

5.0 CEQA CONSIDERATIONS

California Environmental Quality Act (CEQA)-required discussions are included in this section, including the following:

- Indirect and Growth-inducing impacts of the Proposed Project
- Cumulative Impacts of the Proposed Project
- Unavoidable Significant Impacts of the Proposed Project (i.e., residually significant impacts)
- Irreversible Changes

5.1 INDIRECT AND GROWTH INDUCING IMPACTS

CEQA *Guidelines* Section 15126.2 [d] requires that an EIR evaluate the growth inducing impacts of a proposed project. A growth inducing impact is defined by the CEQA *Guidelines* as an impact that fosters economic or population growth, or the construction of additional housing, either directly or indirectly. Direct growth inducement would result, for example, if a project involved the construction of new housing. Indirect growth inducement would result if a project established substantial new permanent employment opportunities (e.g., new commercial, industrial, or governmental enterprises) or if it would remove obstacles to population growth (e.g., expansion of a waste water treatment plant that could allow more construction in the service area).

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide development patterns and growth policies that guide orderly urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer services, and solid waste services. A project that would induce “disorderly” growth (i.e., conflict with the local land use plans) could directly or indirectly cause additional adverse environmental impacts and other public services impacts. An example of this would be the re-designation of property planned for agricultural uses to urban uses, possibly resulting in the development of services and facilities that encourage the transition of additional land in the vicinity to more intense urban uses. Another example would be the extension of urban services to a non-urban site, thereby encouraging conversion of non-urban lands to urban lands.

As described in **Chapter 3.0**, the Proposed Project would result in the construction of improvements to the existing EWWTP needed to meet permit and regulatory requirements issued by the CVRWQCB in Waste Discharge Order No. R5-2008-0055, NPDES Permit No. CA007769, in April 2008 (2008 NPDES Permit and Time Schedule Order R-5-2008-0056). The 1998 EIR completed for the EWWTP Expansion Project analyzed the potential growth inducing effects of the expansion of the EWWTP from 7 million gallons per day (mgd) to 15 mgd capacity. The Expansion Project, completed in 2004, was designed to accommodate the planned growth of the City, as projected in the 1990 City of Vacaville General Plan.

Unlike the Expansion Project, implementation of the Proposed Project would not increase the existing capacity of the EWWTP or otherwise support an expansion of the facility beyond the existing capacity that could allow for an increase in treatment or discharge. Therefore, the Proposed Project would not remove obstacles to growth nor tax community services, foster economic growth or additional housing. No indirect or growth inducing impacts would occur as a result of the Proposed Project.

5.2 CUMULATIVE IMPACT ANALYSIS

Cumulative impacts refer to the effects of two or more projects that, when combined, are considerable or compound other environmental effects. Cumulative impacts must consider the combined impact of past, present, and reasonably foreseeable future projects. When assessing a cumulative impact, an EIR must identify if the project makes a “cumulatively considerable” contribution to the cumulative impact. A project’s contribution may be cumulatively considerable even if the project’s individual impact is considered less than significant. CEQA *Guidelines* Section 15130(b) requires that discussion of cumulative impacts reflect the severity of the impacts and their likelihood of occurrence. The CEQA *Guidelines* 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. Pursuant to CEQA *Guidelines* Section 15130(b), this Draft EIR uses projections contained in the City of Vacaville General Plan (1990) and Solano County General Plan (2008) and related planning documents, and in prior environmental documents that have been adopted or certified, which described or evaluated regional or area-wide conditions contributing to cumulative impacts.

5.2.1 CUMULATIVE CONTEXT

For the purposes of this Draft EIR, the cumulative setting is defined primarily as the City of Vacaville with consideration of the broader development trends impacting the greater Solano County region. According to the Draft Housing Element of the City of Vacaville General Plan (2009), Solano County’s population is expected to reach 585,800 by 2035, a 35 percent increase from 2005. The City’s population is expected reach 132,300 by 2035, a 37 percent increase from 2005. The City has projected that it has a total housing need of 2,208 to accommodate the 2035 population. The City estimates that approximately 6,763 additional units could be accommodated on vacant lands within the City limits.

