



Santa Clara Valley Water District

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Item No.: *2.11.

SUPPLEMENTAL BOARD AGENDA MEMORANDUM

SUBJECT:

Work Study Session on Preliminary Fiscal Year (FY) 2020-21 Groundwater Production Charges and the Fiscal Years 2021-25 Preliminary Capital Improvement Program (CIP).

REASON FOR SUPPLEMENTAL MEMORANDUM:

This report conveys additional information received after the initial report was released, consistent with Executive Limitations Policy EL-7-10-5.

RECOMMENDATION:

- *A. Review the FY 2021-25 Preliminary CIP and provide direction to staff for development of the Draft FY 2021-25 CIP;
- *B. Discuss and provide direction on the preliminary FY 2020-21 Groundwater Production Charge analysis prepared by staff; and
- *C. Provide direction regarding whether to include three newly proposed water supply projects into the Draft FY 2021-25 CIP.

SUMMARY:

This Work Study Session combines, for Board review, the preliminary FY 2020-21 groundwater production charge analysis and the preliminary FY 2021-25 CIP.

The groundwater production charge analysis includes a water demand projection, a discussion of key capital project funding, and some scenarios for Board consideration. This year's funding scenarios will include incorporation of three newly proposed water supply projects for the Board's consideration for inclusion in the Draft FY 2021-25 CIP:

1. Supervisory Control and Data Acquisition (SCADA) Implementation Project,
2. Water Treatment Plant Implementation Project, and
3. Distribution System Implementation Project.

In parallel to the Validation Process for addition of new projects into the FY 2021-25 Preliminary CIP, staff presented the Water Supply Master Plan (WSMP) to the Board on November 20, 2019, and the Board approved the WSMP. The WSMP's sustainability strategy emphasized the need to secure existing supplies and infrastructure. The three projects referenced above are aligned with this strategy. As a result of the parallel timelines, the three projects were not included in the FY 2021-25 Preliminary CIP but can be added into the Draft FY 2021-25 CIP upon Board direction. Additional information about the scope of work, deliverables, schedule, and resource needs for each new

project is provided in the PowerPoint (Attachment 1).

Staff is seeking Board input on the preliminary analysis to incorporate into the development of the groundwater production charge recommendation.

In concert with the review of the preliminary groundwater production charge analysis, this agenda item presents the 5-year FY 2021-25 Preliminary CIP list of projects with their estimated costs and proposed funding (Attachment 2).

Capital Improvement Program (CIP) Background

Each year, a five-year CIP is prepared for Board consideration and approval. The CIP describes the Santa Clara Valley Water District (Valley Water) capital investment priorities and provides information on planned capital projects and Valley Water's intended source(s) of funding. The CIP process works in concert with the annual budget process, wherein funding is appropriated to the projects.

Board's Capital Improvement Program Committee

The Board has established a CIP Committee whose purpose is to review and discuss in greater detail the various processes and information used to prepare an annual update to Valley Water's CIP. In 2019, the CIP Committee was comprised of Chair Linda LeZotte, Vice Chair Nai Hsueh, and Director Tony Estremera.

The CIP Committee met monthly in 2019 to review and discuss information related to capital projects, the development of the CIP and to provide input to staff.

CIP Committee Review of the FY 2021-25 CIP

On December 9, 2019, the CIP Committee reviewed the Preliminary CIP and provided feedback regarding the Board Workshop for Watersheds held on December 17, 2019, which included a review of the Preliminary CIP for Funds 12 and 26, along with a review of the Draft Watersheds O&M 5-Year Plan for FY 2021-25, and Safe, Clean Water and Natural Flood Protection Program Funding Scenario Discussion for Capital Flood Protection Projects.

