OVERVIEW

The Santa Clara Valley Water District's (Valley Water) Fiscal Year (FY) 2023-27 Five-Year Capital Improvement Program (CIP) is a projection of Valley Water's capital funding for planned capital projects from FY 2022-23 through FY 2026-27. The purpose of the CIP is to document planned Valley Water projects to help integrate Valley Water work with the larger community by aligning Valley Water planning with other local agency planning efforts. Mission

Valley Water's CIP is developed following the guidelines of Government Code (GC) § 65403 which governs the development and annual review of Capital Improvement Programs developed by special districts in the State of California. State law requires that the program be reviewed and updated annually. It also requires circulation of the document to all agencies having land use authority within Valley Water boundaries prior to adoption of the program. This document is intended to provide the information necessary to facilitate planning and construction of water-

related infrastructure to meet the needs of Santa Clara County.

The CIP is prepared in accordance with the guidelines established by the Government Finance Officers Association (GFOA). Capital projects in this document are defined by both the accounting criteria for capital investment and the California Public Contract Code definition of public works. They exceed \$50,000 in cost, have long-term life spans and are generally nonrecurring. They usually fall within one of the following six categories:

- 1. Acquisition of land for public purpose;
- 2. Construction of a significant facility, i.e. a flood protection facility, a water treatment facility, or a building;
- Addition to or expansion of an existing facility;

- 4. Nonrecurring rehabilitation or major repair to all or part of a facility provided the total cost is more than \$50,000;
- 5. Specific planning, engineering study, or design work related to an individual project which falls within the above categories;
 - Significant one-time investment in tangible goods of any nature, the benefit of which will accrue over several years. Examples include items such as large initial

investments or improvements in technology or the purchase of a new

telephone system.

The CIP includes several Small Capital Improvement Projects in the various funds. These projects will be ongoing and will be used to fund multiple small projects to undertake repairs, replacements, and minor modifications to existing water utility, watershed or campus facilities. Small Capital Improvements generally meet the following criteria:

- 1. Project cost is less than \$2.5 million (unless otherwise approved by the Board);
- 2. Project can be completed within 2 fiscal years;
- 3. Rights-of-way acquisition is not required.

The proposed funding for the Water Supply Small Capital Improvement projects is anticipated to vary each year based on the work identified in the Water Utility Asset Management Plan. The Facility Management, Small Capital Improvements project is funded at a flat rate each year. Unspent funds in these projects will not carry forward from previous years.

There are some miscellaneous capital expenditures incurred by Valley Water that are not captured in the CIP. These capital expenditures include certain components of water purchases, indirect costs to manage and train staff that are fully engaged in capital work, and routine replacement of vehicles and large equipment.

The mission of Valley Water is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

ALIGNMENT WITH ENDS POLICIES

Valley Water plans, manages and carries out capital improvements to comply with the Ends Policies and Executive Limitations established by its Board of Directors. Under Valley Water's Policy Governance Model, Ends Policies describe the outcomes or results to be achieved by Valley Water staff. The Executive Limitations balance the Ends Policies and set limits on staff activities in fulfilling them.

Program plans, master plans and the asset management plan are developed to achieve the results established by the Ends Policies and to further define the goals and objectives of each Ends Policy. The Board either formally approves the plans or provides direction to staff, confirming the goals and objectives. These plans then become the basis for staff to propose and develop individual capital projects. Project ideas that are proposed by Operations staff must be vetted via a feasibility study and then validated to prepare a business case for proceeding with a capital investment. Some high-profile feasibility studies are included in the CIP. Alignment of the CIP with program or master plans provides a direct link to Ends Policies and ensures Valley Water's long-term capital investments are planned and executed according to the Board's priorities. Three Ends Policies directly drive program or master plans and the types of capital improvements described in the CIP:

- Ends Policy E-2 "Valley Water provides a reliable, safe, and affordable water supply for current and future generations in all communities served."
- Ends Policy E-3 "Natural flood protection is provided to reduce risk and improve health and safety for residents, businesses, and visitors, now and into the future."
 - E-3.1 "Maintain flood protection facilities to design levels of protection."
 - E-3.2 "Assist people, businesses, schools, and communities to prepare for, respond to, and recover from flooding through equitable and effective engagement."

