



Valley Water

FEBRUARY 2024

53rd Annual Report

FY 2024-25

Protection and Augmentation of Water Supplies

February 23, 2024

Dear Valley Water Stakeholder:

The existing major facilities that serve Santa Clara County's water needs, including the system of dams, pipelines and treatment plants, were built decades ago. Projects like the Anderson Dam Seismic Retrofit are necessary to ensure this system continues operating efficiently and safely for many years to come.

Water charges pay for the infrastructure and services required to maintain a reliable groundwater supply and to provide safe, clean water for the county's residents, farms and businesses. Industry-wide cost impacts associated with post-COVID-19 supply chain issues and rapid inflation have dramatically affected the cost to deliver on important water supply projects, like the Anderson Dam Seismic Retrofit Project.

Climate change has brought the possibility of more frequent and prolonged droughts and the need for new infrastructure investments. Accordingly, planning work continues on efforts to expand purified water use in the county, expand local water storage at Pacheco Reservoir, and improve water storage diversification with investments in out-of-county water storage facilities. The effort to develop Valley Water's 2050 Water Supply Master Plan is underway. When completed, it will guide critical investments for projects and programs to increase future water supply reliability. Inside, you will find more information about some of those investments.

Valley Water has released our 53rd Annual Report on the Protection and Augmentation of Water Supplies, which documents our efforts to ensure a reliable water supply to support a healthy life, environment and economy in Santa Clara County. The report presents the basis for the proposed maximum groundwater production charges for fiscal year (FY) 2024-25 and is available on valleywater.org.

While Valley Water continually strives to be a careful steward of the financial resources entrusted to us, we must align water charges with the costs of delivering the services the community relies upon. Water will always be one of our most precious resources, and we are committed to its preservation and responsible management while ensuring the prudent use of public funds. This letter would not be complete without a reminder that Valley Water's Board of Directors encourages everyone to make conservation a way of life. A water conservation mindset paired with strategic infrastructure investments will help secure a sustainable and resilient water supply, now and into the future.

If you have questions or concerns about groundwater, this year's charge-setting process, or how we can better serve you, please contact us by calling 408-265-2600 or emailing clerkoftheboard@valleywater.org. You're also invited to join us at our upcoming scheduled public events (listed on page iii) to speak with staff directly. We look forward to receiving your feedback and thank you for your planned participation.

Sincerely,



Aaron Baker, P.E.
Chief Operating Officer
Water Utility Enterprise

53rd Annual Report

Protection and Augmentation of Water Supplies 2024-2025

The Annual Report on the Protection and Augmentation of Water Supplies is published and filed prior to Valley Water holding public hearings on the groundwater production charges. On average, Valley Water actively replenishes two-thirds of the groundwater used by water retailers, residents, businesses, and farms in Santa Clara County.

With revenue from groundwater production charges, Valley Water protects and augments water supplies for the health, welfare, and safety of the community. The activities, programs and services undertaken with funding from groundwater production charges include:

Infrastructure

- Plan and construct improvements to infrastructure such as dams, pipelines, recharge ponds, drinking water and recycled water treatment plants, and pump stations.
- Operate and maintain dams, pipelines, recharge ponds, treatment plants and pumping stations to help sustain the groundwater basins.

Water supplies

- Operate and maintain local reservoirs to capture water and fill groundwater percolation ponds.
- Purchase imported water and develop local water supplies to replenish the groundwater basin.

Water quality

- Monitor and protect groundwater from pollutants.
- Ensure proper construction and destruction of wells to prevent contaminants from infiltrating the groundwater basin.

The North County groundwater benefit zone is Zone W-2, which approximately encompasses the urbanized area of the Santa Clara Subbasin. South County groundwater benefit zones include Zone W-5 in the Llagas Subbasin; Zone W-7, which encompasses the Coyote Valley; and Zone W-8 which encompasses areas in the foothills southeast of Uvas and Chesbro Reservoirs. More information on the groundwater benefit zones can be found online at valleywater.org/your-water/groundwater/groundwater-benefit-zones.

The following represents the staff proposed maximum rate increases for groundwater benefit zones for FY 2024-25:

North County

- Zone W-2, up to a 12.9% increase, or a \$8.78 per month increase to the average household

South County

- Zone W-5, up to a 6.6% increase, or an \$1.22 per month increase to the average household
- Zone W-7, up to a 14.2% increase, or a \$3.20 per month increase to the average household
- Zone W-8, up to an 8% increase, or a \$1.10 per month increase to the average household

The staff proposed maximum rate increase for agricultural groundwater users in all zones is up to an 8% increase, or roughly a \$0.49 increase per month per acre.

The following opportunities are also available for you to gather information and provide input on these important groundwater issues:

IMPORTANT DATES

April 9, 2024

1 p.m.

Valley Water Board of
Directors Meeting
Time certain

Public Hearing Opens (remote participation via Zoom is also available)

Valley Water Headquarters Boardroom
5700 Almaden Expy, San José, CA 95118
valleywater.zoom.us/j/84454515597
Meeting ID: 844 5451 5597
Dial-in: 1-669-900-9128

April 11, 2024

6 p.m.

Open House (In-person only)

Focused on South County

City of Gilroy
City Council Chambers, City Hall
7351 Rosanna Street, Gilroy, CA 95020

7 p.m.

Valley Water Board of
Directors Meeting
Time certain

Public Hearing Continues (remote participation via Zoom is also available)

Focused on South County

City of Gilroy
City Council Chambers, City Hall
7351 Rosanna Street, Gilroy, CA 95020
valleywater.zoom.us/j/84454515597
Meeting ID: 844 5451 5597
Dial-in: 1-669-900-9128

April 23, 2024

1 p.m.

Valley Water Board of
Directors Meeting
Time certain

Public Hearing Concludes (remote participation via Zoom is also available)

Valley Water Headquarters Boardroom
5700 Almaden Expy, San José, CA 95118
valleywater.zoom.us/j/84454515597
Meeting ID: 844 5451 5597
Dial-in: 1-669-900-9128

53rd Annual Report

Protection and Augmentation of Water Supplies
2024-2025

Board of Directors:

Nai Hsueh – District 5, Chair
Richard P. Santos – District 3, Vice Chair
John L. Varela – District 1
Barbara F. Keegan – District 2
Jim Beall – District 4
Tony Estremera – District 6
Rebecca Eisenberg – District 7

Under the Direction of:

Rick L. Callender, Esq.,
Chief Executive Officer

Melanie Richardson, P.E.,
Assistant Chief Executive Officer

Aaron Baker, P.E.,
Chief Operating Officer, Water Utility Enterprise

Rachael Gibson,
Chief of External Affairs

Prepared by:

Darin Taylor,
Chief Financial Officer

Carmen Narayanan,
Financial Planning & Revenue Manager

Jennifer Abadilla,
Senior Management Analyst

Contributors:

Chanie Abuye	Matt Keller
Gina Adriano	Kaho Kong
Benjamin Apolo III	Jimin Oh Lee
Linda Arluck	Simon Lo
Emmanuel Aryee	Tin Lin
Hossein Ashktorab	Fernando Lucen
Henry Barrientos	Katherine Maher
James Bohan	Becky Manchester
Danny Burnham	Julio Maravilla
Justin Burks	Ryan McCarter
Freddie Chak	Brian Mendenhall
Andrea Yau-Chan	Hossein Morshedien
Barton Ching	James O'Brien
Jessica Collins	Julianne O'Brien
Vanessa De La Piedra	Mike Potter
Hemang Desai	Metra Richert
Jiana Escobar	Miguel Silva
Samantha Greene	Ranithri Slayton
Jason Gurdak	Kirsten Struve
Christopher Hakes	Charlene Sun
Robert Harvie	Matthew Tan
Linh Hoang	David Tucker
Dana Jacobson	Jose Villarreal
Cindy Kao	Jing Wu
Bassam Kassab	Sarah Young
	Xiaoyong Zhan

DISCLAIMER

The water utility financial forecast set forth herein was required to be prepared by California statutes for rate setting and other purposes and was not prepared to comply with Valley Water's continuing disclosure or other federal securities law disclosure obligations. The forecast represents the estimate of projected financial results of certain funds of Valley Water related to Valley Water's water utility and is based upon Valley Water's judgment of the most probable occurrence of certain future events at the time this forecast is published. Such projected financial forecast is based on a variety of assumptions which are material in the development thereof, and variations in the assumptions may produce substantially different forecast results. Actual operating results achieved during the projection period may vary from those presented in the forecast and such variations may be material. Revenues, operating outlays and other amounts set forth above (i) are presented on a budgetary basis which is not consistent with generally accepted accounting principles in all respects, and (ii) may not

be presented consistent with the requirements of other statutes, regulations or contractual obligations applicable to or entered into by Valley Water, including but not limited to bonds, notes or other obligations issued by or on behalf of Valley Water and payable from the Water Enterprise Fund and the State Water Project Fund. The Parity Debt Service Coverage calculation included herein is prepared for general reference and may not conform to the debt service coverage calculation formulas pursuant to the Water Utility Parity Master Resolutions or other calculations applicable to the Water Enterprise Fund and the State Water Project Fund individually. Investors or potential investors considering the purchase or sale of District bonds, notes or other obligations are referred to information filed by Valley Water on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System for municipal securities disclosures, maintained on the following website: emma.msrb.org/.

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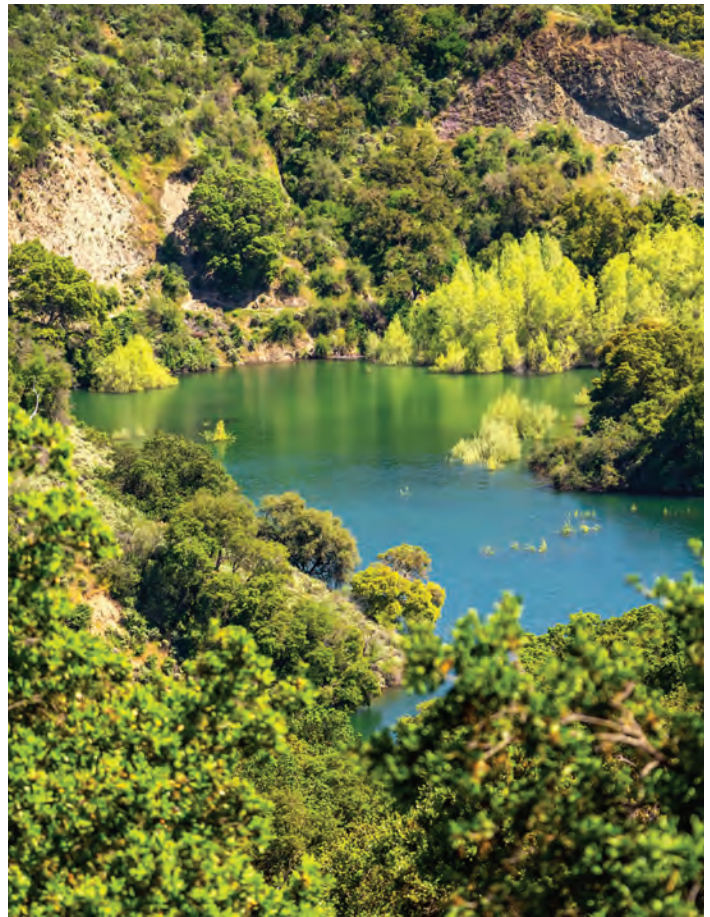
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Executive Summary

This is the 53rd annual report on Valley Water's (Santa Clara Valley Water District) activities in the protection and augmentation of water supplies. This report is prepared in accordance with the requirements of the District Act, section 26.5.

In calendar year 2023, Valley Water's conjunctive management program supplied the county with 518,000 acre-feet of water supply, relative to total water use of 273,000 acre-feet. Imported water supply allocations were 100% for State Water Project (SWP) water and 100% for Municipal and Industrial Central Valley Project (CVP) water. The last time the full allocations were allotted were in 2006 and 2017, respectively. Banked water at Semitropic Water Storage District increased to an estimated 286,000 acre-feet out of a total capacity of 350,000 acre-feet. Total storage in Valley Water reservoirs as of February 1, 2024 was 47 percent of the 20-year average and 23 percent of capacity, or about 37,702 acre-feet. Groundwater storage increased in 2023 by about 61,600 acre-feet to an estimated 382,600 acre-feet, well into the healthy range. See Section 1, "Current Water Demand and Water Supply Conditions" for more details.

Valley Water estimates the increases in population and jobs will result in an increase in water demands from a current annual average of about 310,000 acre-feet to about 342,000 acre-feet in 2045. According to the preliminary results of Valley Water's Water Supply Master Plan 2050 and the associated Monitoring and Assessment Program (MAP), water supplies would be sufficient to meet future water demand by investing in the maintenance of existing supplies and infrastructure, as well as a diverse suite of cost-effective projects including potable reuse, stormwater capture, and conservation. Staff anticipates completing the Water Supply Master Plan 2050 toward the end of calendar year 2024. Valley Water is also considering other Water Supply Master Plan projects to help optimize the system and protect against other uncertainties and water supply risks, including the Los Vaqueros Reservoir Expansion Project with Transfer Bethany Pipeline, the planned Pacheco Reservoir Expansion, the Delta Conveyance Project, and the B.F. Sisk Dam Raise Project. The MAP will continue to provide a mechanism for adapting to changing supply and demand conditions.



Stevens Creek Reservoir

See Section 2, "Future Water Demand and Water Supply Availability" for more details.

Maintaining existing assets provides the foundation for meeting current and future supply needs. The Anderson Dam seismic retrofit, the Rinconada Water Treatment Plant (WTP) reliability improvements, and other aging infrastructure renewal projects like the 10-Year Pipeline Rehabilitation Program comprise a large part of the proposed FY 25-29 Capital Improvement Program. Section 3, "Programs to Sustain Water Supply Availability" further elaborates on the long-term investment strategy, which is composed of seismic retrofit, recycled/purified water, surface water storage expansion, and asset renewal and improvement projects.

Staff developed a groundwater charge projection for the next 10 years based on Board input during the January 9, 2024 Valley Water Board of Directors meeting. While Valley Water continually strives for cost reductions and better utilization of the public's assets, it is imperative to align water charges with the costs to deliver the services the community relies upon.

An increase in the groundwater charge projection in North County Zone W-2 is recommended. The increase is driven by multiple factors: 1) to advance the Anderson Dam Seismic Retrofit, which will improve public safety and restore operational capacity; 2) to fund key baseline projects including the Rinconada WTP reliability improvement and 10-year pipeline rehabilitation program; 3) to conduct planning work related to the Pacheco Reservoir Expansion, the B.F. Sisk Dam Raise and the Los Vaqueros Reservoir Expansion projects, which would provide additional water storage capacity; and 4) to pay for general inflation impacting the nation.

For South County Zones (W-5, W-7, and W-8), an increase in the groundwater charge projection for FY 2024-25 is also recommended. Key drivers include: 1) to advance the Anderson Dam Seismic Retrofit, which will improve public safety and restore operational capacity; 2) to conduct planning work related to the Pacheco Reservoir Expansion and the B.F. Sisk Dam Raise project, which would provide additional water storage capacity; and 3) to pay for general inflation impacting the nation.

Section 4 provides details on the financial analysis of the Water Utility, including future capital improvement and maintenance requirements, operating requirements, financing methods and the proposed groundwater production and other water charges by zone for Fiscal Year 2024-25.

The North County groundwater benefit zone is Zone W-2, which approximately encompasses the urbanized area of the Santa Clara Subbasin. South County groundwater benefit zones include Zone W-5 over the Llagas Subbasin; Zone W-7, which encompasses the Coyote Valley; and Zone W-8 which encompasses areas in the foothills southeast of Uvas and Chesbro Reservoirs. See Appendix E for further details.

For Zone W-2 in the North County, staff proposes an increase of up to 12.9 percent for the Municipal and Industrial (M&I) groundwater charge for FY 2024-25. Staff proposes maintaining the contract treated water surcharge at \$115 per acre-foot in alignment with the cost that retailers would incur to pump water from their wells. Staff believes that this price remains close to the point of neutrality where a retailer would be indifferent in the short term as to whether to pump water from the ground or take treated water. The staff recommended

groundwater charge for FY 2024-25 for Zone W-5 is an increase of up to 6.6 percent from the prior year. For Zone W-7 staff is proposing an increase of up to 14.2 percent from the prior year, and for Zone W-8 staff is proposing an increase of up to 8 percent from the prior year.

For agricultural groundwater users, staff proposes an increase of up to 8 percent from the prior year, which equates to setting the agricultural groundwater charge at 9.25 percent of the lowest M&I rate (Zone W-8).

Staff proposed rate changes for surface water users are a function of the groundwater charge in each zone.

The staff recommended charges for FY 2024-25 are shown in the right-hand column of the chart on the next page.



Calero Reservoir

Summary of Groundwater Production and Other Water Charges

		Dollars Per Acre Foot		
Zone W-2 (North County)	Basic User/Groundwater Production Charge	FY 2022-23	FY 2023-24	Proposed Maximum FY 2024-25
	Municipal and Industrial	1,724.00	1,974.00	2,229.00
	Agricultural	36.85	36.85	39.80
	Surface Water Charge			
	Surface Water Master Charge	47.10	54.00	61.00
	Total Surface Water, Municipal and Industrial*	1,771.10	2,028.00	2,290.00
	Total Surface Water, Agricultural*	83.95	90.85	100.80
	Treated Water Charges			
	Contract Surcharge	115.00	115.00	115.00
	Total Treated Water Contract Charge**	1,839.00	2,089.00	2,344.00
Zone W-5 (Llagas Subbasin)	Basic User/Groundwater Production Charge			
	Municipal and Industrial	513.00	543.50	579.00
	Agricultural	36.85	36.85	39.80
	Surface Water Charge			
	Surface Water Master Charge	47.10	54.00	61.00
	Total Surface Water, Municipal and Industrial*	560.10	597.50	640.00
	Total Surface Water, Agricultural*	83.95	90.85	100.80
	Recycled Water Charges			
	Municipal and Industrial	493.00	523.50	559.00
	Agricultural	64.25	67.20	70.15
Zone W-7 (Coyote Valley)	Basic User/Groundwater Production Charge			
	Municipal and Industrial	582.50	657.50	750.50
	Agricultural	36.85	36.85	39.80
	Surface Water Charge			
	Surface Water Master Charge	47.10	54.00	61.00
	Total Surface Water, Municipal and Industrial*	629.60	711.50	811.50
Zone W-8 (Uvas/Chesbro)	Basic User/Groundwater Production Charge			
	Municipal and Industrial	368.50	398.00	430.00
	Agricultural	36.85	36.85	39.80
	Surface Water Charge			
	Surface Water Master Charge	47.10	54.00	61.00
	Total Surface Water, Municipal and Industrial*	415.60	452.00	491.00
	Total Surface Water, Agricultural*	83.95	90.85	100.80

*Note: The total surface water charge is the sum of the basic user charge (which equals the groundwater production charge) plus the water master charge

**Note: The total treated water contract charge is the sum of the basic user charge (which equals the groundwater production charge) plus the contract surcharge

***Note: The total treated water non-contract charge is the sum of the basic user charge (which equals the groundwater production charge) plus the non-contract surcharge

Background and History

Valley Water (Santa Clara Valley Water District) is a special district originally formed in 1929. Valley Water is authorized to supply water and provide flood protection services in Santa Clara County, California which includes 15 incorporated cities/towns (Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga and Sunnyvale).

Valley Water seeks to provide water supply of adequate quantity and quality to meet the desired quality of life in the community. To fulfill this mission, Valley Water imports water into the county, manages two groundwater subbasins, and owns and operates three water treatment plants, an advanced water purification center, a state-of-the-art water quality laboratory, ten reservoirs, three pumping stations, a hydroelectric plant, numerous recharge facilities in seven major recharge systems, and related distribution facilities. Valley Water is authorized to import, store, treat and distribute water within its jurisdictional boundaries to provide water in sufficient quantity and quality for present and future beneficial use.

Valley Water wholesales drinking water to water retailers and protects and augments groundwater for the benefit of multiple water retailers, mutual water companies and thousands of private well owners that pump groundwater. Water retailers then deliver water to the consumers in the county. Valley Water receives revenue from groundwater charges for water pumped from areas receiving benefit from Valley Water groundwater management activities, in addition to revenue from the sale of treated water, nonpotable surface water and recycled water.

What do Groundwater Production Charges pay for?



What you get	What we do
Benefits <ul style="list-style-type: none">Reliable, healthy and clean drinking waterDiverse water supply sourcesProtected and sustained water resourcesMaximized water conservation and recyclingReduced risk of subsidence through sustainable groundwater management	Replenish the groundwater basin <ul style="list-style-type: none">Operate and maintain local reservoirs to capture water and fill recharge ponds.Purchase imported water.Provide treated drinking water to offset groundwater pumping (in-lieu recharge). Ensure safe drinking water <ul style="list-style-type: none">Monitor and protect groundwater from pollutants.Ensure proper construction and destruction of wells. Construct, maintain and repair <ul style="list-style-type: none">Plan and construct improvements to infrastructure such as dams, pipelines, ponds, treatment plants and pump stations.Operate and maintain pipelines and pumping plants to help sustain the groundwater basins.



Los Alamitos Percolation Pond

Local water



A complex network of reservoirs, creeks and specialized ponds replenishes the groundwater basin. The same system is also used to transport imported water so that it, too, can be used to replenish the aquifer. It all works so well that managed recharge actually exceeds natural recharge in nearly all years.

Water pumped from the groundwater basin through wells is used by private well owners, farmers and water retailers. Some water captured in reservoirs is processed at state-of-the-art drinking water treatment plants. The treated water is sold to local water retailers, such as San Jose Water Company, who use their own distribution systems to serve customers.

Imported water



Much of the county's current water supply comes from hundreds of miles away, first as snow or rain in the Sierra Nevada range of northern and eastern California, then as water in rivers that flow toward the Sacramento-San Joaquin River Delta. This imported water is brought into the county through the complex infrastructure of the State Water Project, the federal Central Valley Project and San Francisco's Hetch Hetchy system. Three drinking water treatment plants deliver imported water to customers, while the rest is used to replenish groundwater basins.

Having treated imported water available to meet demands protects the groundwater basin from over pumping.

Recycled/Purified water



An important and growing source of water is recycled and purified water. Used primarily for irrigation by industry and agriculture, recycled water is wastewater that has been treated to meet strict standards set by the State Water Resources Control Board.

Using recycled water helps conserve drinking water supplies and provides a drought-resilient water supply, while reducing dependency on imported water and groundwater. Additionally, there are environmental benefits of helping to preserve our saltwater and tidal habitat by reducing freshwater discharge to the San Francisco Bay in the north county. Recycled water also minimizes treated wastewater discharge to the Pajaro River at certain times in the south county.

