

CHAPTER 7

Other Statutory Considerations

7.1 Cumulative Impacts

A cumulative impact is created when two or more projects act in combination to cause related impacts that are greater than the subject project alone. California Environmental Quality Act (CEQA) Guidelines (Section 15130(a)) require an environmental impact report (EIR) to identify and discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in combination with the effects of past, current, and probable future projects. If the lead agency determines that the incremental effect of the project is not cumulatively considerable, then it may conclude the effect is less than significant.

The CEQA Guidelines also state that the cumulative impacts discussion does not need to provide as much detail as is provided in the analysis of project-only impacts and should be guided by the standards of practicality and reasonableness.

In addition, Section 15130(b) of the CEQA Guidelines identifies that one of the following two may be used to complete an adequate cumulative analysis:

- A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the lead agency (i.e., the list approach), or
- A summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency (i.e., the plan approach).

As discussed in Chapter 4, Environmental Analysis, a majority of the environmental effects associated with the Merced Wastewater Treatment Plant (WWTP) Expansion Project (Project) would occur during facility construction. Therefore, this analysis focuses on other concurrent construction projects that may act in combination with construction of the Project.

In addition, this analysis addresses the identified significant and unavoidable effects of implementing the City of Merced's (City) General Plan and the Long-Range Development Plan (LRDP) for the University of California-Merced (UC-Merced). If the Project further impacted the effects identified as significant and unavoidable in these two EIRs as a result of serving the

Specific Urban Development Plan (SUDP) and UC-Merced campus, then these effects would be considered cumulatively significant.

7.1.1 Past, Present and Reasonably Foreseeable Future Projects

This analysis is based on a summary of existing and anticipated projects within the immediate vicinity of the Project and includes future population growth and development that could occur within the SUDP and Phase 1 of the UC-Merced Campus as a result of expanding the WWTP capacity and facilitating future development in the community. A detailed discussion of growth-inducing impacts associated with this Project is presented in Chapter 6, Growth-Inducing Impacts.

A general summary of projects in the vicinity of the WWTP that are either under construction, have been recently approved, or are pending approval is presented in Table 7-1. A majority of the listed projects are related to development projects that are focused around the Merced Municipal Airport.

Much of the land area in the southern portion of Merced is already urbanized and built to allowable densities. The listed projects, therefore, consist mainly of infill developments and are generally limited in size, whereas most lands located immediately south of the city limits and under Merced County jurisdiction are in an agricultural land use.

The documents referenced in Table 7-1, along with a summary of their associated impacts, are available to the public for review at the City of Merced Development Services and Public Works Departments and the Merced County Association of Governments.

The projects listed in Table 7-1 are anticipated to result in construction-related effects that may not be individually significant; however, if they are constructed simultaneously with the Project, they could contribute to cumulative effects on air quality including emissions of nitrogen oxides (NO_x), reactive organic gases (ROG), and particulates; traffic congestion; and temporary increases in noise, light and glare. Over the long-term future, the residential and commercial projects are expected to also increase local traffic, whereas the public works project will likely improve traffic movement and reduce traffic congestion. The schedule for developing these projects is not known.

7.1.2 Summary of Projections Contained in an Adopted General Plan or Related Planning Document

The 1997 Merced General Plan EIR identified a series of environmental impacts that would occur with implementation of the SUDP. Several of these impacts were considered to be significant and unavoidable, while other impacts could be reduced to a less-than-significant level with the implementation of appropriate mitigation. Table 7-2 identifies these impacts and which are considered to be significant and unavoidable:

