SAN FRANCISCO BAY RESTORATION AUTHORITY

Staff Recommendation
April 22, 2022

TISCORNIA MARSH RESTORATION AND SEA LEVEL RISE ADAPTATION PROJECT:
FINAL DESIGN, PERMITTING, AND INITIAL CONSTRUCTION

Project No. RA-011
Project Manager: Linda Tong

RECOMMENDED ACTION: Authorization to disburse up to $3,082,000 to Marin Audubon Society to prepare permit applications, develop final designs, continue engaging community members, and begin construction for the restoration of Tiscornia Marsh adjacent to the Canal community in San Rafael, Marin County.

LOCATION: Tiscornia Marsh, City of San Rafael, Marin County; Measure AA Region: North Bay

MEASURE AA PROGRAM CATEGORY: Safe, Clean Water and Pollution Prevention Program; Vital Fish, Bird and Wildlife Habitat Program; Integrated Flood Protection Program; Shoreline Public Access Program.

EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Tiscornia Marsh Restoration and Sea Level Rise Adaptation Planning Project (June 7, 2019 Authority Staff Recommendation)

Exhibit 3: Project Designs and Photos

Exhibit 4: Project Support Letters

Exhibit 5: Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation Project Final Environmental Impact Report (Final EIR)

RESOLUTION AND FINDINGS

Staff recommends that the San Francisco Bay Restoration Authority adopt the following resolution and findings:

Resolution:

The San Francisco Bay Restoration Authority hereby authorizes the disbursement of an amount not to exceed three million eighty-two thousand dollars ($3,082,000) to Marin Audubon Society to prepare permit applications, develop final designs, continue engaging community members, and begin construction for the restoration of Tiscornia Marsh. Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Authority the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be employed in carrying out the project.
3. A plan for acknowledgement of Authority funding.
4. Evidence that all permits and approvals required to implement the project have been obtained.
5. Evidence that the grantee has entered into agreements sufficient to enable the grantee to implement, operate, and maintain the project.
6. Evidence that the grantee has entered into a project labor agreement consistent with San Francisco Bay Restoration Authority Resolution 22.

Findings:

Based on the accompanying staff recommendation and attached exhibits, the San Francisco Bay Restoration Authority hereby finds that:

1. The proposed authorization is consistent with The San Francisco Bay Restoration Authority Act, Gov. Code Sections 66700-66706.
2. The proposed authorization is consistent with The San Francisco Bay Clean Water, Pollution Prevention and Habitat Restoration Measure (Measure AA).
3. The Authority has independently reviewed and considered the *Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation Project Final Environmental Impact Report* (Final EIR), certified by the City of San Rafael on January 11, 2022 and attached to the accompanying staff recommendation as Exhibit 5.
4. The Final EIR identifies potentially significant effects of the Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project (Project) with respect to Air Quality, Biological Resources, Cultural Resources, and Transportation and Traffic. The Project as modified by the mitigation measures identified in the Final EIR avoids, reduces or mitigates the possible significant environmental effects to less than significant and there is no substantial evidence that the Project as modified will have a significant effect on the environment.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends that the Authority authorize a grant of up to $3,082,000 to Marin Audubon Society (MAS) to prepare permit applications, develop final designs, and continue engaging

community members for the Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project (the project). The grant will also provide funds toward the first two phases of project construction; MAS will need to raise additional funds before construction can begin. The project aims to address the extensive loss of tidal marsh at the mouth of the San Rafael Canal in Marin County (Exhibit 1) due to erosion, and to help reduce the flood risk for the adjacent Canal community through restoration of Tiscornia Marsh. The project will build on and implement the conceptual design work funded by the Authority on June 7, 2019 (Exhibit 2).

