Department of Fish and Game for pipeline construction. In addition, it will be necessary to acquire a Nationwide Permit (12) from the Los Angeles District of the Corps as well as a Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region.

SITE 3

Site 3 is a hill-slope located between Irving Street and Firethorn Avenue (Figure 6-1). The distance that the pipeline alignment must cross is approximately 100 feet of primarily dead chaparral habitat comprised almost entirely of winged ragweed (*Hymenochlea monogyra*). Also scattered here and there were specimens of four-winged saltbush (*Atriplex canescens*). An intermittent watercourse was located near the pipeline alignment. Water in this drainage was conveyed beneath Firethorn Avenue via a metal pipe. One gum tree and a few tobacco trees (*Nicotiana glauca*) were near the alignment but not on it.

The soil was primarily granitic sand and there was clear evidence of old and abandoned burrows of kangaroo rats (*Dipodomys* spp.). There was no evidence near the pipeline alignment of active burrows. It is surmised that because most of the vegetation on the alignment was dead that the kangaroo rats were extirpated from the area due to the absence of food (seeds from the *Atriplex*, etc.). There are three kangaroo rat species that have the potential to be found in the general region. These are the Pacific kangaroo rat (*D. agilis*), Merriam's kangaroo rat (*D. merriami*), and Stephen's kangaroo rat (*D. stephensi*). The latter species is federally listed as "endangered" under the Endangered Species Act, and as "threatened" under the California Endangered Species Act. While the correct species that once occurred at Site 3 can not be definitively determined in the absence of a population to monitor, the observational data suggest that the most likely species is either the Pacific or Merriam's kangaroo rat for the following reasons. First, the burrows observed had numerous openings, often 4 or 5, which is typical of *D. merriami*. Second, the burrow system was located under the dead shrubs in moderate to dense canopy, also typical of *D. merriami*. Third, the Pacific kangaroo rat also tends to occur in areas of moderate to dense chaparral cover, while the Stephen's kangaroo rat typically prefers sparse vegetation in several habitat types. There is no sparse vegetation at Site 3.

The Multiple Species Habitat Conservation Plan lists this site as potential habitat for the burrowing owl (*Athene cunicularia*). During the field survey, there was no evidence of burrowing owls on site. In addition, the site does not contain suitable habitat for this species.

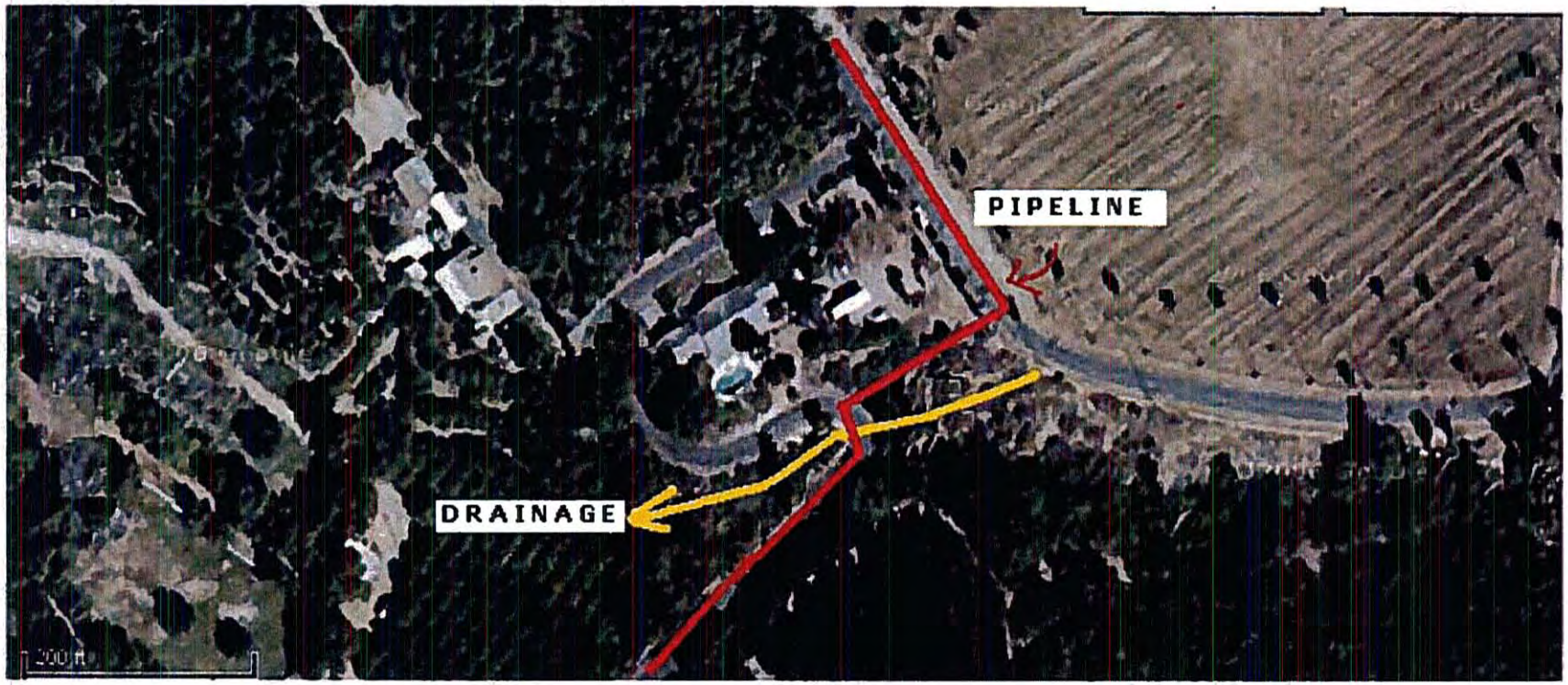

FIGURE 6-7
WMWD La Sierra Avenue Pipeline, Firethorn Drainage Crossing

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The field data do not indicate the current occurrence of any special-status plants, animals, or their habitats at Site 3. While there is no confirmed evidence that the Stephen's kangaroo rat currently occurs at Site 3, if it ever did, WMWD will consult with the U.S. Fish and Wildlife Service and California Department of Fish and Game to confirm that incidental take of the Stephen's kangaroo rat will not occur and that there are no habitat mitigation requirements.

SUMMARY

SPECIAL-STATUS PLANTS

No special-status plants or habitats for special-status plants were found along the pipeline alignments, nor would they be expected to occur there.

SPECIAL-STATUS ANIMALS

No special-status animals were observed along the pipeline alignments; however, Site 3 supports evidence of the former presence of a kangaroo rat species. Therefore, WMWD will consult with the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

OTHER BIOLOGICAL CONSTRAINTS

There are no significant biological constraints along the pipeline alignments. No wetlands were present. No raptor nests were observed in trees in close proximity to the pipeline alignments. The occurrence of a watercourse at Site 2 requires a Streambed Alteration Agreement from the California Department of Fish and Game as well as a Nationwide Permit from the U.S. Army Corps of Engineers and a Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region.

REGULATORY SETTING

U.S. FISH AND WILDLIFE SERVICE

ENDANGERED SPECIES ACT

Projects that would result in adverse effects on federally listed threatened or endangered species are required to consult with and mitigate through consultation with the U.S. Fish and Wildlife Service (USF&WS). The objective of consultation is to determine whether the project would impact a protected species or designated critical habitat, and to identify mitigation measures that would be required to avoid or reduce impacts to the species. This consultation can be pursuant to either Sections 7 or 10 of the Endangered Species

Act (ESA). Section 7 consultation is required when a federal agency is involved in project approval, funding, or permitting. Section 10 consultation is required when no federal agencies are involved with the project.

The federal ESA of 1973[1] provides legal protection for plant and animal species in danger of extinction, and requires definitions of critical habitat and development of recovery plans for specific species. Section 7 of the ESA requires federal agencies to make a finding on the potential to jeopardize the continued existence of any listed species potentially impacted by all federal actions, including the approval of a public or private action. Section 9 of the ESA prohibits the take of any member of an endangered species. Take is defined in the ESA as "... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USF&WS has further defined the terms harass and harm. Harass is defined as follows:

> "... an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering."

Harm is defined as follows:

> "... significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering."

Section 10(a) of the ESA permits the incidental take of listed species if the take is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Section 3 of the ESA defines an endangered species as any species, including subspecies, in danger of extinction throughout all or a significant portion of its range. This section defines threatened species as any species "likely to become endangered within the foreseeable future throughout all or a significant portion of its range". Federally listed or "listed" indicates that a species has been designated as endangered or threatened through publication of a final rule in the *Federal Register*. Designated endangered and threatened species, listed under Section 4 of the ESA, receive the full protection of the ESA. Proposed endangered and threatened species are those for which a proposed regulation, but not a final rule, has been published in the *Federal Register*. Proposed species are granted limited protection, while candidate species and species of special concern are afforded no protection under the ESA.

[1] The federal Endangered Species Act of 1973, as amended (16 USC 1531 et seq.), Sections 7, 9, and 10.

MIGRATORY BIRD TREATY ACT—1936

The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations (CFR) Section 10-13. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country and is enforced in the United States by the USF&WS. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 CFR 20. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors). Six families of raptors occurring in North America were included in the amendment:

- Accipitridae (kites, hawks, and eagles);
- Catharidae (New World vultures);
- Falconidae (falcons and caracaras);
- Pandionidae (ospreys);
- Strigidae (typical owls); and
- Tytonidae (barn owls).

All species and subspecies of the families listed above are protected under the amendment.

FEDERAL CLEAN WATER ACT

SECTION 404

The objective of the Clean Water Act (CWA, 1977, as amended) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Section 301 prohibits the discharge of any pollutant into the Nation's waters without a permit, and Section 402 establishes the permit program. Section 404 of the CWA regulates activities that result in discharge of dredged or fill material into waters of the United States. The United States Army Corps of Engineers (Corps) is responsible for permitting certain types of activities affecting wetlands and "other waters of the United States." Under Section 404 of the CWA, 1972, the Corps has the authority to regulate activity that could discharge fill or dredged material or otherwise adversely modify wetlands or other waters of the U.S. The Corps implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or acres.

SECTION 401

The State Water Resources Control Board (SWRCB) has authority over wetlands through Section 401 of the CWA, as well as the Porter-Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy.

The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain a certificate from the appropriate State agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the SWRCB to the nine regional boards. The California Regional Water Quality Control Board, Santa Ana Region is the appointed authority for Section 401 compliance in the Project area. A request for certification or waiver is submitted to the regional board at the same time that an application is filed with the Corps. The regional board has 60 days to review the application and act on it. Because no Corps permit is valid under the CWA unless "certified" by the State, these boards may effectively veto or add conditions to any Corps permit.

CALIFORNIA DEPARTMENT OF FISH AND GAME

CALIFORNIA ENDANGERED SPECIES ACT

The California Department of Fish and Game (CDFG) administers a number of laws and programs designed to protect fish and wildlife resources. Principal of these is the California Endangered Species Act of 1984 (CESA-Fish and Game Code Section 2050), which regulates the listing and take of State-endangered and State-threatened species. CESA declares that deserving species will be given protection by the state because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats.

Species listed under CESA cannot be taken without adequate mitigation and compensation. The definition of take under CESA is the same as described above for the federal ESA. However, based on findings of the California Attorney General's office, take under CESA does not prohibit indirect harm by way of habitat modification. Typically, CDFG implements endangered species protection and take determinations by entering into management agreements (Section 2018 Management Agreements) with project applicants.

CDFG maintains lists for Candidate-Endangered Species and Candidate-Threatened Species. California candidate species are given equal protection by the law as listed species. CDFG also lists Species of Special Concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or

educational value. Species of special concern do not receive protection under the CESA or any section of the California Fish and Game Code and do not necessarily meet CEQA Guidelines Section 15380 criteria as rare, threatened, endangered, or of other public concern. Like federal species of concern, the determination of significance for California species of special concern must be made on a case-by-case basis. Designation of Species of Special Concern is intended by CDFG to be used as a management tool for consideration in future land use decisions.

FISH AND GAME CODE – SECTIONS 3503, 3503.5 AND 3513

California Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects birds-of-prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act. These regulations could require that elements of a proposed project (particularly vegetation removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFG and/or USF&WS.

FISH AND GAME CODE – SECTIONS 3511, 4700, 5050, AND 5515

California Fish and Game Code Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians) and 5515 (fish) designate certain species as "fully protected". Fully protected species, or parts thereof, may not be taken or possessed at any time, and no provision of the Code or any other law may be construed to authorize the issuance of permits or licenses to take any fully protected species. No such permits or licenses heretofore issued may have any force or effect for any such purpose, except that the California Fish and Game Commission may authorize the collecting of such species for necessary scientific research. Section 3511 of the Code may authorize the live capture and relocation of fully protected birds pursuant to a permit for the protection of livestock. Legally imported and fully protected species or parts thereof may be possessed under a permit issued by CDFG.

CDFG STREAMBED ALTERATION AGREEMENTS

Under sections 1600-1607 of the California Fish and Game Code, the CDFG regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFG's jurisdiction are defined in the code as the . . . "bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit..." (Section 1601).

This broad definition gives the CDFG great flexibility in deciding what constitutes a river, stream, or lake. The CDFG defines streams under the jurisdictions of sections 1600-1607 as follows:

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

2. Biological components of any stream may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species that derive benefits from the stream systems.

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

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

    a. The floodplain of a stream can be the broadcast measurement of a stream's lateral extent depending on the return frequency of the flood event used. For most flood control purposes, the 100-year flood event is the standard measurement. However, because it may include significant amounts of upland or urban habitat, in many cases the 100-year floodplain may not be appropriate.

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

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

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

In practice, the CDFG usually marks its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

RIVERSIDE COUNTY

WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) encompasses 1,966 square miles of western Riverside County including approximately 842,500 acres of unincorporated County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as approximately 372,700 acres within the jurisdictional areas of cities. The MSHCP provides for the creation of a conservation area that protects and manages approximately 500,000 acres of habitat for covered species (146 species). The MSHCP provides for habitat conservation, species protection and management, program costs, and development certainty to the County and cities; State and federal wildlife agencies; development, agriculture, and environmental communities; and the public at large. The goal of the MSHCP is to target the highest quality habitats for preservation, while allowing development of less important habitat areas.

The approval of the MSHCP and execution of the Implementing Agreement (IA) by the wildlife agencies allows signatories of the IA to issue "take" authorizations for all species covered by the MSHCP, including State- and federal-listed species as well as other identified sensitive species and/or their habitats. Each city or local jurisdiction will impose a Development Mitigation Fee for projects within its jurisdiction. With payment of the mitigation fee to the County and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), CESA and FESA will be granted. The Development Mitigation Fee varies according to project size and project description. Payment of the mitigation fee and compliance with the requirements of Section 6 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, CESA and FESA for impacts to species and habitats covered by the MSHCP pursuant to agreements with the USFWS, CDFG and/or any other appropriate participating regulatory agency and as set forth in the IA for the MSHCP. *(Michael Brandman Associates, June 30, 2006)*

RIVERSIDE COUNTY ORDINANCE NO. 663.10, STEPHEN'S KANGAROO RAT MITIGATION FEE ORDINANCE

The purpose of this ordinance is to finance the preparation, development and implementation of a Habitat Conservation Plan, including the acquisition of habitat

reserve sites, and the application for a Section 10(a) permit under the Federal Endangered Species Act of 1973. It is the further purpose of this ordinance to provide a method for mitigation of impacts to the Stephen's Kangaroo Rat caused by the loss of its habitat due to development during the preparation and implementation of a Habitat Conservation Plan and provide for habitat mitigation to be identified in the Habitat Conservation Plan. Mitigation of impacts to the Stephen's Kangaroo Rat will be accomplished through the review of each proposed development project within the Fee Assessment Area to determine whether on-site mitigation through the reservation or addition of lands included within or immediately adjacent to a potential habitat reserve site or payment of the Mitigation Fee or a combination of both is appropriate and furthers the ultimate Habitat Conservation Plan objectives. A proposed development project may be referred, for review, to Federal and State resource agencies based upon criteria which may be established and agreed upon by the County and said agencies.

This ordinance provides for the establishment of this review process and satisfaction of on-site mitigation to protect potential habitat reserve sites or payment of the Mitigation Fee or a combination of both, which upon implementation will satisfy U.S. Fish and Wildlife Service, California Department of Fish and Game, as well as County mitigation requirements for the Stephen's kangaroo rat and its habitat which may occur within the unincorporated areas of the County designated herein.

According to Section 10(f) of the ordinance, public utility transmission facilities are exempt from paying fees. Therefore, the pipeline portion of the project will be exempt from paying mitigation fees for potential impacts to Stephen's kangaroo rat habitat.

Data used for this section were obtained from various sources including the California Natural Diversity Data Base and the Western Riverside County Multiple Species Habitat Conservation Plan. Full bibliographical entries for all reference material are contained at the end of this section.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would result in any of following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	5, 6		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies,	5, 6		X		

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?					
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X		
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	5, 6				X
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	6				X
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	6		X		

a. Less than Significant with Mitigation Incorporated. There are no species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service that might be impacted by implementation of the proposed project.

There are no special-status species or suitable habitat at either Site 1 (proposed pump station location) or Site 2 (vacant lot at the disruption of Cleveland Avenue). However, as stated previously, the hill-slope located between Irving Street and Firethorn Avenue contains soil that is primarily granitic sand. There was also clear evidence of old and abandoned burrows of kangaroo rats (*Dipodomys* spp.). There was no evidence near the pipeline alignment of active burrows. It is surmised that because most of the vegetation on the alignment was dead the kangaroo rats were extirpated from the area due to the absence of food (seeds from the *Atriplex*, etc.). There are three kangaroo rat species that have the potential to be found in the general region. These are the Pacific kangaroo rat (*D. agilis*), Merriam's kangaroo rat (*D. merriami*), and Stephen's kangaroo rat (*D. stephensi*). The latter species is federally listed as "endangered" under the Endangered Species Act, and as "threatened" under the California Endangered Species Act. While the correct species that once occurred on this hill-slope can not be definitively determined in the absence of a population to monitor, the observational data suggest that the most likely species is either the Pacific or Merriam's kangaroo rat for the following reasons. First, the burrows observed had numerous openings, often 4 or 5, which is typical of *D. merriami*. Second, the burrow system was located under the dead shrubs in moderate to dense canopy, also typical of *D. merriami*. Third, the Pacific kangaroo rat also tends to occur in areas of moderate to dense chaparral cover, while the Stephens' kangaroo rat typically prefers sparse vegetation in several habitat types. There is no sparse vegetation at this location; therefore, it would not be considered as Stephen's kangaroo rat habitat.

The field data do not indicate the current occurrence of any special-status plants, animals, or their habitats at Site 3.

While there is no confirmed evidence that the Stephen's kangaroo rat currently occurs at the hill-slope (Site 3), if it ever did, implementation of mitigation measure BIO-1 at the end of this section will insure that there are no significant impacts to special status species at this location.

b. Less than Significant with Mitigation Incorporated. The majority of the project site is located in existing rights-of-way or otherwise disturbed ground. However, it would be necessary to cross a small perennial stream. During the field survey, this stream supported a streamflow of approximately 0.5 cubic feet per second. The water source may be from a large commercial nursery located upslope and/or the extensive orange (*Citrus*) groves that are in the area. Downstream, the water in this drainage disappeared underground to the stormwater drainage system at Victoria Avenue.

The highly disturbed environment of this area located between the two sections of Cleveland Avenue and the absence of native plant species except for the willow tree, indicates that the construction of the proposed pipeline across the lot would not result in impacts to special-status plants, animals, or their habitats. No such species or

habitats are located along the alignment. The presence of the small drainage will require that a Streambed Alteration Agreement be obtained from the California Department of Fish and Game for pipeline construction. It is also possible that a Section 404 Permit will be required from the U.S. Army Corps of Engineers as well as a Section 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region. Implementation of mitigation measure BIO-2 at the end of this section will ensure that there are no impacts to special-status plants, animals, or their habitats in this area.

The pipeline would also cross under the Arlington Channel on Pierce Street, the Riverside Canal on La Sierra Avenue, The Metropolitan Water District Aqueduct on Cleveland Avenue and the Gage Canal on Irving Street. These crossings would be completed by the drill and bore method[2]; therefore, there would be no impact to the four water conveyance systems or their wildlife habitat due to construction of the La Sierra Avenue Water Transmission Pipeline.

c. **Less than Significant with Mitigation Incorporated.** There are no federally protected wetlands as defined by Section 404 of the Clean Water Act within the proposed Project alignment with the exception of the perennial stream discussed above. Implementation of mitigation measure BIO-2 at the end of this section will ensure that there are no impacts to wetland habitats by implementation of the proposed project.

d. **No Impact.** The proposed Project, which is mostly underground, would not interfere with any migratory activities or impact migratory corridors because there are none in the Project area. Site walks and reviews of General Plans show no active habitat linkages or corridors, habitat does not support such linkages, and no nursery sites exist within the Project area.

e. **No Impact.** The proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No other ordinances are in place that would apply to the proposed Project.

f. **Less than Significant with Mitigation Incorporated.** The proposed Project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan. None of the Project area requires action under the Western Riverside County Multiple Species Habitat Conservation Plan. As stated above, there would be no impacts to special-status species due to implementation of the proposed Project as long as mitigation measure BIO-1 at the end of this section is followed.

[2] In the drill and bore method, a small tunnel is bored under the waterway, a casing is placed in the bore, and the pipeline is jacked through the casing. This eliminates the need to disturb the waterway.

MITIGATION MEASURES

WMWD should implement the following mitigation measures to ensure that there are no impacts to special-status species.

BIO-1

WMWD shall consult with the U.S. Fish and Wildlife Service and California Department of Fish and Game to confirm that incidental take of the Stephen's kangaroo rat will not occur and that there are no habitat mitigation requirements.

BIO-2

WMWD shall acquire a Streambed Alteration Agreement from the California Department of Fish and Game for the perennial stream crossing as well as a Section 404 Permit from the U.S. Army Corps of Engineers and a Section 401 Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the above recommended mitigation measures will ensure that there are no biological resources impacts associated with the La Sierra Avenue Water Transmission Pipeline Project.

REFERENCES:

California Department of Fish and Game. 2006. Natural Diversity Data Base.

City of Riverside, Riverside General Plan, adopted September 13, 1994. Note the City is currently in the process of updating this plan.

Michael Brandman Associates. 2006. Habitat Assessment (Burrowing Owl and Narrow Endemic Plants) and MSHCP Consistency Analysis, Tentative Tract Map 30480. KB Home Inland Valley. June 30.

Riverside County Board of Supervisors. Western Riverside County Multiple Species Habitat Conservation Plan.

Riverside County Board of Supervisors. 2003. General Plan. October.

Riverside County Board of Supervisors. Riverside County Ordinance No. 663.10, Stephens' Kangaroo Rat Mitigation Fee Ordinance.

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

CHAPTER 7
CULTURAL RESOURCES

ENVIRONMENTAL SETTING

CULTURAL HISTORY

PREHISTORY

The prehistory of the coastal region has been much more intensively studied than that of the inland areas just to the east. It appears that the broad outlines of prehistory are similar, but there are known divergences between the coast and the inland zones and more will undoubtedly be identified as more study is done of inland sites.

Moratto proposed a Paleo-Coastal Tradition to incorporate several early components on the central and southern California coast that are "...distinctive yet apparently related to the Western Pluvial Lakes Tradition" (Moratto 1984:104). While rare, several sites with components dating roughly from 11,000 to 8,000 B.P. (before present) have been examined along the coast and the way of life appears sufficiently similar to group these components as a Tradition. In this case the tradition involves exploitation of bay and estuary settings to harvest both terrestrial and aquatic food sources with a rather generalized tool kit.

The next major era of prehistoric occupation in the area is the Early Period, from about 8,000 to 3,300 B.P. As described by Chester King (1981) this incorporates several previously named archeological cultures, including the Oak Grove Culture, the Hunting Culture, the Archaic and Early Mainland cultures, the Millingstone and Intermediate horizons and the Encinitas Tradition and part of the Campbell Tradition. There have been several hypotheses related to why there is a distinctive cultural change between this and the preceding era. Migration of new populations has been suggested by several researchers, either along the coast or from the inland areas, but most archeologists now feel that this period results from *in situ* development (e.g., In archeology, this refers to an artifact that has not been removed from its original place of deposition and may aid in the interpretation of the artifact.)

The common factor in the Early Period is elaboration of the technology related to seed procurement and processing. This was accompanied by increasingly specialized and efficient means of utilizing the resources available in the environment in general. The general picture is of cultural stability, with the inhabitants slowly becoming more and more comfortable in their setting. During the period, resources from a wide range of micro-environments can find their way to the same village through trade with related groups or seasonal movement of the village population. By the end of the period, external trade

relationships are quite extensive and bead production has moved from a primarily home-use decorative industry to production of an exchange medium.

The Middle Period, from about 3,300 to 800 B.P., is marked by continued economic specialization and, apparently, population growth. Although marine resources were exploited from the earliest known occupation of the coast, these were primarily shallow water fish and shellfish, although deep water fish were sometimes taken. In the Middle Period large pelagic fish were a major component of the coastal diet. This may mark the introduction of the plank canoe (King 1981). Villages are established at several locations along the coast that had not been occupied before. Indicating population expansion made possible by more efficient resource utilization. A similar pattern is seen in the inland areas, where development of mortar and pestle technology allowed utilization of the acorn as a major food source.

The end of the Middle Period may be a period of upset in other areas of California. Trade in obsidian, common through most of the Middle Period, drops almost to nothing. However, in the southern coastal zone there is no evidence of massive upset, just a continuation and intensification of trends already present in the Middle Period through to contact with the Spanish, which resulted in rapid destruction of the Native American way of life.

ETHNOGRAPHY

At the time of Euro-American contact, the project area was controlled by the Cahuilla. However, this was the far western edge of Cahuilla territory at that time. They controlled a large territory stretching from the Riverside vicinity to the Salton Sea and beyond. The desert areas in the Lower Sonoran ecological zone, such as the project vicinity, were not the most productive parts of Cahuilla territory, therefore, not the most densely settled. The lower slopes of the San Bernardino, San Jacinto and Santa Rosa mountains and the interior valleys near these areas were the Cahuilla heartland. Still, there are enough recorded archeological sites in the vicinity, almost all of them related to seed processing, to demonstrate the Cahuilla exploited this area for food regularly, if perhaps, seasonally.

Because of the large size of Cahuilla territory and the considerable differences in elevation within it, a large variety of animal and vegetable foods were available within the territory. The main animal sources of food were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, valley and mountain quail, doves, ducks, and other birds. Men were the primary procurers of animal foods, but the bulk of the diet was made up of a wide variety of vegetable foods, mostly collected and processed by women. The Cahuilla relied on six species of acorns and numerous varieties of seeds including manzanita, sunflower, and sage among others. To add to the staple crop of seeds, they also collected bulbs, roots, cactus pods, and various fruits among the hundreds of species that were used for food manufacture and medicine (Bean and Saubel 1972). Through trade with the neighboring Colorado River tribes, the Cahuilla had an incipient agricultural system, that is, they planted seeds to grow corn, beans, squash and melons, but did little to encourage growth or tend the plants. They

were just another food source supplementing the many that grew wild in their territory (Bean 1978:578).

Older men were most active in rituals and ceremonial affairs. They created most of the ceremonial paraphernalia used by the tribe. The Cahuilla, more of a linguistic grouping than a political unit, had no overall chief, but they did have hereditary leaders of lineages. These lineages were grouped in moieties, either wildcat or coyote, and one lineage was recognized as the founding lineage of the moiety. The leader of the founding lineage was, thus, the chief of the moiety. Each lineage head had an assistant, who had important ritual duties of his own, and an advisory council of ritual specialists and shamans. These shamans each had his own special area of knowledge about the environment or ritual magic. These positions were hereditary with each man training his own successor from his own lineage who showed the proper innate abilities. The shamans were both admired and feared and they formed a coherent social group that cross-cut the lineage structure.

Linguistically, the Cahuilla spoke one of the four languages in the Cupan subgroup of the Takic linguistic family. The language is most closely related to Gabrielino, their neighbors to the west. The Cahuilla traded widely, in fact, some Cahuillas specialized as traders and traveled as far as Santa Catalina to the west and the Gila River to the east to exchange goods. Warfare was most often an internal matter between rival lineages rather than fighting with non-Cahuilla tribes, although they did defend their territory as necessary (Bean 1978:582).

The Cahuilla were able to maintain their native social structure later in time than many California Indians. The Anza expedition crossed part of Cahuilla territory in 1874, but land routes from Mexico were soon cut by hostilities with Quechan Indians. The Spanish expansion then leapfrogged up the coast from mission to mission. Although some Cahuilla were baptized at San Gabriel, San Luis Rey and San Diego, the tribes interior location protected them from most of the early impact of the Spanish. Although diseases depleted the population, the rest lived an essentially aboriginal life. Even when the Spanish began grazing cattle on Cahuilla territory, they viewed it more as an economic opportunity, working for wages as herdsmen part of the time and returning to their villages the rest of the year.

When the Americans took over it became steadily more difficult for the Cahuilla to maintain a separate identity. A smallpox epidemic in 1863 was devastating, then reservations were established and by 1891 federal supervision of the Cahuilla was intensive. The effects of government schools, increased missionary activities and federal land programs eventually reduced native culture to a shadow of its former self. Despite this, many traditional cultural practices continue to this day.

HISTORY

The town of Riverside was established in 1870 by Judge J. W. North, who had already been prominent in the political and cultural affairs of Minnesota and Nevada. He

developed an interest in establishing an agricultural colony in California and, after an extensive inspection tour, settled on what is now Riverside. Judge North's selection was a good one, as Riverside was incorporated in 1883 and became the county seat in 1893.

Of equal importance in the development of Riverside was Mrs. Eliza Tibbetts. A Professor Sanders, the husband of an old friend, sent Mrs. Tibbetts two budding navel orange trees from Brazil, in 1873 or thereabouts. Mrs. Tibbetts was able to keep them alive and from those two ancestors developed the entire southern California citrus industry. One of these trees still survives, transplanted near the corner of Magnolia and Arlington. A memorial to Mrs. Tibbetts has been erected at that site (Hoover *et al.* 1990).

From its early agricultural beginnings the city has grown steadily and the basis of the economy has diversified. The strategic location of the town between the coastal and desert zones and on the major transportation corridors between the coast and the eastern markets has contributed greatly to this growth.

INFORMATION CENTER RECORD SEARCH

A record search was requested from the Eastern Information Center of the California Historical Resources Information System at Riverside. The purpose of the search was to identify any previous surveys and recorded resources near the proposed alignment. The Information Center reply indicates that much of the route has already been surveyed, although some of the surveys took place several years ago. There are 18 reports on file at the Information Center that cover lands near the proposed alignment, three of them covering portions of the proposed alignment. The latter are:

Drover, Christopher R., Ph.D.

1981 Environmental Impact Evaluation: Archaeological Assessment of Zone Change 3296 Near La Sierra, California.

This survey of about 40 acres included a stretch of La Sierra about one half mile long. No resources were recorded, but CA-RIV-7820 was recently recorded within the area of this survey (see site discussion below).

McKenna *et al.*

2005a A Phase I cultural Resources Investigation for the Proposed Alvord High School Site at the Frost Reservoir on Indiana Avenue in the City of Riverside, Riverside County, California.

This covered a portion of the northern part of the project area where the route goes around the site of Frost Reservoir to gain the main line of Indiana Avenue. Frost/Sayward Reservoir and two canals (Upper and Lower Riverside Canal) were recorded.

McKenna *et al.*

2005b A Phase I Cultural Resources Investigation for the Proposed Corona Feeder Master Plan Project Area, Riverside County, California.

This linear survey crosses the current alignment at a ninety degree angle in two separate places. An insignificant amount of the current project area was covered.

