

**City of Manteca
2005 Water Master Plan
Final Environmental Impact Report**

SCH# 2005082080

Prepared for:

City of Manteca
Public Works Department
1001 West Center Street
Manteca, CA 95337
Contact: Keith Conarroe
(209) 825-2577

Prepared by:

Jones & Stokes
268 Grand Avenue
Oakland, CA 94610
Contact: Rosalyn Stewart
(510) 433-8962

April 2007

Jones & Stokes. 2007. *City of Manteca 2005 Water Master Plan Final Environmental Impact Report*. April. (J&S 05013.05.) Oakland, CA.

Contents

	Page
Chapter 1	
CEQA Compliance	1-1
Format and Organization of the FEIR.....	1-1
Public Review of the DEIR.....	1-2
Public Meeting on the DEIR.....	1-3
Revisions to the DEIR.....	1-3
Comments Received on the DEIR.....	1-3
Preparation of the FEIR.....	1-3
Lead Agency.....	1-4
FEIR Authors.....	1-4
Chapter 2	
Comments and Responses	2-1
Introduction.....	2-1
Comments and Responses.....	2-1
Letter 1, George Quaresma, City of Manteca Fire Chief (November 6, 2006).....	Follows 2-2
Response to George Quaresma, City of Manteca Fire Chief (November 6, 2006).....	2-3
Letter 2, California Department of Transportation (November 29, 2006).....	Follows 2-4
Response to California Department of Transportation.....	2-5
Letter 3, Pacific Gas & Electric (December 8, 2006).....	Follows 2-6
Response to Pacific Gas & Electric.....	2-7
Letter 4, San Joaquin County, Environmental Health Department (December 12, 2006).....	Follows 2-8
Response to San Joaquin County, Environmental Health Department.....	2-9
Letter 5, San Joaquin Valley Air Pollution Control District (No Date).....	Follows 2-10
Response to San Joaquin Valley Air Pollution Control District.....	2-11
Letter 6, State Clearinghouse and Planning Unit (December 15, 2006).....	Follows 2-12
Response to State Clearinghouse and Planning Unit.....	2-13

Letter 7, San Joaquin Council of Governments
(SJCOG, Inc) (December 20, 2006)Follows 2-14
Response to San Joaquin Council of Governments2-15

**Chapter 3 Revisions to Draft Subsequent Environmental Impact
Report3-1**
Introduction3-1
Revisions3-1

Appendix A Mitigation Monitoring and Reporting Plan

CEQA Compliance

This final environmental impact report (FEIR) for the City of Manteca 2005 Water Master Plan (WMS) has been prepared in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

Section 15132 of the CEQA Guidelines requires that a final environmental impact report (FEIR) consist of the following components:

- The draft environmental impact report (DEIR) or a revision of the DEIR;
- Comments and recommendations received on the DEIR, either verbatim or in summary;
- A list of persons, organizations, and public agencies commenting on the DEIR;
- The responses of the lead agency to significant environmental concerns raised in the review and consultation process;
- Any other information added by the lead agency.

The DEIR, published November 2006, together with the responses to comments on the DEIR constitute the FEIR for the proposed project. The FEIR is an informational document prepared by the lead agency that must be considered by decision-makers before approving or denying the proposed project. Although a subsequent EIR was prepared for this project, the same CEQA requirements apply.

Format and Organization of the FEIR

When certified by the lead agency, the FEIR will consist of two parts: 1) City of Manteca Water Master Plan Draft Environmental Impact Report, published in November 2006; and 2) City of Manteca Water Master Plan Final Environmental Impact Report, including:

- all comments received on the DEIR either orally or in writing;

- ❑ responses to those comments; and
- ❑ any changes or revisions to the DEIR.

This FEIR comprises three chapters and an appendix containing the information required by the CEQA Guidelines, as outlined above.

- **Chapter 1** describes the public review process for the DEIR and provides a list of organizations, public agencies, and members of the public that commented on the DEIR, as well as a list of people involved in the preparation of the responses to comments.
- **Chapter 2** contains comment letters received on the DEIR, along with the City of Manteca's (City's) responses to those comments.
- **Chapter 3** presents changes made to the DEIR in response to comments. Changes to the DEIR are presented in errata format in Chapter 3 and are also referenced in the Chapter 2 responses.
- **Appendix A** contains the Mitigation Monitoring and Reporting Plan (MMRP) for the Proposed Project. The MMRP identifies the required actions and responsible agencies for the implementation of proscribed mitigation.

Public Review of the DEIR

Upon completion of the DEIR, the City filed a Notice of Completion with the State Clearinghouse and issued a Notice of Availability, consistent with CEQA Guidelines Sections 15085 and 15087. The Notice of Availability provided notice of the public comment period that began on Friday October 27, 2006 and ended on Tuesday December 12, 2006. The DEIR was submitted to the State Clearinghouse for circulation to responsible and trustee agencies. In addition, the City distributed 25 copies of the DEIR to state, regional, and local agencies, as well as individuals. The City and consultants have responded to all comments received during the public comment period.

Copies of the DEIR were made available for public review at the following locations:

City of Manteca
Planning Department (copy 1)
Public Works Department (copy 2)
City Clerks Office (copy 3)
1001 West Center Street
Manteca, CA 95337

Stockton-San Joaquin County Public Library
Manteca Branch Library (copy 4)
320 West Center Street
Manteca, CA 95336

Public Meeting on the DEIR

A public meeting was noticed in the Notice of Availability; the meeting was held on Thursday November 30, 2006, at the City of Manteca Council Chambers (1001 West Center Street, Manteca, CA 95337). Although members of the public were invited to voice their comments at this meeting, no one attended the meeting.

Revisions to the DEIR

In response to comments received on the DEIR, the City made minor changes to the text of the EIR. The changes do not result in any new significant environmental impacts or substantially increase the severity of any environmental impacts. Therefore, pursuant to Section 15088.5 of the CEQA Guidelines, recirculation of the DEIR prior to certification is not required.

Comments Received on the DEIR

The following persons, organizations, and public agencies submitted comments on the DEIR:

- George Quaresma, City of Manteca Fire Chief (November 6, 2006)
- California Department of Transportation (November 29, 2006)
- Pacific Gas & Electric (December 8, 2006)
- San Joaquin County, Environmental Health Department (December 12, 2006)
- San Joaquin Valley Air Pollution Control District (No Date)
- State Clearinghouse and Planning Unit (December 15, 2006)
- San Joaquin Council of Governments (SJCOG, Inc.) (December 20, 2006)

Preparation of the FEIR

The FEIR was prepared by the City of Manteca and the following consultants. All work reflects the City's independent judgment and analysis.

Lead Agency

City of Manteca

City of Manteca
Public Works Department
1001 West Center Street
Manteca, CA 95337
(209) 825-2577

City Contact—Keith Conarroe

FEIR Authors

Jones & Stokes

Jones & Stokes
268 Grand Avenue
Oakland, CA 94610
(510) 433-8962

Project Director—Sally Zeff, AICP
Project Manager—Rosalyn Stewart, AICP
Project Coordinator—Sandra Devoto

Chapter 2

Comments and Responses

Introduction

Copies of the comment letters and testimony received on the City of Manteca 2005 Water Master Plan DEIR and responses to each comment are included in this chapter. The purpose of the public review process was to receive input on the content of the proposed program and the DEIR. CEQA requires that the City make a good-faith reasoned analysis and respond to comments received (CEQA Guidelines, Section 15088).

Each comment letter received on the DEIR has been assigned a number, and comments within each letter are lettered consecutively (e.g., 1-A, 1-B, 2-A, 2-B) in the right margin adjacent to the individual comment. Each comment letter is followed by the City's responses to that letter. The responses are numbered to correspond with the comments as identified in the right margin of the letter. Where the response indicates that a change has been made to the DEIR, the relevant text change can be found in Chapter 3 of this FEIR.

Comments and Responses

The following presents the City's responses to all comments received during the public comment period (October 27, 2006 – December 12, 2006). A total of six letters were received. Listed below are the sources of the comment letters and the dates they were received, as well as the numbers assigned to each of the comment letters.

- George Quaresma, City of Manteca Fire Chief (November 6, 2006)—Letter 1
- California Department of Transportation (November 29, 2006)—Letter 2
- Pacific Gas & Electric (December 8, 2006)—Letter 3
- San Joaquin County, Environmental Health Department (December 12, 2006)—Letter 4

- San Joaquin Valley Air Pollution Control District (No Date)—Letter 5
- State Clearinghouse and Planning Unit (December 15, 2006)—Letter 6
- San Joaquin Council of Governments (SJCOG, Inc.) (December 20, 2006)—Letter 7

Letter #1

Conarroe, Keith

From: Brinton, Mike
Sent: Monday, November 06, 2006 10:32 AM
To: Podesta, Jim; Clark, Frederic; Conarroe, Keith
Subject: FW: Draft EIR for 2005 Water Master Plan

??

From: Quaresma, George
Sent: Monday, November 06, 2006 10:24 AM
To: Brinton, Mike
Subject: Draft EIR for 2005 Water Master Plan

Having perused through the Draft E.I.R. for the 2005 Water Master Plan I have only 1 comment. The EIR considers the current 300,000 gallon water tower within the report as being a part of our water system through 2025. I don't know if it has a significant impact on the report, but isn't the water tower O.O.S. and planned for demolition? Shouldn't it's impact on the 2005 Water Master Plan be non existent and eliminated?

1-A

Response to George Quaresma, City of Manteca Fire Chief (November 6, 2006)

Response to Comment 1-A: The current water tower was constructed in 1961. When constructed, the water tower provided peak capacity and emergency reserve function for the City water system. With the further development of the City water system since 1961, the functions provided by the water tower have diminished and the water tower is no longer a necessary part of the system.

A structural evaluation of the water tower was completed after the 2005 Water Master Plan and DEIR were completed. The seismic evaluation found that the water tower did not meet current seismic design standards. The water tower was drained and taken out of service. The Manteca City Council then determined that the water tower should be demolished. Various City communication systems that are mounted on the water tower will need to be relocated before the water tower can be demolished.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

DEPARTMENT OF TRANSPORTATION
P.O. BOX 2048 STOCKTON, CA 95201
(1976 E. CHARTER WAY/1976 E. DR. MARTIN
LUTHER KING JR. BLVD. 95205)
TTY: California Relay Service (800) 735-2929
PHONE (209) 941-1921
FAX (209) 948-7194

Post-It™ brand fax transmittal memo 7671		# of pages
To: <i>Scott Morgan</i>	From: <i>Dan Brewer</i>	
Co: <i>State Clearinghouse</i>	Co: <i>Caltrans</i>	
Dept:	Phone # <i>948-7142</i>	
Fax # <i>916 333-3018</i>	Fax # <i>948-7194</i>	

DEIR Governor



Your power!
is efficient!

Letter #2

November 29, 2006

10-SJ-Various
SCH 2005082080 (DEIR)
Manteca Water Master Plan

Keith Conarroe
City of Manteca
Community Development Department
1001 West Center Street
Manteca, CA 95337

RECEIVED
NOV 29 2006
STATE CLEARING HOUSE

*Cleary
12-14-06
P*

Dear Mr. Conarroe:

The California Department of Transportation (Department) appreciates the opportunity to have reviewed the Draft Environmental Impact Report (DEIR) for the Manteca Water Master Plan to improve and expand the City of Manteca (City) water system.

The DEIR states that State Route 99 and State Route 120 could be temporarily impacted due to construction related activities. These activities could include the implementation of traffic controls, temporary lane closures, temporary road closures with detours and placement of construction warning signs. An Encroachment Permit will be required for work any work done within the Department's right of way. This work is subject to the California Environmental Quality Act. Therefore, additional biological, archaeological, or other environmental studies may be required as part of the encroachment permits application. A qualified professional must conduct any such studies undertaken to satisfy the Department's environmental review responsibilities. Ground disturbing activities to the site prior to completion and/or approval of required environmental documents may affect the Department's ability to issue a permit for the project. Furthermore, if engineering plans or drawings will be part of your permit application, they should be prepared in standard units.

2-A

If you have any questions or would like to discuss our comments in more detail, please contact Dan Brewer at (209) 948-7142 (e-mail: dan.brewer@dot.ca.gov) or me at (209) 941-1921.

Sincerely,

TOM DUMAS, Chief
Office of Intermodal Planning

c: SMorgan State Clearinghouse

Response to California Department of Transportation (November 29, 2006)

Response to Comment 2-A: The City of Manteca understands that it will be required to obtain an encroachment permit prior to the start of any work within the California Department of Transportation (Caltrans) rights-of-way. The Water Master Plan DEIR and FEIR will be submitted with the permit application. In accordance with Caltrans standards, any additional environmental studies will be conducted by qualified personnel. All engineering plans and drawings will be prepared in standard units.