The project site consists of subtidal mudflats, tidal marsh and diked wetland, and a narrow band of transition habitat on levee slopes. Despite its relatively small size of approximately 24 acres, Tiscornia Marsh supports much wildlife, including the endangered California Ridgway's rail. MAS owns the 20-acre Tiscornia Marsh and levee segment behind it, and the City of San Rafael, an active partner and lead agency of the project, owns the remaining four acres of diked wetlands at the site and the surrounding levee segment. At current erosion rates, most of Tiscornia Marsh will be eroded by 2050, destroying the already-scarce habitat for endangered species and other wildlife if no action is taken. Once tidal marsh and open bay, the Canal Community is at a particularly high risk of flooding from even near-term sea-level rise, especially as the buffer of marsh continues to erode. Much of the Canal community lies below high tide elevations, requiring levees to protect it from flooding. Most of the existing shoreline levee has been raised and improved south to the Richmond Bridge, but the project area currently demonstrates a gap in flood protection. The existing levee is steep, narrow, and inconsistent in height. It is already vulnerable to the FEMA 100-year annual chance flood event. Its lack of a functional upland transition zone reduces both habitat functions and flood protection.

The project will restore tidal marsh habitat and construct coarse beach habitat, improve the adjacent levee and construct an ecotone transition zone, and open a diked marsh to tidal action (Exhibit 3). The planned marsh restoration will expand habitat for the endangered California Ridgway's rail, salt marsh harvest mouse, and other species, address overtopping and erosion from waves, and improve water quality. The coarse beach will protect the outboard tidal marsh from erosion. The entire levee within the project site will be raised to a uniform elevation (13 feet NAVD88) to provide a more consistent, increased level of flood protection. The levee section along the San Rafael Canal will be relocated landward to allow for restoring the diked marsh to tidal action. The Bay side of the new and improved levee segments will include a wide transition zone that will provide high tide refugia habitat for endangered species and other wildlife. The upgraded levee will benefit the community by improving protection from flooding as sea level rises, and by providing public access to the segment of Bay Trail that will be constructed along the top of the improved levee. The project will demonstrate nature-based techniques to restore habitat and protect the shoreline and adjacent communities from sea level rise, serving as a model for reusing dredged sediments to expand marshes in the Bay.

In 2016, MAS received funds to explore nature-based adaptation to sea level rise and climate change from a grant program hosted by the State Coastal Conservancy and Marin Community Foundation. That grant funded preparation of a conceptual design for restoring Tiscornia Marsh and supported initial outreach in the Canal community. In 2019, MAS received a grant from the Authority to advance the design, conduct a series of technical studies, and complete an environmental impact review. The recommended authorization is to complete the planning

process (which consists of preparing permit applications, developing final designs, and continuing to engage the Canal community members in learning about and providing input on the project) and to provide a portion of the funds needed for the first and second phases of construction. The first phase of construction involves constructing the coarse beach and installing temporary construction access so that the project will be better positioned to accept and contain dredged sediments for the marsh restoration when dredged material is available. The second phase of construction includes construction of a setback levee behind the diked marsh, raising of the levee segment adjacent to existing tidal marsh, and placement of dredged sediments for creation of tidal marsh habitat.

MAS will need to obtain additional funds to fully cover the first and second phases of construction before requesting bids from construction firms to conduct the work for both phases. MAS will also eventually need to find additional funds to complete a third and final phase of construction (which consists of finalizing the coarse beach construction, restoring the diked marsh, and surfacing the levee crest to create a segment of Bay Trail) and monitoring. The current plan for phasing of construction may vary depending on when and how additional funds are obtained, timing of receiving sediments from entities that are producing dredged material, and other factors.

The portion of the project proposed for funding consists of the main components below:

1) Regulatory Permitting – Coordinate with regulatory agencies through the Bay Restoration Regulatory Integration Team (BRRIT); prepare studies and documentation to support permit applications and approvals; prepare applications for regulatory and city permits; prepare a monitoring and adaptive management plan.
2) Final Design – Perform analyses to support final design; identify source of dredged material; prepare the 65%, 90%, and 100% complete design for the restoration project.
3) Community Outreach – Conduct additional public meetings and youth media outreach; develop new community Resilience Team.
4) Bid and Construction Management – Prepare bid package and contract documents; select and hire construction contractor; provide construction support and management for the first phase of construction.
5) First Phase of Construction – Construct the coarse beach that will protect the reconstructed outboard tidal marsh and install temporary construction access so the project site can accept and contain dredged sediments for the marsh restoration.
6) Second Phase of Construction – Construct setback levee behind the diked marsh, raise the levee segment adjacent to existing tidal marsh, and reconstruct the eroded marsh with imported dredged material.

