American Canyon Wetlands Restoration Plan

Project No. RA-018
Project Manager: Maggie Jenkins

RECOMMENDED ACTION: Authorization to disburse up to $450,000 to the City of American Canyon to conduct feasibility studies, form a Technical Advisory Committee, prepare a Wetlands Restoration Plan, and prepare a Monitoring Plan. The American Canyon Wetlands Restoration Plan will summarize opportunities for projects that will protect, restore, and enhance wetland and upland habitat along the City’s shoreline in Napa County. The feasibility studies will address strategies for flood protection and habitat restoration; opportunities for education, community engagement, and public access; strategies for managing wastewater overflow; and potential impacts of sea level rise to the project area.

LOCATION: City of American Canyon, Napa 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: Project Designs and Photographs
Exhibit 3: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the San Francisco Bay Restoration Authority adopt the following resolution pursuant to The San Francisco Bay Restoration Authority Act, Gov. Code Sections 66700-66706:

“The San Francisco Bay Restoration Authority hereby authorizes the disbursement of an amount not to exceed four hundred fifty thousand dollars ($450,000) to the City of American Canyon to conduct feasibility studies, form a Technical Advisory Committee, prepare a Wetlands Restoration Plan, and prepare a Monitoring Plan. The American Canyon Wetlands Restoration Plan will summarize opportunities for projects that will protect, restore, and enhance wetland and upland habitat along the City’s shoreline in Napa County. 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:
a. A detailed work program, schedule, and budget.

b. Names and qualifications of any contractors to be employed in carrying out the project.

c. A plan for acknowledgement of Authority funding.”

Staff further recommends that the Authority adopt the following findings:

“Based on the accompanying staff report 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).”

PROJECT SUMMARY:

Staff recommends that the Authority authorize a grant up to four hundred and fifty thousand dollars ($450,000) to the City of American Canyon to prepare a comprehensive Wetlands Restoration Plan (“Plan”), conduct feasibility studies, form a Technical Advisory Committee, and prepare a Monitoring Plan (collectively “the project”). The Plan will analyze opportunities for target projects to improve habitat, reduce flooding, reduce wastewater contamination risk, increase public access, and increase resiliency to sea level rise along the American Canyon shoreline. The project area consists of the North Slough, Lower Napa River wetlands, and upland habitats bordering the American Canyon community.

The City of American Canyon identified five main issues within the project area, including habitat degradation, flooding, wastewater contamination, limited public access, and susceptibility to rising seas. The wetlands surrounding the North Slough are divided by an eroding levee road and culvert system, which impedes the natural flow of water, fish and mammals. The stretch of levee road (Eucalyptus Drive) over the culverts has been decommissioned and now functions as a part of the San Francisco Bay Trail. Seasonal flooding of the Bay Trail at the levee road limits safe trail access and threatens nearby infrastructure located approximately 700 yards away. Alternative flood management strategies are needed to improve habitat and reduce flood risk. In the upland habitat within the southern region of the project area, the wastewater overflow pond sits adjacent to the Corporation Yard (Corp Yard), which was historically used for wastewater treatment. The wastewater overflow pond poses a contamination threat to the adjacent wetlands and uplands; and therefore, new strategies are needed to manage wastewater overflow for improved water quality.

Throughout the entire project area, there are limited education and recreation opportunities due to minimal public access to the water and wetlands. The Plan aims to evaluate opportunities to provide both education and recreation opportunities within the project area. Lastly, the project area and nearby homes and other infrastructure are threatened by projected sea level rise. Resilience strategies are needed to lessen the impacts on the habitats and structures along the shoreline. Development of the Plan is needed to help inform future restoration actions within the project area.
The project will include the following elements:

- **Technical Advisory Committee (TAC):** A Technical Advisory Committee will be formed to allow experts to provide insight on the proposed Plan and feasibility studies.

- **Feasibility Studies:** Three studies will be conducted to evaluate the feasibility of various improvements, which are described in detail below. Each study will identify possible project partners and funding sources for design, construction, and operation. The studies will also determine the potential benefits to habitat conditions from the proposed restoration and/or enhancement actions.
  
  - The North Slough Levee Flood Protection and Habitat Restoration Study will analyze potential solutions to improve habitat and reduce flooding. The study will evaluate the following: 1) removing existing culverts at the levee; 2) implementing nature-based flood protection strategies; and 3) altering the levee and culvert design to restore natural tidal flows (i.e. box culvert, open bottom culvert, or bridge). The analysis will inform the development of the Plan by identifying solutions to prevent flooding, reduce erosion, improve the levee site, and preserve tidal marsh.
  