Local water supplies make up the foundation of water supply in Santa Clara County, but need to be augmented to reliably meet the demands of the county. Imported water supplies, and of increasing importance, recycled and purified water supplies, are key to Valley Water's conjunctive management efforts to help maintain a reliable water supply.

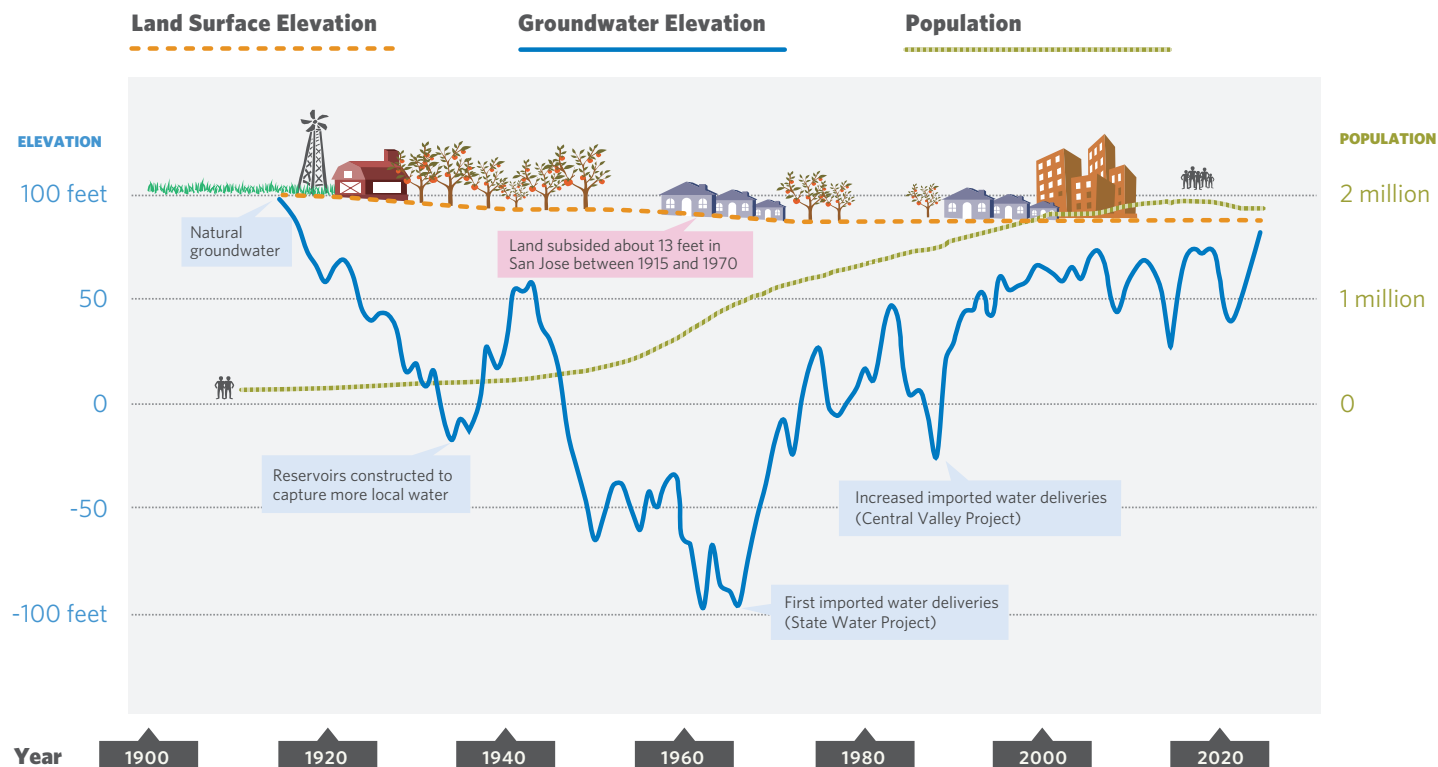
The major water supply facilities that serve the county were built decades ago. Consequently, Valley Water is in an era of investment to repair and replace existing infrastructure to prevent the system from failing.



Almaden Reservoir

Santa Clara County Groundwater-at-a-Glance

A representation of our groundwater supply throughout the years compared with the local population growth. This visual is not intended as a technical exhibit.



Over the years, Valley Water's water importation and groundwater management activities have stabilized groundwater levels and prevented land subsidence, or sinking.

Valley Water's water importation and groundwater management activities halted land subsidence or sinking around 1970 and resulted in groundwater level recovery. These activities remain essential in preventing subsidence and ensuring sustainable groundwater supplies.

Without Valley Water's management programs (including managed and in-lieu recharge), groundwater levels would be considerably lower than they are today, reducing water supply reliability and increasing the risks of renewed land subsidence and saltwater intrusion.



Main Avenue Pond

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1-1 WATER SUPPLY OVERVIEW

The mission of Valley Water (Santa Clara Valley Water District) is to provide Silicon Valley safe, clean water for a healthy life, environment and economy. Accordingly, Valley Water employs an integrated approach to manage a sustainable water supply through conjunctive management and use of surface water and groundwater resources to maximize water use efficiency.

Water supply is comprised of “incoming” supplies from local and imported sources, as well as previously stored supplies, referred to as carryover, withdrawn from in-county and/or out-of-county surface water and groundwater storage.

Local Supplies

Local groundwater resources make up the foundation of water supply in Santa Clara County, but they need to be augmented by Valley Water’s comprehensive water supply management activities to reliably meet the needs of county residents, businesses, agriculture, and the environment. These activities include direct managed recharge as well as the provision of treated and untreated surface water, acquisition of supplemental water supplies, water conservation and recycling, and programs to protect, manage and sustain water resources, collectively referred to as in-lieu groundwater recharge. These activities are considered “in-lieu” recharge since they have the same beneficial effect on groundwater supplies as direct replenishment.

Runoff from precipitation constitutes the bulk of the local water supplies and is captured in local reservoirs. The water is released for groundwater recharge, in-stream environmental/ecological purposes (maintain fish and wildlife habitat), local surface water customers, and treatment at the treatment plants. Some of the precipitation infiltrates and recharges the groundwater basins, although this natural recharge is insufficient to fully replenish groundwater pumped from the basins.

An additional local water supply is recycled water used for non-potable purposes. In the future, recycled water will likely also be advanced purified for potable purposes. Use of recycled water offsets demand for potable water. Every gallon of recycled water used in this county saves an equal gallon of groundwater or treated drinking water.

Imported Supplies

Valley Water has a water supply contract with the California Department of Water Resources' (DWR's) State Water Project (SWP) for up to 100,000 acre-feet (AF) and the U.S. Bureau of Reclamation's Central Valley Project (CVP) for up to 152,500 acre-feet, per year. SWP and CVP supplies originate from natural runoff that is captured and then released from statewide reservoirs operated by the SWP and CVP. To arrive at Valley Water's facilities, the SWP and CVP pump the supplies out of the Sacramento-San Joaquin Delta (Delta). Actual deliveries depend on the availability of water supplies after meeting regulations to protect the environment and the Delta's water quality. The imported water delivered by the SWP and CVP is sent to Valley Water's three water treatment plants, used to supplement groundwater recharge, or stored in local and State reservoirs for use in subsequent years. Valley Water also stores some of its imported water in the Semitropic Groundwater Bank in Kern County for withdrawal during dry periods.

Treated imported water is sold to seven (7) of the 13 water retailers located within Santa Clara County to offset groundwater pumping. Valley Water may also augment its imported supplies by taking deliveries of available temporary flood flows from the Delta watershed early in the year before imported water contract allocations and local hydrology are known. If water supplies are insufficient to meet needs, Valley Water may also purchase transfer water or participate in exchanges to supplement supplies; both transfer and exchange supplies are conveyed to Santa Clara County through the Delta. Additionally, eight (8) water retailers purchase water from the City and County of San Francisco that originates from the Tuolumne River watershed and watersheds in the Bay Area. Without these supplemental supplies, groundwater pumping would likely exceed sustainable groundwater extraction levels.

Conjunctive Water Management

Since the 1930s, Valley Water's water supply strategy has been to coordinate the management and use of surface water and groundwater to maximize water supply reliability, which is known as conjunctive management. The Sustainable Groundwater Management Act (SGMA) was signed into State law in September 2014, with the intent of promoting the local, sustainable management of groundwater supplies. SGMA identifies Valley Water and a limited number of other agencies throughout the state as exclusive groundwater management agencies within their jurisdictions. In May 2016, Valley Water's Board of Directors (Board) adopted a resolution to become the Groundwater Sustainability Agency for the Santa Clara and Llagas subbasins. In November 2016, the Board adopted the 2016 Groundwater Management Plan (GWMP), which describes Valley Water's conjunctive management activities, as well as groundwater sustainability goals, strategies, and related outcome measures. The 2016 GWMP was approved by the DWR in 2019 as an alternative to a Groundwater Sustainability Plan (GSP), in compliance with SGMA. Since March 2018, Valley Water has submitted an annual compliance report to DWR as required by SGMA. In November 2021, the Board adopted the 2021 GWMP as the first required five-year update to the approved

Current Water Demand and Water Supply Conditions

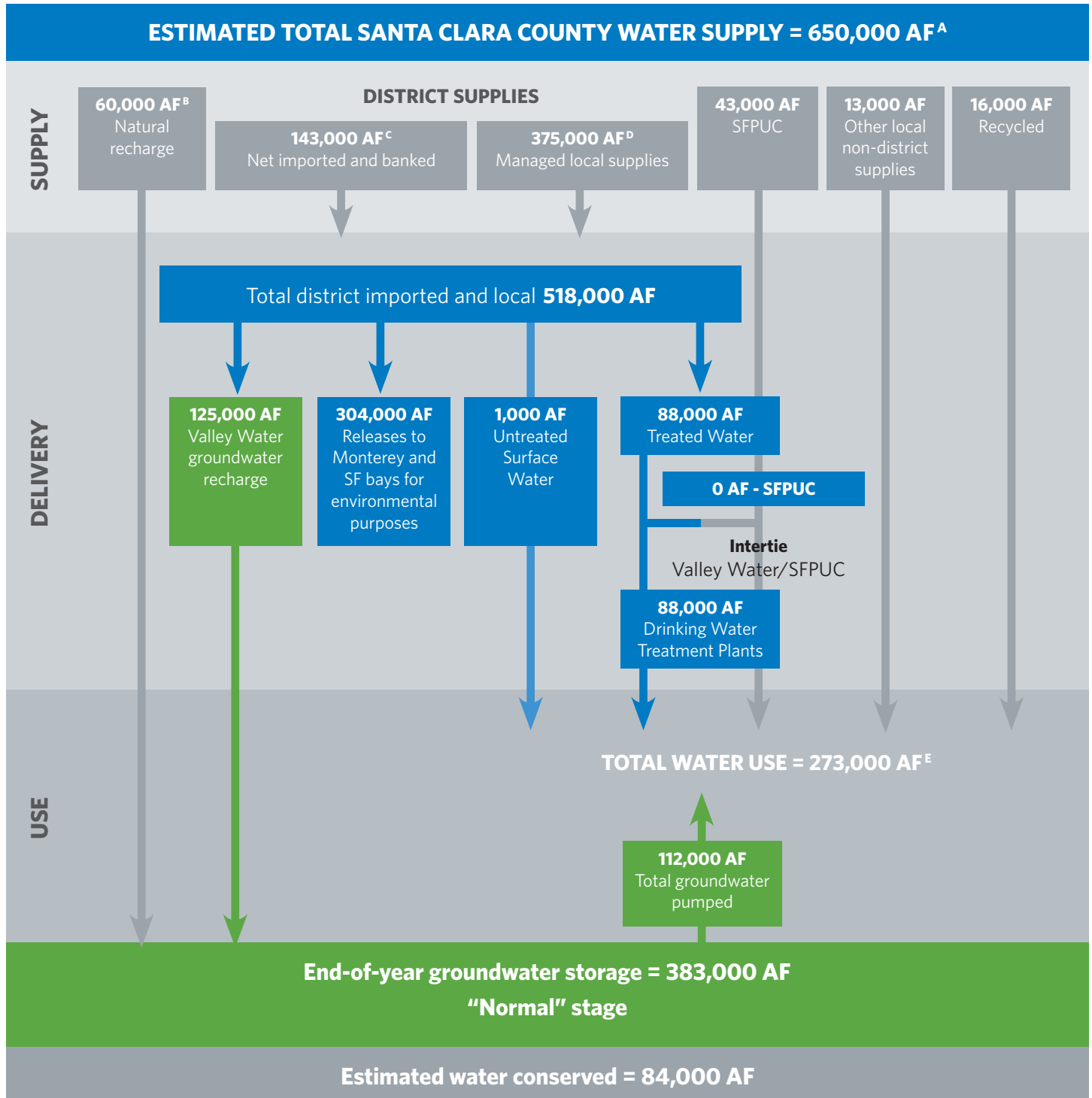
Alternative Plan. Valley Water will continue to sustainably manage the Santa Clara and Llagas subbasins according to the District Act and will fully comply with SGMA.

A key Valley Water conjunctive management effort involves using imported and local surface water to recharge the groundwater subbasins. Valley Water also provides treated and raw surface water to customers, which offsets demands on the groundwater subbasins. Water conservation and recycled water use offset demands on both surface water and groundwater. All these activities help maintain a reliable water supply.

Figure 1-1.1 shows Calendar Year 2023 estimated total water supply for Santa Clara County. Valley Water managed recharge programs replenished the groundwater basins with about 125,000 acre-feet of local and imported surface water. The largest source of in-lieu recharge was the distribution of treated water (88,000 acre-feet). Valley Water saved an estimated 84,000 acre-feet of water through programs designed to reduce residential, commercial, and agricultural water use and make conservation a way of life in the county. A smaller, but important and growing source of in-lieu recharge is recycled water, which provided about 16,000 acre-feet of water for irrigation, industry, and agriculture in 2023. Using recycled water reduces dependency on groundwater and surface water, helps conserve drinking water supplies, and provides a locally controlled, drought-resilient supply. Valley Water is partnering with local recycled water producers to further expand the use of recycled water, including developing potable reuse projects.

Current Water Demand and Water Supply Conditions

Figure 1-1.1 Estimated Total Santa Clara County Water Supply for Calendar Year 2023



^A County Water Supply includes net district and non-district surface water supplies and estimated rainfall recharge to groundwater basins.

^B Natural recharge – Groundwater recharge not controlled by Valley Water, including rainfall and other natural seepage, irrigation return flows, and leakage from water systems, storm drains, and sewer/septic systems.

^C Net imported supplies – Surface water imported from the Sacramento-San Joaquin Delta that is used to replenish groundwater or to supply water treatment plants and surface water users in Santa Clara County. This excludes water transferred into the Semitropic Water Bank in Kern County and imported water stored (i.e., carried over) for future use.

^D Managed local supplies – Watershed rainfall/runoff captured in local reservoirs or previously stored local water that is used to replenish groundwater or to supply water treatment plants and surface water users in Santa Clara County. This excludes estimated evaporation and local supplies stored for future use.

^E Includes municipal, industrial, agricultural and domestic uses.

All values are rounded to the nearest thousand.

Current Water Demand and Water Supply Conditions

Without Valley Water's conjunctive management programs (including managed and in-lieu recharge), groundwater levels would be considerably lower than they are today, reducing water supply reliability countywide and increasing the risks of renewed land subsidence (sinking) and seawater intrusion in the northern Santa Clara Subbasin. Water supplies are becoming increasingly constrained by challenges including uncertainty in surface water supplies, extended droughts, and climate change. Maintaining Valley Water's conjunctive management programs and expanding them as needed is critical to making the best use of local water resources and ensuring a reliable water supply both now and in the future.

A limiting factor to a reliable water supply during drought or other shortages is the capacity and operational constraints of Valley Water's conjunctive management system of groundwater and surface-water reservoirs. The groundwater basins are Valley Water's largest water storage facility. However, most of the local surface-water reservoirs were sized for annual operations, storing water in winter for release to groundwater recharge in summer and fall. The exception is the Anderson-Coyote reservoir system, which historically provided valuable carryover of supplies from year to year and served as a backup supply source to Valley Water's water treatment plants when imported water deliveries are curtailed. However, Anderson Reservoir, the largest reservoir in the county, will not be available for backup supply until seismic retrofit activities have been completed, which is estimated to be the end of 2032. Calero Reservoir also serves as a backup supply to the drinking water treatment plants with dedicated storage preserved for emergency use; however, due to the seismic restriction placed on Calero Reservoir, its emergency pool is limited to 4,000 acre-feet and is much smaller than Anderson's emergency pool of 20,000 acre-feet. Dam safety operating restrictions placed on Anderson, Coyote, Almaden, Calero and Guadalupe reservoirs have resulted in loss of close to 103,400 acre-feet or nearly two-thirds of the total surface storage capacity (as shown in Table 1-1.1) as well as significant loss of water supply yield.

Current Water Demand and Water Supply Conditions

Table 1-1.1 Current and Restricted Capacities of Major Valley Water Reservoirs

Reservoir	Year Built	Reservoir Capacity ³ (acre-feet)	Restricted Capacity ³ (acre- feet)	Primary Use
Almaden ¹	1935	1,555	1,443	Groundwater recharge, treated for drinking water
Anderson ^{1,2}	1950	89,278	3,159	Groundwater recharge, treated for drinking water
Calero ¹	1935	9,738	4,414	Groundwater recharge, treated for drinking water
Chesbro	1955	7,967	7,967	Groundwater recharge
Coyote ¹	1936	22,541	11,843	Groundwater recharge, treated for drinking water
Guadalupe ¹	1935	3,320	2,134	Groundwater recharge
Lexington	1952	18,534	18,534	Groundwater recharge
Stevens Creek	1935	3,056	3,056	Groundwater recharge
Uvas	1957	9,688	9,688	Groundwater recharge
Vasona	1935	463	463	Groundwater recharge
Total		166,140	62,701	

¹ Reservoirs with dam safety operating restrictions

² Per Federal Energy Regulatory Commission (FERC) Order, the capacity of Anderson Reservoir was restricted to deadpool storage, as of October 1, 2020. Based on storage data and field observations, Anderson Reservoir deadpool storage is estimated at about 3,159 AF.

³ Reservoir and restricted capacities were updated in FY 2018–19, FY 2019–20, and FY 2020–21 to reflect most recent surveying results.

As part of annual operations planning, Valley Water routinely opts to carry over a portion of imported water supplies for future years. Even though the amount is often limited by state or federal project operations, it provides cost-effective insurance against a subsequent dry year. Additionally, Valley Water has invested in a water banking program at the Semitropic Water Storage District, which provides up to 350,000 acre-feet of out-of-county water storage capacity. Together with water transfers and exchanges, this additional storage helps Valley Water manage uncertainty and variability in supply as each water year¹ develops. Managing a complex system of surface water and groundwater resources is further complicated by hydrologic uncertainties, regulatory restrictions, and aging infrastructure, as discussed in the following sections of this report.

¹ Water year is the twelve-month period between October 1 and September 30.

1-2 CURRENT WATER SUPPLY CONDITIONS

Precipitation

Locally, rainfall for the 2022–23 season at downtown San José was at 152 percent of average². Total rainfall from July 2022 through June 2023 resulted in an above-average rainfall season, based on data going back to 1874.

The 2023–24³ rainfall year began with a near-average December. Cumulative rainfall at the San José gauge from July 1, 2023, through December 31, 2023, was estimated to be 3.03 inches. Rainfall at the San José gauge in January 2024 totaled 3.9 inches, which is above-average for that month. Cumulative local rainfall as of February 1, 2024, was 89 percent of seasonal average to date in San José and 93 percent in the Coyote watershed.

Statewide precipitation by February 1, 2024, was at 80 percent of seasonal average to date. As of February 1, 2024, statewide snow water equivalent was 8.8 inches and 53 percent of normal for that date.

Imported Water Allocations

Valley Water’s SWP contract provides annual allocations of SWP supplies, and Valley Water’s CVP contract provides allocations of both agricultural and Municipal and Industrial (M&I) supplies. The two projects allocate supplies based on storage conditions, forecasted hydrology, forecasted demands, and the forecasted amount of water needed to meet state and federal environmental requirements, such as Delta water quality and outflow standards.

Water year 2022-2023 was a wet year, which ended a 3-year statewide drought and significantly increased the supplies available from both SWP and CVP. The SWP allocation for 2023 was initially set at 5 percent in December 2022, based on low reservoir storage conditions at that time and an assumption that very dry conditions will continue for the rest of the water year. Following a series of storms, the allocation was increased to 30 percent in January 2023, to 35 percent in February, to 75 percent in March, and finally 100 percent in April. Similarly, the CVP agricultural allocation for south-of-Delta contractors was initially set in February 2023 at 35 percent and 75 percent for agricultural and M&I contractors, respectively. The CVP allocations for south-of-Delta contractors were increased to 80 percent for agricultural contractors and 100 percent for M&I contractors in March, before finally being increased to 100 percent for all south-of-Delta contractors in April. Table 1-2.1 summarizes the year types and final allocations from the SWP and CVP to

² Rainfall at San José (City of San José gauge 6131) was approximately 21.65 inches or 152 percent of average for the rainfall season from July 1, 2022 to June 30, 2023.

³ Precipitation data for rainfall year 2023-2024 is provisional until verified by staff in Spring of 2024.

Current Water Demand and Water Supply Conditions

Valley Water for the last five years.

The early winter of 2023-2024 began with drier than average hydrology; in December 2023, DWR set the initial SWP allocation for 2024 to 10 percent of most SWP contractors' maximum contract amounts. The lower allocation is not unusual, even after a wet year, as DWR assumes that drier conditions will continue when setting its initial allocation. The Bureau of Reclamation (Reclamation) will set its initial allocations for 2024 in February 2024.

Table 1-2.1 Statewide Water Year Types and Final Imported Water Allocations

Water Year	Year Type		Final allocations to Valley Water as % of contract amounts		
	Sacramento River	San Joaquin River	SWP	CVP	
				M&I	AG
2018-19	Wet	Wet	75%	100%	75%
2019-20	Dry	Dry	70%	70%	20%
2020-21	Critical	Critical	5%	25% (55%*)	0%
2021-22	Critical	Critical	5%	0%* (30%*)	0%
2022-23	Wet	Wet	100%	100%	100%

Note: Allocations with asterisks includes allocated Public Health and Safety supplies.

