Volume II – Appendices

## CITY OF MERCED WASTEWATER TREATMENT PLANT EXPANSION PROJECT

Draft Environmental Impact Report SCH No. 2005101135

Prepared by: City of Merced



August 2006



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## Appendix A

Notice of Preparation and Initial Study



To	(SCH)	State	Clearinghouse	

(Agency) 1400 Tenth	Stree	et	
(Address) Sacramento,	CA	95812-3044	

#### Subject: Notice of Preparation of a Draft Environmental Impact Report

Lead Agency:		Consulting Firm (If applicable):		
Agency Name	City of Merced Dept. Public Works	Firm Name	Environmental Science Associates	
Street Address	678 West 18th Street	Street Address	8950 Cal Center Dr., #300	
City/State/Zip	Merced, CA 95340	City/State/Zip	Sacramento, CA 95825	
Contact	David Tucker	ContactR	ichard Hunn	

will be the Lead Agency and will prepare an environmental impact report for the The City of Merced project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to \_\_\_\_\_ Dave Tucker at the address shown above. We will need the name for a contact person in your agency.

Merced Waste Water Treatment Plant Expansion Project Project Title:

Project Location:	Merced	Merced	
2	City (nearest)	County	

#### Project Description: (brief)

Expansion of the WWTP to serve up to 20 million gallons pending in conjuction with treatment upgrades necessary to satisfy waste discharge requirements.

10/28/2005 Date

	1,	1 11		
Signature 🖌	Lich	Attin	·	lon
Title	Davio	Huck	en l	

Telephone (209) 385-6846

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

January 2000

# CITY OF MERCED WASTEWATER TREATMENT PLANT EXPANSION PROJECT

Initial Study

Prepared for: City of Merced Department of Public Works October 2005



# CITY OF MERCED WASTEWATER TREATMENT PLANT EXPANSION PROJECT

Initial Study

Prepared for: City of Merced Department of Public Works October 2005

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## Section I PROJECT BACKGROUND AND INTRODUCTION

#### **1. PROJECT INFORMATION**

Project Title:	City of Merced Wastewater Treatment Plant Expansion Project		
Applicant:	City of Merced		
Property Owner(s)	City of Merced		
Lead Agency:	City of Merced		
Responsible Agencies:	<ul> <li>Central Valley Regional Water Quality Control Board</li> <li>State Water Resources Control Board</li> <li>San Joaquin Valley Unified Air Pollution Control District</li> <li>California Department of Fish and Game</li> <li>Merced County Public Works and Planning Departments</li> </ul>		
Comments Due By:	November 28, 2005		
Contact Person:	David Tucker P.E., City Engineer City of Merced 678 West 18 <sup>th</sup> Street, Merced, CA 95340 <i>Phone</i> : (209) 385-6846 <i>Fax</i> : (209) 385-6211 <i>Email:</i> tuckerd@cityofmerced.org		
Additional Documents	All of the documents cited and relied upon in the preparation of this Initial Study are available at the City of Merced Planning Department and are hereby incorporated into the record for this Initial Study.		

#### 2. INTRODUCTION

The City of Merced (City) operates a wastewater treatment plant (WWTP) serving the urban land uses within the city limits. The WWTP is about 1.5 miles south of the city limits in a rural portion of Merced County. Figure 1 shows the relative location of the WWTP in relation to the City urban area.

The City of Merced is proposing to upgrade and expand the capacity of its WWTP facilities (Project) to serve planned wastewater loads generated within the City's Specific Urban Development Plan (SUDP) area and to comply with current and anticipated effluent quality regulatory limits. The proposed Project would initially increase the WWTP's capacity to 15 million gallons per day (mgd) through a series of improvements. Ultimately, the Project would reach a capacity of 20 mgd with additional improvements as needed to meet future wastewater loads.

## **Project Objectives**

The Project's objective is to provide sufficient capacity to meet wastewater loads generated by planned population growth and development within the City's WWTP service area, consistent with the City's General Plan (1997) and other applicable land use plans. The Project will also include additional levels of treatment sufficient to meet current and future effluent quality regulatory limits and to replace aged facilities with improved wastewater treatment technologies and processes capable of meeting applicable regulatory requirements.

#### 3. BACKGROUND INFORMATION AND PROJECT DESCRIPTION

## **Project Background**

The WWTP was built in the late 1970s and has undergone a series of improvements, in 1974 through 1980 and again in 1994. The City prepared an environmental impact report (EIR) in 1994 that addressed improving the WWTP and expanding its capacity to 20 mgd. In 1998, digester enhancements and a liquid chlorine disinfection system were implemented.

The City is currently permitted to discharge up to 10 mgd of secondary treated effluent from the WWTP to Hartley Slough and the Merced Wildlife Management Area.

Further expansion of the WWTP is necessary to accommodate increased demands for wastewater service associated with the 1997 SUDP Update and the 2001 University of California-Merced Long Range Development Plan.

## **Project Location**

The WWTP is in Township 8 South, Range 13 East (Mount Diablo Baseline and Principal Meridian) on Gove Road. It is about 1.5 miles south of the city limits in a rural area supporting agricultural land uses. The facilities occupy approximately 11.3 acres of the 1,335-acre City-owned property (Figure 2). The Merced Municipal Airport is over 1.5 miles north of the WWTP site.



