APPENDIX 3.1-B: SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION BAY PLAN CONSISTENCY ANALYSIS

ACRONYMS AND ABBREVIATIONS

Authority	California High-Speed Rail Authority
Bay Plan	San Francisco Bay Plan
BCDC	San Francisco Bay Conservation and Development Commission
BMP	best management practice
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CMP	compensatory mitigation plan
EIR	environmental impact report
EIS	environmental impact statement
FRA	Federal Railroad Administration
HSR	high-speed rail
IAMF	impact avoidance and minimization feature
LMF	light maintenance facility
NAVD	North American Vertical Datum
NMFS	National Marine Fisheries Service
Project Section, project	San Francisco to San Jose Project Section
SFO	San Francisco International Airport
US	U.S. Highway
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

1 INTRODUCTION

This appendix assesses the consistency of the San Francisco to San Jose Project Section (Project Section, project) of the California High-Speed Rail (HSR) System with applicable San Francisco Bay Plan (Bay Plan) policies governing proposed uses and activities within areas subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission (BCDC). Table 1 identifies the applicable Bay Plan policies and describes how the project would be consistent or inconsistent with the policies.

Table 1 BCDC Bay Plan Policy Consistency Analysis

Policy	Description of Consistency/ Inconsistency
Fish, Other Aquatic Organisms and Wildlife	
▪ Policy 1. To assure the benefits of fish, other aquatic organisms and wildlife for future generations, to the greatest extent feasible, the Bay's tidal marshes, tidal flats, and subtidal habitat should be conserved, restored and increased.	**Consistent**. The Authority would prepare a CMP to mitigate for all impacts on aquatic resources to address adverse effects, in accordance with BIO-MM#37: Prepare and Implement a Compensatory Mitigation Plan for Impacts on Aquatic Resources. Implementation of this compensatory mitigation would result in the restoration, establishment, enhancement, and/or preservation of aquatic resources.
▪ Policy 2. Native species, including candidate, threatened, and endangered species; species that the California Department of Fish and Wildlife, the National Marine Fisheries Service, and/or the U.S. Fish and Wildlife Service have listed under the California or Federal Endangered Species Act; and any species that provides substantial public benefits, as well as specific habitats that are needed to conserve, increase, or prevent the extinction of these species, should be protected, whether in the Bay or behind dikes. Protection of fish, other aquatic organisms, and wildlife and their habitats may entail placement of fill to enhance the Bay's ecological function in the near-term and to ensure that they persist into the future with sea level rise.	**Consistent**. Section 3.7, Biological and Aquatic Resources, of the Draft EIR/EIS, includes IAMFs, which are incorporated into the project, and mitigation measures to avoid and minimize impacts on fish, other aquatic organisms and wildlife, restore temporary impacts (BIO-MM#36: Restore Aquatic Resources Subject to Temporary Impacts; BIO-MM#38: Prepare and Implement an Annual Vegetation Control Plan), and mitigate for unavoidable permanent impacts (BIO-MM#35: Provide Compensatory Mitigation for Permanent Impacts on Riparian Habitat; BIO-MM#37; BIO-MM#39: Implement Transplantation and Compensatory Mitigation Measures for Protected Trees).
▪ Policy 4. The Commission should: a. Consult with the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species; b. Not authorize projects that would result in the "taking" of any plant, fish, other aquatic organism or wildlife species listed as endangered or threatened pursuant to the state or federal Endangered Species Acts, or the federal Marine Mammal Protection Act, or species that are candidates for listing under these acts, unless the project applicant has obtained the appropriate "take" authorization from the U.S. Fish and Wildlife Service, National Marine Fisheries Service or the California Department of Fish and Wildlife; and c. Give appropriate consideration to the recommendations of the California Department of Fish and Wildlife, the National Marine Fisheries Service or the U.S. Fish and Wildlife Service in order to avoid possible adverse effects of a proposed project on fish, other aquatic organisms and wildlife habitat.	**Consistent**. The Authority has been coordinating with CDFW, USFWS, and NMFS concerning potential project impacts on listed species (under the statutes mentioned in Policy 4) and critical habitat that would be affected by the project, as required by state and federal laws. The Authority is in consultation with USFWS and NMFS for federally listed species regulated under the federal Endangered Species Act that would be affected by the project. The Authority would also obtain a 2081(b) permit from CDFW in accordance with the California Endangered Species Act for state-listed species. .

Policy	Description of Consistency/ Inconsistency
Water Quality	
▪ Policy 1. Bay water pollution should be prevented to the greatest extent feasible. The Bay's tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water quality. Fresh water inflow into the Bay should be maintained at a level adequate to protect Bay resources and beneficial uses.	**Consistent.** The project would include temporary, permanent, and operation BMPs to control sources of pollution, minimize runoff quantity, and improve runoff quality prior to discharge into San Francisco Bay and its tributaries, per HYD-IAMF#1: Stormwater Management, HYD-IAMF#3: Prepare and Implement a Construction Stormwater Pollution Prevention Plan, and HYD-IAMF#4: Prepare and Implement an Industrial Stormwater Pollution Prevention Plan. At Visitacion Creek, some of the freshwater portion that is currently in an aboveground culvert and some of the tidal portion that is currently in an open channel would be placed in an underground culvert, but freshwater or tidal flow would not be detained, impounded, or rerouted. Additionally, flows of other tidal watercourses within BCDC jurisdiction, including Guadalupe Valley Creek, would not be detained, impounded, rerouted, or otherwise affected by the project in a manner that would preclude tidal influence or result in substantial alterations of freshwater inflows into San Francisco Bay.
▪ Policy 2. Water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board's Water Quality Control Plan, San Francisco Bay Basin and should be protected from all harmful or potentially harmful pollutants. The policies, recommendations, decisions, advice and authority of the State Water Resources Control Board and the Regional Board, should be the basis for carrying out the Commission's water quality responsibilities.	**Consistent.** The project would not result in substantial impacts on water quality of tidal watercourses within BCDC jurisdiction. The project would maintain freshwater flows into tidal streams including Visitacion Creek (under Alternative A). Additionally, the project would not conflict with or impede implementation of the Water Quality Control Plan for the San Francisco Bay Basin.
▪ Policy 3. New projects should be sited, designed, constructed and maintained to prevent or, if prevention is infeasible, to minimize the discharge of pollutants into the Bay by: (a) controlling pollutant sources at the project site; (b) using construction materials that contain nonpolluting materials; and (c) applying appropriate, accepted and effective best management practices, especially where water dispersion is poor and near shellfish beds and other significant biotic resources.	**Consistent.** As discussed in Section 3.8, Hydrology and Water Resources, per HYD-IAMF#1, HYD-IAMF#3, and HYD-IAMF#4, temporary, permanent, and operation BMPs to control sources of pollution, minimize runoff quantity, and improve runoff quality prior to discharge into San Francisco Bay and its tributaries would be identified and implemented in accordance with local, state, and federal water quality requirements, which would protect water quality of affected waterbodies.

Policy	Description of Consistency/ Inconsistency
▪ Policy 4. When approving a project in an area polluted with toxic or hazardous substances, the Commission should coordinate with appropriate local, state and federal agencies to ensure that the project will not cause harm to the public, to Bay resources, or to the beneficial uses of the Bay.	**Consistent.** As discussed in Section 3.10, Hazardous Materials and Wastes, the project would include Phase I and Phase II environmental site assessments (HMW-IAMF#1: Property Acquisition Phase I and Phase II Environmental Site Assessments) to document locations with known contamination, suspected contamination, or both; coordinate with appropriate regulatory agencies; and implement remedial actions where necessary. These environmental site assessments would include the Brisbane LMF sites included for Alternative A and Alternative B.
▪ Policy 6. To protect the Bay and its tributaries from the water quality impacts of nonpoint source pollution, new development should be sited and designed consistent with standards in municipal stormwater permits and state and regional stormwater management guidelines, where applicable, and with the protection of Bay resources. To offset impacts from increased impervious areas and land disturbances, vegetated swales, permeable pavement materials, preservation of existing trees and vegetation' planting native vegetation and other appropriate measures should be evaluated and implemented where appropriate.	**Consistent.** As discussed in Section 3.8, per HYD-IAMF#1, HYD-IAMF#3, and HYD-IAMF#4, temporary, permanent, and operation BMPs to control sources of pollution, minimize runoff quantity, and improve runoff quality prior to discharge into San Francisco Bay and its tributaries would be identified and implemented in accordance with local, state, and federal water quality requirements, which would protect water quality of affected waterbodies. As discussed in Section 3.7, where the project would result in permanent loss of wetland or riparian vegetation, compensation to address impacts on these biological resources would be provided per mitigation measures. Implementation of BIO-MM#35 would require compensation for permanent impacts on riparian habitats at a ratio of 2:1. Implementation of BIO-MM#37 would result in the restoration, establishment, enhancement, and/or preservation of aquatic resources.
▪ Policy 7. Whenever practicable, native vegetation buffer areas should be provided as part of a project to control pollutants from entering the Bay, and vegetation should be substituted for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable.	**Consistent.** Stormwater permits applicable to the Authority's and local agencies' municipal stormwater permits require designers to consider the implementation of vegetated buffers to maintain water quality conditions. As discussed in Section 3.8, the flood protection plan (HYD-IAMF#2: Flood Protection) would require the use of natural materials with vegetation to stabilize creek banks and maintain natural riparian corridors, including any modifications to the Visitacion Creek channel.

