



# Santa Clara Valley Water District

**File No.:** 23-0066

**Agenda Date:** 1/10/2023

**Item No.:** \*2.14.

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## BOARD AGENDA MEMORANDUM

### **SUBJECT:**

Work Study Session on the Capital Improvement Program's Preliminary Fiscal Year 2024-2028 Five-Year Plan; Preliminary Fiscal Year 2023-24 Groundwater Production Charges; and Proposed Adjustments and Modifications to the Safe, Clean Water and Natural Flood Protection Program.

### **RECOMMENDATION:**

- A. Review and approve the Capital Improvement Program's (CIP) Preliminary Fiscal Year 2024-2028 (FY 24-28) Five-Year Plan list of projects for the Watershed Stream Stewardship Fund (Fund 12) and the Water Utility Enterprise Fund (Fund 61);
- B. Review and approve the CIP Evaluation Team's recommendation to include the RWTP Ammonia Storage & Metering Facility Upgrade Project, a Fund 61 project, in the CIP's Draft FY 24-28 Five-Year Plan;
- C. Review proposed adjustments and modifications to the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) Fund (Fund 26);
- D. Set the time and place for a public hearing to consider modifications to the Safe, Clean Water Program (Fund 26) Projects; and
- E. Discuss and provide direction on the preliminary FY 2023-24 (FY 24) Groundwater Production Charge analysis.

### **SUMMARY:**

This Work Study Session combines, for Board review, the CIP's Preliminary FY 24-28 Five-Year Plan list of projects with their estimated costs and proposed funding (Attachment 1), and the preliminary FY 24 groundwater production charge analysis.

As a result of project cost increases that have occurred since the Board adopted the CIP's FY 2023-27 (FY 23-27) Five-Year Plan, as detailed in the Project Plan Updates (Attachment 2), staff has prepared funding scenarios for Fund 12 and Fund 26 projects in order to ensure the financial health of both funds. The scenarios for Fund 26 trigger the Safe, Clean Water Program's Change Control Process, which includes conducting a public hearing when key performance indicators (KPIs) for an impacted project are modified. Due to proposed revised KPIs and proposed funding allocations impacting KPIs for five separate projects in the Safe, Clean Water Program, staff recommends the Board set the time and place for a public hearing to consider those modifications, as detailed in the Proposed Adjustments and Modifications to the Safe, Clean Water Program (Attachment 4) and the Draft Public Hearing Notice Attachment (Attachment 7).

In concert with the review of the CIP's Preliminary FY 24-28 Five-Year Plan, staff is seeking Board input on the preliminary analysis to incorporate into the development of the groundwater production charge recommendation. The groundwater production charge analysis includes a water demand projection, a discussion of key capital project funding, and several scenarios for Board consideration.

### ***Capital Improvement Program (CIP) Background***

Each year, the CIP team prepares its rolling five-year plan, which is presented for Board consideration and approval. The CIP's Five-Year Plan describes the Santa Clara Valley Water District (Valley Water) capital investments by type of improvement and provides information on planned capital projects and Valley Water's intended source(s) of funding. The CIP process, wherein capital project plans are updated to reflect changes to scope, schedule or planned expenditures, works in concert with the biennial budget process by which funding is appropriated to the projects. All changes to scope, schedule or planned expenditures from the Board adopted FY 23-27 CIP are included in Attachment 2, Project Plan Updates.

### ***Board's CIP Committee***

The Board established a CIP Committee and its purpose is to review and discuss in greater detail the various processes and information used to prepare an annual update to the CIP's Five-Year Plan. In 2022, the CIP Committee was comprised of Director Nai Hsueh (Committee Chair), Director Linda LeZotte (Committee Vice Chair), and Director Tony Estremera.

The CIP Committee met monthly in 2022, to review and discuss information related to capital projects, the development of the CIP and to provide feedback to staff and recommendations to the full Board, as required.

### ***CIP Committee Review of the Draft Preliminary FY 2024-28 (FY 24-28) CIP Five-Year Plan***

On December 12, 2022, the CIP Committee reviewed the CIP's Draft Preliminary FY 24-28 Five-Year Plan. The Committee focused its review on the funding scenarios which were developed by staff to support the overall financial health of Funds 12, 26, and 61 (see below for scenario descriptions).