Water Banking

To provide reliability in future years, Valley Water stores some of its imported water in groundwater storage outside of the county. This involves conveyance of Valley Water's SWP and/or CVP water supplies to a banking partner, which is another district that operates a groundwater conjunctive use program. Storage in the bank occurs when water is physically delivered to ponds to soak into the aquifer, or when surface water deliveries are used by the banking partner in lieu of groundwater pumping ("in- lieu recharge"). Return of stored water is accomplished when the banking partner uses groundwater in place of surface supplies, or physically pumps groundwater into the surface conveyance system for use by the DWR for the SWP. Valley Water is then delivered imported water pumped from the Delta that would have otherwise been delivered to the banking partner or to other SWP contractors. Valley Water currently banks SWP and CVP water at the Semitropic Water Storage District in Kern County, where Valley Water has a contractual right to store up to 350,000 acre-feet of water. Table 1-2.2 shows the annual changes and year-end balances for banked water during calendar years 2021, 2022, and 2023.

Current Water Demand and Water Supply Conditions

Table 1-2.2 Water Banking for Calendar Years 2021 through 2023 (Acre-Feet)

Water Banking	Actual 2021	Actual 2022	Actual 2023
Semitropic Water Storage District			
Beginning Balance (January 1)	333,170	297,211	252,332
Valley Water Deposit or Withdrawal	- 35,959	- 44,879	+ 33,752
Total Banked Ending Balance (December 31)	297,211	252,332	286,084

Valley Water has contractual rights to deliver or “put” up to 31,675 acre-feet of water into the Semitropic groundwater bank each year. Valley Water has historically been able to deliver additional water by using the unused “put” capacity of other agencies participating in the Semitropic groundwater bank, or by relying on Semitropics’ discretionary operations that create more “put” capacity. The maximum amount of water Valley Water delivered to Semitropic for storage in a single year was 89,022 acre-feet in 2005. Valley Water also has a contractual right to withdraw or “take” up to 31,500 acre-feet of water out of storage in a year, with that maximum amount increasing depending upon the SWP allocation and if the other bank participants have not made full use of their “take” capacity. The higher the SWP water supply allocation, the greater the “take” capacity. Historically, Semitropic has also taken discretionary actions to adjust their operations to allow for larger withdrawals by banking partners. The largest amount of water previously withdrawn by Valley Water in a single year was 45,485 acre-feet in 2015. In 2023, 33,752 acre-feet was delivered to Semitropic for storage.

Reservoir Storage

Reservoir storage volumes in Lake Oroville, Shasta Lake, and Folsom Lake at the beginning of calendar year 2023 were 69, 57 and 140 percent of historic average beginning-of-year volumes, respectively. By the end of December 2023, those levels had increased to 130 percent of average and decreased to 117 percent of average in Lake Oroville and Folsom Lake, respectively, while Shasta Lake increased to 116 percent of average. By February 1, 2024, the levels were at 132, 122 and 120 percent in Lake Oroville, Shasta Lake, and Folsom Lake, respectively.

Locally, the 2023–24 water year started with Valley Water reservoirs at fairly low levels. October 1, 2023 total storage in these reservoirs was 66 percent of the 20-year average and 29 percent of capacity at the spillway crest.

Total storage in Valley Water reservoirs as of February 1, 2024 was 47 percent of the 20-year average and 23 percent of capacity. Storage restrictions are in place for half of Valley Water reservoirs. The combined storage in Valley Water reservoirs as of February 1, 2024 was at 60 percent of restricted capacity.

Current Water Demand and Water Supply Conditions

One of Valley Water's reservoirs, Anderson Reservoir, has undergone a series of storage restrictions in 2009, 2010, 2011, and 2017 by DWR, Division of Safety of Dams (DSOD). The May 2017 interim reservoir operating restriction by DSOD set Anderson Reservoir at the recommended elevation of 589.5 feet (NGVD 1929), which translates to a storage of 51,766 acre-feet. On October 10, 2017, the Board directed staff to operate the Anderson Reservoir system following the 40 percent exceedance rule curve to reduce the chances of exceeding the seismic restriction of the reservoir.

On February 20, 2020, the Federal Energy Regulatory Commission (FERC) issued an order that, as of October 1, 2020, Anderson Reservoir must begin to be safely drawn down to deadpool or around 3 percent of the reservoir's total capacity. Valley Water has complied with the order and Anderson Reservoir reached deadpool in mid-December 2020. Additionally, per the FERC order, Anderson Reservoir must be safely maintained at deadpool through completion of the Anderson Dam Tunnel Project (ADTP), a new, low-level outlet tunnel works that will allow Valley Water to more reliably and quickly draw down the reservoir, until directed otherwise by FERC. The FERC order recognizes that Anderson Reservoir storage might exceed deadpool following periods of heavy rainfall and excessive surface water runoff entering the reservoir, hence FERC had directed Valley Water to keep the outlet pipe's valve fully open to bring back the reservoir storage to deadpool as soon as possible. As of February 1, 2024, Anderson Reservoir storage is at 3,470 acre-feet or 4 percent of its storage capacity. Valley Water has also been implementing Avoidance and Minimization Measures (AMM), such as securing alternative water supplies and lessening the impacts to groundwater recharge, flooding hazards, and other environmental effects; these collective actions are considered the FERC Order Compliance Project (FOCP).

Groundwater Basins

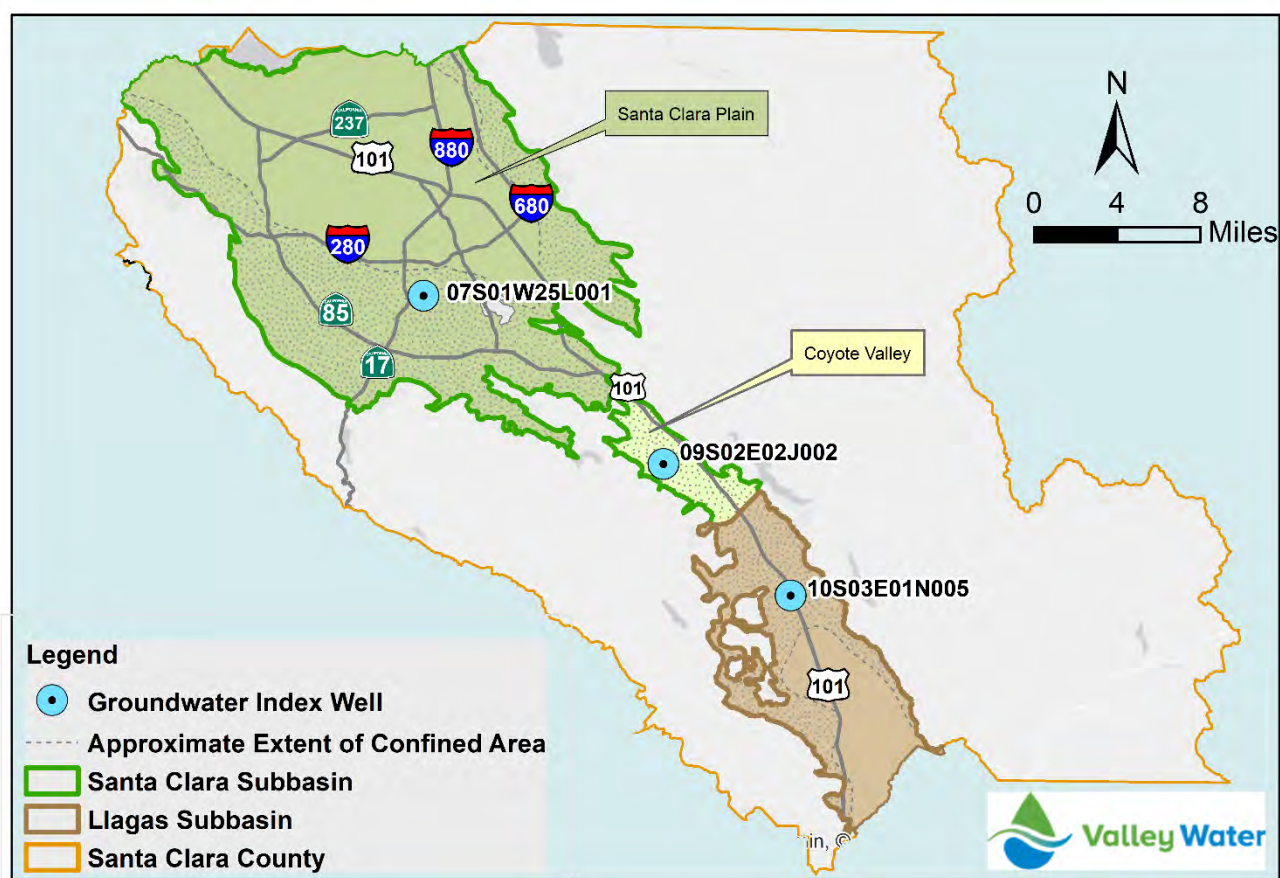
As the Groundwater Sustainability Agency (GSA) for the Santa Clara and Llagas subbasins, Valley Water works to protect and augment groundwater through the activities described in this report and the 2021 GWMP to ensure continued sustainable conditions. The Santa Clara Subbasin is divided into two management areas: the Santa Clara Plain covering the urbanized, northern Santa Clara Subbasin and the more rural Coyote Valley (see location map in Figure 1-2.1). The Llagas Subbasin extends from the Morgan Hill area to the county's southern boundary. While surface water reservoirs are a visible indicator of the local water supply, the majority of local reserves lie hidden beneath our feet in these large groundwater subbasins. Because the groundwater subbasins can store two times more water than all the local surface water reservoirs combined, Valley Water strives to maintain adequate groundwater storage in wet and average years to ensure water supply reliability during dry periods or shortages.

Due to wet conditions and the end of the drought, groundwater levels increased in 2023 and recovered to pre-drought levels throughout the county, including at the three index wells that Valley Water uses to characterize general groundwater trends and conditions (see location map in Figure 1-2.1 and related

Current Water Demand and Water Supply Conditions

hydrographs in Figures 1-2.2 through 1-2.4⁴). Water levels in 2023 remained well above thresholds established to prevent renewed land subsidence⁵. Valley Water continues to closely monitor groundwater levels and land subsidence conditions.

Figure 1-2.1 Map of Index Well Locations



⁴ The previous index well for the Llagas Subbasin (10S03E13D003) was properly destroyed in 2019. The new index well is 10S03E01N005, which has a very similar water level history.

⁵ To avoid additional permanent subsidence due to groundwater overdraft, Valley Water has established water level thresholds at ten index wells throughout the Santa Clara Plain. A tolerable rate of 0.01 feet per year of land subsidence was applied to determine threshold groundwater levels for these wells. Threshold groundwater levels are the groundwater levels that must be maintained to ensure a low risk of unacceptable land subsidence.

Current Water Demand and Water Supply Conditions

Figure 1-2.2 Santa Clara Plain Groundwater Elevations (Index Well 07S01W25L001)

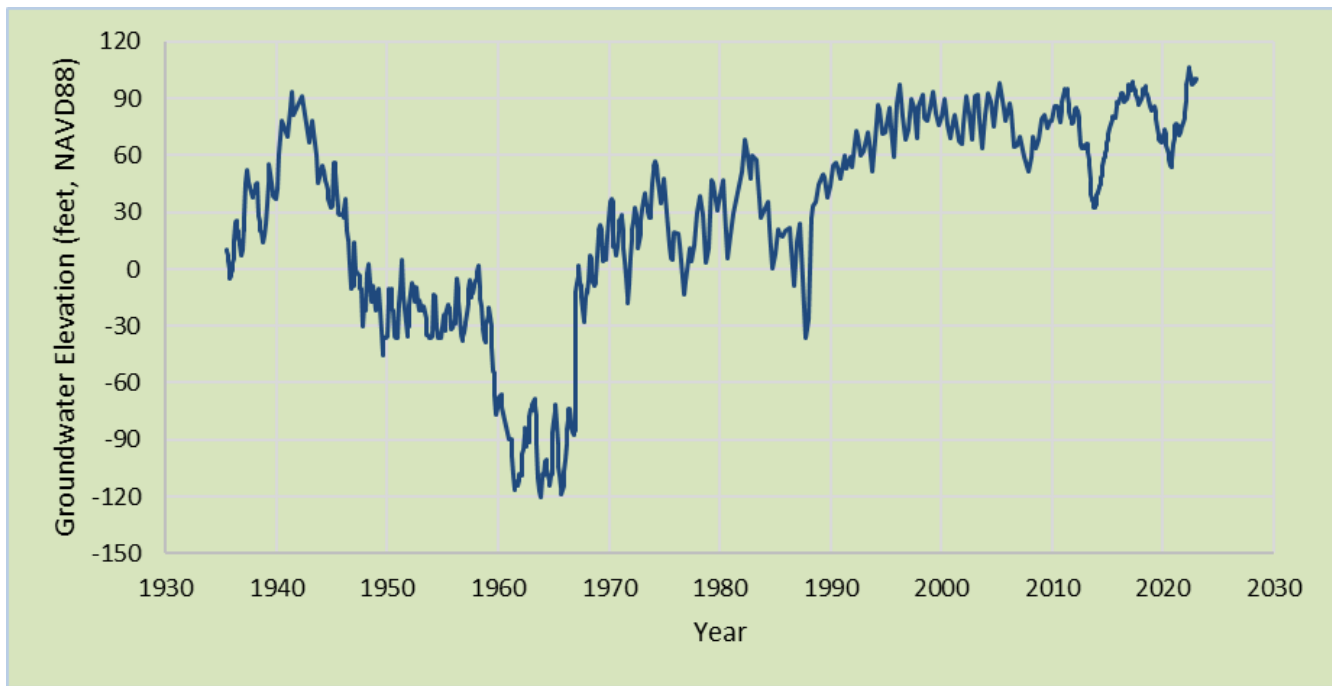
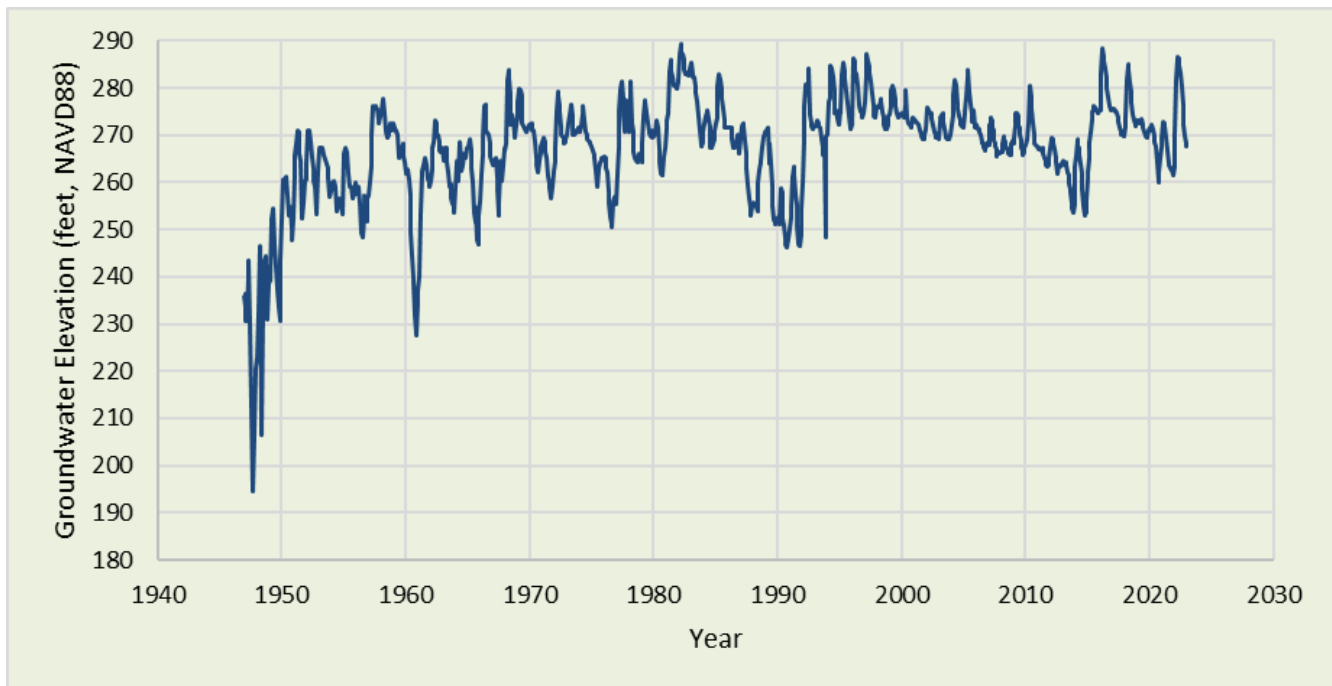
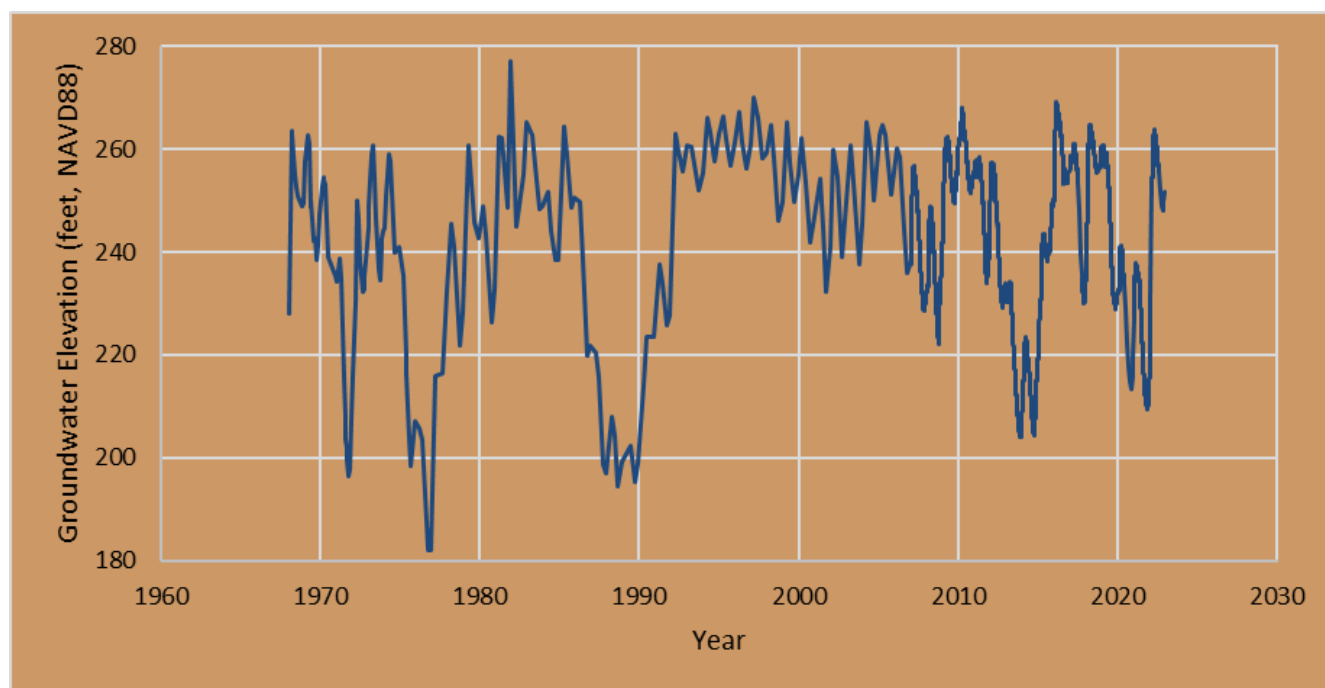


Figure 1-2.3 Coyote Valley Groundwater Elevations (Index Well 09S02E02J002)



Current Water Demand and Water Supply Conditions

Figure 1-2.4 Llagas Subbasin Groundwater Elevations (Index Well 10S03E01N005)



Estimated countywide groundwater storage in 2023 is about 61,600 acre-feet greater than in 2022, as shown in Table 1-2.3. The 2023 storage estimate of 382,600 acre-feet continues to be above the groundwater sustainability outcome measure of 300,000 acre-feet and within the normal stage of the Water Shortage Contingency Plan. The recovery of groundwater storage in 2023 can be attributed to wet hydrologic conditions that ended the drought, Valley Water’s managed recharge operations, and water use reduction by the community. Valley Water continues to closely track water supply conditions and modify operations accordingly. Monthly water supply conditions are summarized in Valley Water’s Water Tracker, which is available on Valley Water’s website⁶. A more detailed evaluation of groundwater conditions will be presented in Valley Water’s annual 2023 groundwater report (typically available by June of each year), which will include reporting on outcome measures related to groundwater storage, levels, quality, and subsidence.

⁶ The Water Tracker is available on Valley Water’s website: <https://www.valleywater.org/your-water/water-supply-planning/monthly-water-tracker>.

Current Water Demand and Water Supply Conditions

Table 1-2.3 End-of-Year Groundwater Storage and Change in Storage

	Cumulative Groundwater Storage Estimates AF (acre-feet)		Change in Storage AF
	End of Year 2022	End of Year 2023	
Santa Clara Subbasin, Santa Clara Plain	298,300	353,000	54,700
Santa Clara Subbasin, Coyote Valley	4,600	9,800	5,200
Llagas Subbasin	18,100	19,800	1,700
Total	321,000	382,600	61,600

Note: Storage estimates are refined as more pumping and recharge data become available.

Water Use Reduction

Valley Water’s Water Shortage Contingency Plan establishes the water use reduction needed based on projected end-of-year groundwater storage as shown in Table 1-2.4. A Drought Response Plan is currently being developed to update the Water Shortage Contingency Plan, which is expected to be completed in 2024.

During the recent drought, the Board approved a water use reduction resolution on June 9, 2021 and Valley Water implemented several drought response actions, including securing emergency imported water supplies, increasing water conservation messaging, promoting water conservation programs, and enforcing outdoor water use restrictions. These actions helped mitigate groundwater decline, and Valley Water estimates that the end of 2023 groundwater storage was approximately 382,600 acre-feet, which falls into the “Normal” stage of our five-stage Water Shortage Contingency Plan. The five stages are shown in Table 1-2.4.

On April 11, 2023, the Board replaced the mandatory call to reduce water use with a voluntary call for 15% water conservation compared to 2019. On June 13, 2023, the Board adopted a resolution to support water conservation as a way of life and an ordinance with a set of permanent water waste prohibitions for Santa Clara County.

Current Water Demand and Water Supply Conditions

Table 1-2.4 Water Shortage Contingency Plan Action Levels

Stage	Title	Projected End-of-Year Groundwater Storage (Acre-Feet)	Suggested Short-Term Reduction in Water Use
1	Normal	Above 300,000	None
2	Alert	250,000 to 300,000	0 – 10%
3	Severe	200,000 to 250,000	10 – 20%
4	Critical	150,000 to 200,000	20 – 40%
5	Emergency	Less than 150,000	Up to 50%

Suggested short-term reductions in water use shown. Actual calls for water use reduction are subject to Board approval.