- E-3.3 "Increase the health and safety of residents countywide by reducing community flood risk."
- Ends Policy E-4 "Water resources stewardship protects and enhances ecosystem health."

(See flowchart "CIP Process Alignment with Ends Policies" on page I-6)

CIP PLANNING PROCESS

Valley Water conducts an annual planning process for its CIP. The purpose of the CIP Planning Process is to ensure the capital projects included in the CIP:

- · Meet the Board's priorities and contribute to the objectives of Valley Water's various programs;
- Have identified funding for the duration of the projects; and
- Are coordinated with the local jurisdiction's General Plans.

The CIP Planning Process is carried out in accordance with the following Executive Limitations:

- Executive Limitation EL-4.3.1., "A BAO shall produce an annual Rolling Five-Year Capital Improvement Plan with the first year serving as the adopted capital budget and the remaining years in place as a projected capital funding plan."
- Executive Limitation EL-4.4.1., "A BAO shall demonstrate to the Board the planned expenditures for the identified and selected capital projects in the Rolling Five-Year Capital Improvement Plan are aligned with the Board's capital priorities."

The annual CIP Process is the responsibility of the CIP Group comprised of division managers, with the responsibility to initiate or implement capital projects. The detailed process is a documented ISO procedure. It includes the following key steps:

 Management review and approval, to ensure staff proposed projects are aligned with Board policies and approved program plans;

- Validation of projects to ensure there is a business case for doing the project and that a capital investment is the best solution;
- Review of all projects, including continuing and newly proposed projects, to ensure the projects in the CIP reflect Board priorities;
- Financial analysis, to determine the capacity of Valley Water's capital funding sources to fund the proposed capital projects;
- Review of impacts the completed capital project will have on the Operations and Maintenance (O&M) resources.
- Outreach to local jurisdictions with land use authority, within Santa Clara County, to coordinate Valley Water's Capital Improvement Program with their General Plans;
- Board review and direction at appropriate steps, to ensure the CIP reflects Board policies and priorities; and
- Board adoption of the CIP plan.

The annual CIP Planning Process starts with collecting information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a Draft CIP in February. The Draft CIP serves as a multi-year plan, and together with other long-term planning efforts of Valley Water, is the basis for the budget for the following fiscal year. This Draft CIP plan is also reviewed by local jurisdictions for consistency with their General Plans. While the Draft CIP is being reviewed by the cities and County, the budget is reviewed and finalized. The Board concludes the outreach on the Draft CIP with a public hearing. The first year of the CIP is reconciled with the budget; The Resolution to adopt the CIP and the budget are presented to the Board for approval in May.

Board Direction and CIP Outreach

The Board has many opportunities each year to provide direction on projects contained in the CIP. The CIP is developed in parallel with the budget and the water rates. It is presented to the Board for review and input on multiple occasions throughout the development process. Early in the validation process the list of newly proposed projects is presented to the Board so they can provide direction to staff, followed by Board workshops to review the Preliminary CIP to ensure that the document is developed in accordance with Board priorities. The direction received is used to develop the Draft CIP which is reviewed by the Board before staff is authorized to release the document for public review. Following a public hearing, the Board approves the resolution to adopt the Final CIP in May.

The Board CIP Committee meets throughout the year to review and discuss information related to the development and implementation of the CIP and provide input to staff. The Committee provides recommendations on issues ranging from project implementation, to resource utilization and funding sources or distribution. The Committee's recommendations are presented to the Board for direction on incorporation into the CIP document or implementation by staff.

On January 10, 2022 the FY 2023-27 Preliminary CIP project list was reviewed and endorsed by the Board. One new project was added to the FY 2023-27 Preliminary CIP.

