

Chapter 3

Environmental Impact Analysis

3.1 Introduction & Overview

A draft EIR must identify and focus on the possible significant environmental impacts of a proposed project [CEQA Guidelines, Section 15126 (a) and Public Resources Code Section 21000 (a)]. The emphasis of the EIR should be placed on the potential impacts that are most significant and most likely to occur.

Impact analysis must focus on the “physical” adverse effects of a proposed project. Potential impacts are expected to be evaluated from the standpoint of short-term and long-term effects as well as direct and indirect effects. Cumulative impacts must also be evaluated.

3.1.1 Potential Environmental Impact Analysis Assumptions

This environmental analysis has been conducted in accordance with the following assumptions:

Short-Term/Long-Term Effects:

As a project, a general plan has a unique status relative to the CEQA process. By its nature, the plan’s impacts are long-term and lasting. The plan guides future growth and development which results in long-term (and mostly) irreversible changes in the physical environment. There are typically no short-term effects or temporary effects of general plan adoption and implementation.

Direct/Indirect Effects:

As with short-term/long-term effects, adoption and implementation of a general plan typically does not have any direct physical impacts on the environment. Impacts occur indirectly as a result of actions taken in accordance with the plan’s policies.

Significant Physical Effects:

Section 15360 of the CEQA Guidelines define “Environment” as the physical conditions that exist within the area that will be affected by a proposed project including, but not limited to, land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The section further defines the area involved as the area in which significant effects would occur either directly or indirectly as a result of the project. The “environment” includes both natural and man-made conditions.

Section 15382 defines “significant effect on the environment” as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. An economic or social change by itself shall not be considered a significant effect on the environment. Economic or social change, however, may be considered in determining whether the physical change is significant.

The operative terms of the law are “significant” “adverse” and “physical” changes resulting from the project. These terms shape the manner that environmental issues are evaluated in this Program EIR.

Environmental impacts are identified as follows:

- **Significant Impact:** Impacts that exceed the defined standards of significance.
- **Significant and Unavoidable Impact:** Impacts that, after implementation of all feasible mitigation measures, continue to exceed the defined standards of significance.
- **Less-Than-Significant Impact:** Impacts that are adverse but that do not exceed the defined standards of significance.

3.1.2 Thresholds of Environmental Significance

A. The Principal of a Threshold Standard

Thresholds of significance are principally used to determine whether a project may have a significant environmental effect. Thresholds are an analytical tool for judging significance.

The "threshold of significance" for a given environmental effect is simply that level at which the Lead Agency finds the effects of the project to be significant. "Threshold of significance" can be defined as:

“A quantitative or qualitative standard, or set of criteria, pursuant to which the significance of a given environmental effect may be determined.”

Ideally, a threshold of significance provides a clear differentiation of whether or not the project may result in a significant environmental effect.

According to CEQA, a threshold may be based on standards such as the following:

- A health-based standard such as air pollutant emission standards, water pollutant discharge standards, or noise levels.
- Service capacity standards such as traffic level of service, water supply capacity, or waste treatment plant capacity.
- Ecological tolerance standards such as physical carrying capacity, impacts on declared threatened or endangered species, loss of prime farmland, or wetland encroachment.
- Cultural resource standards such as impacts on historic structures or archaeological resources.
- Other standards relating to environmental quality issues, such as those listed in the *Guidelines'* Initial Study Checklist or Appendix G of the *Guidelines*.

B. Standard

In accordance with Section 15064 (h) (3) of the CEQA Guidelines, a "standard" means a standard of general application that is all of the following:

- a quantitative, qualitative or performance requirement found in a statute, ordinance, resolution, rule, regulation, order, or other standard of general application;

- adopted for the purpose of environmental protection;
- adopted by a public agency through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency;
- one that governs the same environmental effect which the change in the environment is impacting; and,
- one that governs within the jurisdiction where the project is located.

Section 15064 establishes procedures for determining the application of various “standards” for determining “significance” within the meaning of CEQA. Section 15064.7 promotes the use of standards and thresholds that have been adopted to protect the environment as the means for determining the significance of project impacts. Where an applicable standard or threshold exists, an environmental change which complies with that standard or threshold would not be considered significant.

"Standard" has been carefully defined to ensure that any such benchmark for determining significance has been adopted for the purpose of environmental protection, governs the same environmental effect that the project is causing, and governs within the area of the project. Further, only those standards which have been adopted by a public agency after a public review process are applicable.

The following sections establish thresholds of significance that are used for evaluating the potential environmental impacts of this project. Where applicable, various standards have been established, based on existing law or regulation or as determined by the Lead Agency as applicable for the purposes of evaluating the impacts of this project.