City of Merced Wastewater Treatment Plant Improvement Project . 205087 **Figure 1 Regional Location Map** 

SOURCE: ESRI, 2005; City of Merced; and ESA, 2005



City of Merced Wastewater Treatment Plant Improvement Project . 205087 Figure 2 City of Merced WWTP Property

SOURCE: GlobeXplorer, 2001; and ESA, 2005

## Current WWTP Operations

The WWTP currently provides secondary-level wastewater treatment and discharges treated effluent to Hartley Slough and the Merced Wildlife Management Area. The secondary wastewater treatment process consists of the following four steps:

- Inflow to the WWTP is sent to the primary clarifier, where settleable solids are separated from the waste stream
- Wastewater is sent to a digester, where microorganisms decompose organic material
- Treated wastewater is sent to a secondary clarifier for final clarification
- Treated wastewater is disinfected before its discharge into Hartley Slough

The most stringent operating conditions determine the reliable capacity of the WWTP, including peak month flows, loads (influent strength), and colder temperatures. A key factor in successful wastewater treatment is the operation of the aeration basins and their ability to reduce or eliminate biological oxygen demand of the wastewater.

## **Current Permits**

The WWTP is subject to the regulatory authority of the Central Valley Regional Water Quality Control Board (CVRWQCB), which issues waste discharge requirements (WDR) in association with the requirements under the federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) permit. The plant's operations are currently regulated under WDR No. 5-00-246 (NPDES Permit No. CA0079219), issued in 2000. The plant is currently operating under Mandatory Penalty Complaint No. R5-2004-0537 in response to permit violations for total residual chlorine, a Group II pollutant, and total coliform, a Group I pollutant.

## **Project Description**

As a consequence of planned growth and development in the SUDP and the provisions of the WWTP's amended WDR and NPDES permit, the City is proposing to expand the WWTP and install improvements to the plant. The proposed expansion will include new treatment facilities that will increase the WWTP's capacity, initially to 15 mgd and ultimately to 20 mgd, in addition to improving effluent quality to disinfected-tertiary treatment levels. As part of this process, the City is conducting engineering studies and preparing plans to meet anticipated effluent quality limits that will be imposed by the CVRWQCB.

#### 15 Mgd Capacity Improvements

The new treatment processes include denitrification sufficient to comply with a limitation of 10 milligrams per liter (mg/L) nitrate-nitrogen, coagulation/filtration, ultra-violet disinfection, and

effluent reaeration. The facilities to be constructed include a new headworks, an influent pump station, septage/debris receiving stations, a blower building, and a 95-foot-diameter primary clarifier. The expansion of the plant's headworks and administrative building (Figure 3) will require obtaining approximately 45.3 acres of land north and east of the WWTP. The expansion area will not be annexed into the City. It will remain in Merced County's jurisdiction and require a conditional use or similar administrative permit. Constructing facilities in the proposed expansion area will require the realignment of three privately owned agricultural drains, which will be rerouted to Hartley Slough. As depicted in Figure 3, lands within the west-central portion of the WWTP property are proposed for land-application of biosolids.

The Project includes changing the current point of effluent discharge to Hartley Slough about onequarter mile upstream of the outfall channel that runs parallel to Miles Creek (Figure 3).

The City is studying two biosolids disposal options for the expanded WWTP. The first option is to dispose of the biosolids onsite using disposal rates and methods that would allow the biosolids to be classified as Class A Exceptional Quality biosolids. The second option is to transport all biosolids to a suitable offsite disposal area, such as the Forward Landfill in San Joaquin County. The City will select one or both methods for biosolids disposal during the preparation of the WWTP EIR.

#### 20 Mgd Capacity Improvements

Specific improvements that would increase the WWTP's rated capacity to 20 mgd include additional UV disinfection, effluent cooling, primary digesters, and membrane filtration. Additional required facilities consist of a primary and secondary clarifier, a reactor basin, an aeration basin, and other ancillary facilities.

## **Construction Schedule**

Construction of the Project is scheduled to begin in October 2006. Initial improvements, scheduled to be completed by late 2007, would allow the WWTP to operate at 11.5 mgd. Upon the completion of additional facilities and improvements by late 2008, along with approval by the CVRWQCB, the WWTP would be able to operate at 15 mgd. Completion of all proposed improvements is scheduled for 2013, when the WWTP would be able to operate at a rated capacity of 20 mgd.



SOURCE: Globe Xplorer, 2001; and ESA, 2005



#### 4. ENVIRONMENTAL SETTING

#### Land Use

The City supports a variety of land uses including commercial, residential, and agricultural activities. Its WWTP is on an approximately 1,685-acre City-owned property. The City's General Plan has designated the land at the WWTP site for public uses (City of Merced, 1997a). Adjacent Merced County land generally consists of open space, wildlife habitat, and land in agricultural production.

Figure 2 shows the WWTP site, including the land immediately adjacent to its boundaries. The County of Merced General Plan has designated these surrounding lands for agricultural land uses with a minimum parcel size of 20 acres (County of Merced, 1997a).

#### Surface Waters

The WWTP site lies within the San Joaquin River watershed and is bounded by several local waterways tributary to the river. The plant is partly on lands adjacent to Hartley Slough, Owens Creek, Miles Creek, and Duck Slough. Treated effluent discharged from the WWTP is conveyed to Hartley Slough by an unlined effluent discharge ditch, as shown in Figure 2. The point of discharge is immediately upstream of the confluence of Miles Creek and Hartley Slough. Hartley Slough drains into Owens Creek about 1.5 miles west of the WWTP and ultimately into the San Joaquin River.

About 20 percent of the treated effluent is used to sustain the Merced Wildlife Management Area by maintaining wetland areas for associated wildlife and waterfowl. The remaining 80 percent is discharged to Hartley Slough. The treated effluent in Hartley Slough is subsequently diverted for agricultural purposes during the irrigation season.