Land Services, 4040 West Lane, Stockton, CA 95204

December 8, 2006

City of Manteca
c/o Community Development Dept.
Planning Division
1001 West Center Street
Manteca, CA 95337
Attn: Keith Conarroe
fax: 209-239-8495

RE: Draft Environmental Impact Report (DEIR)
For: 2005 Water Master Plan project
Loc: s/o Woodward Rd., e/o Hwy. 99 and n/o Lathrop Rd., Manteca
PG&E File : 2006-WL595- 40618523, 40138970

Dear Mr. Conarroe,

Thank you for this opportunity to comment on this Draft Environmental Impact Report (DEIR) for the above Project. PG&E has the following comments to offer:

PG&E owns and operates gas and electric facilities which are located within and adjacent to the proposed project. To promote the safe and reliable maintenance and operation of utility facilities, the California Public Utilities Commission (CPUC) has mandated specific clearance requirements between utility facilities and surrounding objects or construction activities. To ensure compliance with these standards, project proponents should coordinate with PG&E early in the development of their project plans. Any proposed development plans should provide for unrestricted utility access and prevent easement encroachments that might impair the safe and reliable maintenance and operation of PG&E's facilities.

3-A

The requesting party will be responsible for the costs associated with the relocation of existing PG&E facilities to accommodate their proposed development. Because facilities relocation's require long lead times and are not always feasible, the requesting party should be encouraged to consult with PG&E as early in their planning stages as possible.

Relocations of PG&E's electric transmission and substation facilities (50,000 volts and above) could also require formal approval from the California Public Utilities Commission. If required, this approval process could take up to two years to complete. Proponents with development plans which could affect such electric transmission facilities should be referred to PG&E for additional information and assistance in the development of their project schedules.

3-B

We would also like to note that continued development consistent with the City's General Plans will have a cumulative impact on PG&E's gas and electric systems and may require on-site and off-site additions and improvements to the facilities which supply these services. Because utility facilities are operated as an integrated system, the presence of an existing gas or electric transmission or distribution facility does not necessarily mean the facility has capacity to connect new loads.

3-C

Expansion of distribution and transmission lines and related facilities is a necessary consequence of growth and development. In addition to adding new distribution feeders, the range of electric system improvements needed to accommodate growth may include upgrading existing substation and transmission line equipment, expanding existing substations to their ultimate buildout capacity, and building new substations and interconnecting transmission lines. Comparable upgrades or additions needed to accommodate additional load on the gas system could include facilities such as regulator stations, odorizer stations, valve lots, distribution and transmission lines.

We would like to recommend that environmental documents for proposed development projects include adequate evaluation of cumulative impacts to utility systems, the utility facilities needed to serve those developments and any potential environmental issues associated with extending utility service to the proposed project. This will assure the project's compliance with CEQA and reduce potential delays to the project schedule.

3-D

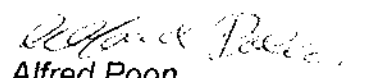
PG&E remains committed to working with the City to provide timely, reliable and cost effective gas and electric service to the planned area. We would also appreciate being copied on future correspondence regarding this subject as this project develops.

The California Constitution vests in the California Public Utilities Commission (CPUC) exclusive power and sole authority with respect to the regulation of privately owned or investor owned public utilities such as PG&E. This exclusive power extends to all aspects of the location, design, construction, maintenance and operation of public utility facilities. Nevertheless, the CPUC has provisions for regulated utilities to work closely with local governments and give due consideration to their concerns. PG&E must balance our commitment to provide due consideration to local concerns with our obligation to provide the public with a safe, reliable, cost-effective energy supply in compliance with the rules and tariffs of the CPUC.

3-E

Should you require any additional information or have any questions, please call me at (209) 942-1419.

Sincerely,


Alfred Poon
Land Agent
Land Rights Protection
Northern Area
External: (209) 942-1419
Fax: (209) 942-1485

Response to Pacific Gas & Electric (December 8, 2006)

Response to Comment 3-A: Construction of all program elements will be in accordance with California Public Utilities Commission (CPUC) standards. Mitigation Measure PSU-3 (in Chapter 3.12, *Public Services, Utilities, and Recreation*, Impacts and Mitigation Measures) has been revised as follows to ensure early coordination with PG&E and other service providers.

The City of Manteca and its program contractor will coordinate with PG&E and other service providers early in the development of individual program elements to ensure adequate access to utility lines or to discuss any necessary utility relocation.

Response to Comment 3-B: As noted in Response to Comment 3-A, Mitigation Measure PSU-3 (in Chapter 3.12, *Public Services, Utilities, and Recreation*, Impacts and Mitigation Measures) has been revised to ensure early coordination with PG&E and other service providers. The City of Manteca understands its responsibility for relocation costs due to program construction, as well as the potential necessity for formal approval from the CPUC.

Response to Comment 3-C: The City of Manteca recognizes the potential cumulative impacts of General Plan buildout on PG&E's gas and electrical systems; however, the cumulative analysis in the DEIR is limited to the contribution of the proposed WMP elements on those systems. The DEIR (Chapter 5, *Other CEQA Findings*, Cumulative Impacts, Program Contribution to Cumulative Impacts) has been revised as follows to address this.

Continued development under the City's 2023 General Plan will have a cumulative impact on PG&E's gas and electric systems. Construction of various program elements that require electrical connections will result in a minor increase in demand for electricity, but will not result in a considerable contribution to the cumulative impact.

Additionally, the growth-inducing analysis in the DEIR (Chapter 5, *Other CEQA Findings*, Growth-Inducing Impacts, Growth-Related Impacts of the Proposed Program, Indirect Impacts) recognizes the potential impacts of program implementation on future City growth and subsequent demands on public services and utilities.

Response to Comment 3-D: The commenter notes that, as required by CEQA Guidelines Section 15130, all environmental documents for proposed development projects shall consider a project's potential contribution to cumulative impacts, including those related to gas and electrical services.

Response to Comment 3-E: The City of Manteca appreciates PG&E's commitment to providing timely, reliable, and cost-effective gas and electric service to the City's Primary Urban Service Area. Then commenter's request to be notified of further action on this project is noted.

ENVIRONMENTAL HEALTH DEPARTMENT

SAN JOAQUIN COUNTY



Donna K. Heran, R.E.H.S.
Director
Laurie A. Cotulla, R.E.H.S.
Program Manager

304 East Weber Avenue, Third Floor
Stockton, California 95202-2708
Telephone: (209) 468-3420
Fax: (209) 464-0138
Website: www.sjgov.org/ehd/

Unit Supervisors
Carl Borgman, R.E.H.S.
Mike Huggins, R.E.H.S., R.D.I.
Douglas W. Wilson, R.E.H.S.
Margaret Lagorio, R.E.H.S.
Robert McClellon, R.E.H.S.
Jeff Carruesco, R.E.H.S.

December 12, 2006

Letter #4

Keith Conaroc
Associate Civil Engineer
City of Manteca
Public Works Department
1001 West Center Street
Manteca, California 95337

**RE: PUBLIC REVIEW OF THE DRAFT ENVIRONMENTAL IMPACT
REPORT FOR THE CITY OF MANTECA WATER MASTER PLAN**

The San Joaquin County Environmental Health Department requests the following comments be added to the above project for consideration:

1. Any abandoned wells shall be destroyed under permit and inspection by the Environmental Health Department.

4-A

Should you have any questions or need further assistance please call Steven C. Shih, Lead Senior R.E.H.S., at (209) 468-9850.

Donna Heran, R.E.H.S., Director

A handwritten signature in cursive script, appearing to read "Mike Huggins for".

Mike Huggins, Supervising R.E.H.S., R.D.I., Program Coordinator
Environmental Health Department

MH:tl

Response to San Joaquin County, Environmental Health Department (December 12, 2006)

Response to Comment 4-A: The text of the DEIR (Chapter 2, *Program Description*, Required Permits and Approvals) has been revised as follows to note that the City of Manteca will need to obtain a permit from the San Joaquin County Environmental Health Department for well abandonment.

- San Joaquin County, Environmental Health Department: well abandonment and destruction;



DEC 18 2006

Keith Conarro
City of Manteca
Public Works Department
1001 West Center Street
Manteca, CA 95337

Project: 2005 Water Master Plan Draft Environmental Impact Report (DEIR)

Subject: CEQA comments regarding the City of Manteca 2005 Water Master Plan

District Reference No: C200602473

Dear Mr. Conarro:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above and offers the following comments:

Findings of Significance

Upon review of the project and its alternatives, the District concurs that:

- The DEIR accurately describes the environmental settings and regulatory environment, and identifies applicable District rules.
- Compliance with the District's Regulation VIII requirements will reduce the temporary increase in construction-related PM10 (dust) emissions to a level of insignificance.
- Although the temporary increase in construction-related mobile emissions generated by on-road vehicles (increased road congestion from pipeline construction) may be significant, the implementation of a Traffic Control Plan would reduce these emissions.
- Generation of operations-related stationary source emissions are expected to be less than significant through compliance with District's permitting requirements.

5-A

Soyel Sautredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061
www.valleyair.org

Southern Region
2700 M Street, Suite 275
Bakersfield, CA 93301-2373
Tel: (661) 326-6900 FAX: (661) 326-6985

- Generation of operations-related mobile emissions from maintenance vehicles and equipment are expected to have a less-than-significant effect on air quality.

↑
5-A

District Recommendations

The District recommends the following changes and/or additions to the DEIR to improve the documents accuracy:

- Chapter 2. Program Description, Required Permits and Approvals, Final Bullet states the California Air Resources Board requires an Authority to Construct (ATC). Please note the project may need a District issued ATC as part of the project's permitting requirements.

5-B

- Chapter 3.0 Environmental Analysis §3.3 Air Quality discusses construction-related PM10 (page 3.3-11) and cancer risk from diesel exhaust (page 3.3-13). Section 3.13 Transportation discusses construction-related on-road (vehicle) emissions. However, construction-related ROG and NOx emissions were not discussed.

5-C

- As ROG, NOx, and diesel exhaust emissions were not quantified, the District recommends an Air Quality Impact Analysis be included in the document. As stated in the District's response to the Notice of Preparation (District reference # C20061225, dated June 22, 2006), "*The EIR needs to address the short-term and long term local and regional adverse air quality impacts associated with the operation of construction equipment (reactive organic gases, nitrogen oxides, carbon monoxide, and PM10) and emission generated from stationary and mobile sources. The EIR should identify the components and phases of the project. The EIR should provide emissions projections for the project at the build out of each phase (including ongoing emissions from each previous phase). URBEMIS 2002 Version 8.7 may be used to quantify these emissions.*"

5-D

Recommended Mitigation Measures

There are a number of features that could be incorporated into the construction and operation of this project to provide additional reductions of the overall level of emissions. The suggestions listed below should not be considered all-inclusive and remain options that the agency with the land-use authority should consider for incorporation into the project.

Construction activity mitigation measures include:

- Limit area subject to excavation, grading, and other construction activity at any one time
- Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use
- Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set)

5-E

- Require that all diesel engines be shut off when not in use to reduce emissions from idling
- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways, and "Spare the Air Days" declared by the District.
- Implement activity management (e.g. rescheduling activities to reduce short-term impacts)
- During the smog season (May through October), lengthen the construction period to minimize the number of vehicles and equipment operating at the same time.
- Off road trucks should be equipped with on-road engines when possible.
- Minimize obstruction of traffic on adjacent roadways.

5-E

The District encourages the applicant and fleet operators using the facility to take advantage of the District's Heavy-Duty Engine program to reduce project emissions. The Heavy Duty program provides incentives for the replacement of older diesel engines with new, cleaner, fuel-efficient diesel engines. The program also provides incentives for the re-power of older, heavy-duty trucks with cleaner diesel engines or alternative fuel engines. New alternative fuel heavy-duty trucks also qualify. For more information regarding this program contact the District at (559) 230-5858 or visit our website at www.valleyair.org/transportation/heavydutyidx.htm.

5-F

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call Jessica Willis at (559) 230-5818 and provide the reference number at the top of this letter.

Sincerely,

David Warner
Director of Permits Services


Arnaud Marjollet
Permit Services Manager

DW:jrw

cc: File

Response to San Joaquin Valley Air Pollution Control District (No Date)

Response to Comment 5-A: The commenter, the San Joaquin Valley Air Pollution Control District (SJVAPCD), expresses its concurrence with the DEIR's findings of significance. No response is required.

Response to Comment 5-B: The text of the DEIR (Chapter 2, *Program Description*, Required Permits and Approvals) has been revised as follows to note that the "Authority To Construct" permit from SJVAPCD may also be required for the project.

- San Joaquin Valley Air Pollution Control District: authority to construct.

