
7. OTHER CEQA CONSIDERATIONS

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Significant Irreversible Environmental Effects

The CEQA Guidelines, Section 15126.2(c), requires that this EIR consider significant irreversible environmental changes which would be caused by the proposed UCP should it be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Development of any of the UCP would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development would generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed UCP would involve uses in which irreversible damage could result from any potential environmental accidents associated with the UCP; or
- The phasing and eventual development of the UCP would result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The development of the University Community Plan would likely result in or contribute to the following irreversible environmental changes:

- Conversion of 2,133 acres of existing undeveloped land and open vistas to urban and suburban land uses, thus precluding other alternate land uses in the future, and precluding preservation of the existing land use pattern and vistas (see discussion in Section 4.1, Aesthetics);
- Conversion of 1,436 areas of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance, to impermeable surfaces associated with urban and suburban development (see discussion in Section 4.2, Agricultural Resources);
- Increased air emissions (see discussion in Section 4.3, Air Quality);
- Conversion of existing habitat and irreversible loss of endangered species (see discussion on pages in Section 4.4, Biological Resources);
- Degradation of water quality from suburban runoff (see discussion in Section 4.8, Hydrology and Water Quality);

- The commitment of non-renewable energy resources during in the form of fossil fuels, such as natural gas and fuel oil and gasoline for automobiles and construction equipment.
- The consumption or destruction of other non-renewable and slowly-renewable resources, such as water, lumber, asphalt, metals, sand, and gravel.
- Irreversible consumption of goods and services associated with the future population; and
- Irreversible consumption of energy and natural resources associated with the future population.

Cumulative Impacts

Legal Consideration

An EIR must discuss the “cumulative impacts” of a project when its incremental effect will be cumulatively considerable. This means that the incremental effects of the individual project would be considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (Section 15065(c)).

CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” This Section states further that “[I]ndividual effects may be changes resulting from a single project or a number of separate projects.” “The cumulative impact from several projects is [defined as] the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

Section 15130(a)(3) states also that an EIR may determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Section 15130(b) indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, that it should reflect the severity of the impacts and their likelihood of occurrence, and that it should be focused, practical, and reasonable.

To be adequate, a discussion of cumulative effects must include the following elements:

1. Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency’s control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior adopted or certified environmental document, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provided that such documents are referenced and made available for public inspection at a specified location;

2. A summary of the individual projects' expected environmental effects, with specific reference to additional information stating where such information is available; and
3. A reasonable analysis of all of the relevant projects' cumulative impacts, with an examination of reasonable, feasible options for mitigating or avoiding the project's contribution to such effects (Section 15130[b]).

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130[c]).

As used above, the terms "past, present and probable future projects" include existing approved, planned, or budgeted projects; projects that are currently under construction; and projects requiring an agency approval for an application which has been received at the time of NOP release (Section 15130[b][1][B][2]).

The cumulative analysis for this EIR varies according to topic areas, but generally includes planned development in Merced County, and is based on the County General Plan, SUDP Land Use designations and the City of Merced's Vision 2015 General Plan. The specific cumulative context that is considered in each analysis is presented at the onset of the cumulative impact discussion in each section in Chapter 4. Cumulative impacts are analyzed in each section of Chapter 4, and summarized below.

Impacts

The following cumulative impacts were identified in Chapter 4:

Aesthetics

- 4.1-4 Change in visual character and visual incompatibility with adjacent land uses.
- 4.1-5 Intrusion into major view corridors and adverse effects on scenic resources.
- 4.1-6 Introduction of nighttime light and glare.

Agricultural Resources

- 4.2-4 Conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance.
- 4.2-5 Conflict with Agricultural Zoning or result in cancellation of Williamson Act contracts.

Air Quality

- 4.3-9 Cumulative degradation of air quality due to emissions associated with development of the UCP area.
- 4.3-10 Degradation of air quality could result from project emissions in combination with other development.
- 4.3-11 Operational emissions would exceed ROG, NO_x and CO standards.
- 4.3-12 Unacceptable cumulative TAC health risks would be generated by UCP area, and other cumulative, development.

Biological Resources

- 4.4-11 Adverse affect on special status species.

Cultural Resources

- 4.5-5 Damage to or destruction of unidentified prehistoric and historic cultural resources.

Geology, Soils, Seismicity, and Mineral Resources

- 4.6-4 Exposure of additional people to potential seismic hazards.
- 4.6-5 Soil erosion due to cumulative development.
- 4.6-6 Building construction on potentially unstable soils.