Review and Approval Process for Fiscal Years 2021-25 CIP

Receiving Board direction regarding the preliminary list of projects (Attachment 2) will allow staff to proceed with preparing the Draft FY 2021-25 CIP. The Draft CIP is scheduled to be presented to the Board at its February 25, 2020 meeting, at which time staff will recommend Board review and authorization to release the Draft CIP for a 60-day public review period. After public review and responses to comments are completed, the Final CIP will be presented to the Board in May 2020 for approval in conjunction with the FY 2020-21 budget.

Update to Watershed Stream Stewardship Fund and Safe Clean Water Fund Financial Projections

Staff has included updated financial models that reflect updates to the Watershed Stream

Stewardship Fund 12 and the Safe Clean Water Fund 26. While the Fund 12 financial forecast has changed very little relative to what was presented to the Board on December 17, 2019, Fund 26 now reflects a \$12M shortfall at the end of the program as a result of the adjustments to the draft CIP, instead of a \$4M surplus reported to the Board on December 17, 2019. In addition, staff has provided an analysis of Valley Water's share of property tax revenues related to the former RDA (Redevelopment Agency) dissolution. In summary, most properties owned by the former RDA's that were required to be sold, have been sold, and Valley Water has received its share of those one-time revenues. Staff has updated its forecast of ongoing revenues related to the former RDA's and has incorporated that into the financial model for Fund 12.

Summary of Groundwater Production Charge Analysis

Staff has prepared the preliminary FY 2020-21 groundwater production charge analysis, which includes several scenarios for Board review. Staff has developed a baseline scenario that aligns with the 80% level of service goals per the Water Supply Master Plan approved by the Board in November 2019, along with several other scenarios for Board consideration. Staff is seeking Board input on the preliminary analysis to incorporate into the development of the groundwater production charge recommendation.

The groundwater production charge recommendation will be detailed in the Annual Report on the Protection and Augmentation of Water Supplies that is planned to be filed with the Clerk of the Board on February 28, 2020. The public hearing on groundwater production charges is scheduled to open on April 14, 2020. It is anticipated that the Board would set the FY 2020-21 groundwater production charges by May 12, 2020, that would become effective on July 1, 2020.

The FY 2020-21 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 3-4).

Water Use Assumptions

District managed water use for FY 2018-19 is estimated to be approximately 208,000 acre-feet (AF), roughly 19,000 AF lower than budgeted due to a wet winter and wet spring. If the wet winter and wet spring were to repeat for the current year FY 2019-20, then there would be a 30,000 AF water usage shortfall versus budget, which would translate to an estimated \$40 million revenue shortfall. Wet springs have happened roughly 30% of the time over the past two decades, so the likelihood of a repeat is low but still possible. The current water demand projection for FY 2020-21 is 251,000 AF, which is approximately a 21% increase compared to the FY 2018-2019 estimate. Staff believes that the water demand projection should be adjusted downward to 230,000 AF for FY 2020-21. This adjustment would better align with the FY 2017-18 actuals (which did not include a wet spring) and includes consideration for the impact of ramping up production at San Jose Water Company's Montevina Treatment Plant, which uses non-District sourced water. The preliminary groundwater charge scenarios discussed in the following section are based on a reduced water demand projection of 230,000 AF in FY 2020-21, and then assumes a very small amount of growth in the following years.

Staff will continue to carefully monitor monthly water use actuals and work closely with the water retailers during the upcoming rate setting process to modify the water usage forecast as necessary.

Newly Proposed Water Supply Projects

On November 20, 2019, the Board approved the Water Supply Master Plan 2040, which identified a suite of investments to meet long-term water supply reliability goals. The WSMP's sustainability strategy emphasized the need to secure existing supplies and infrastructure. However, this plan did not evaluate the utility infrastructure needs; this evaluation has not taken place since 2011. Valley Water continues to experience greater constraints on system operations (including recent Public Safety Power Shutoffs), and infrastructure is aging/obsolete and needs to be replaced (e.g., SCADA, Almaden Valley Pipeline).