3.1.3 Effects Determined Not To Be Significant

Section 15128 of the CEQA Guidelines requires that an EIR contain “*a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and therefore not discussed in detail in the EIR.*” As a general plan environmental impact report, all areas of potential environmental concern, as identified in Appendix “G” of the CEQA Guidelines, have been discussed in this Environmental Impact Report.

3.1.4 Potential Environmental Impacts

Each section of this chapter is organized around the analysis of a specific area of environmental concern. An explanation of each impact and an analysis of its significance follows each impact statement.

Aesthetics: This environmental issue focuses on the impacts of a project on scenic vistas and the overall appearance of the project in the community context. Issues of light and glare, community view-sheds, architectural compatibility with existing development or a specific site or setting are all part of the issue of “Aesthetics” as addressed within the framework of CEQA.

Scenic vistas or view-sheds that could potentially be affected by new development or intensification of uses associated with implementation of the general plan exist in the planning area. Additionally, new construction or development could detract from the community character of the city, particularly with respect to the older or historic portion of the town.

Agriculture: This environmental issue focuses on the impacts of a project on farmland and agricultural productivity. Environmental concerns focus on the loss of agricultural cropland as inventoried by the Farmland Mapping and Monitoring Program of the California Resources Agency as well as agricultural zoning and Williamson Act Contract lands. An additional area of concern is the potential change resulting from a project that could lead to future conversion of agricultural lands to non-agricultural uses.

The expanded city sphere of influence and urban planning area as contemplated by the general plan's Land Use Element have the potential to impact important farmland as identified by the state Farmland Mapping and Monitoring Program.

Air Quality: This environmental issue focuses on the impacts of a project on air quality. Issues of concern relate to project consistency with applicable air quality plans, policies and regulations, increases of any pollutant for which the area has been designated as a "non-attainment" area. Additional concerns are over the exposure of sensitive receptors, such as people, to high levels of air pollution or odors.

The Waterford Vision 2025 General Plan Update is not expected to conflict with the implementation strategy of the San Joaquin Valley Regional Air Quality Management Plan. However, as the community grows and the general plan is implemented, commuter traffic from the community to the job centers in the central Valley will remain a potential concern with respect to cumulative impacts on the Valley's air quality.

Biological Resources: This environmental issue focuses on the impacts of a project with respect to biological resources such as sensitive plant or animal species or their habitat, or riparian habitat, or its potential interference with the normal movements of wildlife species in the vicinity of a project. Additional concerns focus on consistency of a project with adopted plans, policies and regulations regarding wildlife, habitat conservation planning, local wildlife preservation plans and policies or wetlands.

The expansion of the city's sphere of influence and urban planning area has the potential to impact the habitat of sensitive species. city expansion will occur on land that is currently vacant and/or open space, or in agricultural production. A biological resources survey of existing studies was conducted as part of the environmental review of the general plan and will be included in the Program EIR. This survey provides "focus" for future project specific biological field studies that are typically conducted as part of the project level review process.

Cultural Resources: This environmental issue focuses on the impacts of a project on cultural resources including, but not limited to, the adverse change to a significant historical or archaeological resource. Other areas of concern include the potential for a project to adversely impact a unique paleontological resource or geologic feature or disturb any human remains.

The expansion of the city's sphere of influence and urban planning area has the potential to impact cultural resources that may be located in these areas. city expansion will occur on land that is currently vacant and/or open space, or in agricultural production. A cultural resources survey of literature was conducted as part of the environmental review of the general plan and will be included in the Program EIR. This survey provides "focus" for future project specific

cultural resource field studies that are typically conducted as part of the project level review process.

Geology & Soils: This environmental issue focuses on the impacts of natural geologic or soil conditions on a project. Specific concerns include earthquakes and seismic related hazards, or unstable soils.

The project area is not located within an area depicted on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist. Development occurring in the city as a result of implementation of the general plan will be required to adhere to all regulations relating to grading and soil erosion.

Hazards & Hazardous Materials: This environmental issue focuses on the impacts of a project with respect to hazards. The creation of new hazardous conditions or activities that will result in people or property being exposed to existing hazards is the primary area of focus under this environmental issue. Hazards include, but are not limited to, hazardous materials, hazards associated with aircraft and airports or wild-land fires. An additional concern is the consistency of a project with emergency response plans or emergency evacuation plans.

The project area is unlikely to contain listed “Hazardous Sites” and the storage and handling of materials that might be considered “hazardous” is limited to those materials that are common in households, businesses and industries in the region, which are strictly regulated in accordance with state and federal regulations.

Hydrology & Water Quality: This environmental issue focuses on the impacts of a project on surface and groundwater, including compliance with water quality standards and regulation, depletion of groundwater supplies, pollution or degradation of water quality. Additional concerns include water related hazards such as flooding, mudflows and similar hazards. This area of environmental concern also addresses potential project impacts on area drainage, including storm water runoff.