Policy	Description of Consistency/ Inconsistency
Water Surface Area and Volume	
▪ Policy 1. The surface area of the Bay and the total volume of water should be kept as large as possible in order to maximize active oxygen interchange, vigorous circulation, and effective tidal action. Filling and diking that reduce surface area and water volume should therefore be allowed only for purposes providing substantial public benefits and only if there is no reasonable alternative.	**Consistent**. As discussed in Impact HYD#2: Permanent Impacts on Drainage Patterns and Stormwater Runoff, in Section 3.8 and Impact BIO#19: Permanent Conversion or Degradation of Aquatic Resources Considered Jurisdictional under Section 404 of the federal Clean Water Act, Section 10 of the Rivers and Harbors Act, or Regulated by the State, in Section 3.7, the project would not substantially reduce the surface area and volume of water within San Francisco Bay and tidal watercourses in a manner that would affect dissolved oxygen concentrations, circulation, and tidal action. As discussed in Section 3.7, any permanent loss of waters would be compensated to address impacts. Implementation of BIO-MM#37 would result in the restoration, establishment, enhancement, and/or preservation of aquatic resources.
▪ Policy 2. Water circulation in the Bay should be maintained, and improved as much as possible. Any proposed fills, dikes, or piers should be thoroughly evaluated to determine their effects upon water circulation and then modified as necessary to improve circulation or at least to minimize any harmful effects.	**Consistent**. Overall circulation patterns within San Francisco Bay would be maintained. At Visitacion Creek, some of the freshwater portion that is currently in an aboveground culvert and a portion of the tidal portion that is currently in an open channel would be placed in an underground culvert, but circulation would be maintained. Additionally, flows of other tidal watercourses within BCDC jurisdiction, including Guadalupe Valley Creek, would be maintained and would not preclude tidal influence or result in substantial alterations of freshwater inflows into San Francisco Bay.

Policy	Description of Consistency/ Inconsistency
Tidal Marshes and Tidal Flats	
▪ Policy 1. Tidal marshes and tidal flats should be conserved to the fullest possible extent. Filling, diking, and dredging projects that would substantially harm tidal marshes or tidal flats should be allowed only for purposes that provide substantial public benefits and only if there is no feasible alternative.	**Consistent**. No tidal flats or tidal marshes are expected to be affected by the project. There are freshwater wetlands along Visitacion Creek that may be affected by the East Brisbane LMF under Alternative A. There are saline wetlands along Brisbane Lagoon within the project area, but no disturbance of these wetlands is expected to occur under either project alternative. As such, the project would not substantially harm tidal marshes or tidal flats. The project has been designed to avoid impacts on other aquatic resources, including freshwater wetlands and waters to the maximum extent possible. USEPA and USACE concurred that the project corridors selected by the Authority and FRA as part of the Tier 1 environmental process were most likely to yield the least environmentally damaging practicable alternative under Section 404 of the Clean Water Act (see Chapter 1, Project Purpose, Need, and Objectives). The Authority has developed IAMFs (Appendix 2-E, Project Impact Avoidance and Minimization Features, of the EIR/EIS) that are considered to be part of the project and are intended to avoid and minimize impacts on biological and aquatic resources in the project area. As discussed in Section 3.7, any permanent loss of waters or wetlands would be compensated to address impacts per BIO-MM#37; this mitigation would include compensation for loss of waters and wetlands associated with Visitacion Creek.
▪ Policy 2. Any proposed fill, diking, or dredging project should be thoroughly evaluated to determine the effect of the project on tidal marshes and tidal flats, and designed to minimize, and if feasible, avoid any harmful effects.	**Consistent**. See Consistency with Tidal Marshes and Tidal Flats Policy 1.
▪ Policy 3. Projects should be sited and designed to avoid, or if avoidance is infeasible, minimize adverse impacts on any transition zone present between tidal and upland habitats. Where a transition zone does not exist and it is feasible and ecologically appropriate, shoreline projects should be designed to provide a transition zone between tidal and upland habitats.	**Consistent**. The project has been designed to avoid and minimize impacts on special-status plant communities and aquatic resources. There is limited transitional habitat in the form of freshwater wetlands along Visitacion Creek and Guadalupe Valley Creek that would be affected by the project within BCDC jurisdictional areas. The project is being designed to minimize wetland and water impacts through IAMFs that require biological monitoring (BIO-IAMF#1), training for construction personnel (BIO-IAMF#3), implementation of a biological resources management plan (BIO-IAMF#5), and delineation of equipment staging areas and traffic routes (BIO-IAMF#8). Compensation would be provided for any unavoidable impacts on wetlands.

Policy	Description of Consistency/ Inconsistency
Smog and Weather	
▪ Policy 1. To the greatest extent feasible, the remaining water volume and surface area of the Bay should be maintained.	**Consistent**. As discussed in Impact HYD#2 in Section 3.8, and Impact BIO#19 in Section 3.7, the project would not substantially reduce the surface area and volume of water within San Francisco Bay and tidal watercourses in a manner that would affect dissolved oxygen concentrations, circulation, and tidal action. As discussed in Section 3.7, any permanent loss of waters would be compensated to address impacts. Implementation of BIO-MM#37 would result in the restoration, establishment, enhancement, and/or preservation of aquatic resources.
Subtidal Areas	
▪ Policy 1. Any proposed filling or dredging project in a subtidal area should be thoroughly evaluated to determine the local and Bay-wide effects of the project on: (a) the possible introduction or spread of invasive species; (b) tidal hydrology and sediment movement; (c) fish, other aquatic organisms and wildlife; (d) aquatic plants; and (e) the Bay's bathymetry. Projects in subtidal areas should be designed to minimize and, if feasible, avoid any harmful effects.	**Not applicable.** The project is not located in a subtidal area.
▪ Policy 2. Subtidal areas that are scarce in the Bay or have an abundance and diversity of fish, other aquatic organisms and wildlife (e.g., eelgrass beds, sandy deep water or underwater pinnacles) should be conserved. Filling, changes in use; and dredging projects in these areas should therefore be allowed only if: (a) there is no feasible alternative; and (b) the project provides substantial public benefits.	**Not applicable.** The project is not located in a subtidal area.
Climate Change	
▪ Policy 2. When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared by a qualified engineer and should be based on the estimated 100-year flood elevation that takes into account the best estimates of future sea level rise and current flood protection and planned flood protection that will be funded and constructed when needed to provide protection for the proposed project or shoreline area. A range of sea level rise projections for mid-century and end of century based on the best scientific data available should be used in the risk assessment. Inundation maps used for the risk assessment should be prepared under the direction of a qualified engineer. The risk assessment should identify all types of potential flooding, degrees of uncertainty, consequences of defense failure, and risks to existing habitat from proposed flood protection devices.	**Consistent.** As described in Section 3.8, a preliminary risk assessment was prepared for the project by a registered professional civil engineer using existing 100-year flood elevations from the Federal Emergency Management Agency and the latest projections of sea level rise for 2050 and 2100. Additionally, a detailed vulnerability assessment and adaptation plan would be prepared to identify adaptive management measures for near-term and long-term sea level rise impacts for HSR facilities, including the LMF, subject to coastal flooding inundation.

Policy	Description of Consistency/ Inconsistency
▪ Policy 3. To protect public safety and ecosystem services, within areas that a risk assessment determines are vulnerable to future shoreline flooding that threatens public safety, all projects—other than repairs of existing facilities, small projects that do not increase risks to public safety, interim projects and infill projects within existing urbanized areas—should be designed to be resilient to a mid-century sea level rise projection. If it is likely the project will remain in place longer than mid-century, an adaptive management plan should be developed to address the long-term impacts that will arise based on a risk assessment using the best available science-based projection for sea level rise at the end of the century.	**Consistent.** The ground elevation within the boundaries of the East Brisbane LMF (~18 feet NAVD 88) and West Brisbane LMF (~25 feet NAVD 88) would be set above the latest projections of sea level rise during a 100-year flood event for 2050 (11.9 feet NAVD 88) and 2100 (16.9 feet NAVD 88). Additionally, a detailed vulnerability assessment and adaptation plan would be prepared to identify adaptive management measures for near-term and long-term sea level rise effects for either the East Brisbane LMF or West Brisbane LMF, and any other HSR facilities subject to coastal flooding inundation.
▪ Policy 4. To address the regional adverse impacts of climate change, undeveloped areas that are both vulnerable to future flooding and currently sustain significant habitats or species, or possess conditions that make the areas especially suitable for ecosystem enhancement, should be given special consideration for preservation and habitat enhancement and should be encouraged to be used for those purposes.	**Not applicable.** The undeveloped areas that would be affected by the project do not sustain significant habitats or species. The project would be built in and adjacent to the existing Caltrain right-of-way on the San Francisco Peninsula. Although suitable habitat for special-status wildlife species may be present in the project corridor, all the potential habitat is fragmented, disturbed, or developed, and as such is not critical for the continued persistence of these species. Most habitat would be avoided during construction. Areas especially suitable for ecosystem enhancement are very limited in the project corridor due to the paucity of native vegetation.
▪ Policy 5. Wherever feasible and appropriate, effective, innovative sea level rise adaptation approaches should be encouraged.	**Consistent**. A detailed vulnerability assessment and adaptation plan would be prepared to identify adaptive management measures for near-term and long-term sea level rise impacts for the LMF and any other HSR facilities subject to coastal flooding inundation.