Therefore, to ensure all the conveyance, treatment, and distribution systems are ready to deliver on those future investments, staff has identified the following three new projects:

1. Supervisory Control and Data Acquisition (SCADA) Implementation Project,
2. Water Treatment Plant Implementation Project, and
3. Distribution System Implementation Project.

The three projects referenced above are aligned with the WSMP's sustainability strategy. However, as a result of the parallel timelines, the three projects were not included in the FY 2021-25 Preliminary CIP, but can be added into the Draft FY 2021-25 CIP upon Board direction.

Additional information about the scope of work, deliverables, schedule, and resource needs for each new project is provided below:

SCADA Implementation Project

Valley Water's process control and SCADA systems, which serve a pivotal role in monitoring and controlling the raw water conveyance system (including reservoirs and pumping plants), treatment plants and distribution systems are aging and in need of coordinated replacement and upgrade. The proper functioning of these systems is essential for meeting water demand, maintaining water quality, achieving regulatory compliance, and satisfying customer expectations. In addition, the process control and SCADA systems contain important data used by Operations, Maintenance, Water Quality, Management and other Engineering staff for operations, reporting, analysis, and planning purposes; and expanded access to the data systems is needed.

The objectives of the project are to prepare an update to the process control systems/SCADA master plan (2011), recommend a coordinated suite of improvement projects (projects implementation plan) for the Board's consideration, produce detailed design and implementation standards for the new projects, develop the new projects through conceptual design, and provide owner's engineering support for new projects through construction.

It is anticipated that the project will start in FY 2021 and take 15 years to complete. The first three years of the project will be focused on bringing the updated master plan and suite of new projects

with an implementation plan to the Board, at a budgeted cost of \$6.7 million (which includes \$3.3 million in consultant cost, along with staff resources for project engineering, and key partner and stakeholder participation). The remainder of the project, through FY 2035, will consist of the design and construction of the recommended replacement and upgrade projects themselves, with Board check-ins and approvals for each as they are initiated.

Water Treatment Plant Implementation Project

The infrastructure needs for the water treatment plants (WTPs) have been developed over the years through a number of planning documents focused on specific process areas, and not through an integrated master implementation plan. As a result, projects are often piecemealed for specific needs, needing frequent rebuilds or upgrades due to adjacent processes or regulatory requirements changes. There is a need to develop a comprehensive implementation plan that coordinates regulatory-driven changes with aging infrastructure needs and other operational improvements for the WTPs as well as integrates with the recently completed Water Supply Master Plan.

The WTP Implementation Project will prepare an implementation plan over the next 30 years to identify projects needed to repair, replace, and/or upgrade Valley Water's WTP infrastructures; address the increasingly stringent water quality regulations; and prepare to implement projects that the Board approves. The implementation plan will also conclude with a programmatic EIR. Facilities include the Rinconada, Santa Teresa, Penitencia WTPs and the Purification Center.

It is anticipated that the project will start in FY 2021 and take three years to complete. The estimated cost of the project is \$8.4 million (which includes \$6 million in consultant cost, along with staff resources for dedicated project management and project engineering, and for key partner and stakeholder participation).

Distribution System Implementation Project

Valley Water has not conducted a comprehensive evaluation of its distribution system (raw and treated water pipelines) in recent history. With the recently completed Water Supply Master Plan, there is a need to develop a comprehensive Distribution Systems Implementation Plan (DSMP) looking out 30 years to identify improvements to Valley Water's raw and treated water systems based on current demands, future growth, and emergencies.

The DSMP will provide significant insights, analysis tools for Valley Water's raw and treated water distribution systems to ensure that the distribution system infrastructure is appropriately sized to accommodate new supplies as they are brought online, retailer needs, recommend direct capital actions needed to protect existing distribution systems, and will conclude with a programmatic EIR.

It is anticipated that the project will start in FY 2021 and take three years to complete. The estimated cost of the project is \$8.1 million (which includes \$6 million in consultant cost, along with staff resources for dedicated modeling analysis and evaluation, project engineering support, and for key partner and stakeholder participation).