Among the other projects are several that come up to La Sierra Avenue on one side or the other, but do not cross it. These are not, technically, within the project area, but it is highly likely that any resources that would be of interest to the current project would have been recorded as a result of these earlier projects. The portion of the project area covered in this fashion includes most of the southern portion of the pipeline, that area mapped on the Lake Mathews USGS map. Most of the northern half of the project has not been surveyed.

Recorded resources that are within the record search area, that is, within one-quarter of a mile of the project area, include the following (from north to south).

CA-RIV-4791 The Lower Riverside Canal appears to be crossed at four locations by the project. This large irrigation canal was constructed about 1874 and in use until 1914. It was evaluated as not eligible for the National Register in earlier projects, but the latest update of the site record suggests that it should be found eligible on the grounds that it was an integral and necessary part of the success of the citrus industry in this vicinity.

P33-14767 The site of the Frost/Sayward Reservoir. The alignment does not cross this feature, if it still exists. It was scheduled to be replaced by a school at the time it was recorded.

CA-RIV-7900 This is a house, 11225 Indiana Avenue, evaluated as not eligible.

CA-RIV-7899 This house, adjacent to the above house at 11215 Indiana, was evaluated as not eligible for the National Register, but possibly significant at the county level.

Both of the above houses were located on the north side of Indiana Avenue. However, they no longer exist..

CA-RIV-5672H This site consists of two segments of concrete irrigation flume that appear to date to 1910 or so. The site is over 60 meters east of the project area.

The Information Center included copies of historic maps in its report. The 1901 USGS maps show several houses along Indiana Avenue in the project vicinity, but very few near La Sierra (Taylor Road, at the time). The 1942 USGS indicates many more buildings along both roads. There are no other features indicated near the project area.

An addendum record search was requested from the Eastern Information Center of the California Historical Resources Information System at Riverside to cover the entire project area. The purpose of the search was to identify any previous surveys and recorded resources near the proposed alignments. The Information Center reply indicates that most of the route has already been surveyed, the main previous project being:

McKenna *et al.*
2003 A Phase I Cultural Resources Investigation for the Proposed Corona Feeder Master Plan Project Area, Riverside County, California.

This covers all of the new alternatives except the small portion on Arizona Avenue.

Four other projects focused on the Gage Canal, which crosses the Irving Avenue segment of the route at about the halfway point from Cleveland Avenue to Mockingbird Canyon. Those that are most relevant are:

Hallaran, Kevin
1991 The Gage Canal: A Narrative History.

National Park Service
1993 California Citrus Heritage Recording Project: Arlington Heights Citrus Landscape, Gage Irrigation Canal, National Orange Company Packing House, Victoria Bridge, and Union Pacific Railroad Bridge.

This report was prepared in order to place the resources listed in the title on the Historic American Engineering Record (HAER). Listing on the HAER is equivalent to listing on the National Register of Historic Places.

Wlodarski, Robert J.
1993 An Archaeological Survey Report documenting the Effects of the RCIC I-215 Improvement Project in Moreno Valley, Riverside County, to Orange Show Road in the City of San Bernardino, San Bernardino County, California.

This did not include any survey within the current project area, but did record many portions of the canal.

There have been other surveys that covered small parcels adjacent to a portion of the alignment but not actually within the project area. There have been two cultural resources overviews that incorporated portions of the project area but did not involve fieldwork.

The Information Center included copies of historic maps in its report. The 1901 USGS maps show that some of the road involved in the project had not been built at this time or were constructed only on part of their current alignments. The 1942 USGS indicates all

the roads are in, but there are few houses in the area. Both sets of maps show the Gage Canal.

Although the proposed pipeline will cross the Gage Canal it will be constructed by the jack and bore method to insure no damage to the canal.

NATIVE AMERICAN CONTACTS

The Native American Heritage Commission in Sacramento was contacted to obtain a list of individuals who could be contacted for information on the project area and also to check the Sacred Lands Inventory. No properties listed on the Sacred Lands Inventory are in or near the project area.

On February 7, 2006 a letter and accompanying map of the project vicinity was sent to each of the ten individuals identified by the Native American Heritage Commission as persons who might have information to contribute regarding potential Native American concerns in the project area. A request was made for any information or concerns that they might have regarding village sites, traditional properties or modern Native American uses in any portion of the project vicinity. The letter offered to keep the information confidential if so desired. To date, no replies have been received.

FIELD INSPECTION

The field inspection of the project area was conducted on February 16, 2006, by Robert Gerry of Peak & Associates, Inc. It was quickly apparent that not too much new survey was going to be possible because the original ground surface is not visible in most areas. Development and associated landscaping has covered the bulk of the area.

The inspection started at the north end of the project near the WMWD Arlington desalinization facility. This lies just east of the large office building and paved parking area of the Santa Ana Watershed Project Authority at the end of Sterling Avenue. All of this area is paved. All of both sides of Sterling Avenue is the Riverside Business Center, featuring one and two story warehouses, office and commercial buildings. Only one lot at the northeast end is undeveloped. The frontage of this lot was inspected, a length of about 200 feet, with negative results.

At the west end of Sterling the route turns southeasterly on Pierce Street. There is a vacant lot on the westerly side between Sterling and the Railroad where about 140 feet of very disturbed ground was inspected.

The railroad appears on the 1901 USGS map (Riverside 15') as the Southern California Railroad (San Bernardino and San Diego Line) and on the 1942 edition as the Atchison, Topeka and Santa Fe. It is now used by Metro Link as well. A concrete lined drainage ditch parallels the railroad, but it does not appear on either of the above maps. South of the

railroad there is a recent subdivision on the east side of Pierce and older bungalows on the west. None of these would be affected by the Project. The Alvord High School appears on the 1942 USGS map, but the buildings are set well back from Pierce and will not be affected by this project. There is also a vacant lot at the northwest corner of Pierce and Indiana Avenue that allowed some surface inspection, but again, it is badly disturbed and results were negative.

The alignment turns northeasterly along Indiana and the western section of this portion is characterized by a steep drop on the northerly side to a recent residential subdivision and on the southeasterly side by the embankment of the Lower Riverside Canal. The latter has been recorded (CA-RIV-4791H) and evaluated as not significant. In the vicinity of this project the concrete lining of the canal has been completely destroyed in some areas and is badly deteriorated in others. Another recorded resource (Primary number P-33-14767) is the old Frost/Sayward Reservoir, which lies south of the canal further from the current project alignment. The reservoir was recorded in 2005 due to plans to build a new campus of Alvord High School at this location. This has not happened as yet.

Roughly 300 feet west of Sayward Circle the canal turns south away from Indiana Avenue. From this point east to the intersection with La Sierra, the route is typically lined by new housing on both sides of Indiana. The north side toward the east end of the alignment is lined by modern commercial structures. Two recorded old houses in this area sat on property now occupied by a self storage facility. On the south side the pattern is broken by the Orrenmaa School east of Filmore and older bungalows east of that. Most of the older residences are stucco bungalows, but there are also a couple of homes in the 1960s modern style. All are set far enough back from the street (50 to 100 feet) that they will not be impacted by the current project.

East of the residences on the southeasterly side of Indiana there is a small canal then a large open lot with an almost complete gas station on it at the corner of La Sierra. This lot has been extensively disturbed by construction equipment and inspection of the frontage on both Indiana and La Sierra failed to identify any cultural resources. The easterly side of La Sierra is occupied by a subdivision under construction. The construction destroyed one recorded historic site, CA-RIV-4672H, which was not a significant resource.

The northern part of La Sierra within the project area is built above the natural grade of the surrounding land. Just south of the point where the grades coincide again, La Sierra crosses the Lower Riverside canal, which passes in a modern piped culvert. This is the only place where the proposed pipeline could affect a recorded resource (i.e., the canal); however, the impact will be negligible because the crossing is already modernized.

From this point southeasterly both sides of La Sierra are, in most areas, bordered by modern housing, usually with sound walls between the road and the residences. This situation provided few opportunities for field inspection. In addition, almost all of this area is part of the La Sierra Road Improvement Project, currently underway, which will add lanes, sidewalks and landscaping to the route. The investigator inspected the western margin of

the Arizona Middle School Grounds and an orchard just south of Victoria Avenue, with negative results.

An additional field inspection of the project area was conducted by Robert Gerry of Peak & Associates in October, 2006. The only unsurveyed portion of the project was the section of one alternative on Arizona Avenue, a length of about one half mile. The remainder of the alignment was inspected for changes since the original survey and to examine the crossing at the Gage Canal.

The Arizona Avenue alternative is bordered by new subdivision on one side and a bit older on the other. All the houses appear to be 1970s or 1980s at the oldest, all have tile roofs and most are one story stucco buildings. This pattern is repeated along the Filmore and Victoria segments of the project area.

Cleveland Avenue is within a new subdivision at the western end of the alignment, from La Sierra to an area where subdivision construction is in progress. There is a break in Cleveland Avenue here and it provided an excellent opportunity for follow-up field inspection, since the area has been stripped of all vegetation preparatory to construction. In addition, the open area ends on the east at a drainage, thus the property is fairly sensitive for prehistoric resources. However, no archeological evidence was observed.

The remainder of the Cleveland Avenue area involves orchards, including many where landscaping trees are grown in tubs. There are some residences in this area but none near enough to the alignment to be impacted in any way by the proposed project. None of the structures appear particularly old.

This pattern is repeated along Irving Avenue except that there are no structures near the alignment except for the Gage Canal.

The canal is still in use and is well maintained with gunite and concrete lining. The crossing at Irving employs a small flat wooden bridge with troughs on each side to carry drainage water between ditches on both side of the canal. It will probably be necessary to bore under the canal in this area; therefore, a side area on both sides of the canal was inspected to insure coverage of the area that might be excavated for a bore hole. Again, no sign of cultural resources was observed in this area.

The portion of the alignment leading down from Irving to Van Buren on Firethorn Avenue is adjacent to the Citrus State Park. This is a narrow winding section of road with banks on both sides in most of the area and two residences close to the road near the top of the grade. From the junction with Van Buren to the end, the land is completely disturbed by road construction and installation of the facility that is the end of the project.

No cultural resources were discovered during this field reconnaissance.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would result in any of following:

- Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5 of the State CEQA Guidelines.
- Cause a substantial adverse change in the significance of an archeological resource, pursuant to §15064.5 of the State CEQA Guidelines.
- Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature.
- Disturb any human remains, including those interred outside of formal cemeteries.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	7, 8				X
b. Cause a substantial adverse change in the significance of a archeological resource as defined in § 15064.5?	7, 8		X		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	7, 8				X
d. Disturb any human remains, including those interred outside of formal cemeteries?	7, 8		X		

a. **No Impact.** Based on the 2006 field surveys, there were no historical resources as defined in §15064.5 of the State CEQA Guidelines identified within or immediately adjacent to the proposed Project alignment.

b. **Less Than Significant with Mitigation Incorporated.** Although there were no archeological resources as defined in §15064.5 of the State CEQA Guidelines identified within or immediately adjacent to the proposed project alignment, there is always a possibility that buried cultural resources that were not previously identified could be unearthed during excavation activities thus leading to a potentially significant impact. Implementation of mitigation measure CULT-1 at the end of this section would reduce this potential impact to a less-than-significant level.

c. **No Impact.** The project would not disturb any known unique paleontological resource or site or unique geological feature as none are present in the project area.

d. **Less Than Significant with Mitigation Incorporated.** No human remains, including formal cemeteries were identified within or immediately adjacent to the proposed project alignment. However, it is always possible that unmarked burials could be unearthed during excavation activities. Implementation of mitigation measure CULT-2 at the end of this section would reduce this impact to a less-than-significant level.

MITIGATION MEASURES

Although no evidence of cultural resources was found at the project site, it is always possible that cultural resources could be unearthed during excavation. Therefore, WMWD should include the following mitigation measures in its standard construction specifications:

CULT-1

- If cultural resources are encountered at any time during construction, construction personnel shall avoid altering these materials and their context until a qualified archeologist has evaluated the situation and contacted the State Office of Historic Preservation and the closest Indian Tribe to the Project, (in this case the Soboba Band of Mission Indians). Project personnel shall not collect or retain cultural resources. Prehistoric resources include, but are not limited to: chert or obsidian flakes; projectile points; mortars and pestles; dark, friable soil containing shell and bone; dietary debris; heat-affected rock; or human burials. Historic resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits (glass, metal, wood, ceramics), often found in old wells and privies.

CULT-2

- In the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the remains are found to be Native American, the Native American Heritage Commission shall be notified within 24 hours. Guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains in accordance with the provisions of Health and Safety Code §7050.5 and Public Resources Code §5097.98.

CULT-3

- Full time archeological monitoring shall be conducted in sensitive areas (e.g., Mockingbird Canyon). The archeological monitoring program shall be executed in conjunction with Native American monitoring in sensitive locations where undisturbed soils will be excavated. The Native American Monitor shall be of either Gabrielino or Luiseno descent.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the above mitigation measures would reduce the cultural resources impacts to a level of less than significant.

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CHAPTER 8
GEOLOGY AND SOILS

ENVIRONMENTAL SETTING

REGIONAL GEOLOGY

The major geologic features of the greater project area are the San Jacinto fault zone in the northeast and the Perris Block between the Elsinore and San Jacinto fault zones. The entire project area is within the Peninsula Ranges of Southern California and the Southern California batholith.

The San Jacinto Graben is bounded by the Casa Loma and Claremont branches of the San Jacinto fault system. Faulting is filled with alluvium on faulted blocks and the alluvium is cut by the faults. Lenses of gravel, sand, clay and silt have been formed by the deposit of alluvial material. The lenses are interspersed with wood, gas and boulders. Studies have shown that sediment filled the graben to depths of at least 8,400 feet.

The Perris Block separates the San Jacinto and Elsinore faults. It is sculptured by five erosional surfaces and a deep valley system exists. It is a relatively stable block of cretaceous and older crystalline rock. Crystalline rocks show traces of small amounts of groundwater in the weathered zones near the surface and deeper in the fractures of the rocks.

The San Jacinto fault zone, located approximately ten miles northeast of the project area, is considered one of the most active fault zones in Southern California. The San Jacinto, Claremont, Casa Loma, and Park Hill faults are part of the San Jacinto fault zone. The San Jacinto fault zone's future credible earthquake is magnitude 7.5 on the Richter scale.

The Elsinore fault zone lies approximately ten miles southwest of the project area. The maximum credible earthquake on the Elsinore fault is estimated to be a magnitude 7.0 on the Richter scale.

Both the Elsinore and San Jacinto fault zones are part of the greater San Andreas fault system. The main branch of the San Andreas fault zone is located approximately thirty miles northeast of the project site. The maximum credible earthquake on the San Andreas fault is estimated to be a magnitude 7.5 on the Richter scale.

Liquefaction, a secondary seismic hazard that can result from an earthquake, is not a potential hazard within the project area due to deep groundwater levels.

The California Geological Survey has predicted ground motions (10 percent probability of being exceeded in 50 years) for the project area as a fraction of the acceleration due to

gravity (g) in the project area. The predicted values of ground motion are shown below. Shown are peak ground acceleration (Pga), spectral acceleration (Sa) at short (0.2 second) and moderately long (1.0 second) periods. Ground motion values are also modified by the local site soil conditions. Each ground motion value is shown for three different site conditions: firm rock (conditions on the boundary between site categories B and C as defined by the building code), soft rock (site category C), and alluvium (site category D).

Ground Motion	Firm Rock	Soft Rock	Alluvium
Pga	0.397	0.392	0.431
Sa 0.2 sec	0.971	0.967	1.062
Sa 1.0 sec	0.381	0.463	0.553

Soils

Soils in the project area consist of sandy loamy materials of granitic origin.

Data used for this section were obtained from various sources. Full bibliographical entries for all reference material are contained at the end of this section.

Environmental Impact Analysis

Threshold Criteria

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would result in any of following:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; 2) strong seismic ground shaking; 3) seismic-related ground failure including liquefaction; or 4) landslides.

- Result in substantial soil erosion or the loss of topsoil.

- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	8				X
2. Strong seismic ground shaking?	9			X	
3. Seismic-related ground failure, including liquefaction?					X
4. Landslides?					X
b. Result in substantial soil erosion or the loss of topsoil?				X	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?					X

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	10				X
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					X

a. 1. No Impact. The Aliquist-Priolo Earthquake Fault Zoning Act identifies special study zones for areas where existing known faults are located. The purpose of the Act is to identify areas that may be limited to development and restrict development on or in close proximity to active faults. There are no Aliquist-Priolo faults in the immediate project area.

a. 2. Less-Than-Significant Impact. As stated above, the project area lies in one of the most seismically active zones in southern California. Northwest trending faults comprising the Elsinore Fault Zone and the San Andreas Fault Zone dominate the structural geology of the area. The California Geological Survey has predicted ground motions (10% probability of being exceeded in 50 years) as a fraction of the acceleration due to gravity (g) in the greater project area. The predicted values of ground motion are shown below. Shown are peak ground acceleration (Pga), spectral acceleration (Sa) at short (0.2 second) and moderately long (1.0 second) periods. Ground motion values are also modified by local site soil conditions. Each ground motion value is shown for three different site conditions: firm rock (conditions on the boundary between sites categories B and C as defined by the building code), soft rock (site category C) and alluvium (site category D).

Ground Motion	Firm Rock	Soft Rock	Alluvium
Pga	0.397	0.392	0.431
Sa 0.2 second	0.971	0.967	1.062
Sa 1.0 second	0.381	0.463	0.553

These conditions can be mitigated by special design using reasonable construction and/or maintenance practices common to the Riverside County area. Therefore, the seismic-related impacts would be less than significant.

a. **3. No Impact.** The potential for liquefaction depends upon potential ground movement during seismic events, soil conditions, and depth to groundwater. As previously stated, the Project site is not known to contain soil conditions and groundwater depths conducive to liquefaction.

a. **4. No Impact.** Based on field reconnaissance trips, there were no landslides noted in the Project area. Therefore, it is not anticipated that the Project would impact landslides nor does the Project have the potential to create or generate landslides.

b. **Less-Than-Significant Impact.** Construction activities would disturb about twenty acres of soil that would result in the potential for wind and water erosion. Provisions of the appropriate Permit for Discharges of Storm Water Associated with Construction Activity administered by the California Regional Water Quality Control Board, Santa Ana Region would be complied with. Compliance with this permit would reduce the impacts to a level of less than significant as it would require the use of best management practices such as:

- Prohibit clearing and grading activities until a firm construction schedule is known.
- Stabilize all construction site soils with erosion control measures such as silt fences, matting, etc.
- Control dust during construction by frequent watering.
- Compact disturbed areas as soon as possible.

c. **No Impact.** The Project site is not located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

d. **No Impact.** The Project site is not located on expansive soil as defined in Table 18-1-B of the Uniform Building Code.

e. **No Impact.** There are no on-site wastewater disposal facilities within the immediate Project area and none will be needed as part of the Project.

MITIGATION MEASURES

There were no significant geology and soils impacts identified; therefore, mitigation is not required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

There would be no geology and soils impacts associated with the proposed Project.

REFERENCES

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California Geological Survey. 2005. Ground Motion Map. www.cgs.ca.gov. 10/18/06

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Riverside County Board of Supervisors, General Plan, adopted October 7, 2003.

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CHAPTER 9
HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL SETTING

HAZARDS

Hazards are defined as natural and man-made conditions that must be respected if life and property are to be protected as growth and development occur. These hazards include seismic and other geologic hazards, fire and flooding. These hazards are explained in more detail in the following paragraphs.

SEISMICITY

As stated previously, the Project area lies in one of the most seismically active zones in Southern California. Northwest trending faults comprising the San Jacinto and Elsinore Fault Zones dominate the structural geology of the area. The California Geological Survey has predicted ground motions (10% probability of being exceeded in 50 years) as a fraction of the acceleration due to gravity (g) in the Project area. The predicted values range from 0.396 to 1.097 g *(www.consvr.ca.gov 10/19/06).*

LIQUEFACTION

The liquefaction potential in the Project area is very low due to soil types and depth to groundwater *(www.riversideca.gov 10/19/06).*

SLOPE INSTABILITY AND EROSION

Due to the fact that the majority of the Project alignment is within public street rights-of-way, slope instability and erosion are not concerns within the proposed pipeline alignments.

FIRE

Due to the urban nature of the Project area, wildland fires are not a concern.

FLOODING

The site is not within a 100-year flood plain. However, portions of the alignment are within areas that could be inundated if Cajalco Dam (Lake Matthews) failed. *(www.riversideca.gov, 10/19/06).*

HAZARDOUS MATERIALS

Several standard environmental record services were reviewed to determine the potential for recognized environmental conditions in the area. Those data bases include:

- National Priorities List.
- Comprehensive Environmental Response, Compensation and Liability Act.
- Resource Conservation and Recovery Act.
- Hazardous Materials Response Plans and Inventory.
- Leaking Underground Storage Tank Information System.
- CalSites.
- Hazardous Waste and Substances Sites List *(Cortese)*.

A review of those data bases revealed the location of two potential sites within the project area. Those are:

- Chevron Station 200734 at 3390 La Sierra
- Erwin Family, LLC near the intersection of La Sierra and Dufferin

Data used for this section were obtained from various sources. Full bibliographical entries for all reference material are contained at the end of this section.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact if it would result in any of following:

- Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.

- Create a significant hazard to the public or the environment through reasonably upset accident conditions involving the release of hazardous materials into the environment.

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65963.5 and, as a result, would create a significant hazard to the public or the environment.

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.

- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?			X		
b. Create a significant hazard to the public or the environment through reasonably upset accident conditions involving the release of hazardous materials into the environment?			X		
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X	
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section	11		X		

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
65963.5 and, as a result, would create a significant hazard to the public or the environment?					
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	12				X
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?					X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					X
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?					X

a. Less-Than-Significant With Mitigation Incorporated. Implementation of the proposed Project would not create any significant hazards as a result of the routine transport, use, storage, or disposal of hazardous materials. However, construction would include the temporary use and transport of fuels, lubricating fluids, solvents and other hazardous materials. The contractor would be required to adhere to the requirements of a *Health and Safety Plan* that it would develop for the Project (see mitigation measure HAZ-2 at the end of this section). Implementation of the mitigation measures at the end of this section would reduce these potential impacts to a less-than-significant level.

b. **Less-Than-Significant with Mitigation Incorporated.** Construction equipment used to construct the project would have the potential to release oils, grease, solvents and other finishing products through accidental spills. However, adherence to mitigation measures HAZ-1 and HAZ-2 at the end of this section would result in less-than-significant impacts.

c. **Less-Than-Significant Impact.** Alvord High School at 3606 Pierce Street, Orrenmaa Elementary School at 3350 Filmore Street, Arizona Intermediate School at 11045 Arizona Avenue, and Bethel Christian Elementary and High School campus at 2425 Van Buren Boulevard are within a few hundred feet of the proposed pipeline alignment. However, as stated above, implementation of the proposed Project would not create any significant hazards as a result of the routine transport, use, storage or disposal of hazardous materials. Additionally, potentially hazardous materials used during construction would be handled and used in compliance with the *Health and Safety Plan* that would be developed for the Project. Therefore, there are no impacts anticipated and no further mitigation is required. *(The Thomas Guide, 2003).*

d. **Less Than Significant with Mitigation Incorporated.** Several standard environmental record services are available to determine the potential for recognized environmental conditions in an area. As previously described, those databases were researched to determine the location of potential hazardous waste sites within the proposed project alignment. As shown above, there are two potential LUFT (leaking underground fuel tanks) sites along La Sierra Avenue that could be impacted by the proposed alignment.

   Petroleum contaminants, from each of the above-mentioned sites, may have migrated off-site to areas that would be excavated for construction of the proposed pipeline. Implementation of mitigation measure HAZ-4 at the end of this section would reduce these potential impacts to a less-than-significant level.

   In summary, the proposed Project alignment could be affected by sites that are included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and other standard lists.

e. **No Impact.** The Project site is not within an airport land use plan.

f. **No Impact.** The Project site is not within the vicinity of a private airstrip *(The Thomas Guide, 2003).*

g. **No Impact.** Implementation of the proposed Project would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

h. **No Impact.** As previously stated, the Project would be within an urban area and, therefore, not subject to wildland fires.

MITIGATION MEASURES

To reduce potentially hazardous conditions and minimize the impacts from the handling of potentially hazardous materials, WMWD should include the following in its construction contract documents:

HAZ-1

- The contractor(s) shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains. In addition, the contractor(s) shall store all reserve fuel supplies only within the confines of a designated construction staging area, refuel equipment only within the designated construction staging area, and regularly inspect all construction equipment for leaks.

HAZ-2

- The contractor(s) shall prepare a *Health and Safety Plan*. The plan shall include measures to be taken in the event of an accidental spill.

HAZ-3

- The construction staging area shall be designed to contain contaminants such as oil, grease, and fuel products so that they do not drain towards receiving waters or storm drain inlets.

HAZ-4

- An electronic "sniffer" capable of detecting actionable levels of hydrocarbons shall be employed during excavation activities in proximity to the previously referenced sites. Should actionable levels of contaminants be encountered, these materials should be removed and disposed of in accordance with applicable regulations.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the above mitigation measures would reduce the hazards and hazardous materials impacts to a level of less than significant.

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CHAPTER 10
HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL SETTING

There are several intermittent "blue line" streams in the project area. The proposed pipeline would cross the Arlington Channel and the abandoned Riverside Canal, Metropolitan Water District Aqueduct and Gage Canal.

REGULATORY FRAMEWORK

Federal, California and local regulations have been promulgated to protect the quality of ground and surface water resources. These are briefly explained in the following paragraphs.

FEDERAL

The primary federal laws for protecting water quality are the Clean Water Act (CWA), and the Safe Drinking Water Act (SDWA). These regulations range from establishing maximum contaminant levels to setting anti-degradation policies.

The primary regulatory program for implementing water quality standards is the federal National Pollutant Discharge Elimination System (NPDES) program. In the Project area, the NPDES permits are administered by the California Regional Water Quality Control Board, Santa Ana Region.

CALIFORNIA

In California, the State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards are the primary State agencies that regulate water quality. Individual Regional Boards regulate activities by developing and promulgating a Basin Plan that identifies beneficial uses of waters in the region and establishes policies to protect those uses.

The Project area is within the Santa Ana River Basin. The Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was adopted by the California Regional Water Quality Control Board, Santa Ana Region (Regional Board) on March 11, 1994 and approved by the State Water Resources Control Board (State Water Board) on July 21, 1994 and by the Office of Administrative Law (OAL) on January 24, 1995. The Basin Plan sets standards to protect all waters in the Santa Ana River Basin and prescribes programs to implement these standards. The standards consist of the designated

beneficial uses of the waters, narrative and numerical objectives to protect these uses, and the State's antidegradation policy.

CONSTRUCTION ACTIVITIES

Construction activities disturbing one or more acres are required by the State Water Board to comply with the provisions of the General Permit for Discharges of Storm Water Associated with Construction Activity which is administered by the Regional Board. Compliance with this permit requires the applicant to prepare a Storm Water Pollution Prevention Plan (SWPPP), implement best management practices (BMP's), and monitor to insure impacts to water quality are minimized.

Pursuant to Section 401 of the CWA, the Army Corps of Engineers cannot issue a federal permit under Section 404 of the CWA until the State has issued a water quality certification or waiver to ensure that the project will comply with State water quality standards. The authority to issue the water quality certification or waiver in the Project area is vested with the Regional Board.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would do any of following:

- Violate any water quality standards or waste discharge requirements.

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site.

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

- Otherwise substantially degrade water quality.

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.

- 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.

- Inundation by seiche, tsunami, or mudflow.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Violate any water quality standards or waste discharge requirements?			X		
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?					X
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the					X

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site?					
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?					X
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?					X
f. Otherwise substantially degrade water quality?					X
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?					X
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?					X
i. 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?					X

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
j. Inundation by seiche, tsunami, or mudflow?					X

a. Less Than Significant with Mitigation Incorporated. During site grading and excavation activities, bare soil would be exposed to wind and water erosion. If precautions are not taken to contain sediments, construction activities could produce sediment laden storm runoff that would exceed limits contained in the National Pollutant Discharge Elimination System (NPDES) General Construction Permit to be issued for this project. In addition to increased erosion potential, hazardous materials associated with construction equipment and LUFT sites in the vicinity of the pipeline alignment could adversely affect water quality if spilled or stored improperly. (See previous section for a full discussion and mitigation measures associated with hazardous materials.) Also, construction in areas of high groundwater could require dewatering with a subsequent discharge to surface waters. The mitigation measures at the end of this section would reduce these potential impacts to a level of less than significant by limiting the amount of sediment that could be discharged to surface waters.

b. No Impact. The proposed project would not use groundwater for any purpose and therefore would not substantially deplete groundwater supplies. There are no groundwater recharge facilities in the Project area; therefore, the Project would not interfere with groundwater recharge activities.

c. No Impact. The proposed pipeline would be located underground and therefore would not affect existing drainage patterns. Increased erosion and sedimentation from construction activities were described under paragraph a above.

d. No Impact. The proposed pipeline would be located underground and would not increase runoff that could affect stormwater drainage facilities. The proposed project would not change the amount of impervious surfaces, thereby contributing to increased stormwater flows or flooding.

e. No Impact. The proposed pipeline would be located underground and would not increase runoff that could affect stormwater drainage facilities. The proposed Project would not change the amount of impervious surfaces, thereby contributing to increased stormwater flows or flooding.

f. No Impact. As described under paragraph a above, the proposed Project would not degrade water quality as it would have to comply with the terms of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit.

g. **No Impact.** The proposed Project does not involve housing.

h. **No Impact.** The proposed Project is not within a 100-year flood plain *(www.epa.gov. 10/21/06).*

i. **No Impact.** The proposed Project would not 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.

j. **No Impact.** The proposed Project is not close to any existing water bodies that would be subject to seiches or tsunamis, or significant topography that would cause mud flows.

MITIGATION MEASURES

HYD-1

WMWD should require contractors to implement a program of best management practices (BMP's) 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, implementation of BMP's, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMP's shall be implemented to provide effective erosion and sediment control. These BMP's shall be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMP's to be implemented as part of this mitigation measure shall include, but are not limited to, the following:

- 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.

- 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.

- Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events.

- 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 pollution prevention plan prior to commencement of construction. The construction agent(s) shall routinely inspect the construction site to verify that the BMP's specified in the pollution prevention plan are properly installed and maintained. The construction agent shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.

- 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 shall routinely inspect the construction site to verify that the measures specified in the permit are properly implemented. The construction agent(s) shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the above mitigation measures would reduce the hydrology and water quality impacts to a less than significant level by eliminating discharges to surface waters or by strict adherence to the terms of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit.

REFERENCES

California Regional Water Quality Control Board, Santa Ana Region. 1994. Water Quality Control Plan for the Santa Ana River Basin. March 11.

Environmental Protection Agency. (www.epa.gov 10/21/06).

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

CHAPTER 11
LAND USE AND PLANNING

ENVIRONMENTAL SETTING

Land use and planning activities in the Project area are the responsibility of the County of Riverside and the City of Riverside. General Plans were adopted by these entities as follows:

- Riverside County Board of Supervisors, *Lake Matthews/Woodcrest Area Plan*, adopted October 7, 2003.

- City of Riverside, *Riverside General Plan,* adopted September 13, 1994. Note the City is currently in the process of updating this plan.

Data used for this section were obtained from various sources. Full bibliographical entries for all reference material are contained at the end of this section.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

Section 15382 of the State CEQA Guidelines defines a "significant effect on the environment" as a "substantial or potentially substantial adverse change in the physical conditions within the area affected by the proposed project". The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. According to the State CEQA Guidelines, significant land use or planning impacts would occur if a proposed project would result in any of the following:

- Physically divide an established community.

- 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.