Valley Water Drought Response

Valley Water addresses droughts utilizing a proactive, adaptive management approach to constantly track the quantity and resilience of water supplies, monitor indicators of risk to water supplies and land subsidence, and implement actions as needed. Valley Water’s drought response is intended to (1) minimize economic, social, and environmental hardship; (2) establish water use reduction targets focused on eliminating non-essential use; and (3) safeguard essential water supplies for public health and safety needs.

Valley Water’s strategies to address drought include reducing countywide water use, securing imported water supplies including emergency transfers, as needed, effectively managing surface water and groundwater supplies, optimizing treated water quality and availability, and enhancing drought resilience through efforts such as expanding the use of purified water. During droughts, Valley Water has increased the rebate rates offered by water conservation programs to encourage participation. Valley Water also conducted increased public outreach and education programs which expand water conservation awareness and messaging during droughts. In 2022, Valley Water, in response to not meeting conservation goals, initiated an enforcement program for outdoor water use restrictions, an unprecedented step for a wholesale water agency. As mentioned previously, on June 13, 2023, the Board adopted an ordinance with a set of permanent water waste prohibitions for Santa Clara County. Drought response efforts are implemented using a highly collaborative approach working with retailers and municipalities. Valley Water provides regular updates to the Board, Committees, retailers, and municipalities in order to share drought status, response efforts, and water use reduction progress, and to obtain feedback. Valley Water successfully implemented drought response actions in the recent drought from 2021 to 2023.

1-3 CURRENT WATER DEMAND

Following the end of the drought, preliminary estimates indicate the county's total water use decreased approximately 7 percent in 2023 compared to 2019. Water use in 2019 was approximately 306,000 AF and estimated 2023 water use is approximately 272,700 AF.

To meet current and future demands, Valley Water continues to implement its long-term water conservation program. Water conservation is key to water supply reliability in Santa Clara County. It is an environmentally friendly and cost-effective option that may reduce the need for new water supply projects and investments and groundwater pumping. With Valley Water's target of saving nearly 110,000 acre-feet of water per year by 2040 from a 1992 baseline through conservation programs and stormwater capture projects, the long-term conservation program offers technical assistance and a variety of incentives to achieve sustainable water savings. The program saved approximately 84,000 acre-feet in calendar year 2023.

Table 1-3.1 shows unadjusted water use, including conservation, in Santa Clara County. Figures 1-3.1 and 1-3.2 show a breakdown of groundwater production and managed recharge by water charge zone. Table 1-3.2 shows a historical summary of surface water supply, use and distribution for the last three years.

Table 1-3.1 Water Use in Santa Clara County for Calendar Years 2021-2023

Historical Calendar Year Water Use and Conservation	In Acre-feet ¹		
	Actual 2021	Preliminary 2022	Estimated 2023
Groundwater Pumped	135,400	125,500	112,200
Treated Water	94,000	89,000	88,000
Raw Surface Water Deliveries	2,100	2,000	1,400
SFPUC Supplies to Local Retailers²	47,100	44,800	42,600
San Jose Water Company Water Rights	1,400	5,900	12,500
Recycled Water	16,600	17,400	16,000
Total Water Use³	296,600	284,600	272,700
<i>Conservation⁴</i>	<i>78,000</i>	<i>82,000</i>	<i>84,000</i>
<i>Estimated Total without Conservation</i>	<i>374,600</i>	<i>366,600</i>	<i>356,700</i>

¹ All values are rounded to the nearest hundred. Data is as of February 1, 2024 and may be subject to change.

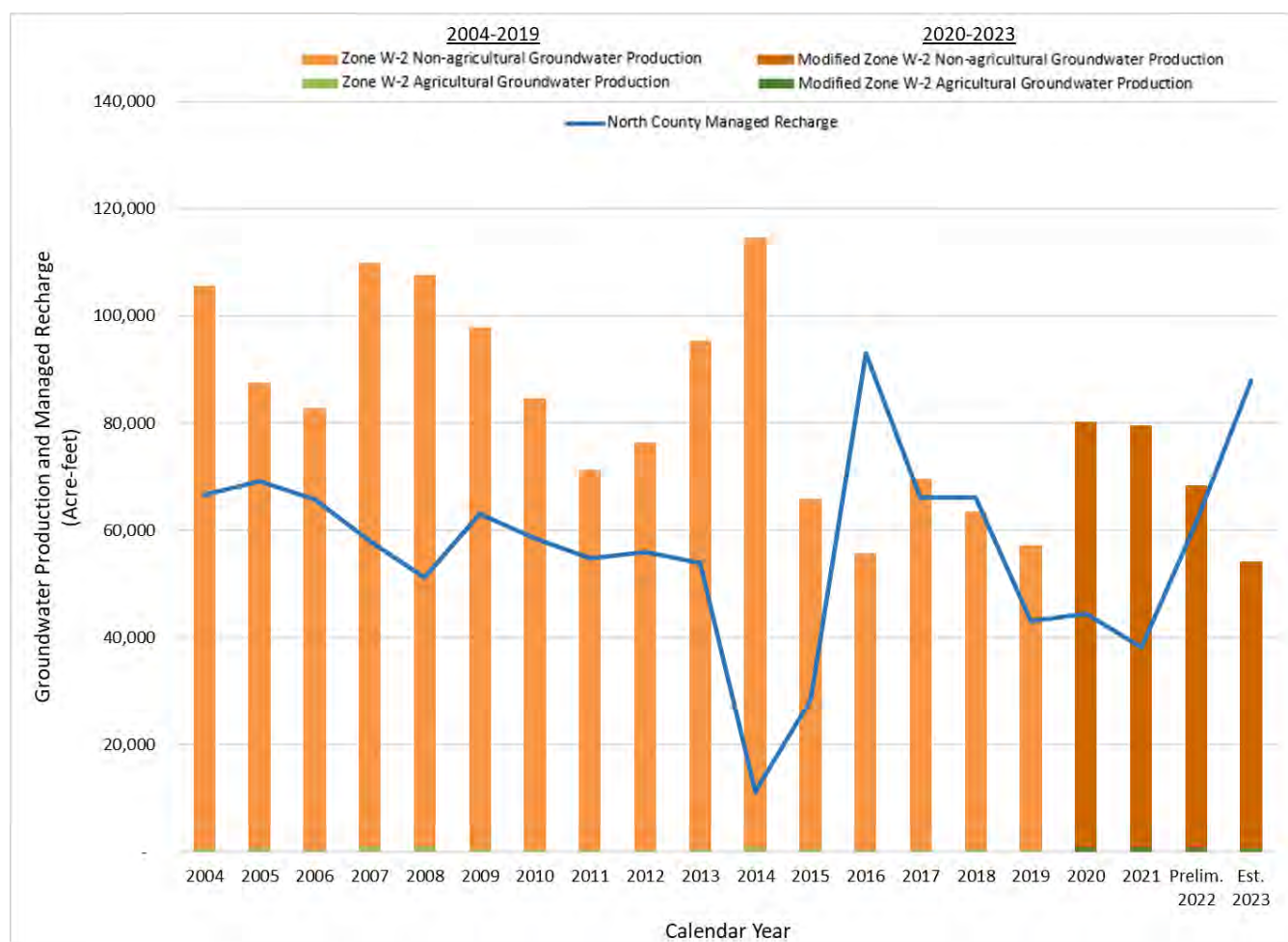
² San Francisco Public Utilities Commission supplies to 8 retailers and NASA-Ames.

³ Stanford has historically utilized between 200-1000 Acre Feet/Year of its water rights. This is not reflected in the table above.

⁴ Conservation numbers are for Valley Water's long-term conservation program and do not include the short-term water use reductions achieved during the drought. Drought-related conservation is accounted for in the reduced groundwater pumped, treated water deliveries, and SFPUC supplies. Conservation numbers in this table are estimated using Valley Water's conservation tracking model, which considers the savings achieved by regulations, codes, ordinances, and Valley Water's conservation programs including rebates and technical services offered to the public. The model reports conservation savings by fiscal year, which are used to approximate conservation on a calendar year basis, rounded to the nearest thousand acre-feet.

Current Water Demand and Water Supply Conditions

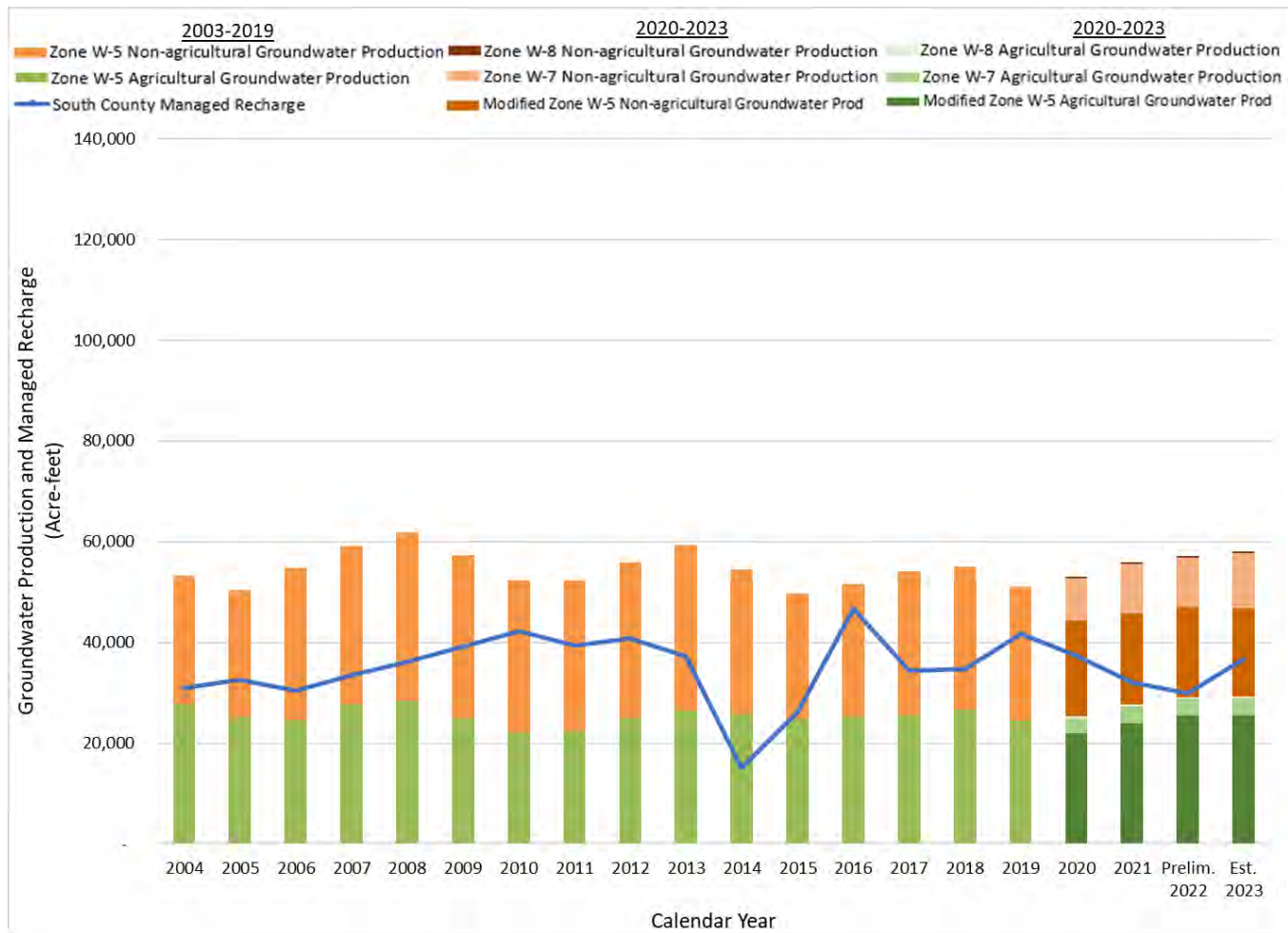
Figure 1-3.1 Groundwater Production and Managed Recharge in North County



Values are based on best available information and are refined as additional data becomes available. The Board adopted new and modified groundwater benefit zones that went into effect on July 1, 2020. Groundwater production shown for 2020 reflects the new/modified zones, and production for all other years reflects usage in the zones in effect at the time. Managed recharge reflects the volume applied on the land surface at Valley Water recharge facilities; subsurface flow is not considered in the above graph.

Current Water Demand and Water Supply Conditions

Figure 1-3.2 Groundwater Production and Managed Recharge in South County



Values are based on best available information and are refined as additional data becomes available. The Board adopted new and modified groundwater benefit zones that went into effect on July 1, 2020. Groundwater production shown for 2020 reflects the new/modified zones, and production for all other years reflects usage in the zones in effect at the time. Managed recharge reflects the volume applied on the land surface at Valley Water recharge facilities; subsurface flow is not considered in the above graph.

Current Water Demand and Water Supply Conditions

Table 1-3.2 Historical Surface Water Supply, Use and Distribution for 3 Previous Calendar Years

	Calendar Year, in Acre Feet		
	Actual 2021	Preliminary 2022	Estimated 2023
Valley Water Supplies			
Local Surface Water			
Inflow (net, minus evap)	53,540	50,090	353,740
Surface Water Storage Releases (+) or additions to (-)	-24,830	-7,380	+20,800
Imported Water			
Prior year carryover	48,830	67,480	33,360
Delta/Out-of-county flood flows	0	0	10,700
State Water Project contract allocation	5,000	5,000	100,000
Central Valley Project contract allocation	71,500	39,330	152,500
Semitropic water bank withdrawals ¹	35,960	44,880	0
Water transfers and exchanges ¹	46,220	20,380	2,450
Returned to Valley Water from SFPUC via intertie	70	0	0
Total District Supplies:	236,290	219,780	673,550
Distribution of Valley Water Supplies			
To groundwater recharge			
Santa Clara Plain (Santa Clara Subbasin)	38,190	61,410	87,940
Coyote Valley (Santa Clara Subbasin)	16,200	10,500	13,620
Llagas Subbasin	15,790	19,320	23,040
To treated water	93,980	89,020	88,030
To surface water irrigation	2,100	2,030	1,350
To environment	2,550	4,140	303,800
To Semitropic water bank	0	0	37,500
To imported water carryover for use in subsequent year			
Used by Valley Water	67,480	33,360	65,250
Imported Water returned to SWP/CVP	0	0	9,220
To water transfers and exchanges	0	0	43,700
Returned to SFPUC via intertie	0	0	100
Total Distribution of District Supplies:	236,290	219,780	673,550
Other Supplies			
San Jose Water Co. water rights ²	1,380	5,910	12,520
Recycled water (including Valley Water)	16,580	17,410	15,990
SFPUC deliveries to retailers & NASA Ames	47,070	44,830	42,560
Total Other Surface Water Supplies	65,030	68,150	71,070
Total Managed Supplies:	301,320	287,930	744,620

Note: Numbers rounded to the nearest 10AF.

¹ These values include supply secured in that year but may have been carried over to a future year.

² Stanford has historically utilized between 200-1000 AFY of its water rights. This is not reflected in the table above.

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2-1 OVERVIEW

As the water management agency and principal water wholesaler for Santa Clara County, Valley Water is responsible for planning (in collaboration with San Francisco Public Utilities Commission [SFPUC] and local retailers) the water supply of the county to meet current and future demands.

Water supply reliability includes the availability of the water itself as well as the reliability and integrity of the infrastructure and systems that capture, store, transport, treat and distribute it. Valley Water strives to meet 100 percent of demands during normal times and to request no more than 20 percent water use reduction during times of shortage, including satisfying its treated water contracts for deliveries to the retail water suppliers. As the groundwater manager for the county, Valley Water's goal is to protect and augment groundwater to ensure it remains a viable source both now and in the future.

Since water supplies available to the county are obtained from both local and imported sources, Valley Water's water supply relies on the amount of precipitation that falls both locally and in the watersheds of Northern California. The supply available is also dependent on the facilities in place to manage the supply. Sources of water supply in northern Santa Clara County (North County) consist of locally captured and managed water, recycled water, water imported by Valley Water via the SWP and the federal CVP, and supplies from SFPUC's regional water system to some of the retail water suppliers. Southern Santa Clara County (South County including Coyote Valley and Llagas Subbasin) is supplied by locally developed and managed water, recycled water, and CVP water.

2-2 PROJECTED FUTURE WATER SUPPLY AVAILABILITY AND DEMAND

Near Term Water Supply Availability

Valley Water begins preparing the Annual Water Supply Operations and Contingency Strategy for the upcoming calendar year in the fall of each year. The strategy is composed of numerous operations and water supply management scenarios that account for the probable range of water supply conditions that Valley Water can expect in the upcoming year. These variable conditions include precipitation, locally and in the Sacramento-San Joaquin Delta watershed, as well as allocations of imported supplies. Local precipitation and runoff impact our local reservoir storage, stream flow, and natural recharge of the groundwater basins. The quantity of precipitation in the Sacramento-San Joaquin Delta watershed and the timing of snowmelt impact Valley Water's imported water supplies that are conveyed through the Delta. Other factors that impact Valley Water's water supply include infrastructure and facility limitations;

Future Water Demand and Water Supply Availability

planned and unplanned facilities outages; contractual obligations; the ability to bring in banked Valley Water supplies from Semitropic Water Storage District; and regulatory, institutional, and legal constraints.

As described in Section 1 of the report, rainfall year 2023–24 began with a near-average December in terms of local rainfall. Above-average precipitation materialized in the month of January. The Northern portion of California saw below-average precipitation at the onset of the rainfall year. The Northern Sierra 8-Station Precipitation Index total from the beginning of October through the end of January of 2024 was 22.1 inches, which is about 80 percent of the seasonal average to date and 44 percent of an average water year.

California Department of Water Resources announced an initial 2024 allocation of 10 percent on December 1, 2023. The Bureau of Reclamation has yet to set its initial CVP allocations for 2024. The initial allocations are subject to change as the water year progresses.

Local surface water supplies have been reduced because of the loss in Valley Water reservoir storage capacity due to regulatory restrictions to address seismic concerns. Regulatory restrictions at Anderson Reservoir, the largest Valley Water owned surface reservoir, have resulted in the loss of nearly all of its storage capacity at least through 2031.

Table 2-2.1 reflects the probable range of local and imported surface water supplies Valley Water currently expects in calendar year 2024. In conjunction with surface water supplies, groundwater reserves are managed to supplement available supplies during dry periods and to ensure that there are adequate supplies to meet current and future demand. The strategy will be continuously updated throughout the year to account for operations to-date and real-time conditions.

Table 2-2.1 Projected Calendar Year 2024 – Range of Surface Water Supply

Projected Calendar Year 2024 Supply in Acre-Feet		
	Average Year	Dry Year
Imported Water ¹	158,400 — 195,400	96,900 — 109,900
Local Surface Water	49,800	22,200
Total	208,200 — 245,200	119,100 — 132,100

¹ Imported Water Supplies are based on a range of SWP allocations provided during the January 22, 2024 State Water Contractors Water Operations meeting and CVP allocations that may possibly occur in an average or dry year. The average year projection assumes between 37-74% allocation for SWP, 60% allocation for CVP agriculture (Ag), and 85% allocation for CVP M&I. The dry year assumes between 9-22% allocation for SWP, 15% allocation for CVP Ag, and 65% for CVP M&I. Transfers, exchanges, banking, and carryover are not included as it is unknown at this point which of these supplies are needed for the upcoming year.

Long-Term Projected Demand and Water Supply

The long-term water supply and demand projections are based on analyses for the Water Supply Master Plan and its associated annual Monitoring and Assessment Program (MAP), as well as Valley Water's and retailers' Urban Water Management Plans. The Water Supply Master Plan presents Valley Water's long-term water supply outlook and identifies the type and level of investment that Valley Water should make to provide a reliable supply of water. The MAP provides annual updates to the water supply and demand forecasts and tracks the progress of potential projects to make sure Valley Water's investment strategy is on track. The sections below present Valley Water's projected water demand, supply, and existing and planned investments, which are described further in Section 3.

Following a five-year planning cycle, in 2023 Valley Water started the development of the Water Supply Master Plan 2050, which extends the planning horizon to 2050 and represents a comprehensive update to the existing Water Supply Master Plan 2040, which was adopted in November 2019. The updated plan will reassess Valley Water's future demand, supply, and recommended investment strategies including updated water conservation targets to achieve by 2050. The Water Supply Master Plan 2050 is planned to be completed toward the end of 2024.

Water Demand

The Water Supply Master Plan 2040 demand forecast was developed during the 2012-2016 drought with anticipation that a full rebound in demands would occur once the drought ended. However, a significant drought rebound has not yet materialized and there is not likely to be a rebound to pre-drought water use within the Water Supply Master Plan 2040 planning horizon. Considering the muted drought rebound, Valley Water updated demand forecasts through the MAP and published the new forecasts in October 2020. The updated demand forecasts integrated the latest growth forecasts projected by the Association of Bay Area Governments and Metropolitan Transportation Commission Plan Bay Area 2017. Even though per capita water use continues to decline, the new demand forecasts estimated that increases in housing and jobs will result in an increase in water demands from a current annual average of approximately 310,000 acre-feet to approximately 342,000 acre-feet in 2045. This forecast takes into account implementation of Valley Water's long-term water conservation programs but does not include short-term water use reductions that might be requested during a drought or other water shortage.

As part of the Water Supply Master Plan 2050 development, Valley Water is updating the 2020 MAP demand projections and proposing to evaluate investment needs by looking at two potential demand futures: stable and high. The stable demand assumes the same drought rebound through 2025 that was forecasted in the MAP 2020 projections but that the demands stay flat at 2025 levels through 2050. The stable demands represent success in making water conservation a way of life and mitigating the impacts of growth and climate change on water use. The high demand assumes significant, unmitigated impacts from

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growth and severe climate change, which increases outdoor water use in particular. The forecasted 2050 countywide stable and high demands are approximately 330,000 acre feet per year (AFY) and 365,000 AFY, respectively. Both demands assume Valley Water achieves its long-term conservation goals. Valley Water's demand projections integrate historic water use data, historic and projected housing and economic growth information, climate change data, and a post-drought water use rebound. The projected demands will help Valley Water determine future water supply needs.

Over the past several years, population in Santa Clara County has decreased, the COVID pandemic has increased uncertainty on future water use and growth projections, and California has experienced another drought. Valley Water is tracking how demands are rebounding from this recent drought and how COVID may impact county housing and job growth in the long-term.