In reviewing the Draft Preliminary CIP's project plan updates (Attachment 2) and corresponding financial analysis, the CIP Committee moved to support the CIP's Draft Preliminary FY 24-28 Five-Year Plan incorporating staff's recommended scenarios for Funds 12 and 26 and the preliminary groundwater charge analysis for Fund 61.

### ***Review and Approval Process for FY 24-28 CIP***

Receiving Board direction regarding the preliminary list of projects (Attachment 1) for Funds 12 and 61 will allow staff to proceed with preparing the CIP's Draft FY 24-28 Five Year Plan. In order to consider the recommended scenario for Fund 26, the Board must set the time and place for a public hearing in compliance with California Government Code section 6066, as set forth in the Safe, Clean Water Program's Change Control Process. After the public hearing is closed, the Board will provide direction regarding the preliminary list of projects for Fund 26, after which staff will finalize the CIP's Draft FY 24-28 Five-Year Plan.

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The Draft FY 24-28 Five-Year Plan is scheduled to be presented to the Board at its February 28, 2023, meeting, at which time staff will recommend Board review and authorization to release the CIP's Draft FY 24-28 Five-Year Plan for a 60-day public review period. After public review and responses to comments are completed, a Resolution to Adopt the CIP's Final FY 24-28 Five-Year Plan will be presented to the Board in May 2023 for approval in conjunction with the FY 2024-25 biennial budget.

***Update to Watershed Stream Stewardship Fund and Safe Clean Water Fund Financial Projections: Funding Scenarios for Consideration***

The CIP Evaluation Team (Team) reviewed the fund models after inputting the project plan updates (Attachment 2). Based on the impact these changes had on the financial health of Funds 12 and 26 and taking into consideration feedback received from the CIP Committee and the Board, the Team identified several scenarios for Board consideration.

In developing the scenarios, the Team reviewed the Funding Filters for Prioritization Matrix (Attachment 3), a tool approved by the Board on September 27, 2022, to help inform the development of recommendations for Board consideration.

Staff has included financial models that reflect updates to the Watershed Stream Stewardship Fund 12 and the Safe Clean Water Fund 26, for two scenarios: Baseline and Staff Recommended Alternative.

For the Watershed Stream Stewardship Fund 12, the baseline scenario indicates one year when minimum reserve requirements are not met within the FY 2023-24 through FY 2032-33 projection. To resolve this challenge, an alternative scenario was analyzed, prepared, and presented to the CIP Committee at the December 12, 2022, meeting.

**Staff Recommended Alternative for Fund 12**

- Baseline (Includes all project plan updates to Board adopted CIP FY 23-27 Five Year Plan)
- Place Palo Alto Flood Basin Tide Gates Replacement Project on-hold indefinitely (around \$75M total project cost [TPC])

The adjustment to the Palo Alto Flood Basin Tide Gates Replacement Project would result in projected reserve balances for Fund 12 that are above policy minimum throughout the forecast timeframe.

For the Safe Clean Water Fund 26, infrastructure construction project costs have increased significantly. The project with a major cost escalation is the Project E1: Coyote Creek Flood Protection Project, with an approximately \$162 million increase. These increased costs are impacting the Safe, Clean Water fund's health, which is reflected by a steady and unsustainable decline in reserve balances, with minimum reserve requirements not being met over a multi-year period within the FY 23-24 through FY 2035-36 projection as reflected in the baseline scenario (Fund 26 projection period is 15 years, which began in FY 2021-22).

To resolve this challenge, an alternative scenario was analyzed, prepared, and presented to the CIP Committee at the December 12, 2022, meeting. While the CIP Committee agreed to support staff's recommended scenario, following that meeting, staff performed additional analysis and is presenting a modified recommended scenario for the full Board's consideration.