- Conflict with any applicable habitat conservation plan or natural community conservation plan.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Physically divide an established community?					X
b. 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?	12, 13				X
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	6				X

a. No Impact. Construction activities are within existing rights-of-way and will not interfere with or divide an established community. Once completed the proposed pipeline would be underground and as such it would not physically divide an established community.

b. No Impact. The proposed Project would be constructed mainly within existing public rights-of-way that are not designated by a general plan or zoning ordinance for a specific use. In addition, due to the fact that the majority of the Project would be located underground, it would not interfere with any existing uses in the Project area. The proposed pump station and hydroelectric facility are located on undeveloped land and therefore would not interfere with any existing use.

c. No Impact. Implementation of the proposed Project would not conflict with the Western Riverside County Multiple Species Habitat Conservation Plan. Additional information concerning this subject is contained in the Biological Resources section of this document.

MITIGATION MEASURES

There were no land use and planning impacts identified; therefore, no mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

There would be no land use and planning impacts associated with the La Sierra Avenue Water Transmission Pipeline.

REFERENCES

City of Riverside, Riverside General Plan, adopted September 13, 1994. Note the City is currently in the process of updating this plan.

Riverside County Board of Supervisors. 2003. General Plan. October 7.

Riverside County Board of Supervisors. 2003. Lake Matthews/Woodcrest Area Plan. October 7.

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

CHAPTER 12
MINERAL RESOURCES

ENVIRONMENTAL SETTING

There are no active mining sites within the project area and according to the local general plans there are no important mineral resources within the project area.

Data used for this section were obtained from various sources. Full bibliographical entries for all reference material are contained at the end of this section.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. According to the State CEQA Guidelines, a project would normally have a significant effect on the environment if it would:

- Result in the loss of availability of a known resource that would be of value to the region and the residents of the state.
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Result in the loss of availability of a known resource that would be of value to the region and the residents of the state?	12, 13				X
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	12, 13				X

a. No Impact. No known mineral deposits are identified within the Project area.

b. **No Impact.** There are no locally-important mineral resource recovery sites delineated in the applicable general plans. Consequently, the Project would not result in the loss of a locally-important mineral resource.

MITIGATION MEASURES

There were no mineral resources impacts identified; therefore, no mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

There would be no mineral resources impacts associated with the La Sierra Avenue Water Transmission Pipeline project.

REFERENCES

City of Riverside, Riverside General Plan, adopted September 13, 1994. Note the City is currently in the process of updating this plan.

Riverside County Board of Supervisors. 2003. General Plan. October 7.

Riverside County Board of Supervisors. 2003. Lake Matthews/Woodcrest Area Plan. October 7.

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

CHAPTER 13
NOISE

ENVIRONMENTAL SETTING

INTRODUCTION

Noise is usually defined as "unwanted sound". It consists of any sound that may produce physiological or psychological damage and/or interfere with a person's communication, work, rest, recreation and sleep. People recognize that noise has become an environmental pollutant.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect our ability to hear. Pitch is the number of complete vibrations (cycles per second) of a wave that results in the tone's range from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment. It is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the ear. The sound intensity refers to how hard the sound wave strikes objects, which, in turn, produces the sound's effect. This is a characteristic of sound that can be precisely measured with instruments.

Sound intensity or acoustic energy is measured in decibels (dB) that are weighted to correct for the relative frequency response of the human ear. For example, an A-weighted noise level dB(A) includes a de-emphasis on high frequencies of sound that are heard by a dog's ear but not by a human's ear. The zero on the decibel scale is based on the lowest level that the healthy, unimpaired human ear can detect. Unlike linear units (inches or pounds), decibels are measured on a logarithmic scale, representing points on a sharply rising curve.

Many noise rating schemes have been developed for various time periods, but an appropriate rating of ambient noise affecting human communities also needs to account for the annoying effects of sound. The predominant rating scales for human communities are the Noise Equivalent (Leq), the Community Noise Equivalent Level (CNEL), and the Day-Night Average Sound Level (Ldn), all of which are based on A-weighted decibels [dB(A)]. The Leq is the total sound energy of time-varying noise over a sample period. The CNEL is the time-varying noise over a 24-hour period with a weighting factor applied to noise occurring during the evening hours of 7:00 pm to 10:00 pm (relaxation hours) and at night from 10:00 pm to 7:00 am (sleeping hours) of 5 and 10, respectively.

Physical damage to human hearing begins at prolonged exposures to more than 85 decibels. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 decibels increasing body tension, thereby affecting blood

pressure, functions of the heart, and the nervous system. Extended periods of noise exposure above 90 dB(A) will result in permanent cell damage. A sound level of 190 dB(A) will rupture the ear drum and permanently damage the inner ear.

Ambient noise is generally more concentrated within urban areas than in outlying residential neighborhoods. Environmental sound levels in high density urban areas are doubling every 10 years. Suburban areas are not experiencing such a significant increase in noise levels because of their relative distance from major noise sources.

According to Occupational Safety and Health Administration (OSHA) regulations, protection against the effects of noise exposure shall be provided when the sound level exceeds those shown in Table 13-1. This table shows the maximum exposure in Ldn for various land use categories and locations (whether indoor or outdoor). This maximum is provided according to the health and psychological effects described above, with a reasonable margin of safety. Table 13-1 identifies whether the threshold applies to activity interference, hearing loss consideration, or both effects.

TABLE 13-1
YEARLY AVERAGE EQUIVALENT SOUND
IDENTIFIED TO PROTECT THE PUBLIC HEALTH AND WELFARE

	Measure	Indoor		To Protect Against Both Effects(a)	Outdoor		To Protect Against Both Effects(a)
		Activity Interference	Hearing Loss Consideration		Activity Interference	Hearing Loss Consideration	
Residential with Outside Space and Farm Residences	Ldn Leq(24)	45	70	45	55	70	55
Residential with No Outside Space	Ldn Leq(24)	45	70	45			
Commercial	Leq(24)	(b)	70		(b)	70	70(c)
Inside Transportation	Leq(24)	(b)	70	70(c)			
Industrial	Leq(24)(d)	(b)	70	(b)	(b)	70	70(c)
Hospitals	Ldn Leq(24	45	70	70(c)	55	70	55
Educational	Ldn Leq(24)	45	70	45	55	70	55
Recreational Areas	Leq(24)	(b)	70	45	(b)	70	70(c)
Farm Land and General Unpopulated Land	Leq(24)		70	70(c)	(b)	70	70(c)

Code:

a. Based on lowest level.
b. Because different types of activities appear to be associated with different levels, identification of a maximum level for activity interface may to difficult except in those circumstances where speech communication is a critical activity.
c. Based only on hearing loss.
d. An Leq(8) may be identified in these situations so long as the exposure over the remaining 16 hours per day is low enough to result in a negligible contribution to the 24-hour average (i.e., no greater than an Leq of 60 dB.

Note: Explanation of identified level for hearing loss: the exposure period which results in hearing loss at the identified level is a period of 40 years.

Source: California Occupational Safety and Health Administration.

A maximum of 45 dB protects against indoor activity interference and hearing loss for residential, hospital, and educational land uses. Outdoor activity interference threshold levels are higher for these land uses, at 55 dB. Commercial, transportation, industrial and recreation activities are considered highly variable, so thresholds for these land uses have not been determined. Similarly, agricultural-related outdoor activities have no stated interference noise levels. Hearing loss consideration for all activities becomes an issue at 70 dB or greater, for both indoor and outdoor noises.

Noise sources may either be a "line source" (e.g., a heavily traveled roadway) or a "point source" (e.g., a stationary engine or compressor). Highway traffic noise on high volume roadways simulates a "line source" and the drop-off rate of sound with distance approaches 3 dB(A) drop with every doubling of distance between the noise source and the noise receiver.

Environmental factors such as the wind direction and speed, temperature gradients, the characteristics of the ground (hard or soft) and the air (relative humidity), the presence of grass, shrubbery, and trees, often combine to increase the actual attenuation achieved outside laboratory conditions to a 4.5 dB(A) drop with every doubling of distance. Thus, a noise level of 74.5 decibels at 50 feet from a highway centerline would attenuate to 70.0 decibels at 100 feet, 65.5 decibels at 200 feet, and so forth.

This is particularly true where the view of the roadway is interrupted by isolated buildings, clumps of bushes or scattered trees, or the intervening ground is soft and covered with vegetation and the source or receiver is located more than 3 meters above the ground. It should be noted, however, that the nominal value of 3.0 dB(A) with doubling applies to sound propagation from a "line source": (1) over the top of a barrier greater than 3 meters in height, or (2) when there is a clear unobstructed view of the highway, the ground is hard, there are no intervening structures, and the height of the line-of-sight averages more than 3 meters above the ground.[1]

Noise levels adjacent to roadways vary with the volume of traffic, the average vehicular speed, and truck mix. The noise levels adjacent to line sources of noise such as roadways increase by 3.0 dB(A) with each doubling in the traffic volume (provided that the speed and truck mix do not change). From the relationship between increases in the number of noise sources (motor vehicles) and the increase in the adjacent noise level, it can be shown that a 26 percent increase in the traffic volumes on a given route increases the adjacent noise levels 3.0 dB(A), but changing the vehicle speed or truck mix has an even more dramatic effect.

The vehicle mix on a given roadway also has a significant effect on the adjacent noise levels. As the number of trucks increases and becomes a larger percentage of the total vehicle volume, the adjacent noise levels increase. This effect is more pronounced if the

[1] Source: Caltrans, 1980.

number of heavy duty (3+ axle) trucks is large when compared to the number of medium duty (2 axle) trucks.

Noise from motor vehicles is generated by engine vibration, the interaction between the tires and the road, and the exhaust system. As vehicle speed increases, so does the noise from these areas of the vehicle. The noise level adjacent to a roadway is highly dependent on the average vehicle speed, especially at lower speed levels. The higher speeds are typically measured at midlink, where traffic lights, stop signs and cross traffic provide less interference. Although some vehicles will go faster that the posted speed limit, in most areas the average speed is just below this limit. The exception is found along lone stretches of highway and streets outside city limits.

ENVIRONMENTAL SETTING

The ambient noise level of a region is the total noise generated within the specific environment and is usually composed of sounds emanating from natural and manmade sources. Noise levels monitored in a region tend to have wide spatial and temporal variation due to the great diversity of contributing sources. This is especially true for the greater project area with its blend of rural land uses adjacent to a mix of residential and commercial uses.

Characterization of the Project area noise levels is difficult due to the lack of actual field measurements. Very little noise measurement data are available for the Project area in general. However, typical noise levels would be in the range of 50 to 55 dB(A).

Generally, the noise levels in the Project area are affected by natural and manmade sources. However, the sound levels are more strongly influenced by human rather than natural sound sources. Within the Project area, the major sources of noise include vehicular traffic and aircraft flyovers.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. According to the State CEQA Guidelines, a project would have a significant effect on the environment if it would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.

- A substantial permanent increase in ambient noise levels above levels existing without the project.

- A substantial temporary or periodic increase in noise levels in the project vicinity above levels existing without the project.

- For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	14				X
b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels?				X	
c. A substantial permanent increase in ambient noise levels above levels existing without the project?					X
d. A substantial temporary or periodic increase in noise levels in the project vicinity above levels existing without the project?				X	
e. For a project located within an airport land use plan, or where such a plan has not been adopted, within two	12				X

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?					
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?					X

a. No Impact. Riverside County has adopted noise standards for a variety of land uses. Community Noise Equivalent Levels (CNEL) to 60 dB(A) are normally acceptable and CNEL to 70 dB(A) are conditionally acceptable with an analysis for noise reduction. These noise levels were developed for review of land use projects such as highways, airports, and manufacturing plants. However, there is no mention of temporary construction-related noise impacts in the County's Noise Ordinance. Therefore, the Project would not expose people to or generate noise levels in excess of standards established in the County's Noise Ordinance.

The City of Riverside's Noise Element contains the following language with respect to construction noise:

> *Construction noise typically involves the loudest common urban noise events associated with building demolition, grading, construction, large diesel engines and truck deliveries and hauling. Construction activity, although temporary at any given location, can be substantially disruptive to adjacent uses during the construction period. Riverside Municipal Code Section 7.35.010(B)(5) regulates the allowable hours of construction activity to 7:00 a.m. to 7:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on Saturdays, with no construction activities allowed on Sunday or Federal holidays. In addition, the Municipal Code limits noise levels from construction activities to the maximum permitted exterior noise level for the affected land use.*

The Project will be required to comply with this ordinance for construction activities within the City limits.

b. Less-Than-Significant Impact. Construction activities associated with the project could result in some minor amount of ground vibration. Vibration from construction activity is typically below the threshold of perception when the activity is more than

50 feet from receivers. Due to the fact that there are no receivers within 50 feet of the construction site, there would be no potentially significant groundbourne impacts.

c. **No Impact.** The pipeline would be underground and not generate any noise. The pump station would be designed to meet all applicable noise standards [i.e., a CNEL of 60 dB(A) at the property line]. Therefore, the proposed Project would not result in a substantial permanent increase in ambient noise levels above levels existing without the Project.

d. **Less-Than-Significant Impact.** The analysis of noise impacts resulting from any project must consider both the construction and operational phases. However, due to the nature of this Project, very little noise would be associated with the operational phase of the Project. Therefore, the following noise analysis concentrates on the construction phase of the Project.

Operation of equipment used during the pipeline construction would temporarily increase noise levels to well in excess of ambient noise levels. The construction noise would vary with the particular construction stage in progress due to the different pieces of construction equipment being used. Six major construction stages would be associated with the pipeline. These are:

- ***Clearing.*** Cutting of the road or shoulder surface in preparation for trenching.
- ***Trenching.*** Digging the actual trench with a backhoe or excavator.
- ***Pipelaying.*** Assembling the pipe segments and laying them in the trench.
- ***Backfilling.*** Filling the trenches with appropriate materials to support the pipe.
- ***Compaction.*** Compaction of the fill material to enhance its load bearing capacity.
- ***Restoration.*** Restoring the project area to its pre-construction condition.

Table 13-2 lists equipment expected to be used during pipeline construction and identifies the number of pieces of equipment typically used, their utilization factor, their reference sound level at a distance of 50 feet, and an indication of the construction phase in which each piece of equipment would be used.

TABLE 13-2
PIPELINE CONSTRUCTION EQUIPMENT LIST
UTILIZATION FACTORS AND REFERENCE SOUND LEVELS

EQUIPMENT	NUMBER REQUIRED	HORSEPOWER RATING	UTILIZATION FACTOR	SOUND LEVEL dB(A)	CONSTRUCTION PHASE
Compressor	1	N/A	0.8	82	Clearing
Concrete Saw	1	20	0.1	82	Clearing
Pavement Breaker	1	1	0.1	88	Clearing
Backhoe	1	150	0.6	78	Trenching
Dump Truck	2	225	0.8	82	Trenching & Backfilling
Utility Truck	2	225	0.8	82	Trenching & Backfilling
Crane	1	100	0.1	86	Pipelaying
Dozer	1	150	0.5	80	Pipelaying
Hydraulic Excavator	1	N/A	0.8	91	Trecnhing
Water Truck	1	225	0.4	91	Backfilling
Compactor	1	N/A	0.1	82	Backfilling
Sweeper	1	N/A	0.1	85	All
Paver	1	N/A	0.1	80	Restoration
Welder	1	25	0.5	75	Pipelaying
Generator	1	50	0.5	76	Pipelaying
Pickups	4	N/A	1.0	72	All

As shown above, noise associated with the pipeline construction could be locally significant during the construction period. However, the exact degree of impact on the surrounding community would depend on the type of equipment being used at any one time, the distance from the equipment, and the hours of operation. It is anticipated that noise levels associated with construction would range from 72 to 91 dB(A) within 50 feet of the equipment being used. The nearest receptor would be approximately 100 feet from the construction site. Therefore, these noise levels would be attenuated by about 6 dB(A) due to the distance to the nearest receptor. Implementation of mitigation measures NOISE-1 and NOISE-2 at the end of this section would reduce the potentially significant noise impacts to a less than significant level.

Unmitigated the anticipated noise level during operation of the pump station would exceed the noise levels at the property line established by the City of Riverside [i.e., CNEL of 60 dB(A)] Therefore, the design of the buildings housing the pumping equipment and natural gas engines would include reinforced concrete block. The walls of the reinforced concrete block buildings would be solid grouted and facility doors would be equipped with perimeter seals. In addition, sound attenuation materials would be used as necessary to meet the sound levels established by the City of Riverside. Implementation of mitigation measure NOISE-3 at the end of this

section would reduce this potentially significant impact to a level of less than significant.

Operations personnel at the pump station would be required to wear protective hearing devices (e.g., ear plugs) during periods when the pump station was operational in accordance with OSHA standards.

e. **No Impact.** The proposed Project would not be within an airport land use area.

f. **No Impact.** The proposed Project would not be within the vicinity of a private airstrip.

MITIGATION MEASURES

The following mitigation measures are recommended to reduce the noise impacts to a level of less than significant.

The construction agent(s) should include the following in its/their standard construction specifications:

NOISE-1

Construction activities shall be limited to between the hours of 7:00 am and 7:00 pm and as necessary to comply with local ordinances. Any holiday, nighttime or weekend construction activities shall be subject to local permitting requirements.

NOISE-2

All equipment used during construction shall be muffled and maintained in good operating condition. All internal combustion engines shall be fitted with well maintained mufflers in accordance with manufacturers' recommendations.

NOISE-3

The building housing the pump station shall be insulated and contain sound attenuation materials to meet local noise standards.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the above mitigation measures would reduce the noise impacts to a level of less than significant due to the fact that all local ordinances would be met.

REFERENCES

California Department of Transportation. 1980. Traffic Manual.

California Occupational Safety and Health Administration. Yearly Average Equivalent Sound Identified to Protect the Public Health and Welfare.

City of Riverside, Riverside General Plan, adopted September 13, 1994. Note the City is currently in the process of updating this plan.

Riverside County Board of Supervisors. 2003. General Plan. October 7.

Riverside County Board of Supervisors. 2003. Lake Matthews/Woodcrest Area Plan. October 7.

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

CHAPTER 14
POPULATION AND HOUSING

ENVIRONMENTAL SETTING

The project is located in U.S. Postal Zip Codes 92503 and 92504. The U.S. Census Bureau *(census.gov 11/27/06)* reported the following data for 2000.

Zip Code	Population	Housing Units
92503	71,670	21,870
92504	46,533	15,955
Totals	118,203	37,825

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. According to the State CEQA Guidelines, a project would normally have significant population and housing impacts if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Induce substantial population growth in an area, either directly (for example, by proposing new				X	

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
homes and businesses) or indirectly (for example, through extension of roads or other infrastructure?					
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?					X
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?					X

a. Less-Than-Significant Impact. The proposed pipeline would serve existing development as well as planned development within the project area. It would not accommodate growth in excess of that contained in the appropriate General Plans. The environmental effects of growth in the area were addressed in appropriate CEQA documents prepared by the County of Riverside and the City of Riverside and deemed to be less-than-significant.

b. No Impact. The proposed project would not displace any existing housing, necessitating the construction of replacement housing elsewhere.

c. No Impact. The proposed project would not displace any people, necessitating the construction of replacement housing elsewhere.

Mitigation Measures

There were no population and housing impacts identified; therefore, no mitigation is required.

Level of Significance After Mitigation

There would be no population and housing impacts associated with the La Sierra Avenue Water Transmission Pipeline Project.

REFERENCES

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

U.S. Census Bureau *(www.census.gov 11/27/06).*

CHAPTER 15
PUBLIC SERVICES

ENVIRONMENTAL SETTING

Public services in the project area are provided by the following entities:

- Police Protection — City of Riverside Police Department
- Fire Protection — Riverside County Fire Department; City of Riverside Fire Department
- Schools — Riverside Unified School District
- Ambulance — AMR Ambulance under contract to Riverside County

These services are described in more detail below.

POLICE SERVICES

As indicated above, police services throughout the area adjacent to the proposed project are provided by the City of Riverside Police Department. The City of Riverside's Police Department headquarters is located at 4102 Orange Street, Riverside and the Field Operations Office is located at 8181 Lincoln Avenue, Riverside. At the current time, the department has 345 sworn employees plus 206 non-sworn employees. *(www.riversideca.gov, 3/12/07).*

FIRE PROTECTION

Fire protection services in the project area are provided by the City of Riverside Fire Department and the Riverside County Fire Department. The City of Riverside has several fire stations that could respond to a fire in the project area. These are:

- Station 3 – Magnolia Center — 6395 Riverside Avenue
- Station 8 – La Sierra — 11076 Hole Avenue
- Station 10 – Arlington Heights — 2590 Jefferson Street
- Station 12 – La Sierra South — 10692 Indiana Avenue

(www.riversideca.gov, 3/12/07)

The Riverside County Fire Department also has a fire station in Home Gardens at 3770 Neece Street, Corona. *(www.countyofriverside.ca, 3/12/07)*

SCHOOLS

The proposed pipeline alignment passes within a short distance of four existing schools which include Alvord High School at 3606 Pierce Street, Orrenmaa Elementary School at 3350 Filmore Street, Arizona Intermediate School at 11045 Arizona Avenue, and Bethel Christian Elementary and High School campus at 2425 Van Buren Boulevard.

AMBULANCE

Ambulance service in the project area is provided by American Medical Response (AMR). AMR's offices are located at 1044 E. La Cadena Drive, Riverside.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. With respect to public services, a project would normally have a significant impact on the environment if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: fire protection, police protection, schools, parks, or other public services.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental					

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
1. Fire Protection?					X
2. Police Protection?					X
3. Schools?					X
4. Parks?					X
5. Other Public Facilities?					X

a. **1. No Impact.** The proposed Project would not require additional fire protection services.

a. **2. No Impact.** The proposed Project would not require additional police protection services. The District has its own security personnel that would respond to any emergency.

a. **3. No Impact.** The proposed Project would not require school services.

a. **4. No Impact.** The proposed Project would not require park services.

a. **5. No Impact.** The proposed Project would not require other public facilities.

Mitigation Measures

There were no public services impacts identified; therefore, no mitigation is required.

Level of Significance After Mitigation

There would be no public services impacts associated with implementation of the La Sierra Avenue Water Transmission Pipeline Project.

References

City of Riverside. www.riversideca.gov 3/12/07

County of Riverside. www.countyof riverside.ca.us 3/12/07

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

Thomas Brothers Guide. Riverside and Orange Counties 2003.

CHAPTER 16
RECREATION

ENVIRONMENTAL SETTING

The only recreational facility in the immediate Project area is the California Citrus State Historic Park. The underground pipeline would be placed within existing public road rights-of-way in Irving Street and Firethorn Avenue adjacent to the Park.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. According to the State CEQA Guidelines, a project would normally have a significant effect on the environment if it would: 1) increase the use of existing recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated or 2) include recreational facilities or require construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?					X
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?					X

a. No Impact. The proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. As stated above, the underground pipeline would be installed in public road rights-of-way adjacent to the California Citrus State Historic Park. However, due to the fact that the underground pipeline would not encroach upon park property, it would have no impacts on recreational facilities.

b. No Impact. The proposed Project does not include housing units and therefore would not require the construction or expansion of recreational facilities.

MITIGATION MEASURES

There were no recreational impacts identified; therefore, no mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

There would be no recreational impacts associated with implementation of the La Sierra Avenue Water Transmission Pipeline Project.

REFERENCES

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

The Thomas Guide, Riverside and Orange Counties, 2003.

CHAPTER 17
TRANSPORTATION/TRAFFIC

ENVIRONMENTAL SETTING

Regional access to the site is via State Highway 91. Traffic volumes on State Highway 91 in the project vicinity (i.e., at La Sierra) are provided in Table 17-1.

TABLE 17-1
TRAFFIC VOLUMES ON STATE HIGHWAY 91
(2005)

WESTBOUND PEAK HOUR	WESTBOUND PEAK MONTH	WESTBOUND ANNUAL AVERAGE DAILY TRAFFIC	EASTBOUND PEAK HOUR	EASTBOUND PEAK MONTH	EASTBOUND ANNUAL AVERAGE DAILY TRAFFIC
13,700	205,000	195,000	13,200	198,000	189,000

Source: dot.ca.gov 11/27/06

Local access to the site is via City and County-maintained streets including: Sterling Street, Pierce Street, Indiana Street, La Sierra Boulevard, Fillmore Street, Arizona Avenue, Victoria Avenue, Cleveland Avenue, Irving Street, Firethorn Avenue, and Van Buren Boulevard.

The latest available traffic counts for these local streets are provided in Table 17-2.

TABLE 17-2
TRAFFIC VOLUMES ON LOCAL STREETS

STREET	SECTION	NORTHBOUND	SOUTHBOUND	DATE
La Sierra	SR91-Indiana	14,867	15,517	Oct. 01
Pierce	Magnolia-Indiana	5,453	4,416	Sept. 03
Van Buren	Magnolia-Indiana	17,574	19,090	May 01

Source: riversideca.gov (11/27/06)

Data used for this section were obtained from various sources. Full bibliographical entries for all reference material are contained at the end of this section.

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on transportation/traffic if it would:

- Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Result in inadequate parking capacity.
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e, result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio			X		

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
on roads, or congestion at intersections?					
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?					X
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?					X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?					X
e. Result in inadequate emergency access?			X		
f. Result in inadequate parking capacity?					X
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?					X

a. Less Than Significant with Mitigation Incorporated. Operation of the proposed project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Operation and maintenance traffic would consist of approximately one light-duty truck per day compared to an existing traffic volume of approximately 15,000 on La Sierra Boulevard. However, construction of the proposed project has the potential to cause significant impacts to traffic circulation and access as a result of decreased road capacity. Depending on which alternative is chosen, pipeline installation could temporarily reduce the number of, or the available width of, travel lanes on Sterling Street, Pierce Street, Indiana Street, La Sierra Boulevard, Fillmore Street, Arizona Avenue, Victoria Avenue, Cleveland Avenue, Irving Street, Firethorn Avenue, and Van Buren

Boulevard during the construction period, resulting in temporary disruptions of traffic flows and increases in traffic congestion. Access to some local businesses could also be limited during the construction period. As such, a potential for short-term impacts exists.

Trenching activities would also temporarily damage roads; however, trenches would be patched or repaved following construction.

Implementation of the mitigation measures at the end of this section would reduce the transportation/traffic impacts to a less than significant level by requiring the adoption of a traffic plan and strict adherence to the same.

b. No Impact. The proposed project would not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. Traffic to and from the site during construction would be less than 100 trips per day compared to an existing volume of 15,000 on La Sierra Boulevard.

c. No Impact. The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

d. No Impact. The proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) due to the fact that it will not change the design of any highway or street.

e. Less than Significant with Mitigation Incorporated. The proposed project would not result in inadequate emergency access. (See mitigation measure TRAF-9 regarding emergency access.)

f. No Impact. The proposed project would not result in inadequate parking capacity as it would not impact any parking facilities.

g. No Impact. The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). No bus turnouts would be affected by construction activities associated with the project.

MITIGATION MEASURES

The following mitigation measures should be complied with to reduce the traffic/transportation impacts:

TRAF-1

- Traffic control plans shall be prepared by a qualified professional engineer prior to construction.

TRAF-2

- Traffic control plans shall consider the ability of alternative routes to carry additional traffic and identify the least disruptive hours of construction site truck access routes and the type and location of warning signs, lights and other traffic control devices. Consideration shall be given to maintaining access to commercial parking lots, private driveways and sidewalks, bikeways and equestrian traffic to the greatest extent possible.

TRAF-3

- Traffic control plans shall comply with the Work Area Traffic Control Handbook and/or Manual of Traffic Controls as determined by each affected local agency to minimize any traffic and pedestrian hazards that exist during project construction.

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.

TRAF-5

- As required by local jurisdictions, the proposed pipeline shall be jacked under select major intersections to avoid traffic disruption and congestion.

TRAF-6

- Public streets shall be kept operational during construction, particularly during the morning and evening peak hours of traffic. Lane closures shall be minimized during peak traffic hours.

TRAF-7

- Public streets shall be restored to a condition mutually agreed to between WMWD and the local jurisdictions prior to construction.

TRAF-8

- WMWD shall attempt to schedule construction to occur jointly with other public works projects already planned in the affected locations, through careful coordination with all local agencies involved.

TRAF-9

- Emergency service providers shall be contacted and consulted to preclude the creation of unnecessary traffic bottlenecks that would seriously impede response times. Additionally, measures to provide an adequate level of access to private properties shall be maintained to allow delivery of emergency services.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the above mitigation measures would reduce the transportation/traffic impacts to a less-than-significant level.

REFERENCES

Caltrans. dot.ca.gov (11/27/06)

City of Riverside. riversideca.gov (11/27/06)

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

CHAPER 18
UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL SETTING

Several entities provide utilities and service systems within the project area. These are:

Utility	Provider
Water	City of Riverside
	Western Municipal Water District
Wastewater	City of Riverside
Electricity	Southern California Edison
	City of Riverside
Natural Gas	The Gas Company
Telephone	Verizon
Trash and Recycling	Waste Management of Inland Empire

ENVIRONMENTAL IMPACT ANALYSIS

THRESHOLD CRITERIA

The following thresholds of significance are based on Appendix G of the 2007 State CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on utilities and service systems if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- Result in a determination by the wastewater treatment provider that serves or may serve the project's projected demand in addition to the provider's existing commitments.

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Comply with federal, state, and local statutes and regulations related to solid waste.

ENVIRONMENTAL ANALYSIS

	SOURCES	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the project:					
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?					X
b. Require or result in the construction of new water or wastewater treatment facilities, the construction of which could cause significant environmental effects?					X
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?					X
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?					X
e. Result in a determination by the wastewater treatment provider that serves or may serve the project's projected demand in addition to the provider's existing commitments?					X

	Sources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?					X
g. Comply with federal, state, and local statutes and regulations related to solid waste?					X

a. No Impact. The project would not generate any wastewater.

b. No Impact. The existing treatment facilities at the Mills WTP and Arlington Desalter have the capacity to supply the La Sierra Avenue Water Transmission Pipeline. Therefore, no additional treatment facilities will be required to serve the proposed Project.

c. No Impact. The Project would not require additional storm water facilities.

d. No Impact. The Metropolitan Water District of Southern California and WMWD have sufficient water supplies and entitlements to serve the proposed Project.

e. No Impact. The Project would not require wastewater service.

f. No Impact. The Project would not require solid waste service.

g. No Impact. The Project would not require solid waste service.

Mitigation Measures

There were no utilities and service systems impacts identified; therefore, no mitigation is required.

Level of Significance After Mitigation

There would be no utilities and service systems impacts associated with the La Sierra Avenue Water Transmission Pipeline.

REFERENCES

State of California. *Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.* July 27, 2007.

CHAPTER 19
OTHER ENVIRONMENTAL CONSIDERATIONS

SIGNIFICANT UNAVOIDABLE ADVERSE EFFECTS

The following discussion is intended to fulfill the requirements of §15126.2(b) of the State CEQA Guidelines that states:

> *Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.*

A significant impact, or significant effect on the environment, is defined in §15382 of the State CEQA Guidelines as:

> *Significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change related to a physical change may be considered in determining whether the physical change is significant.*

The environmental effects of the La Sierra Avenue Water Transmission Pipeline Project are discussed in detail under the appropriate headings in Chapters 3 through 18 of this Draft EIR. All of the impacts identified in those chapters as potentially significant can be mitigated to a level of insignificance through implementation of the mitigation measures described in those same chapters with the exception of oxides of nitrogen and localized particulate matter emissions during construction.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The following discussion is intended to fulfill the requirements of §15126.2(c) of the CEQA Guidelines that states:

> *Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.*

During construction, the use of energy resources (e.g., fuel for construction equipment) would essentially be irreversible and irretrievable. However, this would not be considered a significant impact.

GROWTH-INDUCING IMPACTS

The following discussion is intended to fulfill the requirements of §15126.2(d) of the CEQA Guidelines that states:

> *Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in population may further tax existing community service facilities so consideration must be given to this impact. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*

The goal and purpose of the project is to improve the reliability of WMWD's water supply to its own retail customers and to its wholesale purveyors, to reduce risk of water service interruptions, to reduce possible water shortages during dry years, and to reduce dependence upon the direct delivery of imported water during dry year conditions.

