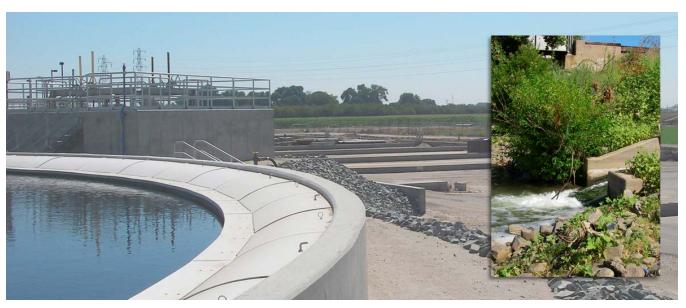
Findings of Fact and Statement of Overriding Considerations for the

City of Manteca Wastewater Quality Control Facility and Collection System Master Plans Update Project



Prepared for: City of Manteca



Prepared by: EDAW 2022 J Street Sacramento, CA 95811

January 2008

EDAW | AECOM

City of Manteca Wastewater Quality Control Facility and Collection System Master Plans Update Project



Prepared for:
City of Manteca
1001 West Center Street

Manteca, CA 95337

Attn: Phil Govea

Deputy Director of Public Works—Engineering

(209) 239-8463

Prepared by:

EDAW

2022 J Street Sacramento, CA 95811

Contact:

Amanda Olekszulin Senior Project Manager (916) 414-5800

January 2008



TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS			Page
			ii
1	STA	ATEMENT OF FINDINGS	1-1
	1.1	Introduction	1-1
	1.2	Description of the Approved Project	1-2
	1.3	Alternatives	1-2
	1.4	Findings of Fact	
2	STATEMENT OF OVERRIDING CONSIDERATIONS		2-1
	2.1	Significant Unavoidable Adverse Impacts	2-1
	2.2	Significant Unavoidable Adverse Impacts Overriding Considerations	2-3
3	REI	FERENCES	3-1

ABBREVIATIONS AND ACRONYMS

Term Definition

ADWF average dry weather flow

AFY acre-feet per year

AIA Air Impact Assessment

APCO Air Pollution Control Officer

BMP best management practice

Caltrans California Department of Transportation
CEQA California Environmental Quality Act

City City of Manteca

City General Plan City of Manteca's General Plan

CPUC California Public Utilities Commission

DFG Department of Fish and Game

DTSC California Department of Toxic Substances Control

EIR Environmental Impact Report

EPA U. S. Environmental Protection Agency

FCOC French Camp Outlet Canal

JPA Joint Powers Authority

LOS Level of Service

MF microfiltration

mgd million gallons per day
MLD Most Likely Descendant

NAHC Native American Heritage Commission

NOI Notice of Intent NO_X nitrogen oxides

NPDES National Pollutant Discharge Elimination System

OSHA U.S. Office of Safety and Health Administration

PM₁₀ respirable particulate matter

PPV peak particle velocity

Term Definition

proposed project Wastewater Quality Control Facility and Collection System Master Plans Update

Project

PSRs Project Study Reports

RO reverse osmosis

ROG reactive organic gasses

RWQCB Central Valley Regional Water Quality Control Board

SCSWSP South County Surface Water Supply Project

SJCDEH San Joaquin County Department of Environmental Health

SJCOG San Joaquin Council of Governments

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

SJVAB San Joaquin Valley Air Basin

SJVAPCD San Joaquin Valley Air Pollution Control District

SOI City's Sphere of Influence

SR 120 State Route 120

SSJID South San Joaquin Irrigation District
SWPPP Storm Water Pollution Protection Plan
SWRCB State Water Resources Control Board

TAC toxic air contaminants

Thermal Plan Water Quality Control Plan for Control of Temperatures in Coastal and Interstate

Waters and Enclosed Bays and Estuaries of California

tpy tons per year

USACE U.S. Army Corps of Engineers
USB Urban Services Boundary
USFWS U.S. Fish and Wildlife Service

UV ultraviolet

VdB velocity decibels
VDE visible dust emissions

WDR Waste discharge requirement

WER water effects ratio

WQCF Wastewater Quality Control Facility

1 STATEMENT OF FINDINGS

1.1 INTRODUCTION

The City of Manteca proposes to adopt the WQCF and Collection System Master Plans Update Project (proposed project), which incorporates both the 2007 City of Manteca Wastewater Quality Control Facility Master Plan Update and the 2006 City of Manteca Wastewater Collection System Master Plan Update. The project would involve the expansion of the City's Wastewater Quality Control Facility (WQCF) treatment capacity from 9.87 million gallons per day (mgd) to 27 mgd average dry weather flow (ADWF), construction of new trunk sewers to accommodate growth planned for in the City's general plan (adopted in 2003), and construction of a recycled water distribution system. The proposed WQCF expansion and upgrades would primarily be located within the existing 22-acre WQCF site, and proposed wastewater collection system improvements would generally be located along the perimeter of the city.

In accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, an Environmental Impact Report (EIR) was prepared to evaluate the environmental effects of the project: *Draft Environmental Impact Report for the City of Manteca Wastewater Quality Control Facility and Collection System Master Plans Update Project*, July 2007, and *Final Environmental Impact Report for the City of Manteca Wastewater Quality Control Facility and Collection System Master Plans Update Project*, November 2007 (SCH # 2006052164). The environmental analysis contained in the EIR is based on an evaluation of how environmental conditions would be expected to change as a result of implementing the project.

CEQA and the State CEQA Guidelines provide that:

[N]o public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

- (a) The public agency makes one or more of the following findings with respect to each significant effect:
 - (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
 - (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
 - (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.
- (b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment. [Public Resources Code Section 21081]

Because the EIR identified significant effects that may occur as a result of the project and in accordance with the provisions of the State CEQA Guidelines, the City of Manteca hereby adopts these findings as part of the approval of the proposed project.

1.2 DESCRIPTION OF THE APPROVED PROJECT

The proposed project would involve the expansion of the WQCF's treatment capacity from 9.87 mgd to 27 mgd ADWF, construction of new trunk sewers to accommodate growth planned for in the City's general plan (adopted in 2003), and construction of a recycled water distribution system. The project would involve construction of treatment facilities to achieve compliance with water quality limitations including rapid mixing and flocculation tanks to address turbidity requirements and a tertiary ultraviolet (UV) light disinfection treatment system to address wastewater reuse requirements. The proposed project would reach buildout via a two-phase, incremental expansion, with capacity increasing from 9.87 to 17.5 mgd ADWF in the first phase, and then from 17.5 to 27 mgd ADWF in the second phase. The proposed increase in capacity would be accommodated using the City's long-term effluent disposal strategy of on-site land application, urban landscape irrigation, and San Joaquin River discharge. The proposed project would also involve the incremental construction of three new trunk sewers and improvements to the collection system.

The WQCF occupies approximately 22 acres of a 210-acre City-owned site, which is bounded generally by Yosemite Avenue to the north, SR 120 to the south, Airport Way to the east, and both McKinley Avenue and the Union Pacific Railroad to the west. The proposed WQCF expansion and upgrades would primarily be located within the existing 22-acre WQCF site. A proposed treated effluent outfall pipeline would extend from the WQCF to a side-bank outfall structure at the San Joaquin River. Proposed wastewater collection system improvements would generally be located along the perimeter of the city. Local roadways in the vicinity of the proposed wastewater collection system trunk sewers include Woodward Avenue, Lathrop Road, and Airport Way. A proposed recycled water distribution system would primarily follow Woodward Avenue, Airport Way, and Center Street.

1.3 ALTERNATIVES

In accordance with the Section 15126.6 of the State CEQA Guidelines, a range of reasonable alternatives to the project that could feasibly attain the basic project objectives was addressed in the EIR. The EIR considered the following four alternatives to the project: No Project Alternative (9.87 mgd), Increased Land Disposal Alternative, Advanced Wastewater Treatment Alternative, and Modified Pipeline Alignment Alternative.

The No Project Alternative and the Modified Pipeline Alternative are environmentally superior to the project. The Advanced Wastewater Treatment Alternative would result in environmental tradeoffs compared to the project. The Increased Land Disposal Alternative would not be environmentally superior to the project.

The No Project Alternative would not attain any of the project's objectives. The Modified Pipeline Alternative would attain all of the project's objectives.

1.3.1 No Project Alternative (9.87 mgd)

Under the No Project Alternative (9.87 mgd), the 2007 WQCF and 2006 collection system master plans would not be implemented, and discharge at the WQCF would not exceed the currently permitted discharge rate of 9.87 mgd. The WQCF would be projected to accommodate increased urban growth in the City service area for the next 5–10 years depending on the buildout rate of proposed development, at which time the ADWF discharge from the WQCF is projected to reach the plant's currently permitted ADWF capacity of 9.87 mgd. Under this alternative, WQCF discharges would be "capped" at 9.87 mgd ADWF, and growth in the City's service area would be constrained. Plant improvements needed to address regulatory requirements, ongoing maintenance needs, or technical upgrades (including buildout of the WQCF) would still be implemented, but capacity would not be increased above 9.87 mgd. If the No Project Alternative were implemented, other options would need to be considered to address the wastewater treatment demands associated with future development in the City's service area.

No Project Alternative impacts would be similar to the project for several resource areas including hazards and hazardous materials; geology, soils, and seismicity; hydrology and water quality; public services and utilities; and fisheries and aquatic resources. The No Project Alternative would result in lesser impacts to the remaining eight resource areas, and would avoid the project's significant and unavoidable impacts associated with Important Farmland and generation of substantial odors. Because the No Project Alternative would not result in any significant and unavoidable impacts, it is the environmentally superior alternative and it is superior to all other alternatives considered. However, this alternative would not meet any project objectives. Further, it would not resolve existing non-compliance issues associated with the temperature of the effluent. Most importantly, this alternative would not result in the expansion of the WQCF to meet buildout demands associated with the City's General Plan 2023. As such, this alternative may result in the curtailment of growth within the City until an alternate plan for wastewater disposal could be developed.

1.3.2 INCREASED LAND DISPOSAL ALTERNATIVE

The Increased Land Disposal Alternative would maximize the discharge of treated effluent to nearby agricultural lands. In order to maintain existing water quality and constituent loadings to the San Joaquin River from the time the WQCF reaches its current permitted capacity of 9.87 mgd ADWF through the proposed buildout capacity of 27 mgd ADWF, it is estimated that a maximum effluent-to-land disposal capacity of 18 mgd would be required.

Treated effluent from the WQCF is currently either land applied to approximately 190 acres of City-owned land or discharged to the San Joaquin River. The City has examined a number of effluent-to-land disposal strategies that would have sufficient capacity for disposal of 18 mgd of treated wastewater year-round. Because of the relatively high unit cost and other implementation constraints of urban water reuse, the increased land disposal alternative would apply undisinfected, denitrified, secondary effluent to existing City-owned land surrounding the WOCF and to future City-purchased land at some distance from the WOCF. While the City has examined the costs of purchasing land from one to 10 miles away for effluent disposal, economic considerations and land availability make the purchase of land farther away from the WQCF a more tenable proposition. To that end, the increased land disposal alternative includes high-rate irrigation (260 in/vr) of City-owned land at the WOCF property (4,600 ac-ft/year or 4.11 mgd) and agricultural irrigation on acreage within 10 miles of the WQCF that would be purchased by the City (15,560 ac-ft/year or 13.89 mgd) as a means of collectively applying 18 mgd of undisinfected, denitrified, secondary effluent to land year-round. This alternative would allow the reclamation of up to approximately two thirds of WOCF effluent at the proposed build-out capacity of 27 mgd ADWF. Additional pipelines would be required to convey treated effluent from the WQCF to the selected land disposal site. All facilities proposed at the WQCF to treat up to 27 mgd of wastewater and proposed collection system and recycled water distribution pipelines would be constructed under this alternative.