The following are highlights of changes from the previous year that have been approved as the basis for the FY 2023-27 CIP:

- To fully fund the Water Supply projects in the FY 2023-27 CIP, Valley Water has preliminarily proposed increases in groundwater production charges for FY 2022-23 of 15% in North County Zone W-2, 5.2% in South County Zone W-5, 10.3% in South County Zone W-7, and 8% in South County Zone W-8.
- The following significant project changes are driving the groundwater production charges:
 - The Anderson Dam Seismic Retrofit Project increased in cost by \$588.75 million.
 - The Purified Water Project increased in cost by \$113.18 million.
 - The Rinconada Water Treatment Plant Reliability Improvement Project increased in cost by \$101.8 million.

- The Rinconada Water Treatment Plant Residuals Remediation/Managment Project increased in cost by \$11.08 million.
- The Almaden Valley Pipeline Replacement Project increased in cost by \$20.57 million.
- The Coyote Pumping Plant ASD Replacement Project increased in cost by \$11.77 million.
- The South County Recycled Water Pipeline Project increased in cost by \$3.51 million.
- The following are highlights of significant project changes under Flood Protection and Water Resources Stewardship:
 - The San Francisco Bay Shoreline Project EIA 11 decreased in cost by \$38.77 million.
 - The San Francisquito Creek, SF Bay through Searsville Dam (E5) Project increased in cost by \$12.61 million.
 - The Guadalupe River Tasman Drive to I-880 Project increased in cost by \$3.26 million.
 - The Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks Project increased in cost by \$6.89 million.
 - The South Bay Salt Ponds (A5-11) Restoration Project increased in cost by \$4.88 million.
 - The Ogier Ponds Separation from Coyote Creek (D4.1b) Project increased in cost by \$2.12 million.

Six projects were completed in the CIP. The RWTP Treated Water Valve Upgrade Project, San Francisquito Creek (SF Bay through Searsville Dam E5) Project, Berryessa Creek (Calaveras, I-680 - Reimbursable) Project, Cunningham Flood Detention Certification Project, Lower Silver Creek (I-680 to Cunningham, Reimbursable Reaches 4-6) Project and Telephone System Voiceover IP Project were all completed in FY22.

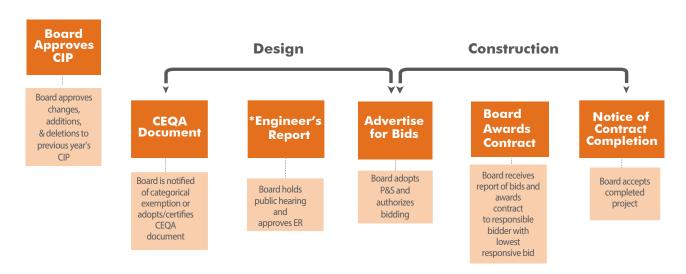
Additional information regarding project changes can be found in each chapter overview.

On February 22, 2022, the Board of Directors reviewed and approved for release the Draft FY 2023-27 CIP. One new project was added to the FY 2023-27 Draft CIP: The Security Upgrades and Enhancements Project.

This project will significantly enhance overall security at Valley Water facilities through technological and physical upgrades and enhancements.

Projects in the CIP are typically divided up into planning, design and construction phases. The Board may determine not to implement a project based on various considerations, such as financial constraints, environmental impacts, Operations and Maintenance, or community desire during a project's planning or design phases. The Board has various opportunities to provide direction and approval of capital projects as shown in the graphic below.

OPPORTUNITIES FOR BOARD DIRECTION ON CAPITAL PROJECTS



^{*} Board approval of the Engineer's Report is required only on projects with zone funding.