Although these facilities will also increase the volume of treated water available to the area, growth issues have been analyzed in separate CEQA documents by the Southern California Association of Governments, County of Riverside and the City of Riverside for the area and have deemed the impacts to be less than significant.

In the City of Riverside's November 2004 Environmental Impact Report for its General Plan it was stated:

> *The SCAG 2004 RTP long-range regional growth projections consider growth within Riverside's existing City limits through year 2025; estimates specific to the Sphere of Influence have been made.*
>
> *As noted in Table 5.12-1, SCAG anticipates that the City of Riverside will have 121,149 dwelling units and 353,397 residents by 2025. In comparison, City estimates provide for 115,182 dwelling units and 336,896 residents within the current City limits by 2025, slightly less than that projected by SCAG. Given the long-range*

nature of these forecasts, the Project is considered consistent with SCAG's long-range forecasts.

Within the proximate Sphere of Influence, the Project will provide for approximately 13,455 dwelling units and 39,359 residents. As land use policy is generally consistent with the Riverside County RCIP for this area, these projections are accounted for in SCAG's estimates for the unincorporated County area.

The following General Plan Land Use and Urban Design Element objective and policies, which emphasize infill development and revitalization of underutilized parcels within the City, will work with the Land Use Policy Map and its implementation to forward growth policy:

Objective LU-8:	***Emphasize smart growth principles through all steps of the land development process.***
Policy LU-8.1:	*Ensure well-planned infill development Citywide, allow for increased density in selected areas along established transportation corridors.*
Policy LU-8.3:	*Allow for mixed-uses development at varying intensities at selected areas as a means of revitalizing underutilized parcels.*

Because the Project's buildout capacity is generally consistent with SCAG's long-range growth forecasts, the Project's population growth inducement impact will be less than significant.

As can be seen by the above, implementation of the La Sierra Avenue Water Transmission Pipeline would not foster population or economic growth, it would accommodate that which has been planned by the appropriate land use agencies (i.e., Southern California Association of Governments, City of Riverside and County of Riverside).

EFFECTS NOT FOUND TO BE SIGNIFICANT

§15128 of the CEQA Guidelines states:

An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study.

As shown in Chapters 3 through 19 of this document, several potential environmental effects associated with the La Sierra Avenue Water Transmission Pipeline Project were deemed not to be significant.

CUMULATIVE IMPACTS

§15130(a) of the CEQA Guidelines states in part:

> *An EIR shall discuss cumulative impacts of a project when the projects incremental effect is cumulatively considerable as defined in §15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable", a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.*

WMWD completed an integrated regional water management plan in 2006. The planning process incorporated research and study of water quality issues, water supply reliability issues, alternative water supply and demand scenarios, potential demand management opportunities, water demand alternatives, and potential water supply opportunities throughout WMWD's entire 510 square mile jurisdiction.

WMWD's wholesale customers, the cities and special districts providing retail water service, within WWMD's jurisdiction participated with WMWD staff to identify projects that would be needed in the future for water supply and distribution reliability.

More than 60 projects were identified. The list was reduced to approximately 30 projects with each project assigned a priority ranking. The project listing will be used to seek financial aid.

WMWD staff began reviewing the list to identify financially feasible projects that would meet the needs of water supply reliability. Five projects were identified in the vicinity of the La Sierra Avenue pipeline project. Although the projects have been identified, it is questionable whether the projects could be implemented without State or federal financial aid.

Projects under investigation for feasibility include the following.

- La Sierra Avenue Pipeline
- Riverside-Corona Feeder
- Arlington Desalter Expansion
- Eagle Valley Water Treatment Plant
- Parallel Pipeline to the Mills Gravity Line

LA SIERRA AVENUE PIPELINE

WMWD is investigating the possibility of an additional pipeline between its Arlington Desalinization Plant and the Mills Gravity Line. That pipeline would generally follow Sterling Avenue, Pierce Street, Indiana Avenue, and La Sierra Avenue to its intersection with El Sobrante Road where it would tie into the Mills Gravity Line. It would also require a pump station near the Arlington Desalinization Plant. If found feasible, this facility would be constructed subsequent to the La Sierra Avenue Water Transmission Pipeline and therefore there would be no cumulative impacts due to construction.

RIVERSIDE-CORONA FEEDER

WMWD staff is investigating the possibility of a new alignment for the proposed Riverside Corona Feeder that would place the pipeline generally west of the Santa Ana River from Interstate 10 to a point south of the unincorporated area of Rubidoux, thence southeasterly where it would join the existing proposed alignment near Cleveland Avenue and Irving Street. The overall Riverside-Corona Feeder project includes the concept of capturing and storing groundwater to increase supplies, reduce costs, and improve quality. Groundwater levels would be managed with existing groundwater wells and pumps to deliver water through the feeder to San Bernardino County areas as well as Riverside County areas. If found feasible, this facility would be constructed subsequent to the La Sierra Avenue Water Transmission Pipeline and therefore there would be no cumulative impacts due to construction.

ARLINGTON DESALTER EXPANSION OF 3.6 MGD

WMWD staff is investigating groundwater supply availability for the possible expansion of the Arlington Desalter. The desalter currently purifies just over 6 MGD of water produced from the Arlington Groundwater Basin underlying the project. With the proposed expansion, the facility could produce approximately 10 MGD. The process would be the same as now, reverse osmosis using membrane filtration with chlorine disinfection to match the disinfection processes of the agencies receiving water from the plant, currently the City of Norco and if expanded, the Jurupa Community Services District. If found feasible, this facility would be constructed subsequent to the La Sierra Avenue Water Transmission Pipeline and therefore there would be no cumulative impacts due to construction.

WESTERN MUNICIPAL WATER DISTRICT EAGLE VALLEY WATER TREATMENT PLANT

WMWD staff is investigating the possibility of constructing a water treatment plant in the vicinity of La Sierra Avenue and El Sobrante Avenue to purify water from Lake Mathews for delivery of approximately 22,000 acre feet of purified water annually to WMWD's

retail service area as well as several of WMWD's wholesale customers. The treatment process would include a reverse osmosis sidestream to reduce salts contained in the Colorado River Water stored within Lake Mathews. If found feasible, this facility would be constructed subsequent to the La Sierra Avenue Water Transmission Pipeline and therefore there would be no cumulative impacts due to construction.

PARALLEL PIPELINE TO THE MILLS GRAVITY LINE

WMWD staff is investigating the possibility of constructing approximately 6 miles of pipeline from the Metropolitan Water District Mills filtration plant at Alessandro Boulevard and Cole Street to WMWD's Mockingbird Station at Van Buren Boulevard and Mockingbird Canyon Road. The pipeline would increase water distribution reliability to WMWD's retail service area as well as many of WMWD's wholesale customers. If found feasible, this facility would be constructed subsequent to the La Sierra Avenue Water Transmission Pipeline and therefore there would be no cumulative impacts due to construction.

As can be seen by the above, there are several anticipated projects within the greater project area. At this time, however, anticipated dates of construction are not known. Should these projects be constructed at the same time as the La Sierra Avenue Water Transmission Pipeline Project, there would be cumulative impacts with respect to air quality and traffic/transportation. Until such time as more detail on these projects is available, it is not possible to quantify these impacts.

CHAPTER 20
ALTERNATIVES TO THE PROPOSED ACTION

INTRODUCTION

Section 15126.6 of the CEQA Guidelines requires all EIR's to consider and discuss alternatives to the proposed project. That section states:

a) *Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.*

b) *Purpose. Because an EIR must identify ways to mitigate or avoid significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*

c) *Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or significantly lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scooping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.*

d) *Evaluation of alternatives. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with*

the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail that the significant effects of the project as proposed.

e) "No Project" Alternative.

- *The specific alternative of "no project" shall also be evaluated along with the impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (see Section 15125).*

- *The "no project" analysis shall discuss the existing conditions at the time of the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.*

f) Rule of Reason. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

PROJECT OBJECTIVES

The goal and purpose of the project is to improve the reliability of WMWD's water supply to its own retail customers and to its wholesale purveyors; to reduce possible water shortages during dry years; and to reduce dependence upon the direct delivery of imported water during dry year conditions.

SIGNIFICANT EFFECTS

All significant impacts associated with the proposed project can be reduced to a level of less than significant with the exception of the oxides of nitrogen and localized particulate emissions during construction.

NO PROJECT ALTERNATIVE

The no project alternative would include maintaining the status quo. In other words, there would be no construction of new facilities. Implementation of the No Project Alternative would not allow WMWD to improve the reliability of its water supply to its own retail customers and to its wholesale purveyors; to reduce risk of water service interruption, to reduce possible water shortages during dry years; and to reduce dependence upon the direct delivery of imported water during dry year conditions. Therefore, this alternative was deemed infeasible by WMWD.

ALTERNATIVE ALIGNMENTS

As stated in Chapter 2, WMWD is considering three possible alternative alignments for the La Sierra Avenue Water Transmission Pipeline Project. These three alignments were described in detail in Chapter 2. A subjective environmental rating of the three alignments as well as the No Project Alternative is provided in Table 20-1.

TABLE 20-1
ENVIRONMENTAL RATING OF PROJECT ALTERNATIVES

ENVIRONMENTAL ISSUE	PROPOSED ALIGNMENT	ARIZONA ALIGNMENT	VICTORIA ALIGNMENT	NO PROJECT
Aesthetics	2	2	2	0
Agricultural Resources	0	0	0	0
Air Quality	3	3	3	0
Biological Resources	1	1	1	0
Cultural Resources	0	0	0	0
Geology and Soils	0	0	0	0
Hazards and Hazardous Materials	1	0	0	0
Hydrology and Water Quality	1	1	1	0
Land Use and Planning	0	0	0	0
Mineral Resources	0	0	0	0
Noise	1	1	1	0
Population and Housing	0	0	0	0
Public Services	0	0	0	0
Recreation	0	0	0	0
Transportation/Traffic	3	2	2	0
Utilities and Service Systems	0	0	0	0
Total Rating[1]	12	10	10	0

[1] The subjective ratings are on a scale of 0 to 3; the higher the rating, the more environmentally damaging is the alternative.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Based on the data shown in Table 20-1, the No Project Alternative would be the environmentally superior alternative as there would be no construction-related impacts associated with it. However, this was deemed to be infeasible by WMWD as it would not meet any of the project objectives.

Also based on the data shown in Table 20-1, either the Arizona alignment or the Victoria Alignment would be the next best alternative due to the reduced impacts on La Sierra Avenue—both of these alternatives would shorten the distance of disturbance on La Sierra Avenue.

In his November 3, 2006 letter to Jeffrey D. Sims, Assistant General Manager, Juan C. Perez, Deputy Director of Transportation for the County of Riverside pointed out that the County Transportation Department has just completed a project to widen and resurface La Sierra Avenue between the Riverside City Limits and El Sobrante Road. This project, which took over a year to construct at a cost exceeding $5.5 million, has resulted in a complete and finished roadway on La Sierra. The City of Riverside is in the process of completing a similar project from the City Limits north to SR 91.

He also pointed out that the County is highly concerned with the proposed Alternative 1, which proposes to place a major water line on La Sierra, tearing up this recent significant

public road investment and causing further construction impact on traffic flow. He also requested that the District consider other alternatives to placing the proposed pipeline along La Sierra.

He further pointed out that in the event that another alternative is not selected, the Transportation Department will require as part of any encroachment permit that the newly constructed pavement be replaced to its new condition without surface trench cuts. This would require the grinding and overlaying of the pavement curb-to-curb along the full street width. The Department would also need to work with the District on the implementation of a traffic control plan which minimizes construction staging impacts to the public.

In his December 6, 2006 Interoffice Memo to Ken Guiterrez, Planning Director, Siobban Foster, Public Works Director, City of Riverside also opposed the proposed alignment in La Sierra Avenue. He stated: "The Public Works Department does not support this alignment due to the anticipated January 2007 completion of a major street widening and reconstruction project on La Sierra Avenue between Indiana Avenue and El Sobrante Road and the major impacts to commuter traffic the project will have.

"Installation of the proposed pipeline in this newly completed street will result in significant damage to the City's investment. If this alignment is selected, the City will require that the asphalt surface be ground and repaved from curb to curb after installation of the pipeline and any other damage to the street be fully repaired. In addition, it will be necessary for WMWD to work closely with the City and County of Riverside to minimize construction impacts."

For these reasons, the Victoria subset would be the second most environmentally superior alternative as it would only impact La Sierra Avenue for a short distance between Victoria Avenue and Cleveland Avenue.

CHAPTER 21
PERSONS AND ORGANIZATIONS CONSULTED

NOTICE OF PREPARATION CIRCULATION

On November 6, 2006, Western Municipal Water District mailed amended copies of the Notice of Preparation of a Draft Environmental Impact Report and Project Background to those entities in the following list:

FEDERAL AGENCIES

Jim Bartel
Ecological Services
Fish and Wildlife Service
U.S. Department of the Interior
6010 Hidden Valley Road
Carlsbad, California 92009

Col. Alex Dornstauder
Chief Engineer
U.S. Army Corps of Engineers
Los Angeles District
Post Office Box 532711
Los Angeles, California 90053-2325

James J. Fletcher, Acting Superintendent
Southern California Agency
Bureau of Indian Affairs
U.S. Department of the Interior
1451 Research Park Drive, Suite 100
Riverside, California 92507-2154

State Agencies

Terry Roberts
State Clearinghouse Director
Governor's Office of Planning and Research
Post Office Box 3044
Sacramento, California 95812-3044

Curt Taucher, Regional Manager
Eastern Sierra and Inland Deserts, Region 6
California Department of Fish and Game
4665 Lampson Avenue, Suite J
Los Alamitos, California 90720

Mr. Gerard Thibeault, Executive Officer
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

Hans Kreutzberg
Office of Historic Preservation
California Department of Parks and Recreation
Post Office Box 942896
Sacramento, California 94296-0001

Nadell Gayou
California Resources Agency
Post Office Box 942836
Sacramento, California 94236-0001

Debbie Pilas-Treadway
Associate Governmental Program Analyst
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, California 95814

Dick Doyle, Planning Division Chief
California Department of Transportation
464 West Fourth Street, 6th Floor
San Bernardino, California 92401

REGIONAL AGENCIES

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
South Coast Air Quality Mgmt. District
Post Office Box 4939
Diamond Bar, California 91765-0939

Daniel Cozad, General Manager (at the time of mailing NOP)
Santa Ana Watershed Project Authority
11615 Sterling Avenue
Riverside, CA 92503

COUNTY AGENCIES

Teresa Tung, Senior Civil Engineer
Riverside County Flood Control and
Water Conservation District
1995 Market Street
Riverside, California 92501

George Johnson
Department of Transportation
County of Riverside
Post Office Box 1090
Riverside, California 92502-1090

Robert C. Johnson, Director
Planning Department
County of Riverside
Post Office Box 1409
Riverside, California 92501

CITY AGENCIES

Steve Whyld
Planning Director
City of Riverside
3900 Main Street
Riverside, California 92522

Rich McGrath
Director of Public Works
City of Riverside
3900 Main Street
Riverside, California 92522

Brad Robbins, Assistant City Manager
City of Corona
400 South Vicentia Avenue
Corona, California 92882-3238

Bill Thompson, Public Works Director
City of Norco
1281 Fifth Street
Norco, CA 92860

INTERESTED ENTITIES

Sherry Teresa, Executive Director
Center for Natural Lands Management
425 E. Alvarado Street, Suite H
Fallbrook, California 92028-2960

Marina Ortega
California Indians for Cultural and Environmental Protection
P.O. Box 497
Santa Ysabel, CA 92070

George Hague
Sierra Club-San Gorgonio Chapter
26711 Ironwood Avenue
Moreno Valley, CA 92555-1906

Eldon Horst, General Manager
Jurupa Community Services District
11201 Harrel Street
Mira Loma, California 91752

Carl Shiloh, General Manager
Home Gardens Sanitary District
13538 Magnolia Avenue
Corona, California 92879-2032

Phil Rizzo
March Joint Powers Authority
P.O. Box 7480
Moreno Valley, California 92552

Ron Young, General Manager
Elsinore Valley Municipal Water District
P.O. Box 3000
Lake Elsinore, CA 92531-3000

UTILITIES

Southern California Edison
Post Office Box 800
Rosemead, California 91770-0800

Mary Cripe
Verizon
150 S. Juanita
Hemet, California 92543

Bryan Wilke, Technical Supervisor
Southern California Gas Company
Post Office Box 3003
Redlands, California 92373-0306

RESPONSES TO THE NOTICE OF PREPARATION

During the 30-day public comment period, responses to the Notice of Preparation were received from the following:

FEDERAL AGENCIES

James J. Fletcher, Superintendent
Southern California Agency
Bureau of Indian Affairs
U. S. Department of the Interior
1451 Research Park Drive, Suite 100
Riverside, California 95207-2154

STATE AGENCIES

Dave Singleton, Program Analyst
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, California 95814

REGIONAL AGENCIES

Steve Smith, Ph. D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765-4182

COUNTY AGENCIES

Juan C. Perez
Deputy Director of Transportation
Transportation Department
Transportation and Land Management Agency
County of Riverside
Post Office Box 1090
Riverside, California 92502-1090

CITY AGENCIES

Ken Gutierrez, AICP
Planning Director
City of Riverside
3900 Main Street
Riverside, California 92522

COMMENTS ON THE NOTICE OF PREPARATION

Copies of the actual comment letters received on the Notice of Preparation are included in Appendix B of this document. Summaries of the comment letters and Western Municipal Water District's responses follow:

BUREAU OF INDIAN AFFAIRS

In his November 2, 2006 letter to Jeffrey D. Sims, P.E., Assistant General Manager, Mr. James J. Fletcher, Superintendent, Southern California Agency, Bureau of Indian Affairs stated:

> *After reviewing the project description, it appears the geographic area of this project is not on or near any Indian lands held in trust by the Federal Government and any direct impacts are not likely. However, this does not mean there are no concerns.*
>
> **Response:**
>
> This comment does not raise any environmental issues and no response is required.
>
> *Assuming a cultural resources survey has already been performed or will be done for both proposed routes, the environmental issue of cultural resources protection both known and discovered during the construction phase is of great concern to local tribes and the Bureau of Indian Affairs. Consideration should be given and caution should be taken not to disclose the location of cultural resources sites that*

may be discovered as part of a cultural resources survey report that may be used as part of the Environmental Impact Report document. Compromising their locations make them subject to vandalism and destruction.

Response:

As stated in Chapter 7, Cultural Resources, there were no cultural resources discovered along any of the proposed alignments.

Please ensure that a procedure is in place during construction that gives direction and guidance on steps to be taken if a cultural resources site is discovered. In the event of such an occurrence, as a minimum, construction should be halted, and an immediate consultation with the State Office of Historic Preservation, and the closest Indian Tribe to project, (in this case the Soboba Band of Mission Indians) should be initiated. In the event of a site discovery, a tribal resources monitor (local qualified tribal member), should be consulted to observe the project excavation and advise on the appropriate procedures to follow.

Response:

Mitigation measures contained in Chapter 7, Cultural Resources, of this document contain the appropriate steps to be taken in case of a cultural resources site discovery during project construction.

NATIVE AMERICAN HERITAGE COMMISSION

In his November 3, 2006 letter to Jeffrey D. Sims, P.E., Mr. Dave Singleton, Program Analyst, stated:

Thank you for the opportunity to comment on the above referenced document. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per CEQA Guidelines §15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'are of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on cultural resources, the Commission recommends the following action:

- *Contact the appropriate California Historic Resources Information Center (CHRIS). The record search will determine:*
  - *If a part or the entire APE has been previously surveyed for cultural resources.*

- *If any known cultural resources have already been recorded in or adjacent to the APE.*
- *If the probability is low, moderate, or high that cultural resources are located in the APE.*
- *If a survey is required to determine whether previously unrecorded cultural resources are present.*

Response:

As shown in Chapter 7 a record search was performed by the Eastern Information Center of the California Archeological Sites Inventory at the University of California, Riverside. The results of that survey are reported in Chapter 7.

- *If an archeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.*

  - *The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.*

  - *The final written report should be submitted within 3 months after work has been completed to the appropriate regional archeological Information Center.*

Response:

The results of the field survey, which were negative, are reported in Chapter 7 of this document.

- *Contact the Native American Heritage Commission (NAHC) for a Sacred Lands File search of the project area and information on tribal contacts in the project vicinity who may have additional cultural resources information.*

- *Please provide U.S.G.S. location information for the project site, including Quadrangle, Township, Section, and Range.*

- *We recommend that you contact all tribes listed on the contact list to avoid the unanticipated discovery of sensitive Native American resources after the project has begun.*

Response:

A request for a Sacred Lands File search of the project area and information on tribal contacts was made to the Native American Heritage Commission. To date, no response to that request has been received.

- *Lack of surface evidence of archeological resources does not preclude their subsurface existence.*

- *Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.*

- *Lead agencies should in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.*

Response:

Mitigation measures that address the above comments are included in Chapter 7 of this document.

- *Lead agencies should include provisions for discovery of Native American human remains or cemeteries in their mitigation plans. Health and Safety Code §7050.5 and Public Resources Code §15064.5(e) and §5097.98 mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.*

Response:

The appropriate mitigation measure is included in Chapter 7 of this document.

- *Lead agencies should consider avoidance, as defined in Section 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.*

Response:

Implementation of the mitigation measures included in the Draft EIR would insure that there would be no significant impacts to cultural resources

associated with implementation of the La Sierra Avenue Water Transmission Pipeline Project.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In his October 27, 2006 letter to Mr. Jeffery D. Sims, P.E., Assistant General Manager, Western Municipal Water District, Steve Smith, Ph. D., Program Supervisor, CEQA Section, Planning, Rule Development and Area Sources, South Coast Air Quality Management District stated:

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR). Please send the SCAQMD a copy of the Draft EIR upon its completion. In addition, please send with the Draft EIR all appendices or technical documents related to the air quality analysis and electronic versions of all air quality modeling and health risk assessment files.

Response:

The SCAQMD is on the mailing list to receive the Draft EIR. The other requested documents will also be sent to the SCAQMD.

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2002 Model. This model is available on the CARB Website at: www.arb.ca.gov.

Response:

WMWD's consultant utilizes the California Environmental Quality Act (CEQA) Air Quality Handbook and its amendments as well as the EMFAC2002 (version 2.2) emission factors in its air quality analysis. The URBEMIS 2002 Model is designed to analyze land development projects and is not applicable to linear projects like the La Sierra Water Transmission Pipeline Project.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile equipment (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

Response:

All of the potential adverse air quality impacts and the above recommendations are discussed in Chapter 5, Air Quality in this document.

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LST's developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at http://www.aqmd.ca.gov/ceqahandbookLST/ LST.html.

Response:

The LST analysis is contained in Chapter 5, Air Quality, of this document.

It is recommended that lead agencies for projects generating or attracting vehicular trips, especially heavy-duty diesel-fueled vehicles, perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_tocix.html. An analysis of all toxic air contaminants due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Response:

The mobile source health risk assessment is included in Chapter 5, Air Quality, in this document.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: http://www/aqmd.ca.gov/ceqahandbook/mitigation/ MM_intro.html. Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.ca.gov/prdas/aqguide/aqguide.html/. Pursuant to state CEQA Guidelines §15126.4(a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Response:

The recommended sources for mitigation were utilized in the development of Chapter 5, Air Quality in this document.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (http://www.aqmd.gov).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are adequately identified, categorized, and evaluated. Please call Charles Blankson, Ph.D., Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Response:

These sources as well as the California Air Resources Board's web site (www.arb.ca.gov) were used in the air quality analyses provided in Chapter 5 of this document.

RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT

In his November 3, 2006 letter to Jeffrey D. Sims, Assistant General Manager, Mr. Juan C. Perez, Deputy Director of Transportation stated:

The County Transportation Department has just completed a project to widen and resurface La Sierra Avenue between the Riverside City Limits and El Sobrante Road. This project, which took over a year to construct at a cost exceeding $5.5 million, has resulted in a complete and finished roadway on La Sierra. The City of Riverside is in the process of completing a similar project from the City Limits north to SR 91.

We are therefore highly concerned with the proposed Alternative 1, which proposes to place a major water line on La Sierra, tearing up this recent significant public road investment and causing further construction impact on traffic flow. We request that the District consider other alternatives to placing the proposed pipeline along La Sierra.

Response:

The District will work closely with the County's Transportation Department during the final planning and design of this project.

In the event that another alternative is not selected, the Transportation Department will require as part of any encroachment permit that the newly constructed pavement be replaced to its new condition without surface trench cuts. This would require the grinding and overlaying of the payment curb-to-curb along the full street width. The Department would also need to work with the District on the implementation of a traffic control plan which minimizes construction staging impacts to the public.

Response:

Appropriate mitigation measures are included in Chapter 19, Transportation/Traffic in this document.

CITY OF RIVERSIDE

In his December 6, 2006 letter to Jeffrey D. Sims, P.E., Ken Gutierrez, AICP, Planning Director stated:

The City does have comments concerning the preparation of the Draft EIR. In addition, to the potential impacts identified in the Notice of Preparation, the City has the following concerns:

Planning Division:

1. *The two five million gallon capacity standpipe, pump station and hydroelectric facilities will result in direct changes to the physical environment. The aesthetic section of the draft EIR should include a comprehensive evaluation of the impacts the proposal will have on the community. Consideration needs to be given to constructing this facility below grade or at least providing adequate screening from public view, as appropriate. In addition, the pump station and hydroelectric facility will need to be screened or buried in a vault, as appropriate for the setting.*

   Response:

   The standpipe is no longer a part of this project.

2. *The significance of the impacts to archeological and historical resources need to be carefully examined.*

   Response:

   Cultural resources are dealt with in detail in Chapter 7 of the Draft EIR.

3. *The connection of the electrical generator to Riverside's electric system needs to be coordinated with the City's Public Utilities Department and comply with Riverside Public Utilities' Electric Rules.*

   Response:

   WMWD and its design engineers will work with the City's Public Utilities Department to ensure that there are no impacts to the City's electrical system.

Public Works Department

4. *The Public Works Department is concerned about the proposal as the two alternatives will result in significant damage to the City's public infrastructure investment. Nevertheless, alternative 2 is preferable due to the reduced impacts to La Sierra Avenue based upon the Exhibit. However, the project description is different than the exhibit so this was difficult to adequately analyze. The construction schedule for the pipeline was not given, but the EIR should consider other major projects planned in the area, including the reconstruction*

of the La Sierra/SR 91 interchange (beginning mid 2007 and continuing for up to 18 months) and construction of a new high school by the Alvord School District on the south side of Indiana Avenue at Pierce. Attached are the comments from the Public Works Department for your reference.

Response:

The exhibits in the Draft EIR match the project description.

In his December 6, 2006 interoffice memo to Ken Gutierrez, Planning Director, Siobban Foster, Public Works Director stated:

The construction schedule for the pipeline was not given, but the EIR should consider other major projects planned in the area, including the reconstruction of the La Sierra/SR 91 interchange (beginning mid 2007 and continuing for up to 18 months) and construction of a new high school by the Alvord School District on the south side of Indiana Avenue at Pierce Street.

Response:

The construction schedule is not known at this time. However, mitigation measure TRAF-8 requires WMWD to attempt to schedule construction to occur jointly with other public works projects already planned in the affected locations, through careful coordination with all local agencies involved.

CHAPTER 22
REPORT AUTHORS/CONTRIBUTORS

REPORT AUTHORS

This Draft Environmental Impact Report was prepared under contract to Western Municipal Water District by:

K.S. Dunbar & Associates, Inc.
Environmental Engineering
3035 Calle Frontera
San Clemente, California 92673-3012
949-366-2089
FAX: 949-366-5315
E-mail: ksdpe@cox.net

Keith S. Dunbar, P.E., F. ASCE, Project Manager
Robert A. Gerry, Senior Archeologist

REPORT CONTRIBUTORS

Western Municipal Water District
Jeffrey D. Sims, P.E., Assistant General Manager
B.J. Carroll, Administrative Assistant
Jeff Ferre, District Counsel
Michelle Ouellette, Esquire
Aaron Gettis, Esquire
Norman Thomas, Consultant

CHAPTER 23
REFERENCES

Source[1]

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[1] Source numbers refer to sources cited in Chapters 3 through 19 under Environmental Analysis.

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CHAPTER 24
ACRONYMS AND ABBREVIATIONS

AAM	annual arithmetic mean
AGM	annual geometric mean
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CNEL	community noise equivalent level
CO	carbon monoxide
CRWQCB, SAR	California Regional Water Quality Control Board, Santa Ana Region
dB(A)	decibels on the A-scale
DEIR	Draft Environmental Impact Report
DFG	California Department of Fish and Game
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EPDC	expected peak day concentration
FEIR	Final Environmental Impact Report
KSD&A	K.S. Dunbar & Associates, Inc.
Ldn	day-night average sound level
Leq	noise equivalent
mgd	million gallons per day
MSHCP	Multiple Species Habitat Conservation Plan
MWD	The Metropolitan Water District of Southern California
NO	nitrogen oxide
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOP	notice of preparation
NO_x	oxides of nitrogen
O_3	ozone
Pb	lead
PM_{10}	particulate matter (less than 10 microns in diameter)
ppm	parts per million
RCFCWCD	Riverside County Flood Control and Water Conservation District
ROC	reactive organic carbon
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SO_2	sulfur dioxide
SO_x	oxides of sulfur
SWRCB	State Water Resources Control Board
TDS	total dissolved solids
USF&WS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Service

WMWD	Western Municipal Water District
$\mu g/m^3$	micrograms per cubic meter

Appendix A
NOP and Supporting Documents

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
Southern California Agency
1451 Research Park Dr., Suite 100
Riverside, CA 92507-2154
Telephone (951) 276-6624 Telefax (951) 276-6641

IN REPLY REFER TO:

NOV 0 2 2006

Mr. Jeffrey D. Sims P.E.
Assistant General Manager
Western Municipal Water District
P.O. Box 5286
Riverside, CA 92508

Dear Mr. Sims,

Thank you for giving us the opportunity to review and comment on the La Sierra Water Transmission Pipeline Project. After reviewing the project description, it appears the geographic area of this project is not on or near any Indian lands held in Trust by the Federal Government and any direct impacts are not likely. However this does not mean there are no concerns.

Assuming a cultural resources survey has already been performed or will be done for both proposed routes, the environmental issue of cultural resources protection both known and discovered during the construction phase is of great concern to local tribes and the Bureau of Indian Affairs. Consideration should be given and caution should be taken not to disclose the location of cultural resource sites that may be discovered as part of a cultural resources survey report that may used as part of the Environmental Impact Report document. Compromising their locations make them subject to vandalism and destruction.

Please ensure that a procedure is in place during construction that gives direction and guidance on steps to be taken if a cultural resources site is discovered. In the event of such an occurrence, as a minimum, construction should be halted, and an immediate consultation with the State Office of Historic Preservation, and the closest Indian Tribe to project, (in this case the Soboba Band of Mission Indian) should be initiated. In the event of a site discovery, a tribal resources monitor (local qualified tribal member), should be consulted to observe the project excavation and advise on the appropriate procedures to follow. Once again we appreciate the opportunity to comment and participate in environmental reviews of Western Municipal Water District projects.

Appendix B
Comments Received on NOP

Should you haven any questions with regard to this matter, please do not hesitate to contact Gil Stuart, Environmental Protection Specialist, at (951) 276-6624 ext. 256.

Sincerely,

James J. Fletcher
Superintendent

cc: Pacific Regional Office/Dan Hall
Soboba Band of Mission Indians/Bennae Calac

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

Notice of Preparation

October 26, 2006

To: Reviewing Agencies

Re: Perris Valley Pipeline Project
SCH# 2006101152

Attached for your review and comment is the Notice of Preparation (NOP) for the Perris Valley Pipeline Project draft Environmental Impact Report (EIR).