Response to Comment 5-C: It is anticipated that construction of the proposed program would occur on an as-needed basis from 2005 through 2025. Additional well construction would be timed with urban expansion. Construction emissions have not been quantified in the DEIR because the construction scheduling and equipment inventory is not known at this stage to adequately estimate emissions. It is anticipated that once this information is known, emissions may be adequately estimated in the environmental documentation prepared for the individual program components. Finally, impacts related to construction activities have been addressed following guidance published in the SJVAPCD's *Guide for Mitigation Air Quality Impacts* (San Joaquin County Valley Air Pollution Control District 2002) in Impact AQ-1: Temporary Increase in Construction-Related Emissions during Construction Activities (Chapter 3.3, *Air Quality*, Impacts and Mitigation Measures). No revisions have been made to the DEIR.

Response to Comment 5-D: Please see Response to Comment 5-C.

Response to Comment 5-E: All of the suggested measures for construction activity are included as activities in Mitigation Measure AQ-1a: Prepare and Implement a Dust Control Plan (Chapter 3.3, *Air Quality*, Impacts and Mitigation Measures) as described in the DEIR on pages 3.3-12 through 3.3-13.

Response to Comment 5-F: The District's information regarding the SJVAPCD's Heavy-Duty Engine program is noted.



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Sean Walsh
Director

December 15, 2006

Letter #6

Keith Conarroe
City of Manteca
1001 W. Center Street
Manteca, CA 95337

Subject: City of Manteca Water Master Plan
SCH#: 2005082080

Dear Keith Conarroe:

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 December 14, 2006, 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
Director, State Clearinghouse

Enclosures
cc: Resources Agency

6-A

**Document Details Report
State Clearinghouse Data Base**

SCH# 2005082080
Project Title City of Manteca Water Master Plan
Lead Agency Manteca, City of

Type EIR Draft EIR

Description The City of Manteca Water Master Plan was developed to guide improvement and expansion of the City's water system to meet current and future needs for safe, reliable water supply and distribution system. The Water Master Plan addresses the water requirements of the City of Manteca 2023 General Plan and recommends capital improvements to support existing infrastructure and customer demands as well as planned new development. The City is proposing to construct and operate new wells and wellhead treatment facilities, blending facilities, storage tanks, pipelines, and associated facilities. All of these facilities are needed to provide adequate municipal and industrial water supply within the City's service area.

Lead Agency Contact

Name Keith Conarroe
Agency City of Manteca
Phone (209) 825-2577 **Fax**
email
Address 1001 W. Center Street
City Manteca **State** CA **Zip** 95337

Project Location

County San Joaquin
City Manteca
Region

Cross Streets
Parcel No.
Township

Range **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways
Schools
Land Use

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

Reviewing Agencies Resources Agency; Regional Water Quality Control Bd., Region 5 (Sacramento); Department of Parks and Recreation; Native American Heritage Commission; Department of Fish and Game, Region 2; Department of Water Resources; California Highway Patrol; Caltrans, District 10; State Water Resources Control Board, Division of Water Rights; State Water Resources Control Board, Clean Water Program; Department of Health Services

Date Received 10/31/2006 **Start of Review** 10/31/2006 **End of Review** 12/14/2006

Response to State Clearinghouse and Planning Unit (December 15, 2006)

Response to Comment 6-A: The State Clearinghouse provides information on the distribution of the DEIR to responsible public agencies. The City of Manteca has received and responded to all agency comments within this FEIR.



S J C O G, Inc.

555 East Weber Avenue • Stockton, CA 95202 • (209) 468-3913 • FAX (209) 468-1084

San Joaquin County Multi-Species Habitat Conservation & Open Space Plan (SJMSCP)

SJMSCP RESPONSE TO LEAD AGENCY ADVISORY AGENCY NOTICE TO SJCOG, Inc.

To: Keith Canarroe, City of Manteca Community Development Department

From: Erin Sickler, SJCOG, Inc.

Date: December 20, 2006

Re: **Lead Agency Project Title:** Water Master Plan EIR
Lead Agency Project Number: N/A
Assessor Parcel Number(s): multiple

Total Acres to be converted from Open Space Use: To be determined by SJMSCP biologist

Habitat Types to be Disturbed: To be determined by SJMSCP Biologist

Species Impact Findings: Findings to be determined by SJMSCP biologist.

Dear Mr. Canarroe:

SJCOG, Inc. has reviewed the City of Manteca Water Master Plan Draft Environmental Impact Report. It is suggested that projects within the EIR participate in the SJMSCP. Also the fee structure referenced in the EIR has been changed and has a routine multiplier that is taken into effect on the first of every year. The general process to be included in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) is also listed below for your review.

7-A

San Joaquin County is a signatory to San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Participation in the SJMSCP satisfies requirements of both the state and federal endangered species acts, and ensures that the impacts are mitigated below a level of significance in compliance with the California Environmental Quality Act (CEQA). Although participation in the SJMSCP is voluntary, lead agents should be aware that if project applicants choose against participating in the SJMSCP, they will be required to provide alternative mitigation in an amount and kind equal to that provided in the SJMSCP.

7-B

Please see second page.

This Project is subject to the SJMSCP. This can be up to a 30 day process and it is recommended that the project applicant contact SJMSCP staff as early as possible.

Please contact SJMSCP staff regarding completing the following steps to satisfy SJMSCP requirements:

- Schedule a SJMSCP Biologist to perform a pre-construction survey ***prior to any ground disturbance***
- Sign and Return Incidental Take Minimization Measures to SJMSCP staff (given to project applicant after pre-construction survey is completed)
- Pay appropriate fee based on SJMSCP findings
- Receive your Certificate of Payment and release the required permit

If you have any questions, please call (209) 468-3913.



7-B

San Joaquin Council of Governments (SJCOG, Inc.) (December 20, 2006)

Response to Comment 7-A: The DEIR discusses the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) on page 3.4-12. In addition, the DEIR (Chapter 3.4, *Biological Resources*, Regulatory Context, Local Regulations and Policies) has been revised as follows to reflect the published development fees and to include a statement regarding the annual adjustment of these fees based on the California Construction Cost Index.

To determine the appropriate fees and mitigation ratios, habitat types have been divided into the following three categories and corresponding development fees (interim fees January 1, 2007 to April 1, 2007 / updated fees effective April 1, 2007 ~~(as of 2005)~~):

- Multipurpose open space ~~(\$909-1,731 / \$6,341 per acre)~~.
- Agriculture and natural land ~~(\$1,819-3,463 / \$13,022 per acre)~~.
- ~~Vernal pools (\$6,074 per acre for upland habitat and \$36,381 per acre for wetted habitat)~~.
- Vernal pools – upland habitat (\$10,565 / \$34,958 per acre).
- Vernal pools – wetted habitat ~~(\$36,381-63,227 / \$69,858 per acre)~~.

These impact fees are adjusted annually to keep pace with inflation at a rate that is consistent with the California Construction Cost Index (CCCI).

Response to Comment 7-B: Mitigation Measure BIO-5c (in Chapter 3.4, *Biological Resources*, Impacts and Mitigation Measures) requires coordination with resource agencies and development of appropriate compensation plans for state- and federally listed wildlife species. The mitigation measure has been revised as follows to clarify that voluntary participation in the SJMSCP is a form of implementation.

Voluntary participation in the SJMSCP can satisfy requirements of both the state and federal endangered species acts, and ensure that impacts are mitigated below the significance threshold.

Chapter 3

Revisions to Draft Environmental Impact Report

Introduction

This chapter provides changes or revisions to the DEIR made in response to comments. Changes to the DEIR are presented in errata format. New text is shown underlined. Deleted text is shown in ~~strikeout~~.

DEIR Revisions

In response to Comments 4-A and 5-B, the following text has been added to Chapter 2, *Program Description*, Required Permits and Approvals, second paragraph and bulleted list (pg 2-15):

The EIR may also be used by regulatory and responsible agencies, which are responsible for issuing permits and approvals that may be needed to proceed with the proposed program or regulate the implementation of best management practices. Subsequent permits and approvals may include the following:

- San Joaquin County, Public Works Department: encroachment permit (county roadways); grading permit; approval of road closures, detours, and traffic control plan;
- San Joaquin County, Environmental Health Department: well abandonment and destruction;
- California Occupational Safety and Health Administration: Preliminary Gas Classification (microtunnelling); excavation/trenching permit;
- California Department of Fish and Game (DFG): Streambed Alteration Agreement;
- California Department of Transportation (Caltrans): encroachment permit (state highways);
- U.S. Army Corps of Engineers: Section 404 permit;

- Regional Water Quality Control Board (RWQCB): 401 Certification; NPDES Stormwater General Construction Permit;
- U.S. Fish & Wildlife Service: incidental take permit under Section 10 of the federal Endangered Species Act (ESA); consultation under Section 7 of the federal ESA;
- State Historic Preservation Office: compliance with Section 106 of the National Historic Preservation Act; ~~and~~
- California Air Resources Board: authority to construct; and
- San Joaquin Valley Air Pollution Control District: Authority To Construct.

In response to Comment 7A, the following text has been added to Chapter 3.4, *Biological Resources*, Regulatory Context, Local Regulations and Policies (pg 3.4-12):

San Joaquin County Multi-Species Habitat and Open Space Conservation Plan

The SJMSCP has been prepared by the County and its cities to provide a regional approach to mitigating development impacts on the 100 listed and non-listed plant, fish, and wildlife species covered by the SJMSCP and to compensate for the conversion of open space to non-open-space uses. In addition, the SJMSCP provides some compensation to offset the impacts of open space land conversions on other beneficial open space uses such as recreation, agriculture, scenic values, educational purposes, flood control, and use by common plant, fish, and wildlife species that are not included in the list of SJMSCP-covered species. The plan allows a development impact fee to be paid by project applicants whose projects would cause the loss of biological resources or conversion of habitats.

To determine the appropriate fees and mitigation ratios, habitat types have been divided into the following three categories and corresponding development fees (interim fees January 1, 2007 to April 1, 2007 / updated fees effective April 1, 2007-(as of m005)):

- Multipurpose open space (~~\$909-1,731~~ / \$6,341 per acre).
- Agriculture and natural land (~~\$1,819-3,463~~ / \$13,022 per acre).
- ~~Vernal pools (\$6,074 per acre for upland habitat and \$36,381 per acre for wetted habitat).~~
- Vernal pools – upland habitat (\$10,565 / \$34,958 per acre).
- Vernal pools – wetted habitat (\$63,227 / \$69,858 per acre).

These impact fees are adjusted annually to keep pace with inflation at a rate that is consistent with the California Construction Cost Index (CCCI).

In response to Comment 7-B, Mitigation Measure BIO-5c in Chapter 3.4, *Biological Resources*, Impacts and Mitigation Measures, has been revised as follows (pg 3.4-24):

Mitigation Measure BIO-5c: Coordinate with Resource Agencies and Develop Appropriate Compensation Plans for State- and Federally Listed Wildlife Species. In the event that, despite implementation of Mitigation Measure BIO-5b, construction activities would result in significant impacts on state- or federally listed wildlife species, the City will develop a compensation plan in coordination with the appropriate resource agency (DFG, USFWS, SJCOG), and/or require that their compensation guidelines be followed, to reduce the impact to a less-than-significant level. Voluntary participation in the SJMSCP can satisfy requirements of both the state and federal endangered species acts, and ensure that impacts are mitigated below the significance threshold.

Compensation guidelines have been identified for several special-status wildlife species, including valley elderberry longhorn beetle, vernal pool branchiopods, giant garter snake, Swainson's hawk, and burrowing owl. The amount of compensation will vary depending on the amount of habitat loss or degree of habitat disturbance anticipated. The compensation plan will be developed and implemented in coordination with the appropriate state or federal agency and would involve identifying an agency-approved mitigation bank or site (on- or off-site); transplanting (elderberry shrubs), re-creating (burrows and vernal pools), or preserving additional habitat for special-status wildlife species; monitoring the mitigation site; or funding the management of the mitigation site.

In response to Comments 3-A and 3-B, Mitigation Measure PSU-3 in Chapter 3.12, *Public Services, Utilities, and Recreation*, Impacts and Mitigation Measures, has been revised as follows (pg 3.12-9):

Mitigation Measure PSU-3a: Identify and Relocate Existing Utilities Where Necessary. The City of Manteca and its program contractors will coordinate with PG&E and other service providers early in the development of individual program elements to ensure adequate access to utility lines or to discuss any necessary utility relocation. The City's program contractor shall identify all underground utilities in the areas of proposed excavations for all program elements. Prior to beginning

construction, Underground Services Alert shall be contacted to identify underground utilities. Where possible, design and specifications for program elements shall avoid existing utilities. In instances where utilities cannot be avoided, the City will relocate existing utilities either before, or during, program construction.

In response to Comment 3-C, the following text has been added to Chapter 5, *Other CEQA Findings*, Cumulative Impacts, Program Contribution to Cumulative Impacts, following the Noise section (page 5-11):

Public Services and Utilities

Continued development under the City's 2023 General Plan will have a cumulative impact on PG&E's gas and electric systems. Construction of various program elements that require electrical connections will result in a minor increase in demand for electricity, but will not result in a considerable contribution to the cumulative impact.

