

3.16 Utilities and Service Systems

This section describes the existing utilities and service systems serving the proposed Larkspur Ferry Service Expansion and Parking Project (Project) area, including water supply, wastewater and stormwater infrastructure, solid waste, and energy systems. It also evaluates the potential for increased demand on these systems associated with the proposed Project and the Build Alternatives.

3.16.1 Existing Conditions

3.16.1.1 Regulatory Setting

The Golden Gate Bridge, Highway and Transportation District, as the owner of the Larkspur Ferry Terminal (LFT), is the California Environmental Quality Act Lead Agency for the Project and has prepared this Draft Environmental Impact Report to evaluate potential impacts and identify required mitigation to avoid or reduce potentially significant impacts. The federal, state, and regional and local regulations applicable to the Project are provided in this section.

State

California Energy Commission

The California Energy Commission (CEC) is the state's primary energy policy and planning agency and oversees energy-related planning and regulations throughout California. The CEC is responsible for forecasting energy demand, maintaining statewide energy data, licensing large thermal power plants, promoting energy efficiency through building standards, supporting the development of renewable energy and emerging technologies, and coordinating the state's response to energy emergencies. The CEC plays a key role in ensuring the reliable and efficient provision of electricity and natural gas throughout the state.

California Department of Resources Recycling and Recovery

The California Integrated Waste Management Board was a state agency established in 1989 that regulated solid waste handling and recycling. California Department of Resources Recycling and Recovery (CalRecycle) was established in 2010 to replace the California Integrated Waste Management Board. CalRecycle and local enforcement agencies oversee the management and operation of solid waste facilities throughout California. Through permitting, inspection, and enforcement programs, these agencies work to ensure compliance with state regulations and minimum standards designed to protect public health, safety, and the environment and to minimize the impacts of solid waste and wastewater disposal.

Consistent with the California Integrated Solid Waste Management Act of 1989, local jurisdictions are required to implement programs that reduce the amount of solid waste disposed of in landfills through source reduction, reuse, and recycling. Construction and demolition activities are encouraged to maximize waste diversion and recycling to minimize landfill disposal through appropriate waste management practices.

Wastewater

Wastewater services within the proposed Project area are provided and regulated by the following agencies:

- State Water Resources Control Board
- San Francisco Bay Regional Water Board
- California Department of Toxic Substances Control

Local

City of Larkspur 2040 General Plan

The Land Use Element of the *City of Larkspur 2040 General Plan* contains the Land Use, Community Facilities and Services, and Community Health and Safety chapters, which present the following policies and programs that are applicable to the proposed Project (City of Larkspur 2024).

Land Use Element

- **Policy LU-1.2:** Require new development to pay its fair share of infrastructure improvements and public service costs to maintain infrastructure capacity and service levels in the City to the extent allowed by law and except as provided by other policies and programs in the Plan.
 - **Action Plan LU-1.2.a:** Establish and periodically review public facilities and service impact fees.
 - **Action Plan LU-2.1a:** This designation is also suitable for areas with limited development potential because of their unusual configuration (e.g., railroad right-of-way), difficult access, lack of utilities, and/or location within Very High Fire Hazard Zones.

Community Facilities and Services

- Policy FAC-3.3: Continue to share information with the school districts regarding land use planning efforts in the City that will impact school district services, including anticipated residential development, infrastructure projects, and population and demographic trends.
- Policy FAC-5.3: As opportunities arise, support continued consolidation of municipal function (police, fire, land use, sewage, storm drainage, school districts, etc.) where it may improve efficiencies and cost effectiveness without compromising the needs of the Larkspur community.
 - Action Program FAC-5.3.a: Pursue annexations and de-annexations, as necessary, to foster more logical service area boundaries. Appropriate environmental analyses should be undertaken for all annexations and de-annexations pursuant to this program.