CIP PROCESS ALIGNMENT WITH ENDS POLICIES

FY 2023-2027 CIP Program Plans or Master Plans Ends Policy E-2 1990 SCVWD Action Plan for reducing disinfection Valley Water provides a by-product (Board approved) → 29 Water Supply Capital **CIP REVIEW AND FINANCIAL ANALYSIS** reliable, safe, and affordable → Integrated Water Resource Plan Projects water supply for current (Board Work Studies) and future generations in all 1999 Producer-Wholesaler Agreement for Supply of communities served. Recycled Water between SCRWA and Valley Water (Board approved) 2004 Valley Water Asset Management Program Implementation Plan --- 2005 Urban Water Management Plan (Board approved) 2005 Dam Safety Plan --- 2005 Water Infrastructure Reliability Plan → 2006 South County Water Recycling MasterPlan (Board approved) 2012 Safe, Clean Water Program (Board/Voter approved) 2012 Water Supply Infrastructure Master Plan (Board approved) --- 2013 Recycled Water Master Plan (City of Sunnyvale) --- 2014 South Bay Water Recycling Strategic Master --- 2019 Water Supply Master Plan Update (Board Approved) Program Plans or Master Plans FY 2023-2027 CIP Ends Policy E-3, E-3.1, 1982, 1986, 1990 Benefit Assessment Program → 16 Flood Protection Capital E-3.2 & E-3.3 (Board approved) Projects Natural flood protection is 2000 Clean, Safe Creek Program provided to reduce risk and (Board/Voter approved) improve health and safety 2001 Stream Maintenance Program (Board for residents, businesses, approved) Annual Watershed Facility Inspection and visitors, now and into Program (for all watersheds) the future.Maintain flood Feasibility Cost Sharing Agreements protection facilities to design with the US Army Corps of Engineers levels of protection. Assist 2012 Safe, Clean Water Program people, businesses, schools, (Board/Voter approved) NEW PROJECT VALIDATION, (and communities to prepare 2020 Measure S, Renewed Safe, Clean Water for, respond to, and recover Program (Board/Voter approved) from flooding through FY 2023-2027 CIP equitable and effective Program Plans or Master Plans → 11 Water Resources engagement. Increase the CEQA commitments Stewardship Projects health and safety of residents Regulatory permitting commitments countywide by reducing Enhancement Program per Clean Safe Creeks community flood risk. Program (Board/Voter approved) Enhancement opportunities determined appropriate by the Board • Fish and Aquatic Habitat Collaborative Effort Ends Policy E-4 • Natural Resource Damage Assessment Water resources stewardship 2012 Safe, Clean Water Program protects and enhances (Board/Voter approved) ecosystem health. 2020 Measure S, Renewed Safe, Clean Water FY 2023-2027 CIP Program (Board/Voter approved) → 3 Buildings and Grounds Strategic Support Program Plans or Master Plans Capital Projects 1990 Facilities Master Plan - Site Analysis Report (Board approved) --- 2005 Needs Assessment and Plan Feasibility Study --- 2012 Campus Master Plan (Board approved) FY 2023-2027 CIP Program Plans or Master Plans → 5 Information Technology

Capital Projects

Strategic Support

2001 Information System Master Plan --- 2003 Enterprise-wide Master Communication Plan

--- 2012 Information Systems Master Plan

FISCAL YEAR 2023-27 **CIP SUMMARY**

The recommended CIP for FY 2023-27 includes 64 priority projects to implement the goals and objectives of Valley Water's program plans and master plans. These projects are grouped into five types of improvements:

- Water Supply Capital Improvements 29 projects contributing to Ends Policy E-2
- Flood Protection Capital Improvements 16 projects contributing to Ends Policy E-3
- Water Resources Stewardship Capital **Improvements**

11 projects contributing to Ends Policy E-4

- Buildings and Grounds Capital Improvements 3 projects supporting Valley Water efforts to achieve the Ends Policies
- Information Technology Capital Improvements 5 projects supporting Valley Water efforts to achieve the Ends Policies

Each of the 64 projects in the CIP has an identified funding source based on the type of improvement or function of the project.

The principal sources of revenue for Valley Water are: property taxes; a special parcel tax, which funds the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program); and water production charges for use of groundwater, treated water, and surface water. These revenues are organized into eight funds. Seven of the eight funds have a specific purpose and only finance the operational and capital

expenditures related to that purpose. In 2008 the Board decided to combine the individual watershed funds into a county-wide watershed and stream stewardship fund to send the message that the watershed activities are managed for the benefit of the county. This also streamlines most tracking and accounting activities for staff. Valley Water continues to receive a small amount of revenue from benefit assessments that were approved by voters in the 1980s and 1990s. These funds are dedicated to specific watersheds and the accounting practices to ensure that they are spent and accounted for appropriately have been kept in place. As shown in the chart below, five of the eight funds are used to finance the five types of capital improvements in the CIP.