Appendix A

Mitigation Monitoring and Reporting Plan

**City of Manteca
2005 Water Master Plan
Mitigation Monitoring and Reporting Plan**

Prepared for:

City of Manteca
Public Works Department
1001 West Center Street
Manteca, CA 95337
Contact: Keith Conarroe
(209) 825-2577

Prepared by:

Jones & Stokes
268 Grand Avenue
Oakland, CA 94610
Contact: Rosalyn Stewart
(510) 433-8962

March 2007

Jones & Stokes. 2007. *City of Manteca 2005 Water Master Plan Mitigation Monitoring and Reporting Plan*. March. (J&S 05013.05) Oakland, CA.

Contents

	Page
Purpose of and Need for Monitoring	1
Project Description	2
Mitigation Monitoring Program	3
Table 1. Mitigation Monitoring and Reporting Plan for MRWTP Phase Two Expansion, Mitigation Measures	follows page 3

Acronyms and Abbreviations

CEQA	California Environmental Quality Act
FSEIR	final subsequent environmental impact report
City	City of Manteca
MMRP	Mitigation Monitoring and Reporting Plan
afa	acre-feet annually
SWRCB	State Water Resources Control Board

Introduction

Purpose of and Need for Monitoring

In compliance with the California Environmental Quality Act (CEQA), a final environmental impact report (FEIR) was prepared for the City of Manteca 2005 Water Master Plan (proposed program). The FEIR identified potentially significant impacts in the resource areas listed below. The FEIR also identified mitigation measures to reduce these impacts to a less-than-significant level, where feasible.

- Aesthetics and Visual Resources
- Agricultural Resources
- Air Quality
- Water Resources
- Noise
- Population and Housing
- Recreation
- Cultural Resources
- Biological Resources
- Transportation

CEQA requires that a lead agency adopt a mitigation monitoring and reporting plan (MMRP) for the measures the agency has proposed to avoid or mitigate significant environmental effects (CEQA Guidelines Section 15097). The purpose of the MMRP is to ensure that the program mitigation measures identified in the FEIR are implemented and to identify who is responsible for their implementation.

Table 1 of this MMRP, which follows this introductory section, identifies the mitigation measures for the proposed program, the parties responsible for implementing and monitoring the mitigation measures, the timing of each mitigation measure, and a summary of the actions necessary to implement and monitor each measure.

Program Description

The City developed the proposed program to guide improvement and expansion of the City's water system to meet current and future needs for a safe, reliable water supply and distribution system. The proposed program addresses the water

requirements of the City of Manteca 2023 General Plan (City of Manteca 2003b) and recommends capital improvements to support existing infrastructure and customer demands as well as planned new development.

Program Purpose and Objectives

The purpose of the proposed program (City of Manteca 2005b) is to provide a comprehensive planning document to guide improvement and expansion of the City of Manteca's water system to meet current and future needs for a safe, reliable water supply and distribution system. The proposed program addresses the water requirements of the 2023 General Plan and recommends capital improvements to support existing infrastructure and customer demands, as well as planned new development.

The objectives of the proposed program are to:

- provide a strategic approach to compliance with the new maximum contaminant level (MCL) of 10 ug/l;
- evaluate planned water system improvements to facilitate delivery of the SSJID's surface water supply to the combined service area;
- develop a groundwater supply and storage plan to meet a conjunctive groundwater/surface water use approach by the City without exceeding the aquifer's safe yield;
- prepare a time-phased capital improvement project (CIP) for the water system;
- implement the goals and objectives of the City of Manteca 2023 General Plan; and
- identify water use conservation programs and recycled water use options.

Program Characteristics

The City developed the 2005 WMP to guide improvement and expansion of the City's water system to meet current and future needs for a safe, reliable water supply and distribution system. The proposed program will include:

- implementation of a conjunctive use program, using groundwater wells in the City along with deliveries of treated surface water from the SSJID;
- consideration of groundwater recharge and recycled water use;
- construction of wellhead treatment systems for arsenic;
- construction of additional groundwater wells and/or storage tanks and associated pump stations for existing wells;

- construction of blending facilities for blending of groundwater with SSJID surface water supplies;
- expansion of the City’s water distribution system (which includes two turnouts, water storage tanks, and associated pump stations), with the potential future construction of an additional turnout, water storage tank, and associated pump station;
- upgrades to existing distribution mains; and
- construction of additional distribution mains associated with new development.

Construction of these facilities will be staged over time as the need develops.

Mitigation Monitoring Program

This MMRP has been prepared for the proposed program in accordance with Public Resources Code 21081.6, which specifies that when a public agency makes findings required by paragraph (1) of subdivision (a) of Section 21081, it “...shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” Public Resources Code 21081.6 further specifies that the MMRP will “...ensure compliance during project implementation.”

This MMRP is intended to ensure the effective implementation of mitigation measures that are within the City’s authority to implement, including monitoring where identified, throughout all phases of development and operation of the proposed program.

Table 1. Mitigation Monitoring and Reporting Plan for the City of Manteca Water Master Plan EIR

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
3.1. Aesthetics				
<p>Mitigation Measure AES-2a: Siting and Screening of Construction Staging Areas</p> <p>The City shall require all program contractors to site construction staging areas for equipment, personal vehicle parking, and material storage to minimize visual impacts to surrounding parcels. Prior to and during use of construction staging areas, screening, berming, and vegetation will be installed as appropriate for the zoning at the site. Screening will be maximized in residential areas, while lower levels are appropriate in commercial, industrial, or rural districts. The locations and screening methods to be used at the staging areas will be reflected in contract documents.</p>	During construction	Program contractors	City of Manteca	<p>Require in contract documents.</p> <p>Verify before issuance of contract.</p> <p>Verify periodically during construction.</p>
<p>Mitigation Measure AES-2b: Landscaping of Disturbed Areas</p> <p>The City shall require all program contractors to replace all existing landscaping that is removed or damaged during construction. Following completion of construction at each site, the contractor will replant landscape vegetation and replace irrigation hardware. Undeveloped lands without landscaping that are disturbed by construction will be allowed to return to a natural vegetated state. Standard erosion control practices will be implemented in compliance with current state regulations to ensure restoration is successful (see additional mitigation in Section 3.8, <i>Hydrology and Water Resources</i>). The landscaping to be replaced/planted at program element sites will be reflected in contract documents.</p>	After construction	Program contractors	City of Manteca	<p>Incorporate in project design.</p> <p>Verify before issuance of contract.</p> <p>Verify after completion of construction.</p>
<p>Mitigation Measure AES-3a: Siting and Design of Storage Tanks</p> <p>During design and planning of storage tanks, the City and its contractor shall adhere to the following design guidelines:</p> <ul style="list-style-type: none"> ■ To reduce visibility from roads and sensitive land uses, storage tanks will be placed well away from the parcel boundaries, and be designed to conform to the existing character of the surrounding land use through use of matching paint colors, fencing materials, and landscaping. ■ The painting palette for each storage tank will be selected to match the colors and tones of the surrounding neighborhood. Building materials used in the tanks will be selected to match the character of surrounding land uses. ■ Gates and fencing that are visible from public roadways will be similar to those existing in nearby residential neighborhoods. 	During design and planning	Program contractors	City of Manteca	<p>Incorporate in project design.</p> <p>Verify prior to construction.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
The City shall be responsible for ensuring that design of all storage tanks conforms to these guidelines.				
<p>Mitigation Measure AES-3b: Landscaping of Storage Tanks</p> <p>The City shall require all program contractors to provide a combination of earth berms, landscaping, and/or tree screening along the perimeter of the storage tank sites. The City's Landscape Standards will be used for storage tank sites. The primary goal of the landscaping along public roadways and around new facilities will be to screen views, minimize exposed surface area, and maintain consistency with the surrounding character. Species selection should reflect and respect the existing mature vegetation associated with the area. Plant variety will increase the effectiveness of the screen by providing multiple layers, seasonality, more diverse habitat, and reduced susceptibility to disease. The landscaping to be planted at the storage tank sites will be reflected in contract documents. The City will be responsible for maintenance of vegetation on the storage tank sites.</p>	During and after construction	Program contractors – installation; City of Manteca – maintenance	City of Manteca	<p>Incorporate in project design.</p> <p>Verify before issuance of contract.</p> <p>Maintain landscaping after completion of construction.</p>
<p>Mitigation Measure AES-3c: Burial of Storage Tanks in Sensitive Areas</p> <p>If, at the time of storage tank construction, the land surrounding the selected tank site is already developed with residential uses, the City shall consider partial or full burial of storage tanks where feasible, taking into account high groundwater levels and other factors (e.g., cost).</p>	During design and planning	Program contractors	City of Manteca	Consider in design and planning.
<p>Mitigation Measure AES-4a: Surface Treatment to Reduce Daytime Glare</p> <p>To minimize any effects from introduced light sources and reflected light, the City shall consider finishing structures and hardware surfaces with paint or other treatments that minimize daytime glare and reflectivity, including components such as grates, railings, piping, roofs, and other metal fixtures. The City will evaluate each new facility on a case-by-case basis with regard to surrounding land uses, and cover appropriate facilities with non-glare surfacing.</p>	During construction	Program contractors	City of Manteca	<p>Consider in design and planning.</p> <p>Verify during project element review.</p>
<p>Mitigation Measure AES-4b: Shielding of Nighttime Lights</p> <p>To reduce the effects of night illumination, the City shall consider shielding nighttime lights and direct them away from sensitive uses and the sky as appropriate for the zoning at the site. Shielding will be maximized in residential areas, while lower levels are appropriate in commercial, industrial, or rural districts. Lighting will be internally directed with low-level intensity, sufficient only to detect movement within facility grounds. The quantity of lights used will be the minimum</p>	During construction	Program contractors	City of Manteca	<p>Incorporate in project design.</p> <p>Verify after completion of construction.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>required for property security to minimize incidental light. Lights will be cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light onto adjacent properties and open space. All lights will provide good color rendering and natural light qualities. The City will annually check that nighttime lighting at program element sites conforms to these guidelines.</p>				Annual monitoring.
3.2. Agricultural Resources				
<p>Mitigation Measure AG-2: Prevent the Premature Conversion of Agricultural Land in the Program Area</p>	During design and planning	City of Manteca	City of Manteca	<p>Control during development planning.</p> <p>Follow legal requirements for farmland conversion as necessary.</p>
<p>The City of Manteca will limit the premature conversion of agricultural land, including land under Williamson Act contract, by avoiding active farmland during construction of program elements. The City will follow all legal requirements for farmland conversion if development on agricultural land is necessary during WMP implementation.</p>				
3.3. Air Quality				
<p>Mitigation Measure AQ-1a: Prepare and Implement a Dust Control Plan</p>	Prior to construction	Program contractors	City of Manteca	<p>Incorporate into contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify Dust Control Plan prior to construction.</p> <p>Verify periodically during construction.</p>
<p>To control the generation of construction-related PM10 emissions, the City will require program contractors to prepare and submit a Dust Control Plan to the SJVAPCD at least 10 working days prior to any earthmoving or construction activities; the plan shall be reviewed and approved by the SJVAPCD prior to onset of any construction activities. The City’s dust control requirements will be reflected in contract documents.</p>				
<p>Requirements of the Dust Control Plan for construction activities can include the following.</p>				
<ul style="list-style-type: none"> ■ Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. ■ Limit area subject to excavation, grading, and other construction activity at any one time. ■ Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. ■ Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). 				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> ■ Apply idling time limits or require that all diesel engines be shut off when not in use on the premises to reduce emissions from idling. ■ Curtail construction during periods of high ambient pollutant concentrations. This may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways, and “Spare the Air Days” declared by the SJVAPCD. ■ Implement activity management (e.g., rescheduling activities to reduce short-term impacts). ■ During the smog season (May through October), lengthen the construction period to minimize the number of vehicles and equipment operating at the same time. ■ Equip off-road trucks with on-road engines when possible. ■ Minimize obstruction of traffic on adjacent roadways. 				
<p>Mitigation Measure AQ-1b: Use ARB Certified Engines</p> <p>The City will require construction equipment engines that meet the current off-road engine emission standard (as certified by the ARB), or be re-powered with an engine that meets this standard. Tier I and Tier II engines have significantly less NOx and PM emissions compared to uncontrolled engines. Additionally, the City will require use of ARB-certified alternative fueled engines in construction equipment, where practicable, to reduce ROG, NOx, and PM emissions. Alternative fueled equipment may be powered by Compressed Natural Gas (CNG), Propane (LPG), electric motors, or other ARB certified off-road technologies. Program contractors will follow all SJVAPCD requirements and regulations for engine emission standards. Use of ARB-certified engines and/or alternative fueled engines will be reflected in contract documents.</p>	During construction	Program contractors	City of Manteca	Incorporate into contract documents. Verify prior to issuance of contract.
<p>Mitigation Measure AQ-3: Ensure All Emergency Backup Generators and Diesel Engines Meet EPA Tier 2 and ATCM Standards</p> <p>To minimize emissions resulting from operation of the emergency diesel generators, the City will install only generators that meet EPA Tier 2 standards for non-methane hydrocarbon (NMHC), Nox, and CO; and ARB ATCM standards for PM₁₀. The City will follow all SJVAPCD requirements and regulations for engine emission standards.</p>	During construction	Program contractors	City of Manteca	Incorporate in project design. Verify after completion of construction.

