#### **OVERVIEW**

The Santa Clara Valley Water District's (Valley Water) Capital Improvement Program (CIP) Fiscal Year (FY) 2024-28 Five-Year Plan is a projection of Valley Water's capital funding for planned capital projects from FY 2023-24 through FY 2027-28. 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 waterrelated 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:

- Acquisition of land for public purpose; 1.
- 2. Construction of a significant facility, i.e. a flood protection facility, a water treatment facility, or a building;
- 3. 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; and
- 6. 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 \$5 million (unless otherwise approved by the Board);
- 2. Project can be completed within two fiscal years; and
- 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-4.4.1., "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-4.4.3., "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 Ends Policies"

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 QEMS 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 Five-Year 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 CIP Draft Five-Year Plan in February. The CIP Draft Five-Year Plan 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 CIP Draft Five-Year Plan is also reviewed by local jurisdictions for consistency with their General Plans. While the CIP Draft Five-Year Plan is being reviewed by the cities and County, the budget is reviewed and finalized. The Board concludes the outreach of the CIP Draft Five-Year Plan with a public hearing. The first year of the CIP is reconciled with the budget; the Resolution to adopt the CIP Final Five-Year Plan 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 Five-Year Plan. The CIP Five-Year Plan 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 CIP Preliminary Five-Year Plan to ensure that the document is developed in accordance with

Board priorities. The direction received is used to develop the CIP Draft Five-Year Plan 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 CIP Final Five-Year Plan 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 Five-Year Plan document or implementation by staff.

On January 10, 2023, the CIP Preliminary FY 2024-28 Five-Year Plan project list was reviewed and endorsed by the Board. One new project was added to the project list, the RWTP Ammonia Storage and Metering Facility (ASMF) Upgrade Project.

The ASMF at Rinconada Water Treatment Plant (RWTP) will be replaced for reliability and safety, since it is a critical system for the Plant. The single ammonia storage tank will be replaced with two tanks. The four existing metering pumps will be replaced with new ones, and three new feed lines will be installed. The estimated project cost is \$7.233 million and the project duration is expected to last five years.

On April 11, 2023, the Public Hearing to consider the CIP Draft FY 2024-28 Five-Year Plan was opened by the Board. At that time another new project was recommended and approved for inclusion in the CIP Final FY 2024-28 Five-Year Plan project list, the Pond A4 Resilient Habitat Restoration project

The Pond A4 Resilient Habitat Restoration Project (Pond A4) is a multi-benefit project that will create habitat for threatened and endangered species and promote community flood resilience by constructing a 30:1 sloped ecotone at the southern boundary of Pond A4. The estimated project cost is \$5.749 million and the project duration is expected to last two years.

The following are highlights of changes from the previous year that have been approved as the basis for the CIP Final FY 2024-28 Five-Year Plan:

- To fully fund the Water Supply projects in the CIP FY 2024-28 Five-Year Plan, on May 16, 2023, the Board approved increases in groundwater production charges for FY 2023-24 of 14.5% in North County Zone W-2, 6.0% in South County Zone W-5, 12.9% 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 (which includes the FERC sub-projects) increased in cost by \$183.217 million.
  - The Purified Water Project (which includes the P3 Entity costs) increased in cost by \$458.130 million.
  - The Rinconada Water Treatment Plant Reliability Improvement Project increased in cost by \$166.104 million.
  - The 10-Year Pipeline Rehabilitation (FY 2018-27) Project increased in cost by \$14.887 million.
  - The Almaden Valley Pipeline Replacement Project increased in cost by \$2.729 million.
  - The Vasona Pump Station Upgrade Project increased in cost by \$8.854 million.
  - The Santa Teresa Water Treatment Plant Filter Media Replacement Project increased in cost by \$5.691 million.
  - The Water Treatment Plant Electrical Improvement Project increased in cost by \$6.887 million.
- The following are highlights of significant project changes under Flood Protection and Water Resources Stewardship:
  - The Palo Alto Flood Basin Tide Gate Structure
    Replacement decreased in cost by \$27.105 million.
  - The Sunnyvale East and West Channels (E2) Project decreased in cost by \$12.445 million.
  - The Guadalupe River Tasman Drive to I-880 Project increased in cost by \$3.926 million.