Responsible agencies *must* transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Jeffrey D. Sims, P.E.
Western Municipal Water District
450 Alessandro Boulevard
Riverside, CA 92506

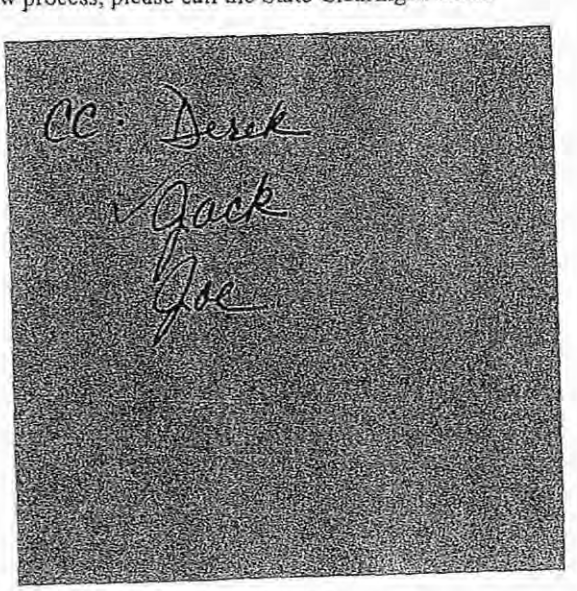
with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Senior Planner, State Clearinghouse

Attachments
cc: Lead Agency



1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2006101152
Project Title Perris Valley Pipeline Project
Lead Agency Western Municipal Water District

Type NOP Notice of Preparation

Description The project consists of the construction of a potable water pipeline, with standard appurtenances, from WMWD's Mills Gravity Pipeline (aka Woodcrest Pipeline) to WMWD's Arlington Desalter Water Purification Facility near the extensions of Sterling and Fillmore Streets in the City of Riverside, together with the construction of a water pumping plant (pump station) to lift water from the lower elevation of the Arlington Desalter to higher elevations within WMWD's retail service area, a water stand pipe to regulate water lifted from one pump station to the next, and a hydroelectric generating facility to conserve energy for use at the Arlington Desalter when water is supplied from the Mills Gravity Pipeline to communities at lower elevations.

Lead Agency Contact

Name Jeffrey D. Sims, P.E.
Agency Western Municipal Water District
Phone (951) 789-5000 **Fax**
email
Address 450 Alessandro Boulevard
City Riverside **State** CA **Zip** 92506

Project Location

County Riverside
City
Region
Cross Streets Sterling Avenue, Sterling Street
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways
Schools
Land Use

Project Issues Air Quality; Geologic/Seismic; Toxic/Hazardous; Water Quality; Noise; Traffic/Circulation; Public Services; Biological Resources

Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Fish and Game, Region 6; Department of Water Resources; Department of Health Services; Native American Heritage Commission; California Highway Patrol; Caltrans, District 8; State Water Resources Control Board, Division of Water Rights; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 8

Date Received 10/26/2006 **Start of Review** 10/26/2006 **End of Review** 11/27/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

County: Riverside SCH# [illegible]

Resources Agency

- ■ **Resources Agency**
  Nadell Gayou
- ☐ **Dept. of Boating & Waterways**
  David Johnson
- ☐ **California Coastal Commission**
  Elizabeth A. Fuchs
- ☐ **Colorado River Board**
  Gerald R. Zimmerman
- ☐ **Dept. of Conservation**
  Roseanne Taylor
- ☐ **California Energy Commission**
  Paul Richins
- ☐ **Dept. of Forestry & Fire Protection**
  Allen Robertson
- ☐ **Office of Historic Preservation**
  Wayne Donaldson
- ■ **Dept of Parks & Recreation**
  Environmental Stewardship Section
- ☐ **Reclamation Board**
  DeeDee Jones
- ☐ **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- ▩ **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou
- ☐ _____
  Conservancy

Fish and Game

- ☐ **Depart. of Fish & Game**
  Scott Flint
  Environmental Services Division
- ☐ **Fish & Game Region 1**
  Donald Koch
- ☐ **Fish & Game Region 2**
  Banky Curtis
- ☐ **Fish & Game Region 3**
  Robert Floerke
- ☐ **Fish & Game Region 4**
  Julie Vance
- ☐ **Fish & Game Region 5**
  Don Chadwick
  Habitat Conservation Program
- ▨ **Fish & Game Region 6**
  Gabrina Gatchel
  Habitat Conservation Program
- ☐ **Fish & Game Region 6 I/M**
  Tammy Allen
  Inyo/Mono, Habitat Conservation Program
- ☐ **Dept. of Fish & Game M**
  George Isaac
  Marine Region

Other Departments

- ☐ **Food & Agriculture**
  Steve Shaffer
  Dept. of Food and Agriculture
- ☐ **Depart. of General Services**
  Public School Construction
- ☐ **Dept. of General Services**
  Robert Sleppy
  Environmental Services Section
- ▩ **Dept. of Health Services**
  Veronica Malloy
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- ☐ **Delta Protection Commission**
  Debby Eddy
- ☐ **Office of Emergency Services**
  Dennis Castrillo
- ☐ **Governor's Office of Planning & Research**
  State Clearinghouse
- ■ **Native American Heritage Comm.**
  Debbie Treadway
- ☐ **Public Utilities Commission**
  Ken Lewis
- ☐ **State Lands Commission**
  Jean Sarino
- ☐ **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Business, Trans & Housing

- ☐ **Caltrans - Division of Aeronautics**
  Sandy Hesnard
- ☐ **Caltrans - Planning**
  Terri Pencovic
- ▩ **California Highway Patrol**
  Shirley Kelly
  Office of Special Projects
- ☐ **Housing & Community Development**
  Lisa Nichols
  Housing Policy Division

Dept. of Transportation

- ☐ **Caltrans, District 1**
  Rex Jackman
- ☐ **Caltrans, District 2**
  Marcelino Gonzalez
- ☐ **Caltrans, District 3**
  Jeff Pulverman
- ☐ **Caltrans, District 4**
  Tim Sable
- ☐ **Caltrans, District 5**
  David Murray
- ☐ **Caltrans, District 6**
  Marc Birnbaum
- ☐ **Caltrans, District 7**
  Cheryl J. Powell
- ▨ **Caltrans, District 8**
  Dan Kopulsky
- ☐ **Caltrans, District 9**
  Gayle Rosander
- ☐ **Caltrans, District 10**
  Tom Dumas
- ☐ **Caltrans, District 11**
  Mario Orso
- ☐ **Caltrans, District 12**
  Bob Joseph

Cal EPA

Air Resources Board

- ☐ Airport Projects
  Jim Lerner
  - ☐ Transportation Projects
    Ravi Ramalingam
  - ☐ Industrial Projects
    Mike Tollstrup
- ☐ **California Integrated Waste Management Board**
  Sue O'Leary
- ☐ **State Water Resources Control Board**
  Jim Hockenberry
  Division of Financial Assistance
- ☐ **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- ▩ **State Water Resouces Control Board**
  Steven Herrera
  Division of Water Rights
- ▩ **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- ☐ **Department of Pesticide Regulation**

Regional Water Quality Control Board (RWQCB)

- ☐ **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- ☐ **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- ☐ **RWQCB 3**
  Central Coast Region (3)
- ☐ **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- ☐ **RWQCB 5S**
  Central Valley Region (5)
  - ☐ **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - ☐ **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- ☐ **RWQCB 6**
  Lahontan Region (6)
  - ☐ **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- ☐ **RWQCB 7**
  Colorado River Basin Region (7)
- ▩ **RWQCB 8**
  Santa Ana Region (8)
- ☐ **RWQCB 9**
  San Diego Region (9)

☐ **Other** _____

_____

_____

Last Updated on 04/28/06

State of California—Health and Human Services Agency
Department of Health Services

California Department of Health Services

SANDRA SHEWRY
Director

ARNOLD SCHWARZENEGGER
Governor

June 12, 2007

Jeffrey D. Sims, P.E.
Assistant General Manager
Western Municipal Water District
P.O. Box 5286
Riverside, CA 92517

Dear Mr. Sims:

WESTERN MUNICIPAL WATER DISTRICT (WMWD), SYSTEM NO. 3310049
LA SIERRA AVENUE WATER TRANSMISSION PIPELINE – COMMENTS ON THE DRAFT EIR (SCH#2006101152)

The Department reviewed the Draft Environmental Impact Report dated May 2007 for the above referenced project. We provide the following comments for your consideration:

1. The project, which includes several miles of transmission pipeline connecting the Arlington Desalter to WMWD's Mockingbird Canyon Pump Station, a new pump station and 2-5 MG reservoir, will bring a new source of water supply to WMWD's water system.
   a. Per the Health & Safety Code, Section 116550, the WMWD must submit a permit application to the Department for approval to use this new source of supply.
   b. Please add the Department of Health Services as a Responsible Agency for the project.
2. The transmission pipeline must be designed and constructed with adequate separation between the potable pipeline and other non-potable pipelines or conveyances. Please send the Department the construction plans for the pipeline for review.

We appreciate the opportunity to provide comment. If you have any questions regarding this letter, please contact Jing Chao or me at (619) 525-4834.

Sincerely,

J. Steven Williams, P.E.
District Engineer

Southern California Drinking Water Field Operations Branch
1350 Front St., Room 2050, San Diego, CA 92101
(619) 525-4159; (619) 525-4383 fax
Internet Address: www.dhs.ca.gov/ps/ddwem/

cc: State Clearinghouse, 1400 Tenth St., Sacramento, CA 95814

Veronica Malloy, Department of Health Services, Drinking Water Program, Environmental Review Unit, 1616 Capitol Ave., MS 7418, P.O. Box 997413, Sacramento, CA 95899-7413

County of Riverside, Department of Environmental Health
File – *Correspondence*

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
www.nahc.ca.gov
ds_nahc@pacbell.net

November 3, 2006

RECEIVED
NOV 07 2006
WMWD

Mr. Jeffrey D. Sims, P.E.
Western Municipal Water District
450 Alessandro Boulevard
Riverside, CA 92506

SENT BY FAX: to: 951-780-3897
Number of Pages: 3

Re: SCH# 2006101152; CEQA Notice of Preparation (NOP) Draft Environmental Impact Report (DEIR) for Perris Valley Pipeline Project; Western Municipal Water District; Riverside County

Dear Mr. Sims:

Thank you for the opportunity to comment on the above-referenced document. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR per CEQA guidelines § 15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE),' and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

√ Contact the appropriate California Historic Resources Information Center (CHRIS). The record search will determine:

- If a part or the entire (APE) has been previously surveyed for cultural resources.
- If any known cultural resources have already been recorded in or adjacent to the APE.
- If the probability is low, moderate, or high that cultural resources are located in the APE.
- If a survey is required to determine whether previously unrecorded cultural resources are present.

√ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
- The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.

√ Contact the Native American Heritage Commission (NAHC) for:

* A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity who may have information on cultural resources in or near the APE. Please provide us site identification as follows: USGS 7.5-minute quadrangle citation with name, township, range and section. This will assist us with the SLF.

- Also, we recommend that you contact the Native American contacts on the attached list to get their input on the effect of potential project (e.g. APE) impact.

√ Lack of surface evidence of archeological resources does not preclude their subsurface existence.

- Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
www.nahc.ca.gov
ds_nahc@pacbell.net

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

√ Lead agencies should consider avoidance, as defined in § 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse
Attachment: List of Native American Contacts

Native American Contacts
Riverside County
November 3, 2006

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resource Center
P.O. Box 1477 Luiseno
Temecula , CA 92593

(951) 308-9295
(951) 676-2768
(951) 695-1778 Fax

Soboba Band of Mission Indians
Robert J. Salgado, Sr., Chairperson
P.O. Box 487 Luiseno
San Jacinto , CA 92581
luiseno@soboba-nsn.
(951) 654-2765

(951) 654-4198 - Fax

Pauma & Yuima
Bennae Calac, Cultural Resource Coordinator
P.O. Box 369 Luiseno
Pauma Valley , CA 92061
kymberli_peters@yah
(760) 802-1811

(760) 742-3422 Fax

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 2183 Luiseno
Temecula , CA 92593

(951) 676-2768

(951) 695-1778 Fax

Soboba Band of Luiseno Indians
Harold Arres, Cultural Resources Manager
P.O. Box 487 Luiseno
San Jacinto , CA 92581
harres@soboba-nsn.
(951) 654-2765

FAX: (951) 654-4198

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibilitiey as defined in Sec. 7050,5 of the Health & Safety Code, Sec. 5097.94 of the Public Resources Code and Sec. 5097.98 of the Publi Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2006101152; CEQA Notice of Preparation (NOP) for draft Environmental Impact Rekport (DEIR) for Perris Valley Pipeline Project; Western Municipal Water District; Riverside County, California.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

October 27, 2006

Mr. Jeffrey D. Sims, P.E.
Assistant General Manager
Western Municipal Water District
P.O. Box 5286
Riverside, CA 92517-5286

Dear Mr. Sims:

Notice of Preparation of a Draft Environmental Impact Report for
Perris Valley Pipeline Project

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR). Please send the SCAQMD a copy of the Draft EIR upon its completion. In addition, please send with the Draft EIR all appendices or technical documents related to the air quality analysis and electronic versions of all air quality modeling and health risk assessment files.

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, the lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2002 Model. This model is available on the SCAQMD Website at: www.aqmd.gov/ceqa/models.html.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended

that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

It is recommended that lead agencies for projects generating or attracting vehicular trips, especially heavy-duty diesel-fueled vehicles, perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA webpages at the following internet address: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA webpages at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/prdas/aqguide/aqguide.html. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (http://www.aqmd.gov).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Charles Blankson, Ph.D., Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:CB:li

RVC061025-02LI
Control Number

WARREN D. WILLIAMS
General Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
951.788.9965 FAX
www.floodcontrol.co.riverside.ca.us

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

November 7, 2006

Mr. Jeffrey D. Sims, Assistant General Manager
Western Municipal Water District
Post Office Box 5286
Riverside, CA 92517-5286

Dear Mr. Sims:

Re: Notice of Preparation of a Draft Environmental Impact Report for the La Sierra Water Transmission Pipeline

This letter is written in response to the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the La Sierra Water Transmission Pipeline. The proposed project would consist of the construction of a potable water pipeline from Western Municipal Water District's (WMWD) existing connection to Mills Gravity Pipeline to the Arlington Desalter Water Purification Facility near the extensions of Sterling and Fillmore Streets in the city of Riverside. The proposed project will also include the construction of a water pumping plant, a water stand pipe and a hydroelectric generating facility. The proposed project is located in the city of Riverside and the unincorporated Lake Mathews/Woodcrest area of Riverside County.

The Riverside County Flood Control and Water Conservation District (District) has the following comments/concerns that should be addressed in the DEIR:

1. The proposed project is located within the District's Southwest Riverside Master Drainage Plan (MDP). When fully implemented, these MDP facilities will provide flood protection to relieve those areas within the plan of the most serious flooding problems and will provide adequate drainage outlets. The DEIR should evaluate potential impacts to proposed MDP facilities in the project area. The District's MDP facility maps can be viewed online at www.floodcontrol.co.riverside.ca.us. To obtain further information on the MDP and the proposed District facilities, contact Art Diaz of the District's Planning Section at 951.955.1345.

2. Existing District facilities are located within the proposed project area and may be impacted. Any work that involves District right-of-way, easements or facilities will require an encroachment permit from the District. The construction of facilities within road right-of-way that may impact District storm drains should also be coordinated with us. To obtain further information on encroachment permits or existing facilities, contact Ed Lotz of the District's Encroachment Permit Section at 951.955.1266.

3. The District is a signatory to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). For purposes of procuring an encroachment permit from the District, the permit applicant will need to demonstrate that all construction related activities within the District right-of-way is consistent with the MSHCP. To accomplish this, the CEQA document should include a MSHCP consistency report with all of its supporting documents and provide adequate mitigation in accordance with all applicable MSHCP requirements. The MSHCP consistency report should address, at a minimum, Sections 3.2, 3.2.1, 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3 and Appendix C of the MSHCP.

4. Construction projects that result in the disturbance of 1 or more acre of land (or less than 1 acre if part of an overall plan of common development) may require coverage under the State Water Resources Control Board's (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (Construction Activity General Permit). Copies of the Construction Activity General Permit and Fact Sheet may be obtained from the SWRCB website (www.swrcb.ca.gov).

Thank you for the opportunity to review the Notice of Preparation. Please forward any subsequent environmental documents regarding the project to my attention at this office. Any further questions concerning this letter may be referred to Jason Swenson at 951.955.8082 or me at 951.955.1233.

Very truly yours,

TERESA TUNG
Senior Civil Engineer

c: TLMA
Attn: David Mares
Ed Lotz
Art Diaz

JDS:mcv
P8\110544

COUNTY OF RIVERSIDE

TRANSPORTATION AND LAND MANAGEMENT AGENCY

Transportation Department

George A. Johnson, P.E.
Director of Transportation

November 3, 2006

Jeffrey D. Sims
Assistant General Manager
Western Municipal Water District
450 E. Alessandro Blvd.
P. O. Box 5286
Riverside, CA 92517-5286

SUBJECT: La Sierra Water Transmission Pipeline

Dear Mr. Sims:

Thank you for your Notice of Preparation of a Draft Environmental Impact Report for the La Sierra Water Transmission Pipeline. We appreciate the opportunity to comment on this proposal.

The County Transportation Department has just completed a project to widen and resurface La Sierra Avenue between the Riverside City Limits and El Sobrante Road. This project, which took over a year to construct at a cost exceeding $5.5 million, has resulted in a complete and finished roadway on La Sierra. The City of Riverside is in the process of completing a similar project from the City Limits north to SR 91.

We are therefore highly concerned with the proposed Alternative 1, which proposes to place a major water line on La Sierra, tearing up this recent significant public road investment and causing further construction impact on traffic flow. We request that the District consider other alternatives to placing the proposed pipeline along La Sierra.

In the event that another alternative is not selected, the Transportation Department will require as part of any encroachment permit that the newly constructed pavement be replaced to its new condition without surface trench cuts. This would require the grinding and overlaying of the pavement curb-to-curb along the full street width. The Department would also need to work with the District on the implementation of a traffic control plan which minimizes construction staging impacts to the public.

4080 Lemon Street, 8th Floor • Riverside, California 92501 • (951) 955-6740
P.O. Box 1090 • Riverside, California 92502-1090 • FAX (951) 955-3198

Please do not hesitate to contact me at 951-955-6740 should you wish to discuss this further.

Sincerely,

Juan C. Perez,
Deputy Director of Transportation

Cc: Supervisor Bob Buster
Attn: Dave Stahovich
George A. Johnson, Director of Transportation
Hugh Smith, Engineering Division Manager
Lawrence Tai, County Traffic Engineer
Mojahed Salama, Permits Engineer
Tom Boyd, City of Riverside

JCP:dlp

COUNTY OF RIVERSIDE
TRANSPORTATION AND LAND MANAGEMENT AGENCY

Transportation Department

George A. Johnson, P.E.
Director of Transportation

November 3, 2006

Jeffrey D. Sims
Assistant General Manager
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Riverside, CA 92517-5286

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Cc: Supervisor Bob Buster
Attn: Dave Stahovich
George A. Johnson, Director of Transportation
Hugh Smith, Engineering Division Manager
Lawrence Tai, County Traffic Engineer
Mojahed Salama, Permits Engineer
Tom Boyd, City of Riverside

JCP:dlp

Copies to :
Norm Thomas
Keith Dunbar

RECEIVED
DEC 07 2006
WMWD

Community Development
Department
Planning Division

CITY OF RIVERSIDE

December 6, 2006

Jeffrey D. Sims, P.E.
Western Municipal Water District
450 E. Alessandro Blvd.
Riverside CA 92508

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR LA SIERRA WATER TRANSMISSION PIPELINE

Dear Mr. Sims:

Thank you for the opportunity to review and comment on the subject project. Since the project is located within our City limits and our sphere of influence, we wish to respond regarding the contents of the draft Environmental Impact Report (EIR).

We note that the Project Description indicates that both Alternative 1 and Alternative 2 will follow La Sierra Avenue. Alternative 1 picks up La Sierra Avenue at Indiana Avenue and Alternative 2 picks up La Sierra Avenue at Arizona Avenue. However, the exhibits provided with the Project Description do not reflect this alignment for Alternative 2. We have tried contacting you regarding this discrepancy but have been unable to make contact. Please confirm the correct alignment of each alternative to properly evaluate the potential impacts.

The City does have comments concerning the preparation of the draft EIR. In addition to the potential impacts identified in the Notice of Preparation, the City has the following concerns:

Planning Division:

1. The two five million gallon capacity standpipe, pump station and hydroelectric facilities will result in direct changes to the physical environment. The aesthetic section of the draft EIR should include a comprehensive evaluation of the impacts the proposal will have on the community. Consideration needs to be given to constructing this facility below grade or at least providing adequate screening from public view, as appropriate. In addition, the pump station and hydroelectric facility will need to be screened or buried in a vault, as appropriate for the setting.

2. The significance of the impacts to archeological and historical resources need to be carefully evaluated.

Public Utilities Department:

3. The connection of the electrical generator to Riverside's electric system needs to be coordinated with the City's Public Utilities Department and comply with Riverside Public Utilities' Electric Rules.

Public Works Department:

4. The Public Works Department is concerned about the proposal, as the two alternatives will result in significant damage to the City's public infrastructure investment. Nevertheless, alternative 2 is preferable due to the reduced impacts to La Sierra Avenue based upon the Exhibit. However, the project description is different than the exhibit so this was difficult to adequately analyze. The construction schedule for the pipeline was not given, but the EIR should consider other major projects planned in the area, including the reconstruction of the La Sierra/SR 91 interchange (beginning mid 2007 and continuing for up to 18 months) and construction of a new high school by the Alvord School District on the south side of Indiana Avenue at Pierce. Attached are the comments from Public Works Department for your reference.

Once again thank you for the opportunity to comment on the NOP. We look forward to continued communication and coordination on this project. Should you have any questions regarding this letter, please feel free to contact Barbara Milosevic, Associate Planner at (951) 826-5507 or bmilo@riversideca.gov.

Sincerely,

Ken Gutierrez, AICP
Planning Director

attachment

cc: Ronald Loveridge, Mayor
Riverside City Council Members
Brad Hudson, City Manager
Michael Beck, Assistant City Manager
Kevin Milligan, Utilities Assistant Director/Water
Stephen Badgett, Utilities Assistant Director/Energy Delivery

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Copies to :
Norm Thomas
Keith Dunbar

RECEIVED
DEC 07 2006
WMWD

CITY OF RIVERSIDE
Community Development Department
Planning Division

December 6, 2006

Jeffrey D. Sims, P.E.
Western Municipal Water District
450 E. Alessandro Blvd.
Riverside CA 92508

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The City does have comments concerning the preparation of the draft EIR. In addition to the potential impacts identified in the Notice of Preparation, the City has the following concerns:

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2. The significance of the impacts to archeological and historical resources need to be carefully evaluated.

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3. The connection of the electrical generator to Riverside's electric system needs to be coordinated with the City's Public Utilities Department and comply with Riverside Public Utilities' Electric Rules.

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Once again thank you for the opportunity to comment on the NOP. We look forward to continued communication and coordination on this project. Should you have any questions regarding this letter, please feel free to contact Barbara Milosevic, Associate Planner at (951) 826-5507 or bmilo@riversideca.gov.

Sincerely,

Ken Gutierrez, AICP
Planning Director

attachment

cc: Ronald Loveridge, Mayor
Riverside City Council Members
Brad Hudson, City Manager
Michael Beck, Assistant City Manager
Kevin Milligan, Utilities Assistant Director/Water
Stephen Badgett, Utilities Assistant Director/Energy Delivery

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CITY OF RIVERSIDE

INTEROFFICE MEMO

DATE: December 6, 2006

TO: Ken Gutierrez
Planning Director

FROM: Siobhan Foster
Public Works Director

SUBJECT: Western Municipal Water District
NOP for the La Sierra Water Transmission Pipeline

The Public Works Department has reviewed the Notice of Preparation for the Western Municipal Water District's (WMWD) proposed La Sierra Water Transmission Pipeline. The project consists of a 48 to 54-inch water transmission pipeline between the Arlington desalter on Sterling Avenue and WMWD's service area to the south. Two proposed alternative alignments are proposed.

Alternative 1. La Sierra Avenue

Alternative No 1 will begin on Sterling Ave. near Pierce Street, and then proceed south on Pierce Street to Indiana Ave. where it will turn northeast and proceed to La Sierra Ave. where it would turn south and proceed along La Sierra Ave. to El Sobrante Rd. The Public Works Department does not support this alignment due to the anticipated January 2007 completion of a major street widening and reconstruction project on La Sierra Ave. between Indiana Ave. and El Sobrante Road and the major impacts impact to commuter traffic the project will have.

Installation of the proposed pipeline in this newly completed street will result in significant damage to the City's investment. If this alignment is selected, the City will require that the asphalt surface be ground and repaved from curb to curb after installation of the pipeline and any other damage to the street be fully repaired. In addition, it will be necessary for WMWD to work closely with the City and County of Riverside to minimize construction impacts.

Alternative 2 Cleveland Avenue

Alternative No 2 will begin on Sterling Ave near Pierce Street, and then proceed south on Pierce Street to Indiana. Beginning at Indiana Ave. and Fillmore St. there are two possible subset alignments.

The first subset alignment would take the pipeline southeasterly along Fillmore St. to Arizona Ave. The pipeline would then follow Arizona Ave. to La Sierra Ave, where it would turn south

to Cleveland. The pipeline would turn north easterly on Cleveland St. to Irvine Ave. At Irvine Ave. the pipeline would turn southeasterly and proceed to Firethorn and Van Buren Bl. From that intersection the pipeline would follow Van Buren Blvd. to the WMWD pumping station at Van Buren Blvd. and Mockingbird Canyon Road.

The second subset alignment is the same alignment as above between the Arlington Desalter and the intersection of Fillmore St. and Arizona Av. where the pipeline would continue southeasterly on Fillmore to Victoria Ave. where it would turn north easterly on Victoria Ave and proceed to La Sierra. From this point the alignment is the same as above.

Alternative 2 is preferable due the reduced impacts to La Sierra Avenue; however, the same comments apply as with alternative 1.

The construction schedule for the pipeline was not given but the environment document should consider other major projects planned in the area including the reconstruction of the La Sierra/SR 91 interchange (beginning mid 2007 and continuing for up to 18 months) Construction of a new high school by the Alvord School District on the south side of Indiana Ave. at Pierce Street.

James Chuang
Environmental Specialist/Land Planner

Land Planning & Natural Resources
Mail Location GT16G3
555 W. Fifth Street
Los Angeles, CA 90013-1036

Tel: 213.244.5817
Fax: 213.244.8046
E-mail : WCChuang@semprautilities.com

June 25, 2007

Mr. Keith S. Dunbar, P.E., F.ASCE
K.S. Dunbar &Associates, Inc.
Environmental Engineering
3035 Calle Frontera
San Clemente , CA 92673-3012

Re: **La Sierra Avenue Water Transmission Pipeline Project (SCH # 2006101152)**

Dear Mr. Dunbar:

Southern California Gas Company (SCG) appreciates the opportunity to review and respond to the Project's Draft Environmental Impact Report. We respectfully request that the following comments be incorporated in the subsequent Final Environmental Impact Report (FEIR).

SCG recommends that the FEIR include a discussion of activities associated with the installation of the new water transmission pipeline. At present, there is no mention of any existing facilities or new facilities that would have to be installed. This additional discussion should include:

- The presence and condition of existing utility infrastructure on the project site, including right-of-ways and/or easements.
- Identification of any exiting natural gas infrastructure that would need to be relocated and/or abandoned.
- Identification and description of any temporary areas required for construction and/or staging of material related to gas service relocation or construction.
- Identification of any actions that would require permitting or acquisition of new right-of-way or easements.
- Any proposed grading and/or drainage improvements that would redirect drainage in a manner that would increase the potential for erosion around SCG facilities.

The FEIR should also recognize that appropriate diagrams, including specific environmental impact analyses related to these activities, if necessary, may help to reduce the time and cost associated with the possible relocation existing natural gas pipelines.

In addition, if any field monitoring for cultural or biological resources is required during construction of the natural gas facilities, the monitoring should be mentioned in the FEIR as a requirement and responsibility of the La Sierra Avenue Water Transmission Pipeline Project. Likewise, any environmental mitigation required for the potential impacts associated with the construction of gas service to the project should also be addressed as part of the responsibility of the La Sierra Avenue Water Transmission Pipeline Project.

Once again, we appreciate the opportunity to comment on the DEIR. If you have any questions, please feel free to contact me at (213) 244-5817 or WCChuang@semprautilities.com.

Sincerely,

James Chuang
Environmental Specialist
Southern California Gas Company

CONSULTATION SUMMARY

LA SIERRA AVENUE
WATER TRANSMISSION PIPELINE PROJECT

State Clearinghouse No. 2006101152

Prepared for:

Western Municipal Water District
Post Office Box 5286
Riverside, California 92517-5286

Prepared by:

K.S. Dunbar & Associates, Inc.
Environmental Engineering
3035 Calle Frontera
San Clemente, California 92673-3012
(949) 366-2089
FAX: (949) 366-5315
E-mail: ksdpe@cox.net

February 2008

Introduction

Western Municipal Water District (WMWD) intends to construct the La Sierra Avenue Water Transmission Pipeline Project (Project) which will improve the reliability of WMWD's water supply to its own retail customers and to its wholesale purveyors; to reduce risk of water service interruptions; to reduce possible water shortages during dry years; and to reduce dependence upon the direct delivery of imported water during dry year conditions. A description of the Project follows.

Pipeline

The La Sierra Avenue Water Transmission Pipeline would convey potable water between Western Municipal Water District's (WMWD) Arlington Desalter Water Purification Facility and its water transmission facilities (Mockingbird Canyon Pump Station) near the intersection of Van Buren Boulevard and Mockingbird Canyon (Figure 1).

At the present time, there is one main alternative alignment being considered as well as two possible subsets. These are discussed in the following paragraphs.

The main alternative would begin at a new pump station to be constructed near WMWD's Arlington Desalter at 11615 Sterling Avenue in the City of Riverside. The pipeline alignment would follow Sterling Avenue in a westerly direction to its intersection with Pierce Street. It would then follow Pierce Street in a southeasterly direction to its intersection with Indiana Avenue. Along Pierce Street, the alignment would cross under the Arlington Channel. It would then follow Indiana Avenue in a northeasterly direction to its intersection with La Sierra Avenue. It would then follow La Sierra Avenue in a southeasterly direction to its intersection with Cleveland Avenue. It would then follow Cleveland Avenue in a northeasterly direction until its intersection with Irving Street. It would then follow Irving Street in a southeasterly direction to its intersection with Firethorn Avenue. It would then generally follow Firethorn Avenue in a southwesterly direction to its intersection with Van Buren Boulevard. Due to the steepness and tight turns along a portion of Firethorn Avenue it would be necessary to leave the public right-of-way for a portion of this alignment segment. It would then follow Van Buren Boulevard in a southeasterly direction to WMWD's Mockingbird Canyon Pump Station.

One subset to this alignment, would also begin at a new pump station to be constructed near WMWD's Arlington Desalter. It would then follow Sterling Avenue in a westerly direction to its intersection with Pierce Street. It would then follow Pierce Street in a southeasterly direction to its intersection with Indiana Avenue. It would then follow Indiana Avenue in a northeasterly direction to its intersection with Fillmore Street. It would then follow Fillmore Street in a southeasterly direction of its intersection with Arizona Avenue. It would then follow Arizona Avenue in a northeasterly direction to its intersection with La Sierra Avenue. From that point on, the alignment would be the same as the main alternative.

A second subset would also follow the same alignment as above between the Arlington Desalter and the intersection of Fillmore Street and Arizona Avenue. At this point, the alignment would extend along Fillmore Street in a southeasterly direction to its intersection with Victoria Avenue. Within this portion of the

alignment, it would be necessary to cross under the Riverside Canal. It would then follow Victoria Street in a northeasterly direction to its intersection with La Sierra Boulevard. From that point on, the alignment would be the same as the main alternative.