The Increased Land Disposal Alternative would not be environmentally superior to the project because it would not avoid any of the project's significant and unavoidable impacts related to Important Farmland and generation of odors, and it would result in greater environmental impacts in three resource areas including greater impacts to Important Farmland, sensitive habitats and species, and construction-related traffic impacts. While this alternative may achieve most project objectives, because of the substantial expense involved with securing additional land for effluent disposal, it would not be expected to meet the project objective of providing for the "cost-effective" expansion of City WQCF facilities.

1.3.3 ADVANCED WASTEWATER TREATMENT ALTERNATIVE

Because the proposed project includes nitrification-denitrification, tertiary filtration and UV disinfection facilities, the remaining advanced wastewater treatment options available to the City are microfiltration and reverse osmosis (MF/RO). RO is a membrane separation process that is used for the removal of dissolved constituents from wastewater remaining after advanced treatment with tertiary filtration or microfiltration. RO treatment relies on applied pressure to force water through a semi-permeable membrane while restraining the passage of particulate and high molecular weight constituents. Membranes exclude ions, but require high pressures to produce the

deionized water. Passage of water through the membrane produces a relatively ion free effluent stream and a concentrated brine stream. MF occurs prior to RO in order to remove larger organic and inorganic particles that foul the RO membrane and thus increase membrane resistance to water flow and reduce membrane service life.

The Advanced Wastewater Treatment alternative would involve the implementation of advanced MF/RO technology. In order to maintain existing water quality and TDS loadings in the San Joaquin River from the time the WQCF reaches its current permitted capacity of 9.87 mgd ADWF through the proposed buildout capacity of 27 mgd ADWF, it is estimated that a maximum MF/RO capacity of 21 mgd would be required (LWA 2007). This alternative assumes that the blending of effluent streams of different qualities is permitted and, therefore, only a portion of WQCF tertiary effluent would need to undergo MF/RO prior to blending with non-MF/RO tertiary effluent and discharge to the San Joaquin River.

Although no significant water quality impacts were identified for the project, the project would exceed currently adopted standards for aluminum (although a water effects ratio [WER] study has been completed to identify an appropriate site-specific objective for total aluminum in the San Joaquin River that is both sufficiently protective of aquatic life and identifies available assimilative capacity for aluminum in the river under which the WQCF can discharge its effluent); however, this impact was determined to be less than significant because the current adopted standard is believed, based on available science, to be overly protective of water quality and aquatic resources. The MF/RO process would reduce the concentration and loadings of aluminum and other metals in the effluent compared to the proposed project.

The Advanced Wastewater Treatment alternative would result in environmental tradeoffs compared to the proposed project. While impacts to water quality and fisheries would be reduced compared to the proposed project as a result of greater constituent removal efficiencies, this alternative could result in greater hazardous material impacts as a result of the brine that is produced as a by-product of the MF/RO process. This alternative would not reduce or eliminate the project's significant and unavoidable impacts (e.g., Important Farmland and odors). While this alternative may achieve most project objectives, because of the substantial expense involved with constructing and operating MF/RO facilities, it would not be expected to meet the project objective of providing for the "cost-effective" expansion of City WQCF facilities. However, from a water quality perspective, the Advanced Wastewater Treatment Alternative would be the environmentally superior alternative because this alternative would have greater constituent removal efficiencies than the project.

1.3.4 Modified Pipeline Alignment Alternative

The proposed project would incrementally add new collection system sewer pipelines to meet the development goals adopted in the City of Manteca General Plan 2023. Building upon the existing wastewater collection system, new wastewater collection system pipelines would convey wastewater to an influent pump station at the WQCF. In addition, a new recycled water distribution system would be constructed in stages to supply recycled water citywide. Implementation of the proposed project would also result in construction of an approximately 14,000-foot 48-inch diameter outfall pipeline parallel to the existing outfall pipeline. Although proposed pipelines would mainly be constructed within developed roadways, some proposed pipeline segments would traverse sensitive biological habitats such as freshwater marsh and riparian forest habitats. This alternative would modify the pipeline alignments to avoid sensitive biological habitats wherever feasible.

The proposed pipeline routes for the wastewater collection system, effluent outfall, and recycled-water distribution system cross or are located immediately adjacent to three canals that contain sensitive biological habitats (see Draft EIR Exhibits 4.5-1, 4.5-2a, 4.5-2b, and 4.5-2c). The proposed wastewater collection system would cross a drainage canal north of Yosemite Avenue and west of Airport Way (Exhibit 4.5-2a). The crossing, referred to as Alignment A, is located 1,000 feet east of the confluence of the drainage canal with the French Camp Outfall Canal. Beginning at a point just west of Airport Way and north of the Southern Pacific Railroad tracks, another portion of the proposed wastewater collection system route (referred to as Alignment B) would be located within 5 feet of a drainage canal for approximately 2,000 feet (Exhibit 4.5-2b). This canal is also a

tributary of the French Camp Outfall Canal and averages 20 feet wide. Water and dense freshwater marsh vegetation types are present within and along the banks of the channel. The proposed wastewater collection system also crosses the French Camp Outfall Canal south of the WQCF property and north of SR 120 (Exhibit 4.5-2c). This area, referred to as Alignment C, contains water and freshwater marsh vegetation in the channel of the canal.

The modified pipeline alignment alternative would alter the three pipeline alignments that cross or are located immediately adjacent to canals that contain sensitive biological habitats. At Alignment A, the alternative would realign the pipeline to the east and north of the French Camp Outfall Canal to avoid crossing the drainage canal. At Alignment B, the pipeline alignment would be realigned northeast and away from the drainage canal to avoid dense freshwater marsh habitat. Lastly, the alternative would realign Alignment C east of the drainage canal.

At Alignment C, the City has determined that it is infeasible to modify the collection system alignment. The collection system pipeline alignment south of the WQCF was established considering the location and depth of the influent pump station constructed at the WQCF under the Phase III improvements project. Due to topography and long trunk sewer lengths, there is minimal flexibility in modifying the collection system pipeline route in the vicinity of freshwater marsh habitat north of SR 120 and east of McKinley Avenue without compromising the ability to convey wastewater to the influent pump station by gravity. Because of the congested core of the treatment plant site and the desire to limit construction impacts, the influent pump station was sited along the easterly boundary of the city property. Therefore, it would be infeasible to realign the collection system at Alignment C because it is essentially fixed to allow for connection to a previously constructed stub within the treatment plant core.

Overall, the Modified Pipeline Alignment Alternative would be environmentally superior to the project. This alternative would not avoid the project's significant and unavoidable impacts (e.g., Important Farmland and odors); however, this alternative would substantially reduce the project's impacts to sensitive resources. Further, all project objectives would be achieved with implementation of this alternative.

1.4 FINDINGS OF FACT

The City of Manteca has reviewed the Draft EIR for the proposed project; Appendices to the Draft EIR; and the Final EIR, which contains Responses to Comments on the Draft EIR and additional information. The City has also considered the public record on the project. In addition to this Statement of Findings, the public record for the proposed project is composed of the following elements (a full reference list is provided in Chapter 8 of the Draft EIR):

- ▶ Draft Environmental Impact Report for the City of Manteca Wastewater Quality Control Facility and Collection System Master Plans Update Project, July 2007 (State Clearinghouse # 2006052164).
- ► Final Environmental Impact Report for the City of Manteca Wastewater Quality Control Facility and Collection System Master Plans Update Project, November 2007 (State Clearinghouse # 2006052164).
- ► Draft Environmental Impact Report, Volumes 1 and 2, Manteca General Plan 2023, certified October 6, 2003.
- ► City of Manteca General Plan 2023 Policy Document, Wade Associates, adopted October 6, 2003.
- ► San Joaquin County General Plan, San Joaquin County, adopted 1992.
- ▶ Soil Survey of San Joaquin County California, Natural Resources Conservation Service, 1992.

- ► Geotechnical Investigation Report Proposed Additions to Manteca Wastewater Treatment Plant, Manteca, California, Kleinfelder, Inc., 1997.
- Addendum to Geotechnical Investigation Report Proposed Additions to Manteca Wastewater Treatment Plant, Manteca, California, Kleinfelder, Inc., 2004.
- ► Risk Management Plan, City of Manteca Wastewater Quality Control Facilities. Version 1, Sierra-Pacific Group, 1999.
- ► Near and Far Field Dilution Analysis of the Manteca Wastewater Discharge, Resource Management Associates, 2006.
- ► Antidegradation Analysis for proposed Wastewater Quality Control Facility Discharge Modification, Larry Walker Associates, 2007.
- ► City of Manteca 2005 Urban Water Management Plan, City of Manteca, 2005.

Pursuant to Public Resources Code Section 21081, for each significant effect identified in the EIR, the City of Manteca must make one or more of the findings stated on page 1-1.

After reviewing the public record, as composed of the aforementioned elements, the City of Manteca hereby makes the following findings regarding the significant effects of the proposed project, pursuant to Public Resources Code Section 21081 and Section 15091 of the State CEQA Guidelines.

1.4.1 LAND USE AND AGRICULTURAL RESOURCES

SIGNIFICANT EFFECT: CONVERSION OF IMPORTANT FARMLAND TO NONAGRICULTURAL USE (IMPACT 4.1-3)

Implementation of the proposed project would result in the conversion of approximately 41 acres of Prime Farmland and Farmland of Statewide Importance to nonagricultural use. Conversion of agricultural land would be considered a **significant** impact.

Finding

Changes or alterations, which reduce but do not completely avoid the significant effects of the project, have been incorporated into the project. While this mitigation measure would substantially reduce the significant effects of the project, the residual impact would continue to be significant. Therefore, this impact would be significant and unavoidable.

Impacts to farmland resources would be avoided by the No Project Alternative (9.87 mgd) and Modified Pipeline Alternative. As discussed in Section 1.1, "Introduction," of this document and as discussed herein, specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR that would reduce this impact to a less-than-significant level.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address this issue.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure for loss of agricultural land. This mitigation measure would reduce impacts related to the loss of agricultural land to the greatest extent feasible, but not to a less-than-significant level.

Mitigation Measure 4.1-3: Conversion of Important Farmland to Nonagricultural Use. The City will pay the required City agricultural mitigation fee to help offset the conversion of Important Farmland. Consistent with Chapter 13.42 of the Manteca Municipal Code, a \$2,000 agricultural mitigation fee will be assessed for every acre of Important Farmland that would be developed as part of the proposed project. A total of \$82,000 (\$2,000 multiplied by 41 acres) will be made available to acquire farmland conservation easements and/or farmland deed restrictions. Consistent with goals of the City's Right to Farm ordinance, this mitigation measure would reduce the occurrence of conflicts between nonagricultural and agricultural land uses from development pressure by preserving agricultural lands located within the project vicinity.

Implementation of this mitigation measure would substantially reduce significant impacts associated with the conversion of approximately 41 acres of Important Farmland on the WQCF site and along pipeline alignments because funding conservation easements would provide assistance to public and private sectors in protecting other farmland from the pressures of development. The agricultural mitigation fee would be used to specifically purchase farmland easements and/or farmland deed restrictions to partially offset project impacts; however, approximately 41 acres of Important Farmland would still be unavoidably lost. In addition, no new farmland would be made available, and the productivity of existing farmland would not be improved as a result of this mitigation measure. Thus, full compensation for losses of Important Farmland would not be achieved. No other feasible mitigation is available. Impact 4.1-3 (Conversion of Important Farmland to Nonagricultural Use) would remain **significant and unavoidable** after mitigation.