**TABLE 7-1
LIST OF PROJECTS IN THE VICINITY OF THE PROJECT**

Project Name	Size	Project Description	Status
Development Projects			
Pad at Home Depot	5,400 square feet	Retail; located at the northwest corner of 18 th and R Streets	Application was approved December 2001; Conditional Use Permit (CUP) #998
Skyview Industrial Park	22.7 acres	Industrial subdivision; located near the Merced Municipal Airport on the north side of Wardrobe Avenue, west of Massasso	Application was approved Jan. 2002; Vesting Parcel Map #01-10
Warehouses	Six 10,000-square-foot warehouses	Warehouses; located near the Merced Municipal Airport on the north side of Wardrobe Ave.	Application was approved July 2003; CUP #1029
Merced Apartments	28 units	Apartments; located near the SW corner of R and W. 2 nd Streets	Application was approved Dec. 2003; CUP #1037
Cypress Terrace	47 acres	Tentative Subdivision Map #1219; 255 units	Expiration Date 5-20-04
Moss Landing #6	7.7 acres	Tentative Subdivision Map #1240; 37 units	Expiration Date 8-07-04
Cypress Terrace #2	10.2 acres	Tentative Subdivision Map #1242; 49 units	Expiration Date 2-05-05
Vista Del Sol	29.8 acres	Tentative Subdivision Map #1243	Expiration Date 2-19-05
Indoor Soccer	16,000 square feet	Indoor soccer facility; located near the west side of Heron Way at 115 Heron Way	Application was approved Oct. 2004; CUP #1052
Planning Project			
City of Merced General Plan Update	40,000 acres	The City of Merced is in the process of updating its General Plan to define future objectives and policies to guide population growth, development, and land uses within the urban development area for the foreseeable planning horizon.	In September 2005, the City Council adopted a General Plan Update Study Area Boundary. The General Plan Update is expected to be completed by mid- to late 2007.
South Merced Specific Plan	N/A	The City is proceeding to develop a Specific Area Plan for the south Merced area. This area currently supports commercial and industrial land uses. Future plans envision establishing a tourist corridor, recreational facilities, and other improvements to promote public use.	Planning is within preliminary stages, focusing on soliciting public comment and guidance. In 2004, a Strategic Plan was prepared to outline the opportunities, vision, and next steps in Plan development.
Ranchwood Mission Lake Project	N/A	Residential and commercial development located outside the SUDP.	No application submitted to date.
Public Works Projects			
Highway 59 realignment (Castle Hwy.)		Tier 1 ¹ infrastructure improvement to provide access to N. Merced and reduce travel on Highway 99 in Merced; Location: Highway 99 to Bellevue Rd. to Highway 59.	
Highway 59 realignment south		Tier 2 ² infrastructure improvement to reduce travel through downtown Merced; Location Highway 140 south to Dickenson Ferry Road to Highway 59.	
Highway 99 Merced/Atwater Freeway expansion to 6 lanes		Tier 2 infrastructure improvement for safety and to increase capacity from 4 to 6 lanes; Location from the Merced city limits to the Atwater city limits.	
¹ Tier 1 refers to primary improvement projects that do not require additional funding to be implemented. ² Tier 2 refers to secondary improvement projects that require additional funding to be implemented.			
SOURCE: Merced County Association of Governments. 2004.			

**TABLE 7-2
ENVIRONMENTAL EFFECTS OF IMPLEMENTING
CITY OF MERCED SPECIFIC URBAN DEVELOPMENT PLAN**

Issue	Impact Significance with Mitigation	Effect
Air Quality	Significant – Mitigation not available	Effects of regional growth on air quality are considered to be significantly adverse and unmitigable. Other measures, combined with General Plan policies expected to reduce growth within Specific Urban Development Plan (SUDP) to less than significant
Water Resources and Water Quality	Less Than Significant	Mitigation measures are available to reduce or eliminate potential adverse effects resulting from growth and development.
Plant and Animal Species	Less Than Significant	Mitigation measures are available to reduce or eliminate potential adverse effects resulting from growth and development.
Land Use Impacts	No Impact	No potential significant adverse impact was found to exist as a result of plan implementation.
Natural Resources and Agricultural Land	Significant – Mitigation not available	Expansion of the urban land uses will result in the loss of crop land. The loss cannot be mitigated. Potential loss of agricultural lands is deemed to be minimized to the degree possible as a result of SUDP policies.
Population and Housing	No Impact	No potential significant adverse impact was found to exist as a result of plan implementation.
Transportation and Circulation	Less Than Significant	Mitigation measures are available to reduce or eliminate potential adverse effects resulting from growth and development.
Public Services	Less Than Significant	Mitigation measures are available to reduce or eliminate potential adverse effects resulting from growth and development.
Parks and Recreation	No Impact	No potential significant adverse impact was found to exist as a result of plan implementation.

Source: City of Merced, 1997

As noted in Table 7-2, two impacts were identified as potentially significant and unavoidable. These impacts are highlighted in the following text.

- Air Quality – Implementation of the General Plan would contribute to the cumulative regional impact of PM₁₀ and ozone concentrations, which currently exceed the attainment status of the San Joaquin Valley Air Basin.
- Agricultural Soils – Implementation of the General Plan would result in the loss of Prime Farmland as a result of conversion to urban land uses.

The UC-Merced LRDP EIR (UC-Merced, 2002) identified significant impacts that could not be eliminated or reduced to a less-than significant level by mitigation measures. These significant and unavoidable impacts are:

- Aesthetic Resources – Implementation of the Phase 1 Campus would create new sources of light or glare. Campus development, in combination with other community development, would change the visual character of the area and affect scenic vistas and other scenic resources.