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
3.4. Biological Resources				
<p>Mitigation Measure BIO-1a: Document Special-Status Plant Populations</p> <p>Prior to design or construction of individual program elements on undisturbed lands, the City will document special status species populations. The City will retain a qualified botanist to document the presence or absence of special-status plants on or near to the individual program element site before implementation. Alternatively, the City may use certified environmental documentation to identify special-status plant populations on well sites within proposed development areas.</p> <p>To document plant populations, the following steps will be undertaken before construction of program elements. At any point during implementation of this mitigation measure, the City may choose to re-design or modify the program elements to avoid direct and indirect impacts on special-status plants, and will not need to complete the remaining steps identified in this mitigation measure.</p> <ul style="list-style-type: none"> ■ Review Existing Information. The botanist will review existing information to develop a list of special-status plants that could grow on sites selected for individual program elements. Sources of information consulted will include the CNDDDB; USFWS list of endangered, threatened, and proposed species for the program region; previously prepared environmental documents; City and County general plans; habitat conservation plans; and the CNPS electronic inventory. ■ Coordinate with Agencies. The botanist will coordinate with the appropriate agencies (DFG and USFWS) to discuss botanical resource issues and determine the appropriate level of surveys necessary to document special-status plants. ■ Conduct Field Studies. The botanist will evaluate existing habitat conditions for each site selected for construction of program elements, and determine what level of botanical surveys may be required. The type of botanical survey will depend on species richness, habitat type and quality, and the probability of special-status species occurring in a particular habitat type. Depending on these factors and the proposed construction activity, one or more of the following levels of survey may be required: <ul style="list-style-type: none"> □ Habitat Assessment. A habitat assessment determines whether suitable habitat is present. This type of assessment can be conducted at any time of year and is used to assess and characterize habitat conditions and 	<p>During design and planning</p>	<p>City of Manteca</p>	<p>City of Manteca</p>	<p>Perform assessment prior to design and construction.</p> <p>Incorporate information into project design.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>determine whether return surveys are necessary. If no suitable habitat is present, no additional surveys will be required.</p>				
<ul style="list-style-type: none"> ❑ Species-Focused Surveys. Species-focused surveys (or target species surveys) will be conducted if suitable habitat is present for special-status plants. The surveys will focus on special-status plants that could grow in the region, and would be conducted during a period when the target species are evident and identifiable. 				
<ul style="list-style-type: none"> ❑ Floristic Protocol-Level Surveys. Floristic surveys that follow the CNPS Botanical Survey Guidelines (revised Nelson 1987 surveys, approved by the CNPS board on June 2, 2001) will be conducted in areas that are relatively undisturbed or have moderate to high potential to support special-status plants. The CNPS Botanical Survey Guidelines require that all species be identified to the level necessary to determine whether they qualify as special-status plants or are plant species with unusual or significant range extensions. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable. To account for different special-status plant identification periods, one or more series of field surveys may be required in spring and summer. 				
<p>Special-status plant populations identified during the field surveys will be mapped and documented. The City shall implement Mitigation Measure BIO-1b in conjunction with this mitigation measure to avoid or minimize significant impacts on special-status plants.</p>				
<p>Mitigation Measure BIO-1b: Avoid or Minimize Impacts on Special-Status Plant Populations by Redesigning the Program Elements, Protecting Special-Status Plant Populations, and/or Developing a Transplantation Plan (If Necessary)</p>	<p>Prior to and during construction</p>	<p>City of Manteca</p>	<p>City of Manteca</p>	<p>Incorporate in project design. Incorporate into contract documents. Verify prior to issuance of contract. Verify periodically during construction.</p>
<p>Where a program element would have potential to result in direct loss or indirect disturbance to special-status plants, the City will implement the following measures to avoid or minimize impacts on special-status plants:</p>				
<ul style="list-style-type: none"> ■ Redesign or modify the program elements during future site design to avoid direct and indirect impacts on special-status plants, if feasible. 				
<ul style="list-style-type: none"> ■ During design and construction of wells and wellhead treatment facilities, blending stations, booster pumps, storage tanks, or distribution pipelines, 				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>protect special-status plants by installing environmentally sensitive area fencing (orange construction barrier fencing) around special-status plant populations. The environmentally sensitive area fencing will be installed at least 20 feet from the edge of the population. The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.</p> <ul style="list-style-type: none"> ■ Coordinate with the appropriate resource agencies and local experts to determine whether transplantation is feasible. If the agencies concur that transplantation is a feasible mitigation measure, the botanist will develop and implement a transplantation plan through coordination with the appropriate agencies. The special-status plant transplantation plan will involve identifying a suitable transplant site; moving the plant material and seed bank to the transplant site; collecting seed material and propagating it in a nursery; and monitoring the transplant sites to document recruitment and survival rates. 				
<p>Mitigation Measure BIO-2a: Conduct a Noxious Weed Survey and Document Noxious Weed Infestation</p> <p>Prior to construction of program elements on undisturbed lands or adjacent to agricultural areas, the City will address noxious weed impacts. The City will hire a qualified botanist to determine whether noxious weeds are an issue for the program and whether they could displace native plants and natural habitats, affect the quality of forage on rangelands, or affect cropland productivity. Alternatively, the City may use certified environmental documentation to determine noxious weed impacts on well sites within proposed development areas.</p> <p>If noxious weeds are an issue, the City will review the County Agricultural Commission’s noxious weed list; California Department of Food and Agriculture’s A, B, and C lists of noxious weeds; and California Exotic Pest Plant Council’s list of pest plants of ecological concern. These lists will be used to identify weeds that will be targeted during field surveys by the botanist. Surveys will focus on target weed species that are considered locally important for documentation and control purposes.</p> <p>If noxious weed infestations are located during the field surveys, they will be mapped and documented. The City will implement Mitigation Measure BIO-2b to</p>	<p>During design and planning</p>	<p>City of Manteca</p>	<p>City of Manteca</p>	<p>Perform assessment prior to design and construction.</p> <p>Incorporate information into project design.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
avoid the dispersal of noxious weeds into uninfested areas.				
<p>Mitigation Measure BIO-2b: Avoid the Dispersal of Noxious Weeds into Uninfested Areas</p> <p>To avoid the introduction or spread of noxious weeds into uninfested areas, the City will incorporate the following measures into construction project plans and specifications:</p> <ul style="list-style-type: none"> ■ Use certified, weed-free, imported erosion-control materials (or rice straw in upland areas). ■ Coordinate with the County Agricultural Commissioner and land management agencies to ensure that the appropriate best management practices (BMPs) are implemented. ■ Educate construction supervisors and managers about weed identification and the importance of controlling and preventing the spread of noxious weeds. ■ Clean equipment at designated wash stations after leaving noxious weed infestation areas. <p>The noxious weed avoidance measures will be reflected in contract documents and implemented by the program contractor.</p>	Prior to and during construction	Program contractor	City of Manteca	<p>Incorporate in project design.</p> <p>Incorporate into contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify periodically during construction.</p>
<p>Mitigation Measure BIO-3a: Identify and Document Riparian Habitat</p> <p>During design of individual program elements, the City will retain a qualified botanist to document the location, type, extent, and habitat functions and values for riparian habitat that could be affected by an individual program element. This information will be mapped and documented. Mitigation Measures BIO-3b and BIO-3c will be implemented as necessary to avoid, minimize, or compensate for impacts on riparian habitats.</p>	During design and planning	City of Manteca	City of Manteca	<p>Perform assessment prior to design and construction.</p> <p>Incorporate information into project design.</p>
<p>Mitigation Measure BIO-3b: Avoid and Minimize Disturbance of Riparian Habitats</p> <p>To the extent possible, the City will avoid impacts on riparian habitats by implementing the following measures:</p> <ul style="list-style-type: none"> ■ Redesign or modify wells and wellhead treatment facilities, blending stations, booster pumps, storage tanks, or distribution pipelines to avoid direct and indirect impacts on riparian habitats, if feasible. 	Prior to and during construction	City of Manteca; Program contractors	City of Manteca	<p>Incorporate in project design.</p> <p>Incorporate into contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify periodically</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> ■ Protect riparian habitats that occur near the project site by installing environmentally sensitive area fencing at least 20 feet from the edge of the riparian vegetation. Depending on site-specific conditions, this buffer may be narrower or wider than 20 feet. The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. ■ Minimize the potential for long-term loss of riparian vegetation by trimming vegetation, rather than removing the entire shrub. Shrub vegetation will be cut at least 1 foot above ground level to leave the root systems intact and allow for more-rapid regeneration of the species. Cutting will be limited to a minimum area necessary within the construction zone. 				during construction.
<p>The riparian habitat avoidance measures will be reflected in contract documents and implemented by the program contractor.</p>				
<p>Mitigation Measure BIO-3c: Compensate for the Loss of Riparian Habitat</p> <p>If riparian habitat is removed as part of the program elements, the City will compensate for the loss of riparian vegetation to ensure no net loss of habitat functions and values. Compensation ratios will be based on site-specific information and determined through coordination with state and federal agencies (including DFG, USFWS, USACE, and NOAA Fisheries). Compensation will be provided at a minimum 1:1 ratio (1 acre restored or created for every 1 acre removed) and may be a combination of on-site restoration/creation, off-site restoration, and mitigation credits. The City will develop a restoration and monitoring plan that describes how riparian habitat will be enhanced or re-created and monitored over a minimum period of time, as determined by the appropriate state and federal agencies. The City will implement the restoration and monitoring plan.</p>	Prior to, during, and after construction	City of Manteca	City of Manteca	<p>Incorporate in project design.</p> <p>Develop and implement the restoration and monitoring plan.</p>
<p>Mitigation Measure BIO-4a: Identify and Delineate Waters of the United States (Including Wetlands)</p> <p>During design and siting of individual program elements, the City will retain a qualified botanist to identify areas that could qualify as waters of the United States, including wetlands, assuming such features exist on the program element site. Wetlands will be identified using both the USACE and USFWS/DFG definitions of</p>	During design and planning	City of Manteca	City of Manteca	<p>Perform assessment prior to design and construction.</p> <p>Incorporate information into project design.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>wetlands. USACE jurisdictional wetlands shall be delineated using the methods outlined in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987). The jurisdictional boundary of other waters of the United States will be identified based on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 CFR 328.3[e]).</p> <p>This information will be mapped and documented as part of wetland delineation reports. Mitigation Measures BIO-4b and BIO-4c will be implemented as necessary to avoid, minimize, or compensate for impacts on waters of the United States, including wetland habitats.</p>				
<p>Mitigation Measure BIO-4b: Avoid and Minimize Disturbance of Waters of the United States, Including Wetland Communities</p> <p>To the extent possible, the City will avoid and minimize impacts on wetlands and other waters of the United States (creeks, streams, and rivers) by implementing the following measures:</p> <ul style="list-style-type: none"> ■ Redesign or modify wells and wellhead treatment facilities, blending stations, booster pumps, storage tanks, or distribution pipelines to avoid direct and indirect impacts on wetland habitats, if feasible. For pipelines, this may be accomplished through the use of trenchless installation methods (e.g., jack and bore). ■ Protect wetland habitats that occur near the project site by installing environmentally sensitive area fencing at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status fairy shrimp habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. ■ Avoid installation activities in saturated or ponded wetlands during the wet season (spring and winter) to the maximum extent possible. Where such activities are unavoidable, protective practices, such as use of padding or 	<p>Prior to and during construction</p>	<p>City of Manteca; Program contractors</p>	<p>City of Manteca</p>	<p>Incorporate in project design.</p> <p>Incorporate into contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify periodically during construction.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>vehicles with balloon tires, will be used.</p> <ul style="list-style-type: none"> <li>■ Where determined necessary by resource specialists, use geotextile cushions and other materials (e.g., timber pads, prefabricated equipment pads, or geotextile fabric) in saturated conditions to minimize damage to the substrate and vegetation. <li>■ Stabilize exposed slopes and streambanks immediately on completion of installation activities. Other waters of the United States will be restored in a manner that encourages vegetation to re-establish to its pre-program condition and that reduces the effects of erosion on the drainage system. <li>■ In highly erodible stream systems, stabilize banks using a non-vegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more-aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products. <li>■ During construction, remove trees, shrubs, debris, or soils that are inadvertently deposited below the OHWM of drainages in a manner that minimizes disturbance of the drainage bed and bank. 				
<p>These measures will be incorporated into contract specifications and implemented by the program contractor. In addition, the City will ensure that the contractor incorporates all permit conditions into construction specifications.</p>				
<p>Mitigation Measure BIO-4c: Compensate for the Loss of Wetland Habitat</p> <p>If wetlands are filled or disturbed as part of the program, the City will compensate for the loss of wetland habitat to ensure no net loss of habitat functions and values. Compensation ratios will be based on site-specific information and determined through coordination with state and federal agencies (including DFG, USFWS, and USACE). The compensation will be at a minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of on-site restoration/creation, off-site restoration, and mitigation credits. A restoration and monitoring plan will be developed and implemented that describes how wetlands will be created and monitored over a minimum period of time.</p>	<p>Prior to, during, and after construction</p>	<p>City of Manteca</p>	<p>City of Manteca</p>	<p>Incorporate in project design. Develop and implement the restoration and monitoring plan.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Mitigation Measure BIO-5a: Document Special-Status Wildlife Species and Their Habitats</p> <p>Prior to construction of individual program elements on undisturbed lands, the City will document special-status wildlife species and their habitats. The City will retain a qualified wildlife biologist to document the presence or absence of special-status wildlife before implementation. Alternatively, the City may use certified environmental documentation to identify wildlife populations on well sites within proposed development areas.</p> <p>To document special-status wildlife, the following steps will be undertaken before construction of program elements. At any point during implementation of this mitigation measure, the City may choose to redesign or modify the program element(s) to avoid direct and indirect impacts on special-status wildlife, and will not need to complete the remaining steps identified in this mitigation measure.</p> <ul style="list-style-type: none"> ■ Review Existing Information. The wildlife biologist will review existing information to develop a list of special-status wildlife species that could occur in the program area. The following information will be reviewed as part of this process: the USFWS special-status species list for the project region, CNDDDB, previously prepared environmental documents, City and County general plans, SJMSCP, and USFWS-issued biological opinions for previous projects. ■ Coordinate with State and Federal Agencies. The wildlife biologist will coordinate with the appropriate agencies (the DFG or USFWS) to discuss wildlife resource issues in the region and determine the appropriate level of surveys necessary to document special-status wildlife and their habitats. ■ Conduct Field Studies. The wildlife biologist will evaluate existing habitat conditions and determine what level of biological surveys may be required. The type of survey required will depend on species richness, habitat type and quality, and the probability of special-status species occurring in a particular habitat type. Depending on the existing conditions in the program area and the proposed construction activity, one or more of the following levels of survey may be required: <ul style="list-style-type: none"> □ Habitat Assessment. A habitat assessment determines whether suitable habitat is present. This type of assessment can be conducted at any time of year and is used to assess and characterize habitat conditions and to determine whether return surveys are necessary. If no suitable habitat is 	<p>During design and planning</p>	<p>City of Manteca</p>	<p>City of Manteca</p>	<p>Perform assessment prior to design and construction.</p> <p>Incorporate information into project design.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>present, no additional surveys will be required.</p>				