  - The Corp Yard Wastewater Overflow Pond and Environmental Education Facilities Opportunities Study will consist of two main parts. The first part will evaluate potential solutions for reducing wastewater contamination risk, improving habitat, and increasing resiliency to sea level rise. This effort will include 1) identifying the risk of contamination to wetlands and uplands habitat from the wastewater overflow ponds; 2) assessing the value of restoring the wastewater overflow pond and portions of the Corp Yard to functioning wetland and upland habitat areas; 3) evaluating alternative options for wastewater overflow management; and 4) assessing future impacts of sea level rise to ensure sustainable project development. The second part of the study will identify opportunities for increased public access and education. The Corp Yard maintenance buildings will be evaluated as potential sites for an educational center and a public restroom facility.
  
  - The Kayak Launch Recreational Facility Study will determine the most suitable location for an inclusive, Americans with Disabilities Act (ADA)-accessible kayak launch to be included in the San Francisco Bay Area Water Trail in order to improve public access and recreational opportunities. Three sites are being considered for the kayak launch, including the Corp Yard Site, North Slough Levee, and Glass Beach. The site selection process will include an evaluation of the potential adverse effects on wildlife. The study will also identify opportunities for interpretive signage and public outreach events to improve education and community engagement.

- **Wetlands Restoration Plan:** A comprehensive Wetlands Restoration Plan will be developed to identify potential projects that may be implemented to help improve habitat, reduce flooding, reduce wastewater contamination risk, increase public access, and increase resiliency to sea level rise along the American Canyon shoreline. The plan will incorporate results from the three feasibility studies and feedback from the community and Technical Advisory Committee (TAC).

- **Monitoring Plan:** The Monitoring Plan will identify appropriate monitoring strategies for each project identified in the Plan. The plan will outline recommended evaluation
methods and suggest baseline and post-project measures. The California Rapid Assessment Method (CRAM) will be utilized to generate baseline reports and project-specific guidance will be developed to further evaluate wetlands and riparian habitats. The Monitoring Plan will incorporate feedback from the TAC and rely on guidance from EPA’s National Wetlands Monitoring Workgroup’s published resources. Where appropriate, data will be made available to the public through online information resources, such as EcoAtlas (https://www.ecoatlas.org/).

The City of American Canyon’s project team and partners are well qualified to carry out the development of the Plan. A core team of four City staff will support the Plan development, including the Parks and Open Space Project Coordinator, Outdoor Recreation and Environmental Coordinator, Environmental Services Manager, and the Director of Parks. The City’s project team has extensive experience in coastal resource conservation, environmental permitting and monitoring, and public engagement. The City has successfully completed multiple grant-funded projects and has the capacity to satisfy grant requirements. Past projects have included public access, education, recreation, and restoration components. The City contributed to the development of the Newell Open Space Preserve Management Plan and received grant funding from the California State Parks’ Habitat Conservation Fund to enhance and protect the Newell Open Space Preserve. As a part of the first phase of the Clarke Ranch Master Plan, the City acquired grant funds to support the American Canyon’s Wetlands Edge Park Environmental Education project.

The City will draw on input from local experts in the TAC who will help to guide the development of the proposed Plan and its feasibility studies. The TAC will be comprised of six supporting agencies, including American Canyon Community and Parks Foundation (ACCPF), California Department of Fish and Wildlife (CDFW), Napa County Flood Control and Water Conservation District, Napa County Regional Park and Open Space District, Napa County Resource Conservation District (RCD), and the American Canyon Open Space Advisory Committee. Collectively, these organizations have expertise in wetland biology and ecology, flood management, biological monitoring, watershed management, and outdoor education and recreation. The City is dedicated to finding a qualified consultant to develop the plan and will utilize the TAC’s expertise to select a qualified consultant.

The project has broad public support and will incorporate community input throughout the planning process. The City has received six letters of support from local agencies and has commitment from several agencies to serve on the TAC. In particular, the proposed kayak launch and wetland restoration activities are well supported. Citizens of American Canyon identified a kayak launch as the most needed recreational item in the 2015 recreational needs assessment and identified wetlands restoration as a priority in the 2017 Clarke Ranch Community Park Master Plan. The City of American Canyon plans to actively seek community input through outreach events and public meetings. The TAC and City staff will host at least four public meetings and will accommodate diverse groups by hosting meetings at alternative times (nights, weekends) and sites (online and at title 1 schools, cultural and community gatherings, and youth sporting events when possible). The resulting Plan will benefit the community by providing strategies for improved flood management, water quality, and public access.