Conservation

Valley Water and all major retail water providers partner in regional implementation of a variety of water-use efficiency programs (water conservation programs) to permanently reduce water use in the county. Valley Water's long-term savings target is to achieve 109,000 AFY in water savings by 2040 (110,000 AFY when including stormwater capture projects). The Water Supply Master Plan 2040's "No Regrets" package includes water conservation programs designed to achieve this ambitious water savings target, as well as stormwater capture/recharge programs. Work is underway to establish a new target for the Water Supply Master Plan 2050 to increase our community's water supply reliability.

Additional regulations that have contributed to significant and sustained levels of conservation includes the Water Conservation Act of 2009, which required all retail water agencies in the state, with assistance from the water wholesalers, to reduce per capita water use 20 percent by 2020. Valley Water's long-term conservation programs successfully supported this effort, and countywide water use was 20 percent lower during the 2014-2019 period than in 2013 and was 7% lower in 2023 compared to 2019. The State's "Making Conservation a California Way of Life" regulations builds on the success of the Water Conservation Act of 2009 and creates a new framework for water suppliers to develop locally-specific strategies to remain in compliance with the statewide policy. This draft regulation establishes "urban water use objectives" for retail water providers, which are the sum of its indoor residential water use; outdoor residential water use; commercial, industrial, and institutional water use; and water loss. The recommendations, objectives, and standards are expected to be adopted by the California Department of Water Resources and State Water Resources Control Board in calendar year 2024. Valley Water's water conservation programs will help ensure success, as they did with implementation of the Water Conservation Act in the past.

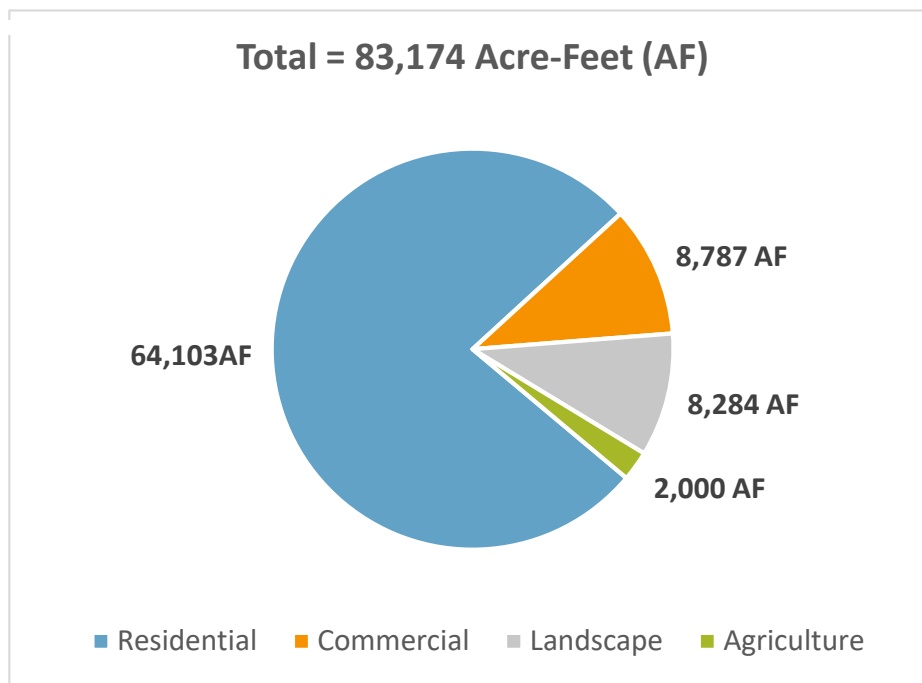
To identify strategies to achieve both Valley Water's aggressive long-term targets and the State's "Making Conservation a California Way of Life" regulatory framework's objectives, Valley Water completed a Water

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Conservation Strategic Plan (Strategic Plan) in 2021. The Strategic Plan details specific recommendations and strategies for increasing participation rates in water conservation programs, addressing geographic or demographic disparity in participation trends, and considering the creation of new programs and conservation policies. Importantly, the Strategic Plan determined that the type and variety of programs Valley Water offers are sufficient to meet the long-term savings target if resources are invested to increase participation rates. Adoption of local conservation policies such as a Model Water-Efficient New Development Ordinance have the potential to meet the long-term savings target earlier and more cost effectively than without such policies.

Valley Water implements approximately 20 different ongoing water conservation programs including incentives and rebates, free device installation, free delivery of water-saving devices and educational resources, one-on-one home visits, site surveys, and educational outreach to reduce water consumption in homes, businesses and agriculture. Figure 2-2.1 shows Valley Water’s conservation savings in the past Fiscal Year 2022–23 broken out by categories of Residential, Commercial, Landscape and Agriculture. These programs are designed to achieve sustainable, long-term water savings and are implemented regardless of water supply conditions. Without these savings, the demands shown in Figure 2-2.2 would be substantially higher. Additional information about the Water Conservation Strategic Plan and available water conservation programs can be found at www.watersavings.org.

Figure 2-2.1 Long-Term Water Conservation Savings in FY 2022–23



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Water Supply

Several sources of supply contribute to Valley Water's ability to meet future demands, including local surface water and natural groundwater recharge, recycled and purified water, supplies delivered to retailers by the SFPUC, and Delta-conveyed imported water supplies:

Local Surface Water and Natural Groundwater Recharge

Local surface water supplies are expected to increase over current levels after Valley Water completes seismic retrofits on several dams so that they can be operated at full capacity. Natural recharge sources include deep percolation of rainfall, natural seepage through creeks, subsurface inflow from adjacent aquifers and other sources. Since pumping far exceeds natural recharge, Valley Water uses surface water for managed aquifer recharge. The stormwater capture projects in the Water Supply Master Plan 2040's "No Regrets" package are projected to incrementally increase the volume of local water used for groundwater recharge. Valley Water is also considering constructing new groundwater recharge facilities that would increase Valley Water's ability to recover groundwater storage rapidly after a drought. The new recharge facilities being considered could potentially recharge water from Anderson Reservoir or Valley Water's imported water supplies.

Recycled and Purified Water

Recycled and purified water is a local, reliable source of water supply that helps meet demands in wet, normal, and dry years. Recycled and purified water use is expected to steadily increase in the long-term. Valley Water's 2020 Urban Water Management Plan estimates that retailers will use approximately 25,000 AFY of non-potable recycled (NPR) water to meet 2045 demands. Current NPR water use is approximately 17,000 AFY. Valley Water's Board has set a supply objective to meet at least 10 percent of the county's total water demands using recycled and purified water. In June 2021, Valley Water completed a Countywide Water Reuse Master Plan (CoRe Plan) in collaboration with recycled water producers, wholesalers, retailers, and other interested stakeholders that includes recommendations for potable reuse projects to produce up to 24,000 AFY of potable reuse (purified water) consistent with the Water Supply Master Plan. This is in addition to the 25,000 AFY of NPR. As part of the development of the Water Supply Master Plan 2050, goals for potable reuse are being evaluated.

In December 2019, Valley Water executed an agreement with the cities of Palo Alto and Mountain View with an option to receive up to 10,000 acre-feet per year of treated wastewater from the Palo Alto Regional Water Quality Control Plant for up to 76 years. In 2020, staff began California Environmental Quality Act (CEQA) development to support construction of an Indirect Potable Reuse (IPR) project using a Public-Private Partnership (P3) procurement process. Purified Water from a new purification facility in Palo Alto would be delivered to the Los Gatos Recharge System. Valley Water continues to collaborate with the City of Palo Alto on draft legal agreements including Land Lease,

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Operation and Maintenance for the project implementation.

In addition, the Valley Water Board and San José City Council directed staff to develop needed agreements with the Cities of San José and Santa Clara for a direct potable reuse project in San José using treated wastewater from the Regional Wastewater Facility. The first phase of the San José Purified Water Project is a demonstration facility to ensure a future direct potable reuse facility meets regulatory requirements and is cost effective, while also helping to ensure operator certification and public education. This first phase was approved for inclusion in Valley Water's CIP.

Building on the Success of Existing Partnerships

To achieve water reuse goals, Valley Water is building on its partnerships with four water reuse systems in the County, referred to as our Partner Agencies, to integrate existing plans and infrastructure. The Partner Agencies include:

1. Palo Alto/Mountain View Recycled Water System. Valley Water is working with the Cities of Palo Alto and Mountain View to evaluate and implement applicable water reuse alternatives, including the construction of a 1.25 million gallons per day Advanced Water Purification Facility (AWPF) at the Palo Alto Regional Water Quality Control Plant to reduce the salinity of recycled water, and collaboration for a larger regional AWPF to produce purified water for future potable reuse (described above).
2. South Bay Water Recycling (SBWR). SBWR receives tertiary treated recycled water from the San José/Santa Clara Regional Wastewater Facility (RWF). The RWF produces recycled water for SBWR to distribute to retailers, including the City of San José, City of Milpitas, San Jose Water Company, and the City of Santa Clara. In 2014, Valley Water collaborated with the City of San José in constructing the Silicon Valley Advanced Water Purification Center, which produces purified water for blending into the SBWR system to improve water quality and increase recycled water usage. Valley Water, San José, and Santa Clara have begun negotiations to implement development of joint water reuse projects that may expand current water purification efforts to improve water supply reliability in the face of climatic change (described above).
3. South County Regional Wastewater Authority (SCRWA). In 1999, SCRWA partnered with Valley Water to create a master plan and capital improvement program and agreed that Valley Water would distribute wholesale recycled water produced by SCRWA. Valley Water has partnered with various partners such as developers and other potential recycled water users in the Gilroy area to construct new pipelines and expand the South County Recycled Water System. Since 2021, Valley Water, Gilroy and Morgan Hill staff have been evaluating options and opportunities by updating the South County Master Plan to enhance current non-potable water recycling and evaluate future potable water reuse in South County. Currently Valley Water is working with its partners in South County to revise the 1999 water reuse agreements.

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4. Sunnyvale Recycled Water System (RWS). Starting in 2013, Valley Water partnered with Sunnyvale on the Wolfe Road pipeline design and construction to expand water reuse distribution. The completed pipeline delivers recycled water from the RWS to Apple Inc. in Cupertino, with Valley Water as the wholesaler and California Water Company as the retailer. Valley Water and Sunnyvale are interested in continued collaboration on potable water reuse alternatives.

San Francisco Public Utilities Commission (SFPUC)

Eight of Valley Water's retailers also receive water from SFPUC (often referred to as "common retailers"). SFPUC water supplies to common retailers reduce demands on Valley Water supplies in northern Santa Clara County. Most of the common retailers have supply guarantees from SFPUC that are not expected to change over time. However, two retailers (the City of San José and the City of Santa Clara) have interruptible contracts. If SFPUC interrupts supplies to these retailers, there could be additional demand for Valley Water supplies.

An intertie facility between Valley Water and SFPUC provides a backup supply of healthy, clean drinking water to the residents of Alameda and Santa Clara Counties in an emergency or when planned maintenance activities require supplemental water supply from one agency to the other.

Delta-Conveyed Imported Water

Valley Water holds contracts with the California Department of Water Resources and U.S. Bureau of Reclamation for up to 252,500 acre-feet per year of supplies, with actual deliveries subject to availability of water supplies and regulatory constraints to protect fish, wildlife, and water quality. These Delta-conveyed imported water deliveries from the SWP and CVP have been impacted by significant restrictions on Delta pumping required by biological opinions and permits issued by the U.S. Fish and Wildlife Service (FWS, October 2019), National Marine Fisheries Service (NMFS, October 2019), and California Department of Fish and Wildlife (CDFW, 2020) and by water rights permit conditions imposed by the State Water Resources Control Board (Decision-1641, 1999).

Based on modeling projections provided by the California Department of Water Resources, future average imported water deliveries could decrease with additional regulatory restrictions and impacts from climate change. On September 24, 2019, the Valley Water Board of Directors adopted a resolution that expresses support for Governor Newsom in his development of a single-tunnel Delta Conveyance Project and adopted Guiding Principles to shape Valley Water participation in the project. On November 17, 2020, the Board adopted a resolution to approve a provisional participation percentage in the Delta Conveyance Project of 2.73 percent and authorize the Chief Executive Officer to increase Valley Water's provisional participation percentage up to a total of 3.23 percent if additional shares become available. Additional shares became available, and Valley Water increased its provisional participation rate to 3.23 percent. The Delta Conveyance Project is currently under environmental review. A final Environmental Impact Report

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was issued in December 2023 and a final Environmental Impact Statement is expected to be issued in 2024.

Future Water Supply Investments

Valley Water's existing long-range plan, the Water Supply Master Plan 2040, provides a long-term strategy for ensuring Valley Water's water supply sustainability through 2040. The strategy has three core elements:

1. **Secure existing supplies and infrastructure**: Projects include the Delta Conveyance Project, dam seismic retrofits, and other capital improvement projects to maintain existing infrastructure. Repairing and maintaining the existing infrastructure minimizes the number of new projects Valley Water needs to invest in to meet future demands.
2. **Increase water reuse and conservation**: Projects include developing up to 24,000 acre-feet of potable reuse, stormwater capture projects, and demand management projects to meet Valley Water's water conservation savings target of 110,000 acre-feet per year by 2040. The stormwater capture and demand management projects are also referred to as the "No Regrets" suite of projects. Demand management, stormwater capture, and water reuse are critical elements of the water supply strategy. They are resilient to climate change and are local solutions for meeting future demands.
3. **Optimize the use of existing supplies and infrastructure**: Projects include the Los Vaqueros Reservoir Expansion, the Pacheco Reservoir Expansion, and expanding groundwater recharge capacity. Valley Water's existing supplies are sufficient to meet current and future needs in all but the driest years. In some years, supplies exceed needs, so additional facilities could increase the flexibility to use those supplies. These planned investments will help Valley Water maintain operational flexibility into the future.

As mentioned earlier, Valley Water is in the process of developing the Water Supply Master Plan 2050. With this plan development, a variety of projects are being evaluated, including alternative supply projects such as purified water, local and imported surface supply, storage projects, and recharge and pipeline projects. The projects recommended in the Water Supply Master Plan 2040 are among the projects being evaluated. Through this plan development, Valley Water will identify and recommend projects to be planned or implemented to ensure long-term water supply reliability for the County. In addition, Valley Water will continue to promote water conservation to make conservation a way of life, and is developing a 2050 conservation target as part of the Water Supply Master Plan 2050.

Reserves

Santa Clara County, like most of California, experiences drastic variation in annual precipitation. The variable precipitation causes annual fluctuations in water supply availability. Annual supplies can exceed demands in some years, while demands can greatly exceed supplies in other years. As part of its conjunctive management program, Valley Water prepares for this supply variability by storing excess wet year supplies in

the local groundwater basins, local reservoirs, San Luis Reservoir, and the Semitropic Groundwater Bank. Valley Water draws on these reserve supplies during dry years to help meet demands. In addition to water use reduction calls for the community, these reserves are generally enough to meet demands during a single critically dry year or the initial years of an extended drought. As part of the Water Supply Master Plan 2050 development, Valley Water is evaluating what investments in reserves will be needed to meet future drought demands.

2-3 CHALLENGES & RISKS TO FUTURE WATER SUPPLY AVAILABILITY

Droughts

The unpredictable nature of droughts makes them Valley Water's greatest water supply challenge. Single year droughts can impact Valley Water's ability to maintain a groundwater recharge program. Multi-year droughts deplete reserves and can result in groundwater level declines and the risks of land subsidence and dry wells. Valley Water's conjunctive management program minimizes this risk but needs to be supported with continued investments in Valley Water's existing water supply system, increased water conservation, and the expansion of recycled and purified water. In addition, use of Valley Water's Water Shortage Contingency Plan also supports Valley Water's conjunctive management during droughts.

Risks to Imported Water Supplies

Imported water supplies are at risk from increased regulatory restrictions, Delta levee failure, and impacts of climate change, including sea level rise and changing precipitation patterns. These risks could impact not only Valley Water's supplies but those of SFPUC as well. To mitigate these risks and improve the reliability of its imported water supplies, Valley Water participates with state and federal agencies, other water contractors, and environmental organizations in long-term planning efforts to improve Delta conveyance and restore ecosystem health. The goals of these planning efforts are to protect and restore both water supply reliability and the ecological health of the Delta and its tributaries. On May 8, 2018, and November 17, 2020, Valley Water voted to participate in planning for new Delta conveyance infrastructure and is now working with the state and water agency partners in support of a project that will meet the needs of the county.

The State Water Resources Control Board (SWRCB) approved amendments to the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) in December 2018 that will result in increased restrictions on water users within the San Joaquin Basin (Basin), potentially reducing SFPUC supplies. SWRCB staff are working with Basin stakeholders to develop voluntary agreements that will achieve an equivalent level of environmental protection while reducing impacts on water supplies. If these voluntary agreements are not developed and adopted by the SWRCB as an alternative to the December 2018 approved changes and the objectives in the recently approved plan are implemented, SFPUC supplies to Santa Clara County retailers will likely be reduced, which could increase demand for

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Valley Water supplies. Valley Water will continue to work with state officials and other agencies to address these concerns.

Climate Change

Future climate projections for Santa Clara County indicate increasing temperatures, increasing storm intensity, shifting seasonal and annual precipitation patterns, and increasing drought severity. Each of these climatic changes can impact the reliability of Valley Water's local and imported water supplies. Moreover, climate change models are also projecting reduced annual average Sierra Nevada snowpack and increased San Francisco Bay sea level rise, which could also negatively affect imported water deliveries. Valley Water's water supply strategy of managing demands, providing drought-resilient supplies, and increasing system flexibility helps adapt to future climate change.

Aging Infrastructure

Valley Water manages and addresses risks and uncertainties by building and maintaining an integrated and diverse water supply system. If properly maintained, the water supply system that exists today will continue to meet most of the county's future water needs and will be the foundation of future water supply investments. Thus, securing existing water supplies and infrastructure is critical to water supply reliability. Valley Water needs to continue to replace the aging water supply infrastructure, retrofit its dams as necessary, and improve its water treatment plants for future reliability.

Other Risks and Uncertainties

Other risks and uncertainties to water supply include fisheries protection measures, unexpected hazards and extreme events resulting in local and/or imported water outages, more stringent water quality standards, water quality contamination, SFPUC changes in contracts with local water retailers, seismic restrictions on local reservoirs, and demand growth different than projected.

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3.1 ACTIVITIES TO PROTECT AND AUGMENT WATER SUPPLIES OF VALLEY WATER

Groundwater production charges and other water charges finance a program of activities to protect and augment water supplies of Valley Water. The program is comprised of activities and service functions in the areas of operations, maintenance, and construction, as illustrated in Table 3-1.1. These activities are designed to work together to meet Valley Water’s Board-adopted end goals and policies as well as to provide benefits to the community.

Table 3-1.1 Program Activities to Manage and Provide a Sustainable Water Supply

Activities to Protect & Augment Water Supplies		End Goals & Benefits
	Services and Functions	
Operation	<ul style="list-style-type: none"> • Planning & development • Water purchases • Transmission • Treatment • Distribution • Storage • Groundwater recharge • Conservation & water recycling • Regulatory compliance and mitigation 	<ul style="list-style-type: none"> • Reliable, clean water supply for current and future generations • Delivery of reliable high-quality drinking water • Sustainable water supply through integrated water management • Assets and resources managed for efficiency and reliability • Healthy, safe, and enhanced quality of living in Santa Clara County
Maintenance	<ul style="list-style-type: none"> • Surface water & groundwater resources protection & management • Asset protection & management 	
Construction	<ul style="list-style-type: none"> • Capital improvement • Infrastructure management 	

Revenue from groundwater production charges and treated water charges constitute the majority of funds needed to finance the operations costs of the Water Utility. About a quarter of the operating budget⁷ is needed for imported water purchases to augment local supplies. About a third of the operating budget is needed to provide treated water to augment groundwater supply in meeting water demand. The balance is used to provide program services including conjunctive management and protection of surface water and groundwater resources, operation and maintenance of facilities, water conservation, planning and development of recycled water and other alternative sources of supply, as well as administrative and support services.

⁷ The budget document is available on Valley Water website: www.valleywater.org.

Programs to Sustain Water Supply Availability

Groundwater levels increased in 2023 and groundwater storage remains within the normal range of the Water Shortage Contingency Plan. Groundwater levels recovered in 2023 due to the wet hydrologic conditions that ended the 2020 to 2022 drought, Valley Water's managed recharge operations, and water conservation by the community. More substantial declines during the recent drought were avoided by obtaining emergency imported water supplies and through expanded conservation programs and messaging to reduce water use. Valley Water was able to meet treated water demands with safe clean drinking water that met or exceeded all regulatory requirements in FY 2022–23.

The asset management program and maintenance activities continued, including work at Valley Water's water treatment plants, pipelines, and pump stations. Valley Water is also developing three water supply implementation planning projects to provide recommendations on how to ensure existing infrastructure is maintained and updated to meet current and future demands.

To help secure existing imported water supply, Valley Water has been engaged in planning efforts to improve the conveyance of SWP and CVP supplies across the Delta since 2006, recognizing that the current approach of diverting directly from rivers in the vulnerable southern end of the Delta is unsustainable. Plans to improve Delta conveyance evolved from development of the Bay Delta Conservation Plan to the California WaterFix, and finally to Governor Newsom's Delta Conveyance Project. In September 2019, the Board adopted 8 guiding principles for participation in the Delta Conveyance Project, revising the guiding principles previously adopted in October 2017 for the California WaterFix, to ensure that Santa Clara County's interests are represented in Delta Conveyance discussions. The Board anticipates that participation in the project will improve the reliability and water quality of its supplies conveyed through the Delta, and that the project will provide an alternative conveyance pathway that is more protective of Delta fisheries. Valley Water staff are also supporting the state's EcoRestore program, which will contribute towards a sustainable Delta ecosystem.

Valley Water is involved in three Proposition 1 Water Storage Investment Program (WSIP) funded projects: Pacheco Reservoir Expansion, Sites Reservoir, and Los Vaqueros Reservoir Expansion. Proposition 1 WSIP dedicated \$2.7 billion for investment in new water storage projects and the California Water Commission announced conditional funding awards in July of 2018. The planned Valley Water led Pacheco Reservoir Expansion was conditionally awarded the full \$484.5 million requested, which also included an early funding award of \$24.2 million; the full award was later increased to \$496 million, and then again to \$504 million. Section 3-2 includes updates and additional information on the Pacheco Reservoir Expansion Project. The California Water Commission also conditionally awarded the Sites Reservoir Project \$875 million (including \$44 million in early funding) and the Los Vaqueros Reservoir Expansion project \$478 million (including \$24 million in early funding). Both the Sites Reservoir and Los Vaqueros Reservoir Expansion Projects, the latter including the proposed Transfer-Bethany Pipeline conveyance facility, are pending Board of Directors' decision(s) on long-term project involvement by Valley Water.

