



# Santa Clara Valley Water District

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**File No.:** 21-0578

**Agenda Date:** 6/8/2021  
**Item No.:** 7.1.

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## BOARD AGENDA MEMORANDUM

### **SUBJECT:**

Safe, Clean Water and Natural Flood Protection Program 5-Year Implementation Plan for Fiscal Years 2022-2026.

### **RECOMMENDATION:**

Approve the Safe, Clean Water and Natural Flood Protection Program 5-Year Implementation Plan for Fiscal Years 2022-2026 (5-Year Plan).

### **SUMMARY:**

On November 3, 2020, Santa Clara County voters overwhelmingly approved Measure S, a renewal of Santa Clara Valley Water District's (Valley Water) Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program). Voters first approved a community-focused program to address our waterways and water supply in 2000 as the Clean, Safe Creeks and Natural Flood Protection Plan, then again in 2012 as the Safe, Clean Water and Natural Flood Protection Program.

The renewed Safe, Clean Water Program addresses the following six community priorities:

**Priority A:** Ensure a Safe, Reliable Water Supply

**Priority B:** Reduce Toxins, Hazards, and Contaminants in our Waterways

**Priority C:** Protect Our Water Supply and Dams from Earthquakes and Other Natural Disasters

**Priority D:** Restore Wildlife Habitat and Provide Open Space

**Priority E:** Provide Flood Protection to Homes, Businesses, Schools, Streets, and Highways

**Priority F:** Support Public Health and Public Safety for Our Community

The renewed Safe, Clean Water Program requires Valley Water to develop 5-year implementation plans, which serve as planning documents for the upcoming five years.

The 5-Year Plan describes the work to be accomplished during the five years in order to deliver the key performance indicators (KPIs) and clarifies roles and responsibilities for implementing, measuring, monitoring and directing the Safe, Clean Water projects. It breaks down the KPIs into 5-year targets and then proposes measures to gauge progress toward those targets. These also define the completion category for the 5-year targets to ensure transparency and accountability.

The plan provides an opportunity to carry out text adjustments, funding adjustments, reassess projects and KPIs and address any new needs that may arise to ensure that the Safe, Clean Water Program continues to fulfill the community and Board priorities. However, the Board is not limited to making changes to the Program at 5-year intervals. The Board must make all adjustments during a publicly held board meeting. Additionally, any changes to the KPIs or decisions not to implement a project require a public hearing before a vote of the Board occurs during a public meeting.

During the development of the community preferred program for the renewal of the Safe, Clean Water Program in early 2020, Valley Water staff estimated the funding required to deliver the various KPIs.

However, as the projects progress, project costs and schedules can change due to changing conditions, circumstances and inflation, etc. Since the program's development, some capital project costs have increased and some operations project costs have decreased. The capital project funding and schedule changes are reflected in the FY2022-26 Capital Improvement Program (CIP) that the Board approved on May 11, 2021.

Overall, there has been an increase in project costs, putting long-term pressure on the Safe, Clean Water Program Fund (Fund). Staff is proposing that the Board approve the 5-Year Plan (Attachment 1), which includes funding and fund transfer schedule adjustments that are necessary to ensure that Valley Water delivers the KPIs while responsibly managing the Fund in compliance with the Board's fiscal policies.

Meanwhile, Valley Water will continue to pursue external funding, including grants, such as the Natural Resources Conservation Service (NRCS) grant for Project E6: Upper Llagas Creek Flood Protection. Valley Water will also seek federal low-cost loans that may be available from the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA) for projects, including the Almaden Lake Improvement Project under D4: Fish Habitat and Passage Improvement, E1: Coyote Creek Flood Protection, E2: Sunnyvale East and Sunnyvale West Channels Flood Protection, E5: San Francisquito Creek Flood Protection and E6: Upper Llagas Creek Flood Protection.

The WIFIA program accelerates investment in our nation's water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects. The details of the proposed text, schedule and funding adjustments included in the 5-Year Plan are provided below.

The renewed Program requires that IMC review the 5-Year Plan prior to its submittal for Board approval. On May 6, 2021, the IMC approved the 5-Year Plan with proposed adjustments.

The details of the proposed schedule, funding or text adjustments included in the 5-Year Plan and requiring Board approval are detailed below. These are in addition to the capital project schedule and funding adjustments included in the FY2020-26 CIP.

### ***Renewed Safe, Clean Water Adjustments***

As per the Safe, Clean Water Program's Change Control Process, staff is recommending approval of the proposed schedule, funding and text adjustments to several projects incorporated in the 5-Year

Plan. Text adjustments are as shown in red font below.

