

3.5 Energy

3.5.1 Introduction

This section evaluates the potential impacts of the project on energy. This section also provides an overview of the environmental and regulatory settings that apply to energy and presents and discusses the potential project impacts to energy use and appropriate mitigation measures, as necessary.

3.5.2 Environmental Setting

Energy Supply

California's major sources of energy are petroleum products (i.e., gasoline, diesel, and oil), electricity, and natural gas. The California Energy Commission (CEC) indicates that California crude resources in 2019 came from in-state (29.7 percent), Alaska (11.9 percent), and foreign sources (58.4 percent) (CEC, 2020a). In 2018, California's in-state energy generation plus net imports totaled 285,675 gigawatt hours. Energy generation by source included hydroelectric (nine percent), nuclear (six percent), natural gas (32 percent), and renewable (17 percent) as well as coal and other imports (19 percent) (CEC, 2020b).

Energy Consumption

Existing land uses in the project vicinity consist of the Corte Madera Creek bed, trail and bike paths, public parks and open space, residential uses, and schools and colleges. No existing energy-emitting sources currently occur on the project site.

3.5.3 Regulatory Setting

The following laws, statutes, regulations, codes, and policies would apply to the project.

Federal Regulations

National Energy Conservation Policy Act

The National Energy Conservation Policy Act serves as the underlying authority for federal energy management goals and requirements. Signed into law in 1978, it has been regularly updated and amended by subsequent laws and regulations. This act is the foundation of most federal energy requirements.

National Energy Policy Act of 2005

The National Energy Policy Act of 2005 sets equipment energy efficiency standards and seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, including hybrid vehicles; constructing energy-efficient buildings; and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

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Executive Order 13423 (Strengthening Federal Environmental, Energy, and Transportation Management), signed in 2007, strengthens the key energy management goals for the federal government and sets more challenging goals than the Energy Policy Act of 2005. The energy reduction and environmental performance requirements of Executive Order 13423 were expanded upon in Executive Order 13514 (Federal Leadership in Environmental, Energy, and Economic Performance), signed in 2009.

State Regulations

Low Carbon Fuel Standard Program

The Low Carbon Fuel Standard (LCFS) program was adopted by CARB in 2009 and began implementation on January 1, 2011. In 2018, CARB approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in line with California's 2030 greenhouse gas (GHG) emission-reduction target enacted through SB 32, adding new crediting opportunities to promote zero-emission vehicle (ZEV) adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector. The LCFS is designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and, therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector (CARB, 2020).

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars (ACC) program in 2012. The ACC program coordinated regulations that apply to vehicle model years 2015 through 2025 to control smog, soot-causing pollutants, and GHG emissions. The three elements of the program are the ZEV regulations, GHG regulations, and particulate-matter standard. The ZEV program became a stand-alone regulation in 1999. Since then, the ZEV program has been reviewed and continually amended as technology and emission reduction needs have been identified. The current ZEV regulations require manufacturers to produce increasing numbers of fully electric vehicles and plug-in hybrid electric vehicles for model years 2018 through 2025. GHG regulations include furthering the Low-Emission Vehicle (LEV) Program. Some elements of the most recent LEV Program amendments include reducing emissions from light- and medium-duty on-road vehicles, an increase in useful life durability of these vehicles, and more stringent particulate-matter standards. Monitoring of the effectiveness of these programs to achieve the fuel-efficiency and emission goals will continue (CARB, 2020).

Regional and Local Regulations

Marin Countywide Plan

The following goals in the Marin Countywide Plan are relevant to the project (Marin County, 2007):

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Energy Efficiency

Goal EN-1.1: Adopt Energy Efficiency Standards. Integrate energy efficiency and conservation requirements that exceed State standards into the development review and building permit process.

Goal EN-1.4: Reduce Energy Use in County Facilities. Continue to integrate energy efficiency and conservation into all County functions.

Goal EN-2.2: Adopt Renewable Energy Building Standards. Integrate technically and financially feasible renewable energy requirements into development and building standards.

Goal EN-3.1: Initiate Green Building Initiatives. Encourage and over time increasingly require sustainable-resource use and construction with non-toxic materials.

Goal EN-3.3: Incorporate Green Building in County Facilities. Integrate green building practices into all County facilities.

Town of Ross Municipal Code

The following code of the Town of Ross Municipal Code related to energy is applicable to the project (Town of Ross, 2020):

Chapter 15.10 California Energy Code

15.10.010 Adoption of the California Energy Code by reference. The 2019 California Energy Code (California Code of Regulations, Title 24, Part 6), with Appendix 1-A, as published by the International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, D.C. 20001 and the California Building Standards Commission, 2525 Natomas Park Drive, Suite 130, Sacramento, California 95833-2936, is adopted by reference hereto. A copy of this document is maintained in the office of the Building Department. (Ord. 700 (part), 2019; Ord. 675 (part), 2016; Ord. 650 (part), 2013; Ord. 647 (part), 2013).

Town of Ross General Plan

The following policy of the Town of Ross General Plan related to energy is applicable to the project (Town of Ross, 2007):

Goal 2. Sustainable Building and Community Practices

2.2 Incorporation of Resource Conservation Measures. To the extent consistent with other design considerations, public and private projects should be designed to be efficient and innovative in their use of materials, site construction, and water irrigation standards for new landscaping to minimize resource consumption, including energy and water.

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3.5.4 Impact Assessment Methodology

Significance Criteria

Consistent with State CEQA Guidelines Appendix G (Environmental Checklist) and Marin County Environmental Review Guidelines the project would have a significant impact on energy if it would:

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

Approach to Impact Analysis

The following analysis discusses the potential significant impacts of the project related to energy resources in the project area. This section includes an analysis of potential short-term (construction) and long-term (operation) impacts of the project. Impact evaluations are assessed based on the existing conditions described earlier in this section. Mitigation measures are identified, as necessary, to reduce significant impacts.

