Santa Clara Valley Water District

File No.: 21-0500

Agenda Date: 4/27/2021
Item No.: *3.9.

BOARD AGENDA MEMORANDUM

SUBJECT:
Adopt a Resolution Adopting the Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, and Approve the Palo Alto Flood Basin Tide Gate Structure Replacement Project, Project No. 10394001 (Palo Alto) (District 7). (Previously Listed as Item 6.2)

RECOMMENDATION:

A. Consider the environmental effects of the Palo Alto Flood Basin Tide Gate Structure Replacement Project (Project) as discussed in the Final Mitigated Negative Declaration;
B. Adopt the Resolution ADOPTING THE FINAL MITIGATED NEGATIVE DECLARATION AND THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE PALO ALTO FLOOD BASIN TIDE GATE STRUCTURE REPLACEMENT PROJECT; and
C. Approve the Project.

SUMMARY:
Background and Project Description

The levees forming the Palo Alto Flood Basin (Flood Basin) were built by the City of Palo Alto (City) in the 1940s and the associated tide gate structure (Structure) was constructed in 1957 by the former Santa Clara County Flood Control and Water Conservation District (now Santa Clara Valley Water District, also known as Valley Water), Santa Clara County and the City. The Structure is located along the Bay shoreline in the City, east of the Palo Alto Municipal Airport and Palo Alto Baylands Nature Preserve. The floodwaters stored in the Flood Basin are released to the Bay through eight cells with 16 tide gates (which includes one motorized sluice gate) that comprise the overall tide gate structure. The purpose of the tide gates is to regulate flows through the Flood Basin such that when the water surface elevation in the basin is higher than the tidal elevation of the Bay, the tidal flap gates are pushed open by water pressure and discharge water from the Flood Basin to the Bay. When the water surface elevation in the Flood Basin is lower than the Bay, the flap gates are held shut by water pressure from the Bay, to prevent full tidal inundation.

The Structure has been regularly inspected and maintained by Valley Water. In 2011, Valley Water discovered that water was flowing beneath the Structure, undermining the function of the tide gates and potentially its structural stability. In 2012, Valley Water completed emergency repairs to stop seepage flow beneath the Structure. As part of that effort, staff prepared a post construction report (as required by the United States Army Corps of Engineers' Emergency Permit) which detailed the

emergency work and recommended replacement of the Structure.

In 2014, Valley Water retained the services of Mark Thomas & Company (MT) to perform structural inspections and prepare an assessment report for the Structure. The report concluded that the Structure was generally in fair condition and recommended minor structural repairs.

In 2017, Valley Water retained a construction contractor to perform minor repairs. The work was complicated due to cracks found in the bottom slab and inability to dewater for the repair work, which resulted in the contract being terminated without completing the work. Subsequently, a structural assessment was performed by MT in October 2017 which concluded that the structure would be functional for a couple more years and recommended the Structure be replaced.

In 2018, after project objectives were changed to replace (rather than repair) the Structure, a new team was assigned to the Palo Alto Flood Basin Tide Gate Structure Replacement Project (Project) to commence planning and design of the new Structure. The new Project team also prepared an Emergency Action Plan in coordination with the City of Palo Alto in 2019 to provide guidance for potential flooding emergencies in the interim. MT was engaged to perform additional structural assessments in January 2020 and January 2021, and both assessments concluded that the Structure would still be good for another couple of years. Annual assessments will be performed until the new Structure is constructed and fully functional.

The Project objectives include the following:

- Prevent failure of the existing Structure, which would result in increased risk of coastal and fluvial flooding;
- Maintain or improve the level of flood protection for Matadero, Adobe, and Barron Creeks, including during Project construction; and
- Upsize the Structure to function with two feet of future sea-level rise.