<ul style="list-style-type: none"> <li>❑ Species-Focused Surveys. Species-focused surveys (or target species surveys) will be conducted if suitable habitat is present for special-status wildlife and if it is necessary to determine the presence or absence of the species in the program area. The surveys will focus on special-status wildlife species that have the potential to occur in the program area (Table 3.4-2). The surveys will be conducted during a period when the target species are present and/or active. <li>❑ Protocol-Level Wildlife Surveys. The City will comply with protocols and guidelines issued by responsible agencies for certain special-status species. The USFWS and DFG have issued survey protocols and guidelines for several special-status wildlife species that could occur in the program region, including valley elderberry longhorn beetle, vernal pool branchiopods, California tiger salamander, and western burrowing owl. In some cases, the City may choose to assume the presence of the species rather than conduct a protocol-level survey. The protocols and guidelines may require that surveys be conducted during a particular time of year or time of day when the species is present and active. Many survey protocols require that only a USFWS- or DFG-approved biologist perform the surveys. The City will coordinate with the appropriate state or federal agency biologist before the initiation of protocol-level surveys to ensure that the survey results will be valid. Because some species can be difficult to detect or observe, multiple field techniques may be used during a survey period and additional surveys may be required in subsequent seasons or years as outlined in the protocol or guidelines for each species. 				
<p>Special-status wildlife or suitable habitat identified during the field surveys will be mapped and documented. The City shall implement Mitigation Measure BIO-1b in conjunction with the following mitigation measure to avoid or minimize significant impacts on special-status wildlife.</p>				
<p>Mitigation Measure BIO-5b: Avoid and Minimize Impacts on Special-Status Wildlife Species by Redesigning Program Elements, Protecting Special-Status Wildlife Habitat, and Developing a Mitigation Monitoring Plan (If Necessary)</p> <p>The City shall attempt to avoid and minimize direct and indirect effects on special-status wildlife. The City will implement the following measures during planning</p>	<p>Prior to, during, and after construction</p>	<p>City of Manteca; Program contractors</p>	<p>City of Manteca</p>	<p>Incorporate in project design. Incorporate into contract documents.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
and design of program elements:				Verify prior to issuance of contract.
<ul style="list-style-type: none"> ■ Conduct pre-construction surveys, as required by Mitigation Measure BIO-5a. 				Verify periodically during construction.
<ul style="list-style-type: none"> ■ Redesign or modify program elements to avoid direct and indirect impacts on special-status wildlife or their habitats, if feasible. 				Verify periodically during construction.
<ul style="list-style-type: none"> ■ Protect special-status wildlife and their habitats near the project site by installing environmentally sensitive area fencing around habitat features, such as seasonal wetlands, burrows, and nest trees. The environmentally sensitive area fencing or staking will be installed at a minimum distance from the edge of the resource as determined through coordination with state and federal agency biologists (the USFWS and DFG). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. 				
<ul style="list-style-type: none"> ■ Restrict construction-related activities to the non-breeding season for special-status wildlife species that could occur in the project area. Timing restrictions may vary depending on the species and could occur during any time of the year. 				
<ul style="list-style-type: none"> ■ Coordinate with the appropriate resource agencies to determine whether a monitoring plan for special-status wildlife is necessary as part of all program elements. If a monitoring plan is required, it will be developed and implemented in coordination with appropriate agencies and will include: 				
<ul style="list-style-type: none"> ❑ a description of each of the wildlife species and suitable habitat for species that could occur in the program area; 				
<ul style="list-style-type: none"> ❑ the location and size of no-disturbance zones in and adjacent to environmentally sensitive areas for wildlife; 				
<ul style="list-style-type: none"> ❑ directions on the handling and relocating of special-status wildlife species found on the project site that are in immediate danger of being destroyed; and 				
<ul style="list-style-type: none"> ❑ notification and reporting requirements for special-status species that are identified in the program area. 				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>The City may also use certified environmental documentation to identify, avoid, and minimize impacts to wildlife populations on well sites within proposed development areas.</p>				
<p>Mitigation Measure BIO-5c: Coordinate with Resource Agencies and Develop Appropriate Compensation Plans for State- and Federally-Listed Wildlife Species</p> <p>In the event that, despite implementation of Mitigation Measure BIO-5b, construction activities would result in significant impacts on state- or federally listed wildlife species, the City will develop a compensation plan in coordination with the appropriate resource agency (DFG, USFWS, SJCOG), and/or require that their compensation guidelines be followed, to reduce the impact to a less-than-significant level. Voluntary participation in the SJMSCP can satisfy requirements of both the state and federal endangered species acts, and ensure that impacts are mitigated below the significance threshold.</p> <p>Compensation guidelines have been identified for several special-status wildlife species, including valley elderberry longhorn beetle, vernal pool branchiopods, giant garter snake, Swainson’s hawk, and burrowing owl. The amount of compensation will vary depending on the amount of habitat loss or degree of habitat disturbance anticipated. The compensation plan will be developed and implemented in coordination with the appropriate state or federal agency and would involve identifying an agency-approved mitigation bank or site (on- or off-site); transplanting (elderberry shrubs), re-creating (burrows and vernal pools), or preserving additional habitat for special-status wildlife species; monitoring the mitigation site; or funding the management of the mitigation site.</p>	<p>Prior to, during, and after construction</p>	<p>City of Manteca</p>	<p>City of Manteca</p>	<p>Incorporate in project design. Develop and implement the conservation plan.</p>
<p>3.5. Cultural Resources</p>				
<p>Mitigation Measure CR-1: Conduct Cultural Resource Studies</p> <p>During project design, the City will require that archaeological and built environment inventories are conducted at locations proposed for the construction of distribution pipelines, storage tanks, blending stations, wells, and wellhead treatment facilities prior to construction. Alternatively, the City may use certified environmental documentation to identify cultural resources on well sites within proposed development areas.</p> <p>These studies will include conducting a records search at the Central California Information Center, contacting the NAHC and Native American representatives,</p>	<p>During design and planning</p>	<p>City of Manteca</p>	<p>City of Manteca</p>	<p>Perform assessment prior to design and construction. Incorporate information into project design.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>contacting other interested parties, conducting background research, and conducting a pedestrian inventory of the program area. All resources located as a result of a survey will be recorded on the appropriate Department of Parks and Recreation (DPR) 523 forms, photographed, and mapped. Archaeological resources will be plotted on a 7.5-minute U.S. Geological Survey (USGS) topographic map using data collected with a GPS receiver. Site records will be produced and forwarded to the Central California Information Center (CCIC). The significance of resources will be evaluated using criteria for listing in the CRHR. Impacts to historical resources located as a result of a survey will be analyzed and mitigated, if they cannot be avoided. Mitigation measures may include archaeological excavation, monitoring, or recording to particular standards.</p>				
<p>Mitigation Measure CR-2: Stop Work in Case of Accidental Discovery of Buried Archeological or Paleontological Resources</p>	<p>During construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents. Verify before issuance of contract.</p>
<p>If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, human bone, or fossils, are inadvertently discovered during ground-disturbing activities, the program contractors will stop work within 100 feet of the find until a qualified archaeologist and/or paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the City and other appropriate agencies.</p> <p>If human remains of Native American origin are discovered during project construction, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Pub. Res. Code Sec. 5097). If any human remains are discovered or recognized in any location other than a dedicated cemetery, the program contractors will conduct no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:</p> <ul style="list-style-type: none"> ■ the coroner of the county has been informed and has determined that no investigation of the cause of death is required; and ■ if the remains are of Native American origin, <ul style="list-style-type: none"> □ the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or 				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>❑ the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.</p>				
<p>According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission.</p>				
<p>The above provisions will be included in contract documents.</p>				
<p>3.6. Geology, Minerals, and Soils</p>				
<p>Mitigation Measure GEO-2a: Adherence to California Building Standards Code (CBSC) and American Water Works Requirements</p>	<p>During design and planning</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents. Verify prior to issuance of contract. Incorporate in project design.</p>
<p>The City shall require that all new water supply and distribution infrastructure be designed and constructed to meet or exceed requirements of the current CBSC and the American Water Works Association. This provision shall be written into contract documents for construction of all program elements.</p>				
<p>Mitigation Measure GEO-2b: Adherence to Recommendations Developed from Site-Specific Geotechnical Studies for Program Elements</p>	<p>During design and planning</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Perform assessment prior to design and construction. Incorporate information into project design. Require in contract documents Verify prior to issuance of contract.</p>
<p>During design of new water supply and distribution infrastructure, the City shall consider preparation of site-specific geotechnical studies by a qualified geotechnical engineer. A geotechnical study will be required for construction of large or unusual structures, such as water storage tanks. The City may use developer’s geotechnical reports to consider geologic and soils impacts on well sites within proposed development areas. Design and construction of program infrastructure will conform to all recommendations of these investigations. This provision shall be written into contract documents.</p>				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
3.7. Hazards and Hazardous Materials				
<p>Mitigation Measure HAZ-1a: Containment of Hazardous Materials Used during Wellhead Treatment Operations</p> <p>The City Fire Department, with oversight from the County Office of Emergency Services, has jurisdiction over containment requirements for production, use, storage, and transport of hazardous chemicals with the city limits. The requirements enforced are contained in the Uniform Fire Code, the Uniform Building Code, and the National Fire Protection Association Series. The City will implement double containment for all chemicals stored onsite at wellhead treatment facilities, and a scrubbing system for pressurized or liquefied gases that are hazardous or would create a nuisance if released. The City Fire Department or County Office of Emergency Services shall verify proper implementation of this measure through routine inspections.</p>	During operation	City of Manteca	City of Manteca Fire Department or County Office of Emergency Services	<p>Incorporate in project design.</p> <p>Verify through routine monitoring after construction.</p>
<p>Mitigation Measure HAZ-1b: Development and Implementation of Plans to Reduce Risk of Exposure of People and the Environment to Hazardous Materials during Wellhead Treatment Operations</p> <p>Any chemicals used during treatment will be regulated under the Hazardous Materials Release Response Plans and Inventory Law of 1985, which requires that a Hazardous Materials Business Plan be prepared for emergency response to a release or threatened release of a hazardous material. In the event an accidental release should occur, this emergency response plan will provide emergency responders with a protocol for containing and disposing of the unintentional release. The City will prepare and implement the Hazardous Materials Business Plan as required.</p>	During design and planning	City of Manteca	City of Manteca	<p>Prepare hazardous materials business plan during design and planning.</p> <p>Implement plan as necessary.</p>
<p>Mitigation Measure HAZ-2: Proper Disposal of Hazardous Materials</p> <p>Any and all residual materials from wellhead treatment that contains arsenic or other constituents of concern at concentrations that meet the standards for “designated” or “hazardous” waste will be stored, handled, and disposed of by the City at the appropriate collection and treatment facility (a Class I landfill) according to Title 27 California Code of Regulations §20210.</p>	During operation	City of Manteca	City of Manteca	<p>Incorporate in project design.</p> <p>Implement during project operations.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Mitigation Measure HAZ-3a: Develop and Implement Plans to Reduce Exposure of People and the Environment to Hazardous Conditions during Construction Activities</p> <p>The City shall require program contractors to develop plans to prevent the pollution of surface water and groundwater and to promote the health and safety of workers and other people in the program vicinity. These plans shall include an operations and maintenance plan, a site-specific safety plan, and a fire prevention plan, in addition to the stormwater pollution prevention plan (SWPPP) required for hydrology impacts (see Mitigation Measure HWQ-1 in Section 3.8, <i>Hydrology and Water Resources</i>). The plans are required by law and shall require approval by several responsible agencies. Required approvals include the SWPPP shall be approved by the RWQCB, the site-specific safety plan and the operations and maintenance plan shall be approved by Cal-OSHA, and the fire safety plan shall be approved by the City of Manteca Fire Department.</p> <p>The City shall also require program contractors to develop and implement a hazardous materials management plan that addresses public health and safety issues by providing safety measures, including release prevention measures; employee training, notification, and evacuation procedures; and adequate emergency response protocols and cleanup procedures.</p> <p>Finally, the City shall require program contractors to comply with Cal-OSHA, as well as federal standards, for the storage and handling of fuels, flammable materials, and common construction-related hazardous materials and for fire prevention. Cal-OSHA requirements can be found in the California Labor Code, Division 5, Chapter 2.5 Hazardous Substances Information and Training. Federal standards can be found in Occupational Safety and Health Administration Regulations, Standards—29 CFR, Part 1926 Safety and Health Regulations for Construction. The provisions listed herein will be incorporated into contract documents.</p>	<p>Prior to and during construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify required approvals prior to construction.</p>
<p>Mitigation Measure HAZ-3b: Follow City of Manteca Fire Department and Other Guidelines for Storage and Handling of Hazardous Materials</p> <p>The City shall require program contractors to transport, store, and handle hazardous materials required for construction in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the City of Manteca Fire Department. This provision will be reflected in contract documents.</p>	<p>During construction</p>	<p>Program contractors</p>	<p>City of Manteca Fire Department</p>	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Implement during project operations.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Mitigation Measure HAZ-3c: Immediately Contain Spills, Excavate Spill-Contaminated Soil, and Dispose of It at an Approved Facility</p> <p>The City shall require that in the event of a spill of hazardous materials in an amount reportable to the City of Manteca Fire Department (as established by fire department guidelines), the program contractor will immediately control the source of the leak and contain the spill. If required by the Fire Department or other regulatory agencies, the contractor will excavate contaminated soils and dispose of them off-site at a facility approved to accept such soils. This provision will be reflected in contract documents.</p>	During construction	Program contractors	City of Manteca Fire Department	<p>Require in contract documents</p> <p>Verify prior to issuance of contract.</p>
<p>Mitigation Measure HAZ-3d: Perform Hazards Records Search Prior to Development of All Program Sites and Implement Necessary Remediation</p> <p>Prior to development of program sites, the City will perform hazardous records searches to determine if the site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment. If any hazardous sites are discovered, the City will implement necessary remediation actions as required by law before developing the site.</p>	During design and planning	City of Manteca	City of Manteca	<p>Perform assessment prior to design and construction.</p> <p>Incorporate information into project design.</p>
<p>Mitigation Measure HAZ-3e: Screen Surface Soils in the Program Area for Residuals from Agricultural Chemicals (Fertilizers and Pesticides)</p> <p>To reduce the potential for human exposure to potentially harmful pesticide and fertilizer residues, for program elements being constructed in areas with potential for harmful pesticide and fertilizer residues, the City will require that surface soils in the area be sampled or field screened by a qualified hazardous materials consultant for residuals from agricultural chemicals during construction. Alternatively, the City may use developer’s soils reports to determine the presence of agricultural residues on well sites within proposed development areas. The San Joaquin County Environmental Health Department will review the results of soils sampling or screening and identify appropriate handling in accordance with the Department’s guidelines.</p> <p>In the event that soil sampling or field screening indicates the presence of hazardous concentrations of agricultural chemicals, the following measures shall apply. Program activities will not be performed within lands where agricultural chemicals have been applied until completion of the restricted access period, to ensure that the concentrations of hazardous agricultural chemicals on the site have been reduced to a</p>	During design and planning	Program contractors	San Joaquin County Environmental Health Department	<p>Perform assessment during construction.</p> <p>Incorporate information into project design.</p> <p>Require in contract documents</p> <p>Verify prior to issuance of contract.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>safe level. The use of appropriate personal protective gear shall be required when working within or adjacent to agricultural lands during the 30 days following the application of agricultural chemicals.</p>				
