

Chapter VII

Irreversible Impacts

A. PURPOSE

Public Resources Code (PRC) Section 21100(b) requires the master environmental impact report (Master EIR) to identify any significant effects of the project that would be irreversible if the project were implemented. These are essentially the same as significant impacts that cannot be mitigated.

Section 15126.2(c) of the California Environmental Quality Act (CEQA) Guidelines offers examples of what may constitute irreversible environmental changes. These include the use of nonrenewable resources and irretrievable commitments of resources.

B. IRREVERSIBLE IMPACTS

By statute, the *City of Modesto Urban Area General Plan (UAGP)* is to comprise “a comprehensive, long-term general plan for the physical development of the county or city, and of any land outside its boundaries which in the planning agency’s judgment bears relation to its planning.” (Government Code Section 65300) The proposed UAGP amendment would enable Modesto to grow over time from its January 1, 2014, population of approximately 207,000 residents to an ultimate population within the Modesto planning area of approximately 390,000 at some time after 2040, beyond the horizon of this plan. The development of homes, businesses, and industry as provided under the UAGP would commit or consume nonrenewable resources—such as fossil fuels to serve transportation and manufacturing needs, agricultural soils, water supply, clean air, and wildlife habitat—and would increase solid waste.

Fossil fuels are used in autos, trucks, and trains. Petroleum also is used in plastics, paving, synthetic dyes, fabric, and other building materials of the built environment. Natural gas is used for heating, for fuel, and for generating electricity. The potential consumption of energy resources by development permitted in the project area under the UAGP can be mitigated at least partially by conservation measures required by the City of Modesto, as well as by energy production encouraged by alternate sources, such as wind, solar, and cogeneration facilities. Despite conservation, increases in population, vehicle miles traveled, and economic activity would lead to increases in the amount of fossil fuels and energy that are consumed.

The Modesto area contains very high quality agricultural soils. Urban development would overlay these soils, and, although they would not actually be destroyed, they no longer would be available for agricultural use. Under the assumption that radical changes in lifestyle or economic conditions would not occur to halt this conversion, this loss would be irreversible.

As a result of increased population, the project would contribute to a cumulative loss of natural water resources in the San Joaquin Valley and contribute to the need to identify additional water resources. This impact would be at least partially mitigated through conservation measures required by the City, including the use of reclaimed water, water conserving devices, and drought-tolerant landscaping.

Air quality in the project area and the San Joaquin Valley would be degraded as a result of the growth identified in the UAGP, in concert with growth throughout the valley. The amount of pollutant emissions and particulate levels would increase in Modesto chiefly through motor vehicle-generated emissions and grading activities, but pollutants carried in from elsewhere by prevailing winds would continue to contribute to air pollution problems. In the long term, these impacts are to be mitigated by state and federal Clean Air Act standards and air pollution control district regulations, as well as policies in the UAGP. However, cleaner air is many years away, considering the current level of pollution and status of attainment plans.

Increased population and employment would result in an increase in solid waste. Although solid waste is not generally considered a nonrenewable resource, it is at least partly made up of the byproducts of nonrenewable resources, such as steel, aluminum, and plastics. California law mandates the reduction of solid waste volumes through source reduction and recycling. Modesto is meeting the state-mandated goal of reducing its solid waste stream to landfills by 50 percent from 1990 levels. To the extent that some solid waste was not recycled, nonrenewable resources would be lost.