Policy	Description of Consistency/ Inconsistency
▪ Policy 7. Until a regional sea level rise adaptation strategy can be completed, the Commission should evaluate each project proposed in vulnerable areas on a case-by-case basis to determine the project's public benefits, resilience to flooding, and capacity to adapt to climate change impacts. The following specific types of projects have regional benefits, advance regional goals, and should be encouraged, if their regional benefits and their advancement of regional goals outweigh the risk from flooding: a. remediation of existing environmental degradation or contamination, particularly on a closed military base; b. a transportation facility, public utility or other critical infrastructure that is necessary for existing development or to serve planned development; c. a project that will concentrate employment or housing near existing or committed transit service (whether by public or private funds or as part of a project), particularly within those Priority Development Areas that are established by the Association of Bay Area Governments and endorsed by the Commission, and that includes a financial strategy for flood protection that will minimize the burdens on the public and a sea level rise adaptation strategy that will adequately provide for the resilience and sustainability of the project over its designed lifespan; and d. a natural resource restoration or environmental enhancement project. The following specific types of projects should be encouraged if they do not negatively impact the Bay and do not increase risks to public safety: e. repairs of an existing facility; f. a small project; g. a use that is interim in nature and either can be easily removed or relocated to higher ground or can be amortized within a period before removal or relocation of the proposed use would be necessary; and h. a public park.	**Consistent.** See Consistency with Climate Change Policy 3. The ground elevation within the boundaries of the East Brisbane LMF would be set above the latest projections of sea level rise for 2050 and 2100 during a 100-year flood event to protect it from flooding and adverse impacts on San Francisco Bay. Additionally, a detailed vulnerability assessment and adaptation plan would be prepared to identify adaptive management measures for near-term and long-term sea level rise impacts for any other HSR facilities subject to coastal flooding inundation, in coordination with other stakeholders, including local agencies. Therefore, the public benefits from building the project would outweigh the risk of flooding. Furthermore, the project is a transportation project that would have the overall effect of reducing greenhouse gas emissions. The project would improve passenger rail service, and as a result, it is anticipated that people would shift trips from on-road vehicles and aircraft to the HSR system, which is less emissions-intensive than other transportation modes. The project is discussed in the California Air Resources Board's Assembly Bill 32 Scoping Plan and update as a key strategy to meet California's long-term air quality and climate objectives. Additionally, because the project is committed to using 100% renewable energy for electricity and the system runs on electricity (thus displacing vehicle fossil fuel emissions), the project would also help the state meet the 2045 goal of carbon neutrality in Executive Order B-55-18.

Policy	Description of Consistency/ Inconsistency
Safety of Fills	
▪ Policy 1. The Commission has appointed the Engineering Criteria Review Board consisting of geologists, civil engineers specializing in geotechnical and coastal engineering, structural engineers, and architects competent to and adequately empowered to: (a) establish and revise safety criteria for Bay fills and structures thereon; (b) review all except minor projects for the adequacy of their specific safety provisions, and make recommendations concerning these provisions; (c) prescribe an inspection system to assure placement and maintenance of fill according to approved designs; (d) with regard to inspections of marine petroleum terminals, make recommendations to the California State Lands Commission and the U.S. Coast Guard, which are responsible for regulating and inspecting these facilities; (e) coordinate with the California State Lands Commission on projects relating to marine petroleum terminal fills and structures to ensure compliance with other Bay Plan policies and the California State Lands Commission's rules, regulations, guidelines and policies; and (f) gather, and make available performance data developed from specific projects. These activities would complement the functions of local building departments and local planning departments, none of which are presently staffed to provide soils inspections.	**Consistent.** As discussed in Section 3.9, Geology, Soils, Seismicity, and Paleontological Resources, GEO-IAMF#10: Geology and Soils, requires the contractor to document through issuance of a technical memorandum how various guidelines and standards, including the CBC, have been incorporated into facility design and construction. Section J107 of the CBC provides requirements for surface preparation, benching, fill material, and compaction that increase the safety of fills. The contractor's documentation would include a comprehensive geotechnical report that would include soil investigation and earthwork recommendations to address the safety of fills, as required by Chapter 18 of the CBC. The geotechnical report can be made available for BCDC's review.
▪ Policy 2. Even if the Bay Plan indicates that a fill may be permissible, no fill or building should be constructed if hazards cannot be overcome adequately for the intended use in accordance with the criteria prescribed by the Engineering Criteria Review Board.	**Consistent.** As discussed in Section 3.9, GEO-IAMF#1: Geologic Hazards, requires that the contractor prepare a construction management plan addressing how the contractor would address geologic constraints and minimize or avoid impacts on geologic hazards during construction. These hazards include, but are not limited to unstable soil, subsidence, expansive soil, and corrosive soil. GEO-IAMF#10 requires the contractor to document through issuance of a technical memorandum how various guidelines and standards, including the CBC, have been incorporated into facility design and construction. Chapter 18 of the CBC provides criteria for design and installation of foundation systems to support structural loads (including fill loads). It also includes requirements for soil investigations and evaluation of geotechnical hazards that could be applicable to building in BCDC areas such as slope instability, liquefaction, settlement, and faulting.
▪ Policy 3. To provide vitally needed information on the effects of earthquakes on all kinds of soils, installation of strong-motion seismographs should be required on all future major land fills. In addition, the Commission encourages installation of strong-motion seismographs in other developments on problem soils, and in other areas recommended by the U.S. Geological Survey, for purposes of data comparison and evaluation.	**Not applicable.** The project does not anticipate major fills in the BCDC area because the project utilizes the existing rail alignment.

Policy	Description of Consistency/ Inconsistency
▪ Policy 4. Adequate measures should be provided to prevent damage from sea level rise and storm activity that may occur on fill or near the shoreline over the expected life of a project. The Commission may approve fill that is needed to provide flood protection for existing projects and uses. New projects on fill or near the shoreline should either be set back from the edge of the shore so that the project will not be subject to dynamic wave energy, be built so the bottom floor level of structures will be above a 100-year flood elevation that takes future sea level rise into account for the expected life of the project, be specifically designed to tolerate periodic flooding, or employ other effective means of addressing the impacts of future sea level rise and storm activity. Rights-of-way for levees or other structures protecting inland areas from tidal flooding should be sufficiently wide on the upland side to allow for future levee widening to support additional levee height so that no fill for levee widening is placed in the Bay.	**Consistent.** Neither the East Brisbane LMF nor the West Brisbane LMF would be located along the immediate shoreline. The ground elevation for either the East Brisbane LMF or the West Brisbane LMF would be set above the sea level rise projections with a 100-year flood in 2050 and 2100. Additionally, a detailed vulnerability assessment and adaptation plan would be prepared to identify adaptive management measures for near-term and long-term sea level rise impacts for either the East Brisbane LMF or West Brisbane LMF, and any other HSR facilities subject to coastal flooding inundation.
Shoreline Protection	
▪ Policy 1. New shoreline protection projects and the maintenance or reconstruction of existing projects and uses should be authorized if: (a) the project is necessary to provide flood or erosion protection for (i) existing development, use or infrastructure, or (ii) proposed development, use or infrastructure that is consistent with other Bay Plan policies; (b) the type of the protective structure is appropriate for the project site, the uses to be protected, and the causes and conditions of erosion and flooding at the site; (c) the project is properly engineered to provide erosion control and flood protection for the expected life of the project based on a 100-year flood event that takes future sea level rise into account; (d) the project is properly designed and constructed to prevent significant impediments to physical and visual public access; (e) the protection is integrated with current or planned adjacent shoreline protection measures; and (f) adverse impacts to adjacent or nearby areas, such as increased flooding or accelerated erosion, are avoided or minimized. If such impacts cannot be avoided or minimized, measures to compensate should be required. Professionals knowledgeable of the Commission's concerns, such as civil engineers experienced in coastal processes, should participate in the design.	**Not applicable.** The project is not a shoreline protection project or the maintenance or reconstruction of an existing project. Potential long-term sea level rise adaptation measures may include shoreline protection facilities, but these improvements would be subject to separate discretionary permits and approvals from resource agencies, including BCDC.