<p>Mitigation Measure HAZ-5: Incorporate Emergency Access Routes During Construction</p>	<p>Prior to construction</p>	<p>Program contractors</p>	<p>City of Manteca Fire Department</p>	<p>Require in contract documents Verify prior to issuance of contract. Verify at start of construction.</p>
<p>The City of Manteca Fire Department shall have oversight on emergency access during construction of the program elements. Prior to ground-breaking, program contractors will notify the Fire Department of all construction plans and potential traffic impacts. The Fire Department will verify that adequate emergency access throughout the program area continues during project construction. If emergency access is deemed inadequate during program construction, the Fire Department will identify alternate routes for emergency response. The Fire Department and other emergency service providers will be notified of lane closures and detours at least one week in advance of the closure so that adequate alternate routes can be determined. This provision will be reflected in contract documents.</p>				
<p>Mitigation Measure HAZ-6a: Before Construction Begins, Clear Materials That Could Serve as Fire Fuel from Areas Slated for Construction Activities</p>	<p>Prior to construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents. Verify prior to issuance of contract. Verify at start of construction.</p>
<p>If dry vegetation or other fire fuels exist on or near construction staging areas, welding areas, or any other area on which equipment will be operated, program contractors shall clear the immediate area of fire fuel. To maintain a firebreak and minimize the availability of fire fuels, the City will require contractors to maintain areas subject to construction activities clear of combustible natural materials to the extent feasible. This provision will be reflected in contract documents.</p>				
<p>Mitigation Measure HAZ-6b: Require That Spark-Generating Construction Equipment Be Equipped with Manufacturers’ Recommended Spark Arresters</p>	<p>Prior to construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents. Verify prior to issuance of contract.</p>
<p>Prior to construction of program elements on undisturbed lands or adjacent to agricultural areas, the City will require program contractors to equip any construction equipment that normally includes a spark arrester with an arrester in good working order. Subject equipment includes, but is not limited to, heavy equipment and chainsaws. This provision will be reflected in contract documents to minimize a source of construction-related fire.</p>				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
3.8. Hydrology and Water Resources				
<p>Mitigation Measure HWQ-1a: Implement Erosion and Sediment Control Measures</p> <p>Before onset of construction activities on construction sites of one acre or more, the City’s program contractor shall obtain coverage under the General Construction Permit. The City will be responsible for ensuring that construction activities comply with the conditions in this permit, which require development of a SWPPP, implementation of BMPs identified in the SWPPP, and monitoring to ensure that effects on water quality are minimized. As a performance standard, the General Construction Permit shall require controls of pollutant discharges that utilize the best available technology (BAT) that is economically achievable, best conventional technology (BCT) to reduce pollutants, and any more stringent controls necessary to meet water quality standards.</p> <p>For construction sites smaller than one acre, the program contractor will comply with City’s established SWPPP requirements and BMPs. The following erosion and sediment control BMPs are examples of BMPs that may be part of the SWPPP in order to be included in the construction specifications and project performance specifications, based on standard City measures and standard dust-reduction measures:</p> <ul style="list-style-type: none"> ■ cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways; ■ enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways; ■ control and contain soil and filter runoff from disturbed areas. This will be done by using berms, silt fencing, straw bales or wattles, plastic sheeting or geofabric, silt/sediment traps and catch basins, silt fencing, sand bag dikes, temporary vegetation or other groundcover, or other means necessary to prevent the escape of sediment from the disturbed area; ■ ensure that no earth or organic material shall be deposited or placed where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water; ■ prohibit the following types of materials from being rinsed or washed into the 	<p>Prior to and during construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify required SWPPP prior to construction.</p> <p>Verify compliance during construction through routine inspections.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>streets, shoulder areas, or gutters: concrete; solvents and adhesives; thinners; paints; fuels; sawdust; dirt; gasoline; asphalt and concrete saw slurry; and heavily chlorinated water;</p> <ul style="list-style-type: none"> ■ ensure that dewatering activities shall be conducted according to the provisions of the SWPPP. No dewatered materials shall be placed in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures; ■ ensure that drainage facilities in downstream off-site areas will be protected from sediment using BMPs acceptable to City of Manteca and the Central Valley RWQCB; and ■ ensure that grass or other vegetative cover will be established on the construction site as soon as possible after disturbance. 				
<p>Preparation and implementation of a SWPPP will be conducted by the City or its program contractors. The City will review the SWPPP and ensure that its contractors have submitted an NOI to comply with the General Construction Permit to the Central Valley RWQCB before construction begins. The City or its agent will perform routine inspections of the construction area to verify that the BMPs specified in the SWPPP are properly implemented and maintained. The City will notify its contractors immediately if there is a noncompliance issue and will require compliance.</p>				
<p>Mitigation Measure HWQ-1b: Develop and Implement a Spill Prevention, Control, and Countermeasure Program for Construction Activities</p> <p>The program contractor will develop and implement a Spill Prevention, Control, and Countermeasure Program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction activities. The SPCCP will be completed before any construction activities begin. Implementation of this measure shall comply with state and federal water quality regulations.</p> <p>The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that:</p> <ul style="list-style-type: none"> ■ violates applicable water quality standards, ■ causes a film or sheen on or discoloration of the water surface or adjoining 	<p>Prior to and during construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify required SPCCP prior to construction.</p> <p>Verify compliance through routine inspection during construction.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>shoreline, or</p> <ul style="list-style-type: none"> ■ causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines. <p>If a spill is reportable, the contractor’s superintendent will notify the City and take action to contact the appropriate safety and cleanup crews to implement the SPCCP. A written description of reportable releases must be submitted to the Central Valley RWQCB. This submittal must contain a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases shall be documented on a spill report form.</p> <p>If an appreciable spill has occurred and results determine that program activities have adversely affected surface water or groundwater quality, a detailed analysis shall be performed to identify the likely cause of contamination, and recommendations shall be made for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the program contractor will select and implement measures to control contamination, with a performance standard that surface and/or groundwater quality must be returned to baseline conditions. These measures will be subject to review by the City.</p> <p>The City will review the SPCCP before onset of construction activities as required. The City will routinely inspect the construction area to verify that the measures specified in the SPCCP are properly implemented and maintained. The City will notify its contractors immediately if there is a noncompliance issue and will require compliance.</p>	<p>Prior to and during construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify Frac-Out Contingency Plan prior to construction.</p>
<p>Mitigation Measure HWQ-1c: Develop and Implement a Frac-Out Contingency Plan for Jack and Bore Activities</p> <p>For tunneling activities that use drilling lubricants (e.g., construction of pipelines using jack-and-bore methods), the program contractor will prepare and implement a Frac-Out Contingency Plan that is intended to minimize the potential for a frac-out associated with tunneling activities, provide for the timely detection of frac-outs, and ensure an organized, timely, and “minimum-impact” response in the event of a frac-out and release of drilling lubricant (i.e., bentonite). The Contingency Plan will require, at a minimum, the following measures.</p> <ul style="list-style-type: none"> ■ A full-time monitor will attend all drilling to look for observable frac-out 				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>conditions or lowered pressure readings on drilling equipment.</p> <ul style="list-style-type: none"> <li>■ If a frac-out is identified, all work will stop, including the recycling of drilling lubricant. In the event of a frac-out into water, the pressure of water above the tunnel will keep excess mud from escaping through the fracture. The location and extent of the frac-out will be determined, and the frac-out will be monitored for 4 hours to determine whether the drilling lubricant congeals (bentonite will usually harden, effectively sealing the frac-out location). <li>■ If the drilling lubricant congeals, no other actions will be taken that potentially suspend sediments in the water column. <li>■ Surface releases of bentonite will be allowed to harden and then will be removed. <li>■ The Contingency Plan will identify additional measures to be taken to contain or remove the drilling lubricant if it does not congeal. <p>Preparation and implementation of a Frac-Out Contingency Plan will be reflected in contract documents.</p>				
<p>Mitigation Measure HWQ-2a: Use Trenchless Technology.</p> <p>Where distribution pipelines cross water bodies, the City will require its program contractor to use trenchless technology (microtunneling or jack-and-bore), where feasible. Frac-out plans as described in Mitigation Measure HWQ-1c shall be implemented as necessary.</p>	During construction	Program contractors	City of Manteca	<p>Require in contract documents.</p> <p>Incorporate in project design.</p> <p>Verify prior to issuance of contract.</p>
<p>Mitigation Measure HWQ-2b: Dry-Season Construction.</p> <p>Where Mitigation Measure HWQ-2a is not feasible, and flows in the water body (or area) are seasonal, construction shall be conducted during the dry season. The program site will be restored prior to the onset of the rainy season to minimize the potential for erosion. This proposed mitigation is subject to additional conditions as a result of negotiations of the required permits from USACE, DFG, and the Central Valley RWQCB.</p>	During and after construction	Program contractors	City of Manteca	<p>Require in contract documents.</p> <p>Incorporate in project design.</p> <p>Verify prior to issuance of contract.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Mitigation Measure HWQ-2c: Implement Measures to Maintain Water Quality.</p> <p>Where construction in a water body is unavoidable, the City will require its program contractor to control the release of sediment during construction by installing a sheet-pile cofferdam or another method that will control turbidity to the specifications listed below. This will ensure that construction activities result in minimal increases in turbidity or suspended solids.</p> <p>The City will require its program contractor to monitor turbidity and suspended solids during the installation and removal of the cofferdam and periods of dewatering during installation of the outfall. If levels exceed the Basin Plan standards, the City will stop work until levels are within Basin Plan limits. Basin Plan standards for turbidity state that project activities will not cause an increase in ambient river turbidity by more than 20% above background turbidity (California Regional Water Quality Control Board 1998). During the first week of construction, turbidity measurements will be taken in the river channel upstream of construction for baseline comparison conditions and at distances of 200 and 600 feet downstream of the program site. Measurements will be taken three times per day during the construction period, and measurements shall be taken where flow regime is applicable to the relative flow regime around the construction zone so the sample is representative of the water quality affected by construction.</p> <p>If turbidity violates the Basin Plan standard described above, operations will stop and the RWQCB will be notified. Investigation of the cause of the significant turbidity increase will be conducted and corrections will be made in construction operations where applicable. If necessary, the frequency and duration of monitoring may be revised in coordination with the RWQCB as part of the NPDES permit process. This mitigation measure is subject to alteration through negotiations of the other required permits from USACE, DFG, and the Central Valley RWQCB.</p>	<p>During and after construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents.</p> <p>Incorporate in project design.</p> <p>Verify prior to issuance of contract.</p> <p>Verify monitoring during the construction period.</p>
<p>Mitigation Measure HWQ-2d: Provisions for Dewatering.</p> <p>Dewatering effluent shall be discharged to the SSJID drainage system and is subject to the SSJID-City of Manteca Storm Drainage Agreement. Before discharging any substance that could reach surface waters, the City’s program contractors shall obtain an NPDES permit and WDRs from the Central Valley RWQCB. Depending on the volume and characteristics of the discharge, coverage under the RWQCB’s General Construction Permit or General Dewatering Permit is possible. As part of the permit, the program contractors will design and implement measures as</p>	<p>Prior to and during construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents.</p> <p>Incorporate in project design.</p> <p>Verify prior to issuance of contract.</p> <p>Verify NPDES</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>necessary so that the discharge limits identified in the relevant permit are met. As a performance standard, these measures will be selected to achieve maximum sediment removal and represent the BAT that is economically achievable. Implemented measures may include retention of dewatering effluent until particulate matter has settled before it is discharged, use of infiltration areas, and other BMPs. Final selection of water quality control measures will be subject to review by the City of Manteca.</p> <p>The City of Manteca will verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. The City or its agent shall perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. The City will notify its contractors immediately if there is a noncompliance issue and will require compliance.</p>				<p>permit prior to construction.</p> <p>Verify compliance during dewatering thorough routine inspection.</p>
3.9. Land Use and Planning				
<i>None</i>				
3.10. Noise				
<p>Mitigation Measure NOI-1a: Limit Hours of Construction.</p> <p>The City will require all program contractors to comply with the City’s 2023 General Plan Noise Element, Noise Ordinance, and zoning regulations. Construction activities for water supply infrastructure, except distribution pipelines, shall be limited to the hours between 7:00 a.m. and 10:00 p.m. All wells, wellhead treatment facilities, turn-outs, storage tanks, and other infrastructure outside of roadway ROWs shall adhere to these construction limits. However, this requirement is not applicable to construction of distribution mains in ROWs, when traffic conditions necessitate that construction activities occur on a 24-hour-per-day basis. During phases of 24-hour-per-day construction in ROWs, program contractors shall notice all neighbors within 500-feet of the pipeline segment a minimum of three weeks prior to ground-breaking. This provision will be reflected in contract documents.</p>	During construction	Program contractors	City of Manteca	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify periodically during construction.</p>
<p>Mitigation Measure NOI-1b: Prepare a Noise Control Plan.</p> <p>The City will require its program contractor to prepare a detailed Noise Control Plan based on the construction methods proposed. This plan will identify specific measurement that will be taken to ensure compliance with the noise limits specified</p>	Prior to construction	Program contractors	City of Manteca	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>above. The Noise Control Plan shall be reviewed and approved by City staff before any noise-generating construction activity begins. As part of this Plan, the City’s program contractor shall employ noise-reducing construction practices such that noise standards in the City’s 2023 General Plan Noise Element, Noise Ordinance, and zoning regulations are not exceeded. Measures that shall be used to limit noise include, but are not limited to:</p> <ul style="list-style-type: none"> ■ locating equipment as far a practical from noise sensitive uses, ■ using mufflers on all standard equipment, ■ selecting haul routes that affect the fewest number of people, ■ using noise-reducing enclosures around noise-generating equipment, ■ constructing barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission, and ■ enclosing equipment. 				<p>Verify Noise Control Plan prior to construction.</p>
<p>In the event that the construction engineer is unable to mitigate construction-related noise to the levels specified, the program contractor shall cease construction activities and employ additional mitigation measures sufficient to meet the noise levels above or offer to temporarily relocate residents (i.e., provide hotel vouchers). This provision will be reflected in contract documents.</p>				
<p>Mitigation Measure NOI-1c: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking Program.</p> <p>The program contractor shall notify all residents and businesses within 500 feet of construction areas of the construction schedule in writing a minimum of three weeks prior to ground-breaking. The program contractor will designate a noise-disturbance coordinator who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the noise-disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents. This provision will be reflected in contract documents.</p>	<p>Prior to construction</p>	<p>Program contractors</p>	<p>City of Manteca</p>	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p> <p>Verify status of Complaint/Response Tracking Program periodically during construction.</p>