Groundwater Production Charge Projection Scenarios

Staff has prepared several preliminary groundwater production charge projection scenarios for Board review. The increase in the North County Municipal and Industrial (M&I) groundwater production charge ranges from 8.1% to 8.7% for FY 2020-21 depending on the scenario, and from 4.7% to 5.3% in the South County.

The overall impact of the preliminary analysis scenarios for FY 2020-21 to the average household would be an increase ranging from \$3.83 to \$4.12 per month in North County and from \$0.78 to \$0.88 per month in South County.

Staff proposes to increase the Contract Treated Water Surcharge from \$100/AF to \$200/AF to encourage retailers to continuing investing in groundwater wells. Staff is concerned about increased retailer interest in reliance on treated water relative to groundwater due to the increased life-cycle cost of groundwater wells. Groundwater provides 40% of water used in the county and is the largest emergency supply. It is important that treated water retailers maintain groundwater wells for routine use as well as use during an emergency.

Staff has prepared the following scenarios for Board consideration:

Scenario 1) Baseline: Water Supply Master Plan (WSMP) 80% Level of Service (LOS)

This scenario includes the following projects and assumptions:

- Baseline Projects according to the WSMP including the Almaden Valley Pipeline Replacement, Land Rights - South County Recycled Water Pipeline, and Supervisory Control and Data Acquisition (SCADA)/Water Treatment Plant/ Distribution System Implementation Projects;
- Delta Conveyance (State side only);
- No Regrets Package projects;
- Potable Reuse Phase 1 to produce 24,000 AF (assume operations start in FY 28);
- Pacheco Reservoir Expansion (assumes \$485M Proposition 1 grant, \$250M of WIIN Act Funding, 20% Partnerships);
- Transfer-Bethany Pipeline;
- South County Recharge (assume facilities built beyond FY 2029-30);
- \$200M warranty placeholder cost for dams and Water Treatment Plants.

Scenario 2) No WIIN Act Funding

Includes the same projects and assumptions as Scenario 1 except as follows:

- Assumes \$0 WIIN Act Funding instead of \$250M.

Scenario 3) Revised Purified Water Program

Includes the same projects and assumptions as Scenario 2 except as follows:

- Replaces Potable Reuse Phase 1 placeholder project with a \$614M Potable Reuse Project based on the recently signed agreement with Palo Alto and Mountain View to produce 13KAF by FY 30, and;
- Assumes that the District builds, finances and operates the facilities (i.e. not delivered via a Public-Private Partnership or P3) and therefore the P3 reserve is eliminated.

Scenario 4) Add Delta Conveyance Central Valley Project (CVP) side investment

Includes the same projects and assumptions as Scenario 3 except as follows:

- Adds the Delta Conveyance CVP side costs.

Staff can model additional scenarios for the Board as needed.

It should be noted that Investment Scenario 3 replaces the Potable Reuse Phase 1 placeholder project, which would produce 24KAF by FY 28, with a \$614M Potable Reuse Project based on the recently signed agreement with Palo Alto/Mountain View to produce 10 to 13KAF by FY 30. This revised Potable Reuse Project under Scenario 3 would meet the 80% level of service goal (note that the Baseline scenario slightly exceeded the 80% LOS goal, due to future uncertainties discussed with the Board in 2019). The cost estimate for the revised Potable Reuse Project is based on an indirect potable reuse (IPR) project, but it could potentially be a direct potable reuse (DPR) project. Regulations for DPR are expected by the end of 2023, and draft regulations are expected to be released sometime in 2022. A DPR project may lower total cost due to avoiding long pipelines to recharge areas.

There are a couple of strategic options for the Board to consider:

1. Given the reduced near-term water usage projection, the Board could wait until the Fall of 2020 for the Monitoring and Assessment Plan (MAP) review to determine if a water supply shortfall exists relative to achieving the 80% level of service goal.
2. Pursue substitute water supply investment to make up the 11 to 14KAF shortfall (including incremental purified water investments, incremental Delta Conveyance “CVP side” investments, and/or investments in Sites or Los Vaqueros water storage projects).