With its long history advocating for wildlife and implementing multi-benefit marsh restoration projects, MAS is well suited to carry out the project. MAS's efforts have included restoring tidal marsh, enhancing seasonal wetland, and establishing transitional ecotone habitats, ranging from a few acres to more than 300 acres. MAS is an active participant in designing, environmental review, and permitting of its restoration projects, and hires engineers and biologists with extensive experience restoring marshes. Environmental Science Associates (ESA) staff have provided all the engineering designs, technical reports, and environmental review documents for this project, and ESA will continue as a subcontractor on this project through permitting and

construction for this phase. ESA staff includes environmental engineers, biologists, and planners with extensive experience working on wetland restoration projects for MAS and other clients.

The project has years of community support and involvement. The project's community-based organization partner, Multicultural Center of Marin (MCM), has been engaging residents over the past three years through public meetings, site visits, website development, and work with youth. A new MCM program is establishing a "Resilience Team" of community members trained by MCM consultants on how to educate, engage, and empower residents to participate in projects that impact them. The project also has the support of elected officials and Marin County staff (Exhibit 4). Dennis Rodoni, District Supervisor for the Canal community, has participated in project meetings, and City Council support is reflected in the inclusion of a program supporting the project in the recently adopted San Rafael General Plan 2040. Both state legislators, Senator Mike McGuire and Representative Marc Levine, as well as federal Congressman Jared Huffman, support the project. San Rafael Public Works staff has been involved in project planning and evaluation, and San Rafael Planning staff has overseen environmental review and participated in community meetings.

Site Description: Tiscornia Marsh is located on the south bank of the San Rafael Canal, in San Rafael's Canal community, the largest and most diverse disadvantaged community in Marin County. The project site consists of MAS's 20-acre site (remnant tidal marsh, mudflat) and segment of levee south of the tidal marsh, and the City of San Rafael's 4-acre site (diked marsh, small parcel to the west) and levee surrounding the diked marsh and Pickleweed Park. The eastern end of MAS's levee segment connects with the northern terminus of the Bay Trail. The western end of the City's levee segment connects with the northwest corner of Pickleweed Park.

Within the project area the levee has an uneven dirt surface with variable elevation (9 to 12 feet NAVD88). This condition increases the vulnerability of the Canal community to sea level rise. The marsh vegetation consists of native mid- to high-marsh plants: pickleweed, cordgrass, and salt grass. The marsh supports a well-developed channel system with overhangs that California Ridgway's rails use for protective cover. In past years, the endangered rails have been observed on multiple occasions by staff from the Invasive Spartina Project, ESA and the National Estuarine Research Reserve. American avocets, black-necked stilts, herons, and egrets forage in the marsh. During winter, the site provides habitat for migratory shorebirds that forage on the mudflat, for foraging and resting waterfowl, and for diving birds at high tides. Gulls use the shallow water in most seasons. Rafting diving ducks, primarily scaup and canvasback, depend on outboard waters when overwintering in the Bay. The marsh and its channels are also foraging and nursery habitat for native fish and stop-overs for young anadromous fish as they out-migrate from the Delta. The City's diked marsh is primarily vegetated with pickleweed and is at a compatible elevation to connect with the outboard marsh but currently has no tidal connection to the Bay.

PROJECT FINANCING

San Francisco Bay Restoration Authority	$3,082,000
Ocean Protection Council	$624,000
To Be Fundraised	$5,836,900

Project Total	**$9,542,900**

The Project Financing table shows the cost of the first and second phases of construction. MAS will need to obtain the funding required for both phases before requesting bids from firms to begin any construction. MAS and the City of San Rafael will provide in-kind volunteer and staff time totaling an estimated $130,000 for project management, document review, regulatory coordination, engineering and planning services, and some construction administration support for the project. The Ocean Protection Council has provided a grant to MAS, through their Proposition 1 Funds for Projects that Benefit Communities Entitled to Environmental Justice and Improve Water Quality, to support final design and permitting work. MAS will continue to explore other sources of funding, and there is the potential for additional Authority funding for the project in future years.