1.4.2 VISUAL RESOURCES

SIGNIFICANT EFFECT: IMPACTS OF CONSTRUCTION-RELATED NIGHTIME LIGHTING (IMPACT 4.2-4)

Project construction could, at times, continue past dusk. High-intensity lighting may be used to illuminate construction sites associated with the WQCF site, pumping stations, parallel outfall pipeline, and pipeline alignments. This lighting could be visible to nearby residences and could contribute to skyglow in the surrounding area. Although construction-related lighting would be temporary, it could result in intrusive glare in areas adjacent to project construction sites. This would be a **potentially significant** construction-related lighting impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to a less-than-significant level the project's construction-related nighttime lighting impacts.

Mitigation Measure 4.2-4: Impacts of Construction-Related Nighttime Lighting. If construction activity occurs after dusk and nighttime lighting is required to illuminate any construction sites associated with the proposed project, the City will ensure that all construction lights are directed away from adjacent development and that all construction lighting is shielded to minimize glare. Implementation of this mitigation measure would reduce impacts of construction-related lighting to **less-than-significant** levels.

1.4.3 AIR QUALITY

SIGNIFICANT EFFECT: GENERATION OF SHORT-TERM CONSTRUCTION-RELATED EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS (IMPACT 4.3-1)

Modeled short-term project-generated emissions from construction equipment for projects constructed during Phase 1 (2008 to 2010 based on construction projections presented in Draft EIR Table 3-4) would exceed San Joaquin Valley Air Pollution Control District's (SJVAPCD's) significance threshold of 10 tpy and project applicable SJVAPCD-required and other control measures for fugitive dust are not currently part of the project description. Project-generated, construction-related emissions of criteria air pollutants and precursors could violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations, especially considering the nonattainment status of San Joaquin County, and/or conflict with air quality planning efforts. As a result, this impact would be **significant**.

Finding

Changes or alterations, which reduce but do not completely avoid the significant effects of the project, have been incorporated into the project. Those changes or alterations are within the responsibility and jurisdiction of another public agency, SJVAPCD, and not the agency making these findings. These measures can and should be adopted by that other agency. While this mitigation measure would substantially reduce the significant effects of the project, the residual impact would continue to be significant. Therefore, this impact would be significant and unavoidable.

Impacts from NO_X , ROG, and PM_{10} emissions during construction would be further reduced or avoided by the No Project Alternative (9.87 mgd). As discussed in Section 1.1, "Introduction," of this document and as discussed herein, specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR that would reduce these impacts to a less-than-significant level.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address this issue.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure for the project's generation of short-term construction-related emissions of criteria pollutants and precursors. This mitigation measure would reduce this impact to the greatest extent feasible, but not to a less-than-significant level.

Mitigation Measure 4.3-1: Generation of Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors.

- A. SJVAPCD has indicated that the project may be subject to Rule 9510, Indirect Source Review (SJVAPCD 2006d). It would appear that the WQCF expansion portion of the project would be exempt in accordance with Section 4.4.3 of the Rule, which exempts facilities that are subject to the New and Modified Source Rule. Construction of the collection system and outfall would result in emissions of NO_X in excess of 2.0 tons per year, which is a baseline for applicability of the Rule. Therefore, the City of Manteca will ensure that the proposed project complies with the following, as required by law:
 - Submit an Air Impact Assessment (AIA) application to SJVAPCD. The AIA application will be submitted on a form provided by the SJVAPCD and contain, but not limited to, the applicant's name and address, detailed project description, on-site emission reduction checklist, monitoring and reporting schedule, and an AIA. The AIA shall quantify construction NO_X and PM₁₀ emissions associated with the

project. (PM_{10} emissions would be less than 2 tpy; therefore, it may be acceptable to limit the AIA analysis to NO_X emissions.) This will include the estimated construction baseline emissions, and the mitigated emissions for each applicable pollutant for the development project, or each phase thereof, and shall quantify the off-site fee, if applicable.

General mitigation requirements, as contained in the ISR rule, include the following:

- Exhaust emissions for construction equipment greater than 50 horsepower used or associated with the project will be reduced by 20% of the total NO_X and by 45% of the total PM_{10} exhaust emissions from the statewide average as estimated by ARB.
- Consider using less polluting construction equipment, which can be achieved by utilizing add-on controls, cleaner fuels, or newer lower emitting equipment.
- Additional strategies for reducing construction emissions may include, but are not limited to:
 - Providing commercial electric power to the project site in adequate capacity to avoid or minimize the use of portable electric generators and the equipment;
 - Substitution of electric-powered equipment for diesel engine driven equipment; and
 - Limiting the hours of operation of heavy duty equipment and/or the amount of equipment in use at any one time.
- ► The requirements listed above can be met through any combination of on-site, emission-reduction measures or off-site fees. The ISR rule provides a method of calculating fees to be paid to offset any NO_X and PM₁₀ emission reductions that would not be achieved by selection of construction equipment and fuels.
- B. The City of Manteca will ensure that the proposed project complies with SJVAPCD's Regulation VIII, "Fugitive Dust Prohibitions," and that all applicable control measures, as required by law, are implemented during construction to reduce the generation of fugitive PM₁₀ and PM_{2.5} emissions. Regulation VIII contains, but not limited to, the following required control measures.
 - 1. Prewater site sufficient to limit visible dust emissions (VDE) to 20% opacity.
 - 2. Phase work to reduce the amount of disturbed surface area at any one time.
 - 3. During active operations, apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity.
 - 4. During active operations, construct and maintain wind barriers sufficient to limit VDE to 20% opacity.
 - 5. During active operations, apply water or chemical/organic stabilizers/suppressants to unpaved haul/access roads and unpaved vehicle/equipment traffic areas sufficient to limit VDE to 20% opacity and meet the conditions of a stabilized unpaved road surface.
 - 6. An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.
 - 7. An owner/operator shall post speed limit signs that meet State and Federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.

- 8. When handling bulk materials, apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity.
- 9. When handling bulk material, construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity.
- 10. When storing bulk materials, comply with the conditions for a stabilized surface as listed above.
- 11. When storing bulk materials, cover bulk materials stored outdoors with tarps, plastic, or other suitable material and anchor in such a manner that prevents the cover from being removed by wind action.
- 12. When storing bulk materials construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants to limit VDE to 20% opacity or utilize a three-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.
- 13. Limit vehicular speed while traveling on the work site sufficient to limit VDE to 20% opacity.
- 14. Load all haul trucks such that the freeboard is not less than 6 inches when material is transported across any paved public access road sufficient to limit VDE to 20% opacity.
- 15. Apply water to the top of the load sufficient to limit VDE to 20% opacity.
- 16. Cover haul trucks with a tarp or other suitable cover.
- 17. Clean the interior of the cargo compartment or cover the cargo compartment before the empty truck leaves the site; and prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate; and load all haul trucks such that the freeboard is not less than 6 inches when material is transported on any paved public access road, and apply water to the top of the load sufficient to limit VDE to 20% opacity; or cover haul trucks with a tarp or other suitable cover.
- 18. Owners/operators shall remove all visible carryout and trackout at the end of each workday.
- 19. An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall take the actions for the prevention and mitigation of carryout and trackout.
- 20. Within urban areas, an owner/operator shall prevent carryout and trackout, or immediately remove carryout and trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site.
- 21. Within rural areas, construction projects 10 acres or more in size, an owner/operator shall prevent carryout and trackout, or immediately remove carryout and trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site.
- 22. For sites with paved interior roads, an owner/operator shall prevent and mitigate carryout and trackout.
- 23. Cleanup of carryout and trackout shall be accomplished by manually sweeping and picking-up; or operating a rotary brush or broom accompanied or preceded by sufficient wetting to limit VDE to 20% opacity; or operating a PM₁₀-efficient street sweeper that has a pick-up efficiency of at least 80%; or flushing with water, if curbs or gutters are not present and where the use of water would not result as a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program.

- 24. An owner/operator shall submit a Dust Control Plan to the Air Pollution Control Officer (APCO) prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for nonresidential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. Construction activities shall not commence until the APCO has approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all such activities conducted for residential and nonresidential (e.g., commercial, industrial, or institutional) purposes or conducted by any governmental entity.
- C. The City of Manteca will ensure that the following SJVAPCD-recommended additional control measures will be implemented by the proposed project during construction to further reduce fugitive PM₁₀ and PM2.5 dust emissions.
 - 1. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from adjacent project areas with a slope greater than 1%.
 - 2. Suspend excavation and grading activity when winds exceed 20 mph.
 - 3. Limit area subject to excavation, grading, and other construction activity at any one time.
- D. The City of Manteca will ensure that the following SJVAPCD-recommended additional control measures will be implemented by the proposed project during construction to further reduce construction equipment exhaust emissions.
 - 1. Minimize idling time (e.g., 10-minute maximum).
 - 2. Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). This measure would be particularly applicable to the utilization of signal boards.
 - 3. Staging areas for heavy-duty construction equipment shall be located as far as possible from sensitive receptors.
 - 4. Use alternative fueled or catalyst equipped diesel construction equipment, where reasonable available, such as equipment capable of using biodiesel or emulsified fuel. Alternative fuels and NO_X reduction equipment should be ARB-certified.
 - 5. Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use at any one time.
 - 6. 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 or on Spare the Air Days.

Implementation of Mitigation Measures 4.3-1A and D would result in the required minimum 20% reduction in NO_X emissions and a 45% reduction in PM_{10} emissions from heavy-duty diesel equipment, as compared with statewide average emissions. In addition, implementation of these measures would also result in a 5% reduction in ROG emissions from heavy-duty diesel equipment. All or part of the reductions may result from on-site equipment and fuel selection; the remainder would result from off-site reductions achieved through the payment of fees. Implementation of these measures would reduce temporary, short-term, construction-related emissions of ROG and NO_X generated by the proposed project, but not to a less-than-significant level, as emissions would still

exceed SJVAPCD's significance thresholds. As a result, this impact (generation of construction-related NO_X emissions) would remain **significant and unavoidable**.

SIGNIFICANT EFFECT: EXPOSURE OF SENSITIVE RECEPTORS TO ODORS (IMPACT 4.3-5)

The WQCF is known to produce odors and there has been at least one confirmed compliant per year over a three year period. While the design of the project incorporates all feasible odor control technologies to reduce project-generated odors, it is unknown whether these technologies would limit odor complaints to less than one per year, which is the significance standard used by the SJVAPCD for significant odor problems. No other feasible odor control technologies are available to reduce the intensity of odors at the WQCF site and that would guarantee that odor complaints would be limited to one per year. Therefore, this impact would be **significant**.

Finding

Specific economic, legal, social, technological, or other considerations, have resulted in no feasible mitigation measures to reduce this impact and that would limit odor complaints from the WQCF to less than once per year because project incorporates all feasible odor-control technologies into the design of the proposed facilities. Therefore, this impact would be significant and unavoidable. Further, none of the project alternatives would reduce this impact as there are no additional technologies available to reduce the project's odor impacts.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address this issue.

Facts in Support of Finding

While the design of the project incorporates all feasible odor control technologies to reduce project-generated odors, it is unknown whether these technologies would limit odor complaints to less than one per year, which is the significance standard used by the SJVAPCD for significant odor problems. No other feasible odor control technologies are available to reduce the intensity of odors at the WQCF site and that would guarantee that odor complaints would be limited to one per year. Therefore, this impact would be **significant and unavoidable**.

1.4.4 **N**OISE

SIGNIFICANT EFFECT: SHORT-TERM INCREASES IN CONSTRUCTION SOURCE NOISE LEVELS (IMPACT 4.4-1)

If construction activities were to occur during the more noise-sensitive hours or if construction equipment were not properly equipped with noise control devices, construction-generated source noise could result in the exposure of persons to or generation of noise levels in excess of applicable standards, could result in annoyance and/or sleep disruption to occupants of any existing noise-sensitive land uses in the project vicinity, and/or could create a substantial temporary increase in ambient noise levels. As a result, this impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's short-term increases in construction source noise levels.

