

3.16 Energy

This section evaluates the potential impacts of the Project related to energy consumption during construction, invasive plant management, and maintenance of the Project. Construction activities include the earthwork involved in the estuarine restoration and infrastructure improvement portions of the Project. Invasive plant management activities include the removal of dense-flowered cordgrass (*Spartina densiflora*), European beachgrass (*Ammophila arenaria*), and dwarf eelgrass (*Zostera japonica*) using any one or a combination of the methods described in Section 2.5 (Proposed Invasive Plant Management). Maintenance activities include periodic repairs and improvements to the non-motorized boat put-in, trails, parking lots and road within the Project Area, and also include monitoring activities. The study area for this resource section is the same as the Project Area.

3.16.1 Setting

Energy Resources

Energy resources in Humboldt County consist primarily of fossil fuels such as natural gas deposits. Active gas wells in Humboldt County are concentrated in the Tompkins Hill Gas Field in the Eel River basin. Although natural gas deposits exist in Humboldt County, the County imports approximately 90 percent of its natural gas. There is no record of geothermal production in Humboldt County. The study area is not located on or near any substantial known energy source or energy system infrastructure.

Roughly half of the electricity serving Humboldt County is generated at the Pacific Gas and Electric Company (PG&E) Humboldt Bay Generation Station utilizing a 163-megawatt natural gas-fired power plant. Local biomass resources are used to provide about 25 to 30 percent of the county's electricity needs. The biomass resources are primarily derived from lumber mill wood residue. It is projected that local renewable resources could provide the majority of Humboldt County's electricity needs and a substantial portion of heating and transportation energy demands (Humboldt County 2017). No existing energy infrastructure serves the study area.

3.16.2 Regulatory Framework

This section presents applicable regulations and policies to the extent that they may apply to Project construction, invasive plant management, and maintenance activities. Federal regulations, such as the Corporate Average Fuel Efficiency Standards, and state regulations, such as the California Green Building Standards and California Energy Efficiency Standards for Residential and Non-residential Buildings, are not included in this section as the Project does not involve components that would be subject to such regulations.

Federal

There are no energy-related federal regulations that apply to the Project.

State

State of California Energy Action Plan

In 2003, the three key energy agencies in California— the California Energy Commission (CEC), the California Power Authority (CPA), and the California Public Utilities Commission (CPUC)—jointly adopted an Energy Action Plan (EAP) which sets goals for California’s energy future and memorializes a commitment to achieve these goals through specific actions. In 2005, the CPUC and the CEC jointly prepared a subsequent draft of the EAP (EAP II) to identify further actions necessary to meet California’s future energy needs. To the extent that efficiency, demand response, renewable resources, and distributed generation are unable to satisfy increasing energy and capacity needs, the EAP II supports the use of clean and efficient fossil-fuel energy generation. The plan recognizes that concurrent improvements are required to the bulk electricity transmission grid and distribution facility infrastructure to support growing demand centers and the interconnection of new generation, both on the utility and customer side of the meter.

Senate Bill 1389

Senate Bill (SB) 1389, the *California Integrated Energy Policy*, was adopted in August 2002 and requires the CEC to prepare an Integrated Energy Policy Report (IEPR) for electricity, natural gas, and transportation fuels. The IEPR contains an analysis of the policies and actions that are necessary to ensure that the state has adequate energy resources—including a range of alternative energy resources—to meet its needs. The IEPR also includes recommendations to reduce energy demand and to improve the state’s energy infrastructure.

Assembly Bill 1007

Assembly Bill 1007 (Pavley, Chapter 371, Statutes of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the State Alternative Fuels Plan in partnership with the California Air Resources Board and in consultation with other state, federal, and local agencies. The final State Alternative Fuels Plan, published in December 2007, attempts to achieve an 80-percent reduction in greenhouse gas emissions associated with personal transportation, even as California’s population increases.

Local

Lands within the Project Area are owned by CDFW or are under the jurisdiction of the State Lands Commission, and therefore will not require a Conditional Use Permit from Humboldt County nor adherence to the Humboldt County General Plan or the Local Coastal Program Eel River Area Plan. Because potential impacts related to energy would be limited to the immediate Project Area, local and regional regulatory policies are not included in this analysis.

3.16.3 Evaluation Criteria and Significance Thresholds

Under criteria based on Appendix G of the CEQA Guidelines, the Project would be considered to have a significant impact on energy resources if it would result in any of the following:

- Result in potentially significant environmental impact due to wasteful, inefficient; unnecessary consumption of energy resources, during Project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The following sections describe the anticipated environmental impacts on energy due to the Project.