Policy	Description of Consistency/ Inconsistency
▪ Policy 2. Equitable and culturally-relevant community outreach and engagement should be conducted to meaningfully involve nearby communities for all shoreline protection project planning and design processes—other than maintenance and in-kind repairs to existing protection structures or small shoreline protection projects—in order to supplement technical analysis with local expertise and traditional knowledge and reduce unintended consequences. In particular, vulnerable, disadvantaged, and/or underrepresented communities should be involved. If such previous outreach and engagement did not occur, further outreach and engagement should be conducted prior to Commission action.	**Not applicable.** The project is not a shoreline protection project.
▪ Policy 3. Riprap revetments, the most common shoreline protective structure, should be constructed of properly sized and placed material that meet sound engineering criteria for durability, density, and porosity. Armor materials used in the revetment should be placed according to accepted engineering practice, and be free of extraneous material, such as debris and reinforcing steel. Generally, only engineered quarrystone or concrete pieces that have either been specially cast, are free of extraneous materials from demolition debris, and are carefully selected for size, density, and durability will meet these requirements.	**Not applicable.** The project is not a shoreline protection project.
▪ Policy 4. Authorized protective projects should be regularly maintained according to a long-term maintenance program to assure that the shoreline will be protected from tidal erosion and flooding and that the effects of the shoreline protection project on natural resources during the life of the project will be the minimum necessary.	**Not applicable.** The project is not a shoreline protection project. The Authority would be a tenant operating within the Caltrain right-of-way for the blended portions of the Project Section. The Peninsula Corridor Joint Powers Board would continue to perform regular maintenance along the track and railroad right-of-way as well as on the power systems, train control, signaling, communications, and other vital systems required for the safe operation of the blended system. The Authority would regularly perform maintenance along the dedicated track and railroad right-of-way as well as on the power systems, train control, signalizing, communications, and other vital systems required for the safe operation of the HSR system.
▪ Policy 5. All shoreline protection projects should evaluate the use of natural and nature-based features such as marsh vegetation, levees with transitional ecotone habitat, mudflats, beaches, and oyster reefs, and should incorporate these features to the greatest extent practicable. Ecosystem benefits, including habitat and water quality improvement, should be considered in determining the amount of fill necessary for the project purpose. Suitability and sustainability of proposed shoreline protection and restoration strategies at the project site should be determined using the best available science on shoreline adaptation and restoration. Airports may be exempt from incorporating natural and nature-based features that could endanger public safety by attracting potentially hazardous wildlife.	**Not applicable.** The project is not a shoreline protection project.

Policy	Description of Consistency/ Inconsistency
▪ Policy 6. Adverse impacts to natural resources and public access from new shoreline protection should be avoided. When feasible, shoreline protection projects should include components to retain safe and convenient water access, for activities such as fishing, swimming, and boating, especially in communities lacking such access. Where significant impacts cannot be avoided, mitigation or alternative public access should be provided. Shoreline protection projects that include natural and nature-based features may be self-mitigating or require less mitigation than projects that do not include any natural or nature-based features.	**Not applicable.** The project is not a shoreline protection project.
▪ Policy 7. The Commission should encourage pilot and demonstration projects to research and demonstrate the benefits of incorporating natural and nature-based techniques in San Francisco Bay.	**Not applicable.** This project would not conflict with the implementation of this policy.
Environmental Justice and Social Equity	
▪ Policy 1. The Commission's guiding principles on environmental justice and social equity should shape all of its actions and activities.	**Consistent**. The project would not preclude the implementation of this policy. The Authority considered environmental justice in the development of the project and the potential effects on environmental justice populations in Chapter 5, Environmental Justice. As documented in Section 5.9, California High-Speed Rail Authority's Draft Environmental Justice Determination, the Authority has preliminarily concluded that the San Francisco to San Jose Project Section would not result in disproportionately high and adverse environmental effects on minority and low-income populations.
▪ Policy 3. Equitable, culturally-relevant community outreach and engagement should be conducted by local governments and project applicants to meaningfully involve potentially impacted communities for major projects and appropriate minor projects in underrepresented and/or identified vulnerable and/or disadvantaged communities, and such outreach and engagement should continue throughout the Commission review and permitting processes. Evidence of how community concerns were addressed should be provided. If such previous outreach and engagement did not occur, further outreach and engagement should be conducted prior to Commission action.	**Consistent**. Targeted outreach activities for minority and low-income residents and businesses within the project corridor have been conducted since 2016. Section 5.5, Environmental Justice Engagement and Documentation, of the Draft EIR/EIS includes a summary of environmental justice engagement and Volume 2, Appendix 5-A Environmental Justice Engagement Summary Report, Attachment 1 includes documentation of the community outreach. The process of community outreach would continue through the design and construction phases of the project.

Policy	Description of Consistency/ Inconsistency
▪ Policy 4. If a project is proposed within an underrepresented and/or identified vulnerable and/or disadvantaged community, potential disproportionate impacts should be identified in collaboration with the potentially impacted communities. Local governments and the Commission should take measures through environmental review and permitting processes, within the scope of their respective authorities, to require mitigation for disproportionate adverse project impacts on the identified vulnerable or disadvantaged communities in which the project is proposed.	**Consistent.** No underrepresented and/or identified vulnerable and/or disadvantaged community have been identified within the BCDC jurisdictional areas that would be affected by the project. Nonetheless, underrepresented and/or identified vulnerable and/or disadvantaged communities have been identified along the Project Section. The Authority has completed an analysis of environmental justice impacts, which is summarized in Chapter 5. As documented in Section 5.9, the Authority has preliminarily concluded that the San Francisco to San Jose Project Section would not result in disproportionately high and adverse environmental effects on minority and low-income populations.
Transportation	
▪ Policy 1. Because of the continuing vulnerability of the Bay to filling for transportation projects, the Commission should continue to take an active role in Bay Area regional transportation and related land use planning affecting the Bay, particularly to encourage alternative methods of transportation and land use planning efforts that support transit and that do not require fill. The Metropolitan Transportation Commission, the California Department of Transportation, the California Transportation Commission, the Federal Highway Administration, county congestion management agencies and other public and private transportation authorities should avoid planning or funding roads that would require fill in the Bay and certain waterways.	**Consistent.** The *Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Train System* (Statewide Final Program EIR/EIS) (Authority and FRA 2005) evaluated a Modal Alternative to HSR that relied upon roadway and airport expansion to meet intercity transportation needs instead of HSR. The Modal Alternative included expansion of US 101 by two lanes from San Francisco to San Jose, which would require placing fill in the Bay in Brisbane, South San Francisco, Burlingame, Foster City, San Carlos, Redwood City, and potential additional areas. The Modal Alternative included expansion of Interstate 880 by two lanes from Oakland to San Jose that would require fill in Bay waters in Oakland and Milpitas. The Modal Alternative also included airport expansion in Oakland and San Jose of 35 additional gates and 2 additional runways. While the Statewide Final Program EIR/EIS did not identify the specific locations of new runways, if they would be at Oakland, an additional runway would likely require Bay fill in tidal areas. The project would reduce the need for future fill associated with highways and freeways and airports in the San Francisco Bay and would have far less fill in BCDC jurisdictional areas compared to roadway and airport improvements needed to meet a similar amount of travel demand. Thus, the project would be consistent with and would advance this policy.

Policy	Description of Consistency/ Inconsistency
▪ Policy 3. If a route must be located across the Bay or a certain waterway, the following provisions should apply: c. Toll plazas, service yards, or similar facilities should not be located on new fill and should be located far enough from the Bay shoreline to provide adequate space for maximum feasible public access along the shoreline.	**To be determined (Alternative A).** The East Brisbane LMF (i.e., a service yard) under Alternative A would require fill of Visitacion Creek. In addition, the lead tracks associated with the East Brisbane LMF would require fill of Guadalupe Valley Creek, in the form of an extension of the existing culvert. Thus, Alternative A would place a service yard and lead tracks associated with the service yard partially on new fill. Other than the placement of fill within a portion of Visitacion Creek and Guadalupe Valley Creek, the LMF would be far enough from the Bay shoreline such that there would be adequate space for maximum feasible public access. The project would implement LU-MM#3: Shoreline Access Improvements in Brisbane, which would build a new bike/pedestrian path north of Brisbane Lagoon that would extend the Bay Trail to connect to the new bike/pedestrian path. This would maximize public access to Brisbane Lagoon and San Francisco Bay. With implementation of LU-MM#3, the project would result in a net increase in public access, relative to existing conditions. The HSR project overall reduces the potential for filling of the Bay compared to freeway, highway, and airport expansion that would otherwise be needed to meet a similar amount of transportation demand. **To be determined (Alternative B).** The West Brisbane LMF (i.e., a service yard) under Alternative B would not require fill of Visitacion Creek. However, the lead tracks associated with the West Brisbane LMF (i.e., a service yard) would require fill of Guadalupe Valley Creek, in the form of an extension of the existing culvert. Thus, Alternative B would place lead tracks associated with the service yard partially on new fill. Other than the placement of fill within a portion of Guadalupe Valley Creek, the LMF would be far enough from the Bay shoreline that there would be adequate space for maximum feasible public access. The project would implement LU-MM#3, which would build a new bike/pedestrian path north of Brisbane Lagoon and extend the Bay Trail to connect to the new bike/pedestrian path. This would maximize public access to Brisbane Lagoon and San Francisco Bay. With implementation of LU-MM#3, the project would result in a net increase in public access, relative to existing conditions. The HSR project overall reduces the potential for filling of the Bay compared to freeway, highway, and airport expansion that would otherwise be needed to meet a similar amount of transportation demand.