Mitigation Measure 4.4-1: Short-Term Increases in Construction Source Noise Levels. To reduce the exposure of noise-sensitive receptors to project-generated construction source noise levels, the City will implement the following measures:

- ▶ Limit all construction activities within the city to the hours from 7 a.m. to 7 p.m. to ensure compliance with Section 17.13.04(A) of the City of Manteca Municipal Code.
- Limit all construction activities within the county, or affected by the County, to the hours from 6 a.m. to 9 p.m. to ensure compliance with the San Joaquin County Development Code (Section 9-1029.9[C][3]).
- ▶ Properly maintain and equip all construction equipment with noise control, such as mufflers, in accordance with manufacturers' specifications.
- ▶ Place noisy stationary equipment (e.g., compressors, generators) away from existing off-site noise-sensitive receptors and/or provide acoustical shielding.

Implementation of Mitigation Measure 4.4-1 would reduce significant impacts related to noise from construction sources to a **less-than-significant** level because noise levels would be reduced (e.g., by approximately 5 dBA) and construction activities would be limited to the hours during which noise levels are exempt from the provisions of the applicable standards and would not result in a noticeable increase in ambient noise levels at noise-sensitive receptors during the more noise-sensitive hours of the day.

SIGNIFICANT EFFECT: EXPOSURE OF SENSITIVE RECEPTORS TO OR GENERATION OF EXCESSIVE GROUNDBORNE VIBRATION OR NOISE LEVELS (IMPACT 4.4-5)

Short-term project-generated vibration levels from construction sources could exceed FTA's maximum-acceptable vibration standard of 80 VdB with respect to human response for residential use at vibration-sensitive land uses. As a result, this impact would be **significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's generation of excessive groundborne vibration.

Mitigation Measure 4.4-5: Exposure of Sensitive Receptors to or Generation of Excessive Groundborne Vibration or Noise Levels. To reduce the exposure of vibration-sensitive receptors to project-generated construction source vibration levels, the City will implement the following measure:

► Construction activities within 60 feet of occupied residences will be performed without equipment that produces relatively high levels of vibration (e.g., use jackhammers in place of hoe rams).

Implementation of Mitigation Measure 4.4-5 would reduce significant impacts related to the exposure of sensitive receptors to excessive groundborne vibration to a **less-than-significant** level because vibration levels would not exceed FTA's maximum-acceptable standard with respect to human response for residential uses (i.e., annoyance).

1.4.5 TERRESTRIAL BIOLOGICAL RESOURCES

SIGNIFICANT EFFECT: IMPACTS ON SPECIAL-STATUS PLANTS (IMPACT 4.5-2)

Implementation of the proposed project would result in loss and disturbance of riparian, freshwater marsh, and annual grassland habitat that could potentially support 13 special-status plant species. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. Those changes or alterations are within the responsibility and jurisdiction of another public agency, San Joaquin Council of Governments (SJCOG) and the California Department of Fish and Game (DFG), the agencies responsible for implementing the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), and not the agency making these findings. These measures can and should be adopted by these other agencies.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on special-status plants.

Mitigation Measure 4.5-2: Impacts on Special-Status Plants. The proposed project is located in the Central Zone of the SJMSCP. Eleven of the special-status plants listed in Table 4.5-1 are addressed in the SJMSCP. The City will request coverage under the SJMSCP and fees will be paid in the amount determined by SJCOG during the application and review process for the project. If SJCOG determines, based on an independent review by a qualified biologist, that suitable habitat for special-status plants would be affected, the following measures may be required to reduce impacts on the 11 special-status species covered by the SJMSCP:

- ▶ Before project construction, surveys for the 11 special-status plants covered by the SJMSCP shall be conducted by a qualified botanist at the appropriate time of year, when the target species would be in flower or otherwise clearly identifiable. Surveys shall be conducted in accordance with specific methodologies described in Section 5.2.2 of the SJMSCP. If any of the 11 special-status plants are found, the following measures will be implemented:
 - Greene's tuctoria, Delta button celery, Sanford's arrowhead and slough thistle: If these species are present in the project area and cannot be avoided, a mitigation plan will be developed, with review and input from the regulatory agencies (e.g., DFG). The mitigation plan will identify mitigation measures for any populations affected by the proposed project, such as creation of off-site populations through seed collection or transplanting, preserving and enhancing existing populations, or restoring or creating suitable habitat in sufficient quantities to compensate for the impact. These measures will be designed to ensure that the project does not result in a net reduction in the population size or range of Greene's tuctoria, Delta button celery, Sanford's arrowhead, and slough thistle.
 - Recurved larkspur, Wright's trichocoronis, alkali milk vetch, Suisun Marsh aster, rose-mallow, Delta mudwort, and Delta tule pea: If these species are found in the project area and cannot be avoided, a mitigation strategy will be developed with review and input from the regulatory agencies (e.g., DFG). The mitigation strategy will first consider the feasibility of establishing a conservation easement. If dedication of a conservation easement is found not to be a feasible mitigation option, payment of SJMSCP development fees will be used to mitigate impacts on these species. Use of conservation easements or development fees for establishment of habitat preserves, or a combination of the two mechanisms, will be structured to ensure that the project does not result in an overall net reduction in the

population size or range of recurved larkspur, Wright's trichocoronis, alkali milk vetch, Suisun Marsh aster, rose-mallow, Delta mudwort, and Delta tule pea.

• The remaining two species, San Joaquin spearscale and lesser spearscale, are not covered in the SJMSCP. Surveys for these species shall be conducted by a qualified botanist at the appropriate time of year when the target species would be in flower or otherwise clearly identifiable. If survey results indicate that neither species is present in project area, no additional mitigation will be required. If populations of these species are encountered during the surveys, they will be avoided to the extent feasible. If avoidance is not possible, plants will be evaluated for their biological importance based on the known distribution of the plants and other pertinent data, in consultation with DFG. If significant impacts would occur, a mitigation plan will be developed in coordination with DFG. The plan will detail specific measures to reduce impacts on the plants to a less-than-significant level, which may include a combination of avoidance, salvage, replanting, or protection of off-site populations as deemed appropriate by DFG. The plan will also include methods for monitoring of mitigation success and reporting requirements.

SIGNIFICANT EFFECT: IMPACTS ON VERNAL POOL CRUSTACEANS, CALIFORNIA TIGER SALAMANDER, AND WESTERN SPADEFOOT TOAD (IMPACT 4.5-3)

Implementation of the proposed project would result in loss and disturbance of annual grassland habitat that could support vernal pools and other wetlands suitable for vernal pool crustacean species, California tiger salamander, and western spadefoot. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. Those changes or alterations are within the responsibility and jurisdiction of another public agency, SJCOG, DFG, and U.S. Fish and Wildlife Service (USFWS), the agencies responsible for implementing the SJMSCP, and not the agency making these findings. These measures can and should be adopted by these other agencies.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on vernal pool crustaceans, California tiger salamander, and western spadefoot toad.

Mitigation Measure 4.5-3: Impacts on Vernal Pool Crustaceans, California Tiger Salamander, and Western Spadefoot Toad. For the wastewater collection system alignment approximately 900 feet north of Yosemite Avenue and the effluent outfall pipeline alignment, the City will request coverage under the SJMSCP and fees will be paid in the amount determined by SJCOG during the application and review process for the project. SJCOG may also determine, based on an independent review by a qualified biologist, that the following measures will be implemented to reduce impacts on the vernal pool crustaceans, California tiger salamander, and western spadefoot toad if potential habitat is present in the project area and would be affected by plan implementation.

Vernal Pool Crustaceans

- Filling of vernal pools will be delayed until pools are dry and samples from the top layer of vernal pool soils are collected. Soil collections will be sufficient to include a representative sample of plant and animal life present in the pools by incorporating seeds, cysts, eggs, spores and similar inoculum.
- ► Collected soils will be dried and stored in pillowcases labeled with the date and location of soils collected. Soils will be deposited with the Joint Powers Authority (JPA). The JPA shall retain the soils in a cool, dry

area and shall be responsible for providing soils to vernal pool construction managers for inoculating newly created vernal pools on Preserve lands.

California Tiger Salamander and Western Spadefoot Toad

If potential California tiger salamander and spadefoot toad habitat is determined to be present and could be affected, surveys will be conducted according to the current protocol approved by the Technical Advisory Committee (TAC) and the permitting agencies (i.e., DFG and USFWS). If salamanders and/or toads are detected, incidental take minimization measures will be developed in coordination with the TAC and permitting agencies. This may be conducted as part of the CWA Section 404 permitting process, if such a permit is required. The measures will be based on the need to avoid and minimize impacts on breeding, feeding, and sheltering behaviors of California tiger salamander and spadefoot toad, and will include consideration of the following:

- effects on aquatic habitat, including retaining pools and maintaining appropriate pool hydrology to enable successful metamorphosis of larvae to occur, but without fostering nonnative aquatic predators;
- retention of small mammal burrows and other suitable estivation habitat (e.g., underground holes, cracks, or niches) in adjacent uplands;
- ▶ the fact that maintenance of open habitat between breeding ponds and estivation sites (e.g., roads and other linear barriers) can increase mortality or even prevent migrations and dispersal, significantly increasing harm to and mortality of salamanders and toads);
- ▶ siting replacement wetland habitat, whenever possible, within approximately 1.5 miles of other known breeding sites.

SIGNIFICANT EFFECT: IMPACTS ON GIANT GARTER SNAKE (IMPACT 4.5-4)

Implementation of the proposed project would disturb irrigation/drainage canals and ditches that provide suitable aquatic and upland habitat for giant garter snake and could result in direct take of individuals. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. Those changes or alterations are within the responsibility and jurisdiction of another public agency, SJCOG, DFG, and USFWS, the agencies responsible for implementing SJMSCP, and not the agency making these findings. These measures can and should be adopted by these other agencies.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on giant garter snake.

Mitigation Measure 4.5-4: Impacts on Giant Garter Snake. The City will request coverage under the SJMSCP and fees will be paid in the amount determined by SJCOG during the application and review process for the project. SJCOG may also determine, based on an independent review by a qualified biologist, that the following measures will be implemented to reduce impacts on giant garter snake:

Construction will occur during the active period for the snake, between May 1 and October 1. Between October 2 and April 30, the JPA, with the concurrence of the permitting agencies' representatives on the TAC, shall determine whether additional measures are necessary to minimize and avoid take.

- ▶ Vegetation clearing within 200 feet of the banks of potential aquatic habitat for giant garter snake will be limited to the minimum area necessary.
- ► The movement of heavy equipment within 200 feet of the banks of potential aquatic habitat for giant garter snake will be confined to existing roadways to minimize habitat disturbance.
- ▶ Before ground disturbance, all on-site construction personnel will be given instruction regarding the presence of SJMSCP-covered species and the importance of avoiding impacts on these species and their habitats.
- In areas where wetlands, irrigation ditches, marsh areas, or other potential giant garter snake habitats are being retained on the site:
 - a. Temporary fencing will be installed at the edge of the construction area and the adjacent wetland, marsh, or ditch.
 - b. Working areas, spoils, and equipment storage and other project activities will be restricted to areas outside of marshes, wetlands, and ditches.
 - c. Water quality will be maintained and construction runoff into wetland areas will be limited through the use of hay bales, filter fences, vegetative buffer strips, or other accepted equivalents.
- ▶ If on-site wetlands, irrigation ditches, marshes, etc., are being relocated in the vicinity, the newly created aquatic habitat will be created and filled with water before dewatering occurs and the existing aquatic habitat is destroyed. In addition, nonpredatory fish species that exist in the aquatic habitat and that are to be relocated will be seined and transported to the new aquatic habitat as the old site is dewatered.
- ▶ If wetlands, irrigation ditches, marshes, etc., will not be relocated in the vicinity, then the aquatic habitat will be dewatered at least 2 weeks before construction begins.
- ▶ Preconstruction surveys for the giant garter snake (conducted after completion of environmental reviews and before ground disturbance) will occur within 24 hours of ground disturbance.
- ▶ Other provisions of the USFWS Standard Avoidance and Minimization Measures during Construction Activities in Giant Garter Snake Habitat will be implemented (excluding programmatic mitigation ratios which are superseded by the SJMSCP's mitigation ratios).