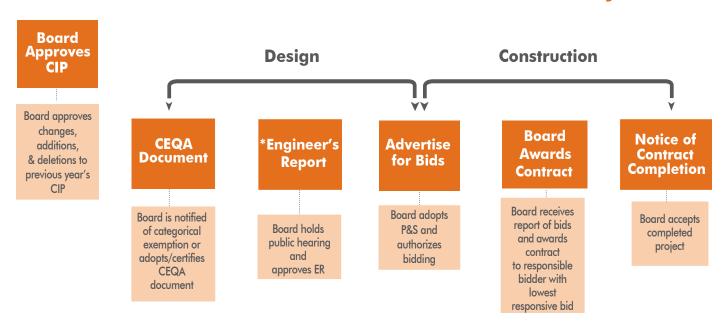
- The Coyote Creek, Montague Expressway to Tully Road (E1) increased in cost by \$161.890 million.
- The Upper Penitencia Creek, Coyote Creek to Dorel Drive Project decreased in cost by \$12.989 million.
- The Almaden Lake Improvements Project decreased in cost by \$46.198 million.
- The Hale Creek Enhancement Pilot Study Project increased in cost by \$3.425 million.
- The Calabazas/San Tomas Aquino Creek-Marsh Connection Project increased in cost by \$3.314 million.
- The Ogier Ponds Separation from Coyote Creek (D4.2) Project increased in cost by \$6.046 million.
- Infrastructure construction projects in the CIP FY 2024-28 Five-year Plan are experiencing significant cost increases due to construction inflation escalation factor increases, volatile market condtions, and an unstable labor force.
- Two projects were completed in the FY 2023-27 CIP. The Cross Valley Pipeline Extension (under ADSRP) and the Coyote Warehouse are planned to be completed at the close of fiscal year 2023.

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



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**



<sup>\*</sup> Board approval of the Engineer's Report is required only on projects with zone funding.

#### CIP PROCESS ALIGNMENT WITH ENDS POLICIES

#### **Program Plans or Master Plans** FY 2024-2028 CIP Ends Policy E-2 1990 SCVWD Action Plan for reducing disinfection → 29 Water Supply Capital Valley Water provides a by-product (Board approved) **Projects** reliable, safe, and affordable NEW PROJECT VALIDATION, CIP REVIEW AND FINANCIAL ANALYSIS Integrated Water Resource Plan 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 Plan 2019 Water Supply Master Plan Update (Board Approved) Program Plans or Master Plans FY 2024-2028 CIP Ends Policy E-3, E-3.1, → 1982, 1986, 1990 Benefit Assessment Program (Board → 16 Flood Protection Capital E-3.2 & E-3.3 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 approved) for residents, businesses, Annual Watershed Facility Inspection Program (for all and visitors, now and into watersheds) the future. Maintain flood Feasibility Cost Sharing Agreements protection facilities to with the US Army Corps of Engineers design levels of protection. 2012 Safe, Clean Water Program Assist people, businesses, (Board/Voter approved) schools, and communities 2020 Measure S, Renewed Safe, Clean Water to prepare for, respond to, Program (Board/Voter approved) FY 2024-2028 CIP and recover from flooding → 10 Water Resources through equitable and Program Plans or Master Plans Stewardship Projects effective engagement. **CEQA** commitments Increase the health Regulatory permitting commitments and safety of residents Enhancement Program per Clean Safe Creeks countywide by reducing Program (Board/Voter approved) community flood risk. Enhancement opportunities determined appropriate by the Board • Fish and Aquatic Habitat Collaborative Effort Natural Resource Damage Assessment Ends Policy E-4 Other Water resources 2012 Safe, Clean Water Program stewardship protects and (Board/Voter approved) enhances ecosystem health. FY 2024-2028 CIP 2020 Measure S, Renewed Safe, Clean Water Program (Board/Voter approved) → 3 Buildings & Grounds Capital Projects **Program Plans or Master Plans** 1990 Facilities Master Plan - Site Analysis Report Strategic Support (Board approved) → 2005 Needs Assessment and Plan Feasibility Study → 2012 Campus Master Plan (Board approved) FY 2024-2028 CIP 5 Information Technology **Program Plans or Master Plans** Capital Projects 2001 Information System Master Plan Strategic Support → 2003 Enterprise-wide Master Communication Plan

--> 2012 Information Systems Master Plan

#### **FISCAL YEARS 2024-28 CIP SUMMARY**

The recommended CIP FY 2024-28 Five-Year Plan includes 63 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* 10 projects contributing to Ends Policy E-4
- Buildings & 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 **Fnds Policies**

Each of the 63 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 Five-year Plan.

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:
- \$504 million for Pacheco Reservoir from the California Water Commission:
- \$30 million for Upper Berryessa, Lower Berryessa, and Lower Penitencia from DWR: and

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 & Grounds			•					
Information Technology	•				•			

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

• \$61.9 million for San Francisco Bay Shoreline Phase I Project from the San Francisco Bay Restoration Authority.

In addition to Valley Water funding sources, Valley Water has entered into a flexible, low cost Water Infrastructure Finance and Innovation Act (WIFIA) master loan agreement with the Environmental Protection Agency (EPA) that commits up to:

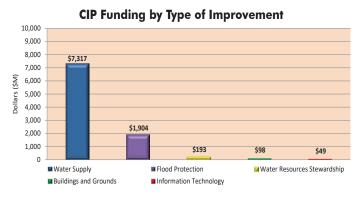
- \$580 million to provide upfront funding for the Anderson Dam Seismic Retrofit Project and the Coyote Percolation Dam Replacement Project with final payoff of the loan occurring in 2067.
- \$146 million to provide upfront funding for the Sunnyvale East and West Channels Flood Protection Project, the Coyote Creek Flood Protection Project, and the Upper Penitencia Creek Project with final payoff of the loan occurring in 2063.