Valley Water aggressively pursues external funding to supplement its principal revenue when practical. For a complete listing of grants and partnerships see Appendix A.

A number of Valley Water projects are receiving substantial State funding through grants:

- \$25 million for Lower Silver Creek and Cunningham Flood Detention from DWR;
- \$496 million for Pacheco Reservoir from the California Water Commission:
- \$29.4 million for Upper Berryessa, Lower Berryessa, and Lower Penitencia from DWR; and
- \$61.5 million for South San Francisco Bay Shoreline Phase 1 Project from the San Francisco Bay Restoration Authority.

| VALLEY WATER PRIORITIES | Valley Water Funds | | | | | | |
|-----------------------------|----------------------------------|--------------------------------------|--------------|---------------------------|--------------------------------|--|--|
| Type of Improvement | Water Utility Enterprise Fund | Watershed Stream Stewardship Fund | General Fund | Safe, Clean Water Fund | Information Technology Fund | | |
| Water Supply | • | | | • | | | |
| Flood Protection | | • | | • | | | |
| Water Resources Stewardship | • | • | | • | | | |
| Buildings and Grounds | | | • | | | | |
| Information Technology | • | | | | • | | |

This chart identifies which types of improvement are associated with each of Valley Water's five capital funds.

The estimated total funding required to implement the 64 projects defined in the CIP is \$8.749 billion. Valley Water has been and continues to be successful in leveraging funding for its capital projects through partnerships with federal, state, and local agencies. Of the \$8.749 billion total funding, \$1.286 billion is expected from Valley Water's various partners, such as the U.S. Army Corps of Engineers (USACE), and \$7.462 billion from Valley Water. A list of projects that are funded cooperatively with Valley Water's partners is summarized in Appendix A. Fundin from partners for the cooperative capital projects generally come in two ways:

- Funds that are made available by the partners when needed (cost-sharing agreements or in-kind services), or
- Funds that are reimbursed by the partners after Valley Water advances the needed funds.

Of the \$1.286 billion that is expected from Valley Water's partners, \$810 million is advanced by Valley Water and reimbursed later. This \$810 million is included in the CIP, and increases Valley Water's total funding requirement from \$7.462 billion to \$8.273 billion, to ensure that Valley Water has adequate funding to advance the reimbursement.

CIP Funding by Type of Improvement

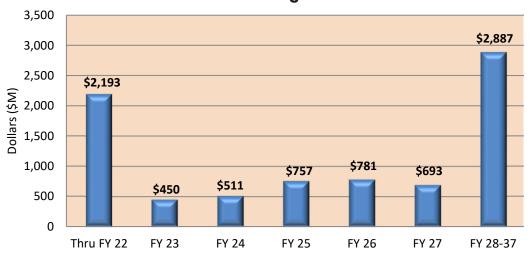


The chart above shows the distribution by type of improvement, of the \$8.273 billion total CIP funding as planned in the FY 2023-27 CIP.

The chart above shows how the \$8.273 billion to implement the 64 projects is allocated to each of the five types of improvements.

Of the \$8.273 billion in total funding for the 64 projects identified in the CIP, the Board has appropriated \$2.192 billion in prior years (through June 30, 2022, the end of fiscal year 2021-22). This year's CIP process identified additional funding needs of \$6.079 billion to complete the projects in the CIP, with \$450 million allocated in fiscal year 2022-23 and a total of \$5.629 billion proposed for future years. The table shown on page I-8 breaks down the fiscal year total by the five types of improvement and by applicable funding sources.

CIP Funding Schedule



The chart above shows how the \$8.273 billion is distributed by fiscal year.