SIGNIFICANT EFFECT: IMPACTS ON RAPTORS (IMPACT 4.5-6)

Implementation of the proposed project would result in the disturbance and/or loss of active nests and foraging habitat for special-status and common raptors. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. Those changes or alterations are within the responsibility and jurisdiction of another public agency, SJCOG, DFG, and USFWS, the agencies responsible for implementing SJMSCP, and not the agency making these findings. These measures can and should be adopted by these other agencies.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on raptors.

Mitigation Measure 4.5-6: Impacts on Raptors. The City will request coverage under the SJMSCP and fees will be paid in the amount determined by SJCOG during the application and review process for the project. Compensation for loss of agricultural lands will also mitigate the loss of foraging habitat for raptor species. SJCOG may also determine, based on an independent review by a qualified biologist, that the following measures will be implemented to reduce impacts on special-status raptors.

Swainson's Hawk

The City has the option of retaining known or potential Swainson's hawk nest trees (i.e., trees that hawks are known to have nested in within the past 3 years or trees, such as large oaks, that the hawks prefer for nesting) or removing the nest trees. If the City elects to retain a nest tree, and to encourage tree retention, the following incidental take minimization measure will be implemented during construction activities:

- ▶ If a nest tree becomes occupied during construction activities, then all construction activities will remain a distance of two times the dripline of the tree, measured from the nest.
- ▶ If the City elects to remove a nest tree, then nest trees may be removed between September 1 and February 15, when the nests are unoccupied.

Burrowing Owl

The City will prevent ground squirrels from occupying the project site early in the planning process by employing one of the following practices:

- New vegetation will be planted or existing vegetation will be retained entirely covering the site at a height of approximately 36 inches above the ground. Vegetation will be retained until construction begins.
- If burrowing owls are not known or suspected on a project site, the City will disk or plow the entire project site to destroy any ground squirrel burrows. At the same time burrows are destroyed, ground squirrels will be removed through one of approved methods described in Appendix A of the SJMSCP to prevent reoccupation of the project site (also found at http://www.sjcog.org/). If these measures are not attempted or are attempted but fail, and burrowing owls occupy the project site, then the following measures will be implemented:
 - During the nonbreeding season (September 1–January 31), burrowing owls occupying the project site will be removed from the project site by passive relocation as described in DFG's *Staff Report on Burrowing Owl Mitigation* (DFG 1995).
 - During the breeding season (February 1–August 31), occupied burrows will not be disturbed and will be provided with a 75-meter protective buffer until the Technical Advisory Committee (TAC)—with the concurrence of the permitting agencies' representatives on the TAC—or a qualified biologist approved by the permitting agencies verifies through noninvasive means that either the birds have not begun egg laying, or juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed.

White-Tailed Kite

Before the start of any ground-disturbing activities (e.g., project site grading), preconstruction surveys will investigate all potential nesting trees on the project site (e.g., especially tree tops 15–59 feet above the ground in oak, willow, eucalyptus, cottonwood, or other deciduous trees), during the nesting season (February 15–September 15) whenever white-tailed kites are noted on-site or within the vicinity of the project site during the nesting season. A setback of 100 feet from nesting areas will be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies

whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests that are known to be occupied. Setbacks will be marked by brightly colored temporary fencing.

Northern Harrier

A setback of 500 feet from nesting areas will be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests that are known to be occupied. Setbacks will be marked by brightly colored temporary fencing.

Common Raptors

- ▶ If project activity would occur during the raptor nesting season (February 15–September 15), preconstruction surveys will be conducted during the nesting season in suitable nesting habitat within 100 feet of areas of project activity. The survey will be conducted within 2 weeks before the beginning of construction or tree removal.
- A setback of 100 feet from active nesting areas will be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests that are known to be occupied. Setbacks will be marked by brightly colored temporary fencing.

SIGNIFICANT EFFECT: IMPACTS ON PROTECTED AND HERITAGE TREES (IMPACT 4.5-9)

Implementation of the proposed project would result in the potential loss and disturbance of native oaks and other existing trees that are protected by local ordinances. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to a less-than-significant level the project's impacts on protected and heritage trees.

Mitigation Measure 4.5-9: Impacts on Protected and Heritage Trees. The City will implement the following measures to reduce impacts of the proposed project on protected and heritage trees:

- ▶ Before project implementation, a tree survey shall be conducted by a qualified botanist to enumerate and evaluate all trees that meet standards in the applicable City codes outlined above that could be affected by implementation of the proposed project.
- ► Trees that are subject to protection, but must be removed as a result of project implementation, will be replaced in accordance with tree planting specifications established by the City Tree Ordinance. Replacement trees will be planted on-site at a location in the general vicinity that is consistent with City standards.
- ▶ Replacement tree plantings will be monitored in accordance with City monitoring protocols.

▶ If monitoring indicates that replacement plantings are not meeting performance standards, remedial measures will be implemented. Appropriate measures will be determined by the City and will be implemented until it is demonstrated that replacement plantings meet performance standards.

SIGNIFICANT EFFECT: IMPACTS ON SENSITIVE HABITATS, INCLUDING JURISDICTIONAL WATERS OF THE UNITED STATES (IMPACT 4.5-10)

Implementation of the project could result in fill or reconfiguration of less than 1 acre of potentially jurisdictional waters of the United States, including drainage canals and the San Joaquin River, and associated freshwater marsh and riparian habitat. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. Those changes or alterations are within the responsibility and jurisdiction of another public agency, U.S. Army Corps of Engineers (USACE) and California Department of Fish and Game (DFG), and not the agency making these findings. These measures can and should be adopted by these other agencies.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on sensitive habitats, including jurisdictional waters of the United States.

Mitigation Measure 4.5-10: Impacts on Sensitive Habitats, Including Jurisdictional Waters of the United States. The City will avoid impacts on the San Joaquin River and its tributaries and impacts on freshwater marsh habitat within the French Camp Outlet Canal and its tributaries by implementing the following construction methods:

- ► trenchless construction methods such as horizontal directional drilling or bore-and-jack to bore under the French Camp Outlet Canal in two locations and bore under a tributary of the French Camp Outlet Canal in one location;
- ▶ limiting open-cut trench installation near sensitive habitat to improved and unimproved roadways; and
- ▶ limiting construction equipment and material to roadways and disturbed upland areas (e.g., agricultural fields and vineyards).

Although it is anticipated that the construction techniques discussed above would avoid impacts on the French Camp Outlet Canal, any proposed action involving tunneling or boring under navigable waters requires a USACE Section 10 permit. Therefore, the City will apply to USACE for a Section 10 permit under the Rivers and Harbors Act to obtain permission to pass under the French Camp Outlet Canal and its tributary. Where construction activities would occur within 25 feet of the French Camp Outlet Canal or its tributaries or other areas with freshwater marsh, biological monitoring will be conducted to ensure that there are no adverse effects on these sensitive habitats.

A determination of waters of the United States, including wetlands and riparian habitat that would be affected by construction of the effluent outfall structure, would be made by qualified biologists through the formal Section 404 wetland delineation process. If necessary, the City will consult with the appropriate agencies (e.g., USACE, DFG, and the U.S. Environmental Protection Agency), and authorization for fill of jurisdictional areas will be secured from USACE via the Section 404 permitting process and other applicable resource agencies' permitting processes, if required. As part of these processes, measures will be developed to minimize impacts, such as conducting activities during the low-flow season and erecting protective fencing to minimize the area of impact and potential for runoff and siltation. Any jurisdictional habitat that is removed will be replaced or rehabilitated on a "no-net-loss" basis in accordance with applicable agency regulations and at a location and by methods

agreeable to the applicable agencies. In addition, construction of the effluent outfall structure may require an encroachment permit from the State Reclamation Board. Therefore, the City will consult with the Reclamation Board before initiating any construction activities.

1.4.6 GEOLOGY, SOILS, AND SEISMICITY

SIGNIFICANT EFFECT: RISKS TO PEOPLE AND STRUCTURES CAUSED BY SEISMIC-RELATED GROUND FAILURE (IMPACT 4.7-2)

Based on the underlying soil conditions in the project area and the shallowness of the groundwater table, construction of the proposed project has the potential to expose people or structures to seismic-related ground failure, including liquefaction and differential settlement. Therefore, this impact is considered **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to a less-than-significant level the project's potential risks to people and structures caused by seismic-related ground failure.

Mitigation Measure 4.7-2: Risks to People and Structures Caused by Strong Seismic-Related Ground Failure.

- a. Before contract bidding for project construction, the approved project design plans and specifications, including grading and foundation plans, shall be reviewed by a soils engineer approved by the City. This review shall be completed to assess whether the recommendations in project geotechnical reports prepared by Kleinfelder are sufficient for construction of the buildings and facilities described in the final project design plans. If these measures are deemed insufficient, the geotechnical engineer shall prepare supplemental site-specific geotechnical report(s) with appropriate recommendations sufficient to ensure the safety of project structures and site occupants. These measures could include, but are not limited to, the construction of deep foundations, installation of driven piles, and extra reinforcement of foundation slabs. At a minimum, these measures shall demonstrate that the proposed project design would meet CBC and City design standards.
- b. During project design and construction, all measures outlined in project geotechnical reports for the proposed project and, if necessary, measures included in the supplemental site-specific geotechnical report(s) shall be implemented to ensure that project structures and site occupants would be safe during seismic events.
- c. The on-site soils will likely be saturated by rainfall in the winter and early spring months. If the construction schedule requires continued work during the wet months, the City shall consult with a qualified civil engineer and implement any additional recommendations provided, as conditions warrant.

SIGNIFICANT EFFECT: CONSTRUCTION-RELATED EROSION HAZARDS (IMPACT 4.7-3)

Based on soil types and topography, excavation, movement, and grading of soil could result in erosion during project construction, particularly during periods of strong winds. This impact is considered **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to a less-than-significant level the project's impacts related to construction-related erosion hazards.

Mitigation Measure 4.7-3: Construction-Related Erosion Hazards.

- A grading and erosion control plan shall be prepared by a California Registered Civil Engineer prior to issuance of any grading permits. The plan shall be consistent with the CBC grading requirements and shall include the site-specific grading required for new construction. The City shall ensure that the construction contractor is responsible for securing a source of transportation and deposition of excavated materials.
- ▶ BMPs for erosion and siltation prevention, as further described in Section 4.9, "Hydrology and Water Quality," of this Draft EIR, will be implemented at proposed project areas during all construction activities. The City will consult with the Central Valley Regional Water Quality Control Board to acquire the appropriate regulatory approvals that may be necessary to obtain Section 401 water quality certification, State Water Board statewide NPDES stormwater permit for general construction activity, and any other necessary site-specific waste discharge requirements (WDRs) or waivers. As required under the NPDES stormwater permit for general construction activity, the City will prepare and submit the appropriate Notice of Intent (NOI) and prepare the SWPPP and any other necessary engineering plans and specifications for pollution prevention and control. The SWPPP and other appropriate plans shall identify and specify the use of erosion and sediment control BMPs, means of waste disposal, implementation of approved local plans, non-stormwater management controls, permanent post-construction BMPs, and inspection and maintenance responsibilities. BMPs will include dust control measures such as wetting the top layer of exposed soils and covering soil stockpiles, as necessary.
- ► The SWPPP would also specify the pollutants that are likely to be used during construction that could be present in stormwater drainage and non-stormwater discharges. A sampling and monitoring program would be included in the SWPPP that meets the requirements of State Water Board Order 99-08-DWQ to ensure that the BMPs are effective.
- Prior to issuance of any grading permits, construction techniques will be identified that would reduce the potential for runoff, and the plan shall identify the erosion and sedimentation control measures to be implemented. The SWPPP shall also specify spill prevention and contingency measures, identify the types of materials used for equipment operation, and identify measures to prevent or clean up spills of hazardous materials used for equipment operation and hazardous waste. Emergency procedures for responding to spills shall also be identified. BMPs identified in the SWPPP shall be used in all subsequent site development activities. The SWPPP shall identify personnel training requirements and procedures that would be used to ensure that workers are aware of permit requirements and proper installation and performance inspection methods for BMPs specified in the SWPPP. The SWPPP shall also identify the appropriate personnel responsible for supervisory duties related to implementation of the SWPPP. All construction contractors shall retain a copy of the approved SWPPP on the construction site.