### **Staff's Recommended Alternative for Fund 26**

#### **Financial Model includes:**

- Baseline (includes all project plan updates to Board adopted CIP FY 23-27 Five-Year Plan)
- Assumed higher FY24 Tax Growth (5% vs. 2%) to keep pace with inflation due to a potentially higher Consumer Price Index (CPI) increase
- Higher NRCS Funding (to match Upper Llagas Creek Flood Protection Project - Phase 2B construction costs)

#### **Safe, Clean Water Program proposed adjustments and modifications:**

##### **Priority D**

- Fish Habitat and Passage Improvement Project (D4 Creek/Lake Separation Projects) - Select Almaden Lake Improvement Project to meet D4 key performance indicator (KPI) #1 (Planning/Design only); and select the Ogier Ponds Project to meet D4 KPI #2 (construction) and modify the KPI #2 to partially fund the construction of one creek/lake separation project (~\$5M) (Modify KPI).
- Restoration of Natural Creek Functions Project (D6.3) - Not implement the KPI #3 of the placeholder project (not implement the project).

##### **Priority E**

- Sunnyvale East and Sunnyvale West Channels Flood Protection Project (E2) - Place construction of the Sunnyvale East Channel on-hold and reallocate the construction funding to Fund 26 reserves (Modify funding allocation). Continue with construction of Sunnyvale West Channel.
- Upper Penitencia Creek Flood Protection Project (E4) - Place construction of the project on-hold and reallocate the construction funding to Fund 26 reserves (Modify funding allocation).

The primary difference between the original staff recommended scenario for Fund 26, as presented to the CIP Committee, and the modified staff recommended scenario presented above, is that through reduction of the partial funding allocation for the Ogier Ponds Project, Valley Water can proceed with the construction of the Sunnyvale West Channel. In turn, the reduced allocation for the Ogier Ponds Project will be funded under Fund 12 and is included in the financial model.

In addition to the capital project modifications necessitated by the Coyote Creek Flood Protection Project cost increases, Valley Water staff has identified the need to modify the Project D3: Sediment Reuse to Support Shoreline Restoration due to changed circumstances. The project key performance indicator (KPI) #1 is to maintain partnership agreements to reuse sediment to improve the success of salt pond and tidal marsh restoration projects and activities. Valley Water has been delivering

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sediment to Salt Pond A8 pursuant to an agreement with U.S. Fish and Wildlife Service (USFWS). Valley Water is pausing delivering sediment to Pond A8 for approximately two years as USFWS renews necessary permits. Staff is recommending that the Board modify KPI #1 to expand sediment reuse beyond the South Bay Salt Pond Restoration Project. Staff is also recommending adjusting the project's name, description and benefits in alignment with the proposed modification.

In the interest of efficient use of public funds, staff has combined the proposed modification to D3: Sediment Reuse to Support Shoreline Restoration with the proposed modifications to D4: Fish Habitat and Passage Improvement, D6: Restoration of Natural Creek Functions, E2: Sunnyvale East and Sunnyvale West Channels Flood Protection, and E4: Upper Penitencia Creek Flood Protection.

The staff recommended alternative would result in projected reserve balances from FY 23-24 through FY 2035-36 that are near or above Valley Water's policy minimum. Additional adjustment(s) would be necessary to ensure reserves are above policy minimum throughout the entire forecast timeframe.

### ***Summary of Groundwater Production Charge Analysis***

Staff has prepared the preliminary FY 2023-24 groundwater production charge analysis, which includes several scenarios for Board review. Staff is seeking Board input on the preliminary analysis to incorporate into the development of the groundwater production charge recommendation.

The groundwater production charge reflects the benefit of Valley Water activities to protect and augment groundwater supplies and is applied to water extracted from the groundwater basin in Zones W-2, W-5, W-7, and W-8. Zone W-2 encompasses the Santa Clara groundwater subbasin north of Metcalf Road or the North County. Zone W-5 overlays the Llagas subbasin from northern Morgan Hill south to the Pajaro River. Zone W-7 overlays the Coyote Valley south of Metcalf Road to northern Morgan Hill, and W-8 encompasses the area below Uvas and Chesbro Reservoirs.