3.2 FUTURE CAPITAL IMPROVEMENT, OPERATING AND MAINTENANCE REQUIREMENTS

The highest priority work of Valley Water's Water Utility, now and into the future, is to implement a program of activities to ensure reliable water supplies, to protect local surface water and groundwater supplies, and to meet treated water quality standards. This program of operations, maintenance and capital improvement activities will require continued funding from groundwater production charges and other sources of revenue, as described in Section 4 of this report.

The proposed FY 2024–25 operations and capital programs, as shown in Section 4, Tables 4-5.1 and 4-5.2 respectively, continue to emphasize activities to protect and maintain existing water supplies and assets, and to plan for uncertainties including hydrologic conditions and regulatory restrictions on imported and local supplies. This is consistent with Valley Water's long-term water supply strategy, described in Water Supply Master Plan, to 1) secure existing supplies and infrastructure, 2) increase water reuse and conservation, and 3) optimize the use of existing supplies and infrastructure. Thus, the proposed programs, if funded accordingly, will enable the Water Utility to provide reliable water supplies next year and in the future.

The current capital program and expected future capital investments are composed of seismic retrofit, recycled water, surface water storage expansion, Delta conveyance, asset renewal and improvement, Fish and Aquatic Habitat Collaborative Effort (FAHCE), and master planning projects.

The seismic stability evaluations of Anderson, Almaden, Calero, Lenihan, Stevens Creek and Guadalupe Dams have been completed. The four resulting CIP projects (for Anderson, Almaden, Calero and Guadalupe Dams) contain several unique construction elements. In the case of Anderson Dam, Valley Water has identified several separate construction elements that are either budgeted or in the design phase including Cross Valley Pipeline Extension, Coyote Percolation Dam Replacement, Coyote Creek Flood Management Measures, and installation of chiller units as Coyote Creek Fish Protection Measures. The seismic stability evaluation for three remaining dams, Coyote, Chesbro and Uvas, was initiated in the fall of 2014. Recent results show that Coyote Dam will require seismic retrofit study in the future. In addition to seismic retrofit improvements at four of the previously listed dams, the conditions of the outlet system, and the adequacy of the spillway and freeboard are being evaluated and will be incorporated into the retrofit work as appropriate.

With operating restrictions on several Valley Water dams due to seismic deficiencies or questions about seismic adequacy, there may be impacts to current and future operating budgets, such as the need to purchase additional water because of an inability to capture and utilize local runoff or store imported water.

Programs to Sustain Water Supply Availability

Recently Valley Water received notification from the DSOD that the Almaden, Calero, Coyote and Guadalupe Dams received downgraded ratings of “poor.” As such, staff has included a preliminary capital cost projections for the Dam Safety Program.

Valley Water is considering a significant investment to expand local surface water storage in and outside of Santa Clara County. In conjunction with the San Benito County Water District and Pacheco Pass Water District, Valley Water continues planning and design efforts on the expansion of the existing Pacheco Reservoir on the North Fork Pacheco Creek in south-east Santa Clara County. The reservoir is located 60 miles southeast of San José and sits north of Highway 152. The expanded reservoir would increase the reservoir’s capacity from 5,500 acre-feet to up to 140,000 acre-feet, enough water to supply 1.4 million residents for a year. The planned Pacheco Reservoir Expansion would provide a number of benefits including reducing the frequency and severity of water shortages, increasing emergency water supplies, improving water quality, and providing ecosystems benefits⁸.

Valley Water has joined seven other local agencies to form the Los Vaqueros Expansion (LVE) Joint Powers Authority (JPA) to explore expanding Los Vaqueros Reservoir in eastern Contra Costa County by a total of 115,000 acre-feet and constructing the Transfer-Bethany Pipeline to connect Los Vaqueros Reservoir to the California Aqueduct. Valley Water’s Board of Directors has authorized staff to seek up to 50,000 acre-feet of storage in the project. The LVE Project would allow Valley Water to store imported water during wet periods and call on the stored water when needed and provide an alternate pathway to deliver imported water.

In September 2019, Valley Water adopted guiding principles for participation in the Delta Conveyance Project and on November 17, 2020, Valley Water Board of Directors adopted a resolution to approve a provisional participation percentage in the Delta Conveyance Project of 2.73 percent and authorize the CEO to increase Valley Water’s provisional participation percentage up to a total of 3.23 percent if additional shares become available. Subsequently, additional shares became available, and Valley Water increased its provisional participation rate to 3.23 percent.

The Governor’s Delta Conveyance Project has the potential to improve Valley Water’s water supply reliability while improving the flexibility of SWP infrastructure to respond to environmental conditions in the Delta to reduce fishery impacts. Over the long term, the project could improve water supply reliability in the face of climate change effects, including salinity intrusion from levee failures and sea level rise, improve access to transfer supplies, improve water quality, and enhance the benefit of storage projects. Continued participation in the Delta Conveyance Project represents a potential substantial future investment for Valley Water.

⁸ The Maximum Conditional Eligibility Determination (MCED) funding award of \$484.5 million in 2018 was increased to \$496.6 million in 2021, and again to \$504 million by the CWC as available funds were redistributed to all remaining eligible projects.

Programs to Sustain Water Supply Availability

The U.S. Bureau of Reclamation (Reclamation) and the San Luis & Delta-Mendota Water Authority (SLDMWA) are jointly developing the B.F. Sisk Dam Raise and Reservoir Expansion Project (Project). This Project will raise the existing B.F. Sisk Dam by 10 feet and increase the storage capacity of San Luis Reservoir by 130,000 AF. Valley Water is participating in the planning phase of the Project through the SLDMWA, along with seven other members. Valley Water's Board has authorized staff to seek up to 60,000 acre-feet of storage in the Project. Operational details are being negotiated, but it is anticipated that the Project would allow Valley Water to store both SWP and CVP supplies as well as other types of water during dry conditions.

Maintaining existing assets provides the foundation for meeting current and future supply needs. The Rinconada Water Treatment Plant reliability improvements and other aging infrastructure renewal projects comprise the bulk of planned expenditures in the current capital program. Fiscal Year 2024–25 will be year eight (8) of Valley Water's 10-Year Pipeline Inspection and Rehabilitation Program. This program assesses condition and makes necessary repairs to critical raw and treated water pipelines each year. Some sections of one of Valley Water's most critical supply pipelines, the Almaden Valley Pipeline, has reached end of life and therefore a replacement project is included in the CIP. Other infrastructure such as the Vasona Pump Station is original and overdue for a major upgrade. As infrastructure continues to age, these major facility upgrades will continue through the future.

Some highlights of the proposed FY 2024–25 Capital Improvement Program are listed next.

Storage:

- Seismic retrofit of Anderson Dam
- Pacheco Reservoir Expansion

Transmission:

- Raw and treated water pipeline inspection and rehabilitation
- Vasona Pumping Station Upgrades
- Coyote Pumping Plant Adjustable Speed Drive Replacement
- Almaden Valley Pipeline Replacement

Water Treatment Plants:

- Continued construction for the comprehensive upgrade of the Rinconada Water Treatment Plant processes to ensure plant reliability for the next 50 years; this will include new facilities for ozone generation, liquid oxygen, fluoride, chlorine contact, and new filters
- Penitencia Water Treatment Plant Residuals Management
- Water Treatment Plant Electrical Improvements Project

Recycled and Purified Water:

- Development of an advanced water purification demonstration facility in the City of San José to support potable reuse as directed by VW Board of Directors

Programs to Sustain Water Supply Availability

Detailed cost projections for the preliminary FY 2025–29 Capital Improvement Program (CIP) can be found in Section 4-5.

Additional Future Capital and O&M Requirements

Additional programs, such as the Fish and Aquatic Habitat Collaborative Effort (FAHCE) and master planning efforts may require substantial future investment, as described below.

FAHCE

The Fish and Aquatic Habitat Collaborative Effort (FAHCE) was established to address a water rights complaint after the 1996 listing of steelhead trout as a threatened species under Federal Endangered Species Act (ESA)⁹ by National Marine Fisheries Service (NMFS). On August 8, 2023, Valley Water’s Board of Directors certified the FAHCE Final Program Environmental Impact Report (EIR) for Guadalupe River and Stevens Creek Watersheds. On October 1, 2023, staff started full implementation of FAHCE Plus flow measures for Lexington, Calero, Guadalupe, Almaden and Stevens Creek Reservoir.

In 2019, to support environmental permitting for the Anderson Dam Seismic Retrofit (ADSR) Project, restoration measures for Coyote Creek watershed originally contained in the FHRP was transferred to the ADSR Project’s environmental review and permitting process. In the future, once the EIR for Anderson Dam Seismic Retrofit Project is certified and the construction completed, changes to operation and maintenance of water diversions in the Coyote Creek will be required.

Nonflow measures (e.g., barrier removal or other habitat restoration projects) in all three watershed areas are being implemented consistent with the Fish Habitat Restoration Plan (FHRP). In the meantime, Valley Water filed water right change petitions with the State Water Resources Control Board for diversions in Guadalupe River and Stevens Creeks watershed areas while responding to a lawsuit filed by San Francisco Baykeeper. Final resolution of the water rights complaint and implementation of the FHRP and the Baykeeper lawsuit will require a large financial commitment on the part of Valley Water for construction, operation and maintenance of infrastructure that improve habitat for fish in creeks located in the Three Creeks. Costs have been estimated but would need to be updated pending on the water right orders and resolution of the Baykeeper lawsuit. The updates will need to be integrated into the groundwater production charge projections.

⁹ The Endangered Species Act (ESA) is a federal law to ensure the conservation of threatened and endangered plants and animals and the habitats in which they are found. The ESA prohibits “take” of listed species through direct harm or destruction or adverse modification of designated critical habitat of such species. In the 1982 ESA amendments, Congress authorized the federal ESA implementing agencies, U.S. Fish and Wildlife Service and National Marine Fisheries Service, through the Secretary of the Interior, to issue permits for the “incidental take” of listed species before permittees could proceed with an activity that is legal in all other respects but would result in the incidental taking of a listed species. Prior to issuance of “take” permits, permit applicants are required to design, implement, and secure funding for a conservation plan that minimizes and mitigates harm to the impacted species during the proposed project. That plan is commonly called a Habitat Conservation Plan (HCP). HCPs are legally binding agreements between the U.S. Secretary of the Interior or Commerce and the permit holder.

The California Endangered Species Act (CESA) is the state equivalent of the federal ESA. It states that all native species and habitats of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. CESA also allows for take incidental to otherwise lawful development projects. The state Department of Fish and Wildlife is the CESA implementing agency, authorized to issue permits and memorandum of understanding.

Programs to Sustain Water Supply Availability

Water Supply Infrastructure Master Plan Implementation Projects

To address aging infrastructure and meet future reliability goals, the Valley Water Board of Directors approved three planning projects to define the long-term needs and ensure the reliability of Valley Water's water supply infrastructure. Under the umbrella of the current Water Supply Master Plan 2040, and the Water Supply Master Plan 2050 under development, the following projects are intended to identify capital project needs under these three categories of existing infrastructure:

Water Treatment Plant Master Plan Implementation Project

This project will develop and implement a comprehensive 30-year program of capital improvements to repair, replace, and/or upgrade the infrastructure at our water treatment plants and address the increasingly stringent water quality regulations.

Supervisory Control and Data Acquisition (SCADA) Master Plan Implementation Project

This project will develop and implement a comprehensive 15-year program of capital improvements to upgrade the Water Utility SCADA systems, as it ages and becomes obsolete. This project will include defining technology standards and guidelines for these upgrades.

Distribution System Master Plan Implementation Project

This project will develop and implement a comprehensive 30-year program of capital improvements to Valley Water's raw and treated water distribution pipelines and pump stations, to meet current demands and future growth, as well as improve our ability to handle emergencies. The project will first aim to optimize our raw and treated water distribution systems operations based on both retailer needs and abilities, and then the project will recommend improvement projects.

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4-1 INTRODUCTION

This section summarizes the maximum proposed water charges for fiscal year (FY) 2024–25 and the multi-year financial analysis that serves as the foundation for those water charges in each zone. The major sources of revenue for the Water Utility are from the imposition of charges on groundwater production and from contracts for the sale of treated surface water produced by its three treatment plants. Valley Water also receives revenue from surface water charges, recycled water charges, property tax, interest earnings, grants, capital reimbursements and other miscellaneous sources. Valley Water assesses the need for groundwater production and other water charges annually and, in accordance with state law, prepares this report to describe the activities undertaken to provide a water supply, along with the associated capital, operating and maintenance requirements.

The Rate Setting Process

According to Section 26.3 of Valley Water’s founding legislation (District Act), proceeds from groundwater production charges can be used for the following purposes:

1. Pay for construction, maintenance, and operation of imported water facilities
2. Pay for imported water purchases
3. Pay for constructing, maintaining, and operating facilities which will conserve or distribute water including facilities for groundwater recharge, surface distribution, and purification and treatment
4. Pay for debt incurred for purposes 1, 2 and 3

The work of Valley Water is divided into projects. Every project has a detailed description including objectives, milestones, and an estimate of resources needed to deliver the project. To ensure compliance with the District Act, each project manager must justify whether or not groundwater production charges can be used to pay for the activities associated with their project. The financial analysis presented in this report is based on the financial forecasts for these vetted projects.

This year’s groundwater production and surface water charge setting process will be conducted consistent with the District Act, and Board Resolutions 99-21 and 12-10¹⁰. In late 2017, the State Supreme Court found that Proposition 218 is not applicable to groundwater production charges. Procedural requirements for property related fees and charges under Proposition 218 like holding a public hearing and noticing well

¹⁰ Resolutions 99-21 and 12-10 can be found at <https://www.valleywater.org/ProposedWaterCharges>.

Financial Outlook of Water Utility System

owners are consistent with the District Act and are continuing. The surface water charge setting process will mirror the process described in Proposition 218 for property-related fees for water services. Both the groundwater and the surface water rate setting process are consistent with Proposition 26 requirements that the groundwater production and surface water charges are no more than necessary to cover reasonable costs and bear a fair or reasonable relationship to the rate payor's burdens on or benefits received from the groundwater and surface water programs.

FY 2024–25 will be the thirteenth year that a protest procedure will be conducted for surface water users. Last year's formal protest procedure for the surface water charge setting process resulted in zero protests. As in the past, Valley Water's Board will continue to hold public hearings and seek input from its advisory committees and the public before rendering a final decision on groundwater production and surface water charges for FY 2024–25.

In late 2009, Valley Water engaged Raftelis Financial Consultants, Inc. (RFC) to independently review Valley Water's cost of service and rate setting methodology used to calculate groundwater production charges for FY 2010–11. At that time, RFC had conducted over 600 rate and financial planning studies for water and wastewater utilities across the country. Specifically, RFC reviewed the cost of service and financial planning model developed by Valley Water to calculate groundwater production charges for FY 2010–11. RFC reviewed Valley Water's rate setting methodology for consistency with industry standards, best practices, and legal considerations such as Proposition 218, the District Act, and Resolution 99-21. The methodology used to calculate groundwater production charges for FY 2010–11 is detailed in RFC's report titled "Review of the Santa Clara Valley District's Cost of Service and Rate Setting Methodology for Setting FY 2011 Groundwater Production Charges"¹¹. The report was completed in March 2010 and demonstrates that Valley Water developed groundwater production charges and other charges consistent with cost-of-service principles and legal considerations including Proposition 218, the District Act, and Resolution 99-21. Valley Water continues to use the same cost of service methodology and will do so for the FY 2024–25 rate setting process.

In 2010, Valley Water engaged RFC and the water resources engineering firms of Hydrometrics Water Resources and Carollo Engineers to further analyze and quantify the conjunctive use benefit of treated water to groundwater and surface water customers. In addition, RFC analyzed the benefits of agricultural water usage to M&I users. The report titled "Report Documenting the Reasonableness of the Conjunctive Use Benefit of Treated Water to Groundwater and Surface Water Customers and the Benefit of Agricultural Customers to Municipal and Industrial Customers" was completed in February 2011 and provides further support and justification for Valley Water's cost of service methodology.

¹¹ The RFC reports, dated March 5, 2010, February 17, 2011, February 27, 2015, and February 28, 2020 can be found at: <https://www.valleywater.org/ProposedWaterCharges>.

Financial Outlook of Water Utility System

In 2014, Valley Water engaged RFC once again to analyze and quantify the conjunctive use benefit of surface and recycled water to groundwater customers. The report titled “Report Documenting the Reasonableness of the Conjunctive Use Benefit of Surface Water and Recycled Water to Groundwater Customers” was completed in February 2015 and provides further support and justification for Valley Water’s cost of service methodology.

In 2020, Valley Water completed a scientific study of its groundwater benefit zones. Based on a comprehensive evaluation of geological studies, local groundwater data, and the services Valley Water provides, new metes and bounds were established to better reflect services and benefits received by well users. The boundary for the North County groundwater zone (W-2) was slightly modified and the South County groundwater zone (W-5) boundary was modified with two new zones added. South County groundwater benefit zones include Zone W-5, which overlays most of the Llagas Subbasin; Zone W-7, which encompasses the Coyote Valley; and Zone W-8, which encompasses areas in the foothills southeast of Uvas and Chesbro Reservoirs. More information about the Groundwater Benefit Zone study can be found online at valleywater.org/qwbenefits.

In 2024, Valley Water will begin a study on Water Use Projections, Demand Elasticity, and Rate Affordability. Contract negotiations are underway as of the publish date of this report. Staff anticipates that the results from the study would inform the FY 2025–26 rate setting cycle.

Overview of Customer Classes and Charges

As the primary wholesale water provider for Santa Clara County, Valley Water serves four (4) customer classes including groundwater users, treated water users, surface water users and recycled water users. Resolution 99-21 guides staff in the development of the overall pricing structure based on principles established in 1971. The general approach is to charge the recipients of the various benefits for the benefits received. More specifically, pricing is structured to manage surface water, groundwater supplies and recycled water conjunctively to prevent the over use or under use of the groundwater basin. Consequently, staff is very careful to recommend pricing for groundwater production charges, treated water charges, surface water charges and recycled water charges that work in concert to achieve the effective use of available resources (as supported by the 2010 RFC study).

Groundwater users pump water from the ground that is both naturally and artificially recharged into the groundwater basins. The groundwater production charge recoups Valley Water’s costs to protect and augment this source of water, as outlined in the District Act.

Treated water users are comprised of seven (7) retail water companies that take treated surface water from one of Valley Water’s three (3) treatment plants and sell it to their end user customers. The water comes from locally captured runoff or water imported into the county.

Financial Outlook of Water Utility System

Valley Water recoups the cost of providing treated water by charging users the basic user charge, which is set equivalent to the groundwater production charge, and a treated water surcharge. The provision of treated water helps preserve the groundwater basin and therefore benefits groundwater users. This fact provides the rationale for setting the basic user charge equal to the groundwater production charge in accordance with cost-of-service principles as justified by the 2011 RFC study. The treated water surcharge is set by Board policy at an amount that promotes the effective use of available water resources.

Surface water users are those users permitted by Valley Water to tap raw district-managed surface water from creeks, streams, or raw water pipelines. To the extent Valley Water releases stored water from its local reservoirs, Valley Water considers this to be surface water, which is not subject to diversion by third parties. Local supplies and imported water are made available to Valley Water surface water permittees.

Surface water users pay the basic user charge, which is set equivalent to the groundwater production charge, plus a surface water master charge. The basic user charge helps pay for the cost to manage and augment surface water supplies and is set equal to the groundwater production charge, as justified by the 2015 RFC study, because surface water is considered in-lieu groundwater usage. The surface water master charge pays for costs that are specific to surface water users only, including the work to operate surface water turnouts and maintain surface water accounts.

Recycled water users are those users who take treated wastewater for non-potable purposes, such as irrigation and industrial uses. Recycled water charges are established at rates that maximize cost recovery while providing an economic incentive to use recycled water. The provision of recycled water helps preserve the groundwater basins and therefore benefits groundwater users. Consequently, groundwater users pay for recycled water to the extent that recycled water charges do not achieve full cost recovery, as justified by the 2015 RFC study.

Agricultural water users are a subset of the groundwater, surface water and recycled water customer classes. Section 26.1 of the District Act defines agricultural water use as “water primarily used in the commercial production of agricultural crops or livestock.” Agricultural charges are limited to a maximum of 25 percent of non-agricultural charges per the District Act. Board policy further limits agricultural charges to no more than 10 percent of non-agricultural charges in order to help preserve open space. Non-rate related revenue is used to offset lost agricultural water revenue for each customer class and is referred to as the Open Space Credit.

Non-agricultural users (also referred to as Municipal and Industrial, or M&I, users) are a subset of all 4 customer classes and consist of all water use other than agricultural. Non-agricultural water use charges are established for each customer class as described in the preceding paragraphs.

4-2 WATER CHARGE RECOMMENDATIONS FOR FISCAL YEAR 2024–25

Last year, FY 2023–24, the Board increased groundwater production charges. In the North County Zone W-2, the Board adopted a groundwater production charge of \$1,974 per acre-foot for non-agricultural water and \$2,089 per acre-foot for contract treated water. In the South County Zone W-5, the Board adopted a \$543.50 per acre-foot groundwater production charge for non-agricultural water. In the South County Zone W-7, the Board adopted a \$657.50 per acre-foot groundwater production charge for non-agricultural water. In the South County Zone W-8, the Board adopted a \$398 per acre-foot groundwater production charge for non-agricultural water. In all zones, the Board adopted a \$36.85 per acre-foot groundwater production charge for agricultural water, which was flat compared to the prior year.

For North County Zone W-2, staff has developed a groundwater production charge projection based on guidance from the Board of Directors. For FY 2024–25, the proposed maximum increase is driven by multiple factors: 1) to advance the Anderson Dam Seismic Retrofit, which will improve public safety and restore operational capacity; 2) to fund key baseline projects including the Rinconada WTP reliability improvement and 10-year Pipeline Rehabilitation Program; 3) to conduct planning work related to the Pacheco Reservoir Expansion, the B.F. Sisk Dam Raise and the Los Vaqueros Reservoir expansion projects, which would provide additional water storage capacity; and, 4) to pay for general inflation impacting the nation.

For South County Zones (W-5, W-7, and W-8) the FY 2024–25 proposed maximum groundwater production charges are driven by: 1) the need to advance the Anderson Dam Seismic Retrofit, which will improve public safety and restore operational capacity; 2) to conduct planning work related to the Pacheco Reservoir Expansion, the B.F. Sisk Dam Raise and the Los Vaqueros Reservoir expansion projects, which would provide additional water storage capacity; and, 3) to pay for general inflation impacting the nation.