Community Health and Safety

- Action Program SAF-5.5b (a). Areas subject to recent slope movement or within the paths of debris flow are not suitable for the development of occupied structures. Further disruption of these high-risk areas will only be permitted to protect public safety or by the City for roads, utilities, and other similar facilities after intensive geologic studies have determined that mitigation is practical and their costs warranted.
- Action Program SAF-7.1.f: Continue to work with Marin Municipal Water District [MMWD] to meet its goal to expand its water supply to meet a four 4-year demand and to provide and maintain water supply systems and the long-term integrity of the systems to supply for fire suppression for all

structural and wildfire fire suppression, which should include the maintenance and replacement of fire hydrants located within the City of Larkspur. Require proof of adequate water supply for suppression of wildfires and structural fires for all conditional project approvals.

- Action Program SAF-7.4.e: Work with Marin Water to Prioritize fire flow upgrades in the Very High Fire Hazard Severity Zone to meet a goal, where feasible, of 1,000 gallons per minute for two hours.

Natural Environment and Resources

- Policy ENV-2.6: Support efforts by the MMWD, Marin County Flood Control and Water Conservation District, and other interested agencies and organizations to enhance water quality and other interested agencies and organizations to enhance water quality and reduce peak stormwater runoff in the Ross Valley Watershed.
- Action Program ENV-3.2.b: Adopt requirements for master plan approval to assure adequate emergency, utilities, fire safety, environmental protection, and protection of surrounding open space resources in conjunction with any private development with open space areas.
- Goal ENV-6.1: Support local and regional efforts to reduce water consumption.
- Goal ENV-6.2: Apply water conservation development standards for residential, commercial, and civic development, reconstructions, and remodels.
 - Action Program ENV-6.2.a: Include and implement Water and Wastewater programs in City's Climate Action Plan [CAP] to promote efficiency in water use, consumer conservation, graywater use, rainwater catchment systems, and other applicable actions.
 - Action Program ENV-6.2.b: Through the permitting process, require new and replacement public and private landscaping to use drought tolerant plantings and water-conserving landscape techniques consistent with State (CALGreen), regional (Marin Water), and local (local CALGreen code implementation) regulations.
 - Action Program ENV-6.2.c: Through the permitting process, require the installation of water-conserving plumbing fixtures in new buildings and when existing fixtures are replaced consistently with state (e.g., CALGreen code, regional [Marin Water], and local [local CALGreen code implementation]) regulations.
- Policy ENV-6.4: Promote waste reduction strategies for residential, commercial, and civic sectors.
- Policy ENV-6.5: Increase energy efficiency and conservation in City buildings, equipment, and operations. Promote energy and water conservation and building upgrades to the community.

City of Larkspur Climate Change Action Plan 2030

The CAP, adopted in 2021, is a tool to develop programs and actions needed to reduce greenhouse gas emissions. The City of Larkspur recognizes the potential effects of climate change on the community and has prepared the CAP to outline strategies, programs, and actions to reduce reliance on fossil fuels, improve energy efficiency, support renewable energy use, and reduce transportation-related emissions. The plan also establishes a framework of ongoing climate action and adaptation and recognizes that Larkspur has achieved its 2020 greenhouse gas emissions reduction target (City of Larkspur 2021).

California Green Building Standards Code

In 2025, Ordinance No. 1089 of the City of Larkspur Municipal Code amended the building code regulations adopting the 2025 edition of the CALGreen code. The purpose of the code is to improve public

health and safety through effective building construction and features regulations for energy efficiency, water efficiency and conservation, material conservation, resource efficiency, and environmental quality.

Marin Municipal Water District

MMWD prepared the Urban Water Management Plan (UWMP) to provide a comprehensive assessment of the MMWD's water supply system, which relies primarily on seven local, rain-fed reservoirs supplemented by imported water from Sonoma Water and limited recycled water for nonpotable uses. UWMP serves as the MMWD's principal planning document for evaluating future water demands, supply reliability, drought preparedness, and water conservation programs. The current UWMP updates the MMWD's 2020 UWMP and incorporates information from the 2023 Strategic Water Supply Assessment to support long-term water resource planning and management.