The groundwater production charge recommendation will be detailed in the 52<sup>nd</sup> Annual Report on the Protection and Augmentation of Water Supplies that is planned to be filed with the Clerk of the Board on February 24, 2023. The public hearing on groundwater production charges is scheduled to open on April 11, 2023. It is anticipated that the Board would set the FY 2023-24 groundwater production charges by May 9, 2023, that would become effective on July 1, 2023.

The FY 2023-24 groundwater production charge and surface water charge setting process will be conducted consistent with the District Act, and Board resolutions 99-21 and 12-10. (Attachments 6 and 7).

### ***Water Use Assumptions***

District managed water use for FY 2021-22 is estimated to be approximately 220,800 acre-feet (AF), roughly 11,500 AF lower than budgeted due to drought conditions and the Board's call for 15% mandatory conservation compared to 2019. In response to the ongoing drought, water use is budgeted for FY 2022-23 at a multi-decade low of 192,100 AF. In FY 2023-24 and beyond, water usage has been adjusted based on trends from the last drought (2014-2017) returning to "normal" water use by FY 2025-26. Water usage is projected to be 205,000 AF for FY 2023-24.

Staff are carefully monitoring monthly water use actuals and working closely with the water retailers during the drought and will continue to do so during the upcoming rate setting process, modifying the water usage forecast as necessary.

***Groundwater Production Charge Projection Scenarios***

Staff has prepared a preliminary baseline groundwater production charge projection scenario for Board review, with several additional scenarios including an extended drought scenario and scenarios reflecting a range of assumptions for the Pacheco Reservoir Expansion Project and the Purified Water Program. Staff can model additional scenarios for the Board as needed.

For the baseline scenario, the increase in the North County Zone W-2 Municipal and Industrial (M&I) groundwater production charge is 15.0% for FY 2023-24. In the South County, for FY2023-24 baseline scenario, increases in the M&I groundwater production charge projections are 6.0% for Zone W-5; 12.9% for Zone W-7; and 8.0% for Zone W-8.

The overall impact of the preliminary analysis baseline scenario for FY 2023-24 to the average household would be an estimated increase of \$8.91 per month in North County, \$1.06 per month in South County Zone W-5, \$2.59 per month in South County in Zone W-7, and \$1.02 per month in South County in Zone W-8.

Staff assumes the continuation of the Contract Treated Water Surcharge at \$115/AF to maintain alignment with the cost that retailers would incur to pump water from their wells.

Staff has prepared the following scenarios for Board consideration:

**Scenario 1) Baseline with Return to Prior Projection Water Use by FY26:**

This scenario includes the following projects and assumptions:

- Conservation: 15% achieved by FY 2022-23, returning to prior projections by FY 2025-26
- Anderson Reservoir leveraging WIFIA loan (up to 49% of TPC)
- Pacheco Reservoir Expansion Project (PREP) with \$504 Proposition 1 grants, WIFIA loan (up to 49% of TPC) and Partnership Participation at 35% of TPC
- Purified Water Expansion operational by FY28, assumes 100% debt financed by P3 entity
- Los Vaqueros (Transfer Bethany Pipeline) with up to 50 kAF storage
- Delta Conveyance SWP portion at 3.23%
- Ongoing, additional emergency water supply purchases in FY2023-24 and FY 2024-25 (\$28.3M total)
- Leverage existing Supplemental Water and Rate Stabilization reserves (around \$50M total from FY 2023-24 and FY 2024-25)

- Master Plan Project Placeholder - Assumes \$333M in anticipated costs from FY 24 to FY 33 for new pipelines, pipeline rehabilitations, treatment plant upgrades and SCADA implementation projects.
- Agricultural rates remain set at 10% of lowest groundwater benefit zone M&I rate

Scenario 2) Baseline with Extended Drought:

Water use remains at a low of 192kAF in FY 2023-24 and FY 2024-25, combined with \$20M/year in Emergency Water Purchases.

Scenario 3) Baseline with 0% Partnership Participation Funding for Pacheco Reservoir Expansion Project:

Includes the same projects and assumptions as Scenario 1.