Pump Station

The pump station would typically be used when the Mills Water Treatment Plant was out of service for maintenance. Therefore, it would only run a few weeks each year. The pump station would contain either 2,000 horsepower of natural gas engines and 2,000 horsepower of electric motors, or 4,000 horsepower of electric motors to drive the pumps. More detailed information on the pump station is provided in Table 1.

Table 1
Sterling Pump Station Facility

Location	On Sterling Avenue or extension of Sterling Avenue at Pierce St near the Arlington Desalter at 11615 Sterling Street
Foot Print	70 feet x 100 feet
Pump Lift	570 feet (from approx. 680 ft to 1250 ft USGS hydraulic grade line)
Horsepower at 75% efficiency	4000 horsepower at 45 cubic feet per second at 570 feet of lift

Hydroelectric Facility

The water elevation at the Mills Plant is approximately 1630 feet USGS; thus there is the opportunity to conserve energy with the construction of a hydroelectric generating facility at the proposed pump station near the Arlington Desalter. The La Sierra Avenue Water Transmission Pipeline would be constructed with a pipe wall thickness capable of sustaining pressure created by elevation differences of 660 feet. The pipeline design would support energy conservation as the water drops approximately 300 feet (after friction losses) from approximately 1,340 feet hydraulic grade line after pressure reduction near Mockingbird Canyon Road and Van Buren Boulevard to a hydraulic grade created by the Jurupa Community Services District water tank and pipeline of approximately 1,000 feet elevation.

More detailed information on the hydroelectric facility is provided in Table 2

Table 2
Sterling Hydro Station

Location	Near the Arlington Desalter at 11615 Sterling Street
Foot Print	70 feet x 100 feet
Available Energy for Conservation	300 feet
Kilowatts Generated at 35% efficiency	265 kw at 30 cubic feet per second at 300 feet of head

Draft EIR Circulation

On December 10, 2007, WMWD mailed copies of the Draft Environmental Impact Report to those in the following list.

Federal Agencies

Jim Bartel
Ecological Services
Fish and Wildlife Service
U.S. Department of the Interior
6010 Hidden Valley Road
Carlsbad, California 92009

Forrest Vanderbilt, Project Manager
Regulatory Division
U.S. Army Corps of Engineers
Los Angeles District
Post Office Box 532711
Los Angeles, California 90053-2325

James J. Fletcher, Superintendent
Southern California Agency
Bureau of Indian Affairs
U.S. Department of the Interior
1451 Research Park Drive, Suite 100
Riverside, California 92507-2154

State Agencies

Terry Roberts
State Clearinghouse Director
Governor's Office of Planning and Research
Post Office Box 3044
Sacramento, California 95812-3044

Curt Taucher, Regional Manager
Eastern Sierra and Inland Deserts, Region 6
California Department of Fish and Game
4665 Lampson Avenue, Suite J
Los Alamitos, California 90720

Mr. Gerard Thibeault, Executive Officer
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

Hans Kreutzberg
Office of Historic Preservation
California Department of Parks and Recreation
Post Office Box 942896
Sacramento, California 94296-0001

Nadell Gayou
California Resources Agency
Post Office Box 942836
Sacramento, California 94236-0001

Debbie Pilas-Treadway
Associate Governmental Program Analyst
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, California 95814

Dick Doyle, Planning Division Chief
California Department of Transportation
464 West Fourth Street, 6th Floor
San Bernardino, California 92401

J. Steven Williams, P.E.
District Engineer
Southern California Drinking Water Field Operations Branch
Department of Health Services
1350 Front Street, Room 2050
San Diego, California 92101

Veronica Malloy
Environmental Review Unit
Drinking Water Program
Department of Health Services
P.O. Box 997413
Sacramento, California 95899-7413

Regional Agencies

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
South Coast Air Quality Mgmt. District
Post Office Box 4939
Diamond Bar, California 91765-0939

Celeste Cantú, General Manager
Santa Ana Watershed Project Authority
11615 Sterling Avenue
Riverside, CA 92503

County Agencies

Teresa Tung, Senior Civil Engineer
Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, California 92501

George Johnson, P.E.
Department of Transportation
County of Riverside
Post Office Box 1090
Riverside, California 92502-1090

Ron Goldman, Director
Planning Department
County of Riverside
Post Office Box 1409
Riverside, California 92501

City Agencies

Ken Guiterrez. AICP
Planning Director
City of Riverside
3900 Main Street
Riverside, California 92522

Siobhan Foster
Director of Public Works
City of Riverside
3900 Main Street
Riverside, California 92522

Brad Robbins, Assistant City Manager
City of Corona
400 South Vicentia Avenue
Corona, California 92882-3238

Bill Thompson, Public Works Director
City of Norco
1281 Fifth Street
Norco, CA 92860

Interested Entities

Sherry Teresa, Executive Director
Center for Natural Lands Management
425 E. Alvarado Street, Suite H
Fallbrook, California 92028-2960

Marina Ortega
California Indians for Cultural and Environmental Protection
P.O. Box 497
Santa Ysabel, CA 92070

George Hague
Sierra Club-San Gorgonio Chapter
26711 Ironwood Avenue
Moreno Valley, CA 92555-1906

Eldon Horst, General Manager
Jurupa Community Services District
11201 Harrel Street
Mira Loma, California 91752

Carl Shiloh, General Manager
Home Gardens Sanitary District
13538 Magnolia Avenue
Corona, California 92879-2032

Lori M. Stone, Executive Director
March Joint Powers Authority
P.O. Box 7480
Moreno Valley, California 92552

Ron Young, General Manager
Elsinore Valley Municipal Water District
P.O. Box 3000
Lake Elsinore, CA 92531-3000

Utilities

Southern California Edison
Post Office Box 800
Rosemead, California 91770-0800

Verizon – Executive Offices
CEQA Review
1 Baxter Way
Westlake, California 91362-3889

Kenneth J. Velasquez
Technical Services Supervisor
South Inland Division
The Gas Company
1981 W. Lugonia
Redlands, California 92374-9720

Subsequently on December 11, 2007, the State Clearinghouse mailed copies of the DEIR to those State agencies noted below and established a 45-day public comment period that closed on January 24, 2008.

Resources Agency
Department of Fish and Game, Region 6
Department of Parks and Recreation
Department of Water Resources
California Highway Patrol
Caltrans, District 8
Department of Health Services
Air Resources Board, Major Industrial Projects
State Water Resources Control Board, Division of Water Rights
Regional Water Quality Control Board, Region 8
Department of Toxic Substances Control
Native American Heritage Commission

Responses to the Draft Environmental Impact Report

During the 45-day public review period, responses to the Draft Environmental Impact Report were received from the following:

Federal Agencies

None.

State Agencies

Terry Roberts
Director, State Clearinghouse
Governor's Office of Planning and Research
Post Office Box 3044
Sacramento, California 95812-3044

Nancy Dagle
Environmental Scientist
CDHS Environmental Review Unit
California Department of Public Health
Post Office Box 997377
Sacramento, California 95899-7377

Dave Singleton
Program Analyst
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, California 95814

Glenn Robertson, Engineering Geologist
CEQA Coordinator
California Regional Water Quality Control Board, Santa Ana Region (8)
3737 Main Street, Suite 500
Riverside, California 92501-3348

Greg Holmes, Unit Chief
Southern California Cleanup Operations Branch - Cypress Office
California Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630

Regional Agencies

None.

County Agencies

Teresa Tung, Senior Civil Engineer
Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, California 92501

City Agencies

Ken Gutierrez, AICP
Planning Director
Community Development Department
3900 Main Street
Riverside, California 92522

Interested Agencies

None.

Utilities

None.

WMWD's Responses to Comments on the DEIR

Copies of the actual comment letters are included in Appendix A of this document. The comments are summarized below followed by WMWD's responses:

State Clearinghouse

In his January 25, 2008 letter to Jeffrey D. Sims, Terry Roberts, Director, State Clearinghouse stated:

> *This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.*

Response:

No response is required to this informational comment.

California Department of Public Health

In her December 13, 2007 letter to Keith S. Dunbar, P.E., F. ASCE, Nancy Dagle, Environmental Scientist, CDHS Environmental Review Unit stated:

> *Thank you for the opportunity to review the above document. The California Department of Health Services (CDHS), Division of Drinking Water and Environmental Management is responsible for issuing water supply permits administered under the Safe Drinking Water Program and may need to issue a new or amended Water Supply Permit for the above referenced project. A project triggers a permit if it includes increases in water supply, storage or treatment of drinking water. CDHS will be a responsible agency pursuant to the California Environmental Quality Act (CEQA) and considers the above referenced document as adequate to meet the CDHS CEQA permit requirement.*
>
> *Please contact the CDHS local district office at (619) 525-4159 for assistance with the CDHS requirement for permit application, contact Jing Chao, P.E., with any questions.*
>
> **Response:**
>
> WMWD's staff and/or its consultants will contact Jing Chao, P.E., during the design phase of the Project to discuss the permit application requirements.

Native American Heritage Commission

In his December 31, 2007 letter to Jeffrey D. Sims, P.E., David Singleton, Program Analyst stated:

> *The Native Heritage Commission is the state agency designated to protect California's Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per CEQA Guidelines §15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'are of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on cultural resources, the Commission recommends the following action:*
>
> ✓ *Contact the appropriate California Historic Resources Information Center (CHRIS). Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/http://www.ohp.parks.ca.gov/1068/files/!C%20Roster.pdf. The record search will determine:*
>
> - *If a part or the entire APE has been previously surveyed for cultural resources.*
> - *If any known cultural resources have already been recorded in or adjacent to the APE.*
> - *If the probability is low, moderate, or high that cultural resources are located in the APE.*

- *If a survey is required to determine whether previously unrecorded cultural resources are present.*

Response:

As shown in Chapter 7 of the DEIR, a record search was performed by the Eastern Information Center of the California Archeological Sites Inventory at the University of California, Riverside. The results of that survey are reported in Chapter 7 of the DEIR.

✓ *If an archeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.*

- *The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.*

- *The final written report should be submitted within 3 months after work has been completed to the appropriate regional archeological Information Center.*

Response:

The results of the field survey, which were negative, are reported in Chapter 7 of the DEIR.

✓ *Contact the Native American Heritage Commission (NAHC) for a Sacred Lands File search of the project area and information on tribal contacts in the project vicinity who may have additional cultural resources information. Please provide this office with the following citation format to assist with the Sacred Lands File Search Request. U.S.G.S. 7.5-minute quadrangle citation with name, township, range and section.*

- *The NAHC advises the use of Native American Monitors to ensure proper identification and care give cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American cultural resource may be known only to a local tribe(s).*

Response:

A request for a Sacred Lands File search of the project area and information on tribal contacts was made to the Native American Heritage Commission. To date, no response to that request has been received.

✓ *Lack of surface evidence of archeological resources does not preclude their subsurface existence.*

- *Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.*

- *Lead agencies should in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.*

Response:

Similar mitigation measures are included in Chapter 7 of the DEIR..

✓ *Lead agencies should include provisions for discovery of Native American human remains or cemeteries in their mitigation plans.*

- *CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by the Commission if the Initial Study identifies the presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native Americans, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave items.*

Response:

Similar mitigation measures are included in Chapter 7 of the DEIR..

✓ *Health and Safety Code §7050.5, Public Resources Code §5097.98 and §15064.5(d) of the California Code of Regulations (CEQA Guidelines)mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the County Coroner of Medical Examiner can determine whether the remains are those of a Native American. Note that§7052 of the Health and Safety Code states that disturbance of Native American Cemeteries is a felony.*

Response:

The appropriate mitigation measure is included in Chapter 7 of the DEIR.

✓ *Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation.*

Response:

There would be no impacts to cultural resources associated with implementation of the La Sierra Avenue Water Transmission Pipeline Project.

California Regional Water Quality Control Board, Santa Ana Region

In his email, Glenn Robertson, Engineering Geologist, CEQA Coordinator stated:

Western Municipal Water District proposes to construct a potable water pipeline from the Arlington Desalter (Sterling and Fillmore St., Riverside) to its water distribution system at Mockingbird Cyn Pump Station (Mockingbird Cyn Drive and Van Buren). They realize that some drainages will be crossed or encroached upon along the pipeline route, and that a Nationwide Permit and CWA Section 401 Water Quality Certification will be needed.

At this time, I do not expect to comment on this EIR (deadline January 24), but I urge WMWD representatives through this email to consult with the Regional Water Quality Control Board office (Adam Fisher, 951-320-6363) early in their permit process to determine appropriate mitigation, BMP's, and 401 Application procedures. I will retain the EIR in our in-house CEQA Library.

Response:

WMWD and/or its consultants will contact Mr. Fisher at the appropriate time during the design process.

Department of Toxic Substances Control[1]

In his January 29, 2008 letter to Jeffrey Sims, P.E., Greg Holmes, Unit Chief, Southern California Cleanup Operations Branch - Cypress Office stated:

DTSC has the following comments; please address if applicable:

1) The EIR should identify the current or historic uses at the project site that may have resulted in a release of hazardous wastes/substances.

Response:

As stated in the DEIR, the majority of the project is an underground pipeline that will be constructed within public street rights-of-way. Also as stated in the DEIR, the pump station and hydroelectric

[1] Although this letter was received after the close of the public comment period, WMWD is including it in this Consultation Summary as well as providing responses to applicable comments.

facility will be constructed on a vacant lot that has no known history of the use or storage of hazardous materials.

As stated on page 9-5 of the DEIR, there are two potential LUFT (leaking underground fuel tanks) sites along La Sierra Avenue that could be impacted by the proposed alignment. Petroleum contaminants, from the two sites may have migrated off-site to areas that could be excavated for construction of the proposed pipeline. Implementation of mitigation measure HAZ-4 would reduce these potential impacts to a less-than-significant level.

Mitigation measure HAZ-4 states:

> "An electronic 'sniffer' capable of detecting actionable levels of hydrocarbons shall be employed during excavation activities in proximity to the previously referred to sites. Should actionable levels of contaminants by encountered, these materials should be removed and disposed of in accordance with applicable regulations."

2) *The EIR should identify the known or potentially contaminated sites within the proposed Project area. For all identified sites, the EIR should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:*

- *National Priorities List (NPL). A list maintained by the United States Environmental Protection Agency (U.S.EPA).*
- *Envirostar (formerly Calsites). A database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).*
- *Resource Conservation and Recovery Information System (RCRIS). A database of RCRA facilities that is maintained by the U.S. EPA.*
- *Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS). A database of CERCLA sites that is maintained by the U.S. EPA.*
- *Solid Waste Information System (SWIS). A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.*
- *Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC). A list that is maintained by Regional Water Quality Control Boards.*
- *Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.*
- *The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California 90017, (213) 452-3008, maintains a list of Formerly Used Defense Sites (FUDS).*

Response:

These lists were all reviewed during the preparation of the DEIR.

3) *The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents. Please see comment No. 17 below for more information.*

Response:

See response to comment No. 1 above.

4) *All environmental investigations, sampling and/or remediation for the site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substances cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table.*

Response:

Should it become necessary to conduct such studies, the above protocol would be followed.

5) *Your document states: "A review of those databases revealed the location of two potential sites (leaking underground fuel tanks (LUFT) within the project area. Those are: Chevron Station 200734 at 3390 La Sierra, Erwin family, LLC near the intersection of La Sierra and Dufferin. Petroleum contaminants, from each of the above-mentioned sites, may have migrated off-site to areas that would be excavated for construction of the proposed pipeline. An electronic "sniffer"capable of detecting actionable levels of hydrocarbons shall be employed during excavation activities in proximity to the previously referenced sites. Should actionable levels of contaminants be encountered, these materials should be removed and disposed of in accordance with applicable regulations." Proper investigation, sampling and remedial actions overseen by the respective regulatory agencies, if necessary, should be conducted at the site prior to the new development or any construction. All closure, certification or remediation approval reports should be included in the EIR.*

Response:

Should it become necessary to conduct such studies, the above protocol would be followed.

6) *If any property adjacent to the project site is contaminated with hazardous chemicals, and if the proposed project is within 2,000 feet from a contaminated site, then the proposed development may*

fall within the "Border Zone of a Contaminated Property." Appropriate precautions should be taken prior to construction if the proposed project is within a Border Zone Property.

Response:

The project site is not within a Border Zone Property.

7) *If buildings, structures, or associated uses, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of other related hazardous chemicals, lead-based paints or products, mercury, and asbestos containing materials (ACM's). If other hazardous chemicals, lead-based paints (LPC) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.*

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

8) *The proposed construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.*

Response:

The only imported soil would be clean sand used as bedding material for the pipeline. The standard construction specifications will include a provision that requires the contractor to test all imported materials.

9) *Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. If it is found necessary, a study of the site and a health risk assessment overseen and approved by the appropriate government agency and a qualified health risk assessor should be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.*

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

10) *If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law*

(California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5).

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

11) *If it is determined that hazardous wastes are or will be generated and the wastes are (a) stored in tanks or containers for more than 90 days, (b) treated onsite, or (c) disposed of onsite, then a permit from DTSC may be required. If so, the facility should contact DTSC at (714) 484-5423 to initiate pre-application discussions and determine the permitting process applicable to the facility.*

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

12) *If it is determined that hazardous wastes will be generated, the facility should obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942.*

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

13) *Certain hazardous waste treatment processes may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.*

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

14) *If project plans include discharging wastewater to a storm drain, you may be required to obtain an NPDES permit from the overseeing Regional Water Quality Control Board (RWQCB).*

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

15) *If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area would cease and appropriate health and safety procedures should be implemented.*

Response:

This provision will be included in standard construction specifications.

16) *Your document states: "The project area contains land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as evidenced by the vast orange groves along Van Buren Boulevard, Cleveland Avenue and Irving Street." If the site was used for agricultural, cattle ranching or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of an approved by a government agency at the site prior to construction of the project.*

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

17) *Envirostar (formerly Calsites) is a database primarily used by the California Department of Toxic Substances Control, and is accessible through DTSC's website. DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for governmental agencies, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489 for the VCA.*

Response:

This comment is not applicable to the La Sierra Avenue Water Transmission Line Project.

18) *In future CEQA documents please provide complete contact person title, e-mail address, and agency web address which contains the project information. Also, if the project title changes, please provide historical project titles.*

Response:

This information was included in various locations throughout the document. However, in the future it will be summarized in one location for the ease of the reader.

Riverside County Flood Control and Water Conservation District

In her January 16, letter to Keith S. Dunbar, P.E., F. ASCE, Teresa Tung, Senior Civil Engineer stated:

The Riverside County Flood Control and Water Conservation District has no comments at this time.

Response:

No response is required to this informational comment.

City of Riverside

In his January 23, 2008 letter to Keith S. Dunbar, P.E., F. ASCE, Ken Gutierrez, AICP, Planning Director stated:

Thank you for the opportunity to review and comment on the subject project. Since the project is located within the City limits and its sphere of influence, we wish to respond. The City provided comments concerning the Notice of Preparation (NOP) of the DEIR and met with WMWD representatives in July 2007. The City now understands that the project is part of the Riverside Corona Feeder, in which a prior Program EIR was prepared in 2004. The subject NOC is for a supplemental Draft EIR for Reach E of the larger project.

The City supports the La Sierra Avenue Water Transmission project. However, based on review of the Draft EIR for the project, the City offers the following comments:

Response:

No response is required to these introductory comments.

Planning Division Comments

1. *The City notes that the two to five million gallon reservoir proposed last summer is no longer part of the project. Please provide the City with clarification on whether water storage has been completely eliminated from the project or will occur at a different segment of the project.*

   Response:

   There is no longer any storage facilities associated with the La Sierra Avenue Water Transmission Pipeline Project. The proposed Sterling Pump Station will be designed with variable speed pumps to eliminate the need for the storage facility.

2. *The City's General Plan 2025 Program was adopted and the Final Program EIR (FPEIR) was certified in November 2007. This DEIR still refers to the City's previous General Plan and EIR. The EIR should be updated to refer to the City's recently adopted General Plan (GP) 2025 Program documents and GP 2025 FPEIR. The adopted documents are available at the following links:*

   http://aquarius.riversideca.gov/plnimage7/Browse.aspx?dbid+2; *and*

   http://riversideca.gov/municode/.

Response:

As noted in the References sections in the DEIR, at the time of publication of the DEIR the City was in the process of updating its General Plan documents. Draft copies of those documents were utilized as the reference documents in the preparation of the DEIR. Any changes from draft to final General Plan documents will be considered during the design phase of the Project. Plans will be submitted to the City when design is 90% complete in order to obtain City input.

3. *Figures 2-1 and 6-1 of the DEIR have Buchanan Street incorrectly labeled as Pierce Street. Buchanan Street is approximately ½ mile to the west of Pierce Street. Pierce Street aligns with the street labeled Riverwalk Parkway on the exhibits. The EIR should include revised versions of these exhibits with the streets correctly labled and with the correct pipeline alignment shown along Pierce Street.*

Response:

Revised versions of Figures 2-1 and 6-1 are included in Appendix B to this document showing the corrected Pierce Street alignment..

4. *The DEIR incorrectly reflects the City limits for Riverside. To ensure that the appropriate jurisdiction is contacted for coordination of work, all exhibits depicting City limits should be corrected throughout the EIR. Specifically, exhibits need to be revised to include Annexation area #110 for the Alvord Union School District. Please see the attached map depicting the geographical area (south of Indiana Avenue at Pierce Street) to be included with the City limits.*

Response:

Revised exhibits are included in Appendix B of this document showing the corrected City boundary as a result of Annexation 110 for the Alvord USD.

5. *All appropriate mitigation measures and recommended studies identified for Reach E on Table 1-1-A of the FPEIR for the Riverside-Corona Feeder Project should be applied to this project.*

Response:

Although not all of the mitigation measures and recommended studies identified for Reach e in Table 1-1-A of the FPEIR are repeated verbatim in the DEIR, the intent of the mitigation measures remain the same.

6. *A street opening permit is required from the Public Works Department of the City. The permit application needs to include traffic control plans and a Waste Discharge Identification Number issued by the State Water Control Board.*

Response:

In accordance with the agreement between the City and WMWD entitles "Agreement Regarding Installation, Relocation or Maintenance of Water and Sewer Facilities", dated March 17, 1993, WMWD and/or its consultants will acquire all requested street opening permits during, or immediately following the design phase of the project.

7. *A number of the City's Codes apply to this project and are not addressed within the EIR.*

   a. *Title 19 – Zoning Code – applies to that portion of the project proposed on private property. Those portions of the pipeline crossing private property and the construction of the pump station should be evaluated under the City's Conditional Use Permit (CUP) process. The pump station is currently proposed on property in the BMP – Business and Manufacturing Park Zone. The City requests that WMWD apply for a CUP prior to approval and certification of the project EIR, so details of the location, design, landscaping, and other aspects of the project can be reviewed in detail at a public hearing. All aspects of the project can be included under one CUP application and the results of such application need to be addressed within the EIR.*

   Response:

   WMWD will work closely with the City to address location, design, landscaping and other aspects of the Project and present these details at a public meeting with venue mutually agreed to by staff.

   b. *Title 20 – Cultural Resources – A Certificate of Appropriateness is required in regard to affected cultural resources (Victoria Avenue, Gage Canal, and historic trees). In the case of historic trees, such as those along Citrus Heritage Park and Victoria Avenue, any proposed removal or relocation of City trees will need to be reviewed by the City prior to removal. The impacts related to any removal of cultural resources and historic trees needs to be addressed as part of the DEIR. To help mitigate impacts to important cultural resources and City infrastructure to a less than significant level, the EIR needs to be updated to include a mitigation measure requiring that "the pipeline be laid within the center paving, and the entire streets be ground and repaved to avoid impacts to important cultural resources and City infrastructure." In addition, the cultural resources mitigation measures found in Table I-1-A of the FPEIR for the Riverside-Corona Feeder Project should be included as mitigation in the EIR for this project.*

   Response:

   Implementation of the proposed project would not affect historical trees along Victoria Avenue.

   Potential impacts to trees in other locations are described on pages 3-3 and 3-4 of the DEIR. Appropriate mitigation measures are also included on pages 3-4 and 3-5 of the DEIR.

   On page 7-9 of the DEIR it is stated:

> "The canal is still in use and is well maintained with gunite and concrete lining. The crossing at Irving employs a small flat wooden bridge with troughs on each side to carry drainage water between ditches on both sides of the canal. It will probably be necessary to bore under the canal in this area; therefore, a side area on both sides of the canal was inspected to insure coverage of the area that might be excavated for a bore hole. Again, no sign of cultural resources was observed in this area."

Appropriate cultural resources mitigation measures as shown in Table I-A-1 of the FPEIR are included on pages 7-11 and 7-12 of the DEIR.

c. Title 15 – Trees and Vegetation – does not permit cutting, removal, or trenching near trees in the public right-of-way, except in accordance with the Park and Recreation Commission policies.

Response:

See previous response regarding the discussion on trees. Also, consultants will be advised to work with City staff prior to the start of design. And, design drawings will be submitted to the City when design is 90% complete in order to receive final input prior to completion of plans and specifications.

d. Title 17 – Grading – applies to the proposed work on private property in regard to grading and/or trenching. Grading is not permitted within 50-feet of the City's arroyos. However, it is noted that the project proposed to cross the Mockingbird Arroyo and this has not been adequately addressed in the EIR. As well the pipeline is proposed to cross a blue-line stream in the vicinity of Firethorn Avenue and this was not adequately addressed within the EIR. The EIR needs to address the impacts to the arroyo and the blue-line stream and reflect the City's grading requirements.

Response:

Upon review of Figure 2-4, Six Major Arroyos as identified and mapped by the City of Riverside in the *Riverside Arroyo Watershed Policy Study: Recommendations* prepared by the County/City Arroyo Watershed Committee, December 15, 2006, it would appear that the proposed pipeline might cross the area shown as the Mockingbird Canyon Arroyo; however, at that location near the lower end of Firethorn Avenue the pipeline would be constructed within the roadway public right-of-way and not affect any blue-line stream. As pointed out on page 6-3 of the DEIR,

> "Site 3 is a hill-slope located between Irving Street and Firethorn Avenue (Figure 6-1). The distance that the pipeline alignment must cross is approximately 100 feeet of primarily dead chaparral habitat comprised almost entirely of winged ragweed *(Hymenochlea monogyra)*. Also scattered here and there were specimens of four-winged saltbush *(Atriplex canescens)*. An intermittent watercourse in this drainage was conveyed beneath Firethorn Avenue via a

metal pipe. One gum tree and a few tobacco trees *(Nicotiana glauca)* were near the alignment but not on it."

If necessary to avoid impacts to this intermittent watercourse, the pipeline would be jacked and bored at this location.

e. *Title 7 – Noise – applies to those portions of the project within the City limits. This Title permits construction between the hours of 7 a.m. and 7 p.m. on week days and between 8 a.m. and 5 p.m. on Saturdays. Work is not permitted at any time on Sundays or federal holidays. This should be reflected in the EIR.*

Response:

This is reflected in mitigation measure NOISE-1 on page 13-9 of the DEIR.

f. *The Citywide Design and Sign Guidelines are also applicable to the portions of the project that are above ground. The EIR needs to fully evaluate and mitigate aesthetic impacts, specifically aesthetic impacts associated with the 70-foot by 100-foot pump station facility proposed at 11615 Sterling Avenue. At this time the City does not have plans that show what the pump station facility will look like. This does not allow the opportunity to provide any specific input regarding its design and aesthetic concerns. It is noted that the facility is proposed to be located along the Riverside (SR91) Freeway at a gateway to the City of Riverside where view and appearance of the facility from the freeway is a significant concern. The City wishes to protect the view from the freeway from aesthetically unpleasing uses such as unscreened/exposed utility equipment. As such, the City suggests an alternative, less visible location for the facility. If another location is not feasible, the pump station equipment needs to be fully screened or enclosed within a building architecturally compatible with its surroundings to sufficiently address aesthetic concerns.*

Response:

As stated on page 3-4 of the DEIR:

"The split face block buildings housing the natural gas engines, electrical pumps and hydroelectric facility would be similar in design to other pumping stations owned and operated by WMWD. As shown in Chapter 2, the foot print of these buildings would be approximately 70 feet by 100 feet. Landscaping will be incorporated into the project design to soften the appearance of the buildings and incorporate the buildings into the existing setting.

"Therefore, there would be no impacts anticipated and no mitigation is necessary."

The best example of proposed architecture and aesthetics is the Bergamont Pimp Station located adjacent to the City of Riverside Bergamont Park. Landscaping around the pump station and within the park represented a cooperative effort of City and WMWD staff.

During the preliminary design phase, WMWD's consultants studied alternative locations for the pumping station; however, none were found that met the necessary criteria for the pumping station.

The City requests that plans be made available as soon as possible, and that WMWD submits applications for the review and approval of all aspects of Reach E with the City. All conditions of the CUP and any needed Certificate of Appropriateness should be addressed within the EIR.

Response:

See response to item 7a above. Additionally, design drawings will be submitted to the City when design is 90% complete in order to receive final input prior to completion of plans and specifications.

Chapter 6, Biological Resources Comments

8. The Biological Resources section of the EIR needs to be revised to include a complete habitat assessment analysis prepared by a qualified biologist. The analysis needs to fully evaluate biological impacts and identify and provide focus surveys needed, including but not limited to, a burrowing owl survey, as well as assessment of impacts to blue line streams, riparian riverine areas, and arroyos. Biological studies need to be in compliance with the requirements of the MSHCP.

Response:

As stated on page 6-1 of the DEIR:

"A field survey for special-status plants and animals and their habitats was completed by K.S. Dunbar & Associates, Inc., along the La Sierra Avenue alignment and its subsets on 19 September 2006. In addition, other potential biological constraints were evaluated, for example, the occurrence of wetlands and nest sites for raptors (i.e., birds of prey). Prior to conducting the field survey, a list of potential special-status taxa and habitats was developed based on occurrence records from the region surrounding the site and complied by the California Department of Fish and Game in the California Natural Diversity Database (NDDB) (on file in WMWD's offices). Figure 6-1 illustrates those species and habitats recorded for the project region. These species and habitats were the focus of the field survey. The County of Riverside's Western Riverside County Multiple Species Habitat Conservation Plan was also researched.

"During the field survey, the occurrence of plants and animals along the proposed alignments was recorded. The alignments were examined and characterized as to their suitability to support the special-status plants and animals listed in the NDDB. A narrative discussion of the field survey follows.

"The La Sierra Avenue Pipeline would be constructed entirely within existing paved road alignments except for three locations illustrated on Figure 6-2 as Sites 1, 2, and 3. Except for

these three locations, the pipeline project would not impact special status plants, animals, or their habitats and would not interfere with any habitat linkages, corridors, or conflict with any adopted conservation plan."

Site 1 is the proposed location of the pumping station. As stated on page 6-1 of the DEIR,

> "Based on the evidence available, Site 1 does not and could not currently support any special-status plants, animals, or their habitats."

Site 2 is the proposed location of the pipeline crossing between the two developed portions of Cleveland Avenue. As stated on page 6-3 of the DEIR:

> "The highly disturbed environment of the graded lot located between the two sections of Cleveland Avenue and the absence of native plant species except for the willow tree, indicates that the construction of the proposed pipeline across the lot would not result in impacts to special-status plants, animals, or their habitats. No such species or habitats are located along the alignment. The presence of the small drainage will require that a Streambed Alteration Agreement be obtained from the California Department of Fish and Game for pipeline construction. In addition, it will be necessary to acquire a Nationwide Permit (12) from the Los Angeles District of the Corps as well as a Water Quality Certification from the California Regional Water Quality Control Board, Santa Ana Region."