Transition to modified Groundwater Benefit Zones

On October 8, 2019, the Board directed staff to pursue modifying the existing groundwater benefit zones W-2 and W-5, and to create two new zones W-7 (Coyote Valley) and W-8 (below Uvas and Chesbro Reservoirs), effective July 1, 2020. New metes and bounds (the legal description that defines the boundaries of the zones) will be developed for Board consideration in accordance with Santa Clara Valley Water District Act requirements. Accordingly, staff has engaged Raftelis Financial Consultants to assist with analyzing cost allocations between the modified zones that would support corresponding modified groundwater charges for each zone for FY 2020-21. As of the preparation of this memo, staff is still working on the cost allocations between the modified zones in the South County area (Zones W-5, W-7 and W-8).

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, the District, 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 no change in the SWP Tax for FY 2020-21, which would remain at \$18M. The SWP Tax for the average household in Santa Clara would remain at

about \$27 per year.

All scenarios also assume the continued practice to set the South County agricultural groundwater production charge at 6% of the M&I charge until FY 2022.

A Drought Reserve was established in FY 2015-16 and was budgeted at \$10M for FY 2019-20. No further funding for this reserve is included in the preliminary analysis. The purpose of this reserve would be to help minimize rate impacts during the next drought and would complement the Supplemental Water Supply Reserve. The preliminary analysis also includes a P3 reserve of \$10M in FY 2020-21 under Scenarios 1 and 2, which is adjusted to \$0 under Scenarios 3 and 4. The purpose of this reserve would be to help minimize the impact of unforeseen events associated with the delivery of the Purified Water Program via a public-private partnership or P3. The preliminary analysis does not include unfunded capital projects or additional unfunded operations cost needs identified by staff.

All scenarios assume Water Utility operations cost of \$208.7M in FY 2020-21 versus the FY 2019-20 adopted budget of \$184.9M.

Summary of Groundwater Production Charge Analysis Issues

Staff is seeking Board direction on the following issues to be incorporated into Report on Protection and Augmentation of Water Supplies (PAWS) scheduled to be filed with the Clerk of the Board on February 28, 2020:

- Water demand projection reduction to 230KAF?
- Treated Water surcharge increase to \$200/AF?
- Add Newly Proposed Water Supply Projects?
- Wait for Fall 2020 MAP review, or pursue substitute investment to make up 11-14KAF shortfall?
- Other?

Summary of Proposed Changes to the CIP

Staff is recommending two (2) new projects with a total combined cost of \$97M be included in the Draft FY 2021-25 CIP. Four (4) projects in the FY 20-24 CIP are anticipated to be completed and/or closed out by June 2020; this will remove about \$28M from the CIP.

With the incorporation of some key capital projects' changes into this CIP, the proposed FY 2021-25 CIP is \$1.565 B higher than the previous 5-year CIP, with a total value of \$5.413 B. This does not include the three newly proposed Water Supply Implementation projects, which would increase the FY 2021-25 CIP by \$23.1M, with a total value of \$5.436 B.

The proposed changes to the CIP are summarized below by Fund and presented in the Preliminary FY 2021-25 CIP (Attachment 2).

Fund 11, General Fund

60204016 Facilities Small Capital Projects: Increase of \$1M per FY (from \$2M to \$3M) is required for remodeling of buildings and grounds and replacement of structural equipment (e.g. roofs, heating and air conditioning systems).

Fund 12, Watershed Stream Stewardship Fund

10394001 Palo Alto Flood Basin Tide Gate Structure Improvement: Increase of \$20M in total project cost (TPC), primarily due to increased construction phase costs estimates.

30154019 Guadalupe River Tasman Dr. - I-880: Increase of \$95M to TPC, to reflect all future planning, design, construction costs (this project originally only included \$1M for the planning effort).