#### Water Quality

Water quality of Hartley Slough upstream of the WWTP is largely influenced by agricultural activities and channel management that has included removing riparian vegetation (City of Merced, 1994). Hartley Slough and Owens Creek are not identified as impaired water bodies according to the 2002 California Section 303(d) List and TMDL Priority Schedule. However, downstream of the plant, the San Joaquin River is identified as an impaired waterbody for the following contaminants: boron, chlorpyrifos, DDT (di(para-chloro-phenyl)-trichloroethane), diazinon, electrical conductivity, Group A pesticides, mercury, and unknown toxicity (USEPA, 2003).

#### 5. PURPOSE AND LEGAL BASIS FOR THE INITIAL STUDY

This Initial Study serves as the initial environmental compliance document for the proposed expansion of the WWTP. As described in Section 15063 of the California Environmental Quality Act guidelines (14 CCR 15000 *et seq.*), the purpose of an Initial Study is to determine if a project may have a significant effect on the environment.

Section III of this Initial Study presents the analyses of whether the Project would cause any significant environmental impacts.

### 6. FINDINGS AND CONCLUSIONS

## **Potential Environmental Effects of the Project**

Based on the initial findings and conclusions of the environmental checklist, provided in Section III, it is concluded that implementation of the Project could have a significant adverse effect on the environment. The City will be preparing an EIR for the Project to provide an expanded discussion on the following topics:

Land use and planning Aesthetics Biological resources Hydrology and water quality Geology and soils Hazards and hazardous materials Mineral resources Noise and acoustics Population and housing Public services Recreation Transportation and traffic Utilities and service systems Agriculture resources Air quality Growth-inducing effects

#### **Potential Cumulative Effects**

The Project could have effects on agricultural resources, air quality, and biological resources that are potentially significant and, when considered in combination with the effects of other projects, could contribute to cumulative effects on the environment. However, a majority of these effects would be mitigated by the design of the Project and the standardized mitigation measures that the City would adopt as part of the environmental review process. A cumulative impact assessment for these resource topics will be provided in the EIR for the Project.

The Project would facilitate the continued population growth and development in the City of Merced and the adjacent lands that would be served by the WWTP, thereby indirectly contributing to the secondary effects of growth. These effects generally include increased traffic, degradation of air and water quality, loss of productive agricultural lands, and increased demand on public services (County of Merced, 2001). These topics will be discussed more extensively in the EIR.

## References

City of Merced. 1994. Draft Environmental Impact Report: City of Merced Wastewater Treatment Plant Expansion. SCH# 9211209. June 1994.

City of Merced. 1997a. Merced Vision 2015 General Plan.

City of Merced. 1997b. *Merced Vision 2015 General Plan: Final Program Environmental Impact Report.* SCH# 95082050. April 1997.

County of Merced. 2004. University Community Plan EIR, 2004.

ECO:LOGIC. 2005. City of Merced Wastewater Treatment Plant Expansion: Report of Waste Discharge. April 2005.

UC Merced. 2001. UC Merced Long Range Development Plan EIR, 2001.

USEPA, 2003. U.S. Environmental Protection Agency. 2003. 2002 California Section 303(d) List and TMDL Priority Schedule.

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	Section II					
	CEQA DETERMINATION OF IMPACT					
	ERMINATION: (To be completed by Lead Agency) e basis of this initial evaluation:					
	I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.					
	I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.					
$\boxtimes$	I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.					
	I find that the Proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.					
	I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.					
By:	David Tucker P.E. Date:					
Tist						

Title: Signature:	City Engineer	Representing: _	City of Merced
Approved by:	Jack D. Lesch	Date:	10/21/05
Title: Signature:	Director of Development Services/ Environmental Coordinator	Representing: _	City of Merced
( Distributed fo	r Public Review— Octobul E	2005.	

City of Merced Wastewater Treatment Plant Expansion Project Initial Study

B

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## Section III Environmental checklist Evaluation of environmental impacts

## **Environmental Factors Potentially Affected**

The environmental factors checked below would be potentially affected by the proposed Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture Resources	Air Quality
Biological Resources	Cultural Resources	Geology/Soils
Hazards and Hazardous Materials	Hydrology/Water Quality	Land Use/Planning
Mineral Resources	Noise	Population/Housing
Public Services	Recreation	Transportation/Traffic
Utilities/Service Systems	Mandatory Findings of Signi	ificance

## **Evaluation of Environmental Impacts**

## Aesthetics

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
1.	AESTHETICS—Would the project:				
a)	Have a substantial adverse effect on a scenic vista?				$\boxtimes$
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				$\boxtimes$
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			$\square$	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		$\boxtimes$		

#### Threshold and Conclusion:

**Items 1a:** A significant impact would be one that has a substantially adverse effect on a scenic vista. With regard to these issues, the Project would have **no impact.** 

**Item 1b:** A significant impact would be one that would substantially damage scenic resources within a state scenic highway. With regard to these issues, the Project would have **no impact**.

**Item 1c:** A significant impact would be one that would substantially degrade the visual character of an area. With regard to these issues, the Project would have a **less than significant impact**.

**Item 1d:** A significant impact would be one that has a substantially adverse effect by producing a new source of substantial light or glare. With regard to this issue, the Project would have a **less than significant impact with mitigation.** 

#### <u>Analysis</u>:

The Project site lies in the western San Joaquin Valley and is characterized by generally level topography. The foothill region of the Sierra Nevada, 30 miles to the east, is the nearest significant topographic feature. In this context, the site does not contribute to and is not a part of a designated scenic vista nor does the Project site obstruct an important vista. The Project neither contains nor is adjacent to a county- or state-designated scenic corridor. The Project includes the construction of additional treatment structures similar in color and hue to the current structures as part of the WWTP's overall improvement. New lighting sources at the proposed WWTP entrance would produce a new source of light or glare, which could affect daytime or nighttime views in the area. Further analysis of these issues and the anticipated mitigation measures will be presented in the EIR.