Policy	Description of Consistency/ Inconsistency
▪ Policy 3. If a route must be located across the Bay or a certain waterway, the following provisions should apply: d. To reduce the need for future Bay crossings, any new Bay crossing should be designed to move the largest number of travelers possible by employing technology and operations that increase the efficiency and capacity of the infrastructure, accommodating non-motorized transportation and, where feasible, providing public transit facilities.	**Consistent (Alternative A).** Under Alternative A, the project would include one new crossing over the Bay/tidal waterway (i.e., Visitacion Creek). The project entails the implementation of HSR service; thus, this project would accommodate nonmotorized transportation and would provide public transit facilities. As such, implementation of this new crossing would be consistent with Policy 3(d). Implementation of Alternative A would also require the extension of an existing culvert for Guadalupe Valley Creek. This work on Guadalupe Valley Creek would not be considered a new crossing; therefore, this policy is not applicable for the work that would occur within Guadalupe Valley Creek **Not applicable (Alternative B).** Alternative B would not require a new crossing over Visitacion Creek. Like Alternative A, Alternative B would require the extension of an existing culvert for Guadalupe Valley Creek. This work would not be considered a new crossing. As such, this policy would not apply for Alternative B.
▪ Policy 4. Transportation projects on the Bay shoreline and bridges over the Bay or certain waterways should include pedestrian and bicycle paths that will either be a part of the Bay Trail or connect the Bay Trail with other regional and community trails. Transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline.	**Consistent**. Pedestrian and bicycle path use would not be consistent with the proposed uses of an LMF and railroad right-of-way. Thus, pedestrian and bicycle paths are not proposed along the LMF or railroad right-of-way. However, per LU-MM#3, the Authority would implement a new bicycle and pedestrian path that would connect to the Bay Trail, which would enhance visual and physical access to the Bay. Thus, the project would be consistent with this policy.
Recreation	
▪ Policy 1. Diverse and accessible water-oriented recreational facilities, such as marinas, launch ramps, beaches, and fishing piers, should be provided to meet the needs of a growing and diversifying population, and should be well distributed around the Bay and improved to accommodate a broad range of water-oriented recreational activities for people of all races, cultures, ages and income levels. Periodic assessments of water-oriented recreational needs that forecast demand into the future and reflect changing recreational preferences should be made to ensure that sufficient, appropriate water-oriented recreational facilities are provided around the Bay. Because there is no practical estimate of the acreage needed on the shoreline of the Bay, waterfront parks should be provided wherever possible.	**Consistent.** The project would not preclude the implementation of this policy. The project would not affect any existing water-oriented recreational facilities and as described in Section 3.13, Station Planning, Land Use, and Development, after implementation of LU-MM#2: Relocate Lagoon Road to Avoid Priority Use Areas within BCDC's Jurisdiction, the project would not place any project features within a priority use area designated for "waterfront park, beach" uses, within the shoreline band. Thus, the project would not place any project features within areas that have been designated in the Bay Plan for recreational facilities and which are within the shoreline band. In addition, LU-MM#3 requires the implementation of a new bike/pedestrian path that would connect to and extend the Bay Trail. Thus, the project would increase recreational resources in the area.

Policy	Description of Consistency/ Inconsistency
▪ Policy 2. Waterfront land needed for parks and beaches to meet future needs should be reserved now, because delay may mean that needed shoreline land could otherwise be preempted for other uses. However, recreational facilities need not be built all at once; their development can proceed over time. Interim use of a waterfront park priority use area prior to its development as a park should be permitted, unless the use would prevent the site from being converted to park use or would involve investment in improvements that would preclude the future use of the site as a park.	**Consistent.** The project would not preclude the implementation of this policy. With implementation of LU-MM#2, the project would not place any project features within priority use area designated for "waterfront park, beach" uses.
▪ Policy 3. Recreational facilities, such as waterfront parks, trails, marinas, live-aboard boats, non-motorized small boat access, fishing piers, launching lanes, and beaches, should be encouraged and allowed by the Commission, provided they are located, improved and managed consistent with the following standards: a. General Recreational facilities should: 1. Be well distributed around the shores of the Bay to the extent consistent with the more specific criteria below. Any concentrations of facilities should be as close to major population centers as is feasible; 2. Not pre-empt land or water area needed for other priority uses, but efforts should be made to integrate recreation into such facilities to the extent that they are compatible; 3. Be feasible from an engineering viewpoint; and 4. Be consistent with the public access policies that address wildlife compatibility and disturbance. In addition: 5. Different types of compatible public and commercial recreation facilities should be clustered to the extent feasible to permit joint use of ancillary facilities and provide a greater range of choices for users. 6. Sites, features or facilities within designated waterfront parks that provide optimal conditions for specific water-oriented recreational uses should be preserved and, where appropriate, enhanced for those uses, consistent with natural and cultural resource preservation. 7. Access to marinas, launch ramps, beaches, fishing piers, and other recreational facilities should be clearly posted with signs and easily available from parking reserved for the public or from public streets or trails. 8. To reduce the human health risk posed by consumption of contaminated fish, projects that create or improve fishing access to the Bay at water-	**Consistent.** The project does not include waterfront parks, trails, marinas, live-aboard boats, nonmotorized small boat access, fishing piers, launching lanes, or beaches as a part of the project. Because the project would not place any project features within priority use areas designated for "waterfront park, beach" uses (after implementation of LU-MM#2), the project would not preclude the implementation of this policy. In addition, LU-MM#3 requires the implementation of a new bike/pedestrian path that would connect to and extend the Bay Trail. This path would increase access to the Bay.

Policy	Description of Consistency/ Inconsistency
oriented recreational facilities, such as fishing piers, beaches, and marinas, should include signage that informs the public of consumption advisories for the species of Bay fish that have been identified as having potentially unsafe levels of contaminants. 9. Complete segments of the Bay and Ridge Trails where appropriate, consistent with policy 4-a-6.	
▪ Policy 4. To assure optimum use of the Bay for recreation, the following facilities should be encouraged in waterfront parks and wildlife refuges. a. In waterfront parks. (1) Where possible, parks should provide some camping facilities accessible only by boat, and docking and picnic facilities for boaters. (2) To capitalize on the attractiveness of their bayfront location, parks should emphasize hiking, bicycling, riding trails, picnic facilities, swimming, environmental, historical and cultural education and interpretation, viewpoints, beaches, and fishing facilities. Recreational facilities that do not need a waterfront location, e.g., golf courses and playing fields, should generally be placed inland, but may be permitted in shoreline areas if they are part of a park complex that is primarily devoted to water-oriented uses, or are designed to provide for passive use and enjoyment of the Bay when not being used for sports. (3) Where shoreline open space includes areas used for hunting waterbirds, public areas for launching non-motorized small boats should be provided so long as they do not result in overuse of the hunting area. (4) Public launching facilities for a variety of boats and other water-oriented recreational craft, such as kayaks, canoes and sailboards, should be provided in waterfront parks where feasible. (5) Except as may be approved pursuant to recreation policy 4-b, limited commercial recreation facilities, such as small restaurants, should be permitted within waterfront parks provided they are clearly incidental to the park use, are in keeping with the basic character of the park, and do not obstruct public access to and enjoyment of the Bay. Limited commercial development may be appropriate (at the option of the park agency responsible) in all parks shown on the Plan maps except where there is a specific note to the contrary. (6) Trails that can be used as components of the San Francisco Bay Trail, the Bay Area Ridge Trail or links between them should be developed in waterfront parks. San Francisco Bay Trail segments should be located near the shoreline unless that alignment would have significant adverse effects on Bay resources; in this case, an alignment as near to the shore as possible, consistent with Bay resource protection, should be provided. Bay Area Ridge Trail segments should be developed in waterfront parks where the ridgeline is close to the Bay shoreline. (7) Bus stops, kiosks and other facilities to	**Consistent.** The project does not include waterfront parks as a part of the project. Because the project would not place any project features within priority use areas designated for "waterfront park, beach" uses (after implementation of LU-MM#2), the project would not preclude the implementation of this policy.