CONSISTENCY WITH AUTHORITY'S ENABLING LEGISLATION, THE SAN FRANCISCO BAY RESTORATION AUTHORITY ACT:

The project is consistent with Government Code Section 66704.5 of the Authority's enabling legislation, and therefore is eligible for grant funding from the Authority. Marin Audubon Society, a 501(3)(c) nonprofit organization, is an eligible grantee, as defined by Section 66704.5(a). The project is at the mouth of the San Rafael Canal along the San Francisco Bay Area shoreline, which is within the Authority's jurisdiction. The project involves planning and constructing the restoration and expansion of tidal wetlands; enhancement of a shoreline levee and creation of an ecotone transition zone; and improvement of public access through adding a segment of Bay Trail, making it an eligible project as defined in Section 66704.5(b). Funding this project is consistent with Section 66704.5(e), which allows the Authority to award grants for "all phases of planning, construction, monitoring, operation, and maintenance" of eligible projects.

CONSISTENCY WITH MEASURE AA PROGRAMS AND ACTIVITIES:

The project is consistent with the programs and activities of Measure AA, as outlined below:

The project would support the *Safe, Clean Water and Pollution Prevention Program*'s purpose of providing clean water for fish, birds, wildlife and people, through restoring wetlands that provide natural filters and remove pollution from the Bay's water.

The project would help implement the *Vital Fish, Bird and Wildlife Habitat Program*'s purpose of significantly improving wildlife habitat to support and increase vital populations of fish, birds, and other wildlife in and around the Bay because it would restore wetlands and shoreline habitats to benefit wildlife, including shorebirds, waterfowl and fish. The project would support this program's purpose by enhancing habitat in a shoreline park.

The project would be consistent with the *Integrated Flood Protection Program*'s purpose because it would provide nature-based flood protection through wetland and habitat restoration along the Bay's edge and at a creek outlet that flows to the Bay. The project would also help

implement this program by improving a flood risk management levee that is a necessary part of wetland restoration activities, to protect existing shoreline communities and infrastructure.

The project would support the *Shoreline Public Access Program*'s purpose of enhancing the quality of life of Bay Area residents through improved public access as part of and compatible with wildlife habitat restoration projects, by constructing a new segment of Bay Trail to increase public access along the shoreline.

CONSISTENCY WITH MEASURE AA PRIORITIZATION CRITERIA:

1. **Greatest positive impact.** Tiscornia Marsh is one of the few remaining marshes along the San Rafael Bayfront. The project will create new, high quality tidal marsh and high tide refugia habitat for wildlife, especially for two endangered species (California Ridgway's rail and salt marsh harvest mouse), migratory shorebirds, and other species that depend on the marsh. The project will also fill a major gap in flood protection for the Canal community, with 50,000 residents living at low-lying elevations. In current conditions, the levee at the project site will be one of the first areas to overtop and flood with rising tides. Improving the levee and marsh will help protect Marin County's largest underserved community and largest city from flooding. The project will demonstrate nature-based methods for sea level rise adaptation, which could serve as a model for other projects seeking to restore tidal marsh habitat, beneficially reuse sediments and stabilize shorelines. The project will also have positive impacts on the Canal community by engaging residents in the development of the project, improving public access along the Bay Trail, and incorporating interpretive signs that will inform the public about sea level rise and the benefits of the marsh.