## Agricultural Resources

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
2.	AGRICULTURE RESOURCES In determining whether impacts to agricultural resource refer to the California Agricultural Land Evaluation an Department of Conservation as an optional model to us Would the project:	d Site Assessn	nent Model (1997)	prepared by the	e California
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?			$\boxtimes$	
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	$\square$			

#### Threshold and Conclusion:

**Item 2a:** A significant impact would be one that converts farmland designated as "prime," "unique" or "farmland of statewide importance" (as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency) to nonagricultural uses. The development of the Project would cause a **potentially significant impact**.

**Item 2b**: A significant impact would also occur if the Project conflicts with agricultural zoning and/or an active Williamson Act contract. With regard to this issue, the Project would have **a less than significant impact**.

**Item 2c**: A significant impact would occur if the Project involves other changes in the environment that because of their location or nature, could result in the conversion of farmland to a nonagricultural use. With regard to this issue, the Project would have **a potentially significant impact**.

#### <u>Analysis:</u>

The WWTP expansion would convert 45.3 acres of farmland designated as "prime" or "farmland of statewide importance" on the maps prepared pursuant to the 2002 Farmland Mapping and Monitoring Program of the California Resources Agency to the nonagricultural use of an expansion of the WWTP. The Project would not conflict with an active Williamson Act contract. It would include applying processed sludge to onsite agricultural lands, thereby limiting the types of crops that could otherwise be grown. Additionally, it would create additional wastewater treatment capacity, which would indirectly enable development in other portions of Merced County. This development could result in the further conversion of farmland to nonagricultural uses. These issues will be discussed further in the EIR.

## Air Quality

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
3.	<b>AIR QUALITY</b> Where available, the significance criteria established be district may be relied upon to make the following deter			gement or air p	ollution control
a)	Conflict with or obstruct implementation of the applicable air quality plan?		$\boxtimes$		
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		$\boxtimes$		
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d)	Expose sensitive receptors to substantial pollutant concentrations?		$\boxtimes$		
e)	Create objectionable odors affecting a substantial number of people?			$\boxtimes$	

#### Threshold and Conclusion:

**Item 3a**: A significant impact would be one that conflicts with or obstructs implementation of the applicable air quality plan. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation** for construction and operation of the Project.

**Item 3b**: A significant impact would be one that contributes substantially to the ozone air quality non-attainment status. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation** for construction and operation of the Project.

A significant impact would be one that contributes substantially to the  $PM_{10}$  air quality nonattainment status. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation** for construction and operation of the Project.

**Item 3c**: A significant impact would be one that results in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation** for construction and operation of the Project.

**Item 3d**: A significant impact would be one that exposes sensitive receptors to substantial pollutant concentrations. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation** for construction and operation of the Project.

**Item 3e**: A significant impact would be one that creates objectionable odors affecting a substantial number of people. With regard to this issue, the Project would have a **less than significant impact** for construction and operation of the Project.

#### Analysis:

The Project is not expected to significantly alter growth patterns, thereby conflicting with an applicable air quality implementation plan. The Project would contribute new emissions of criteria air pollutants, which could potentially violate air quality standards or result in a cumulatively considerable net increase of a criteria air pollutant. Construction emissions would vary in volume and duration; however, short-term continuous emissions could potentially add to cumulatively considerable air quality impacts. Additional analysis of these impacts will be presented in the EIR along with appropriate mitigation measures.

The Project would not result in a result in substantial increase in objectionable odors that could affect a substantial number of people.

## **Biological Resources**

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
4.	BIOLOGICAL RESOURCES— Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	$\boxtimes$			
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				$\boxtimes$
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				$\boxtimes$

#### Threshold and Conclusion:

**Item 4a:** A significant impact would be one that has a substantial adverse effect on any candidate, sensitive, or special-status species. With regard to this issue, the Project would have a **potentially significant impact**.

**Item 4b:** A significant impact would be one that adversely affects riparian habitat or other sensitive natural community. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 4c:** A significant impact would be one that adversely affects wetlands. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.
**Item 4d:** A significant impact would be one that impedes the use of a native wildlife nursery site or interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors. With regard to this issue, the Project would have a **potentially significant impact**.

**Item 4e:** A significant impact would be one that or conflicts with local ordinances and policies protecting local biological resources. With regard to this issue, the Project would have **no impact**.

**Item 4f:** A significant impact would be one that conflicts with any conservation plan. With regard to this issue, the Project would have **no impact**.

#### <u>Analysis</u>:

Implementation of the Project could potentially affect special-status species that may inhabit the Project area and modify terrestrial, aquatic, wetland, or riparian habitat. The area surrounding the WWTP is known to contain habitat that supports several raptor special-status species. Hartley Slough and Miles Creek are known to support some fish and other aquatic life. The effluent canals may support migratory or native fish species, and therefore, any construction or modifications to the effluent canals could present potentially significant impacts, which will be discussed further in the EIR. A search of the California Natural Diversity Database (CNDDB) returned no occurrences of special-status species in the immediate Project area. Most of the WWTP expansion features would be limited to the footprint of the current WWTP; however, construction of the new outfall and bridge would occur within Hartley Slough. Therefore, impacts and habitat modifications to wetlands, riparian, and other biological resources will be discussed further in the EIR along with any appropriate mitigation measures.