As stated on page 6-3 of the DEIR, Site 3 is a hill-slope located between Irving Street and Firethorn Avenue. Also as stated on page 6-3 of the DEIR:

> "The Multiple Species Habitat Conservation Plan lists this site as potential habitat for the burrowing owl *(Athene cunicularia*). During the field survey, there was no evidence of burrowing owls on site. In addition, the site does not contain suitable habitat for this species.
>
> "The field data do not indicate the current occurrence of any special-status plants, animals, or their habitats at Site 3. While there is no confirmed evidence that the Stephen's kangaroo rat currently occurs at Site 3, if it ever did, WMWD will consult with the U.S. Fish and Wildlife Service and California Department of Fish and Game to confirm that incidental take of the Stephen's kangaroo rat will not occur and that there are no habitat mitigation requirements."

Due to the fact that there is not suitable habitat on this site to accommodate the burrowing owl, focused surveys are not required to satisfy the requirements of the MSHCP.

Public Works Department Comments

9. *The City prefers the alternative alignment that travels furthest down Fillmore Street to Victoria Avenue. Since the project will result in significant damage to the City's public infrastructure investment, the EIR should include a mitigation requiring that the asphalt surface be ground and repaved curb to curb after installation of the pipeline and any other damage to the street*

be fully repaired. Additionally, WMWD needs to work closely with the City to insure that Public Works' projects are not negatively impacted. Attached are complete comments from Public Works Department for reference.

Response:

As stated on page 20-4 of the DEIR:

> ". . . either the Arizona alignment or the Victoria alignment would be the next best alternative due to the reduced impacts on La Sierra Avenue. Both of these alternatives would shorten the distance of disturbance on La Sierra Avenue."

Page 17-5 contains several mitigation measures associated with transportation/traffic issues. In particular mitigation measure TRAF-7 states:

> "Public streets shall be restored to a condition mutually agreed to between WMWD and the local jurisdiction prior to construction."

In addition, TRAF-8 on page 17-6 states:

> "WMWD shall attempt to schedule construction to occur jointly with other public works projects already planned in the affected locations, through careful coordination with all local agencies involved."

Appendix A
DEIR Comment Letters

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

January 25, 2008

RECEIVED
JAN 30 2008
WMWD

Jeffrey D. Sims
Western Municipal Water District
P.O. Box 5286
Riverside, CA 92517

Subject: La Sierra Avenue Water Transmission Pipeline
SCH#: 2006101152

Dear Jeffrey D. Sims:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 24, 2008, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2006101152
Project Title La Sierra Avenue Water Transmission Pipeline
Lead Agency Western Municipal Water District

Type EIR Draft EIR
Description WMWD intends to construct a water transmission line between its Arlington Desalter and its water distribution system at its Mockingbird Pump Station.

Lead Agency Contact

Name Jeffrey D. Sims
Agency Western Municipal Water District
Phone (951) 789-5000 **Fax**
email
Address P.O. Box 5286
City Riverside **State** CA **Zip** 92517

Project Location

County Riverside
City
Region
Cross Streets Cleveland and La Sierra
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways 91
Airports
Railways BNSF
Waterways
Schools Riverside
Land Use

Project Issues Air Quality

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 6; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Department of Health Services; Air Resources Board, Major Industrial Projects; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 8; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 12/10/2007 **Start of Review** 12/11/2007 **End of Review** 01/24/2008

Note: Blanks in data fields result from insufficient information provided by lead agency.

State of California—Health and Human Services Agency
California Department of Public Health

MARK B HORTON, MD, MSPH
Director

ARNOLD SCHWARZENEGGER
Governor

December 17, 2007

Mr. Keith Dunbar, P.E., F.ASCE
K.S. Dunbar & Associates, Inc.
3035 Calle Frontera
San Clemente, CA 92673-3012

Dear Mr. Dunbar:

RE: Draft Environmental Impact Report for Western Municipal Water District La Sierra Avenue Water Transmission Pipeline Project

Thank you for the opportunity to review the above document. The California Department of Health Services (CDHS), Division of Drinking Water and Environmental Management is responsible for issuing water supply permits administered under the Safe Drinking Water Program and may need to issue a new or amended Water supply Permit for the above referenced project. A project triggers a permit if it includes increases in water supply, storage or treatment of drinking water. CDHS will be a responsible agency pursuant to the California Environmental Quality Act (CEQA) and considers the above referenced document as adequate to meet the CDHS CEQA permit requirements.

Please contact the CDHS local district office at (619) 525-4159 for assistance with the CDHS requirement for permit application, contact Jing Chao, PE with any questions.

Sincerely,

Nancy Dagle
Environmental Scientist
CDHS Environmental Review Unit

Cc:
Project File
Jing Chao, PE

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

December 31, 2007

Mr. Jeffrey D. Sims, P.E.
WESTERN MUNICIPAL WATER DISTRICT
P.O. Box 5286
Riverside, CA 92517-5286

Re: SCH#2006101152; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the La Sierra Avenue Water Transmission Pipeline Project; Riverside County, California

Dear Mr. Sims:

The Native American Heritage Commission is the state agency designated to protect California's Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c (CEQA guidelines). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

√ Contact the appropriate California Historic Resources Information Center (CHRIS). Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ http://www.ohp.parks.ca.gov/1068/files/IC%20Roster.pdf The record search will determine:

- If a part or the entire APE has been previously surveyed for cultural resources.
- If any known cultural resources have already been recorded in or adjacent to the APE.
- If the probability is low, moderate, or high that cultural resources are located in the APE.
- If a survey is required to determine whether previously unrecorded cultural resources are present.

√ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
- The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.

√ Contact the Native American Heritage Commission (NAHC) for:

* A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section; .

- The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s).

√ Lack of surface evidence of archeological resources does not preclude their subsurface existence.

- Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the

NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. . Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

√ Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

Native American Contacts
Riverside County
December 31, 2007

Cahuilla Band of Indians
Anthony Madrigal, Jr., Interim-Chairperson
P.O. Box 391760 Cahuilla
Anza , CA 92539
tribalcouncil@cahuilla.net
(951) 763-2631

(951) 763-2632 Fax

Gabrieleno/Tongva San Gabriel Band of Mission Indians - Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
ChiefRBwife@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resource Center
P.O. Box 1477 Luiseno
Temecula , CA 92593
(951) 308-9295 Ext 8106
(951) 676-2768
(951) 506-9491 Fax

Santa Rosa Band of Mission Indians
John Marcus, Chairman
P.O. Box 609 Cahuilla
Hemet , CA 92546
srtribaloffice@aol.com
(951) 658-5311
(951) 658-6733 Fax

Ramona Band of Mission Indians
Joseph Hamilton, vice chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

Gabrielino Band of Mission Indians of CA
Ms. Susan Frank
PO Box 3021 Gabrielino
Beaumont , CA 92223
(951) 897-2536 Phone/Fax

San Manuel Band of Mission Indians
Henry Duro, Chairperson
26569 Community Center Drive Serrano
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX
(909) 864-3370 Fax

Morongo Band of Mission Indians
Britt W. Wilson, Cultural Resources-Project Manager
49750 Seminole Drive Cahuilla
Cabazon , CA 92230 Serrano
britt_wilson@morongo.org
(951) 755-5206
(951) 755-5200/323-0822-cell
(951) 922-8146 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed SCH#2006101152; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for LA sierra Avenue Water Transmission Pipeline Project; Riverside; Riverside County, California.

Native American Contacts
Riverside County
December 31, 2007

San Manuel Band of Mission Indians
Ann Brierty, Environmantal Department
101 Pure Water Lane Serrano
Highland , CA 92346
abrierty@sanmanuel-nsn.gov
(909) 863-5899 EXT-4321

(909) 862-5152 Fax

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula , CA 92593
tbrown@pechanga-nsn.gov
(951) 676-2768
(951) 695-1778 Fax

Serrano Nation of Indians
Goldie Walker
6588 Valaria Drive Serrano
Highland , CA 92346
(909) 862-9883

Soboba Band of Luiseno Indians
Harold Arres, Cultural Resources Manager
P.O. Box 487 Luiseno
San Jacinto , CA 92581
harres@soboba-nsn.gov
(951) 654-2765
FAX: (951) 654-4198

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed SCH#2006101152; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for LA sierra Avenue Water Transmission Pipeline Project; Riverside; Riverside County, California.

Keith S. Dunbar, P.E., F. ASCE

From: Norm Thomas [nltcalifornia@yahoo.com]
Sent: Thursday, December 27, 2007 5:22 PM
To: Derek Kawaii
Cc: Keith Dunbar
Subject: RE: Western MWD - La Sierra Avenue Water Transmission PipelineEIR, SCH#2006101152

Hi Derek,
Thanks for the response. By copy of this, I'll forward to Keith Dunbar the Draft EIR author for use in preparing the final.

Have a great day
Norm

Derek Kawaii <dkawaii@wmwd.com> wrote:

> Norm,
>
> I think that this is one of your projects. I found the NOC and authors chapter of the EIR via Google and attached it.
>
> Below is one of the comments that we received on the EIR.
> **From:** Michele Underwood
> **Sent:** Thursday, December 20, 2007 3:33 PM
> **To:** Joseph Bernosky; Tom Safford; Derek Kawaii
> **Cc:** Stella Ceballos
> **Subject:** FW: Western MWD - La Sierra Avenue Water Transmission PipelineEIR, SCH#2006101152
>
> Afternoon Joe, Tom and Derek,
> I couldn't remember who's project this was, so I am forwarding this to you all. It came into our water@wmwd.com account. Thanks! Michele
>
> Western Municipal Water District proposes to contruct a potable water pipeline from the Arlington Desalter (Sterling and Fillmore St, Riverside) to its water distribution system at Mockingbird Cyn Pump Station (Mockingbird Cyn Drive and Van Buren). They realize that some drainages will be crossed or encroached upon along the pipeline route, and that a Nationwide Permit and CWA Section 401 Water Quality Certification will be needed.
>
> At this time, I do not expect to comment on this EIR (deadline Jan. 24), but I urge WMWD representatives through this email to consult with the Regional Water Quality Control Board office (Adam Fischer, 951-320-6363) early in their permit process to determine appropriate mitigation, BMPs, and 401 application procedures. I will retain the EIR in our in-house CEQA Library.
>
> Glenn Robertson, Engineering Geologist
> CEQA Coordinator
> California Regional Water Quality Control Board, Santa Ana Region (8)
> 3737 Main Street, Suite 500
> Riverside, CA 92501-3348
> (951) 782-3259
> Fax (951) 781-6288
> Email grobertson@waterboards.ca.gov
> Website: www.waterboards.ca.gov/santaana

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maureen F. Gorsen, Director
5796 Corporate Avenue
Cypress, California 90630

Arnold Schwarzenegger
Governor

January 29, 2008

Mr. Jeffery Sims, P.E.
Assistant General Manager
Western Municipal Water District (WMWD)
Post Office Box 5286
Riverside, California 92517

PUBLIC NOTICE OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LA SIERRA AVENUE WATER TRANSMISSION PIPELINE (A PORTION OF THE RIVERSIDE CORONA FEEDER) PROJECT, LA SIERRA AND CLEVELAND, RIVERSIDE, RIVERSIDE COUNTY (SCH#2006101152)

Dear Mr. Sims:

The Department of Toxic Substances Control (DTSC) has received your submitted Public Notice, Initial Study (IS) and the Draft Environmental Impact Report (EIR) for the above-mentioned project. The following project description is stated in your document: "WMWD intends to construct a water transmission line between its Arlington Desalter and its water distribution systems at its Mockingbird Pump Station near the intersection of Van Buren Boulevard and Mockingbird. During July 2004, WMWD adopted its Draft Programs Environmental Report (PEIR) for the Western Municipal Water District, Riverside- Corona Feeder Project State Clearinghouse No. 2003031121. The purpose of the Riverside – Corona Feeder (RCF) Project is to convey potable water from the San Bernardino Basin Area to serve the needs of WMWD and other water purveyors within WMWD's service area. The La Sierra Avenue Water Transmission Pipeline is a refinement of Reaches E, F, and G as described in the PEIR." DTSC has the following comments; please address if applicable.

1) The EIR should identify the current or historic uses at the project site that may have resulted in a release of hazardous wastes/substances.

2) The EIR should identify the known or potentially contaminated sites within the proposed Project area. For all identified sites, the EIR should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).

- Envirostor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).

- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.

- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.

- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.

- Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC): A list that is maintained by Regional Water Quality Control Boards.

- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.

- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

3) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents. Please see comment No.17 below for more information.

4) All environmental investigations, sampling and/or remediation for the site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table.

5) Your document states: "A review of those data bases revealed the location of two potential sites (leaking underground fuel tanks (LUFT) within the project area. Those are: Chevron Station 200734 at 3390 La Sierra. Erwin Family, LLC near the intersection of La Sierra and Dufferin. Petroleum contaminants, from each of the above-mentioned sites, may have migrated off-site to areas that would be excavated for construction of the proposed pipeline. An electronic "sniffer" capable of detecting actionable levels of hydrocarbons shall be employed during excavation activities in proximity to the previously referenced sites. Should actionable levels or contaminants be encountered, these materials should be removed and disposed of in accordance with applicable regulation." Proper investigation, sampling and remedial actions overseen by the respective regulatory agencies, if necessary, should be conducted at the site prior to the new development or any construction. All closure, certification or remediation approval reports should be included in the EIR.

6) If any property adjacent to the project site is contaminated with hazardous chemicals, and if the proposed project is within 2,000 feet from a contaminated site, then the proposed development may fall within the "Border Zone of a Contaminated Property." Appropriate precautions should be taken prior to construction if the proposed project is within a Border Zone Property.

7) If buildings, other structures, or associated uses; asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of other related hazardous chemicals, lead-based paints or products, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

8) The project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.

9) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. If it is found necessary, a study of the site and a health risk assessment overseen and approved by the appropriate government agency and a qualified health risk assessor should be conducted to

determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

10) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5).

11) If it is determined that hazardous wastes are or will be generated and the wastes are (a) stored in tanks or containers for more than ninety days, (b) treated onsite, or (c) disposed of onsite, then a permit from DTSC may be required. If so, the facility should contact DTSC at (714) 484-5423 to initiate pre-application discussions and determine the permitting process applicable to the facility.

12) If it is determined that hazardous wastes will be generated, the facility should obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942.

13) Certain hazardous waste treatment processes may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

14) If the project plans include discharging wastewater to a storm drain, you may be required to obtain an NPDES permit from the overseeing Regional Water Quality Control Board (RWQCB).

15) If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area would cease and appropriate health and safety procedures should be implemented.

16) Your document states: "The project area contains land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as evidenced by the vast orange groves along Van Buren Boulevard, Cleveland Avenue and Irving Street." If the site was used for agricultural, cattle ranching or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.

17) Envirostor (formerly CalSites) is a database primarily used by the California Department of Toxic Substances Control, and is accessible through DTSC's website. DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489 for the VCA.

18) In future CEQA documents please provide complete contact person title, e-mail address, and agency web address which contains the project information. Also, if the project title changes, please provide historical project title(s).

If you have any questions regarding this letter, please contact Ms. Teresa Hom, Project Manager, preferably at email: thom@dtsc.ca.gov. Her office number is (714) 484-5477 and fax at (714) 484-5438.

Sincerely,

Greg Holmes
Unit Chief
Southern California Cleanup Operations Branch - Cypress Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
1001 I Street, 22nd Floor, M.S. 22-2
Sacramento, California 95814
gmoskat@dtsc.ca.gov

CEQA#1983

WARREN D. WILLIAMS
General Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
FAX 951.788.9965
www.floodcontrol.co.riverside.ca.us

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

January 16, 2008

Mr. Keith S. Dunbar, P.E.,F. ASCE
K.S. Dunbar and Associates, Inc.
Environmental Engineering
3035 Calle Frontera
San Clemente, CA 92673-3012

Dear Mr. Dunbar:

Re: Notice of Availability of a Draft Environmental Impact Report for the La Sierra Avenue Water Transmission Pipeline

This letter is written in response to the Notice of Availability of a Draft Environmental Impact Report (DEIR) for the La Sierra Avenue Water Transmission Pipeline. The proposed project would consist of the construction of a potable water pipeline, with standard appurtenances, from Western Municipal Water District's (WMWD) Arlington Desalter Water Purification Facility near the extensions of Sterling and Fillmore Streets in the city of Riverside to its water distribution system located at Mockingbird Canyon Drive and Van Buren Boulevard. The proposed project will also include the construction of a water pumping plant and a hydroelectric generating facility. The proposed project is located in the city of Riverside and the unincorporated Lake Mathews/Woodcrest area of Riverside County.

The Riverside County Flood Control and Water Conservation District has no comments at this time.

Thank you for the opportunity to review the DEIR. Please forward any subsequent environmental documents regarding the project to my attention at this office. Any further questions concerning this letter may be referred to Jason Swenson at 951.955.8082 or me at 951.955.1233.

Very truly yours,

TERESA TUNG
Senior Civil Engineer

c: TLMA
Attn: David Mares

JDS:mcv
P8\117578

Community Development
Department
Planning Division

January 23, 2008

Keith S. Dunbar, P.E., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
3035 Calle Frontera
San Clemente, CA 92673-3012

SUBJECT: NOTICE OF COMPLETION (NOC) AND NOTICE OF AVAILABILITY (NOA) OF DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE LA SIERRA AVENUE WATER TRANSMISSION PIPELINE PROJECT

Dear Mr. Dunbar:

Thank you for the opportunity to review and comment on the subject project. Since the project is located within the City limits and its sphere of influence, we wish to respond. The City provided comments concerning the Notice of Preparation (NOP) of the DEIR and met with WMWD representatives in July 2007. The City now understands that the project is part of the Riverside-Corona Feeder, in which a prior Program EIR was prepared in 2004. The subject NOC is for a supplemental Draft EIR for Reach E of the larger project.

The City supports the La Sierra Avenue Water Transmission project. However, based on review of the Draft EIR for the project, the City offers the following comments:

Planning Division Comments

1. The City notes that the two to five million gallon reservoir proposed last summer is no longer part of the project. Please provide the City with clarification on whether water storage has been completely eliminated from the project or will occur at a different segment of the project;

2. The City's General Plan 2025 Program was adopted and the Final Program EIR (FPEIR) was certified in November, 2007. This DEIR still refers to the City's previous General Plan and EIR. The EIR should be updated to refer to the City's recently adopted General Plan (GP) 2025 Program documents and GP 2025 FPEIR. The adopted documents and latest versions of the Municipal Code are available at the following links:

   http://aquarius.riversideca.gov/plnimage7/Browse.aspx?dbid=2; and,

3900 Main Street • Riverside, CA 92522 • 951.826.5371 • fax 951.826.5981 • www.riversideca.gov

http://www.riversideca.gov/municode/.

3. Figures 2-1 and 6-1 of the DEIR have Buchanan Street incorrectly labeled as Pierce Street. Buchanan Street is approximately ½ mile to the west of Pierce Street. Pierce Street aligns with the street labeled Riverwalk Parkway on the exhibits. The EIR should include revised versions of these exhibits with the streets correctly labeled and with the correct pipeline alignment shown along Pierce Street;

4. The DEIR incorrectly reflects the City limits for Riverside. To ensure that the appropriate jurisdiction is contacted for coordination of work, all exhibits depicting City limits should be corrected throughout the EIR. Specifically, exhibits need to be revised to include Annexation area #110 for the Alvord Unified School District. Please see the attached map depicting the geographical area (south of Indiana Avenue at Pierce Street) to be included within the City limits;

5. All appropriate mitigation measures and recommended studies identified for Reach E on Table I-1-A of the FPEIR for the Riverside-Corona Feeder Project should be applied to this project;

6. A street opening permit is required from the Public Works Department of the City. The permit application needs to include traffic control plans and a Waste Discharge Identification Number issued by the State Water Control Board;

7. A number of the City's Codes apply to this project and are not addressed within the EIR.

    a. Title 19 – Zoning Code – applies to that portion of the project proposed on private property. Those portions of the pipeline crossing private property and the construction of the pump station should be evaluated under the City's Conditional Use Permit (CUP) process. The pump station is currently proposed on property in the BMP – Business and Manufacturing Park Zone. The City requests that WMWD apply for a CUP prior to approval and certification of the project EIR, so details of the location, design, landscaping, and other aspects of the project can be reviewed in detail at a public hearing. All aspects of the project can be included under one CUP application and the results of such application need to be addressed within the EIR;

    b. Title 20 – Cultural Resources – A Certificate of Appropriateness is required in regard to affected cultural resources (Victoria Avenue, Gage Canal, and historic trees). In the case of historic trees, such as those along Citrus Heritage Park and Victoria Avenue, any proposed removal or relocation of City trees will need to be reviewed by the City prior to removal. The impacts related to any removal of cultural resources and historic trees needs to be addressed as part of the DEIR. To help mitigate impacts to important cultural resources and City infrastructure to a less than significant level, the EIR needs to be updated to include a mitigation measure requiring that "the pipeline be laid within the center paving, and the

entire streets be ground and repaved to avoid impacts to important cultural resources and City infrastructure." In addition, the cultural resources mitigation measures found in Table I-1-A of the FPEIR for the Riverside-Corona Feeder Project should be included as mitigation in the EIR for this project.

c. Title 15 – Trees and Vegetation – does not permit cutting, removal, or trenching near trees in the public right-of-way, except in accordance with the Park and Recreation Commission policies.

d. Title 17 – Grading – applies to the proposed work on private property in regard to grading and/or trenching. Grading is not permitted within 50-feet of the City's arroyos. However, it is noted that the project proposes to cross the Mockingbird Arroyo and this has not been adequately addressed in the EIR. As well the pipeline is proposed to cross a blue-line stream in the vicinity of Firethorn Avenue and this was also not adequately addressed within the EIR. The EIR needs to address the impacts to the arroyo and blue-line stream and reflect the City's grading requirements;

e. Title 7 – Noise – applies to those portions of the project within the City limits. This Title permits construction between the hours of 7 a.m. and 7 p.m. on week days and between 8 a.m. and 5 p.m. on Saturdays. Work is not permitted at any time on Sundays or federal holidays. This should be reflected in the EIR;

f. The Citywide Design and Sign Guidelines are also applicable to the portions of the project that are above-ground. The EIR needs to fully evaluate and mitigate aesthetic impacts, specifically aesthetic impacts associated with the 70-foot by 100-foot pump station facility proposed at 11615 Sterling Avenue. At this time the City does not have plans that show what the pump station facility will look like. This does not allow the opportunity to provide any specific input regarding its design and aesthetic concerns. It is noted that the facility is proposed to be located along the Riverside (SR91) Freeway at a gateway to the City of Riverside where view and appearance of the facility from the freeway is a significant concern. The City wishes to protect the view from the freeway from aesthetically unpleasing uses such as unscreened/exposed utility equipment. As such, the City suggests an alternative, less visible location for the facility. If another location is not feasible, the pump station equipment needs to be fully screened or enclosed within a building architecturally compatible with its surroundings to sufficiently address aesthetic concerns;

The City requests that plans be made available as soon as possible, and that WMWD submits applications for the review and approval of all aspects of Reach E with the City. All conditions of the CUP and any needed Certificate of Appropriateness should be addressed within the EIR;

Chapter 6, Biological Resources Comments

8. The Biological Resources section of the EIR needs to be revised to include a complete habitat assessment analysis prepared by a qualified biologist. The analysis needs to fully evaluate biological impacts and identify and provide focused surveys needed, including but not be limited to, a burrowing owl survey, as well as assessment of impacts to blue line streams, riparian riverine areas, and arroyos. Biological studies need to be in compliance with the requirements of the MSHCP;

Public Works Department Comments

9. The City prefers the alternative alignment that travels furthest down Fillmore Street to Victoria Avenue. Since the project will result in significant damage to the City's public infrastructure investment, the EIR should include a mitigation requiring that the asphalt surface be ground and repaved curb to curb after installation of the pipeline and any other damage to the street be fully repaired. Additionally, WMWD needs to work closely with the City to ensure that Public Works' projects are not negatively impacted. Attached are complete comments from Public Works Department for reference;

Once again thank you for the opportunity to comment on the NOC and NOA. We look forward to continued communication and coordination on this project. Should you have any questions regarding this letter, please feel free to contact Barbara Bouska, Associate Planner at (951) 826-5507 or bbouska@riversideca.gov.

Sincerely,

Ken Gutierrez, AICP
Planning Director

Attachments

cc: Ronald Loveridge, Mayor
Riverside City Council Members
Brad Hudson, City Manager
Michael Beck, Assistant City Manager
Kevin Milligan, Utilities Assistant Director/Water
Stephen Badgett, Utilities Assistant Director/Energy Delivery
Siobhan Foster, Public Works Director
Tom Boyd, Deputy Public Works Director/City Engineer
Erin Gettis, Historic Preservation Officer

Annexation 110 - Alvord High School (P05-1102)
LAFCO 2006-100-2, Vicinity Map
Effective October 27, 2006

NORTH

0 250 500
Feet

CITY OF RIVERSIDE

MEMORANDUM

Engineering

DATE: MAY 21, 2007

TO: BARBARA MILOSEVIC, ASSOCIATE PLANNER

FROM: THOMAS BOYD, DEPUTY PUBLIC WORKS DIRECTOR

CC: STEVE LIBRING, TRAFFIC ENGINEER

RE: **WESTERN MUNICIPAL WATER DISTRICT PIPELINE ROUTE**

The Public Works Department has reviewed the *Draft Environmental Impact Report* (EIR) for the Western Municipal Water District's (WMWD) proposed La Sierra Water Transmission Pipeline. The project consists of a 48 to 54-inch water transmission pipeline between the Arlington Desalter on Sterling Avenue and WMWD's Mockingbird Canyon Pump Station near the intersection of Van Buren Boulevard and Mockingbird Canyon.

In Chapter 2, Project Description, the EIR presents a "Main Alternative" with two varying subsets. The Public Works Department proposes that WMWD design the water transmission pipeline using the alignment described in the **second subset**. When compared to the first subset, this alignment would extend along Fillmore Street in a southerly direction to its intersection at Victoria Avenue. It would then travel in a northeasterly direction to its intersection with La Sierra Avenue. From that point on, it will follow the alignment proposed in the "Main Alternative".

Installation of the proposed pipeline will result in significant damage to the City's investment in the La Sierra Widening project recently completed. The City will require that the asphalt surface be ground and repaved from curb to curb after installation of the pipeline and any other damage to the street be fully repaired.

Some of the reasons Public Works prefers the Main Alternative with the second subset pipeline alignment are the following:

- Minimizes impacts to La Sierra Avenue. La Sierra Avenue will be impacted during the La Sierra/SR-91 Interchange construction (anticipated to begin August 2007 and continuing for 18 months)
- La Sierra is a major arterial – proposed alignment minimizes impacts to the traffic circulation

- Minimizes impacts the construction of a new high school near Indiana Avenue at Pierce Street
- Minimizes impacts to the Arizona Middle School

Finally, the EIR needs to provide a construction schedule for the proposed pipeline so Public Works is confident that other City projects will not be negatively impacted by WMWD's Pipeline Project.

Appendix B
Revised Exhibits

Figure 2-1 La Sierra Avenue Water Transmission Line Alignment

CULTURAL RESOURCES ASSESSMENT

OF THE LA SIERRA WATER PIPELINE

RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

K.S. Dunbar & Associates
3035 Calle Frontera
San Clemente, CA 92673

Prepared by:

Peak & Associates, Inc.
3941 Park Drive, Suite 20, #329
El Dorado Hills, CA 95762

March 9, 2006
(Job # 06-016)

INTRODUCTION

The proposed La Sierra Water Pipeline for Western Municipal Water District (WMWD) lies in the western Riverside area (Arlington neighborhood) of Riverside County. The alignment will be placed in existing streets running primarily south from the starting point at the existing WMWD desalinization plant adjacent to the SR91 expressway to the existing tank on a ridge above the junction of El Sobrante Road and La Sierra Avenue (Map 1). The project lies within the El Sobrante de San Jacinto land grant in township 3 and 4 south, range 5 and 6 west.

Due to federal funding, the project qualifies as a federal undertaking in terms of Section 106 of the National Historic Resources Protection Act of 1966 (16 U.S.C. §470, as amended) and the provisions of federal law for identification and protection of cultural resources apply. This report is submitted to document a finding of "no effect."

CULTURAL HISTORY

Prehistory

The prehistory of the coastal region has been much more intensively studied than that of the inland areas just to the east. It appears that the broad outlines of prehistory are similar, but there are known divergences between the coast and the inland zones and more will undoubtedly be identified as more study is done of inland sites.

Moratto proposed a Paleo-Coastal Tradition to incorporate several early components on the central and southern California coast that are "...distinctive yet apparently related to the Western Pluvial Lakes Tradition" (Moratto 1984:104). While rare, several sites with components dating roughly from 11,000 to 8,000 B.P. (before present) have been examined along the coast and the way of life appears sufficiently similar to group these components as a Tradition. In this case the tradition involves exploitation of bay and estuary settings to harvest both terrestrial and aquatic food sources with a rather generalized tool kit.

The next major era of prehistoric occupation in the area is the Early Period, from about 8,000 to 3,300 B.P. As described by Chester King (1981) this incorporates several previously named archeological cultures, including the Oak Grove Culture, the Hunting Culture, the Archaic and Early Mainland cultures, the Millingstone and Intermediate horizons and the Encinitas Tradition and part of the Campbell Tradition. There have been several hypotheses related to why there is a cultural distinctive cultural change between this and the preceding era. Migration of new populations has been suggested by several researchers, either

along the coast or from the inland areas, but most archeologists now feel that this period results from *in situ* development.

The common factor in the Early Period is elaboration of the technology related to seed procurement and processing. This was accompanied by increasingly specialized and efficient means of utilizing the resources available in the environment in general. The general picture is of cultural stability, with the inhabitants slowly becoming more and more comfortable in their setting. During the period resources from a wide range of micro-environments can find their way to the same village through trade with related groups or seasonal movement of the village population. By the end of the period external trade relationships are quite extensive and bead production has moved from a primarily home-use decorative industry to production of an exchange medium.

The Middle Period, from about 3,300 to 800 B.P., is marked by continued economic specialization and, apparently, population growth. Although marine resources were exploited from the earliest known occupation of the coast, these were primarily shallow water fish and shellfish, although deep water fish were sometimes taken. In the Middle Period large pelagic fish were a major component of the coastal diet. This may mark the introduction of the plank canoe (King 1981). Villages are established at several locations along the coast that had not been occupied before. Indicating population expansion made possible by more efficient resource utilization. A similar pattern is seen in the inland areas, where development of mortar and pestle technology allowed utilization of the acorn as a major food source.

The end of the Middle Period may be a period of upset in other areas of California. Trade in obsidian, common through most of the Middle Period, drops almost to nothing. However, in the southern coastal zone there is no evidence of massive upset, just a continuation and intensification of trends already present in the Middle Period through to contact with the Spanish, which resulted in rapid destruction of the Native American way of life.

Ethnography

At the time of Euro-American contact, the project area was controlled by the Cahuilla. However, this was the far western edge of Cahuilla territory at that time. They controlled a large territory stretching from the Riverside vicinity to the Salton Sea and beyond. The desert areas in the Lower Sonoran ecological zone, such as the project vicinity, were not the most productive parts of Cahuilla territory, therefore, not the most densely settled. The lower slopes of the San Bernardino, San Jacinto and Santa Rosa mountains and the interior valleys near these areas were the Cahuilla heartland. Still, there are enough recorded archeological sites in the vicinity, almost all of them related to seed processing, to demonstrate the Cahuilla exploited this area

for food regularly, if perhaps, seasonally.

Because of the large size of Cahuilla territory and the considerable differences in elevation within it, a large variety of animal and vegetable foods were available within the territory. The main animal sources of food were deer, rabbit, jackrabbit, woodrat, mice, and ground squirrels, antelope, valley and mountain quail, doves, ducks, and other birds. Men were the primary procurers of animal foods, but the bulk of the diet was made up of a wide variety of vegetable foods, mostly collected and processed by women. The Cahuilla relied on six species of acorns and numerous varieties of seeds including manzanita, sunflower, and sage among others. To add to the staple crop of seeds, they also collected bulbs, roots, cactus pods, and various fruits among the hundreds of species that were used for food manufacture and medicine (Bean and Saubel 1972). Through trade with the neighboring Colorado River tribes, the Cahuilla had an incipient agricultural system, that is, they planted seeds to grow corn, beans, squash and melons, but did little to encourage growth or tend the plants. They were just another food source supplementing the many that grew wild in their territory (Bean 1978:578).