***Project A1: Pacheco Reservoir Expansion*****Section:** Schedule for fund transfer

**Justification:** The project KPI is to “Provide a portion of funds up to \$10 million, to help construct the Pacheco Reservoir Expansion Project.” During the development of renewed Safe, Clean Water Program, the fund transfer to the Pacheco Reservoir Expansion Project (Water Utility Enterprise Fund 61) was scheduled to take place in Fiscal Years 2027 and 2028 (FY27 and FY28). However, to help maintain the health of the Safe, Clean Water Fund in the face of increasing capital project costs, the fund transfer is now proposed to take place over a seven-year period of FY25-31. Should the Board approve the 5-Year Plan, the adjusted schedule for transfer of funds will be reflected in the FY23-27 Capital Improvement Program.

***Project C1: Anderson Dam Seismic Retrofit*****Section:** Schedule for fund transfer

**Justification:** The project KPI is to “Provide a portion of funds, up to \$54.1 million, to help restore full operating reservoir capacity of 90,373 acre-feet.” During the development of the renewed Safe, Clean Water Program, the fund transfer to the Anderson Dam Seismic Retrofit Project (Water Utility Enterprise Fund 61) was scheduled for FY28. However, to help maintain the health of the Safe, Clean Water Fund in the face of increasing capital project costs, the fund transfer is now proposed to take place over an eight-year period of FY25-32. Should the Board approve the 5-Year Plan, the adjusted schedule for transfer of funds will be reflected in the FY23-27 Capital Improvement Program.

***D1: Management of Riparian Planting and Invasive Plant Removal*****Section:** Funding

**Justification:** The 15-year funding allocation for the project is reduced by \$16.2 million, from \$68.9 million to \$52.7 million. This reduction is possible because of Valley Water’s revised implementation strategy. Instead of Valley Water staff doing all the work, it will be carried out by Valley Water staff with the support of contract staff, thus reducing the project cost.

***Project E2: Sunnyvale East and Sunnyvale West Channels*****Section:** Benefits

**Justification:** Text adjustments to clarify that the channels are constructed channels and not natural stream systems.

**Adjusted text:**

- Provides 1% flood capacity for approximately 6.4 miles of the channel along Sunnyvale East and approximately three (3) miles of the channel

along Sunnyvale West within the City of Sunnyvale, protecting 1,618 properties (Sunnyvale East) and 47 acres (11 properties) of industrial land (Sunnyvale West)

- Improves **stream channel** water quality by providing erosion control measures to decrease sediment and turbidity
- Identifies recreational opportunities that can be integrated by the City of Sunnyvale and others as appropriate
- Addresses climate change

***Project E7: San Francisco Bay Shoreline Protection*****Section:** Description**Justification:** Text adjustments to align the description with the KPIs.

**Adjusted text:** This project relies on federal participation from the USACE to **develop the project and prepare review and approve** the plans. Without federal participation, Valley Water cannot implement planning, design and construction on our own due to limited available funding. The **proposed Safe, Clean Water funding provides a portion of the local share of funding for planning, design and construction phases Valley Water's cost share to complete the planning study, design and construction** for Economic Impact Areas (EIAs) 1-4, and **provides Valley Water's cost share to complete a portion of the local share of funding for** the planning study and design phases for EIAs 5-940.

**Section:** Funding

**Justification:** With an overall increase in capital project costs and to ensure that Valley Water delivers the KPIs while managing the Safe, Clean Water Fund in compliance with the Board's fiscal policies, it is proposed that Valley Water's estimated portion of the local share of this project be shared between two Valley Water funds instead of just the Safe, Clean Water Fund. Of the Valley Water's estimated share of \$46 million, \$30.4 million would be funded by the Safe, Clean Water Fund and the remaining \$15.6 million would come from the Watersheds Stream Stewardship (WSS) Fund. The main revenue sources for the WSS fund are 1% ad valorem property taxes and subvention reimbursements. Should the Board approve the 5-Year Plan, the funding adjustment will be reflected in the FY23-27 Capital Improvement Program.

***Project E8: Upper Guadalupe **River** Flood Protection*****Section:** Project name**Justification:** Text adjustment to correct the project name by adding the word "River".**Adjusted text:** UPPER GUADALUPE **RIVER** FLOOD PROTECTION***Project F1: Vegetation Control and Sediment Removal for Capacity*****Section:** Funding

**Justification:** The estimated 15-year Safe, Clean Water funding allocation for the project is reduced by \$10.5 million from \$114.1 million to \$103.6 million. This reduction is possible because of the revised Valley Water implementation strategy. Instead of Valley Water staff doing all the work, it will be carried out by Valley Water staff with the support of contract staff, thus reducing costs.

**Project F3: Flood Risk Assessment Studies**

**Section:** Description

**Justification:** Text adjustment to provide current information, including project status at the conclusion of the 2012 Safe, Clean Water Program on June 30, 2021.