SIGNIFICANT EFFECT: RISKS TO PEOPLE AND STRUCTURES RESULTING FROM UNSTABLE SOIL CONDITIONS (IMPACT 4.7-4)

Soils in the southwest portion of the project area have a very high clay content and are rated by the NRCS as highly plastic with a high shrink-swell potential. Therefore, it is possible that expansive soils identified in the southwest portion of the project area could damage wastewater collection system, effluent outfall, and recycled water distribution system pipelines and related structures. Because expansive soils are located in the southwest portion of the project area and groundwater levels in the project area are high, this would be a **potentially significant** impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to a less-than-significant level the project's potential risks to people and structures resulting from unstable soil conditions.

Mitigation Measure 4.7-4: Risks to People and Structures Resulting from Unstable Soil Conditions. The City shall implement Mitigation Measure 4.7-2, described above, to reduce the risks to people and structures resulting from unstable soil conditions in the proposed project area.

1.4.7 PALEONTOLOGICAL RESOURCES

SIGNIFICANT EFFECT: DISTURBANCE OF PALEONTOLOGICAL RESOURCES DURING EARTHMOVING ACTIVITIES (IMPACT 4.8-1)

Although no previously recorded paleontological sites are known to occur at the WQCF site, pumping station sites, or within the proposed collection system and recycled water distribution system pipeline routes, previously undiscovered paleontological resources could be present in sediments of the Modesto Formation that underlie the project area. In addition, fossils have been found at excavations in similar soils less than 2 miles from the project area. Therefore, construction activities could potentially disturb unknown subsurface paleontological resources. This would be a **potentially significant** impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to paleotological resources during earthmoving activities.

Mitigation Measure 4.8-1: Disturbance of Paleontological Resources during Earthmoving Activities. For earthmoving activities at the project area, the City will implement the following measures:

(1) Before the start of construction activities, construction personnel involved with earthmoving activities shall be informed of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during

construction activities, and proper notification procedures should fossils be encountered. This training shall be prepared and presented by a qualified paleontologist or archaeologist.

(2) If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and the City Public Works Department shall be notified. The City will retain a qualified paleontologist to evaluate the resource and prepare a proposed recovery plan in accordance with Society of Vertebrate Paleontology guidelines (1995). The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recovery of identified resources will be implemented by the City before construction activities resume at the site.

1.4.8 Public Services and Utilities

SIGNIFICANT EFFECT: IMPACTS ON EXISTING UTILITY CORRIDORS (IMPACT 4.10-5)

Implementation of the proposed project could potentially disrupt existing aboveground and underground utility facilities in the project area, resulting in interruption of service. This would be a **potentially significant** impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to a less-than-significant level the project's impacts on existing utility corridors. The mitigation measure below has been modified from that originally included in the Draft EIR as described in the Final EIR.

Mitigation Measure 4.10-5: Impacts on Existing Utility Corridors. PG&E owns and operates gas and electric facilities that are located within and adjacent to the proposed project area. 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, the City of Manteca will coordinate with PG&E early in the development of project plans. Any proposed development plans will provide for unrestricted utility access and prevent easement encroachments that might impair the safe and reliable maintenance and operation of PG&E's facilities. In addition, the OLWD owns and operates wastewater treatment facilities in the project area, and has plans to implement a treated effluent spray field system. The City of Manteca will coordinate with OLWD early in the development of project plans. Any proposed development plans will provide for unrestricted utility access and prevent easement encroachments that might impair the safe and reliable maintenance and operation of OLWD's wastewater facilities.

The requesting party will be responsible for the costs associated with the relocation of existing PG&E facilities to accommodate the development of the proposed project. Because facilities relocations require long lead times and are not always feasible, the City will consult with PG&E as early in the 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 CPUC. If required, this approval process could take up to 2 years to complete. The City will consult with PG&E and OLWD for additional information and assistance in the development of its project schedule to reduce effects on utility and wastewater service associated with project development.

1.4.9 Transportation and Circulation

SIGNIFICANT EFFECT: INCREASE IN HAZARDS BECAUSE OF A DESIGN FEATURE (IMPACT 4.11-4)

No permanent design features are proposed that would increase hazards for pedestrians, bicyclists, or drivers. Standard construction practices (i.e., cones, signage, traffic controllers) would be employed during project construction to minimize any potential hazards. However, construction-related vehicle trips associated with construction of the proposed WQCF improvements, outfall pipeline, pumping stations, and pipelines for the wastewater collection system and recycled-water distribution system may block some roadways and result in the queuing of vehicles on area roadways. This could increase the potential for vehicle accidents and could temporarily increase response times for emergency service vehicles. Therefore, this impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to a less-than-significant level the project's increased hazards impacts associated with a design feature.

Mitigation Measure 4.11-4: Increase in Hazards because of a Design Feature. Before commencement of any construction activities, the City of Manteca Public Works Department will prepare and approve a construction management plan. The plan will identify the timing of construction and the timing of elements that would result in the full or partial blockage of local roadways. The plan will indicate where emergency vehicle access to project facilities would be provided, and will also outline the procedures for coordination with emergency service providers before project construction and road closures. The plan will also specify the measures that would be implemented to minimize traffic-related impacts, including construction parking during construction. These measures could include, but are not limited to, use of signage notifying travelers that they are entering a construction zone; and use of cones, flaggers, and guide vehicles to direct traffic through the construction zone. In addition, the plan will include, at a minimum, the following conditions:

- 1. Before beginning any construction activities, the City will determine the roadways that will receive project-related construction traffic for the transport of materials and equipment to the WQCF and those roadways in which new pipeline would be installed.
- 2. The City will document existing pavement conditions through photographs of roadways identified in item 1 above. The photographs will identify general views of pavement conditions as well as document specific locations of where there are current deficiencies in pavement conditions. These photos will be retained on file at the WQCF.
- 3. This City will monitor the condition of roadways identified in item 1 above every 6 months to determine whether any pavement degradation (e.g., potholes, pavement separation) has occurred from preconstruction conditions.
- 4. Where roadways show evidence of degradation below acceptable standards as determined by the City Department of Public Works, the City will repair degraded sections to acceptable standards.
- 5. Lane closures will be identified including specific times of closure. All lane closures will be limited to the hours between 9 a.m. and 4 p.m.

A copy of the plan will be submitted to local emergency response agencies and these agencies will be notified at least 14 days before the commencement of construction that would partially or fully obstruct local roadways.

The City Public Works Department will ensure that project contractors adhere to the provisions of the plan and maintain a copy of the plan at project construction sites.

1.4.10 CULTURAL RESOURCES

SIGNIFICANT EFFECT: DAMAGE TO OR DESTRUCTION OF UNDISCOVERED CULTURAL RESOURCES (IMPACT 4.12-2)

Portions of the project area (including a 3.35-mile segment of the pipeline route for the proposed wastewater collection system and a 1.5-mile portion of the pipeline alignment for the recycled-water distribution system) could not be surveyed because access to these areas was limited. CCIC records searches did not indicate presence of known cultural resources in these areas; however, because these areas could not be surveyed, the potential exists to uncover previously undiscovered resources during project construction. Furthermore, construction-related subsurface disturbances could potentially destroy or damage previously undiscovered prehistoric or historic cultural resources at the wastewater quality control facility (WQCF), pumping station sites, and side-bank outfall site, and along the pipeline alignments. Because these resources have the potential to represent "unique archaeological resources" or "historic resources" as defined by CEQA, this impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to undiscovered cultural resources.

Mitigation Measure 4.12-2: Damage to or Destruction of Undiscovered Cultural Resources. Before the beginning of any project construction activity that could affect the previously unsurveyed portions of the project site, qualified archaeologists shall survey all portions of the site that were not examined during intensive surveys for the current effort, including unsurveyed portions of the pipeline alignment for the recycled-water distribution system (0.96 mile in the central portion of the project area between Swanson Road and West Center Street north of Yosemite Avenue, and 0.54 mile in the southwestern portion of the project area south of Woodward Avenue), pumping station sites, the side-bank outfall site, and approximately 3.35 miles of the pipeline alignment for the proposed wastewater collection system (2.05 miles in the southwestern portion of the project site near the intersection of Peach Avenue and Airport Way, and approximately 1.3 miles in the center of the western portion of the project area between Yosemite and Louise Avenues, and west of Airport Way). The survey shall be conducted during a time when the affected sites can be plowed and disked, so the natural ground surface can be examined for traces of prehistoric and/or historic-era cultural resources. Surveys of these areas are not necessary if it is determined that the areas would not be affected by project construction-related activity, including equipment staging or material stockpiling.

Before the onset of project-related ground-disturbing activities (e.g., land clearing), all construction personnel shall be alerted to the possibility of uncovering buried cultural resources and shall be educated by a qualified archaeologist as to identification of archaeological artifacts. If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified

professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant as per the CRHR and shall develop appropriate mitigation.

SIGNIFICANT EFFECT: DISCOVERY OF HUMAN REMAINS DURING CONSTRUCTION (IMPACT 4.12-3)

Although no evidence suggests that buried human remains would be encountered during project construction, the potential exists for buried human remains to be encountered and for construction activities to result in damage to or destruction of such remains. This impact would be **potentially significant**.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to human remains discovered during project construction.

Mitigation Measure 4.12-3: Discovery of Human Remains during Construction. California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in Sections 7050.5 and 7052 of the California Health and Safety Code and PRC Section 5097.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all such activities within a 100-foot radius of the find shall be halted immediately and the City shall be notified. The City shall immediately notify the county coroner and a qualified professional archaeologist. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The City's responsibilities for acting after notification that Native American human remains were discovered are explained in detail in PRC Section 5097.9. The City of Manteca or its appointed representative and the professional archaeologist shall contact the Most Likely Descendant (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the property owner and the lead agencies, shall determine the ultimate disposition of the remains.

1.4.11 FISHERIES AND AQUATIC RESOURCES

SIGNIFICANT EFFECT: THERMAL EFFECTS ON FISH AND BENTHIC MACROINVERTEBRATES EXPOSED TO THE PLUME WHILE MOVING DOWNSTREAM PAST THE DISCHARGE OUTFALL (IMPACT 4.13-2)

At full build-out, the proposed project would result in a thermal plume of increased temperatures, relative to the ambient temperatures, across portions of the water column, under all conditions, that is larger than the thermal plume that currently exists downstream of the discharge outfall. The project-specific changes to the size and characteristics of this plume would be considerable, as would project-specific effects on the frequency with which specific plume characteristics occur. A zone of passage would remain along the west bank river margin of the water column where river temperatures are unaffected by discharges. When achievable, actively swimming young-of-the-year fishes emigrating from upstream rearing areas would select migration routes past the discharge outfall that avoid elevated temperatures and excessive temperature differentials. The macroinvertebrate communities inhabiting the sediments and drifting through the plume are generally tolerant of the absolute temperature regime and differences created by the proposed project, particularly for the relatively short period of

time they would be drifting through the plume. However, passively drifting fish are typically transported past the discharge in the near-shore habitats and along the upper portion of the water column, both of which are noticeably affected by the effluent plume. Based on the findings for passively drifting fish being noticeably affected by the thermal plume, the proposed project would have a **potentially significant** impact on the populations and communities of fish moving downstream in the lower San Joaquin River and Delta.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment.