Scenario 4) Baseline excluding Pacheco Reservoir Expansion Project:

Includes the same projects and assumptions as Scenario 1; excludes Pacheco Reservoir Expansion Project.

Scenario 5) Baseline with \$100M Reduction in Total Project Costs for the Purified Water Program:

Includes the same projects and assumptions as Scenario 1, but with a \$100M reduction in total project costs (TPC) for the Purified Water Project.

Scenario 6) Baseline with \$100M Reduction in Total Project Costs combined with \$183M in Potential Grant Funding for the Purified Water Program:

Includes the same projects and assumptions as Scenario 1, with a \$100M reduction in total project costs (TPC) for the Purified Water Project and inclusion of \$183M grant funding for the project.

Staff can model additional scenarios for the Board as needed.

**Other Assumptions**

All scenarios assume the continued practice of relying on the State Water Project (SWP) Tax to pay for 100% of the SWP contractual obligations. Pursuant to Water Code Section 11652, Valley Water, whenever necessary, is required to levy on all property in its jurisdiction not exempt from taxation, a tax sufficient to provide for all payments under its SWP contract with the California Department of Water Resources (DWR). All scenarios assume holding the SWP Tax flat for FY 2023-24, setting it at \$27M. The SWP Tax for the average household in Santa Clara would remain at about \$41 per year.

A Drought Reserve was established in FY 2015-16 to help minimize future rate impacts and complements the Supplemental Water Supply Reserve. The reserve (\$10M) was used fully in FY 2022-23 due to the ongoing drought. The staff analysis assumes that future reserve levels build back up over subsequent years beginning in FY 2025-26.

The Baseline scenario assumes Water Utility operations cost of \$269.9M in FY 2023-24 versus the FY 2022-23 adopted budget of \$264.7M.

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The preliminary analysis does not include unfunded capital projects or additional unfunded operations cost needs identified by staff.

***Summary of Groundwater Production Charge Analysis Issues***

Staff is seeking Board direction on the following issues to be incorporated into the Report on Protection and Augmentation of Water Supplies (PAWS) scheduled to be filed with the Clerk of the Board on February 24, 2023:

- Rate Impact Minimization Strategies
- Project Prioritization Strategies

***Summary of Proposed Changes to the CIP***

One new project is being recommended for inclusion in the Draft Preliminary FY 2024-28 CIP.

**93C40417 RWTP Ammonia Storage & Metering Facility Upgrade:** The existing ammonia storage and metering facility (ASMF) at Rinconada Water Treatment Plant (RWTP) includes a single ammonia storage tank and four metering pumps and associated instrumentation and control equipment. It was installed in the mid-1990's as part of the Toxic Gas Ordinance Compliance Project (TGO), and the existing ammonia storage tank has a nominal capacity of 6,700 gallons for aqua ammonia (19% concentration). However, the condition of the existing tank lining is unknown and will be replaced with two (2) tanks for reliability and safety since it is a critical system for the Plant. The four existing metering pumps will be replaced with new ones, and three new feed lines will be installed from the existing ASMF to the new Raw Water (RW) influent pipelines (north and south) and to the new chlorine contact basin (CCB), respectively. The existing feed points to the clearwells and the BW supply line will be removed. The estimated project cost is \$6.20M and the project duration is expected to last five years.

Three (3) projects in the FY 2023-27 CIP are anticipated to be completed and/or closed out by June 2023, as listed below:

- Cross Valley Pipeline Extension (under ADSRP)
- Coyote Warehouse
- ERP System Implementation

Since the Board adopted CIP's FY 2023-27 Five-Year Plan, staff has provided project plan updates for more than 40 projects. These updates have been reviewed and discussed by the CIP Committee in November and December of 2022 and are included for the Board's review in Attachment 2.

