



Santa Clara Valley Water District

File No.: 21-1142

Agenda Date: 11/9/2021
Item No.: 7.2.

BOARD AGENDA MEMORANDUM

SUBJECT:

Overview of the Annual Capital Improvement Program Process and Integrated Financial Planning Schedule for Capital Projects, and Review of the Fiscal Year 2022-23 (FY23) Currently Unfunded Projects.

RECOMMENDATION:

- A. Receive overview of the Annual Capital Improvement Program Process and Integrated Financial Planning Schedule;
- B. Review list of Currently Unfunded Capital Projects; and
- C. Provide feedback as necessary.

SUMMARY:

The annual update of the rolling 5-year Capital Improvement Program (CIP) includes project plan updates for all existing capital projects and a Validation Process to review and evaluate potential new capital projects for inclusion in the CIP, along with review points for the CIP Committee and decision points for the Board. A presentation that shows the steps in detail, along with an integrated financial planning schedule, is included in the Annual CIP Process PowerPoint (Attachment 1).

Annual CIP Process Overview

Each year, Santa Clara Valley Water District (Valley Water) staff can submit new projects for consideration for inclusion into Valley Water's 5-Year CIP. For each potential new project, staff develops a business case to compare capital, non-capital, and non-asset alternative solutions; evaluates the lifecycle costs of these solutions; and identifies a recommended solution that minimizes lifecycle cost while balancing service levels and risk.

In May through September, staff submits the business case for review by their respective Deputy Operating Officer (DOO) or Deputy Administrative Officer (DAO). If staff's respective DOO/DAO approves the project, it is submitted to the CIP coordinator. Simultaneously, project managers update their existing capital projects to reflect changes to scope, schedule, and budget, which must also be approved by the respective DOO/DAO.

Between September and October each year these newly-proposed, initially validated projects will be presented to the CIP Committee and Board, along with a list of currently unfunded projects, which

have been validated during prior years, for review and comment. Staff will address the Board's feedback/comments when preparing the funding scenarios, which will include considering those unfunded projects for inclusion into the CIP.

Initially Validated projects for potential inclusion in the FY2023-27 CIP

There are seven newly-proposed, initially validated projects that have been added to the unfunded list for the FY23-27 CIP.

1. **South Babb Flood Mitigation Project**: Recent modeling identified an increased flooding risk to two apartment buildings due to ponding behind floodwalls constructed as part of the Lower Silver Creek Flood Protection and Creek Restoration Project (Lower Silver Creek Project) Reaches 5C-6A. Water that ponds behind the Lower Silver Creek Project floodwalls comes from spills out of South Babb Creek. The recommended project includes regrading the parking lots in the apartment complex, constructing troughs along the Lower Silver Creek Project floodwall at certain locations to collect water, and adding flapgates and corresponding structural improvements to the existing floodwall. This will lower flood depths in the apartment complex behind the existing floodwalls such that the apartment buildings would not be added to the FEMA 1% floodplain. Potential locations and numbers of flapgates are provided in the hydraulic feasibility and preliminary constraints analysis report. Total project cost estimate = \$1,320,986 and estimated project duration (all phases combined) = 2-3 years.
2. **South Babb Flood Protection Project**: Recent modeling indicates that there is significant spilling from culverts along South Babb Creek. These spills contribute to flooding of nearby areas, particularly between South Babb Creek, Lower Silver Creek, and Story Road. The recommended project improves the culverts at Lochner Drive, White Road, and Farrington Drive on South Babb Creek. While this will not eliminate all the spilling from South Babb Creek during the 100-year event, the majority of spills would be eliminated. In the hydraulic feasibility and preliminary constraints analysis report, a design was proposed where the Lochner Drive, White Road, and Farrington Drive culverts would be converted to voided slab bridges with a trapezoidal concrete channel underneath. A planning study would be required to evaluate other alternatives that would meet the same goal of reducing flooding risk to the area between South Babb Creek, Lower Silver Creek, and Story Road. Total project cost estimate = \$12,038,091 and estimated project duration (all phases combined) = 5-6 years.
3. **San Tomas Aquino Project**: San Tomas Aquino Creek has flood capacity concerns, aging infrastructure, and excessive operation and maintenance costs. In the 1970's, San Tomas was improved to reduce flooding. Following 1995 flood events, and model calibration, levee improvements were made to provide additional freeboard. However, the 1995 Engineers Report states that the levee improvements were designed for interim flow with 1.5' freeboard due to channel restrictions upstream of Highway 101 but recommended that that the improvements be followed by a comprehensive multiyear study of additional improvements to meet current FEMA levee standards. In addition to aging concrete assets, the Operations and

Maintenance Division has experienced many challenges to maintain the channel to meet its level of service with its rapid and recurring sedimentation and vegetation growth. The project's objective is to reduce flood risks and meet FEMA standards, stabilize the channel to minimize maintenance costs, and rehabilitate or replace aging infrastructure in the most cost-effective manner. Total project cost estimate = \$15 Million (no floodwall) to \$35 Million (if floodwalls are installed in sections of the channel) and estimated project duration (all phases combined) = 5 years (Note: Initially validated project cost estimate reflects the high end of the range, approximately \$35M).