Facts in Support of Finding

The City of Manteca adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts associated with thermal effects on fish and benthic macroinvertebrates exposed to the plume while moving downstream past the discharge outfall.

Mitigation Measure 4.13-2: Thermal Effects on Fish and Benthic Macroinvertebrates Exposed to the Plume While Moving Downstream Past the Discharge Outfall. The City of Manteca will design, install, and operate a treated effluent cooling tower or an equivalent technology that cools treated effluent prior to discharge into the San Joaquin River. The cooling tower or equivalent technology will be designed to reduce the temperature of the treated effluent by up to 15°F such that the effluent discharge and associated size and intensity of the thermal plume will not result in adverse thermal affects to the health and/or condition of sensitive fish species and will sufficiently address Thermal Plan Objectives to protect fisheries and aquatic resources. The reduction in temperature of the treated effluent will prevent the creation of a lethal zone or plume, defined as water temperatures that are at or above the lethal effects levels (i.e., >68°F) during time periods when the most sensitive fish species would be in the vicinity of the WQCF outfall (i.e., from January to May) and ambient background temperatures are at or below these lethal effects levels. Because the ambient water temperature of the San Joaquin River can exceed the >68°F lethal effects threshold during the later portion of the time period when sensitive species are present (e.g., April and May), the temperature of the treated effluent produced by the cooling tower or equivalent technology may be greater than ambient background river temperatures under these conditions and during these periods. This could result in conditions where the plume exceeds the lethal effects threshold; however, with implementation of the cooling tower or equivalent technology, the size and intensity of the plume will be minimized resulting in only short-term exposure (through reduced plume size) to marginally increased water temperatures. Because sensitive fish species have been documented (Moyle 2002, Bartholow and Henricksen 2004, Bjorn and Reiser 1991) to survive exposure to higher temperatures (beyond lethal effects thresholds) for short periods of time, substantial adverse impacts to fish would not occur.

Furthermore, the cooling tower or equivalent technology will be designed to cool treated effluent to sufficiently address Thermal Plan Objectives and reduce the temperature of the WQCF's effluent and protect fisheries and aquatic resources. The California Thermal Plan objectives were established, in part, to be protective of beneficial uses including cold water fish habitat. The cooling tower or equivalent technology cooling capacity of 15°F would achieve an effluent temperature within 3°F to 4°F of the ambient river temperature.

Before the design of the cooling tower or equivalent technology is finalized, the City of Manteca will obtain the approval of the RWQCB indicating that the cooling tower or equivalent technology design is adequate to address concerns regarding discharge of higher temperature treated effluent into the San Joaquin River.

The cooling tower or equivalent technology will be constructed, installed, and operated in accordance with the approved final design prior to operating the WQCF at the expanded capacity (i.e., greater than 9.87 mgd ADWF). Implementation of a cooling tower or equivalent technology would reduce impacts to fisheries resources that may otherwise result from the increased discharge of higher temperature treated effluent into the San Joaquin River to a **less-than-significant** level.

1.4.12 CUMULATIVE IMPACTS

SIGNIFICANT CUMULATIVE EFFECT: CONVERSION OF IMPORTANT FARMLAND TO NONAGRICULTURAL USE

The permanent conversion of 41 acres of Important Farmland in the project area to nonagricultural use is considered a cumulatively considerable (i.e., significant) impact when considered in connection with the significant cumulative losses that will occur as a result of the project, past farmland conversions, and planned future development in the City of Manteca, surrounding communities, and San Joaquin County as a whole. The City would contribute financial resources to assist in offsetting the conversion of Important Farmland. The city would use these agricultural mitigation resources to purchase conservation easements on agricultural lands and/or farmland deed restrictions thus providing greater protection to these farmlands in San Joaquin County. However, implementation of this measure would not fully mitigate the project's cumulatively considerable contribution to the loss of agricultural land in San Joaquin County; therefore, cumulative impacts would be significant and the project's incremental contribution would also be significant. This would be a **significant and unavoidable** impact.

Finding

Required changes or alterations, which substantially reduce the project's significant farmland impacts, have been incorporated into the project (Mitigation Measure 4.1-3). While this mitigation would substantially reduce the project's farmland impacts, the residual cumulative impact would remain significant because of the project's substantial loss of important farmland resources. Therefore, this cumulative impact would be significant and unavoidable.

The project's contribution to farmland conversion impacts would be reduced or avoided by the No Project Alternative and Modified Pipeline Alignment Alternative. As discussed in Section 1.1, "Introduction," of this document and is discussed herein, specific economic, legal, social, technological, or other considerations make infeasible the mitigation measure or project alternatives identified in the EIR that would reduce this impact to a less-than-significant level. Therefore, this impact would be significant and unavoidable.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address this issue.

Facts in Support of Finding

All feasible measures (Mitigation Measure 4.1-3) available and within reasonable cost parameters to substantially reduce the project's significant farmland conversion impact have been incorporated into the project. These measures include payment of the City's agricultural mitigation fee to purchase conservation easements on agricultural lands and/or farmland deed restrictions. Additional mitigation measures are not feasible. Because the project's farmland conversion impact would remain substantial and adverse, the project would result in a cumulatively considerable and unavoidable farmland resource impact.

SIGNIFICANT CUMULATIVE EFFECT: DEGRADATION OF VISUAL CHARACTER

Past and current development in the project area has increasingly changed the visual character along SR 120, Airport Way, and Woodward Avenue from agricultural and open space uses to urban uses, thus altering and limiting the views available to motorists on these roadways. This trend would continue as future projects are implemented in the region and the project would contribute to this cumulative change in views. As development proceeds in the Manteca region as a whole, substantial changes in visual conditions would continue as agricultural lands and open space are replaced by urban development. Increased urban development would also lead to increased nighttime light and glare in the region and more limited views of the night sky. The cumulative effect of these changes on visual resources from past and planned future projects, as well as the contribution from the

project, is considered significant. Although these cumulative impacts can be minimized to a degree through vegetative and topographic screening of structures, use of downward emitting outdoor lighting, appropriate building design, and other measures, the significant cumulative impact cannot be fully mitigated. Therefore, the cumulative change of agricultural and open space views in the project region to urban and public facilities land uses is considered cumulative **significant and unavoidable** impacts. In addition, the project's incremental contribution to these impacts is cumulatively considerable.

Finding

Required changes or alterations (see Mitigation Measure 4.2-4 above), which substantially reduce the project's significant visual impacts, have been incorporated into the project. While this mitigation measure would substantially reduce the project's visual impacts, the residual cumulative impact would remain significant because of the cumulative change of agricultural and open space views in the project region to urban and public facilities land uses. Therefore, this impact would be significant and unavoidable.

The project's contribution to cumulative visual impacts would be reduced or avoided by the No Project Alternative. As discussed in Section 1.1, "Introduction," of this document and is discussed herein, specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR that would reduce these impacts to a less-than-significant level. Therefore, this impact would be significant and unavoidable.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address this issue.

Facts in Support of Finding

As described earlier in this section, all feasible measures available and within reasonable cost parameters to substantially reduce the project's significant visual impacts have been incorporated into the project. These measures include the directing of construction lights away from adjacent development and the shielding of construction lighting to minimize glare (see Mitigation Measure 4.2-4 above). Additional mitigation measures are not feasible. Because the project's visual impacts would remain substantial and adverse, the project would result in a cumulatively considerable and unavoidable visual resource impact.

SIGNIFICANT CUMULATIVE EFFECT: GENERATION OF SHORT-TERM CONSTRUCTION-RELATED EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

The project would result in a significant and unavoidable cumulative impact related to short-term construction emissions after implementation of mitigation measures identified in Draft EIR Section 4.3, "Air Quality." For future development projects, assuming all related projects identified in Draft EIR Section 5.2.2, "List of Related Local Projects," plus other development in the air basin also implement all feasible construction emission control measures consistent with SJVAPCD Guidelines (SJVAPCD 2002), construction emissions on a project-by-project basis could be less than significant. However, the related projects taken in total and combined with the nonattainment status of the San Joaquin Valley Air Basin (SJVAB) for ozone and respirable particulate matter (PM₁₀) would nonetheless result in a significant and unavoidable cumulative construction-related air quality impact. Therefore, the project's incremental contribution would also be **significant and unavoidable**.

Finding

Required changes or alterations, which substantially reduce the significant cumulative air quality impacts, have been incorporated into the project (see Mitigation Measure 4.3-1 above). Those changes or alterations are within the responsibility and jurisdiction of another public agency, SJVAPCD, and not the agency making these findings. These measures should be adopted by that agency. While these mitigation measures would substantially reduce

the project's air quality impacts, the residual cumulative air quality impact would remain significant. Therefore, this impact would be significant and unavoidable.

The project's contribution to cumulative air quality impacts would be further reduced or avoided by the No Project Alternative. All feasible mitigation recommended by the SJVAPCD has been incorporated into the project. No other feasible mitigation measures are known that would further reduce the impact and none have been suggested. As discussed in Section 1.1, "Introduction," of this document and is discussed herein, specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR that would reduce these impacts to a less-than-significant level. Therefore, this impact would be cumulatively significant and unavoidable and the project's contribution to this impact would be considerable.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address this issue.

Facts in Support of the Finding

As described earlier in this section, all feasible project mitigation measures that would reduce to less-than-significant levels the generation of short-term construction-related emissions of criteria air pollutants and precursors have been recommended for the project (see Mitigation Measure 4.3-1). It is expected that cumulative projects would implement similar air quality mitigation measures on a project-by-project basis. Although implementation of project and region-wide mitigation measures would reduce the project's contribution to regional pollutant loads, the project would contribute to the continued exceedance of state and federal ambient air quality standards for ozone and PM_{10} . No other feasible mitigation is available. This would be a cumulatively significant and unavoidable impact.

SIGNIFICANT CUMULATIVE EFFECT: IMPACTS TO GROUNDWATER

The City is a participant in the South San Joaquin Irrigation District (SSJID) South County Surface Water Supply Project (SCSWSP), designed to ultimately reduce the City's dependence on groundwater resources which have historically been overdrafted. As a result, it is anticipated that providing potable water needed to serve land uses associated with the project would result in less-than-significant impacts to groundwater resources. However, cumulatively significant impacts could occur because of overdrafting or an increase of salinity intrusion resulting from cumulative groundwater usage by entities other than the City of Manteca. The City of Manteca would continue to limit its contribution to this impact by limiting its own groundwater usage to what has been determined to be sustainable levels. Despite the City of Manteca's limitations on its own groundwater usage, groundwater impacts could be cumulatively considerable because the city cannot be certain that other groundwater users would similarly limit their own groundwater usage to sustainable levels. Implementation of the proposed project would contribute to this cumulatively significant impact.

Finding

No feasible mitigation is available to reduce this impact to a less-than-significant level. Therefore, this impact would be significant and unavoidable and the project's contribution would be considerable.

A Statement of Overriding Considerations has been prepared (see Chapter 2, "Statement of Overriding Considerations," of this document) to address this issue.

Facts in Support of the Finding

As described above, no feasible mitigation is available to reduce groundwater supply and quality impacts to a less-than-significant level. It is assumed that the development of future related projects, and/or additional groundwater usage to serve future projects, would undergo environmental review as required by CEQA. However, it cannot be assumed that all potential environmental impacts associated with groundwater supply and

quality to serve these related projects would necessarily be mitigated to less-than-significant levels. Therefore, potentially significant cumulative groundwater supply and quality impacts could occur, and the project's contribution to this significant cumulative impact would be cumulatively considerable.