# **Cultural Resources**

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
5.	CULTURAL RESOURCES— Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		$\boxtimes$		
b)	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?		$\boxtimes$		
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		$\boxtimes$		
d)	Disturb any human remains, including those interred outside of formal cemeteries?		$\boxtimes$		

### Threshold and Conclusion:

**Item 5a:** A significant impact would be one that would cause a substantial adverse change in the significance of any historic resource as defined in Section 15064.5 of the CEQA Guidelines. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 5b:** A significant impact would be one that would cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5 of the CEQA Guidelines. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 5c:** A significant impact would be one that would destroy a unique paleontological resource or site or a unique geologic feature as defined by Section 15064.5 of the CEQA Guidelines. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 5d:** A significant impact would be one that disturbs human remains. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

## <u>Analysis</u>:

Because the Project consists of constructing new structures and other physical features, the potential for encountering cultural, historic, or prehistoric resources during Project construction exists. A cultural resources investigation for the WWTP site and the 380-acre parcel northwest of the WWTP was conducted for the 1994 City of Merced WWTP Expansion EIR. Information from the 1994 cultural resources assessment and further analysis will be presented in the EIR along with appropriate mitigation measures for identified impacts.

# **Geology and Soils**

Iss	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
6.	GEOLOGY AND SOILS—Would the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	<ul> <li>Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</li> </ul>				
	ii) Strong seismic ground shaking?			$\boxtimes$	
	iii) Seismic-related ground failure, including liquefaction?			$\boxtimes$	
	iv) Landslides?			$\boxtimes$	
b)	Result in substantial soil erosion or the loss of topsoil?		$\boxtimes$		
c)	Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				$\boxtimes$
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			$\square$	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the				$\boxtimes$

### Threshold and Conclusion:

disposal of wastewater?

**Item 6a:** A significant impact would be one that exposes people or structures to loss, injury or death resulting from surface rupture or earthquake, liquefaction, or landslides. With regard to this issue, the Project would have a **less than significant impact**.

**Item 6b:** A significant impact would be one that results in substantial soil erosion or loss of topsoil. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 6c:** A significant impact would be one where geologic materials or soil becomes unstable as a result of the Project and results in landslide or other movement. With regard to this issue, the Project would have **no impact**.

**Item 6d:** A significant impact would occur if the Project is placed on expansive soils and creates substantial risk to life or property. With regard to this issue, the Project would have a **less than significant impact**.

**Item 6e:** A significant impact would occur if septic tanks or systems are utilized in the Project and the soil is unable to support their use. With regard to this issue, the Project would have **no impact**.

### <u>Analysis</u>:

Implementation of the Project would not create a geologic hazard or expose a population to increased geologic hazards. A review of Special Publication 42 for areas in the vicinity of the Project indicates that the site is not in an Alquist-Priolo Earthquake Fault Zone (CGS Special Publication 42, 1999). The nearest mapped active earthquake fault is the San Andreas Fault, over 50 miles away. Because the fault lies a substantial distance from the Project site, the risk of strong ground shaking and/or related ground failure is considered relatively low as compared to other localities in California.

Ground-disturbing activities, including removal of vegetation, can increase water runoff rates and concentrate flows that may result in accelerated erosion. The eroded material could degrade the water quality in Hartley Slough and, to a lesser extent, the San Joaquin River. As required by Section 402 of the Clean Water Act, the City will be required to prepare and implement a Storm Water Pollution Prevention Plan for the Project, which would include mitigation measures to control accelerated erosion and sedimentation.

If the geotechnical investigation encounters expansive soils, standard engineering practices will be incorporated into the Project to protect structures from the effects associated with those soils.

The ability of onsite soils to receive disposed biosolids will be assessed to determine the potential for environmental impact.

## Hazards and Hazardous Materials

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
7.	HAZARDS AND HAZARDOUS MATERIALS Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		$\boxtimes$		
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		$\square$		
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				$\boxtimes$
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				$\square$
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				$\square$
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				$\boxtimes$
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				$\boxtimes$
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with				$\boxtimes$

#### Threshold and Conclusion:

wildlands?

**Item 7a:** A significant impact would be one that produces a substantial risk to the public from routine transportation, use, or disposal of hazardous material, or from reasonably foreseeable accidental release of such material. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 7b:** A significant impact would be one that creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of

hazardous materials into the environment. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 7c:** A significant impact would be one that emits hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. With regard to this issue, the Project would have **no impact**.

**Item 7d:** A significant impact would be one that is located on a listed contamination site and exposes the public or the environment to the hazard. With regard to this issue, the Project would have **no impact**.

**Item 7e:** A significant impact would be one that results in a safety hazard for people residing or working within two miles of a public airport. With regard to this issue, the Project would have **no impact**.

**Item 7f:** A significant impact would be one that results in a safety hazard for people residing or working in the vicinity of a private airstrip. With regard to this issue, the Project would have **no impact**.

**Item 7g:** A significant impact would be one that impairs the implementation of or interferes with an emergency response or evacuation plan. With regard to this issue, the Project would have **no impact**.

**Item 7h:** A significant impact would be one that exposes people or structures to a significant risk of wildland fires. With regard to this issue, the Project would have **no impact**.

## <u>Analysis</u>:

A database search conducted for the Project site revealed the presence of the Merced City Municipal Dump at 2401 Rice Road, about 0.75 miles from the WWTP. The expansion Project would not encroach onto this property.

As an optional part of the Project, treated biosolids would be transported from the WWTP to the Forward Sanitary Landfill near Stockton, California. Alternatively, biosolids may be retained and disposed of onsite.

Potential impacts associated with the transport of hazardous materials, including chemicals, fuels, and solvent, or the accidental release of hazardous materials will be analyzed further in the EIR.

The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The Project is not within two miles of a public airport or public use airport or private airstrip and would not interfere with aviation. It would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; therefore, no impacts are anticipated.