4. **Randol Creek Levee Rehab Project:** From Camden Ave to Bret Harte Drive, the left levee (facing upstream) is at a lower elevation than its intended design elevation, which could result in flows overtopping the levee. In addition, several drop structures have shown signs of deterioration and need structural assessment. The project's objectives are to restore the levee; reduce the flood risk to the adjacent property (Leland high school); and maintain Randol Creek assets in a cost-effective manner. Total project cost estimate = \$2,000,000 and estimated project duration (all phases combined) = 1-2 years.

5. **Coyote Pumping Plant Isolation Valves and Actuators Replacement Project:** Five isolation valves and seven actuators at Coyote Pumping Plant (CPP) have reached the end of their useful life. The actuators were proposed for replacement as part of the Coyote Adjustable Speed Drives Project, but ultimately were not included in that project in order to avoid significant project delay. The actuators were due for replacement in 2011, and the valves are due for replacement in 2026. The project scope includes replacing five of CPP Valves (# 1, 2, 3, 4, and 7); removing all seven hydraulic actuators; replacing the hydraulic actuators with electric actuators; and making changes to the controls. Total project cost estimate = \$3,230,982 and estimated project duration (all phases combined) = 4 years.

6. **Tepid Water System for Emergency Shower/Eyewash Stations at WTPs:** The emergency shower/eyewash (ESEW) systems at Valley Water's three water treatment plants (Rinconada, Penitencia and Santa Teresa Water Treatment Plants) (RWTP, PWTP and RWTP) are in need of upgrade to provide tepid water to the emergency eyewash stations, consistent with Cal/OSHA Title 8 §5162 and ANSI Z358 regulatory requirements. Total project cost estimate = \$2,800,000 and estimated project duration (all phases combined) = 2-3 years.

7. **Security Upgrades and Enhancements:** Upgrading current technical security systems, cyclone fences, and exterior lighting would be accomplished by this project. The current video and access control management systems are aging and becoming increasingly more expensive to maintain, as well as being below industry standard performance. The current video and access control management systems would be replaced with an operating program representing modern best business practices. The project objectives are to significantly enhance overall security at Valley Water facilities by designing and installing a modern

technical security system capable of meeting today's security and investigative requirements. Cyclone fences at key facilities and assets will be replaced with higher climb/tamper resistant types. Exterior lighting will be improved to eliminate darkness. Taken together each component of the Water Security Enhancement Project integrates to create an effective defense in depth capable of deterring, detecting, and delaying threats while responding. Total project cost estimate = \$14M and estimated project duration (all phases combined) = 4-6 years.

Development of the Preliminary CIP

In the fall of every year, an overview of the significant project plan updates from the prior year's adopted CIP are presented to the CIP Committee for information and feedback. During this same time, CIP and Finance staff compile the data from existing CIP project plans, collect the operational forecast information, and run the financial models.

The CIP Evaluation Team (CEO, ACEO, Chiefs and Deputies of the divisions initiating, delivering, implementing, and operating capital projects) meets in November of each year to review the financial models and determine which, if any, unfunded projects should be recommended for inclusion in the CIP. To ensure Valley Water's high priority business needs are met in adherence to Board policy, the CIP Evaluation team reviews the projects based upon:

- Board Priorities
- Asset's remaining lifespan
- Available funding
- Urgency of investment

Based upon the outcome of its review, the CIP Evaluation Team provides recommendations regarding whether the new proposed capital projects should be funded in the upcoming Preliminary 5 -year CIP or remain on the unfunded list. Funding scenarios that include these recommendations will be presented to the CIP Committee for review and feedback in December, along with the Preliminary CIP.

Each winter (December- January), CIP and Finance staff update the funding scenarios to include staff and CIP Committee recommendations, which will be presented to the full Board during a Funding Scenario Workshop in January, as deemed necessary. If a workshop is deemed necessary, the Board's direction from the workshop will be incorporated into the Preliminary CIP and presented to the Board at a subsequent meeting in January. Funding decisions will be made by the Board through its approval of the Preliminary CIP.

FINANCIAL IMPACT:

There is no financial impact associated with this item.

CEQA:

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment.

ATTACHMENTS:

Attachment 1: PowerPoint

UNCLASSIFIED MANAGER:

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