The project incorporates several proposed public access components that connect to the Bay Trail and Water Trail. The Kayak Launch Recreational Facility Study and Corp Yard:
Wastewater Overflow Pond & Environmental Education Facilities Opportunities Study both focus on developing strategies for improved public access. There are currently only two Water Trail access points within Napa County, both of which are north of the project site. The proposed recreational kayak launch would provide an additional trailhead on the Water Trail. In addition, the Corp Yard: Wastewater Overflow Pond & Environmental Education Facilities Opportunities Study will investigate further opportunities for education and public access at the Corp Yard Site, which is directly adjacent to the Bay Trail along Wetlands Edge road.

**Site Description:**

The project area encompasses 150 acres within the Napa River watershed and is bordered to the east by the City of American Canyon and to the west by the Napa-Sonoma Marshes Wildlife Area and the Napa River. The project area consists of diked baylands north of the levee road (Eucalyptus Drive) and mudflats and tidal marsh south of the levee road, with a shallow channel running through the slough. A seasonal tributary, originating in the hills east of American Canyon, feeds into the North Slough. Just north of Highway 29 and Napa Junction Road, the North Slough runs westerly along vineyards and warehouses before turning south, flowing through the culvert system under the levee road (Eucalyptus Drive). It then continues through the Lower Napa River wetlands, open waters of the Napa River, and out towards San Pablo Bay. These wetlands are tidally influenced by the Napa River, and experience an approximately 5 ft daily tidal exchange. The wetlands transition to upland habitat along the eastern edge of planning area.

The North Slough wetlands provide diverse food resources for migratory birds along the Pacific Flyway, and provide habitat for the endangered salt marsh harvest mouse. They also provide habitat for a myriad of other birds, mammals, reptiles, and insects, including the North American beaver, the North American river otter, garter snake, western fence lizard, great blue heron, least sandpiper, and monarch butterfly, among others. Although the wetland habitat is functioning, portions of the upland habitat are degraded, such as the Corp Yard site.

The feasibility studies will involve the wetlands and uplands areas along the North Slough in the Lower Napa River wetlands, including the North Slough levee and Corp Yard site. At the northern end of the project site, the Bay Trail follows the levee road (Eucalyptus drive), which divides the North Slough wetlands. A pipe culvert system allows water to pass through several medium-sized pipes (approximately 24-36 inches in diameter) underneath the levee road. South of the levee road, the Bay Trail runs parallel to Wetlands Edge Road along the eastern edge of the project area. At the southern end of the project site, the Corp Yard sits directly adjacent to the Bay Trail within the upland habitat. The Corp Yard contains several maintenance buildings and parking areas. There is a gravel access road that leads to the North Slough channel. The wastewater overflow ponds are situated in the wetland habitat directly adjacent to the Corp Yard. The project area is owned in part by the City of American Canyon and in part by CDFW.

**PROJECT FINANCING**

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The City of American Canyon will provide in-kind staff time, totaling an estimated $43,000 to conduct project management activities.

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

The proposed 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. The project location is within the Authority’s jurisdiction, as defined by Government Code Section 66704.5(a). The project area, which includes wetlands and uplands adjacent to the City of American Canyon in Napa County, is within a shoreline parcel in the San Francisco Bay area and is outside of the Delta primary zone. The City of American Canyon meets the grantee eligibility criteria defined in Government Code Section 66704.5(a). Consistent with Government Code Section 66704.5(b), the project involves planning for the restoration of tidal wetlands and managed ponds; enhancement of a shoreline levee; and improvement of public access and recreation by adding a trailhead on the San Francisco Bay Area Water Trail and expanding educational opportunities. Funding this planning 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 proposed 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 developing wastewater overflow management strategies and planning for the restoration of 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. The proposed feasibility studies address the need for providing expanded and improved habitat for fish, birds and mammals, and for restoring wetlands and other shoreline habitats to benefit wildlife. The North Slough Levee Flood Protection and Habitat Restoration Study will investigate reconfiguration of the North Slough levee to reduce impediment of fish, birds, and mammals. In addition, the Corp Yard: Wastewater Overflow Pond Study will evaluate the potential expansion of upland and wetland areas into the historic wastewater overflow pond and Corp Yard site.