The UWMP Act of 1983 was amended by the Water Conservation Act of 2009 and later by the 2018 Water Conservation Legislation (Assembly Bill 1668 and Senate Bill 606), which introduced enhanced water-use efficiency, drought planning, and reporting requirements. These amendments strengthened the role of UWMPs as key planning tools for sustainable water management and long-term water supply reliability (EKI 2024).

3.16.1.2 Environmental Setting

Water Supply

MMWD serves the Project area. MMWD obtains its water from seven reservoirs and the Russian River Intertie Pipeline System. Five of the seven MMWD Reservoirs (Alpine, Bon Tempe, Kent, Lagunitas, and Phoenix Lake) are on the north slope of Mount Tamalpais. The total reservoir storage operated by MMWD is 25.9 billion gallons. MMWD's distribution system consists of pipelines ranging from small service connections to large transmission mains and include a network of water mains, pump stations, and treated water storage facilities that deliver potable water throughout its service area. The system is supported by ongoing infrastructure replacement programs to maintain reliability and service capacity. Water treatment is provided by the Bon Tempe and San Geronimo treatment plants, which treat water from the MMWD Reservoirs, and the Ignacio Treatment Facility, which treats imported water received through the North Marin Intertie Pipeline. Together, these facilities provide sufficient treatment capacity to serve existing and Project water demands within the service area (Leonard Charles and Associates 2022). The LFT uses minimal amounts of water onsite for vessel maintenance, two restrooms, drinking fountains, and limited landscaping.

Wastewater

Ross Valley Sanitary District (RVSD) provides wastewater collection services to portions of central Marin County, including the City of Larkspur. The RVSD serves an area with a population of approximately 47,700 and maintains an extensive wastewater collection system consisting of gravity mains, force mains, pump stations, and siphons. Wastewater generated within the RVSD is conveyed through this system for treatment, while private property owners are responsible for maintaining sewer laterals that connect individual properties to the public sewer system. There is 15,451 lateral connections to the system (RVSD 2025). The RVSD operates and maintains approximately 200 miles of sewer collection pipelines and 19 pump stations that collect, convey, and transport an average of approximately 4 million gallons of wastewater per day to the Central Marin Sanitation Agency for treatment (RVSD 2026). The LFT includes two restroom facilities and seven ferries with up to 600-gallon sewage tank capacity. The new Liwa-class

vessels would have up to 650-gallon sewage tank capacities. The entire ferry fleet is anticipated to be Liwa class by 2033.

Stormwater

Onsite surface drainage and adjacent municipal storm drains adjacent to the LFT discharge to the Bay. The Golden Gate Bridge, Highway and Transportation District and the City of Larkspur implement stormwater management programs and treatment requirements, where applicable, to reduce pollutants and protect water quality. Refer to Section 3.9, Hydrology and Water Quality, for further information regarding stormwater.

Solid Waste

Solid waste generated within the Project area is collected by Marin Sanitary Service, which provides garbage, recycling, and organic waste collection services to commercial customers throughout the City of Larkspur. Collected materials are processed through Marin Sanitary Service's Resource Recovery and Recycling Facility and transfer station, where waste is consolidated and transported to the Redwood Landfill for final disposal. These facilities provide the primary solid waste management infrastructure serving the Project area. Redwood Landfill is a 420-acre facility, with approximately 222.5 acres dedicated to waste disposal and the remainder supporting recycling, composting, reuse operations, open space, and a freshwater lagoon. The landfill is permitted to accept non-hazardous waste and is regulated by multiple federal, state, and local agencies to ensure compliance with environmental and public health standards. In addition to municipal solid waste, the facility provides services for construction and demolition debris processing and is permitted to accept up to 2,310 tons of material per day (Waste Management 2026). Marin Sanitary Service is the waste hauler for the LFT, collecting both solid waste and recycling.