The cumulative analysis is based on the long term development levels projected in the City General Plan and County General Plan, as well as reasonably foreseeable potential development projects in the vicinity of the EWWTP. Reasonably foreseeable development projects considered within this Draft EIR consist of the proposed CPV Vaca Station, a 660-megawatt (MW) natural gas-fired power plant, to be located on the southeast portion of the City owned property which includes the project site. The CPV Vaca Station project components include either two General Electric Frame 7FA or two Siemens SGT6 5000F combustion turbine-generators (CTGs) equipped with evaporative coolers and dry low mono-nitrogen oxides (NOx) combustors; heat recovery steam generators; an emission reduction system; diesel-fired emergency generator; and a zero liquid discharge treatment system. The CPV Vaca Station project is proposed by a private energy company and the Application for Certification, filed November 18, 2008, and environmental analysis for this project is subject to approval by the California Energy Commission (CEC).

The City does not have any jurisdiction over the environmental review or permits for this project. The CPV Vaca Station is scheduled to begin construction the first quarter of 2011 and to be in commercial operation by the second quarter of 2013.

5.2.2 CUMULATIVELY CONSIDERABLE IMPACTS

CEQA *Guidelines* Section 15130(a) provides the following direction with respect to the cumulative impact analysis and the determination of significant effects:

1. A cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts.
2. When the combined cumulative impact associated with the project's incremental effect is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed further.
3. An EIR may determine that a project's contribution to a significant cumulative effect will be rendered less than cumulative considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

The following is a list of cumulative impacts related to the Proposed Project by environmental topic as described in **Chapter 4.0**. Refer to **Chapter 4.0** for a detailed discussion of the nature and scope of cumulative impacts associated with the Proposed Project.

Aesthetics

- 4.1-3 The Proposed Project in combination with cumulative development surrounding the project site, could impact visual resources and create new sources of light and glare. Less than Significant.

Air Quality

- 4.2-5 Operation of the Proposed Project under cumulative conditions could create objectionable odors. Less than Significant.
- 4.2-6 Operation of the Proposed Project has the potential to contribute cumulatively considerable emissions of greenhouse gases. Less than Significant.

Biological Resources

- 4.3-12 Development of the Proposed Project would contribute to the cumulative loss of special-status wildlife species or their habitat in the region. Less than Significant With Mitigation.

Cultural Resources

- 4.4-2 Ground-disturbing construction activities may result in cumulatively considerable adverse impacts to previously unidentified subsurface archeological resources or human remains. Less than Significant with Mitigation.

Geology and Soils

- 4.5-4 Development of the Proposed Project in combination with future projects in the City of Vacaville could result in cumulative effects associated with geology and soils. Less than Significant with Mitigation.

Hazards and Hazardous Materials

- 4.6-6 The Proposed Project in combination with future growth and development in the project vicinity could result in cumulative effects associated with hazards and hazardous materials. Less than Significant with Mitigation.

Hydrology and Water Quality

- 4.7-6 The Proposed Project in combination with future growth and development within the City and project vicinity could result in cumulative impacts to hydrology and water quality. Less than Significant.

Land Use

- 4.8-2 The Proposed Project would not contribute to adverse cumulative impacts associated with land use. Less than Significant.

Noise and Vibration

- 4.9-5 Cumulative construction activities could temporarily generate noise levels above existing ambient levels in the Proposed Project vicinity. Less than Significant.
- 4.9-6 Operation of the Proposed Project could generate noise levels above existing ambient levels in the Proposed Project vicinity under cumulative conditions. Beneficial Impact.

Transportation and Circulation

- 4.10-5 Traffic generated by construction of the Proposed Project in combination with cumulative development and construction in the project area has the potential to increase traffic on affected roadways beyond an acceptable capacity. Less than Significant.

Agricultural Resources

4.11-3 The Proposed Project would contribute to adverse cumulative impacts associated with conversion of agricultural land uses. Significant and Unavoidable.

5.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following is a summary of significant unavoidable adverse impacts related to the Proposed Project as described in each issue area contained in **Chapter 4.0**.

Agricultural Resources

The Proposed Project would result in the direct conversion of approximately 2.86 acres and the indirect conversion of approximately 5.48 acres of Prime Farmland. This impact is project-specific and cumulatively considerable.

5.4 IRREVERSIBLE CHANGES

State CEQA *Guidelines* Section 15126.2(c) provides the following direction for the discussion of irreversible changes:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The Proposed Project would result in an irreversible commitment of energy resources, primarily fossil fuels for construction equipment (e.g., fuel, oil, natural gas, and gasoline), and the consumption or destruction of other nonrenewable or slowly renewable resources (e.g., gravel, metals, and water).

Construction of new facilities would involve substantial quantities of building materials and energy, some of which are nonrenewable. The Proposed Project would also result in a temporary increase in automobile and transit trips. These additional trips would also require the use of fossil fuels and other nonrenewable resources.