**Adjusted text:** This project is to enable Valley Water scientists to update custom software models of local creeks for the most current and accurate understanding of potential flood risks in high priority flood-prone areas and then develop options for managing those risks. Existing models will be verified, updated and recalibrated as conditions change. Updating our knowledge-base will lead to more effective creek management and maintenance. Valley Water will also convey this information to the community and partner cities.

When creek conditions necessitate rehabilitation to preserve flood protection, this project also funds preliminary engineering studies to isolate problem areas and explore potential solutions. ~~Current engineering studies to be completed are:~~

- ~~• Galera Creek near Milpitas High School to Interstate 680 in Milpitas, which will feed into the design of Project E3: Lower Berryessa Flood Protection~~
- ~~• Tributaries to Lower Silver Creek (Ruby, Norwood, Quimby and Fowler creeks) in San José~~
- ~~• Ross Creek in San José, from Guadalupe River to Blossom Hill Road~~

~~Under the 2012 Safe, Clean Water Program, As of June 30, 2019, Valley Water had completed four (4) engineering studies on five (5) reaches of creeks as part of the Flood Risk Assessment Studies under this project. These were on Coyote Creek (Bay to Anderson Dam, including Rock Springs Neighborhood); Adobe and Barron creeks tidal flood protection (Highway 101 to Middlefield Road in Palo Alto); and Alamitos Creek (upstream of Almaden Lake in San José) and Ross Creek (Guadalupe River to Blossom Hill Road in San José). The Coyote Creek study completed under this project was utilized to develop the short-term interim projects that Valley Water built to help reduce the risk of flooding along Coyote Creek (See Project E1 - Coyote Creek Flood Protection Project). These include the installation of an interim floodwall and embankment along the creek to protect the Rock Springs community from a flood event~~

equivalent to the February 2017 flood. Valley Water also updated the Alamitos Creek 2-D hydraulic (HEC-RAS) model of the 1% (100-year event) floodplain and shared the information with the City of San José.

### ***Safe, Clean Water Program Annual Report Production Schedule***

In addition to the project adjustment, staff is also recommending adjusting the timeline of the publication of the Safe, Clean Water Program annual reports, specifically the production of the annual reports with audited financials. The annual reports cover all projects and provide project status based on established performance measures, trends and progress toward completion. The reports also discuss any challenges or opportunities that may affect the Program and include the status of anticipated federal and state funding.

**Justification:** Each year, the annual report is prepared following the close of the fiscal year, reflecting on the just-completed fiscal year. Currently, staff provides the draft annual report, with unaudited financials, to the Board for direction and approval in September and the final annual report with audited financials to the Board and IMC in November. However, in recent years, including FY20, it is evident that the audited numbers are most likely to be available in December or January. As a result, with this 5-Year Plan, staff is proposing that Board approve providing the final report with audited financials to the Board and IMC in December or January.

### ***Safe, Clean Water Program Adjustments Approved Within the FY2022-26 CIP***

The 5-Year Plan incorporates the Safe, Clean Water project adjustments that were approved as part of the FY2022-26 CIP. These are listed below:

#### ***Project A3: Pipeline Reliability***

**Sections:** Schedule

**Justification:** The overall project construction schedule is extended by two years and will be completed in FY28 instead of FY26. The extension allows the valve installation work to be combined with construction activities for the 10-Year Pipeline Inspection & Rehabilitation Project, which will minimize impacts to customers. Three (3) valves will be installed by the end of FY26, and the 4<sup>th</sup> fourth valve in FY28.

#### ***Project D4: Fish Habitat and Passage Improvement***

**Sections:** Funding

**Justification:** The project's estimated funding allocation has increased by approximately \$26 million, from \$44.1 million to \$70.1 million.

Project D4 has five (KPIs) and the \$26 million increase is associated with increased project construction costs of the Almaden Lake Improvement Project, a capital

project that would deliver KPI #2 to "Construct one (1) creek/lake separation project in partnership with local agencies."

Therefore, the estimated renewed Safe, Clean Water Program funding allocation to the Almaden Lake Improvement Project is increased from approximately \$24.4 million to approximately \$50.5 million. The increase is primarily because of the higher estimated project construction cost due to the water source change and cost refinements, with the project approaching 60% design plans. At the May 11, 2021 meeting, the Board certified the Final Environmental Impact Report (EIR) for the project and also selected the Almaden Lake Improvement Project as the project to be constructed under KPI #2. Valley Water is working to seek funding from the low-cost WIFIA loan program for the Almaden Lake project.

***Project D6: Restoration of Natural Creek Function*****Sections:** Funding

**Justification:** The estimated funding allocation is increased by \$2.6 million, from \$14.5 million to \$17.1 million. The escalation is primarily driven by the increase in estimated construction costs of the Bolsa Road Fish Passage project, which is one of three projects to be constructed under Project D6. The Bolsa Road Fish Passage Improvement project cost increase is a result of various factors, including project refinements to accommodate the need for permanent access ramps for maintenance purposes and further cost-estimate refinements. The Safe, Clean Water funding allocation for the Bolsa Road project is \$6.6 million; the 5-Year Plan is approximately \$51,000 higher than the adopted FY22-26 CIP. Should the Board approve the 5-Year Plan, the FY23-27 CIP will be updated to reflect the Safe, Clean Water project funding of \$6.6 million.