# Hydrology and Water Quality

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
8.	HYDROLOGY AND WATER QUALITY— Would the project:				
a)	Violate any water quality standards or waste discharge requirements?				$\boxtimes$
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		$\boxtimes$		
f)	Otherwise substantially degrade water quality?		$\boxtimes$		
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				$\boxtimes$
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			$\boxtimes$	
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			$\square$	
j)	Inundation of seiche, tsunami, or mudflow?				$\boxtimes$

### Threshold and Conclusion:

**Item 8a:** A significant impact would occur if the Project violated any water quality standards or waste discharge requirements. With regard to this issue, the Project would have **no impact**.

**Item 8b:** A significant impact would occur if the Project would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in

aquifer volume or a lowering of the local groundwater table level. With regard to this issue, the Project would have a **less than significant impact**.

**Item 8c:** A significant impact would be one that substantially alters drainage and surface flows in a manner that may result in substantial erosion or siltation on- or offsite. With regard to this issue, the Project would have a **less than significant impact**.

**Item 8d:** A significant impact would result if the drainage pattern of the site or area would be substantially altered in a manner that would increase surface runoff and result in flooding on- or offsite. With regard to this issue, the Project would have a **less than significant impact**.

**Item 8e**: A significant impact would result if the Project created or contributed runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provided substantial additional sources of polluted runoff. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 8f:** A significant impact would result if the Project otherwise substantially degraded water quality. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 8g:** A significant impact would occur if the Project placed housing within a 100-year flood hazard area. With regard to this issue, the Project would have **no impact**.

**Item 8h**: A significant impact would occur if the Project placed structures within a 100-year flood hazard area such that Project structures would impede or redirect floodwaters. With regard to this issue, the Project would have a **less than significant impact**.

**Item 8i:** A significant impact would occur if people or structures were exposed to a significant risk of loss, injury or death as a result of flooding or the failure of a levee or dam. With regard to this issue, the Project would have a **less than significant impact**.

**Item 8j:** A significant impact would occur from inundation by seiche, tsunami, or mudflow. With regard to this issue, the Project would have **no impact**.

## <u>Analysis</u>:

The Project would improve the quality of the WWTP's effluent discharge through the addition of new treatment processes. The Project would meet waste discharge requirements mandated by the Central Valley Regional Water Quality Control Board. An additional analysis of issues associated with meeting water quality standards will be presented in the EIR; however, it is anticipated that no adverse water quality impacts would occur.

The Project would not substantially deplete or interfere with groundwater supplies and recharge in the area. The Project site is in the Merced Subbasin of the San Joaquin Valley Groundwater Basin, where groundwater elevations encroach within 10 to 15 feet of the ground surface. Further analysis of

groundwater resources will be presented in the EIR; however, it is anticipated that impacts would remain less than significant.

The Project would not substantially alter the site's drainage pattern in a manner that would result in siltation, erosion, or additional polluted runoff sources. Construction activities at the new outfall would take place in the levee and in the banks of Hartley Slough. Further analysis of these issues will be presented in the EIR.

The Project would not exceed the capacity of existing or planned stormwater drainage systems. It does not involve the construction of residential housing and, therefore, would not place housing within a 100-year flood hazard area.

The Project would place new structures at the WWTP within a 100-year flood hazard area. The Project includes facility improvements along Hartley Slough, including a new bridge and outfall, in addition to new levees north and east of the WWTP. Due to the large footprint of the current WWTP, the actual increase in area protected by the new levee would be minimal, and therefore, the Project is not anticipated to significantly impede or redirect flood flows or increase the risks of flooding or levee failure. Additional analysis will be presented in the EIR.

# Land Use and Planning

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
9.	LAND USE AND PLANNING— Would the project:				
a)	Physically divide an established community?				$\boxtimes$
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				$\boxtimes$

### Threshold and Conclusion:

**Item 9a:** A significant impact would occur if the Project physically divided an established community. With regard to this issue, the Project would have **no impact**.

**Item 9b:** A significant impact would occur if the Project conflicted with an applicable General Plan policy or regulation of an agency with jurisdiction over the Project. With regard to this issue, the Project would have a **less than significant impact.** 

**Item 9c:** A significant impact would occur if the Project conflicted with an applicable habitat conservation plan. With regard to this issue, the Project would have **no impact**.

### <u>Analysis</u>:

The Project would not divide an established community. The Project area is surrounded by parcels larger than 40 acres, of which the majority are in agricultural production. Neither a habitat conservation plan nor a natural communities conservation plan has been adopted for the Project area, and therefore, the Project would not conflict with an adopted habitat conservation plan or a natural communities conservation plan. The Project involves adjacent lands into the WWTP boundary. Lane use entitlements from the County and City may be required to operate those portions of the WWTP within the A-1 zone. Further analysis of effects to land use and planning will be presented in the EIR.

## **Mineral Resources**

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
10.	MINERAL RESOURCES—Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				$\boxtimes$
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land				$\square$

### Threshold and Conclusion:

use plan?

**Item 10a:** A significant impact would occur if the Project resulted in the loss of availability of a mineral resource of value to the region and state. With regard to this issue, the Project would have **no impact**.

**Item 10b:** A significant impact would occur if the Project resulted in the loss of availability of a locally important mineral resource recovery site delineated in an applicable land use plan. With regard to this issue, the Project would have **no impact**.

<u>Analysis</u>: There are no known mineral resources or designated mineral resource recovery sites that would be affected by the Project. According to the Department of Conservation, Division of Mines and Geology Mineral Resource Zone (MRZ) Map in Merced County, the Project area is zoned as MRZ-3a SG-8. Areas classified as MRZ-3a SG-8 include fine- to coarse-grained terrace and fan deposits of the Pleistocene Riverbank Formation. The Riverbank Formation is mined for concrete aggregate in other areas of California, but no history of production from this formation in Merced County was found in a study conducted by the Department of Conservation in 1999 (DMG, 1999) It is anticipated that no impacts would occur.