Fund 26, Safe, Clean Water and Natural Flood Protection Fund

26154003 Guadalupe River Upper, SPRR to Blossom Hill Rd (R7-12): Increase of \$3M in TPC from fund reserves to restore previously approved project plan funding level to correctly reflect future year funding requirements in the project plan

26164001 Hale Creek Enhancement Pilot Study: Preliminary CIP updated to reflect updated project cost increase of \$4.1M.

26174002 Upper Llagas Creek Flood Protection Project: Increase of \$60M in TPC to correctly reflect future year funding requirements in the project plan.

26174041 Upper Berryessa Creek, Calaveras Blvd. to I-880 (USACE Coordination): Administrative transfer of \$6.6M from fund reserves in order to reconcile project construction costs with the USACE.

26174043 Coyote Creek, Montague Expressway to Tully Road Flood Protection Project: Administrative transfer of \$2.3M from Fund 26 Reserves to restore Preliminary CIP funding level to FY 2020-2024 CIP funding level. Board directed transfer of \$21M (uninflated dollars) from Upper Penitencia Creek Project (26244001) to fund construction of Coyote Creek project.

(REMOVED) 26204001 Los Gatos Creek Restoration and Flood Protection Project: This project is being removed from the CIP due to project re-scoping by property owner/project partner.

26244001 and 40324003s Upper Penitencia, Coyote Creek to Dorel Drive Flood Protection Project: Administrative transfer of \$3.1M from Fund 26 Reserves to restore Preliminary CIP funding level to FY 2020-2024 CIP funding level. Board directed transfer of \$21M (uninflated dollars) from Upper Penitencia Creek Project (26244001) to fund construction of Coyote Creek project, which required a fund transfer of \$5M within the Upper Penitencia Project from 40324003s into 26244001. Project 40324003s is now closed.

Fund 61, Water Utility Enterprise Fund

(NEW) 91094001 Land Rights - South County Recycled Water Pipeline: This is a previously validated, unfunded project that is being added to the funded list in the FY 2021-2025 Preliminary CIP. The estimated TPC is \$7.6M.

91084020 Calero and Guadalupe Dams Seismic Retrofits - Planning: Increase of \$3M in TPC due to unforeseen issues related to the draft EIR; additionally, the overall completion date has been extended by three years.

91214010 Small Capital Improvements, San Felipe Reach 1: Decrease of \$15M in TPC due to a revised strategy of future pump replacement in lieu of rebuilding two pumps each year, as was the previous approach. The project team will submit capital projects for validation in future years when the pumps are due for replacement.

(NEW) 92304001 Almaden Valley Pipeline Replacement: This is a newly validated project and being added to the funded list in the FY 2021-2025 Preliminary CIP. The estimated TPC is \$90M. The pipeline is in poor condition with a high risk of failure and will be slip-lined with new steel pipe.

(REMOVED) 92374005 SCADA Remote Architecture & Communications Upgrade: This project is being removed from the CIP; the project is being replaced by the new SCADA Implementation Project which is presented for the Board's consideration for inclusion in the Draft FY2021-25 CIP.

93294057 RWTP Reliability Improvement Project: Increase of \$16M in TPC due to scheduling issues; construction for the overall project has been extended by 10 months.

FINANCIAL IMPACT:

While there is no direct financial impact associated with the recommended action to approve the Preliminary CIP, the CIP presents a funding plan that shows the intended source of funds for each project. Valley Water's FY 2020-21 proposed budget will include the approved projects in the first year of the FY 2021-25 CIP.

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

CEQA:

The recommended CIP 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.

Furthermore, per CEQA Guidelines Section 15273: CEQA does not apply to establishment or

modification of water rates.

ATTACHMENTS:

Attachment 1: PowerPoint
Attachment 2: Preliminary FY 2021-25 CIP
Attachment 3: SCVWD Resolution 99-21
Attachment 4: SCVWD Resolution 12-10

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