SIGNIFICANT CUMULATIVE EFFECT: INCREASED DEMAND FOR WASTEWATER TREATMENT AND CONVEYANCE FACILITIES

The DEIR erroneously identifies that the project would have a significant and unavoidable cumulative contribution to increased demand for wastewater treatment and conveyance facilities. The proposed project would provide adequate wastewater treatment and conveyance facilities to meet demands within the City's urban services boundary. As such, the project would have less-than-significant impacts resulting from increased demands for wastewater treatment and conveyance facilities and would not contribute to any cumulative impacts. Therefore, this impact is hereby considered less-than-significant and a statement of findings is not required for this impact.

2 STATEMENT OF OVERRIDING CONSIDERATIONS

The California Environmental Quality Act (CEQA) requires a public agency to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. The City of Manteca proposes to approve the WQCF and Collection System Master Plan project despite certain significant unavoidable adverse impacts identified in the Environmental Impact Report (EIR).

Expansion of the City's Wastewater Quality Control Facility (WQCF) treatment capacity from 9.87 million gallons per day (mgd) to 27 mgd average dry weather flow (ADWF), construction of new trunk sewers to accommodate growth planned for in the City's general plan (adopted in 2003), and construction of a recycled water distribution system will result in significant environmental effects as described in the EIR. With the implementation of recommended mitigation measures, most significant effects can be mitigated to less-than-significant levels. Impacts that cannot be reduced to a less-than-significant levels are considered significant and unavoidable. Significant unavoidable environmental impacts (direct, indirect, and cumulative) of the proposed project are presented in the following section.

2.1 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

2.1.1 LAND USE AND AGRICULTURAL RESOURCES

CONVERSION OF IMPORTANT FARMLAND TO NONAGRICULTURAL USE (IMPACT 4.1-3) (PROJECT AND CUMULATIVE)

The City will pay the required City agricultural mitigation fee to help offset the conversion of Important Farmland. Consistent with Chapter 13.42 of the Manteca Municipal Code, a \$2,000 agricultural mitigation fee will be assessed for every acre of Important Farmland that would be developed as part of the proposed project. A total of \$82,000 (\$2,000 multiplied by 41 acres) will be made available to acquire farmland conservation easements and/or farmland deed restrictions. Implementation of this mitigation measure would substantially reduce significant impacts associated with the conversion of approximately 41 acres of Important Farmland on the WQCF site and along pipeline alignments because funding conservation easements would provide assistance to public and private sectors in protecting other farmland from development pressures. The agricultural mitigation fee would be used to specifically purchase farmland easements and/or farmland deed restrictions to partially offset project impacts; however, approximately 41 acres of Important Farmland would still be unavoidably lost. In addition, no new farmland would be made available, and the productivity of existing farmland would not be improved as a result of this mitigation measure. Thus, full compensation for losses of Important Farmland would not be achieved. No other feasible mitigation is available. Impact 4.1-3 (Conversion of Important Farmland to Nonagricultural Use) would remain significant and unavoidable after mitigation.

The permanent conversion of 41 acres of Important Farmland in the project area to nonagricultural use is considered a cumulatively considerable (i.e., significant) impact when considered in connection with the significant cumulative losses that will occur as a result of the project, past farmland conversions, and planned future development in the City of Manteca, surrounding communities, and San Joaquin County as a whole. The City would contribute financial resources to assist in offsetting the conversion of Important Farmland. The city would use these agricultural mitigation resources to purchase conservation easements on agricultural lands and/or farmland deed restrictions thus providing greater protection to these farmlands in San Joaquin County. However, implementation of this measure would not fully mitigate the project's cumulatively considerable contribution to the loss of agricultural land in San Joaquin County. Therefore, cumulative impacts would be significant and the project's incremental contribution would also be significant, and this would be a significant and unavoidable cumulative impact.

2.1.2 VISUAL RESOURCES

DEGRADATION OF VISUAL CHARACTER (CUMULATIVE)

Past and current development in the project area has increasingly changed the visual character along SR 120, Airport Way, and Woodward Avenue from agricultural and open space uses to urban uses, thus altering and limiting the views available to motorists on these roadways. This trend would continue as future projects are implemented in the region and the project would contribute to this cumulative change in views. As development continues in Manteca and the vicinity, substantial changes in visual conditions would occur as agricultural lands and open space are replaced by urban and public services development. Increased urban and public services development would also lead to increased nighttime light and glare in the region and more limited views of the night sky. The cumulative effect of these changes on visual resources from past and planned future projects, as well as the contribution from the project, is considered significant. Although these cumulative impacts can be minimized to a degree through vegetative and topographic screening of structures, use of downward emitting outdoor lighting, appropriate building design, and other measures, the significant cumulative impact cannot be fully mitigated. Therefore, the cumulative change of agricultural and open space views in the project region to urban and public services land uses is considered a cumulatively significant and unavoidable impact. In addition, the project's incremental contribution to these impacts is cumulatively considerable.

2.1.3 AIR QUALITY

GENERATION OF SHORT-TERM CONSTRUCTION-RELATED EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS (IMPACT 4.3-1) (PROJECT AND CUMULATIVE)

Implementation of Mitigation Measures 4.3-1A and D would result in the required minimum 20% reduction in NO_X emissions and a 45% reduction in PM_{10} emissions from heavy-duty diesel construction equipment, as compared with statewide average emissions. Implementation of these measures would also result in a 5% reduction in ROG emissions from heavy-duty diesel equipment. All or part of the reductions may result from onsite equipment and fuel selection; the remainder would result from off-site reductions achieved through the payment of fees. Implementation of these measures would reduce temporary, short-term, construction-related emissions of ROG and NO_X generated by the proposed project, but not to a less-than-significant level, as emissions would still exceed SJVAPCD's significance thresholds. As a result, this impact (generation of construction-related NO_X emissions) would remain significant and unavoidable.

The project would result in a significant and unavoidable cumulative impact related to short-term construction emissions after implementation of mitigation measures identified in Draft EIR Section 4.3, "Air Quality." For future development projects, assuming all related projects identified in Draft EIR Section 5.2.2, "List of Related Local Projects," plus other development in the air basin also implement all feasible construction emission control measures consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Guidelines (SJVAPCD 2002), construction emissions on a project-by-project basis could be less than significant. However, the related projects taken in total and combined with the nonattainment status of the San Joaquin Valley Air Basin (SJVAB) for ozone and respirable particulate matter (PM₁₀) would nonetheless result in a significant and unavoidable cumulative construction-related air quality impact. Therefore, the project's incremental contribution would also be significant and unavoidable.

EXPOSURE OF SENSITIVE RECEPTORS TO ODORS (IMPACT 4.3-5) (PROJECT)

The WQCF is known to produce odors and at least one confirmed compliant per year has been received over a three year period. While the design of the project incorporates all feasible odor control technologies to reduce project-generated odors, it is unknown whether these technologies would limit odor complaints to less than one per year, which is the significance standard used by the SJVAPCD for significant odor problems. No other feasible odor control technologies are available to reduce the intensity of odors at the WQCF site and that would

guarantee that odor complaints would be limited to one per year. Therefore, this impact would be significant. Because no other feasible odor control technologies are available to reduce the intensity of odors at the WQCF site and that would guarantee that odor complaints would be limited to one per year, this impact would be significant and unavoidable.

2.1.4 HYDROLOGY AND WATER QUALITY

IMPACTS TO GROUNDWATER (CUMULATIVE)

The City is a participant in the South San Joaquin Irrigation District (SSJID) South County Surface Water Supply Project (SCSWSP), designed to ultimately reduce the City's dependence on groundwater resources which have historically been overdrafted. As a result, it is anticipated that providing potable water needed to serve land uses associated with the project would result in less-than-significant impacts to groundwater resources. However, cumulatively significant impacts could occur because of overdrafting or an increase of salinity intrusion resulting from cumulative groundwater use by entities other than the City of Manteca. The City of Manteca would continue to limit its contribution to this impact by limiting its own groundwater withdrawals to what has been determined to be sustainable levels. Despite the City's limitations on its own groundwater use, groundwater impacts could be cumulatively considerable because the city cannot be certain that other groundwater users would similarly limit their own groundwater use to sustainable levels. Therefore, the city's groundwater pumping, although limited, would nonetheless be considerable because in the event other groundwaters pumpers do not comply, the city's pumping would contribute considerably to the significant cumulative impact.

2.2 OVERRIDING CONSIDERATIONS

Having reduced the effects of the proposed project by adopting mitigation measures to the extent feasible, and balanced the benefits of the proposed project against the project's potential unavoidable adverse impacts, the City of Manteca hereby determines that the specific overriding economic, legal, social, technological, or other benefits of the proposed project outweigh the potential unavoidable adverse effects on the environment, and that the unavoidable adverse effects are therefore acceptable, based on the following overriding considerations, which are sufficient to outweigh the project's unavoidable adverse effects:

- Approval of the project would provide sufficient wastewater conveyance and treatment capacity to meet projected growth within the City of Manteca's WQCF service area through the year 2023;
- ► Approval of the project would provide for orderly and cost-effective expansion of City WQCF facilities and conveyance systems needed to serve the City;
- ► Approval of the project would allow the City to comply with current water quality standards and provide flexibility to address changes in standards and regulations;
- Approval of the project would assist the City in implementing land use densities identified in its General Plan 2023 and would provide wastewater service to areas identified in the City's Urban Services Boundary (USB),
- Approval of the project would be consistent with the City's General Plan policies related to the provision of wastewater treatment services within the City's Sphere of Influence (SOI) and USB, and
- Approval of the project would result in the implementation of effluent cooling technologies that would address existing exceptions to the National Pollutant Discharge Elimination System (NPDES) permit limitations from the Regional Water Quality Control Board (RWQCB) and the State Water Resources Control Board (SWRCB) Water Quality Control Plan for Control of Temperatures in Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) sufficiently to protect fisheries and aquatic resources.

Mayor, City of Manteca	Date	

3 REFERENCES

- Bartholow, J., and J. Henriksen. 2004. Klamath River Historical Fall Chinook Analysis using SALMOD. *Preliminary Draft Project Report*. US Geological Survey, Fort Collins Science Center. Fort Collins, CO. 95 pp.
- Bjorn, T. C. and D. W. Reiser. 1991. Habitat requirements of anadromous salmonids. Influences of forest and rangeland management of salmonid fishes and their habits. *Am. Fish. Soc. Special publ.* 19:83–138.
- California Department of Fish and Game. 1995. Staff Report on Burrowing Owl Mitigation. Sacramento, CA.
- City of Manteca. 2006 (August). City of Manteca Wastewater Collection System Master Plan Update, Revised Draft. Manteca, CA. Engineering Consultant: Nolte Associates, Manteca, CA.
- ———. 2007 (January). City of Manteca Wastewater Quality Control Facility Master Plan Update. Manteca, CA. Engineering Consultant: Nolte Associates, Manteca, CA.
- Larry Walker Associates. 2007. City of Manteca Antidegradation Analysis for Proposed Wastewater Quality Control Facility Discharge Modification.
- LWA. See Larry Walker Associates.
- Moyle, P. 2002. *Inland Fishes of California, Revised and Expanded*. University of California Press. Berkeley, CA.
- San Joaquin Valley Air Pollution Control District. (SJVAPD) 2002 (January). *Guide for Assessing and Mitigating Air Quality Impacts*. Fresno, CA.
- Society of Vertebrate Paleontology. 1995. Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources-Standard Guidelines. Society of Vertebrate Paleontology News Bulletin, Vol. 163, pp. 22–27.
- U.S. Fish and Wildlife Service. 2000. Standard Avoidance and Minimization Measures During Construction Activities in Giant Garter Snake Habitat. Portland, OR.