Natural Gas and Electricity

Pacific Gas and Electric Company (PG&E) provides natural gas and electric services to the Project area. MCE Community Choice Energy operates in Larkspur, providing residents with alternative renewable energy options while using PG&E lines for delivery. There is one natural gas line for heat in the terminal building. LFT electrical use is primarily to power vessel shore power, night lighting, terminal operations and maintenance activities, and electric car chargers.

3.16.2 Environmental Impacts

Both Build Alternatives would be within the City of Larkspur and provide increased ferry service and landside access improvements to accommodate forecast future ridership demand and ensure that ferry service remains a reliable and competitive travel option that reduces vehicle miles traveled and greenhouse gases along the U.S. 101 highway corridor in Marin and Sonoma Counties and for the greater Bay Area through 2050 and beyond.

3.16.2.1 Methodology

Utilities and service systems were evaluated at a programmatic level, as impacts are anticipated to be generally consistent across the Build Alternatives. Potential impacts on water supply, wastewater and stormwater systems, solid waste, and energy services were evaluated based on reviewing the *City of Larkspur 2040 General Plan* (City of Larkspur 2024), MMWD, and Central Marin Sanitation Agency document and plans.

3.16.2.2 Thresholds of Significance

The following significance thresholds, based on Appendix G of the California Environmental Quality Act guidelines, are used to evaluate whether the proposed Project would result in significant impacts related to utilities and service systems.

Would the proposed Project do the following:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- Result in a determination by the wastewater treatment provider, which serves or may serve the Project, that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?
- Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

3.16.2.3 Impacts

Project utility and service system impacts would be substantively the same for both Build Alternatives. Within this section, impacts for Alternative 1 and Alternative 2 are discussed together as the Build Alternatives.

Require or Result In the Relocation or Construction of New or Expanded Water, Wastewater Treatment, or Stormwater Drainage, Electric Power, Natural Gas, or Telecommunications Facilities, the Construction or Relocation of which Could Cause Significant Environmental Effects

Construction and Operation

Build Alternatives

Construction and operation of the parking garages would occur within the existing paved North and Main surface parking lots. The Build Alternatives would not result in an increase in impervious surface and would not require relocation or new or expanded stormwater drainage facilities. The existing drainage patterns would be maintained; however, the Build Alternatives would disturb more than 1 acre and would therefore be subject to the State Water Resources Control Board Construction General Permit, which requires preparation and implementation of a Stormwater Prevention Pollution Plan (SWPPP). In addition, the existing LFT Industrial General Permit SWPPP would need to be amended to address discharge during operation of the new garages. The SWPPPs would incorporate best management practices to minimize construction- and operation-related impacts to stormwater quality. There are no new or expanded water, wastewater, natural gas, or telecommunication facilities proposed for the Build Alternatives, and the Build Alternatives would connect to existing onsite stormwater, wastewater, natural gas, and telecommunication facilities, as applicable. Solar panels would be added to the top of the garages and would also connect to the existing power lines onsite. Construction of the new solar panels on the top level of the garages would have no potential to result in a significant impact. As applicable, the Build Alternatives would connect to

existing utilities onsite and would not require or result in relocation or construction of new facilities, which could cause significant environmental effects; therefore, construction and operational impacts are ***less than significant***. No mitigation required.

Mitigation Measures

No mitigation required.

Have Sufficient Water Supplies Available to Serve the Project and Reasonably Foreseeable Future Development During Normal, Dry, and Multiple Dry Years.