- Aesthetic Resources – Lighting for Phase 1 Campus buildings and other facilities would create a new source of light or glare that could spill onto Lake Yosemite Regional Park and other sensitive areas.
- Agriculture – Implementation of the LRDP will result in the conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to nonagricultural use.
- Air Quality – Development of the Phase 1 Campus would generate increased emissions levels of carbon monoxide and ozone precursors (ROG and NO_x).
- Biological Resources – Development under the LRDP, in conjunction with other development, would result in the loss or adverse modification of important native plant and wildlife habitat, including wetlands, vernal pool habitat, clay playa habitat, and annual grassland habitat, which could lead to adverse effects to special-status species associated with these habitats.
- Noise – Implementation of the Phase 1 Campus development would increase ambient noise levels due to increased traffic on local roadways. Construction of the campus facilities could expose nearby receptors, especially users of the county park, to elevated noise levels
- Public Services – The development of the campus would generate demand for elementary and secondary educational services, which could result in physical effects on the environment.
- Recreation – Cumulative growth in area population will result in an increased demand for recreational facilities, which could cause a deterioration of the current facilities.
- Traffic and Circulation – Implementation of the LRDP, in combination with the proposed University Community and regional growth in Merced County, would result in increased traffic levels in the vicinity of the campus and exceedance of the roadway level of service thresholds.
- Utilities – Implementation of the LRDP would induce substantial economic and population growth in the region and would result in the construction of additional housing.

7.1.3 Project Impacts That May Contribute to Cumulative Effects

Of the identified impacts that would result with the implementation of the Project, the loss of Prime Farmland and the impacts of construction activities on air quality are the only effects found to be significant and unavoidable. The City proposes to acquire 42 acres of agricultural land for the Project. The Project would convert approximately 20 acres of prime agricultural land to WWTP facilities. This 20 acres is considered relatively minor when compared to the overall county agricultural land base (1,165,872 acres in 2002), but is still considered a significant project-level impact. The remaining 22 acres of agricultural land would remain in agricultural

production. An additional four acres of land, not used for agricultural purposes would also be acquired for the WWTP expansion.

The loss of 20 acres of farmland, when considered in combination with other farmland losses occurring in Merced County and elsewhere in California, is considered a significant cumulative impact.

The Project's air quality emissions were evaluated using the San Joaquin Valley Air Pollution Control District's (SJVAPCD) 2002 Guide for Assessing and Mitigating Air Quality Impacts (SJVAPCD, 2002a; 2002b). This analysis considers the possibility that construction of the Project, although temporary, could have a significant impact on ozone precursors (NO_x). However, emissions of NO_x from construction equipment and construction-related truck and worker trips would be mitigated to a less than significant level through the implementation of prescribed mitigation. These emissions would not be cumulatively considerable..

Construction-related emissions of particulates less than 10 microns in diameter (PM₁₀) would be reduced to a less-than-significant level with the implementation of best management practices and other measures defined in this document. Although temporary, these emissions would produce a significant cumulative impact, if construction of the Project occurred simultaneously with construction of other projects in the vicinity (Table 7-1).

Impacts to biological resources, as discussed in Section 4.6, may result in the loss of less than 0.5 acre of wetlands, impacts to special-status species, and impacts to riparian habitats. However, these impacts would be reduced to less-than-significant levels through the implementation of mitigation measures. With these measures, these effects will not contribute to cumulative loss of habitat or direct impacts on special-status species. Planned roadway improvements to State Route 59 identified in Table 7-1 could lead to potential cumulative impacts if improvements coincide with the construction of the Project and require the Project's construction equipment access routes to be directed to different roadways that may not be operating at acceptable levels of service. If this were to occur, construction equipment traffic would contribute to localized traffic congestion until more direct access along State Route 59 becomes available. This scenario is considered a cumulative impact.

Specific Project effects that would result from the temporary generation of construction noise, dust, energy consumption, additional lighting, and potential erosion and sedimentation of local waterways would also be mitigated to less-than-significant levels and would not result in cumulative impacts when considered in combination with other projects. Furthermore, because it was determined that Project impacts to visual resources, recreational resources, groundwater supplies, drainage, seismicity, solid waste, public transit, and emergency access would be less than significant, these impacts would not be cumulatively considerable.

7.2 Unavoidable Significant Impacts

CEQA Section 21100(b)(2) requires that any significant effect on the environment that cannot be avoided must be identified. In addition, Section 15093(a) of the CEQA Guidelines allows the decision-making body of the lead agency to determine if the benefits of a proposed project outweigh the unavoidable adverse environmental impacts of implementing the project. The City can approve a project with unavoidable adverse impacts if it prepares a “Statement of Overriding Considerations” that sets forth the specific reasons for making such a judgment.