2. **Greatest long-term impact.** The project will have significant long-term beneficial impacts on the Bay, wildlife, and people. The project will provide a complete marsh habitat (transition habitat, tidal marsh and intertidal mudflats) which will lead to increased numbers and diversity of birds, fish and other wildlife. The filtering and absorptive qualities of wetlands will increase with the conversion of the diked marsh to tidal marsh and as the new tidal marsh vegetation expands. Construction of the coarse beach will protect the restored outboard marsh from erosion, which is expected to intensify with sea level rise. The project can serve as a model for beneficial reuse of dredged sediments to rebuild and enhance marshes in the Bay, as a key sea level rise adaptation strategy. This could help inform future projects seeking to restore tidal marsh habitat, stabilize shorelines, sequester carbon, and beneficially reuse material dredged from nearby marinas or other local dredging projects to restore marsh. The project goals include designing the levee improvements to achieve protection for a 100-year flood until 2050-2070 using the Ocean Protection Council (2018) medium-high risk curves for sea level rise. In the future, the project's improved levee could be further modified to address climate variability and rising tides.

3. **Leveraging resources and partnerships.** The project will build on conceptual and preliminary designs completed through prior grants awarded by the Authority and the partnership between the State Coastal Conservancy and Marin Community Foundation, and MAS and their consultants will continue working with regulatory agencies through the BRRIT. The Ocean Protection Council will also contribute funds toward final design and

permitting tasks (see PROJECT FINANCING section above). MAS will strengthen ongoing partnerships with the City of San Rafael; Marin County Public Works through its BayWAVE and Clean Water programs; and Multicultural Center of Marin (MCM), a local organization that provides resources and opportunities for diverse immigrant communities to come together and create community-rooted solutions in Marin County. MAS is also in conversation with several other potential partners to increase community engagement and public access: Students and Teachers Restoring a Watershed; the San Francisco Bay Trail; the Estuary & Ocean Science Center and Smithsonian Environmental Research Center; and Conservation Corps North Bay.

4. **Economically disadvantaged communities.** The most immediate beneficiaries of this project will be the adjacent Canal community, which would be among the first to flood with overtopping of the levee adjacent to Tiscornia Marsh. The Canal population is diverse, with Latino, Asian, Pacific Islander, African American, and Middle Eastern, English speaking and non-English speaking residents. The Canal community has a median household income less than 60% of the California median household income and is considered a severely disadvantaged community. The Canal community also supports businesses and services, many of which are essential for residents with limited mobility. This project will protect the local streets and sidewalks from flooding, enabling the residents and businesses of the Canal community to continue thriving.

5. **Benefits to economy.** The Canal community is a vital part of San Rafael and Marin County's economy, supporting many local businesses and workers. Increasing flood protection of the area would benefit Canal community residents who are part of the regional workforce and Canal community workers who come from outside the community. If the Canal community floods, infrastructure, roads, drainage systems and other utilities are at risk. In addition, there are project activities that will contribute to employment and employability of members of the community. Trained participants in MCM's Resilience Team will be hired by MCM to engage residents on the project, with a focus on resilience to climate change, sea level rise, and ways to address potential flooding in their neighborhood. The project will also provide employment opportunities in designing and constructing the marsh and levee.

6. **Engage youth and young adults.** Through MAS's ongoing partnership with MCM, youth will continue to be engaged in the project, producing and broadcasting project-related videos and radio shows, posting on MCM's website and social media outlets, and participating in community meetings.

7. **Monitoring, maintenance, and stewardship.** A monitoring, maintenance, and stewardship plan will be developed during permitting and will include requirements of regulatory agencies. Monitoring will include biological resources (such as marsh and upland plants and endangered species) and physical processes (such as sediment deposition, marsh accretion, and channel dimensions and other components specific to this restoration project). The stability and effectiveness of the shoreline stabilization techniques (living seawall/jetty along the Canal, coarse beach along the marsh edge facing San Rafael Bay) and the upland transition zones at the foot of the improved levee will be monitored for stability and effectiveness. It is expected that the City of San Rafael will be responsible for maintenance

of the levee and MAS will maintain responsibility for the restored marsh. MAS intends to crowd-source data to photo-monitor the site while building a sense of community ownership of the restoration. MAS also intends to install a time-lapse station on the new levee walking path, allowing neighbors to use cellphone cameras to take photos from a post with a fixed viewpoint. This will allow the public to easily take and upload photographs to document changes in the marsh over time.