Growth and development associated with the implementation of the Waterford Vision 2025 General Plan Update will utilize water from the city’s system which is owned and operated by the City of Modesto. The system will need to supply water not only for domestic consumption and landscaping, but also for fire protection. In order to meet water consumption demand at build-out of current land use zones during peak hours the water system will need to incorporate new groundwater wells or introduce treated surface water supply into the system. The city may need an expanded water system to support the growth envisioned by the general plan. An assessment of infrastructure needs as a result of the implementation of the general plan has been prepared and is part of the environmental review of the general plan and is included in the Program EIR.

Land Use & Planning: This environmental issue focuses on the impacts of a project on adopted land use, habitat conservation or natural community conservation plans. The specific focus of this area of environmental concern is potential project conflicts with established plans and policies or the potential for the project to physically divide a community area.

The Waterford Vision 2025 General Plan Update contemplates an expansion of the city's sphere of influence and urban planning area. The expanded city urban planning area is generally bounded by Dry Creek to the north, the Tuolumne River to the south, Eucalyptus Road to the west and the Modesto Reservoir recreation area to the east. The Land Use Chapter of the general plan establishes land use goals and policies, supported by implementation actions, for the manner in which new development will occur and existing uses and resources will be preserved in the city. The future land use configuration of the city will be shaped through the implementation of this chapter. Since it regulates how land is to be utilized, most of the issues and policies contained in all other plan chapters are integrated and synthesized by this chapter.

Mineral Resources: This environmental issue focuses on the impacts of a project on known mineral resources of commercial or otherwise documented economic value.

The project site is not located on a Mineral Resource Zone identified by the California Department of Conservation-Division of Mines and Geology Mineral Land Classification Surveys. The area encompassed and governed by the general plan is unlikely to contain any sand and gravel resource site of local importance.

Noise: This environmental issue focuses on the impacts of a project with respect to noise or ground-borne vibration. The creation of new noise or ground-borne vibration conditions or activities that will result in people or property being exposed to existing noise or vibrations is the primary area of focus under this environmental issue.

Noise will be generated as a result of implementation of the general plan. Construction of residential, commercial and industrial uses, as well as associated supporting infrastructure, will result in a temporary increase in noise levels in the city. There will also be a long-term increase in noise as the city grows to implement the general plan. Noise increases will occur as a result of residential, commercial and industrial uses and new traffic in the area encompassed by the general plan. A noise model was developed to identify projected future noise levels along planning area roadways. Future development project will typically be required to supplement this noise model with project specific noise data and develop design solutions for forecasted noise problem areas.

Population & Housing: This environmental issue focuses on the impacts of a project on population and housing, including population growth or displacement of human population and housing.

The city's current population is approximately 8,000. The proposed general plan is a long-range plan intended to guide growth and development of the city through the year 2025. The city has set a threshold population level of 30,000 for the year 2025 and beyond to provide a benchmark for planners and engineers to design major infrastructure elements for the city (sewer, water, storm drain and street and highway system). The city's increased population will impact the provision of utilities and public services and these impacts will be addressed in the applicable sections of the PEIR.

Public Services & Facilities: This environmental issue focuses on the impacts of a project on public service facility (and infrastructure/utility) needs and the potential environmental impacts

of developing and/or expanding these facilities. Facility needs can be defined by the need to maintain acceptable levels of service such as response times, or other such community service standards as may apply.

As the Waterford Vision 2025 General Plan Update is implemented and projected growth and development occurs, there will be a need to provide additional public services, particularly schools, parks and recreation facilities, and police and fire protection services.

Recreation: This environmental issue focuses on the impacts of a project on public recreation service and facility needs and the potential environmental impacts of developing and/or expanding recreation facilities. Facility needs can be defined by the need to maintain acceptable levels of community recreation service in the area and region.

Modifications to the existing recreation resources of the city and surrounding area will be reviewed as part of the general plan update and the Program EIR.

Transportation/Circulation: This environmental issue focuses on the impacts of a project on transportation systems including roads and highways, public transportation systems, pedestrian circulation and access, parking, and emergency access. Impacts can be in the form of new hazardous circulation or traffic conditions, conflict with existing plans or policies or the creation of an unacceptable traffic level on a transportation system or facility.

The changes proposed in the general plan will need to be reviewed to determine the potential impacts to existing transportation and circulation systems. Changes might be examined with respect to the planned distribution of land uses as contemplated in the land use chapter of the general plan. These changes will need to be evaluated in the Program EIR. The impact of the city's expansion on regional transportation systems and roadways will also need to be examined. A traffic study will be prepared as part of the environmental review of the city's general plan and will be included in the Program EIR.

Utilities & Service Systems: This environmental issue focuses on the impacts of a project on public utility systems or facilities such as water, wastewater, storm water drainage or other utility or service systems.