***Project E1: Coyote Creek Flood Protection*****Section:** Funding

**Justification:** The estimated funding allocation has increased from \$41.8 million to \$45.7 million because of a \$3.9 million increase in estimated project cost. The cost increase is a result of further refinement of project cost estimates in late 2020. Meanwhile, Valley Water is working to seek funding from the low-cost WIFIA loan program.

***Project E2: Sunnyvale East and Sunnyvale West Channels Flood Protection*****Sections:** Schedule

**Justification:** Project construction has been pushed back by two years to begin in FY22 (instead of late FY21) and be completed in late FY26 (instead of mid-FY24). The construction schedule has been adjusted to account for continued discussions with Google regarding their Caribbean Development Project, which will enhance approximately 1,100 linear feet of the Sunnyvale West

Channel and generate on-site mitigation for use by Valley Water. Valley Water has completed the design and continues efforts to acquire the various regulatory agency permits required for construction. The delay in construction schedule has increased the inflated project cost by \$2.2 million from \$33 million to \$35.2 million. Meanwhile, Valley Water is working to seek funding from the low-cost WIFIA loan program.

***Project E5: San Francisquito Creek Flood Protection*****Sections:** Funding

**Justification:** The estimated funding allocation has increased by \$12.4 million, from \$31.5 million to \$43.9 million, because of project plan updates to reflect the full cost of the local-funding only project. The updates include capturing the costs associated with the Newell Road Bridge Replacement Project, which is a project element sponsored by the City of Palo Alto. The city is seeking grant funding of \$8.9 million, which is reflected in the updated project plan. Meanwhile, the San Francisquito Creek Joint Powers Authority (SFJPA), the project sponsor, is seeking \$20 million from grants, partnership contributions, and/or Continuing Authorities Program Section 205 funding from the U.S. Army Corps of Engineers (USACE) to help mitigate project costs, which would otherwise be funded from program reserves. Valley Water is part of the SFJPA. Furthermore, Valley Water is working to seek funding from the low-cost WIFIA loan program.

***Project E6: Upper Llagas Creek Flood Protection*****Sections:** Funding

**Justification:** The project's estimated funding requirement has increased by nearly \$34 million from \$46.3 million to \$80.1 million. The increase is primarily driven by the estimated project construction cost increase of \$20 million for Phase 2A. In addition, staff recommends that the \$80 million renewed Safe, Clean Water Program placeholder for Phase 2B construction be included as part of the project, bringing the total project cost to \$160.1 million.

The Phase 2A construction cost has increased from an estimated \$30 million to \$50 million due to several factors. These include additional utility relocations to be coordinated and completed during construction, increased tunnel costs due to testing and stockpiling of excavated tunnel materials for possible naturally occurring asbestos, City of Morgan Hill's Hale Avenue Extension Project (to be fully reimbursed by the city), COVID-19 protocols and an additional level of Best Management Practices during construction, such as temporary soundwall to reduce construction noise.

With the completion of Phase 1, which is currently under construction, and Phase 2A, which is expected to begin construction in May/June 2021, Valley Water will deliver the local-funding only project (KPI #2). The construction of Phase 2B would deliver KPI #1, which is the preferred project to be constructed with federal,



state and local partnerships.

Of the required funding, Valley Water expects to receive \$7.3 million in state reimbursements. Valley Water is also seeking \$80 million via NRCS grant to help fund Phase 2B. Valley Water is also working to seek funding from the low-cost WIFIA loan program.

The 5-Year Plan also includes an updated project location map, reflecting the 2019 Board-modified creek reaches covered by the local-funding only project.

***Project E8: Upper Guadalupe River Flood Protection***

**Sections:** Schedule

**Justification:** The construction schedule for the local-funding only project (KPI #2) has been postponed by three years with construction now estimated to be completed in FY29. This is necessary to allow USACE to conduct a General Re-evaluation Study, a study to re-evaluate the scope of the entire project and the associated benefits and costs that can help make the project more competitive for federal funding. A new preferred project (KPI #1) will be developed following the completion of the study in FY24. Meanwhile, if Valley Water were to assume the responsibility of continuing the design of the local-funding only project in FY24, project construction could be completed in FY29.

**FINANCIAL IMPACT:**

The 5-Year Plan is produced and printed internally and budgeted to the Safe, Clean Water Implementation Project (26061012).

**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: 5-Year Implementation Plan

Attachment 2: PowerPoint

**UNCLASSIFIED MANAGER:**

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