8. **Coastal Conservancy's San Francisco Bay Area Conservancy Program.** The project is consistent with the Conservancy's San Francisco Bay Area Conservancy Program's Criteria in the following way.
    a. The project is supported by adopted local and regional plans including: *San Rafael General Plan 2040, Climate Change Sea Level Rise San Rafael-White Paper, Marin County's BayWAVE Program, USFWS Recovery Plan for Tidal Marsh Ecosystems for Northern California, Comprehensive Conservation and Management Plan 2016, The Baylands and Climate Change: Baylands Ecosystem Habitat Goals Science Update 2016, San Francisco Bay Trail Guidelines,* and the *Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan).*
    b. The project serves a regional constituency. Construction of a trail segment on the levee improvement will expand the Bay Trail, which continues south to the Richmond-San Rafael Bridge. The Bay Trail serves the entire San Francisco Bay, connecting communities to parks and open spaces, and providing an alternative commute corridor. This proposed segment has the potential to directly serve the Canal community, an economically disadvantaged community adjacent to the project.
    c. The final design and permitting tasks of the project can be implemented in a timely way if funding is secured through the proposed authorization.
    d. The project provides opportunities for benefits that could be lost if the project is not quickly implemented. The project needs to occur before extreme weather, higher tides, and storm surges further erode the marsh and leave the Canal community vulnerable to flooding.
    e. The project includes matching funds from the Ocean Protection Council (see PROJECT FINANCING section above).

9. **San Francisco Bay Conservation and Development Commission's Coastal Management Program.** The project is consistent with multiple policies of BCDC's Management Program and Plan:
    a. Tidal Marshes and Tidal Flats, Policy 5: The project will restore former tidal marshes that have been diked from the Bay.
    b. Tidal Marshes and Tidal Flats, Policy 6: The project design will be based on analysis of fish and wildlife, sediment erosion and accretion, and resilience to sea level rise and climate change.
    c. Tidal Marshes and Tidal Flats, Policy 10: Minor amounts of fill may be authorized based on scientific ecological analysis and consultation with relevant state and federal agencies.
    d. Public Access, Policy 4: Public access will be sited, designed, and managed to prevent significant adverse effects on wildlife.

e. Public Access, Policy 14: Public access is being integrated early into the planning and design of a habitat restoration project.
f. Dredging, Policy 11: Detailed site-specific studies on the site's physical conditions, biology and various engineering aspects of the project are being conducted to support the beneficial reuse of dredged material.

10. **San Francisco Bay Joint Venture's Implementation Strategy.** The project is consistent with the Joint Venture's Implementation Strategy and has been included on the Joint Venture's project list as Tier 1 for years. The project has been significantly expanded since it was approved by the Joint Venture because of increased awareness of impacts of sea-level rise, advances made with prior grant funding, and opportunities that have arisen from MAS's partnership with the City of San Rafael and other entities.

COMPLIANCE WITH CEQA:

In order to comply with the California Environmental Quality Act (CEQA), the *Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation Project Final Environmental Impact Report* (Final EIR, Exhibit 5) was prepared by the City of San Rafael to evaluate the potential environmental impacts of the Tiscornia Marsh Habitat Restoration and Sea Level Rise Adaptation Project. The City of San Rafael certified the Final EIR, approved the project, and adopted the mitigation monitoring and report program (MMRP) within the EIR on January 11, 2022. The Final EIR identified several potentially significant impacts that could be reduced below the level of significance with appropriate mitigation measures.

Summary of Potentially Significant Impacts and Mitigation Measures:

Impacted Resource Area: Air Quality

Potential Impacts: The project could result in a net increase of an air pollutant, such as particulate matter resulting from dust-producing operations, for which the San Francisco Bay Area Air Basin pollution levels exceed the ambient air quality standards under applicable federal and state ambient air quality standards. The project could expose sensitive receptors to substantial pollutant concentrations.

Mitigation Measures: MAS's construction contractors will comply with the applicable Bay Area Air Quality Management District Basic Construction Mitigation Measures, such as wetting exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads), limiting vehicle speeds on unpaved roads to 15 mph, and shutting equipment off when not in use or reducing the maximum idling time to five minutes. MAS's construction contractors will use off-road diesel construction equipment compliant with EPA Tier 4 nonroad engine standards.