The proposed maximum increase for South County Zone W-7 is higher than South County Zone W-5. This is primarily driven by the fact that over half of the water managed by Valley Water (that is delivered to South County) associated with the Anderson/Coyote reservoir system, CVP imported water, and the planned Pacheco Reservoir Expansion, would be used to recharge the groundwater basin underlying Zone W-7 based on historical data, while less than half of that water would be used to recharge Zone W-5. Cost allocations to the zones reflect the distribution of water to recharge those zones. From a water usage perspective, Zone W-7 accounts for less than a quarter of the groundwater pumping in South County, while Zone W-5 accounts for more than three quarters. Since the percentage of cost being allocated to each zone differs from the percentage of water usage attributed to each zone, it follows that the groundwater charge per acre-foot required for cost recovery would be higher for Zone W-7 than Zone W-5.

Zone W-8 accounts for the remaining 2 percent of groundwater pumping in South County. Zone W-8 does

Financial Outlook of Water Utility System

not benefit from the Anderson/Coyote reservoir system, CVP imported water, or the planned Pacheco Reservoir Expansion, nor does it benefit from the recycled water facilities operated by Valley Water in partnership with the South County Regional Wastewater Authority located in Gilroy. Consequently, the groundwater charge projection for Zone W-8 is significantly lower than both Zone W-5 and Zone W-7.

Valley Water staff assume that there will be ongoing rebound from the drought. This assumption results in a moderate water usage rebound from the FY 2023–24 adopted budget of 207,000 acre-feet to around 222,000 acre-feet in FY 2024–25. While the projection assumes ongoing rebound from the drought, it does not eliminate the need for continued conservation.

In general, lower water use relative to historical usage patterns translates to reduced revenue for the Water Utility and therefore results in upward pressure on water rates.

The draft FY 2025–29 Capital Improvement Plan (CIP) totals approximately \$9.0 billion for the Water Utility over the next 10 years. Significant investments planned for FY 2024–25 include:

- \$120 million for Dam Seismic retrofits and improvements at Anderson
- \$19 million for the planned Pacheco Reservoir Expansion
- \$66 million for the Rinconada WTP Reliability Improvement
- \$20 million for various pipeline rehabilitation projects
- \$12 million for CVP capital payments (not related to the Delta Conveyance project)

Valley Water must continue investing significant capital dollars into repairing and rehabilitating the infrastructure required to deliver safe, reliable drinking water to Silicon Valley residents and businesses.

Valley Water is projecting rate increases over the next 15 years in order to invest in several key areas:

- \$3.3 billion for repair, rehabilitation, and seismic retrofitting of the system behind your water supply, including treatment plants, pipelines, pump stations, dams, and recharge ponds.
- \$2.6 billion for the planned Pacheco Reservoir Expansion, which would help provide local water supply reliability for the future (cost would be offset by a \$504 million Proposition 1 award, up to 49 percent of total project cost leveraging WIFIA loans, and 35 percent of total project cost funded through partnerships with other agencies).
- A preliminary cost projection of \$721M for the expanded Dam Safety Program at Almaden, Calero, Coyote and Guadalupe Dams.
- A preliminary cost projection of \$2.7 billion for a San José Purified Water Project – Phase 2 (Full Scale Facility) to develop potable reuse to ensure a drought proof locally controlled supply.
- \$190 million to solve the statewide issue of the Bay Delta, where 40 percent of our water supply travels through. A catastrophic event in the Delta could interrupt this vital supply of water to Santa Clara County for up to two years or more.

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The increase in water charges for FY 2024–25 will bring in revenue required to pay for critical investments in the water supply infrastructure, investments in future supplies, and rising operating costs. The effective management of the region’s water supply system includes securing imported water supplies, storing surface water in local reservoirs, replenishment and protection of the groundwater basins, purification at local water treatment plants, testing for consistent water quality, transport, and delivery of water to local water providers, and conservation programs.

Given the financial picture summarized, staff proposes the following water charges for FY 2024–25:

For the North County Zone W-2, staff proposes up to a 12.9 percent increase, or a \$2,229 per acre-foot groundwater production charge for non-agricultural water; a 12.2 percent increase, or \$2,344 per acre-foot for contract treated water; and a 11.7 percent increase or, \$2,429 per acre-foot for non-contract treated water. The average household would experience an increase in their monthly bill of \$8.78 or about 29 cents a day. Customers may also experience additional charge increases enacted by their retail water provider.

For the South County Zone W-5, staff proposes up to a 6.6 percent increase, or a \$579 per acre-foot groundwater production charge for non-agricultural water. The average household would experience an increase in their monthly bill of \$1.22 or about 4 cents per day.

For the South County Zone W-7, staff proposes up to a 14.2 percent increase, or a \$750.50 per acre-foot groundwater production charge for non-agricultural water. The average household would experience an increase in their monthly bill of \$3.20 or about 11 cents per day.

For the South County Zone W-8, staff proposes up to an 8 percent increase, or a \$430 per acre-foot groundwater production charge for non-agricultural water. The average household would experience an increase in their monthly bill of \$1.10 or about 4 cents per day.

The proposed maximum agricultural groundwater production charge in any groundwater benefit zone is \$39.80 per acre-foot, which would be an 8 percent increase, or roughly a \$0.49 increase per month per acre for the average agricultural water user. The proposed maximum agricultural groundwater production charge is calculated at 9.25 percent of the lowest M&I charge, which is Zone W-8.

Staff recommends increasing the surface water master charge up to 12.9 percent, to \$61 per acre-foot, to align revenues with the costs related to managing, operating, and billing for surface water diversions.

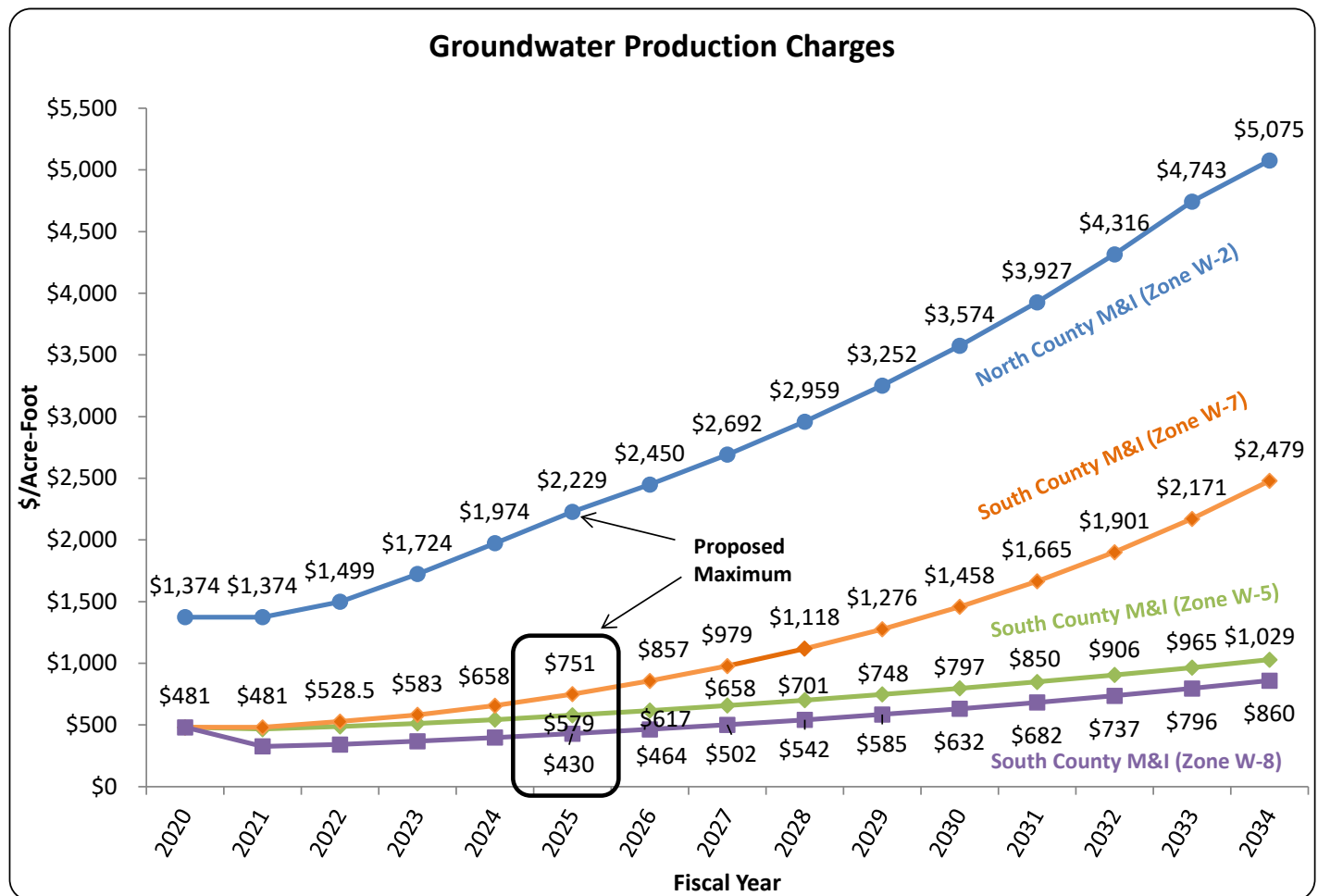
For recycled water, staff recommends increasing the M&I charge up to 6.8 percent to \$559 per acre-foot. For agricultural recycled water, the proposed maximum is a 4.4 percent increase to \$70.15 per acre-foot.

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These recommendations would maximize cost recovery while concurrently providing an economic incentive to use recycled water.

Figure 4-2.1 illustrates the multi-year groundwater production charge projection, which represents staff's proposed maximum groundwater charges for FY 2024–25 and a future projection based on the assumption that Valley Water will continue to provide the same level of service budgeted in FY 2024–25. Potential future uncertainties could result in higher costs or the identification of additional capital or operations projects, which would result in a higher groundwater charge projection than that shown.

Figure 4-2.1 Ten Year Projection



Note: Groundwater production charges shown are rounded to the nearest dollar.

Table 4-2.1 shows groundwater production and other charges in fiscal years 2022–23 and 2023–24. The final column contains the proposed water charges for FY 2024–25, which are in accordance with the pricing policy described in Resolution 99-21.

Financial Outlook of Water Utility System

Table 4-2.1 Summary of Charges (Dollars Per Acre-Foot, \$/AF)

		Dollars Per Acre Foot		
	Basic User/Groundwater Production Charge	FY 2022-23	FY 2023-24	Proposed Maximum FY 2024-25
Zone W-2 (North County)	Municipal and Industrial	1,724.00	1,974.00	2,229.00
	Agricultural	36.85	36.85	39.80
	Surface Water Charge			
	Surface Water Master Charge	47.10	54.00	61.00
	Total Surface Water, Municipal and Industrial*	1,771.10	2,028.00	2,290.00
	Total Surface Water, Agricultural*	83.95	90.85	100.80
	Treated Water Charges			
	Contract Surcharge	115.00	115.00	115.00
	Total Treated Water Contract Charge**	1,839.00	2,089.00	2,344.00
	Non-Contract Surcharge	200.00	200.00	200.00
	Total Treated Water Non-Contract Charge***	1,924.00	2,174.00	2,429.00
Zone W-5 (Llagas Subbasin)	Basic User/Groundwater Production Charge			
	Municipal and Industrial	513.00	543.50	579.00
	Agricultural	36.85	36.85	39.80
	Surface Water Charge			
	Surface Water Master Charge	47.10	54.00	61.00
	Total Surface Water, Municipal and Industrial*	560.10	597.50	640.00
	Total Surface Water, Agricultural*	83.95	90.85	100.80
	Recycled Water Charges			
Zone W-7 (Coyote Valley)	Basic User/Groundwater Production Charge			
	Municipal and Industrial	582.50	657.50	750.50
	Agricultural	36.85	36.85	39.80
	Surface Water Charge			
	Surface Water Master Charge	47.10	54.00	61.00
	Total Surface Water, Municipal and Industrial*	629.60	711.50	811.50
	Total Surface Water, Agricultural*	83.95	90.85	100.80
Zone W-8 (Uvas/Chesbro)	Basic User/Groundwater Production Charge			
	Municipal and Industrial	368.50	398.00	430.00
	Agricultural	36.85	36.85	39.80
	Surface Water Charge			
	Surface Water Master Charge	47.10	54.00	61.00
	Total Surface Water, Municipal and Industrial*	415.60	452.00	491.00
	Total Surface Water, Agricultural*	83.95	90.85	100.80

*Note: The total surface water charge is the sum of the basic user charge (which equals the groundwater production charge) plus the water master charge

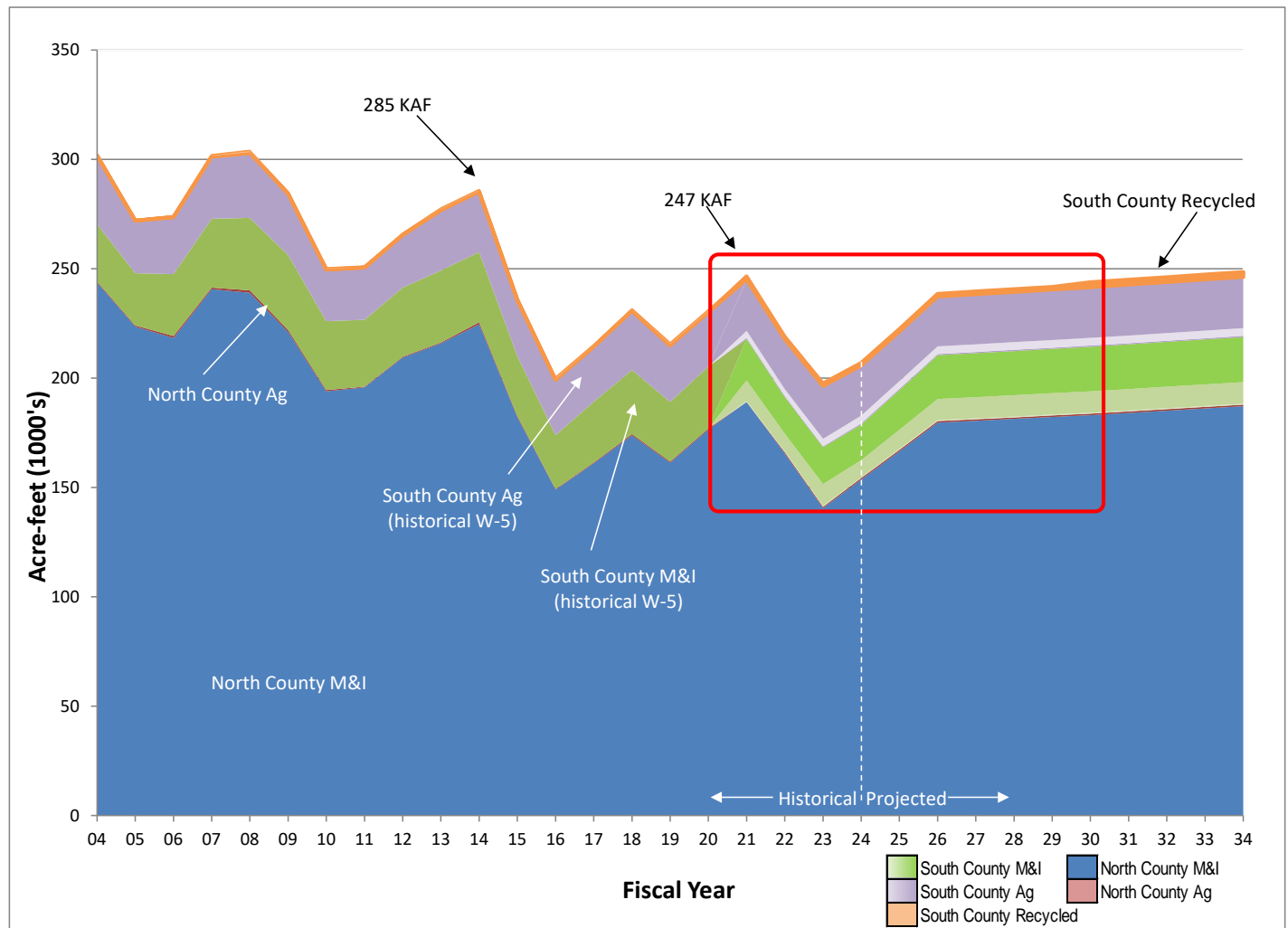
**Note: The total treated water contract charge is the sum of the basic user charge (which equals the groundwater production charge) plus the contract surcharge

***Note: The total treated water non-contract charge is the sum of the basic user charge (which equals the groundwater production charge) plus the non-contract surcharge

Financial Outlook of Water Utility System

Figure 4-2.2a illustrates historical and projected water use countywide, which is a key driver of water charge related revenue. Water usage in FY 2022–23 was estimated at approximately 198,000 acre-feet, which is roughly 6,000 acre-feet higher than budgeted. For the current year, FY 2023–24, staff estimates that water usage will be approximately 207,000 acre-feet, which reflects ongoing rebound from the drought. For FY 2024–25, staff is projecting water usage of 222,000 acre-feet which reflects ongoing rebound versus FY 2023–24.

Figure 4-2.2a Historical and Projected District-Managed Water Use

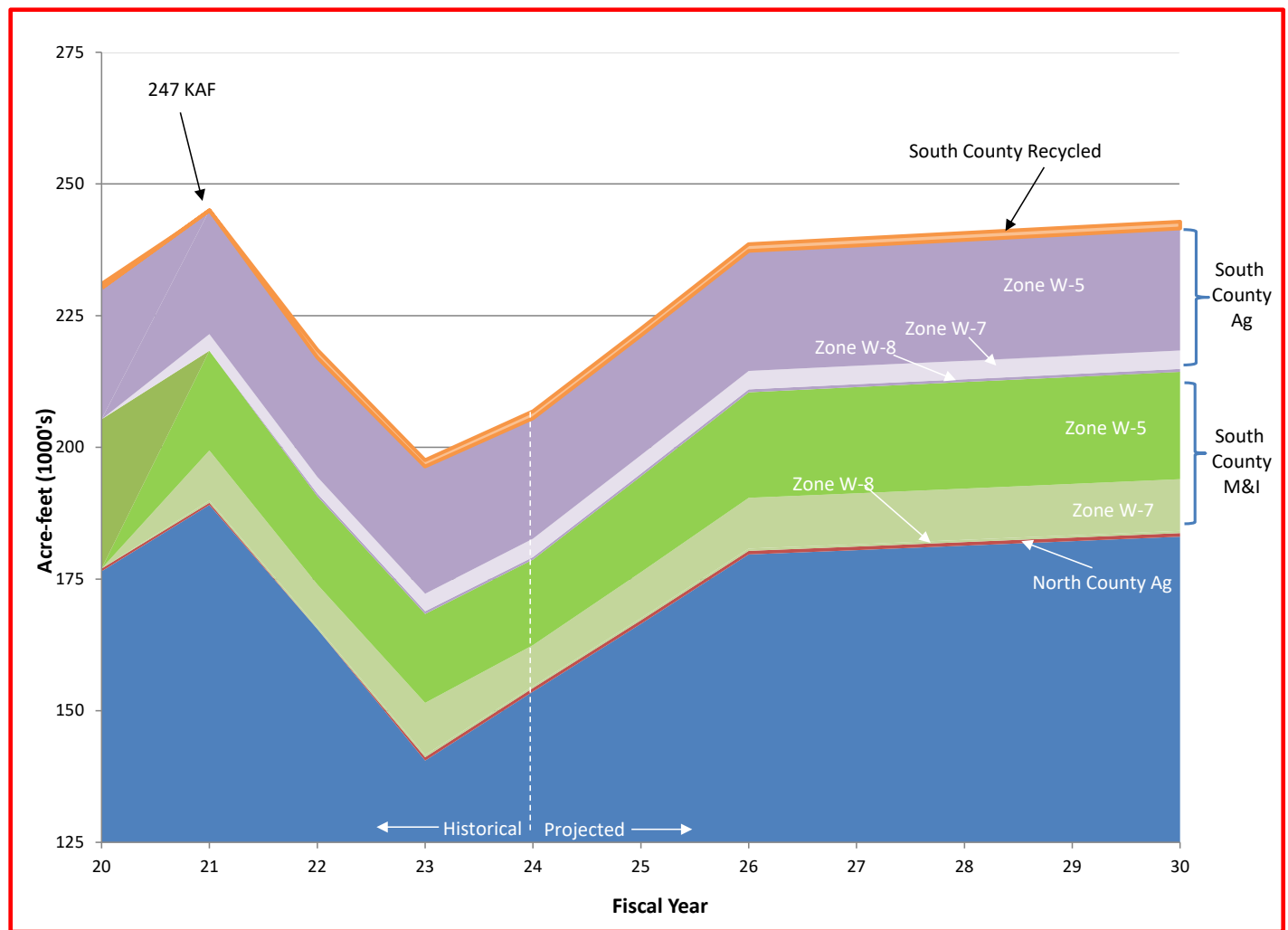


 Represents the portion of the graph shown in Figure 4-2.2b

Financial Outlook of Water Utility System

Figure 4-2.2b illustrates the transition from the historical 2 groundwater benefit zones to 4 groundwater benefit zones. Effective July 1, 2020, the existing groundwater benefit zones W-2 and W-5 were modified, and two new zones were created: W-7 (Coyote Valley) and W-8 (below Uvas and Chesbro Reservoirs). New metes and bounds (the survey description that defines the boundaries of the zones) were developed in accordance with Santa Clara Valley Water District Act requirements.

Figure 4-2.2b Close up of Water Use Projection for Zones



4-3 FINANCIAL OVERVIEW OF VALLEY WATER

Valley Water uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. Fund accounting allows government resources to be segregated and accounted for according to their intended purposes. Accounts related to activities of the Water Utility are segregated into the Water Utility Funds comprised of the Water Utility Enterprise Fund and the State Water Project (SWP) Fund. For the Water Utility Enterprise Fund, revenue accounts include groundwater production, treated water, surface water, recycled water, property taxes, interest earnings, reimbursements, grants and other. Cost accounts include both direct and indirect or overhead costs associated with Water Utility projects and activities. The SWP Fund accounts specifically for SWP tax revenue and SWP contractual costs (note that SWP tax revenue can only be spent on SWP contractual costs). Table 4-3.1 shows an overview of the funds at Valley Water including the Water Utility Funds and the estimated revenues, costs, and reserves for FY 2024–25 for each fund. Throughout this report, the term “Water Utility” or “Water Utility Enterprise” refers to the combination of the Water Utility Enterprise Fund and the SWP Fund.