3.5.5 Impact Discussion

Impacts Analyzed

Impact 3.5-1: The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.	Significance Determination
	Construction: Less than Significant
	Operation and Maintenance: Less than Significant

Construction

Implementation of the project would require the use of energy resources for construction of the project. Construction activities would be temporary and occur over a time period of seven months or less, during which time equipment and vehicles would be operating to construct the project. Energy use would primarily be in the form of petroleum products (i.e., gasoline and diesel) used to operate construction equipment and transport materials/supplies and workers to and from the project area. The precise amount of fuel required for project construction is uncertain; however, it is expected that gasoline and diesel for construction equipment and worker and haul vehicles would be comparable to quantities used for similar construction projects of similar size and magnitude, and that this consumption would not have a measurable effect on demand for local and regional energy sources. Fuel use for construction workers' commute trips would be minor in comparison to the fuel used by construction equipment and for hauling. Fuel consumption would be temporary and limited to the construction phase of the project. Construction would not require a large amount of energy, oil, or natural gas use due to

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the short duration of construction and limited amount of equipment and associated fuel required. Indirect energy use would also occur and include the extraction, production, and transportation of goods and materials needed for construction. Section 2485 of the California Code of Regulations limits idling of heavy trucks traveling to and from the project area delivering and off-hauling materials, thereby limiting potential wasteful use of fuel during idling. Therefore, fuel used during construction would be conserved to the maximum extent feasible.

The demolition debris, including excavated soil and concrete, is anticipated to be recycled at the Marin Resource Recovery Center. In addition, rip-rap and excavated soil would be reused on site where feasible. Inefficient consumption of resources would be avoided through reuse of materials; therefore, project construction would have a less-than-significant impact on wasteful, inefficient, or unnecessary consumption of energy resources.

Operation and Maintenance

Implementation of the project would require the use of minimal energy resources for ongoing operation and maintenance activities, including vegetation management, sediment and debris removal, floodwall maintenance, and annual inspections. Energy use for annual inspections and maintenance activities for vegetation management, sediment removal, and floodwall maintenance would be similar to energy use for District inspection and maintenance of the existing concrete flood control channel because the project is not expected to increase the frequency or extent of operation and maintenance activities within the channel.

Operation of the new stormwater pump station equipment includes an electrical connection to the grid. The stormwater pump station would only require energy use during storm events when the pump station is needed to avoid flooding in the Granton Park neighborhood. A 150-kW generator powered by biodiesel would provide backup power to the pump station in the case of electrical failure. The amount of energy consumption resulting from operation of this equipment would be minimal because the equipment would only run during storm events and use of the equipment would be intermittent during operation. As a result, impacts associated with the wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant.

Mitigation: None required.

	Significance Determination
Impact 3.5-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Construction: Less than Significant
	Operation and Maintenance: Less than Significant

The project is a flood-risk reduction project that does not require a significant amount of energy use by its nature. The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The project would use low-carbon fuel equipment during construction and operation, in compliance with the LCFS. The project would comply

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with the applicable ACC standards when employing vehicles and equipment during construction and operation of the project; therefore, impacts would be less than significant.

Mitigation: None required.

3.5.6 References

- California Independent System Operator. (2020). Understanding the ISO. Retrieved June 28, 2020, from <https://www.caiso.com/about/Pages/OurBusiness/Default.aspx>
- CARB. (2020). Low Carbon Fuel Standard. Retrieved from <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/about>
- CARB. (2020). *The Advanced Clean Cars Program*. Retrieved May 10, 2017, from <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>
- CEC. (2003, May 8). State of California Energy Action Plan. Retrieved June 28, 2020, from https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/2003%20Energy%20Action%20Plan.pdf
- CEC. (2008, February). 2008 Update Energy Action Plan. Retrieved June 28, 2020, from https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/2008%20Energy%20Action%20Plan%20Update.pdf
- CEC. (2019, November). 2019 California Energy Efficiency Action Plan. Retrieved from [https://ww2.energy.ca.gov/business_meetings/2019_packets/2019-12-11/Item_06_2019%20California%20Energy%20Efficiency%20Action%20Plan%20\(19-IEPR-06\).pdf](https://ww2.energy.ca.gov/business_meetings/2019_packets/2019-12-11/Item_06_2019%20California%20Energy%20Efficiency%20Action%20Plan%20(19-IEPR-06).pdf)
- CEC. (2020a). Oil Supply Sources To California Refineries. Retrieved from <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries>
- CEC. (2020b). California Electrical Energy Generation. Retrieved from <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-electrical-energy-generation>
- CEC. (2020c). Warren-Alquist Act. Retrieved from <https://www.energy.ca.gov/rules-and-regulations/warren-alquist-act>
- CPUC. (2020, June). About the California Public Utilities Commission (CPUC). Retrieved June 28, 2020, from <https://www.cpuc.ca.gov/aboutus/>
- Marin County . (2019). Marin County Initial Study Checklist . Marin County Community Development Agency Planning Division.

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Marin County. (1994, May 17). Environmental Impact Review Guidelines (EIR Guidelines).
Policy and Procedures for Implementation of the California Environmental Quality Act (CEQA).

Marin County. (2007, November 6). Marin Countywide Plan.

Town of Ross. (2007, June). Town of Ross General Plan.

Town of Ross. (2020). *Municipal Code*. Retrieved July 29, 2020, from
<https://www.townofross.org/administration/page/municipal-code>

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