The Project would involve construction of a new 132-foot-long tide gate structure slightly inboard (upstream) and southeast of the existing 113-foot-long deteriorating Structure, removal of the existing Structure and levee, and construction of a new levee that ties into the new tide gate structure. The Project would be divided in to two phases and constructed in four seasons. The existing Structure would continue to function until the new structure is completed by the end of second phase. Phase 1 would involve installation of the first dewatering system; construction of the new tide gate structure and east levee transition; and removal of the existing levee in front of the new structure. Phase 2 would involve installation of the second dewatering system; construction of the west levee transition; and removal of the existing Structure. However, prior to initiation of Phase 1, the existing access road would be resurfaced to allow for adequate equipment access.

Environmental Review

Pursuant to CEQA, Valley Water, as the lead agency for the Project, prepared a Final Mitigated

Negative Declaration (MND), which can be accessed through the link provided as Attachment 1 for the Board's consideration prior to approving the Project. The Draft MND was circulated for public review from September 14, 2020 to October 15, 2020. Valley Water received comments from several agencies and individuals.

Valley Water staff considered the public comments and included responses to the comments in Appendix H of the Final MND and made edits as appropriate in the Final MND to incorporate the responses to comments. The information added to the Final MND merely clarifies, amplifies, or makes insignificant modifications to the draft MND, and thus no recirculation of the MND is required pursuant to Section 15073.5 of the CEQA Guidelines.

Summary of Environmental Impacts

As discussed in the attached Final MND, the Project would result in no impacts or less than significant impacts in all resource areas except biological resources.

Potentially significant impacts on biological resources (BIO) described in the MND include: habitat modification and direct harm from construction on special status species including rare plants, California Ridgway's rail, California black rail, burrowing owl, salt marsh harvest mouse, salt marsh wandering shrew, Central California Coast steelhead, Central Valley fall run Chinook salmon, green sturgeon, white sturgeon, Pacific lamprey and longfin smelt; and permanent loss of tidal wetland habitat from tide gate structure relocation. Mitigation measures BIO-1 through BIO-8 would reduce potential impacts on special status species to a less than significant level by requiring pre-construction surveys for special status species, monitoring construction activities and implementing protective measures (if needed), establishing environmentally sensitive area fencing around habitats not identified to be impacted, installing raptor perching deterrents, and conducting fish exclusion and relocation during dewatering. Mitigation measure BIO-9 would reduce impacts on tidal wetland habitat to a less than significant level by requiring compensation for any permanent impacts through purchase of wetland mitigation bank credits. With the implementation of these mitigation measures, the final MND concludes that the Project's potentially significant impacts on biological resources would be reduced to a less than significant level. The mitigation measures are included in the Mitigation and Monitoring Program (MMRP) (Appendix G of the Final MND).

Next Steps

If the Board approves the recommendations, staff will continue to complete the Project design and obtain environmental permits necessary for Project implementation. The Board will be requested to adopt the plans and specifications and authorize advertisement for bids for construction in a future Board meeting. The typical Project Delivery Process Chart is provided in Attachment 3 for reference.

FINANCIAL IMPACT:
The Project is included in the Board-adopted Draft Five-Year 2022-26 Capital Improvement Program (CIP) and the Board-adopted FY 2020-21 Budget. The current total Project cost estimate for

planning, design and construction is $39 million. This Project is funded by the Watersheds and Stream Stewardship Fund (Fund 12). The Project team is currently discussing with City of Palo Alto staff, the possibility of the City reimbursing Valley Water for the motor-operated sluice gate and trail surface improvements which benefit the City. In addition, the Project team is in discussions with the City of Mountain View for possible cost-share based on the benefits to the Coast Casey pump station outfall due to the proposed tide gate structure improvements including the accommodation of sea level rise within the flood basin.

CEQA:
Valley Water is the lead agency under the CEQA for the Project. A Final MND has been prepared for this Project and is included for Board consideration and adoption before Project approval.

ATTACHMENTS:
Attachment 1: Final MND
Attachment 2: Resolution
Attachment 3: Project Delivery Process Chart
*Handout 3.9-A: Anderson

UNCLASSIFIED MANAGER:
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