Construction and Operation

Build Alternatives

Construction of the Build Alternatives would require a temporary increase in water use during construction for activities, such as dust control and equipment cleaning. Water for construction purposes may be provided by temporary onsite storage, water trucks, or from temporary points of connection with the municipal supplier. This demand would be minimal and short term. It is anticipated that water required for construction would primarily be required during the site preparation and foundation construction phases for dust control. Except for the installation of fire suppression systems within the new parking garages, there would be no new operational water needs. The terminal has limited public restroom facilities/drinking fountains and minimal landscaping. There would be no change in the number of ferries that use potable water for on-board restroom facilities but not for consumption. Riders are expected to purchase at the terminal, on board, or bring their own water for consumption. The increased ferry service is not anticipated to result in any substantial changes in water demand associated with the operation or maintenance of the ferries. It should be noted that the existing ferry fleet is anticipated to be replaced with Liwa-class vessels by 2033. Liwa-class vessels will have similarly sized water-holding tanks. Construction and operation of either of the proposed Build Alternatives would not result in any substantial change in overall water demand compared to existing water demand to accommodate the incremental increases in ferry service to meet forecast ridership to 2050 and beyond. The Build Alternatives would have sufficient water supply available to serve the proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be ***less than significant***. No mitigation required.

Mitigation Measures

No mitigation required.

Result in a Determination by the Wastewater Treatment Provider, which Serves or May Serve the Project that it has Adequate Capacity to Serve the Project's Projected Demand in Addition to the Provider's Existing Commitments

Construction and Operation

Build Alternatives

Construction and operation would not result in any substantial change in wastewater demands from the proposed Project. Temporary sanitation needs during construction would be met through portable restroom facilities provided and serviced by a licensed sanitation contractor. Construction activities would not require additional wastewater treatment capacity.

During operation, wastewater generation would remain comparable to existing levels, and the proposed Project would not require modifications or expansions to existing wastewater treatment or conveyance system. The LFT has two restroom facilities onsite and two restrooms on each ferry. General daily solid waste generation would be expected to increase proportionally as ferry ridership increases through 2050 and beyond. It should be noted that the existing ferry fleet is anticipated to be replaced with Liwa-class vessels by 2033, which will have three restrooms on board to accommodate the additional number of riders; however, there would be no change in fleet size. Vessel-holding tanks are pumped daily and disposed of offsite. The Build Alternatives do not include new or additional bathroom facilities, and wastewater flows would continue to be conveyed to and treated by the existing wastewater treatment provider via onsite sewer and offsite disposal.

Given that the Build Alternatives would not meaningfully increase wastewater demand and do not include design features that would generate substantial additional wastewater, the wastewater treatment provider would have adequate capacity to serve the Build Alternatives. Therefore, construction and operational impacts would be *less than significant*. No mitigation required.

Mitigation Measures

No mitigation required.

Generate Solid Waste in Excess of State or Local Standards, or in Excess of the Capacity of Local Infrastructure, or Otherwise Impair the Attainment of Solid Waste Reduction Goals; and Comply with Federal, State, and Local Management and Reduction Statutes and Regulations Related to Solid Waste

Construction

Build Alternatives

Construction of the proposed Project would generate typical solid waste associated with construction activities. However, the overall quantity would be limited and temporary. Construction debris would be recycled or disposed of in accordance with applicable federal, state, and local regulations, including requirements for construction and demolition waste diversion. Construction debris would consist primarily of surface parking lot demolition materials at the North and Main Lots (asphalt and electrical lighting and conduits) and minimal amounts of vegetation. Given the availability of a local landfill and recycling capacity, solid waste generated during construction would not exceed applicable standards or impair attainment of waste reduction goals and would comply with statutes and regulations related to solid waste. Impacts would be *less than significant*.

Operation

Build Alternatives

Operation of the proposed Project would not substantially change existing solid waste generation because the proposed Project involves improvements to an existing facility with similar operational characteristics. General daily solid waste generation would be expected to increase proportionally as the ferry ridership increases through 2050 and beyond. Trash removal would continue to be handled through existing local waste management hauling contracts.

The proposed Project would continue to comply with all applicable federal, state, and local regulations related to solid waste management and diversion, including requirements to reduce, recycle, and properly dispose of waste. As a result, solid waste generated during operation would not exceed applicable

standards or impair attainment of waste reduction goals and would comply with statutes and regulations related to solid waste. Impacts would be *less than significant*.

Mitigation Measures

No mitigation required.