Older men were most active in rituals and ceremonial affairs. They created most of the ceremonial paraphernalia used by the tribe. The Cahuilla, more of a linguistic grouping than a political unit, had no overall chief, but they did have hereditary leaders of lineages. These lineages were grouped in moieties, either wildcat of coyote, and one lineage was recognized as the founding lineage of the moiety. The leader of the founding lineage was, thus, the chief of the moiety. Each lineage head had an assistant, who had important ritual duties of his own, and an advisory council of ritual specialists and shamans. These shamans each had his own special area of knowledge about the environment or ritual magic. These positions were hereditary with each man training his own successor from his own lineage who showed the proper innate abilities. The shamans were both admired and feared and they formed a coherent social group that cross-cut the lineage structure.

Linguistically, the Cahuilla spoke one of the four languages in the Cupan subgroup of the Takic linguistic family. The language is most closely related to Gabrielino, their neighbors to the west. The Cahuilla traded widely, in fact, some Cahuillas specialized as traders and traveled as far Santa Catalina to the west and the Gila River to the east to exchange goods. Warfare was most often an internal matter between rival lineages rather than fighting with non-Cahuilla tribes, although they did defend their territory as necessary (Bean 1978:582).

The Cahuilla were able to maintain their native social structure later in time than many California Indians. The Anza expedition crossed part of Cahuilla territory in 1874, but land routes from Mexico were soon cut by hostilities with Quechan Indians. The Spanish expansion then leapfrogged up the coast from mission to

mission. Although some Cahuilla were baptized at San Gabriel, San Luis Rey and San Diego, the tribes interior location protected them from most of the early impact of the Spanish. Although diseases depleted the population, the rest lived an essentially aboriginal life. Even when the Spanish began grazing cattle on Cahuilla territory, they viewed it more as an economic opportunity, working for wages as herdsmen part of the time and returning to their villages the rest of the year.

When the Americans took over it became steadily more difficult for the Cahuilla to maintain a separate identity. A smallpox epidemic in 1863 was devastating, then reservations were established and by 1891 federal supervision of the Cahuilla was intensive. The effects of government schools, increased missionary activities and federal land programs eventually reduced native culture to a shadow of its former self. Despite this, many traditional cultural practices continue to this day.

History

The town of Riverside was established in 1870 by Judge J. W. North, who had already been prominent in the political and cultural affairs of Minnesota and Nevada. He developed an interest in establishing an agricultural colony in California and, after an extensive inspection tour, settled on what is now Riverside. Judge North's selection was a good one, as Riverside was incorporated in 1883 and became the county seat in 1893.

Of equal importance in the development of Riverside was Mrs. Eliza Tibbetts. A Professor Sanders, the husband of an old friend, sent Mrs. Tibbetts two budling navel orange trees from Brazil, in 1873 or thereabouts. Mrs. Tibbetts was able to keep them alive and from those two ancestors developed the entire southern California citrus industry. One of these trees still survives, transplanted to near the corner of Magnolia and Arlington. A memorial to Mrs. Tibbetts has been erected at that site (Hoover *et al.* 1990).

From its early agricultural beginnings the city has grown steadily and the basis of the economy has diversified. The strategic location of the town between the coastal and desert zones and on the major transportation corridors between the coast and the eastern markets has contributed greatly to this growth.

INFORMATION CENTER RECORD SEARCH

A record search was requested from the Eastern Information Center of the California Historical Resources Information System at Riverside. The purpose of the search was to identify any previous surveys and recorded resources near the proposed alignment. The Information Center reply indicates that much of the route has

already been surveyed, although some of the surveys took place several years ago. There are 18 reports on file at the Information Center that cover lands near the proposed alignment, four of them covering portions of the proposed alignment. The latter are:

Drover, Christopher R., Ph.D.
1981 Environmental Impact Evaluation: Archaeological Assessment of Zone Change 3296 Near La Sierra, California.

This survey of about 40 acres included a stretch of La Sierra about one half mile long. No resources were recorded, but CA-RIV-7820 was recently recorded within the area of this survey (see site discussion below).

Scientific Resource Surveys, Inc.
1981 Cultural Resources Report on (□) 1330 Acres Located Adjacent to Lake Matthews in the County of Riverside.

This coverage included the southern end of the pipeline alignment. No sites recorded in the current project area.

McKenna *et al.*
2005aA Phase I cultural Resources Investigation for the Proposed Alvord High School Site at the Frost Reservoir on Indiana Avenue in the City of Riverside, Riverside County, California.

This covered a portion of the northern part of the project area where the route goes around the site of Frost Reservoir to gain the main line of Indiana Avenue. Frost/Sayward Reservoir and two canals (Upper and Lower Riverside Canal) were recorded.

McKenna *et al.*
2005bA Phase I Cultural Resources Investigation for the Proposed Corona Feeder Master Plan Project Area, Riverside County, California.

This linear survey crosses the current alignment at a ninety degree angle in two separate places. An insignificant amount of the current project area was covered.

Among the other projects are several that come up to La Sierra Avenue on one side or the other, but do not cross it. These are not, technically, within the project area, but it is highly likely that any resources that would be of interest to the current project would have been recorded as a result of these earlier projects. The portion of the project area covered in this fashion includes almost all of the southern portion of the pipeline, that area mapped on the Lake Mathews USGS map. Almost all of the northern half of the project has not been surveyed.

Recorded resources that are within the record search area, that

is, within one-quarter of a mile of the project area, include the following (from north to south).

CA-RIV-4791 The Lower Riverside Canal appears to be crossed at four locations by the project. This large irrigation canal was constructed about 1874 and in use until 1914. It was evaluated as not eligible for the National Register in earlier projects, but the latest update of the site record suggests that it should be found eligible on the grounds that it was an integral and necessary part of the success of the citrus industry in this vicinity.

P33-14767 The site of the Frost/Sayward Reservoir. The alignment does not cross this feature, if it still exists. It was scheduled to be replaced by a school at the time it was recorded.

CA-RIV-7900 This is a house, 11225 Indiana Avenue, evaluated as not eligible.

CA-RIV-7899 This house, adjacent to the above house at 11215 Indiana, was evaluated as not eligible for the National Register, but possibly significant at the county level.

Both of the above houses are located on the north side of Indiana Avenue and are set back far enough from the street to insure that the project will not affect them.

CA-RIV-5672H This site consists of two segments of concrete irrigation flume that appear to date to 1910 or so. The site is over 60 meters east of the project area.

P33-14747 This is the location of two artifacts (manos, the grinding stone used on a grinding slab or "slick") that were recovered during construction monitoring. There is no recorded site in the immediate vicinity and the manos were recovered adjacent to La Sierra. It is possible they could have been brought in with road fill.

CA-RIV-7820 This is the site that was later recorded in the area of a previous survey. It is an historic trash scatter on a hill east of La Sierra. This does not appear to be a significant resource.

CA-RIV-7331 The site consists of two grinding slicks over 90 meters west of La Sierra.

CA-RIV-2227 This consists of a single grinding slick located 300 meters from the project area.

CA-RIV-2097 This site consists of nine grinding slicks on four boulders located about 40 meters west of La Sierra.

CA-RIV-3857 This site consists of grinding features along with waste material from stone tool manufacture or maintenance

(debitage) and may have some depth of deposit. However, it is located 60 meters east of La Sierra.

The Information Center included copies of historic maps in their report. The 1901 USGS maps show several houses along Indiana Avenue in the project vicinity, but very few near La Sierra (Taylor Road, at the time). The 1942 USGS indicates many more buildings along both roads. There are no other features indicated near the project area.

NATIVE AMERICAN CONTACTS

The Native American Heritage Commission in Sacramento was contacted to obtain a list of individuals who could be contacted for information on the project area and also to check the Sacred Lands Inventory. No properties listed on the Sacred Lands Inventory are in or near the project area.
A letter and accompanying map of the project vicinity was sent to each of the ten individuals identified by the Native American Heritage Commission as persons who might have information to contribute regarding potential Native American concerns in the project area. We requested any information or concerns that they might have regarding village sites, traditional properties or modern Native American uses in any portion of the project vicinity. The letter offered to keep the information confidential if so desired. To date, no replies have been received. (Appendix 2)

FIELD INSPECTION

The field inspection of the project area was conducted on February 16, 2006, by Robert Gerry of Peak & Associates. It was quickly apparent that not too much new survey was going to be possible because the original ground surface is not visible in most areas. Development and associated landscaping has covered the bulk of the area.

The inspection started at the north end of the project at the WMWD Arlington desalinization facility. This lies just east of the large office building and paved parking area of the Santa Ana Watershed Project Authority at the end of Sterling Avenue. All of this area is paved. All of both sides of Sterling Avenue is the Riverside Business Center, featuring one and two story warehouse, office and commercial buildings. Only one lot at the northeast end is undeveloped. The frontage of this lot was inspected, a length of about 200 feet, with negative results.

At the west end of Sterling the route turns south on Pierce

Street. There is a vacant lot on west side between Sterling and the Railroad where about 140 feet of very disturbed ground was inspected.
The railroad appears on the 1901 USGS map (Riverside 15') as the Southern California Railroad (Sam Bernardino and San Diego Line) and on the 1942 edition as the Atchison Topeka and Santa Fe. It is now used by Metro Link as well. A concrete lined drainage ditch parallels the railroad, but it does not appear on either of the above maps. South of the railroad there is a recent subdivision on the east side of Pierce and older bungalows on the wet. None of the latter appear to be of architectural interest. The Alvord High School appears on the 1942 USGS map, but the buildings are set well back from Pierce and will not be affected by this project. There is also a vacant lot at the northwest corner of Pierce and Indiana Avenue that allowed some surface inspection, but again, it is badly disturbed and results were negative.

The alignment turns east along Indiana and the western section of this portion is characterized by a steep drop on the north side to a recent residential subdivision and on the south by the embankment of the Lower Riverside Canal. The latter has been recorded (CA-RIV-4791H) and evaluated as not significant. In the vicinity of this project the concrete lining of the canal has been completely destroyed in some areas and is badly deteriorated in others. Another recorded resource (Primary number P-33-14767) is the old Frost/Sayward Reservoir, which lies south of the canal further from the current project alignment. The reservoir was recorded in 2005 due to plans to build a new campus of Alvord High School at this location. This has not happened as yet.

Roughly 300 feet west of Sayward Circle the canal turns south away from Indiana Avenue. From this point east to the intersection with La Sierra, the route is typically lined by new housing on both sides of Indiana. The north side toward the east end of the alignment is lined by modern commercial structures. Two recorded old houses in this area sat on property now occupied by a self storage facility. On the south side the pattern is broken by the Orrenmaa School east of Filmore and older bungalows east of that. Most of the older residences are stucco bungalows, but there are also a couple of homes in the 1960s modern style. All are set far enough back form the street that they sill not be impacted by the current project.

East of the residences on the south side of Indiana there is a small canal then a large open lot with an almost complete gas station on it at the corner of La Sierra. This lot has been extensively disturbed by construction equipment and inspection of the frontage on both Indiana and LA Sierra failed to identify any cultural resources. The east side of La Sierra is occupied by a subdivision under construction. The construction destroyed one recorded historic site, CA-RIV-4672H, which was not a significant resource.

The northern part of La Sierra within the project area is built above the natural grade of the surrounding land. Just south of the point where the grades coincide again, La Sierra crosses the Lower Riverside canal, which passes in a modern piped culvert. This is the only place where the proposed pipeline will affect a recorded resource, and the impact here will be negligible since the crossing is already modernized.

From this point south to El Sobrante Road both sides of La Sierra are, in most areas, bordered by modern housing, usually with sound walls between the road and the residences. This situation provided few opportunities for field inspection. In addition, almost all of this area is part of the La Sierra Road Improvement Project, currently underway, which will add lanes, sidewalks and landscaping to the route. The investigator inspected the western margin of the Arizona Middle School Grounds and an orchard just south of Victoria Avenue, with negative results.

Previously recorded sites in the southern portion of the project area included CA-RIV-7820, a concentration of historic artifacts on a hilltop, and CA-RIV-3857, a prehistoric food processing area and camp. Also, P-33-14747, a location where two prehistoric artifacts were found during construction monitoring is located in this vicinity. The present inspection noted that CA-RIV-7820 still exists, but the hill it lies on rises more than ten feet above the grade of La Sierra, so there will be no effect. The location of CA-RIV-3857 was observed at a distance (it is on private land) and it is separated from La Sierra by a wide gully. The site record says it is 60 meters east of La Sierra and the current inspection indicates this may be an underestimate. The construction that was monitored at P-33-14747 is a subdivision which is still not entirely built out, but the intensive ground disturbance has eliminated any chance of the survival of a site in this area.

All of the project area from the location of CA-RIV-7820 near Orange Lane south to El Sobrante has already been surveyed. Sites in the area that are too far from the alignment to be of concern are CA-RIV-2097, -2227 and -7331. All of these are small prehistoric sites characterized by grinding slicks on boulders.

At El Sobrante the route turns west to the existing tank about 1200 feet west of La Sierra. This area had already been surveyed, and much of it is very steep, but it is the only area of extensive original ground surface visibility in the project area. As a result, the current investigator examined it again. There was nothing new to report. In particular, there are no large boulders or bedrock exposures near the alignment in this area, therefore, no chance for the sites related to food processing that are so common in this area.

CONCLUSIONS

The only known cultural resource that will be crossed by the alignment is a tiny section of the Lower Riverside Canal. This resource has been recorded, but evaluated as not eligible. In addition, this crossing already features a new culvert under the recently improved La Sierra Avenue, so there is no historic structure in the current impact area. This proposed pipeline installation does not constitute an □effect□ in terms of Section 106.

As with any surface inspection, there is always a remote possibility that previous activities (both natural and cultural) have obscured prehistoric or historic period artifacts or habitation areas, leaving no surface evidence to identify the resources. If, during construction activities, artifacts or non-native stone (obsidian, fine-grained silicates, basalt) are exposed or if unusual amounts of bone or shell are observed or if areas that contain dark-colored sediment that do not appear to have been created through natural processes are discovered, then work should cease in the immediate area of the discovery and a professionally qualified archeologist should be contacted immediately for a on-site inspection of the discovery. If any bone is uncovered that appears to be human, then state law requires that the Riverside County Coroner must be contacted. If the coroner determines that the bone most likely represents a Native American interment, then he must contact the Native American Heritage Commission in Sacramento so that they can identify the most likely descendants.

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ADDENDUM TO:

CULTURAL RESOURCES ASSESSMENT OF THE LA SIERRA WATER PIPELINE RIVERSIDE COUNTY, CALIFORNIA, CLEVELAND AVENUE ALTERNATIVE

Prepared for:

K.S. Dunbar & Associates
3035 Calle Frontera
San Clemente, CA 92673

Prepared by:

Peak & Associates, Inc.
3941 Park Drive, Suite 20, #329
El Dorado Hills, CA 95762

November 28, 2006
(Job # 06-095)

INTRODUCTION

The proposed La Sierra Water Pipeline for Western Municipal Water District (WMWD) lies in the western Riverside area (Arlington neighborhood) of Riverside County. The original alignment of the pipeline was surveyed for cultural resources in February of 2006 and reported in March by Peak & Associates, Inc. The present report covers alternatives that were not proposed at that time. The primary addition is the Cleveland Avenue Alternative, which leaves the previously surveyed route at the corner of Cleveland and La Sierra and goes east on Cleveland to Irving and souith on Irving to Mockingbird Canyon. It then winds through the canyon to a terminus at an existing facility on Van Buren Boulevard. Other were two other alternatives surveyed as part of the current project. These were much shorter sections that leave the previosly surveyed alignment at Filmore Avenue and Indiana Avenue and proceed south on Filmore then turn east at either Arizona Avenue or Victoria Avenue to rejoin the previously surveyed alignment on La Sierra (Maps 1 and 2).

The current report omits the background research sections submitted with the original report and addresses only the new alternatives. All of the background information from the original report, including Native American contacts, is applicable to this one as well.

The bulk of the Cleveland Avenue Alternative lies in T3S, R5W, Sections 16, 17, 19, 20 and 21. The rest of the project area is in the El Sobrante de San Jacinto grant.

Due to federal funding, the project qualifies as a "federal undertaking" in terms of Section 106 of the National Historic Resources Protection Act of 1966 (16 U.S.C. §470, as amended) and the provisions of federal law for identification and protection of cultural resources apply. This report is submitted to document a finding of "no effect."

INFORMATION CENTER RECORD SEARCH

The new alternatives incorporate a substantial amount of territory that was not covered by the original record search, therefore, an addendum record search was requested from the Eastern Information Center of the California Historical Resources Information System at Riverside. The purpose of the search was to identify any previous surveys and recorded resources near the proposed alignments. The Information Center reply indicates that most of the route has already been surveyed, the main previous project being:

McKenna *et al.*
2003 A Phase I Cultural Resources Investigation for the Proposed Corona Feeder Master Plan Project Area, Riverside County, California.

This covers all of the new alternatives except the small portion on Arizona Avenue.

Four other projects focused on the Gage Canal, which crosses the Irving Avenue segment of the route at about the halfway point from Cleveland Avenue to Mockingbird Canyon. Those that are most relevant are:

Hallaran, Kevin
1991 The Gage Canal: A Narrative History.

This is an excerpt from:

National Park Service
1993 California Citrus Heritage Recording Project: Arlington Heights Citrus Landscape, Gage Irrigation Canal, National Orange Company Packing House, Victoria Bridge, and Union Pacific Railroad Bridge.

This report was prepared in iorder to place the resources listed in the title on the Historic American Engineering Record (HAER). Listing on the HAER is equivalent to listing on the National Register of Historic Places.

Wlodarski, Robert J.
1993 An Archaeological Survey Report documenting the Effects of the RCIC I-215 Improvement Project in Moreno Valley, Riverside County, to Orange Show Road in the City of San Bernardino, San Bernardino County, California.

This did not include any survey within the current project area, but did record many portions of the canal.

There have been other surveys that covered small parcels adjacent to a portion of the alignment but not actually within the project area. There have been two cultural resources overviews that incorporated portions of the project area but did not involve fieldwork.

The Information Center included copies of historic maps in their report. The 1901 USGS maps show that some of the road involved in the project had not been built at this time or were comnstructed only on part of their current alignments. The 1942 USGS indicates all the roads are in, but there are few houses in the area. Both sets of maps show the Gage Canal.

FIELD INSPECTION

A field inspection of the project area was conducted by Robert Gerry of Peak & Associates in October, 2006. The only unsurveyed portion of the project was the section of one alternative on Arizona Avenue, a length of about one half mile. The remainder of the alignment was inspected for changes since the original survey and to examine the crossing at the Gage Canal.

The Arizona Avenue alternative is bordered by new subdivision on one side and a bit older on the other. All the houses appear to be 1970s or 1980s at the oldest, all have tile roofs and almost all are one story stucco buildings. This pattern is repeated along the Filmore and Victoria segments of the project area.

Cleveland Avenue is within a new subdivision at the western end of the alignment, from La Sierra to an area where subdivision construction is in progress. There is a break in Cleveland Avenue here and it provided an excellent opportunity for follow-up field inspection, since the area has been stripped of all vegetation preparatory to construction. In addition, the open area ends on the east at a drainage, thus the property is fairly sensitive for prehistoric resources. However, no archeological evidence ws observed.

The remainder of the Cleveland Avenue area involves orchards, including many where landscaping trees are grown in tubs. There are some residences in this area but none near enough to the alignment to be impacted in any way by the proposed project. None of the structures appear particularly old.

This pattern is repeated along Irving Avenue except that there are no structures near the alignment except for the Gage Canal.

The canal is still in use and is well maintained with gunite and concrete lining.. The crossing at Irving employs a small flat wooden bridge with troughs on each side to cary drainage water between ditches on both side of the canal. It will probably be necessary to bore under the canal in this area, therefore, a side area on both sides of the canal was inspected to insure covrage of the area that might be excavated for a bore hole. Again, no sign of cultural resources was observed in this area..

The portion of the alignment leading down from Irving to Van Buren on Firethorn Avenue is adjacent to the botanical garden. This is a narrow winding section of road with banks on both sides in most of the area and two residences close to the road near the top of the grade. From the junction with Van Buren to the end, the land is completely disturbed by road construction and installation of the facility that is the end of the project.

CONCLUSIONS

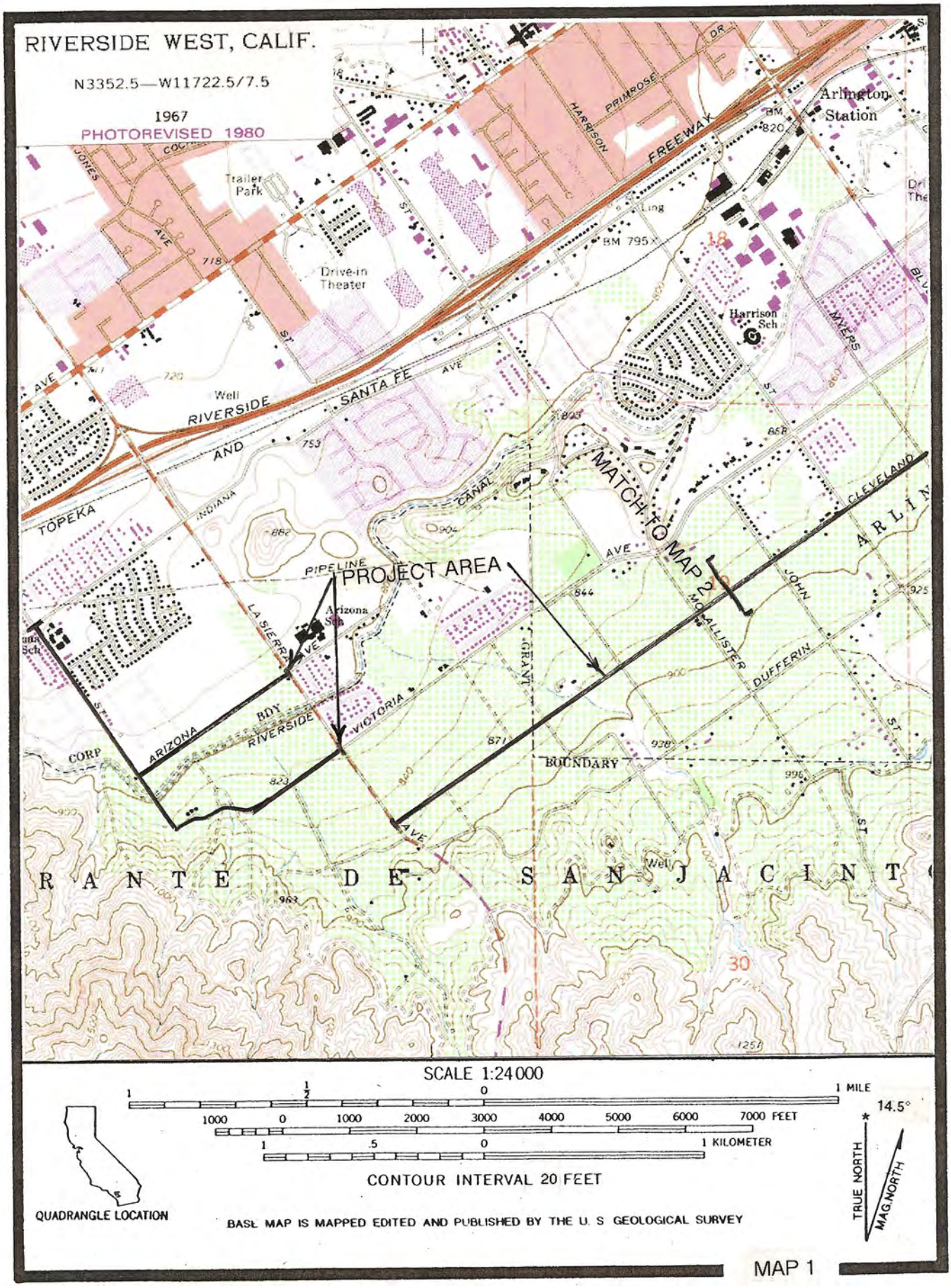
The only known cultural resource that will be crossed by the alternatives is a section of the Gage Canal. This resource has been recorded and placed on the HAER. This means that it is considered as listed on the National Register of Historic Places as well, since HABS (Historic American Buildings Survey) and HAER listings were incorporated into the National Register when the latter was established. Construction began on the canal in 1885 and the section involved here was completed in 1888 to 1889. The canal is not particularly unusual in terms of engineering and has been upgraded as necessary over the years, so much of it does not retain its

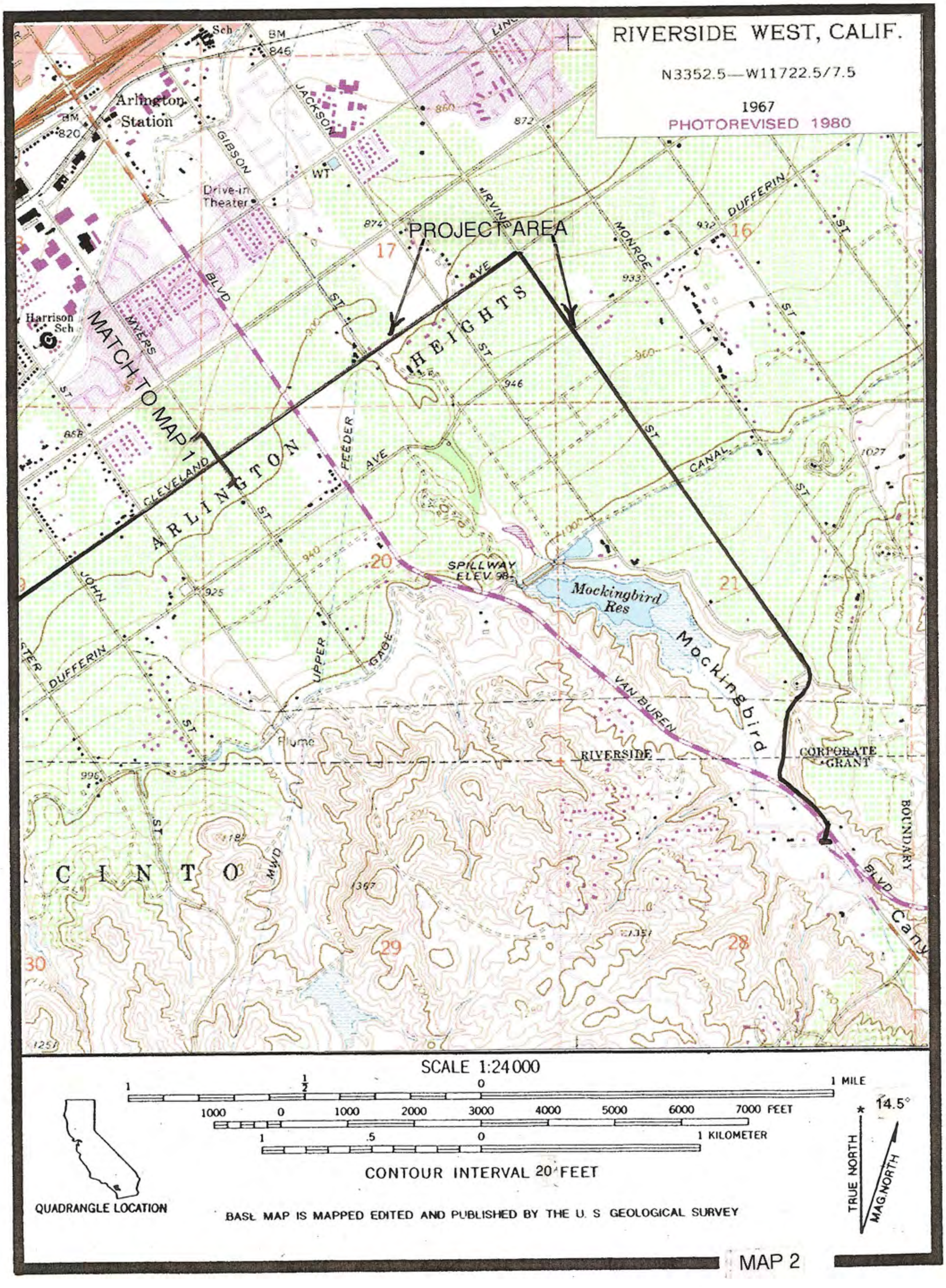
original appearance. For instance, it was originally an unlined ditch, but now it is covered in concrete and gunite. However, it is historically significant because of its contribution to the Riverside citrus industry. Completion of the canal doubled the acreage that could be put into citrus production at the time and it has been a vital provider of irrigation water ever since.

It is assumed that the pipeline will siphon under the canal, which will avoid potential impact if executed with care. If a different type of crossing is contemplated, it will be necessary to consult with National Park Service and concerned local agencies to determine what impacts will occur and acceptable mitigation. It should be noted that with a buried pipeline and sighon, there will be no visual impact to consider. This may not be the case if other methods are used.

We are also assuming that the pipeline will be installed within the right-of-way of Firethorn Avenue between Irving and Van Buren. This is the only area where houses are particularly near the alignment. If the pipeline will be in the right-of-way then there will be no impact.

As with any surface inspection, there is always a remote possibility that previous activities (both natural and cultural) have obscured prehistoric or historic period artifacts or habitation areas, leaving no surface evidence to identify the resources. If, during construction activities, artifacts or non-native stone (obsidian, fine-grained silicates, basalt) are exposed or if unusual amounts of bone or shell are observed or if areas that contain dark-colored sediment that do not appear to have been created through natural processes are discovered, then work should cease in the immediate area of the discovery and a professionally qualified archeologist should be contacted immediately for a on-site inspection of the discovery. If any bone is uncovered that appears to be human, then state law requires that the Riverside County Coroner must be contacted. If the coroner determines that the bone most likely represents a Native American interment, then he must contact the Native American Heritage Commission in Sacramento so that they can identify the most likely descendants.


RIVERSIDE WEST, CALIF.
N3352.5—W11722.5/7.5
1967
PHOTOREVISED 1980
Arlington Station
FREEWAY
HARRISON
PRIMROSE
Trailer Park
Drive-in Theater
Harrison Sch
MYERS
SANTA FE
AVE
RIVERSIDE
AND
TOPEKA
INDIANA
CANAL
PIPELINE
PROJECT AREA
MATCH TO MAP 2
CLEVELAND
JOHN
MCALLISTER
DUFFERIN
GRANT
LA SIERRA
Arizona Sch
ARIZONA
BDY
VICTORIA
CORP
BOUNDARY
Well
R A N T E D E S A N J A C I N T
SCALE 1:24000
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
CONTOUR INTERVAL 20 FEET
QUADRANGLE LOCATION
BASE MAP IS MAPPED EDITED AND PUBLISHED BY THE U. S GEOLOGICAL SURVEY
14.5°
TRUE NORTH
MAG.NORTH
MAP 1


RIVERSIDE WEST, CALIF.
N3352.5—W11722.5/7.5
1967
PHOTOREVISED 1980
PROJECT AREA
MATCH TO MAP 1
ARLINGTON HEIGHTS
Arlington Station
Drive-in Theater
Harrison Sch
Mockingbird Res
Mockingbird
SPILLWAY ELEV. 98
VAN BUREN
RIVERSIDE
CORPORATE GRANT
BOUNDARY
Flume
CINTO
SCALE 1:24000
CONTOUR INTERVAL 20 FEET
QUADRANGLE LOCATION
BASE MAP IS MAPPED EDITED AND PUBLISHED BY THE U. S GEOLOGICAL SURVEY
TRUE NORTH
MAG.NORTH
14.5°

MAP 2