The project is consistent with the goals of the Integrated Flood Protection Program to protect communities from coastal flooding. The North Slough Levee Flood Protection and Habitat Restoration Study will investigate how to best enhance the existing flood protection levee and will develop strategies for improving nature-based flood protection.

The Shoreline Public Access Program’s purpose is to enhance the quality of life of Bay Area residents, including those with disabilities, through safer and improved public access, as part of
and compatible with wildlife habitat restoration projects in and around the Bay. The project would support implementation of this program by planning the addition of an all-access kayak launch, which would function as a new trailhead on the Water Trail. The feasibility studies will also evaluate the Corp Yard site for education and public access opportunities. In addition, the project aims to identify locations for interpretative signage and locations for shoreline clean-up outreach events.

CONSISTENCY WITH MEASURE AA PRIORITIZATION CRITERIA:

1. **Greatest positive impact.** The project’s feasibility studies will result in a Wetlands Restoration Plan that will contribute to enhancing the Napa River watershed. The goal of the feasibility studies is to identify projects that will improve wildlife habitat and provide clean water and multiple benefits to Bay Area residents including flood protection and opportunities for public access, recreation, and outdoor education. The Corp Yard: Wastewater Overflow Pond Study will identify solutions to reduce risk of wastewater contamination and improve water quality. This will have cascading benefits to downstream areas, as water flows from the North Slough through wetlands into the Napa River and San Pablo Bay. In addition, the feasibility studies will contribute to enhanced public access to the Napa River and wetlands by analyzing opportunities for an ADA-accessible kayak launch, education center at the Corp Yard site, interpretive signage, and outreach events. In particular, the proposed kayak launch would provide recreational opportunities beyond the project site itself, by creating an additional trailhead on the Water Trail.

2. **Greatest long-term impact.** The City is considering the long-term sustainability of the planned projects. The Corp Yard: Wastewater Overflow Pond & Environmental Education Facilities Opportunities Study will investigate sea level rise impacts to the Corp Yard project area and will ensure that resiliency and sustainability are factored into consideration for proposed projects.

3. **Leveraging resources and partnerships.** The project will involve coordination and input from the following agencies: American Canyon Community and Parks Foundation, California Department of Fish and Wildlife, Napa County Flood Control and Water Conservation District, Napa County Regional Park and Open Space District, Napa County Resource Conservation District, and the American Canyon Open Space Advisory Committee. Members from the agencies listed above will serve on the Technical Advisory Committee to provide expertise on feasibility studies and advice on effective community engagement.

4. **Economically disadvantaged communities.** The development of the Wetlands Restoration Plan would benefit an economically disadvantaged community in the City of American Canyon. The area directly adjacent to the wetlands and Bay Trail, bordered to the north by Rio Del Mar and to the south by Benton Way, is designated as a low-income Community Block Group based on the 2017 SFBRA 80% Median Income Map. This community will benefit from plans for flood protection, sea-level rise resilience, and increased public access, and will be engaged in the planning process through a series of community meetings. The
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project team plans to offer free access for individuals and school groups to the proposed kayak launch site.

5. **Benefits to economy.** Reducing flooding risk provides an economic benefit, as flooding can threaten local communities and infrastructure. Therefore, investing in flood management and sea level rise resilience planning can yield long-term economic benefits. The Plan will incorporate flood protection and sea level rise resilience planning through two of its feasibility studies. In addition, the kayak launch is expected to generate revenue directly for the City by collecting fees from organized tourist groups. There will be no fee collected for individuals utilizing the kayak launch.

6. **Engage youth and young adults.** Two of the feasibility studies will analyze opportunities for education, interpretation and outreach. The project team will be seeking input from several organizations to facilitate involvement of youth and young adults. They will consult with the American Canyon Community and Parks Foundation, The Napa County Resource Conservation District, the Napa County Flood Control and Water Conservation District, and the Napa County Regional Park and Open Space District. These partner organizations have experience engaging with youth and teaching natural resource protection skills.

7. **Monitoring, maintenance, and stewardship.** The project team will develop a detailed Monitoring Plan that outlines recommended evaluation methods and suggested baseline and post-project measures for each proposed project. Funding sources and project partners will be identified as a part of each feasibility study. The California Rapid Assessment Method (CRAM) will be combined with project-specific monitoring guidance for wetlands and riparian habitats. The project team will seek input on monitoring operations from the TAC and rely on guidance from the EPA’s National Wetlands Monitoring Group. In addition, they will seek guidance from the TAC on developing community stewardship through education and outreach events.