Policy	Description of Consistency/ Inconsistency
accommodate public transit should be provided in waterfront parks to the maximum extent feasible. Public parking should be provided in a manner that does not diminish the park-like character of the site. Traffic demand management strategies and alternative transportation systems should be developed where appropriate to minimize the need for large parking lots and to ensure parking for recreation uses is sufficient. (8) Interpretive information describing natural, historical and cultural resources should be provided in waterfront parks where feasible. (9) In waterfront parks that serve as gateways to wildlife refuges, interpretive materials and programs that inform visitors about the wildlife and habitat values present in the park and wildlife refuges should be provided. Instructional materials should include information about the potential for adverse impacts on wildlife, plant and habitat resources from certain activities. (10) The Commission may permit the placement of public utilities and services, such as underground sewer lines and power cables, in recreational facilities provided they would be unobtrusive, would not permanently disrupt use of the site for recreation, and would not detract from the visual character of the site.	
▪ Policy 5. Bay resources in waterfront parks and, where appropriate, wildlife refuges should be described with interpretive signs. Where feasible and appropriate, waterfront parks and wildlife refuges should provide diverse environmental education programs, facilities and community service opportunities, such as classrooms and interpretive and volunteer programs.	**Consistent.** The project does not include waterfront parks or wildlife refuges, as a part of the project. The project would not place any project features within priority use areas designated for "waterfront park, beach" uses (after implementation of LU-MM#2) or within any areas designated for wildlife refuges. Thus, the project would not preclude the implementation of this policy.

Policy	Description of Consistency/ Inconsistency
Public Access	
▪ Policy 1. A proposed fill project should increase public access to the Bay to the maximum extent feasible, in accordance with the policies for Public Access to the Bay.	**Consistent.** LU-MM#3 would ensure that the project provides for maximum feasible public access through the placement of a new bike/pedestrian path north of Brisbane Lagoon that would connect to and extend the Bay Trail.
▪ Policy 2. In addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline, whether it be for housing, industry, port, airport, public facility, wildlife area, or other use, except in cases where public access would be clearly inconsistent with the project because of public safety considerations or significant use conflicts, including unavoidable, significant adverse effects on Bay natural resources. In these cases, in lieu access at another location preferably near the project should be provided. If in lieu public access is required and cannot be provided near the project site, the required access should be located preferably near identified vulnerable or disadvantaged communities lacking well-maintained and convenient public access in order to foster more equitable public access around the Bay Area.	**Consistent**. As described under Public Access Policy 1, public access would be provided as a part of LU-MM#3.
▪ Policy 3. Public access to some natural areas should be provided to permit study and enjoyment of these areas. However, some wildlife are sensitive to human intrusion. For this reason, projects in such areas should be carefully evaluated in consultation with appropriate agencies to determine the appropriate location and type of access to be provided.	**Consistent**. The area where public access is proposed, per LU-MM#3, does not include areas with wildlife sensitive to human intrusion. Shoreline access improvements include a bike path/extension of the Bay Trail. These public access improvements will be constructed in previously developed and disturbed areas along Alanna Way, Thomas Mellon Circle, US 101, Beatty Avenue, and Lagoon Road. Given that these areas are already developed and that undeveloped areas are highly disturbed, any wildlife species present in these areas would already be adapted to human occpuany and degraded habitat conditions.

Policy	Description of Consistency/ Inconsistency
▪ Policy 4. Public access should be sited, designed and managed to prevent significant adverse effects on wildlife. To the extent necessary to understand the potential effects of public access on wildlife, information on the species and habitats of a proposed project site should be provided, and the likely human use of the access area analyzed. In determining the potential for significant adverse effects (such as impacts on endangered species, impacts on breeding and foraging areas, or fragmentation of wildlife corridors), site specific information provided by the project applicant, the best available scientific evidence, and expert advice should be used. In addition, the determination of significant adverse effects may also be considered within a regional context. Siting, design and management strategies should be employed to avoid or minimize adverse effects on wildlife, informed by the advisory principles in the Public Access Design Guidelines. If significant adverse effects cannot be avoided or reduced to a level below significance through siting, design and management strategies, then in lieu public access should be provided, consistent with the project and providing public access benefits equivalent to those that would have been achieved from on-site access. Where appropriate, effects of public access on wildlife should be monitored over time to determine whether revisions of management strategies are needed.	**Consistent.** As described under Public Access Policy 3, the bike path/extension of the Bay Trail would be sited in developed and disturbed areas, which would limit significant adverse impacts on wildlife. The project also includes IAMFs (Appendix 2-E of the EIR/EIS) and mitigation measures (Section 3.7.9, Mitigation Measures) which would avoid, minimize and compensate for any impacts on wildlife and their habitats that may be affected by the project.
▪ Policy 5. Public access that substantially changes the use or character of the site should be sited, designed, and managed based on meaningful community involvement to create public access that is inclusive and welcoming to all and embraces local multicultural and indigenous history and presence. In particular, vulnerable, disadvantaged, and/or underrepresented communities should be involved. If such previous outreach and engagement did not occur, further outreach and engagement should be conducted prior to Commission action.	**Consistent**. Per LU-MM#3, the Authority would build a new bike/pedestrian path that would connect to the San Francisco Bay Trail and provide public access to an area where public access does not currently exist. The area where the bike/pedestrian path would be implemented is primarily undeveloped, vacant areas near industrial uses. Thus, implementation of this new bike/pedestrian path would not result in a substantial change to the use or character of the site. Targeted outreach activities for minority and low-income residents and businesses within the project corridor have been conducted since 2016. The process of community outreach would continue through the design and construction phases of the project, including for the public access component of this project.
▪ Policy 6. Public access should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding.	**Consistent.** A detailed vulnerability assessment and adaptation plan would be prepared to identify adaptive management measures for near-term and long-term sea level rise impacts for any HSR facilities subject to coastal flooding inundation. The vulnerability assessment and adaptation plan would also consider the proposed bike/pedestrian path.

Policy	Description of Consistency/ Inconsistency
▪ Policy 7. Whenever public access to the Bay is provided as a condition of development, on fill or on the shoreline, the access should be permanently guaranteed. This should be done wherever appropriate by requiring dedication of fee title or easements at no cost to the public, in the same manner that streets, park sites, and school sites are dedicated to the public as part of the subdivision process in cities and counties. Any public access provided as a condition of development should either be required to remain viable in the event of future sea level rise or flooding, or equivalent access consistent with the project should be provided nearby.	**Consistent.** Per LU-MM#3, the Authority would build a new bike/pedestrian path that would connect to the San Francisco Bay Trail and provide public access to an area where public access does not currently exist. If BCDC determines through the permitting process that this mitigation measure is a condition of development, the Authority would permanently guarantee these proposed shoreline access improvements. A detailed vulnerability assessment and adaptation plan would be prepared to identify adaptive management measures for near-term and long-term sea level rise impacts for the entire project corridor. The vulnerability assessment and adaptation plan would also consider the proposed bike/pedestrian path.
▪ Policy 8. Public access improvements provided as a condition of any approval should be consistent with the project, the culture(s) of the local community, and the physical environment, including protection of Bay natural resources, such as aquatic life, wildlife and plant communities, and provide for the public's safety and convenience. The improvements should be designed and built to encourage diverse Bay-related activities and movement to and along the shoreline, should provide barrier free access for persons with disabilities, for people of all income levels, and for people of all cultures to the maximum feasible extent, should include an ongoing maintenance program, and should be identified with appropriate signs, including using appropriate languages or culturally-relevant icon-based signage.	**Consistent**. Per LU-MM#3, the Authority would build a new bike/pedestrian path that would connect to the San Francisco Bay Trail and provide public access to an area where public access does not currently exist. Targeted outreach activities for minority and low-income residents and businesses within the project corridor have been conducted since 2016. The process of community outreach would continue through the design and construction phases of the project, including for the public access component of this project. The new access would be open free for use by all. Americans with Disabilities Act design requirements would apply to assure accessibility for persons with disabilities. Signage would be considered during trail design.
▪ Policy 10. Access to and along the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available. Diverse and interesting public access experiences should be provided which would encourage users to remain in the designated access areas to avoid or minimize potential adverse effects on wildlife and their habitat.	**Consistent.** Per LU-MM#3, the Authority would build a new bike/pedestrian path near the waterfront. This path would connect to public thoroughfares, including Alana Way. Parking is located at the northern end of the proposed path, near Candlestick Park and parking is also located at the southern end of the proposed path, near Lagoon Road. The Bayshore Caltrain Station is also near the proposed path. When the bike/pedestrian path is designed, diverse and interesting public access experiences would be provided.
▪ Policy 11. Roads near the edge of the water should be designed as scenic parkways for slow-moving, principally recreational traffic. The roadway and right-of-way design should maintain and enhance visual access for the traveler, discourage through traffic, and provide for safe, separated, and improved physical access to and along the shore. Public transit use and connections to the shoreline should be encouraged where appropriate.	**Not applicable.** The project is not proposing any new roadways; rather, the roadway improvements that are proposed would be limited to modifications to existing roadways. The project would relocate Lagoon Road further away from Brisbane Lagoon with implementation of LU-MM#2. The project would enhance visual access to travelers and improve physical access to and along the shore after implementation of LU-MM#3, which would include the construction of a new bike/pedestrian path.