The potential significant impacts that are associated with the construction and operation of the WWTP and that have been found to be significant and unavoidable include:

- The permanent conversion of 20 acres of Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use that would occur with the Project implementation.
- The significant unavoidable secondary effects associated with removing an obstacle to planned urban growth, as described in the SUDP and associated EIR, and the UC-Merced Campus LRDP and associated EIR, that the implementation of the 20 mgd WWTP would accommodate.

The significant and unavoidable environmental impacts associated with implementing the City’s SUDP and the UC-Merced Campus LRDP include:

- Loss of agricultural land
- Loss of habitat
- Increased traffic and traffic congestion
- Air quality impacts
- Increased traffic noise
- Increased energy demand
- Alteration of the region’s visual character
- Increased use of non-renewable fossil fuels

The City’s General Plan is its main tool for mitigating these effects, except those identified as significant and unavoidable in the 1997 Merced Vision 2015 General Plan:

- Effects to Air Quality. Implementation of the General Plan would contribute to the cumulative regional impact on PM₁₀ and ozone concentrations that exceed the Attainment status of the San Joaquin Valley Air Basin.
- Loss of Agricultural Soils. Implementation of the General Plan would result in the loss of prime farmland as a consequence of conversion to urban land uses.

The EIR prepared for the UC-Merced LRDP identified significant impacts that could not be eliminated or reduced to a less-than-significant level by mitigation measures imposed by the university (UC-Merced, 2001). These significant and unavoidable impacts would result from development proposed under the build-out of the Phase 1 portion of the LRDP and include:

- **Aesthetic Resources.** Implementation of the Phase 1 Campus would create new sources of light or glare. Campus development, in combination with other community development, would change the visual character of the area and affect scenic vistas and other scenic resources.
- **Aesthetic Resources.** Lighting for Phase 1 Campus buildings and other facilities would create a new source of light or glare that could spill onto Lake Yosemite Regional Park and other sensitive areas.
- **Agriculture.** Implementation of the LRDP will result in the conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to nonagricultural use.
- **Air Quality.** Development of the Phase 1 Campus would generate increased emissions levels of carbon monoxide and ozone precursors (reactive organic gases and nitrogen oxides).
- **Biological Resources.** Development under the LRDP, in conjunction with other development would result in the loss or adverse modification of important native plant and wildlife habitat, including wetlands, vernal pool habitat, clay playa habitat, and annual grassland habitat, and adverse effects to special-status species associated with these habitats.
- **Noise.** Implementation of the Phase 1 Campus development would result in significant and unavoidable increased ambient noise levels because of increased traffic on the local roadways. Construction of the campus facilities could expose nearby receptors, especially users of the county park, to elevated noise levels.
- **Public Services.** The development of the Phase 1 Campus would generate demand for elementary and secondary educational services, which could result in physical effects on the environment.
- **Recreation.** Cumulative growth in area population will result in an increased demand for recreational facilities, which could cause a deterioration of the facilities.
- **Traffic and Circulation.** Implementation of the LRDP, in combination with the proposed University Community and regional growth in Merced County, would result in increased traffic levels in the vicinity of the campus and exceed the roadway level-of-service thresholds.
- **Utilities.** Implementation of the LRDP would induce substantial economic and population growth in the region and would result in the construction of additional housing.

In addition to these significant unavoidable effects, the university identified significant irreversible changes to the environment resulting from build-out of the Phase 1 Campus. These significant irreversible changes generally fall into three categories: (1) irretrievable commitment of materials and energy during construction and maintenance of the project; (2) loss of agricultural, biological, and cultural resources as undeveloped lands are converted to urban uses; and (3) increased use of natural resources due to increased population at and surrounding the campus site. In the context that the Project would accommodate a critical infrastructure component of both plans, this impact is identified as a significant and unavoidable effect of the Project for which no mitigation is available.

7.3 Significant Irreversible Environmental Changes Which Would Result from the Proposed Project Should It Be Implemented

Section 15126(c) of the CEQA Guidelines requires an EIR to include a discussion of significant irreversible environmental changes that would result from implementation of a project. Implementation of the Project would indirectly result in the commitment of nonrenewable natural resources used in construction (such as gravel, petroleum products, steel, and others) and slowly renewable resources, such as wood products for the construction of the Project; however, this would not be considered a significant impact.

Operation of the Project would also result in a commitment of energy resources in the form of fossil fuels, including fuel oil, natural gas, and gasoline, for wastewater treatment and distribution facility services. However, operational characteristics associated with the Project would not substantially deviate from current operations, and therefore, no significant increase in the use of these resources is expected beyond current baseline conditions.