CIP Funding Schedule by Type of Improvement and Funding Sources (\$K)

| | Through FY21 | FY22 | FY22 Unspent | FY23 | FY24 | FY25 | FY26 | FY27 | FY28-37 | TOTAL |
|---|-----------------|-----------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| WATER SUPPLY | | | | | | | | | | |
| Water Utility Enterprise Fund | 742,240 | 217,053 | 38,795 | 315,067 | 345,094 | 651,253 | 683,733 | 587,092 | 2,566,226 | 6,107,758 |
| Safe, Clean Water and Natural Flood Protection Fund | 2,278 | 344 | - | 1,246 | 3,652 | 3,293 | 3,370 | 2,155 | 200 | 16,538 |
| Water Supply Total | 744,518 | 217,397 | 38,795 | 316,313 | 348,746 | 654,546 | 687,103 | 589,247 | 2,566,426 | 6,124,296 |
| FLOOD PROTECTION | | | | | | | | | | |
| Watershed Stream Stewardship Fund | 405,651 | 59,280 | 12,856 | 33,084 | 37,066 | 19,965 | 51,920 | 46,939 | 177,451 | 831,356 |
| Safe, Clean Water and Natural Flood Protection Fund | 598,253 | 82,522 | 71,371 | 65,690 | 88,366 | 63,496 | 23,426 | 33,222 | 41,468 | 996,443 |
| Flood Protection Total | 1,003,904 | 141,802 | 84,227 | 98,774 | 125,432 | 83,461 | 75,346 | 80,161 | 218,919 | 1,827,799 |
| WATER RESOURCES STEWARI | | | | | | | | | | |
| Water Utility Enterprise Fund | 765 | - | | - | - | 3,710 | 4,843 | 2,323 | 41,394 | 53,035 |
| Watershed Stream Stewardship Fund | 9,436 | 2,015 | 364 | 751 | 1,610 | 2,315 | 4,755 | 3,706 | 24,024 | 48,612 |
| Safe, Clean Water and Natural Flood Protection Fund | 19,914 | 17,591 | 4,222 | 25,235 | 21,066 | 4,479 | 1,303 | 4,146 | 5,791 | 99,525 |
| Mitigation Total | 30,115 | 19,606 | 4,586 | 25,986 | 22,676 | 10,504 | 10,901 | 10,175 | 71,209 | 201,172 |
| BUILDINGS AND GROUNDS | | | | | | | | | | |
| General Fund | 20 | 6,000 | - | 6,394 | 10,689 | 6,620 | 6,734 | 11,025 | 24,216 | 71,698 |
| Buildings and Grounds Total | 20 | 6,000 | - | 6,394 | 10,689 | 6,620 | 6,734 | 11,025 | 24,216 | 71,698 |
| INFORMATION TECHNOLOGY | | | | | | | | | | |
| Water Utility Enterprise Fund | 2,908 | 204 | | 1,331 | 2,682 | 763 | 274 | 130 | 3,009 | 11,301 |
| Information Technology Fund | 25,721 | 1,145 | 819 | 1,471 | 1,261 | 1,144 | 741 | 2,015 | 3,236 | 37,933 |
| Information Technology Total | 28,629 | 1,349 | 819 | 2,802 | 3,943 | 1,907 | 1,015 | 2,145 | 6,245 | 49,234 |
| TOTAL | 1,807,186 | 386,154 | 128,427 | 450,269 | 511,486 | 757,038 | 781,099 | 692,753 | 2,887,015 | 8,274,199 |
| CUMULATIVE TOTAL | 1,807,186 | 2,193,340 | | 2,643,609 | 3,155,095 | 3,912,133 | 4,693,232 | 5,385,985 | 8,273,000 | |

FY 2021-22 Funds to be reappropriated

As shown in the table, CIP Funding Schedule by Type of Improvement and Funding Sources (on the previous page): approximately \$127 million of the already appropriated \$2.192 billion is not spent and is reappropriated to FY 2022-23 for continued use

in those same projects in amounts consistent with the project expenditure schedule for FY 2022-23. The following chart explains the relationship between the CIP funding schedule and expenditure schedule.

CIP Funding Schedule vs. CIP Expenditure Schedule