Areas of No Project Impact

Construction, invasive plant management activities and maintenance of the Project would not result in short-term, long-term or cumulative impacts relative to one of the evaluation criteria identified for energy resources. For the reasons presented below, the following evaluation criterion is not applicable to the Project.

- **Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?** Lands within the study area are owned by CDFW or are under the jurisdiction of the State Lands Commission and therefore are not subject to any local plans or regulations governing energy resources. The Project would not conflict with or inhibit the implementation of the State EAP or other state regulations that are applicable to the Project. No residential or non-residential building development is proposed so green building codes and building-related energy reduction goals are not applicable. The Project would require the use of equipment to construct the Project and remove invasive plant species; however, these activities would be temporary and would not interfere with the broader renewable energy or energy efficiency goals of the state. This criterion is not applicable to the Project and will not be discussed further.

3.16.4 Methodology

Existing information sources were reviewed to determine whether any portions of the study area contain significant energy resources and to evaluate how these resources, if any, would be affected by the Project. This analysis evaluates the use of energy resources (e.g., fuel and electricity) during the construction, invasive plant management activities, and maintenance of the Project. Specifically, the analysis considers whether Project activities would use large amounts of fuels or energy, and whether they would be used in a wasteful manner.

3.16.5 Impacts and Mitigation Measures

Impact: EN-1: Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Construction

Construction of the estuarine restoration portion of the Project would require use of heavy equipment, as discussed in Section 3.3 (Air Quality), and associated fuels

(primarily gas, diesel, and motor oil). The precise amount of construction-related energy consumption that would occur is uncertain. However, construction would not require a large amount of fuel or energy usage because of the moderate number of construction vehicles and equipment, worker trips, and truck trips that would be required for a project of this scale. Trips expected to occur during Project construction would consist of less than 30 per day, and construction equipment would remain staged in the Project Area once mobilized. Additionally, all material appropriate for reuse on-site would remain within the Project Area so truck trips to dispose of sediment off-site would not be required. The use of fuel would be limited to construction activities of the estuarine restoration component of the Project and would not be wasteful or unnecessary.

Excessive idling and other inefficient site operations would be prohibited. Equipment idling times would be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes or less (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Because of the relatively short initial timeframe needed to construct the estuarine restoration portion of the Project (approximately two construction seasons), and because Project construction would not encourage activities that would result in the use of large amounts of fuel and energy in a wasteful manner, impacts related to the inefficient use of construction-related fuels would be less than significant.

Invasive Plant Management and Maintenance

Following Project implementation, periodic maintenance of infrastructure by CDFW staff, including road, parking area, and trail maintenance, as well as ongoing management of non-native plants in the estuarine restoration area and along the dunes may be conducted. These activities would generally be supported by CDFW vehicles and use of hand-held tools, although some activities (e.g., mechanical removal of dense-flowered cordgrass or European beachgrass) may require use of heavy equipment. Passive recreational uses of the site, such as hiking, wildlife viewing, and small watercraft use would also continue to occur, and would require use of personal vehicles to access the site. The use of fossil-fuel powered equipment to support invasive plant management and maintenance activities would be periodic and short-term (e.g., European beachgrass removal would occur intermittently between August 1 and March 15 for a period of six years, and potentially up to ten years or as long as needed to achieve control and/or eradication). These activities would not result in a substantial increase in energy use, and would not result in inefficient, wasteful, or unnecessary consumption of fuels or other energy resources. The impact would be less than significant.

Mitigation Measures: No mitigation is necessary.

Level of Significance: Less than significant.

3.16.6 Cumulative Impacts

Impact EN-C-1: **Would the Project contribute to a cumulatively significant impact to energy resources?**

The geographic scope of potential cumulative impacts related to energy resources consists of the PG&E service area in Northern California (e.g., Humboldt and Trinity counties).

As described in Impact EN-1, the Project would have a less-than-significant impact relative to inefficient, wasteful, or unnecessary consumption of fuels or other energy resources. Construction of the cumulative projects identified in Table 3-1 (Projects Considered for Cumulative Impacts) would also require the consumption of fuels and other energy resources. However, each of the cumulative projects would be required to comply with existing and future laws and regulations governing energy use, similar to the Project. The cumulative project impacts would also include predominantly passive recreation and restoration related uses, and would not result in a substantial increase in energy use. For this reason, the cumulative impact from energy use would be less than significant.

Mitigation Measures: No mitigation necessary.

Level of Significance Less than significant.

3.13.7 References

California Environmental Protection Agency (Cal EPA). 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. March.

Humboldt County. 2017. Humboldt County General Plan, October. Available at: <https://humboldt.gov/205/General-Plan>.