The estimated total funding required to implement the 63 projects defined in the CIP is \$10.037 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 \$10.037 billion total funding, \$1.296 billion is expected from Valley Water's various partners, such as the U.S. Army Corps of Engineers (USACE), and \$8.741 billion from Valley Water.

A list of projects that are funded cooperatively with Valley Water's partners is summarized in Appendix A. Funding 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 inkind services), or
- Funds that are reimbursed by the partners after Valley Water advances the needed funds.

Of the \$1.296 billion that is expected from Valley Water's partners, \$820 million is advanced by Valley Water and reimbursed later. This \$820 million is included in the CIP, and increases Valley Water's total

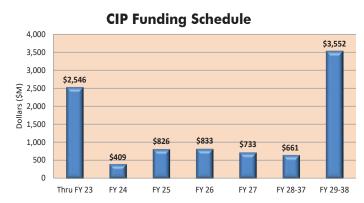


The chart above shows the distribution by type of improvement, of the \$9.561 billion total CIP funding as planned in the FY 2024-28 CIP.

funding requirement from \$8.741 billion to \$9.561 billion, to ensure that Valley Water has adequate funding to advance the reimbursement.

The chart above shows how the \$9.561 billion to implement the 63 projects is allocated to each of the five types of improvements.

Of the \$9.561 billion in total funding for the 63 projects identified in the CIP, the Board has appropriated \$2.546 billion in prior years (through June 30, 2023, the end of FY 2022-23). This year's CIP process identified additional funding needs of \$7.015 billion to complete the projects in the CIP, with \$409 million allocated in FY 2023-24 and a total of \$6.606 billion proposed for future years. The table shown on page I-9 breaks down the fiscal year total by the five types of improvement and by applicable funding sources.



The chart above shows how the \$9.561 billion is distributed by fiscal year.

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

	Through FY22	FY23	FY23 Unspent	FY24	FY25	FY26	FY27	FY28	FY29-38	TOTAL
WATER SUPPLY										
Water Utility Enterprise Fund	925,589	308,090	44,622	341,494	683,637	612,692	529,395	539,769	3,359,246	7,299,911
Safe, Clean Water and Natural Flood Protection Fund	2,593	1,220	-	3,559	3,609	3,465	2,199	101	91	16,837
Water Supply Total	928,182	309,310	44,622	345,053	687,246	616,157	531,594	539,870	3,359,337	7,316,748
FLOOD PROTECTION										
Watershed Stream Stewardship Fund	452,732	35,235	7,918	12,968	10,697	60,121	41,922	42,017	106,782	762,473
Safe, Clean Water and Natural Flood Protection Fund	678,529	27,024	86,233	34,301	114,808	135,807	108,374	29,412	13,590	1,141,846
Flood Protection Total	1,131,261	62,259	94,151	47,269	125,505	195,928	150,296	71,429	120,372	1,904,319
WATER RESOURCES STEWARDS	HIP									
Water Utility Enterprise Fund	765	-	-	-	-	1,233	15,538	15,118	15,862	48,516
Watershed Stream Stewardship Fund	7,352	1,751	-	6,119	2,757	1,942	14,061	15,551	9,604	59,137
Safe, Clean Water and Natural Flood Protection Fund	36,259	28,654	31,389	4,570	2,754	4,521	4,149	4,000	-	84,906
Mitigation Total	44,376	30,405	31,389	10,689	5,511	7,696	33,748	34,669	25,466	192,559
BUILDINGS AND GROUNDS										
General Fund	2,020	6,886	3,380	4,314	4,340	10,086	15,360	13,971	41,135	98,112
Buildings and Grounds Total	2,020	6,886	3,380	4,314	4,340	10,086	15,360	13,971	41,135	98,112
INFORMATION TECHNOLOGY										
Water Utility Enterprise Fund	2,996	1,274	783	-	2,140	2,582	7	586	3,437	13,022
Information Technology Fund	25,563	1,471	376	1,383	1,198	778	2,117	889	2,513	35,912
Information Technology Total	28,559	2,745	1,159	1,383	3,338	3,360	2,124	1,475	5,950	48,934
TOTAL	2,134,398	411,605	174,701	408,708	825,939	833,227	733,121	661,414	3,552,261	9,560,672
CUMULATIVE TOTAL	2,134,398	2,546,003	524,103	2,954,711	3,780,650	4,613,877	5,346,997	6,008,411	9,560,672	

FY 2022-23 Funds to be reappropriated

As shown in the table, CIP Funding Schedule by Type of Improvement and Funding Sources (on the previous page): approximately \$175 million of the already appropriated \$2.546 billion is not spent and is reappropriated to FY 2023-24 for continued use

in those same projects in amounts consistent with the project expenditure schedule for FY 2023-24. The following chart explains the relationship between the CIP funding schedule and expenditure schedule.

#### **CIP Funding Schedule vs. CIP Expenditure Schedule**