Impacted Resource Area: Biological Resources

Potential Impacts: Construction of the project could have a substantial effect on special status birds, common nesting migratory birds, or raptors in the study area. The project could have substantial adverse effects on salt marsh harvest mouse and salt marsh wandering shrew. Construction or operation of the project could have a substantial effect on special status plants. The project could have a substantial adverse effect, either directly or through habitat

modification, on marine species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration (NOAA).

Mitigation Measures: A qualified biologist will provide Worker Environmental Awareness Training (WEAT) to field management and construction personnel. WEAT will identify the types of sensitive resources located in the study area and the measures required to avoid impacts on these resources. To minimize or avoid the loss of California Ridgway's rail, construction activities adjacent to the tidal marsh areas (within 500 feet) will be avoided during the breeding season from February 1 through August 31. Ground disturbance to suitable salt marsh harvest mouse habitat will be avoided to the extent feasible, and access roads, haul routes, and staging areas within 50 feet of salt marsh harvest mouse habitat will be bordered by temporary exclusion fencing. Prior to the start of construction, a qualified biologist will conduct a properly timed special status plant survey for Marin knotweed, Suisun Marsh aster, Congested-headed hayfield tarplant, and Point Reyes bird's-beak. If special-status plant species are identified within the project work limits, then the biologist will establish an appropriate buffer area for each plant population to exclude activities that cause adverse impacts on the special-status plant species. Prior to the start of any in-water construction that would require pile driving, the City of San Rafael will prepare a NOAA-approved sound attenuation monitoring plan to protect fish and marine mammals, and the approved plan shall be implemented during construction.

Impacted Resource Area: Cultural Resources

Potential Impacts: The project could potentially cause an adverse change in the significance of an archaeological resource. The project could potentially disturb human remains, including those interred outside of formal cemeteries.

Mitigation Measures: Prior to authorization to proceed, a qualified archaeologist will conduct a training program for all construction and field workers involved in site disturbance. On-site personnel will attend a mandatory pre-project training that outlines the general archaeological sensitivity of the area and the procedures to follow in the event archaeological resources or human remains are inadvertently discovered. If potential human remains are encountered, all work will halt within 100 feet of the find and the City of San Rafael will be contacted by on-site construction crews. The City of San Rafael will contact the Marin County coroner to determine if the remains are Native American. If that is the case, the coroner will contact the Native American Heritage Commission to identify the person or persons believed to be the Most Likely Descendant. The Most Likely Descendent will make recommendations for the means of treating, with appropriate dignity, the human remains and any associated grave goods.

Impacted Resource Area: Transportation and Traffic

Potential Impacts: The project could potentially increase unsafe conditions for pedestrians and bicyclists during construction, due to the introduction of trucks turning in and out of the construction staging area.

Mitigation Measures: Prior to the issuance of construction permits, the construction contractor will prepare and submit a Construction Traffic Control Plan to the City of San Rafael Public Works Department for approval. The Construction Traffic Control Plan will address, at a minimum, the following issues: 1) Placement of temporary signing, lighting, and traffic control devices if required, such as appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic; 2) Provision of construction personnel at the driveway on Spinnaker Point Drive leading to the construction staging area to direct traffic, pedestrians, and bicyclists while trucks are turning into and out of the driveway; 3) Notification of all construction activities to San Rafael City Schools at least two months in advance, so that it may make proper accommodations for any possible limitations to access at Bahia Vista Elementary School. San Rafael City Schools will be notified of the timing, location, and duration of construction activities. The construction contractor will ensure that construction of the project does not inhibit vehicle, bicycle, pedestrian, and/or school bus service.

Conclusion

Staff has independently evaluated the EIR and MMRP and concurs that the mitigation measures incorporated into the project will reduce the project's potentially significant environmental impacts below the level of significance. Staff therefore recommends that the Authority find that the project as mitigated avoids, reduces, or mitigates the possible significant environmental effects to less than significant and that there is no substantial evidence that the project will have a significant effect on the environment.

Upon approval of the project, staff will file a Notice of Determination.