Policy	Description of Consistency/ Inconsistency
▪ Policy 12. Federal, state, regional, and local jurisdictions, special districts, and the Commission should cooperate to provide appropriately sited, designed and managed public access, especially to link the entire series of shoreline parks, regional trail systems (such as the San Francisco Bay Trail) and existing public access areas to the extent feasible without additional Bay filling and without significant adverse effects on Bay natural resources. State, regional, and local agencies that approve projects should assure that provisions for public access to and along the shoreline are included as conditions of approval and that the access is consistent with the Commission's requirements and guidelines.	**Consistent.** Per LU-MM#3, the Authority would build a new bike/pedestrian path that would connect to the San Francisco Bay Trail and would provide public access to an area where public access does not currently exist.
▪ Policy 13. The Public Access Design Guidelines should be used as a guide to siting and designing public access consistent with a proposed project. The Design Review Board should advise the Commission regarding the adequacy of the public access proposed. The Design Review Board should encourage diverse public access to meet the needs of a growing and diversifying population. Public access should be well distributed around the Bay and designed or improved to accommodate a broad range of activities for people of all races, cultures, ages, income levels, and abilities.	**Consistent.** Where new construction is proposed within BCDC's jurisdiction, including the new bike/pedestrian path per LU-MM#3, the project would be developed in accordance with the Public Access Design Guidelines.
Mitigation	
▪ Policy 1. Projects should be designed to avoid adverse environmental impacts to Bay natural resources such as to water surface area, volume, or circulation and to plants, fish, other aquatic organisms and wildlife habitat, subtidal areas, or tidal marshes or tidal flats. Whenever adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable. Finally, measures to compensate for unavoidable adverse impacts to the natural resources of the Bay should be required. Mitigation is not a substitute for meeting the other requirements of the McAteer-Petris Act.	**Consistent.** The Authority has developed IAMFs that are part of the project and are intended to avoid and minimize impacts on biological and aquatic resources in the project area. The Authority has also developed MMs to further reduce impacts on biological and aquatic resources from the project. Finally, the Authority would restore temporary impacts (BIO-MM#36 and BIO-MM#38) and would mitigate for permanent impacts (BIO-MM#35 and BIO-MM#37) on riparian habitat and aquatic resources.
▪ Policy 2. Individual compensatory mitigation projects should be sited and designed within a Baywide ecological context, as close to the impact site as practicable, to: (1) compensate for the adverse impacts; (2) ensure a high likelihood of long-term ecological success; and (3) support the improved health of the Bay ecological system. Determination of the suitability of proposed mitigation locations should be guided in part by the information provided in the Baylands Ecosystem Habitat Goals report.	**Consistent.** The CMP would be prepared for the project after surveys have been conducted to ground-truth the land cover mapping. The Authority would consider this policy when developing the CMP (BIO-MM#35 and BIO-MM#37). The Authority would provide BCDC with the opportunity to review the CMP.

Policy	Description of Consistency/ Inconsistency
▪ Policy 3. For major and appropriate minor projects that require compensatory mitigation, communities surrounding both the project and the compensatory mitigation site should be meaningfully involved in an equitable and culturally-relevant manner. In particular, vulnerable, disadvantaged, and/or underrepresented communities should be involved. This should include consultation with the community in the identification and prioritization of potential projects, and in the monitoring and programming of a mitigation site. If such previous outreach and engagement did not occur, further outreach and engagement should be conducted prior to Commission action.	**Consistent.** Targeted outreach activities for minority and low-income residents and businesses within the project corridor have been conducted since 2016. The process of community outreach would continue through the design and construction phases of the project, including for compensatory mitigation. Once compensatory mitigation sites are determined, the Authority would determine if additional consultation is required.
▪ Policy 4. When determining the appropriate location and design of compensatory mitigation, the Commission should also consider potential effects on benefits provided to humans from Bay natural resources, including economic (e.g., flood protection, erosion control) and social (e.g., aesthetic benefits, recreational opportunities) benefits and whether the distribution of such benefits is equitable.	**Consistent.** The CMP would be prepared for the project after surveys have been conducted to ground-truth the land cover mapping. The Authority would consider this policy when developing the CMP (BIO-MM#35 and BIO-MM#37). The Authority would provide BCDC with the opportunity to review the CMP.
▪ Policy 5. The amount and type of compensatory mitigation should be determined for each mitigation project based on a clearly identified rationale that includes an analysis of: the probability of success of the mitigation project; the expected time delay between the impact and the functioning of the mitigation site; and the type and quality of the ecological functions of the proposed mitigation site as compared to the impacted site.	**Consistent.** The CMP would be prepared for the project after surveys have been conducted to ground-truth the land cover mapping. The Authority would consider this policy when developing the CMP (BIO-MM#35 and BIO-MM#37). The Authority would provide BCDC with the opportunity to review the CMP.
▪ Policy 6. To increase the potential for the ecological success and long-term sustainability of compensatory mitigation projects, resource restoration should be selected over creation where practicable, and transition zones and buffers should be included in mitigation projects where feasible and appropriate. In addition, mitigation site selection should consider site specific factors that will increase the likelihood of long-term ecological success, such as existing hydrological conditions, soil type, adjacent land uses, and connections to other habitats.	**Consistent.** The CMP would be prepared for the project after surveys have been conducted to ground-truth the land cover mapping. The Authority would consider this policy when developing the CMP (BIO-MM#35 and BIO-MM#37). The Authority would provide BCDC with the opportunity to review the CMP.
▪ Policy 7. Mitigation should, to the extent practicable, be provided prior to, or concurrently with those parts of the project causing adverse impacts	**Consistent.** The CMP would be prepared for the project after surveys have been conducted to ground-truth the land cover mapping. The Authority would consider this policy when developing the CMP (BIO-MM#35 and BIO-MM#37). The Authority would provide BCDC with the opportunity to review the CMP.

Policy	Description of Consistency/ Inconsistency
▪ Policy 8. When compensatory mitigation is necessary, a mitigation program should be reviewed and approved by or on behalf of the Commission as part of the project. Where appropriate, the mitigation program should describe the proposed design, construction and management of mitigation areas and include: a. Clear mitigation project goals; b. Clear and measurable performance standards for evaluating the success of the mitigation project, based on measures of both composition and function, and including the use of reference sites; c. A monitoring plan designed to identify potential problems early and determine appropriate remedial actions. Monitoring and reporting should be of adequate frequency and duration to measure specific performance standards and to assure long-term success of the stated goals of the mitigation project; d. A contingency plan to ensure the success of the mitigation project, or provide means to ensure alternative appropriate measures are implemented if the identified mitigation cannot be modified to achieve success. The Commission may require financial assurances, such as performance bonds or letters of credit, to cover the cost of mitigation actions based on the nature, extent and duration of the impact and/or the risk of the mitigation plan not achieving the mitigation goals; and e. Provisions for the long-term maintenance, management and protection of the mitigation site, such as a conservation easement, cash endowment, and transfer of title.	**Consistent.** The CMP would be prepared for the project after surveys have been conducted to ground-truth the land cover mapping. The Authority would consider this policy when developing the CMP (BIO-MM#35 and BIO-MM#37). The Authority would provide BCDC with the opportunity to review the CMP.
▪ Policy 9. Mitigation programs should be coordinated with all affected local, state, and federal agencies having jurisdiction or mitigation expertise to ensure, to the maximum practicable extent, a single mitigation program that satisfies the policies of all the affected agencies.	**Consistent.** The Authority would coordinate the mitigation program with all applicable agencies.
▪ Policy 10. If more than one mitigation program is proposed, the Commission should consider the cost of the alternatives in determining the appropriate program, as well as equitably consider the priorities and concerns of surrounding communities.	**Consistent.** The Authority would consider this policy when developing the CMP.

Policy	Description of Consistency/ Inconsistency
▪ Policy 11. To encourage cost effective compensatory mitigation programs, especially to provide mitigation for small fill projects, the Commission may extend credit for certain fill removal and allow mitigation banking provided that any credit or resource bank is recognized pursuant to written agreement executed by the Commission. Mitigation bank agreements should include: (a) financial mechanisms to ensure success of the bank; (b) assignment of responsibility for the ecological success of the bank; (c) scientifically defensible methods for determining the timing and amount of credit withdrawals; and (d) provisions for long-term maintenance, management and protection of the bank site. Mitigation banking should only be considered when no mitigation is practicable on or proximate to the project site.	**Consistent.** The Authority would consider this policy when developing the CMP.
▪ Policy 12. The Commission may allow fee-based mitigation when other compensatory mitigation measures are infeasible. Fee-based mitigation agreements should include: (a) identification of a specific project that the fees will be used for within a specified time frame; (b) provisions for accurate tracking of the use of funds; (c) assignment of responsibility for the ecological success of the mitigation project; (d) determination of fair and adequate fee rates that account for all financial aspects of the mitigation project, including costs of securing sites, construction costs, maintenance costs, and administrative costs; (e) compensation for time lags between the adverse impact and the mitigation; and (f) provisions for long-term maintenance, management and protection of the mitigation site.	**Consistent.** The Authority would consider this policy when developing the CMP.
Appearance, Design, and Scenic Views	
▪ Policy 1. To enhance the visual quality of development around the Bay and to take maximum advantage of the attractive setting it provides, the shores of the Bay should be developed in accordance with the Public Access Design Guidelines.	**Consistent.** The project does not include shoreline development and is not in a high-quality visual setting. The rail portions of the project are in and along an active rail line and the project improvements would not change the visual quality of the rail corridor within BCDC jurisdictional areas. The LMF sites are in a former landfill and railyard adjacent to commercial and industrial uses and these areas are not part of the aesthetic values of shoreline views along San Francisco Bay or at Brisbane Lagoon. Visitacion Creek is inside a former landfill and is not publicly accessible. In addition, the views from Visitacion Creek are of the existing industrial areas of the Bay, including the nearby Morgan Brisbane Terminal, which stores and distributes aviation fuel to SFO, and the US 101 highway. Thus, Visitacion Creek does not provide scenic views. Where new public access (LU-MM#3) is proposed within BCDC's jurisdiction, the access would be developed in accordance with the Public Access Design Guidelines.