# Noise

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
11.	NOISE—Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		$\boxtimes$		
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				$\boxtimes$
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			$\bowtie$	
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		$\boxtimes$		
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				$\square$

#### Threshold and Conclusion:

**Item 11a:** A significant impact would occur if the Project resulted in the exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance or applicable standards of other agencies. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 11b:** A significant impact would result if the Project exposed persons to or generated excessive ground-borne vibration or ground-borne noise levels. With regard to this issue, the Project would have **no impact**.

**Item 11c**: A significant impact would result if the Project caused a substantial permanent increase in ambient noise levels. With regard to this issue, the Project would have a **less than significant impact**.

**Item 11d**: A significant impact would result if the Project caused a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels without the Project. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 11e:** A significant impact would be one that exposes people residing or working in the vicinity of a public airport or public use airport to excessive noise levels. With regard to this issue, the Project would have **no impact**.

**Item 11f:** A significant impact would be one that exposes people residing or working in the vicinity of a private airstrip to excessive noise levels. With regard to this issue, the Project would have **no impact**.

<u>Analysis</u>: Construction activities associates with the Project could potentially exceed City or Merced County noise thresholds. The Merced County standard for residential land uses is 65 dBA Ldn<sup>1</sup> for exterior noise levels and 45 dBA Ldn for interior noise levels. The County refers to the State Land Use Compatibility Guidelines for the acceptable noise level at parks, which is listed as 70 dBA Ldn. Further analysis of these issues and appropriate mitigation will be presented in the EIR.

The Project would add equipment that would produce minor increases in the amount of noise generated by the WWTP. However, the change from baseline noise conditions due to operation of the Project would not vary significantly. Further analysis of these issues will be presented in the EIR; however, it is anticipated that this impact would remain less than significant.

Project construction could potentially result in a temporary or periodic increase in ambient noise levels within the Project vicinity. Noise increases would be temporary and would not be significantly louder than the current conditions. Further analysis of these issues will be presented in the EIR.

<sup>&</sup>lt;sup>1</sup> Ldn is a 24-hour day and night A-weighted noise exposure level that accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 10 p.m. and 7 a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noise.

# **Population and Housing**

Issu	nes (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
12.	POPULATION AND HOUSING— Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	$\boxtimes$			
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				$\boxtimes$
c)	Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?				$\boxtimes$

### Threshold and Conclusion:

**Item 12a:** A significant impact would result if the Project induces substantial population growth in an area. With regard to this issue, the Project would have a **potentially significant impact**.

**Item 12b:** A significant impact would result if the Project displaced substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. With regard to this issue, the Project would have **no impact**.

**Item 12c:** A significant impact would result if the Project displaced substantial numbers of people, necessitating the construction of replacement housing elsewhere. With regard to this issue, the Project would have **no impact**.

### Analysis:

The Project would not directly induce or create any new population in the City of Merced or adjacent lands. The proposed WWTP expansion Project would result in an increase in capacity that would facilitate continued planned population growth in the City's SUDP. Impacts associated with population growth were analyzed in the City's certified General Plan EIR (1997). Further analysis of the secondary effects of growth (e.g., agricultural land conversion) will be presented in the EIR.

The Project would not displace any existing housing or people necessitating the construction of replacement housing elsewhere. Further analysis of these issues will be presented in the EIR; however, it is anticipated that no impacts would occur.

# Public Services

		and Supporting Information Sources): BLIC SERVICES— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	asso alte phy con env acco perf	sult in substantial adverse physical impacts ociated with the provision of new or physically red governmental facilities, need for new or visically altered governmental facilities, the struction of which could cause significant ironmental impacts, in order to maintain eptable service ratios, response times, or other formance objectives for any of the public vices:				
	i)	Fire protection?				$\boxtimes$
	ii)	Police protection?				$\boxtimes$
	iii)	Schools?				$\boxtimes$
	iv)	Parks?				$\boxtimes$
	v)	Other public facilities?				$\boxtimes$

### Threshold and Conclusion:

**Item 13a:** The Project would have a significant environmental impact if construction of the Project resulted in an increased demand for emergency service public facilities that are needed to maintain adequate service levels and would create a substantial adverse physical impact. With regard to this issue, the Project would have **no impact**.

The Project would have a significant environmental impact if additional public school facilities are needed to maintain adequate service levels for the Project, and these facilities create a substantial adverse physical impact. With regard to this issue, the Project would have **no impact**.

The Project would have a significant environmental impact if additional parks are needed to maintain adequate service levels for the Project, and these facilities create a substantial adverse physical impact. With regard to this issue, the Project would have **no impact**.

The Project would have a significant environmental impact if construction of other public facilities that are needed to maintain adequate service levels for the Project creates a substantial adverse physical impact. With regard to this issue, the Project would have **no impact**.

<u>Analysis</u>: The expansion of the WWTP is not anticipated to directly increase the need for public services, government facilities, or resources, nor would it generate any additional demands for public services that would require new or altered facilities, including police and fire protection. Further analysis of these issues will be presented in the EIR; however, it is anticipated that no impacts would occur.

# Recreation

Issi	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
14.	RECREATION:				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				$\square$
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				$\square$

#### Threshold and Conclusion:

**Item 14a:** A significant impact would result if the Project increased the use or accelerated the physical deterioration of recreational facilities. With regard to this issue, the Project would have **no impact**.