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Mitigation Measure NOI-2: Employ Vibration-Reducing Construction Practices</p> <p>The City’s program contractor shall employ vibration-reducing construction practices such that vibration standards in the City’s 2023 General Plan Noise Element, Noise Ordinance, and zoning regulations are not exceeded. Measures that may be used to limit vibration include, but are not limited to:</p> <ul style="list-style-type: none"> ■ locating vibration-generating equipment as far as possible from vibration-sensitive land uses; ■ avoiding simultaneous operation of multiple pieces of vibration-generating equipment; ■ avoiding nighttime construction in residential areas; ■ avoiding construction processes that generate high vibration levels (for example, vibration from pile driving can be reduced or eliminated by using pre-drilled holes, pushed piles, or shielded pile drivers); and ■ avoiding the use of vibratory rollers near vibration-sensitive uses. <p>This provision will be reflected in contract documents.</p>	During construction	Program contractors	City of Manteca	<p>Require in contract documents.</p> <p>Verify prior to issuance of contract.</p>
<p>Mitigation Measure NOI-3: Design Pump Stations, Other Noise-Generating Facilities, and Building Enclosures to Meet Local Noise Standards</p> <p>The City will design the new booster pump stations, other noise-generating facilities, and building enclosures so that noise levels do not exceed applicable City noise standards and ordinances. Prior to field acceptance, the City shall retain an acoustical consultant to measure noise levels from the operating facility. If program-generated noise exceeds the noise ordinance performance standards, additional noise-attenuation measures shall be implemented to meet the standards. The proposed facility shall not receive final acceptance until the required noise standards are met. This measure shall be made a condition of the final design review.</p>	During design and planning	Program contractors	City of Manteca	<p>Require in contract documents.</p> <p>Perform assessment prior to field acceptance.</p> <p>Incorporate information into project design.</p> <p>Verify standard compliance prior to facility operation.</p>
3.11. Population and Housing				
<i>None</i>				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
3.12. Public Services, Utilities, and Recreation				
Mitigation Measure PSU-3a: Identify and Relocate Existing Utilities Where Necessary	Prior to construction	Program contractors	City of Manteca	Require in contract documents. Incorporate in project design. Verify prior to issuance of contract.
<p>The City of Manteca and its program contractors will coordinate with PG&E and other service providers early in the development of individual program elements to ensure adequate access to utility lines or to discuss any necessary utility relocation. The City’s program contractor shall identify all underground utilities in the areas of proposed excavations for all program elements. Prior to beginning construction, Underground Services Alert shall be contacted to identify underground utilities. Where possible, design and specifications for program elements shall avoid existing utilities. In instances where utilities cannot be avoided, the City will relocate existing utilities either before, or during, program construction.</p>				
3.13. Transportation				
Mitigation Measure TR-1: Develop and Implement a Traffic Control Plan	Prior to and during construction	Program contractors	City of Manteca	Require in contract documents. Verify prior to issuance of contract. Verify Traffic Control Plan prior to construction.
<p>In accordance with the City of Manteca’s policy on street closures and traffic diversion for arterial and collector roadways, the program contractor will prepare a Traffic Control Plan (to be approved by the City Engineer) prior to construction. The Traffic Control Plan will include:</p> <ul style="list-style-type: none"> ■ a street layout showing location of construction activity and surrounding streets to be used as detour routes, including “special signage;” ■ a tentative start date and construction duration period for each phase of construction; ■ the name, address, and emergency contact number for those responsible for maintaining the traffic control devices during the course of construction; and ■ written approval to implement traffic control from other agencies, including Caltrans and the County, as needed. <p>Additionally, the Traffic Control Plan will include, but may not be limited to, the following stipulations:</p> <ul style="list-style-type: none"> ■ provide access for emergency vehicles at all times; ■ maintain access for driveways and private roads, except for brief periods of construction, in which case property owners will be notified; 				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> ■ provide adequate off-street parking or use designated public parking areas for construction-related vehicles not in use through the construction period and construction workers' personal vehicles; ■ restrict delivery of construction materials to between the hours of 9:00 a.m. and 3:00 p.m. to avoid more congested morning and evening hours; ■ identify roadway segments or intersections that are at or approaching LOS that exceeds local standards and provide for construction-generated traffic to avoid these locations at the peak periods, either by traveling different routes or by traveling at non-peak times of day. Locations listed in Table 3.13-7 and Table 3.13-8 will potentially be identified if construction occurs prior to City-planned transportation improvements reflected in Table 3.13-9; ■ maintain pedestrian and bicycle access and circulation during project construction where safe to do so. If construction encroaches on a sidewalk, a safe detour will be provided for pedestrians at the nearest painted crosswalk. If construction encroaches on a bike lane, warning signs will be posted that indicate bicycles and vehicles are sharing the roadway; ■ include traffic controls such as flag persons wearing OSHA-approved vests and using the "Stop/Slow" paddle to warn motorists of construction activity; ■ maintain access to transit and ensure that public transit vehicles are detoured if temporary road closures occur; ■ post standard construction warning signs in advance of the construction area and at any intersection that provides access to the construction area; ■ post construction warning signs in accordance with local standards or those set forth in the Manual on Uniform Traffic Control Devices (Federal Highway Administration 2001) in advance of the construction area and at any intersection that provides access to the construction area; ■ during lane closures, notify the Manteca Fire Department and Manteca Police Department of construction locations and ensure that alternative evacuation and emergency routes are designed to maintain response times during construction periods, if necessary; ■ provide written notification to appropriate contractors regarding appropriate routes to and from construction sites and weight and speed limits for local roads used to access construction sites. Submit a copy of all such written 				

Mitigation Measures	Timing	Implementing Party	Monitoring Party	Monitoring Actions
notifications to the Manteca Planning Department; and				
<ul style="list-style-type: none"> ■ repair or restore the road right-of-way to its original condition or better upon completion of the work. 				
Preparation and implementation of a Traffic Control Plan will be reflected in contract documents.				