Hazards and Hazardous Materials

- 4.7-10 Volume and type of hazardous materials used, transported, stored and disposed would increase with cumulative development.
- 4.7-11 Increased potential for wildland fires to occur.

Hydrology and Water Quality

- 4.8-10 Increased amounts of sediments and other constituents that could degrade receiving water quality.
- 4.8-11 Increased volume of groundwater extracted from the regional aquifer, depleting groundwater supplies and lowering groundwater table.
- 4.8-12 Increased generation of sediment and urban contaminants that could affect receiving water quality.
- 4.8-13 Water quality affected by discharge of wastewater or use of reclaimed water.
- 4.8-14 Increased rate of stormwater runoff from newly created impervious surfaces, potentially resulting in localized flooding.
- 4.8-15 Increased exposure to flooding due to volume of stormwater runoff to Bear Creek.
- 4.8-16 Exposure to flooding if Fairfield or Le Grand Canals were to fail or if conveyance capacity were exceeded due to cumulative flows.

Noise

- 4.10-6 Increased noise levels due to increased vehicle traffic on regional road network.
- 4.10-7 Increased non-traffic noise at land uses within and near the UCP.
- 4.10-8 Temporary and/or periodic increase in noise levels due to UCP-related construction, in combination with other County development.

Public Services

- 4.12-2 Increased demand for police services.
- 4.12-4 Increased demand for fire protection services.
- 4.12-6 Increased demand for schools.
- 4.12-8 Increased demand for libraries.
- 4.12-10 Increased demand for hospitals

Recreation

- 4.13-4 Increased demand for community parks and recreation facilities, and for construction of new community parks.
- 4.13-5 Increased potential for physical deterioration of Lake Yosemite Regional Park due to increased demand

4.13-6 Elimination of Merced Hills Golf Course

Transportation and Circulation

- 4.14-3 Additional demand on regional and local transit services.
- 4.14-7 Increased congestion on local and regional roads.
- 4.14-8 Increased congestion on local and regional roads, combined.

Utilities

- 4.15-6 Increased demand for wastewater treatment facilities.
- 4.15-8 Increased generation of solid waste that could exceed the permitted landfill capacity.
- 4.15-11 Increased demand for electricity and natural gas.

Significant and Unavoidable Adverse Impacts

The potential environmental impacts that would result from implementation of the proposed UCP are summarized in Table S-1, Summary of Impacts and Mitigation Measures. In most cases, impacts that have been identified would be less than significant after application of relevant regulations and UCP policies. In some instances, incorporation of the specific mitigation measures listed in Table S-1 and described in each technical section would reduce the impact to levels that are less than significant. Those impacts that cannot be feasibly mitigated to a less-than-significant level would remain significant and unavoidable adverse impacts. The project-specific impacts are listed below:

- 4.1-1 Altered visual character of UCP area could be visually incompatible with surrounding land uses.
- 4.1-2 Intrusion into major view corridors and adverse effects on scenic resources.
- 4.1-3 New source of night time light and glare in the UCP area.
- 4.2-1 Conversion of Prime Farmland, Unique Farmland and Farmland of Statewide Importance.
- 4.3-2 Construction-generated NO_x, ROG, and CO emissions.
- 4.3-4 Operational emissions would exceed SJUVAPCD standards.
- 4.9-1 Land use designations could result in incompatible land uses.
- 4.10-3 Ambient noise level increases due to increased vehicular traffic.
- 4.10-4 Substantial temporary or periodic increases in ambient noise levels.
- 4.13-3 Elimination of a portion of the Merced Hills Golf Course.

The significant and unavoidable cumulative impacts are listed below:

- 4.1-4 Cumulative alteration of the visual character of the UCP area.
- 4.1-5 Intrusion into major view corridors and adverse effects on scenic resources.
- 4.1-6 Introduction of nighttime light and glare.
- 4.2-4 Conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance.
- 4.3-9 Project emissions could degrade air quality.
- 4.4-11 Adversely affect special status species.
- 4.10-6 Increased noise due to increased vehicle traffic on regional road network.

- 4.10-8 Temporary and or periodic noise increase due to UCP construction, in combination with other County development.
- 4.13-5 Increased potential for physical deterioration of Lake Yosemite Regional Park due to increased demand.
- 4.13-6 Elimination of the Merced Hills Golf Course.
- 4.14-7 Increased congestion on local and regional roads.
- 4.14-8 Increased congestion on local and regional roads, combined.
- 4.15-6 Increased demand for wastewater treatment facilities.