**Item 14b:** A significant impact would result if the Project included recreational facilities that might adversely affect the physical environment due to construction or expansion. With regard to this issue, the Project would have **no impact**.

#### <u>Analysis</u>:

The expansion of the WWTP would not adversely affect any recreational parks, facilities, or recreational opportunities. The Project would not require the construction of any new recreational facilities that may have an adverse impact on the environment. Access to the Merced Wildlife Management Area will be maintained to allow for permitted hunting within the wildlife area to the south. Further analysis of these issues will be presented in the EIR.

# Transportation and Traffic

Issu	ues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
15.	TRANSPORTATION/TRAFFIC— Would the project:				
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to- capacity ratio on roads, or congestion at intersections)?				
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				$\boxtimes$
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				$\boxtimes$
e)	Result in inadequate emergency access?		$\boxtimes$		
f)	Result in inadequate parking capacity?				$\boxtimes$
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				$\boxtimes$

## Threshold and Conclusion:

**Item 15a:** A significant impact would result if the Project caused an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation.** 

**Item 15b:** A significant impact would result if the Project caused level of service ratings (individually or cumulatively) to be exceeded. With regard to this issue, the Project would have a **less than significant impact.** 

**Item 15c**: A significant impact would result if the Project resulted in substantial safety risks due to changes in air traffic patterns. With regard to this issue, the Project would have **no impact**.

**Item 15d**: A significant impact would result if the Project produced hazards to safety from design features or incompatible uses. With regard to this issue, the Project would have **no impact**.

**Item 15e:** A significant impact would result if the Project resulted in inadequate emergency access. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item 15f:** A significant impact would result if the Project results in inadequate parking. With regard to this issue, the Project would have **no impact**.

**Item 15g:** A significant impact would result if the Project conflicted with alternative transportation policies, plans, or programs. With regard to this issue, the Project would have **no impact**.

### Analysis:

Operation of the Project will not affect traffic or vehicle circulation, roadway capacities, or air traffic patterns and operations. Following construction, the WWTP expansion would not result in an increase in traffic that is substantial in relation to the current traffic load and capacity of the street system. During construction, emergency vehicle access to the WWTP will be maintained. Impacts to the local transportation system during construction are expected to be minimized through the application of standardized traffic control measures. Further analysis of transportation-related impacts will be provided in the EIR.

# Utilities and Service Systems

Issu	tes (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
16.	UTILITIES AND SERVICE SYSTEMS—Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				$\boxtimes$
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				$\square$
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				$\square$
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				$\boxtimes$
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			$\boxtimes$	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				$\boxtimes$

### Threshold and Conclusion:

**Item 16a:** A significant impact would result if the Project resulted in violation of requirements established by the Regional Water Quality Control Board. With regard to this issue, the Project would have **no impact**.

**Item 16b**: A significant impact would result if the Project adversely affected the environment due to construction of existing or new water or wastewater treatment facilities that would cause significant adverse impacts. With regard to this issue, the Project would have **no impact**.

**Item 16c**: A significant impact would result if the Project required construction of new storm-drain facilities that would cause significant adverse impacts. With regard to this issue, the Project would have **no impact**.

**Item 16d:** A significant impact would result if the Project demands a water supply that is unavailable from existing entitlements and resources. With regard to this issue, the Project would have **no impact**.

**Item 16e:** A significant impact would occur if the Project results in a determination by the wastewater treatment provider that it has inadequate capacity. With regard to this issue, the Project would have **no impact**.

**Item 16f:** A significant impact would result if the Project creates a disposal need that cannot be accommodated by a landfill. With regard to this issue, the Project would have a **less than significant impact**.

**Item 16g:** A significant impact would result if the Project is unable to comply with federal, state and local statutes and regulations related to solid waste. With regard to this issue, the Project would have **no impact**.

### <u>Analysis</u>:

The purpose and intent of the Project is to comply with waste discharge requirements established by the Regional Water Quality Control Board. New drainage infrastructure would be constructed in accordance with City regulations. The Project will comply with federal, state, and local statutes and regulations related to solid waste. Further analysis of these issues will be provided in the EIR.

# Section IV MANDATORY FINDINGS OF SIGNIFICANCE

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Issues (and Supporting Information Sources):		Potentially Significant Impact	Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE					
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				$\boxtimes$

### Threshold and Conclusion:

**Item a)** The Project does not have the potential to degrade the quality of the environment by reducing habitat, threatening to eliminate any plant or animal community, or eliminating important examples of California history or prehistory. With regard to this issue, the Project would have a **less than significant impact with mitigation incorporation**.

**Item b)** The Project could potentially contribute incremental effects that would be cumulatively considerable when considered in combination with other past, present, or foreseeable future projects. With regard to this issue, the Project would have a **potentially significant impact**.

**Item c)** The Project would not result in environmental impacts that would have a direct or indirect adverse effect on human beings. With regard to this issue, the Project would have **no impact**.

#### Analysis:

The Project could degrade the quality of the environment by reducing habitat, threatening to eliminate any plant or animal community, or eliminating important examples of California history or prehistory. Further analysis and discussion of these issues will be provided in the EIR. However, it is anticipated, that the installation of new treatment facilities and state-of-the-art technologies at the WWTP will enhance the wastewater treatment system and provide sufficient capacity to avoid system upsets that may otherwise occur. This improvement will, in turn, potentially improve effluent quality.

The Project could potentially contribute to incremental effects that would be cumulatively considerable when considered in combination with other past, present, or foreseeable future projects. The Project's cumulative effects to air quality and important farmlands and its contribution to potential growth-inducing effects will be evaluated in the EIR.

The Project will not result in environmental impacts that would have a direct or indirect adverse effect on human beings. Further analysis of this issue will be provided in the EIR.