8. **Coastal Conservancy’s San Francisco Bay Area Conservancy Program.**
   b. The proposed project serves a regional constituency. The results of the feasibility studies will inform future implementation phases that will have benefits beyond the immediate project site. One major focus of the plan is improving public access. The Bay Trail serves the entire San Francisco Bay, connecting communities to open spaces and outdoor education opportunities. Visitors will benefit from proposed education and recreation opportunities located directly adjacent to the Bay Trail at the Corp Yard site and kayak launch. In addition, the water flowing through the project site is connected to the lower reaches of the Napa River and feeds into San Pablo Bay. Therefore, identifying solutions to reduce wastewater contamination risk and improve water quality at the project site will also benefit constituents in San Pablo Bay.
The proposed project can be implemented in a timely way. The project can begin as soon as funding is secured through the propose authorization and is projected to be completed by 2022.

The proposed project provides opportunities for benefits that could be lost if the project is not quickly implemented. The Plan will address several urgent issues including flooding, habitat degradation, water contamination, limited public access, and sea level rise.

9. San Francisco Bay Conservation and Development Commission’s Coastal Management Program. The feasibility studies address several policies of BCDC’s San Francisco Bay Plan, part of its Coastal Management Program:

- Tidal Marshes and Tidal Flats Policy 5: The Plan will recommend a mechanism to restore natural tidal flows at the North Slough levee, preserving tidal marsh;
- Tidal Marshes and Tidal Flats Policy 6: The project will include the development of a monitoring program with project-specific monitoring recommendations. The Wetlands Restoration Plan will be based on analysis of tidal flows, localized sediment erosion, and resilience to sea level rise and climate change;
- Public Access Policy 3: The project will consult with appropriate agencies as a part of the TAC involvement to determine the appropriate location for public access;
- Public Access Policy 4: Public access will be sited, designed and managed to prevent significant adverse effects on wildlife;
- Public Access Policy 5: Project plans include outreach to a diverse group of community members and specify plans to create inclusive public access;
- Environmental Justice and Social Equity Policy 3: Equitable community outreach and engagement will be conducted;
- Public Access Policy 6: Public access at the Corp Yard site will be sited, designed, and managed to avoid significant adverse impacts from sea level rise and shoreline flooding.
- Public Access Policy 8: The public access improvements will be designed to encourage diverse Bay-related activities and will provide barrier free access for persons with disabilities;
- Public Access Policy 14: Public access is being integrated early into the planning and design of a habitat restoration project;
- Climate Change Policy 4: The project will give special consideration for preservation and habitat enhancement to areas vulnerable to future flooding;
- Climate Change Policy 5: The project will incorporate sea level rise adaptation approaches where feasible and appropriate for the Corp Yard site;
- Recreation Policy 1: The project will incorporate plans for an accessible water-oriented recreation opportunity as a part of the Kayak Launch Recreational Facility Study.

10. San Francisco Bay Joint Venture’s Implementation Strategy.
The proposed project is not currently on the Joint Venture’s list, but the project is consistent with the Joint Venture’s Implementation Strategy. The resulting Wetlands Restoration Plan will contribute to the Joint Venture’s goal of protecting, restoring and enhancing wetlands and
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associated uplands. For the North Bay Subregion, which includes Napa County, the Joint Venture aims to restore 15,000 acres of bay habitats and enhance 13,000 acres of bay habitats. Specifically in Napa County, where the project is located, the Joint Venture aims to ensure maximum protection of important habitats as a part of the North Bay ecosystem. Through three feasibility studies, the project will develop a Plan to guide the restoration of wetlands and uplands habitat. Lastly, the Implementation Strategy emphasizes the need to control pollutants to improve water quality, which will be directly addressed by the Corp Yard: Wastewater Overflow Pond feasibility study.

COMPLIANCE WITH CEQA:

The proposed project is statutorily exempt from the requirement to prepare an environmental document under the California Environmental Quality Act and categorically exempt from CEQA under 14 Cal. Code of Regulations Sections 15262 and 15306, as it only involves preparation of feasibility and planning studies for possible future actions that have not yet been approved, adopted or funded, and basic data collection, research and resource evaluation activities that will not result in serious or major disturbance to an environmental resource. The planning studies will consider environmental factors. Staff will file a Notice of Exemption upon approval of the proposed project.