Policy	Description of Consistency/ Inconsistency
▪ Policy 2. All bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay. Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas, from the Bay itself, and from the opposite shore. To this end, planning of waterfront development should include participation by professionals who are knowledgeable of the Commission's concerns, such as landscape architects, urban designers, or architects, working in conjunction with engineers and professionals in other fields.	**Consistent.** The project does not include shoreline development and is not in a high-quality visual setting. The rail portions of the project are in and along an active rail line and the project improvements would not change the visual quality of the rail corridor within BCDC jurisdictional areas. The LMF sites are in a former landfill and railyard adjacent to commercial and industrial uses and these areas do not provide views of the shoreline along San Francisco Bay or at Brisbane Lagoon. Visitacion Creek is inside a former landfill and is not publicly accessible. In addition, the views from Visitacion Creek are of the existing industrial areas of the Bay, including the nearby Morgan Brisbane Terminal, which stores and distributes aviation fuel to SFO, and the US 101 highway. Thus, Visitacion Creek does not provide scenic views. Where new public access (LU-MM#3) is proposed within BCDC's jurisdiction, the access would be developed in accordance with the Public Access Design Guidelines.
▪ Policy 4. Structures and facilities that do not take advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline. In particular, parking areas should be located away from the shoreline. However, some small parking areas for fishing access and Bay viewing may be allowed in exposed locations.	**Consistent.** The project does not propose new facilities in visually sensitive areas along the Bay where it would change views of the Bay. No parking facilities are proposed within areas under BCDC's jurisdiction.
▪ Policy 7. Access routes to Bay crossings should be designed so as to orient the traveler to the Bay (as in the main approaches to the Golden Gate Bridge). Similar consideration should be given to the design of highway and mass transit routes paralleling the Bay (by providing frequent views ofthe Bay, if possible, so the traveler knows which way he or she is moving in relation to the Bay). Guardrails, fences, landscaping, and other structures related to such routes should be designed and located so as to maintain and to take advantage of Bay views. New or rebuilt roads in the hills above the Bay and in areas along the shores of the Bay should be constructed as scenic parkways in order to take full advantage of the commanding views of the Bay.	**Consistent.** The project does not include changes to orientations of existing rail or roadway alignments relative to views of the Bay. In addition, no landscaping or fencing is proposed that would block Bay views.
▪ Policy 8. Shoreline developments should be build in clusters, leaving open area around them to permit more frequent views of the Bay. Developments along the shores of tributary waterways should be Bay-related and should be designed to preserve and enhance views along the waterway, so as to provide maximum visual contact with the Bay.	**Not applicable.** The project would not affect views of the Bay. Where new public access (LU-MM#3) is proposed within BCDC's jurisdiction, the access would be developed in accordance with the Public Access Design Guidelines.

Policy	Description of Consistency/ Inconsistency
▪ Policy 9. "Unnatural" debris should be removed from sloughs, marshes, and mudflats that are retained as part of the ecological system. Sloughs, marshes, and mudflats should be restored to their former natural state if they have been despoiled by human activities.	**Consistent.** AVQ-IAMF#1: Aesthetic Options, and AVQ-IAMF#2: Aesthetic Review Process, would provide opportunities for BCDC input to shape design enhancements, such as debris removal from Visitacion Creek for Alternative A and debris removal from Guadalupe Valley Creek for both alternatives.
▪ Policy 10. Towers, bridges, or other structures near or over the Bay should be designed as landmarks that suggest the location of the waterfront when it is not visible, especially in flat areas. But such landmarks should be low enough to assure the continued visual dominance of the hills around the Bay.	**Not applicable.** No structures of this type are proposed in areas under BCDC jurisdiction.
▪ Policy 12. In order to achieve a high level of design quality, the Commission's Design Review Board, composed of design and planning professionals, should review, evaluate, and advise the Commission on the proposed design of developments that affect the appearance of the Bay in accordance with the Bay Plan findings and policies on Public Access; on Appearance, Design, and Scenic Views; and the Public Access Design Guidelines. City, county, regional, state, and federal agencies should be guided in their evaluation of bayfront projects by the above guidelines.	**Consistent.** AVQ-IAMF#1 and AVQ-IAMF#2 provide opportunities for BCDC input to shape design enhancements to minimize impacts on visual quality, particularly for proposed new access per LU-MM#3.
▪ Policy 14. Views of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments and landscaping between the view areas and the water. In this regard, particular attention should be given to all waterfront locations, areas below vista points, and areas along roads that provide good views of the Bay for travelers, particularly areas below roads coming over ridges and providing a "first view"of the Bay (shown in Bay Plan Map No. 8, Natural Resources of the Bay).	**Consistent.** No structures, landscaping, or fencing are proposed that would block Bay views.
Other Uses of the Bay and Shoreline	
▪ Policy 1. Shore areas not proposed to be reserved for a priority use should be used for any purpose (acceptable to the local government having jurisdiction) that uses the Bay as an asset and in no way affects the Bay adversely. This means any use that does not adversely affect enjoyment of the Bay and its shoreline by residents, employees, and visitors within the site area itself or within adjacent areas of the Bay or shoreline.	**Consistent**. Overall, the project would not adversely affect the enjoyment of the Bay and its shoreline. Although the project would introduce project features, such as overhead contact system poles, lead tracks, and features associated with the LMF into the shoreline areas, with LU-MM#3, the project would have the overall effect of increasing the potential enjoyment of the Bay and its shoreline. The project would remove portions of a roadway (Tunnel Avenue) that is currently within the shoreline area, which would allow for the greater enjoyment of the Bay and its shorelines. In addition, per LU-MM#3, the Authority would implement a new bicycle and pedestrian path that would connect to the Bay Trail. The project would overall enhance the ability for residents, employees, and visitors to enjoy the Bay and its shoreline. Thus, the project would be consistent with this policy.

Policy	Description of Consistency/ Inconsistency
Fills in Accord with the Bay Plan	
▪ Policy 1. Fills in Accord with Bay Plan. A proposed project should be approved if the filling is the minimum necessary to achieve its purpose, and if it meets one of the following three conditions: a. The filling is in accord with the Bay Plan policies as to the Bay-related purposes for which filling may be needed (i.e., ports, water-related industry, and water-related recreation) and is shown on the Bay Plan maps as likely to be needed; or b. The filling is in accord with Bay Plan policies as to purposes for which some fill may be needed if there is no other alternative (i.e., airports, roads, and utility routes); or c. The filling is in accord with the Bay Plan policies as to minor fills for improving shoreline appearance or public access.	**To be determined**. As part of the permitting process, BCDC will determine whether the project is consistent with this policy concerning fill of the Bay and tidally influenced waterways.
Public Trust	
▪ Policy 1. When the Commission takes any action affecting lands subject to the public trust, it should assure that the action is consistent with the public trust needs for the area and, in case of lands subject to legislative grants, should also assure that the terms of the grant are satisfied and the project is in furtherance of statewide purposes.	**Not applicable**. The project would not affect any known granted public trust lands or any lands under the jurisdiction of the State Lands Commission.

Authority = California High-Speed Rail Authority
BCDC = San Francisco Bay Conservation and Development Commission
BMP = best management practice
CBC = California Building Code
CDFW = California Department of Fish and Wildlife
CMP = compensatory mitigation plan
EIR = environmental impact report
EIS = environmental impact statement
FRA = Federal Railroad Administration
HSR = high-speed rail
IAMF = impact avoidance and minimization feature
LMF = light maintenance facility
NAVD = North American Vertical Datum
NMFS = National Marine Fisheries Service
SFO = San Francisco International Airport
US = U.S. Highway
USACE = U.S. Army Corps of Engineers
USEPA = U.S. Environmental Protection Agency
USFWS = U.S. Fish and Wildlife Service

REFERENCES

California High-Speed Rail Authority (Authority) and Federal Railroad Administration (FRA). 2005. *Final Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Proposed California High-Speed Train System*. August 2005. Sacramento, CA and Washington, DC.