With the incorporation of the project plan updates reflected in Attachment 2, the proposed FY 2024-28 Preliminary CIP is \$1.344B higher than the previous 5-year CIP, with a total value of \$9.632B. The majority of this cost increase is the result of the following project cost increases:

- Pacheco Reservoir Expansion Project: Increased due to inflation by \$319.043M
- Anderson Dam Seismic Retrofit Project (all projects combined): Increased by \$183.131M
- RWTP Reliability Improvement Project: Increased by \$166.104M
- Purified Water Project (PWP): Increased by \$465.777M
- Coyote Creek Flood Protection Project: Increased by \$161.890M



To review the key factors impacting the health of Funds 12, 26 and 61, staff will include a brief presentation providing additional detail for five (5) significant project plan updates (listed below). As noted above, these projects, along with the Pacheco Reservoir Expansion Project (to be presented separately immediately preceding this agenda item), have had the greatest impact on water rates and the health of each fund and warrant the Board's review. Each of these brief presentations will be presented by the respective capital project Deputy Operating Officer/Assistant Operating Officer and will be included in a PowerPoint presentation in a Supplemental Agenda Memo that will be available on January 6, 2023.

- Anderson Dam Seismic Retrofit Project
- Rinconada Water Treatment Plant Reliability Improvement Project
- Purified Water Project
- Palo Alto Flood Basin Tide Gate Structure Replacement Project
- Coyote Creek Flood Protection Project (Safe, Clean Water Program)

The proposed changes to the CIP are summarized by Fund and will be presented in the PowerPoint presentation in a Supplemental Agenda Memo that will be available on January 6, 2023. The proposed changes are reflected in the Preliminary FY 24-28 CIP (Attachment 1).

To ensure consistency with Valley Water's various planning efforts, CIP staff will continue to coordinate with the staff leading development of the Water Supply Master Plan and Watersheds and Water Utility Operations and Maintenance Plans. If necessary, these plans will be updated to align with CIP's FY 24-28 Five Year Plan, as adopted by the Board.

#### **ENVIRONMENTAL JUSTICE IMPACT:**

While individual capital projects may have environmental justice impacts and conduct outreach and engagement to impacted communities, which will be reported to the Board accordingly, the FY 2024-28 Preliminary CIP and the FY 2023-24 Groundwater Production Preliminary Analysis Work Study Session has no environmental justice impact.

The CIP's Preliminary FY 2024-28 Five-Year Plan is a projection of Valley Water's capital funding for planned capital projects. Its purpose is to document planned capital projects to help integrate Valley Water work with the larger community by aligning Valley Water planning with other local agency planning efforts. The Preliminary CIP documents any changes to capital projects' planned funding and expenditures and is updated and brought to the Board of Directors for approval each year in January.

Each February, upon the Board's direction, to ensure meaningful engagement of all Santa Clara County communities in the decision-making process, staff provides a copy of the CIP's Draft FY 2024-28 Five-Year Plan to Valley Water partner agencies and publishes a public notification for a review before the Board of Directors adopts the Resolution to Adopt the CIP in May.

The CIP is thus produced each year in collaboration with government, academic, private, non-

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governmental and non-profit organizations, as well as diverse and disadvantaged communities, and as such, adheres to the Board's General Principles and Ends Policies, which are integral in ensuring that Valley Water meets its mission.

**FINANCIAL IMPACT:**

While there is no direct financial impact associated with the recommended action to approve the CIP's Preliminary FY 24-28 Five-Year Plan, the Five-Year Plan presents a funding plan that shows the intended source of funds for each project. Valley Water's FY 2023-24 proposed biennial budget will include the approved projects in the first year of the CIP's FY 24-28 Five-Year Plan.

Furthermore, this preliminary analysis of the groundwater production charges does not have any immediate financial impact, however, the adopted groundwater production charges will affect the future finances of the Water Utility Enterprise.

**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: CIP Preliminary FY 2024-28 Five-Year Plan  
Attachment 2: Project Plan Updates  
Attachment 3: Funding Filters for Prioritization Matrix  
Attachment 4: Proposed Adjustments and Modifications  
Attachment 5: Resolution No. 99-21  
Attachment 6: Resolution No. 12-10  
Attachment 7: Draft Public Hearing Notice  
\*Supplemental Agenda Memo  
\*Supplemental Attachment 1: PowerPoint

**UNCLASSIFIED MANAGER:**

Melanie Richardson, 408-630-2035  
Darin Taylor, 408-630-3068