Table 4-3.1 FY 2024–25 Projected Funds Analysis

	Water Utility Funds				
	Water Utility	State Water	Safe, Clean Water	Watershed	Administration
(Millions \$)	Enterprise Fund	Project Fund	Fund	Funds	Funds
Revenue	418.7	29.0	86.6	135.7	12.9
Interfund Transfer	2.8	-	(5.0)	(5.5)	7.7
Operations Costs	(252.1)	(31.5)	(24.8)	(84.2)	(140.1)
Debt Service	(87.2)	-	(8.0)	-	-
Capital	(340.7)	-	(159.0)	(34.9)	(14.6)
Debt Proceeds	261.3	-	109.6	-	-
Intra-District Reimbursements ¹	-	-	-	-	127.6
Balance²	2.9	(2.5)	(0.5)	11.1	(6.5)
Reserves					
Restricted	49.4	9.1	103.9	-	-
Committed	64.6	-	-	150.7	14.1
Designated Liability	-	-	-	-	14.3
Total Reserves	114.0	9.1	103.9	150.7	28.437

¹ Intra-District Reimbursements represent overhead costs that have been allocated to the Water Utility, Safe, Clean Water, and Watersheds (included in the operations and capital costs for those funds)

² Positive balances indicate funds flowing into reserves. Negative balances indicate funds flowing out of reserves.

Financial Outlook of Water Utility System

The Safe, Clean Water Fund accounts for the program that voters renewed in November 2020 for the purpose of addressing multiple community priorities. These priorities are ensuring a safe, reliable water supply; reducing toxins, hazards, and contaminants in our waterways, protecting our water supply and dams from earthquakes and other natural disasters; restoring wildlife habitat and providing open space; providing flood protection to homes, businesses, schools, streets, and highways; and supporting public health and public safety for our community. The primary source of revenue for this fund is a special parcel tax. This fund supports several projects that benefit not only the community at large but also the Water Utility including hazardous materials management and response, water conservation rebates and programs, and stormwater runoff management. Most notably this fund will contribute \$54 million toward the Anderson Dam Seismic Retrofit project and in the form of a reimbursement to the Water Utility Enterprise Fund. It will also apportion some of the revenue towards the Treated Water Pipeline Reliability and the Pacheco Reservoir Expansion projects. For more information on the Safe, Clean Water program please visit valleywater.org.

The Watershed Funds are a segregated grouping of funds with separate funding sources (including Benefit Assessments and 1 percent ad valorem property taxes) for the purpose of providing flood protection and watershed management in Santa Clara County.

The Administration Funds include the General Fund, Fleet Fund, Information Technology Fund and Risk Fund to account for all revenues and expenditures necessary to carry out the basic governmental activities of Valley Water that are not accounted for through other funds. Administration Funds expenditures that are not offset by Administration Funds revenues are allocated to the Water Utility, Safe, Clean Water, and Watershed funds through an overhead rate at the project level.

4-4 WATER UTILITY FINANCES FOR FISCAL YEARS 2022–23 & 2023–24

Fiscal Year 2022–23

Actual overall revenue for FY 2022–23 was \$18.9 million higher than the adopted budget of \$316.5 million. Higher treated water usage, partially offset by lower groundwater production, resulted in \$5.2 million higher operating revenues. In total, property tax revenues, capital reimbursement, interest earnings, intergovernmental services, and other revenues were \$13.7 million higher than budgeted.

Actual operations outlays came in at \$274.7 million and were \$50.5 million lower than the adopted budget due to debt service being \$10.0 million lower than budget (due to timing of debt issuances) and total operations outlays being \$40.5 million lower than budget.

Unspent capital budget was carried forward to FY 2023–24 consistent with accounting practices.

Fiscal Year 2023–24

Staff estimates that FY 2023–24 revenue will come in at, or slightly below, the adopted budget revenue of \$383.3 million. Operations and capital costs are anticipated to come in at or below budget. Staff anticipates that discretionary reserve levels will come in at budget at year end.

4-5 OVERVIEW OF OPERATING AND LONG-TERM CAPITAL PLANS

To develop a charge structure that will support planned work, staff analyzes the immediate needs of Valley Water as well as anticipated requirements in the years to come.

Operations Costs

Operations costs are projected to increase at an average of 6.4 percent per year over the next ten years. The growth is largely driven by 1) the ramp up of payments associated with both the Delta Conveyance Project and the Los Vaqueros Reservoir Expansion Project; and 2) the inclusion of the new B.F. Sisk Dam Raise Project at San Luis Reservoir. Operations cost increases are also driven by significant inflation impacting the nation including cost increases associated with employee salaries and benefits. Table 4-5.1 shows Valley Water's Water Utility operating program for FY 2022–23 (actuals), FY 2023–24 (adjusted budget), and FY 2024–25 (projected). Water Utility staff continually strive to implement a program that ensures that treated water quality standards are met and that water supplies are reliable to meet current and future demand.

Financial Outlook of Water Utility System

Table 4-5.1 Operating Budget Summary

Cost Center	Thousands \$			Description of Cost Centers and Activities
	Actual FY 23	Adjusted FY 24	Projected FY 25	
Source of Supply	122,763	139,568	163,178	<p>This cost center contains all the anticipated expenditures that relate to obtaining, producing, and protecting water supply; including all conservation, reclamation, and importation costs.</p> <p>Activities include: groundwater level & quality monitoring; groundwater modeling; dams and reservoir operations & maintenance; imported water supply management; long-term Delta issues resolution; operations and maintenance of San Felipe Reaches 1-3, including mechanical and electrical; operations planning; water rights protection; Urban Water Management Plan; administration of recycled water agreements, technical studies; water conservation technical assistance, outreach and education; environmental planning & compliance; well permitting and destruction; Silicon Valley Advanced Water Purification Center operations and maintenance; and habitat conservation and mitigation commitments.</p>
Raw Water Transmission & Distribution	18,682	17,590	19,287	<p>This cost center contains all expenditures relating to the distribution of raw water. The distribution system consists of pipelines, canals, and percolation ponds and includes the use of creek systems.</p> <p>Activities include: operations and maintenance of recharge ponds, canals, pipelines & diversions including vegetation management; operations and maintenance of raw water distribution system, including mechanical and electrical; raw water corrosion control; environmental compliance support.</p>
Water Treatment and Treated Water Transmission & Distribution	52,196	55,466	60,261	<p>These cost centers contain all expenditures associated with the treatment of water at the Rinconada, Penitencia and Santa Teresa Water Treatment Plants, as well as those expenditures related to the distribution of treated water to retail customers and includes costs associated with the treated water reservoirs, pumping plants, pipelines, and turnouts.</p> <p>Activities include: operations and maintenance of 3 water treatment plants; the Silicon Valley Advanced Water Purification Center; Water District laboratory operations; water quality planning, testing, research, and reporting; operations and maintenance of treated water transmission and distribution system; and recycled water transmission and distribution general maintenance.</p>
Administration & General	30,341	37,464	40,851	<p>This cost center contains all expenditures of an administrative nature which cannot be properly assigned to another of the other four cost centers.</p> <p>Activities include: asset protection evaluation and planning; integrated regional water management plan; water system computer modeling; urban runoff pollution prevention; general & division management; financial support & water charge setting; customer relations; health and safety training; billing; data maintenance; auditing; meter reading, testing, repair, installation, backflow prevention; emergency services; warehouse and equipment services; and real estate services.</p>
Total Program Requirements	223,982	250,087	283,578	

Capital Improvement Program

Valley Water constructs, operates, and maintains reservoirs, pipelines, recharge facilities, and water treatment plants that are needed to achieve the Board's Ends Policies. On an annual basis, Valley Water conducts a process to plan for capital improvements and identify the resource needs and constraints to implement the projects. The result of this process is Board approval of a rolling 5-Year Capital Improvement Program (CIP)¹².

Table 4-5.2 shows the capital projects identified in a preliminary version of the FY 2025-29 CIP and planned funding for the next ten fiscal years. The table shows funding \$9 billion worth of capital projects between FY 2024–25 and FY 2033–34. Approximately \$2.3 billion of the program is allocated to the planned Pacheco Reservoir Expansion Project that will provide additional storage capacity for storm runoff and imported water, and approximately \$1.7 billion of the program is allocated to seismically retrofit Anderson Dam, our county's largest reservoir. Roughly \$745 million in preliminary costs is for the Dam Safety Program for Almaden, Calero, Coyote and Guadalupe Dams.

Due to affordability issues, staff recommends that the Palo Alto Purified Water Project be put on hold, taken out of the funded CIP and moved to the unfunded list. In its place, staff recommends including a placeholder for a San Jose Purified Water Project – Phase 2 (Full Scale Facility). The cost is a placeholder at this time until engineering cost estimates can be developed. The first step is the development of the San Jose Purified Water Project – Phase 1 (Demonstration Facility) (SJ PWP Phase 1 Demonstration Facility) project, which is already a validated project in the CIP.

The SJ PWP Phase 1 Demonstration Facility will ensure that the future direct potable reuse facility will meet these new regulations to protect public health and provide reliable drought-proof water supplies for our county. The demonstration facility will also make sure a future full-scale facility is designed in the most cost-effective way, ensure we have operators that can run the facility, and continue to provide public education and outreach on potable reuse. If a full-scale San Jose Purified Water Project can be developed, it would be more cost-effective than the Palo Alto Purified Water Project due to more treated wastewater being available. It is recommended that this decision be reviewed in two years depending on progress of developing the needed interagency agreements with San Jose and Santa Clara.

The remaining portion of the capital program is primarily dedicated to asset management of Water Utility Enterprise facilities throughout the county. Staff annually conducts a validation process examining the business case for capital solutions in comparison with alternative operations, maintenance, and non-asset

¹² The latest CIP can be accessed at www.valleywater.org/CIP.

Financial Outlook of Water Utility System

based solutions to ensure that Valley Water invests in the right solutions or projects at the right time for the right costs and for the right reasons. All newly proposed projects undergo the validation process prior to being proposed for inclusion in the CIP.

The capital program, including debt proceeds and debt service flow through the North County Zone W-2 financial model. The North County Zone W-2 is reimbursed for all capital projects that benefit South County Zones W-5, W-7, and W-8 via a capital cost recovery payment over a time period of 30 years, beginning when the project is completed.

Financial Outlook of Water Utility System

Table 4-5.2 Capital Improvements Projects – Fiscal Years 2024–25 Through 2033–34

Water Utility CIP FY 2025-34 Sorted by Cost Center (Funded)		Planned Funding with Inflation (Thousands of Dollars)					
Project Name	FY25	FY26	FY27	FY28	FY29	FY 30-34	Total FY 25-34
SOURCE OF SUPPLY							
Dam Seismic Stability Evaluation*	299	500	394	409	4,612	1,882	8,096
Calero and Guadalupe Dams Seismic Retrofits, Planning	0	0	210	870	0	0	1,080
South County Recycled Water Pipeline Land Rights*	9	0	0	0	0	0	9
South County Recycled Water Pipeline, Short-Term Implementation Phase 1B*	148	143	23	0	0	0	313
South County Recycled Water Pipeline - Short-Term Implementation Phase 2*	23	0	0	0	0	0	23
Central Valley Project Capital Payments*	12,375	12,811	13,261	11,858	12,275	66,688	129,268
Small Capital Improvements, San Felipe Reach 1*	2,528	97	835	13,500	14,088	29,954	61,002
Small Capital Improvements, San Felipe Reach 2*	0	0	12	0	0	1,105	1,117
Coyote Pumping Plant ASD ¹ Replacement	21,029	9,862	4,403	2,900	0	0	38,194
Small Capital Improvements, San Felipe Reach 3*	618	0	2,565	0	5	695	3,883
San Jose Purified Water Project - Phase 1 (SJWP)	1,040	6,490	17,778	21,841	1,825	0	48,974
Almaden Dam Improvements	0	0	4	175	182	30,298	30,659
Almaden Calero Canal Rehabilitation	696	724	18,801	1	0	0	20,222
Anderson Dam Seismic Retrofit (C1)*	45,111	159,851	211,183	212,087	251,575	806,562	1,686,368
Anderson Dam Tunnel*	42,426	973	404	0	0	0	43,803
Coyote Creek Flood Management Measures*	31,420	555	118	35	0	0	32,128
Coyote Creek Chillers*	555	0	0	0	0	0	555
Coyote Percolation Dam Replacement*	73	0	0	0	0	0	73
Calero Dam Seismic Retrofit, Design and Constuction	3,016	3,137	3,150	35	36	144,900	154,274
Guadalupe Dam Seismic Retrofit, Design and Construction	104	108	112	13,057	26,540	33,525	73,446
Pacheco Reservoir Expansion*	19,053	16,380	25,498	237,231	338,507	1,663,098	2,299,767
Source of Supply Subtotal	180,523	211,630	298,751	513,998	649,645	2,778,706	4,633,252
RAW WATER TRANSMISSION & DISTRIBUTION							
Pacheco/Santa Clara Conduit Right of Way Acquisition*	228	0	0	0	0	0	228
Vasona Pumping Plant Upgrade	1,170	1,774	11,337	14,528	3,245	0	32,054
Almaden Valley Pipeline Replacement	2,129	2,214	2,522	2,254	19,606	55,636	84,361
Small Capital Improvements, Raw Water Transmission*	2,274	919	731	866	791	7,106	12,687
FAHCE ² Stevens Creek Moffett Ave Fish Ladder - 90%*	0	0	1,216	1,718	0	0	2,934
FAHCE ² Stevens Creek Multi-Port Outlet at Dam - 90%*	0	0	312	1,144	39	0	1,495
FAHCE ² Implementation*	0	0	4,739	4,379	14,691	98,611	122,420
Coyote Percolation Dam Fish Passage Phase 2*	0	0	1,886	1,962	2,040	14,071	19,959
Ogier Ponds Construction (e.g. Ogier Ponds)*	0	0	0	0	0	27,963	27,963
Raw Water Transmission & Distribution Subtotal	5,801	4,907	22,743	26,851	40,412	203,387	304,101
WATER TREATMENT							
Water Treatment Plant Implementation	517	283	0	0	0	0	800
Water Treatment Plant Electrical Improvement	671	5,928	5,146	4,730	30	0	16,505
PWTP ³ Residuals Management	9,398	17,551	8,924	0	0	0	35,873
STWTP ⁴ Filter Media Replacement	574	0	0	0	0	0	574
RWTP ⁵ FRP Residuals Management Modifications	0	0	0	0	0	0	0
RWTP ⁵ Reliability Improvement	66,210	121,474	126,350	63,193	44,406	152	421,785
RWTP ⁵ Ammonia Storage & Metering Facility Upgrade	478	545	2,944	2,297	0	0	6,264
Small Capital Improvements, Water Treatment	5,748	10,561	5,980	1,208	2,688	29,607	55,792
Water Treatment Subtotal	83,596	156,342	149,344	71,428	47,124	29,759	537,593
TREATED WATER TRANSMISSION & DISTRIBUTION							
Treated Water Isolation Valves	2,012	1,887	584	1,907	201	0	6,591
Small Capital Improvements, Treated Water Transmission	104	45	0	47	41	268	505
Treated Water Transmission & Distribution Subtotal	2,116	1,932	584	1,954	242	268	7,096
SUBTOTAL FUNDED	272,036	374,811	471,422	614,231	737,422	3,012,120	5,482,042

Footnotes for Table 4-5.2, Capital Improvements Projects – Fiscal Years 2024–25 Through 2033-34:

1. Adjustable Speed Drive
2. Fisheries and Aquatic Habitat Collaborative Effort
3. Penitencia Water Treatment Plant
4. Santa Teresa Water Treatment Plant
5. Rinconada Water Treatment Plant

* The asterisked projects would benefit one or more of the South County Zones W-5, W-7, & W-8 and therefore would be funded in part or in whole by the South County.

Financial Outlook of Water Utility System

Table 4-5.2 Capital Improvements Projects – Fiscal Years 2024–25 Through 2033–34, continued

Water Utility CIP FY 2025-34 Sorted by Cost Center (Funded)	Planned Funding with Inflation (Thousands of Dollars)						
Project Name	FY25	FY26	FY27	FY28	FY29	FY 30-34	Total FY 25-34
ADMINISTRATION AND GENERAL							
WTP-WQ ⁶ Network Equipment*	2,021	2,448	7	550	426	5,549	11,001
10-Year Pipeline Rehabilitation (FY 2018-27)*	19,610	9,152	1,565	-	-	-	30,327
CADD System Support Services*	1,692	1,400	1,561	1,748	1,894	10,911	19,208
Capital Project Management and Controls*	844	985	1,099	1,230	1,333	7,678	13,169
GS Capital Program Services*	2,560	2,881	3,212	3,596	3,897	22,446	38,591
Survey Management and Technical Support*	666	655	730	817	886	5,103	8,857
CIP Development and Administration*	1,104	1,180	1,315	1,472	1,596	9,191	15,858
Water Utility Capital Administration*	6,324	5,408	5,624	5,849	6,083	34,269	63,557
Capital Warranty Services*	-	-	-	232	1,217	6,853	8,302
SCADA ⁷ Implementation*	50	728	-	-	-	-	778
Distribution Systems Implementation*	631	657	135	-	-	-	1,423
SMPPI Upgrades - Phase 1	586	552	1,270	1,295	1,358	5,364	10,425
Data Consolidation*	22	-	-	-	-	-	22
Software Upgrades & Enhancements*	385	406	429	452	475	2,739	4,887
Office Computer & Printer Replacement*	1,242	1,061	1,118	1,436	1,702	6,754	13,313
Network Equipment*	2,872	764	1,790	405	713	6,005	12,550
Headquarters Operations Building*	891	3,737	672	681	575	19	6,575
Security Upgrades and Enhancements Project*	189	199	4,270	5,097	-	-	9,754
Administration and General Subtotal	41,688	32,213	24,798	24,860	22,155	122,882	268,597
CAPITAL PLACEHOLDERS AND PROJECTED CARRYFORWARD							
Capital Placeholder ⁸	1,973	6,272	11,781	41,863	988,147	2,178,288	3,228,323
(-) Almaden, Calero & Guadalupe Dams	(3,120)	(3,245)	(3,476)	(14,137)	(26,758)	(208,723)	-259,459
(+) Preliminary placeholder for the Dam Safety Program at Almaden, Calero, Coyote* and Guadalupe Dams	5,093	5,419	8,363	32,902	73,630	309,602	435,009
(+) Preliminary placeholder for Water Supply Infrastructure Master Plan Implementation Projects	-	4,098	6,894	23,099	40,807	250,654	325,551
(+) Preliminary placeholder for Direct Potable Water Reuse (San Jose Purified Water Project - Phase 2 Full-Scale Facility)	-	-	-	-	900,468	1,826,755	2,727,223
Projected Carryforward*	30,592	-	-	-	-	-	30,592
Capital Placeholder and Projected Carryforward Subtotal	32,565	6,272	11,781	41,863	988,147	2,178,288	3,258,916
TOTAL FUNDED	346,289	413,295	508,001	680,955	1,747,725	5,313,290	9,009,554

Footnotes for Table 4-5.2, Capital Improvements Projects – Fiscal Years 2024–25 Through 2033-34, continued:

6. Water Treatment Plant – Water Quality Lab
7. Supervisory Control and Data Acquisition
8. The Capital Placeholder represents A) an estimate of future costs associated with the 3 Water Supply Infrastructure Master Plan Implementation Projects currently underway (see section 3-2 for additional details); B) the replacement of Almaden, Calero and Guadalupe Dam-related CIP projects with a preliminary placeholder for the Dam Safety Program (Almaden, Calero, Coyote and Guadalupe); and C) a preliminary placeholder for San Jose Purified Water Project - Phase 2 (Full Scale Facility).

* The asterisked projects would benefit one or more of the South County Zones W-5, W-7, & W-8 and therefore would be funded in part or in whole by the South County.

Table 4-5.3 shows the capital projects identified on the unfunded list, and reflects staff recommendations previously discussed.

Table 4-5.3 Unfunded Capital Improvements Projects – Fiscal Years 2024–25 Through 2033–34

Unfunded Capital Improvement Projects	Proposed Funding in Raw Dollars (Thousands of Dollars)						
Project Name	FY25	FY26	FY27	FY28	FY29	FY 30-34	Total FY 25-34
SOURCE OF SUPPLY							
PWP ¹ Indirect Potable Water Reuse Projects	5,812	5,535	1,454	1,513	184	0	14,497
PWP ¹ P3 Entity	376,024	303,139	264,447	110,447	0	0	1,054,057
Source of Supply Subtotal	381,836	308,674	265,901	111,960	184	0	1,068,554
TOTAL UNFUNDED	381,836	308,674	265,901	111,960	184	0	1,068,554

1. Purified Water Program (which will be delivered via a P3, or Public-Private Partnership)

4-6 FINANCES

Financing and Bond Rating

To fund the construction of new facilities, Valley Water has historically relied on both pay-as-you-go financing as well as short-term and long-term debt financing. In addition, Valley Water is seeking grant funding through available state and federal grants to help fund its capital planning, design, and construction activities. Water Utility debt service will increase by roughly \$22.6 million in FY 2024–25 due to anticipated short-term debt issuance. Looking forward, capital improvement needs total roughly \$9 billion for the ten fiscal years 2024–25 through 2033–34. As shown in Figure 4-6.1, Valley Water will see debt service rise from \$87.2 million in FY 2024–25 to roughly \$316 million in FY 2033–34 as a result of periodic debt issuances to fund capital projects.

Total outstanding debt is shown in Figure 4-6.2 and is projected to increase from around \$1.3 billion in FY 2024–25 to almost \$7 billion in FY 2033–34. Projected outstanding debt would be higher if future validated unfunded capital projects are funded. Conversely, the debt level could be reduced if capital projects are eliminated or postponed, or if further external funding is found.

In 2023, Valley Water closed on two separate Water Infrastructure Finance and Innovation Act (WIFIA) loans for the Anderson Dam Seismic Retrofit Project and the Pacheco Reservoir Expansion project to provide long-term, low-cost federal loans to fund up to 49 percent of the projects total cost. On February 14, 2023, Valley Water closed on a \$580 million WIFIA Master Agreement and executed an initial planning and design loan of \$74 million at 3.77% interest rate for the Anderson Dam Seismic Retrofit and the Coyote Percolation Dam projects. On October 30, 2023, Valley Water closed on a \$1.5 billion WIFIA Master Agreement and executed an initial planning and design loan of \$91.6 million at 5.08% interest rate for the Pacheco Reservoir Expansion Project. Both loans are very flexible in that principal payments are structured to occur in the last 10 years of the debt service payment term, but could be paid sooner with no prepayment penalty if warranted by Valley Water financial circumstances at the time.

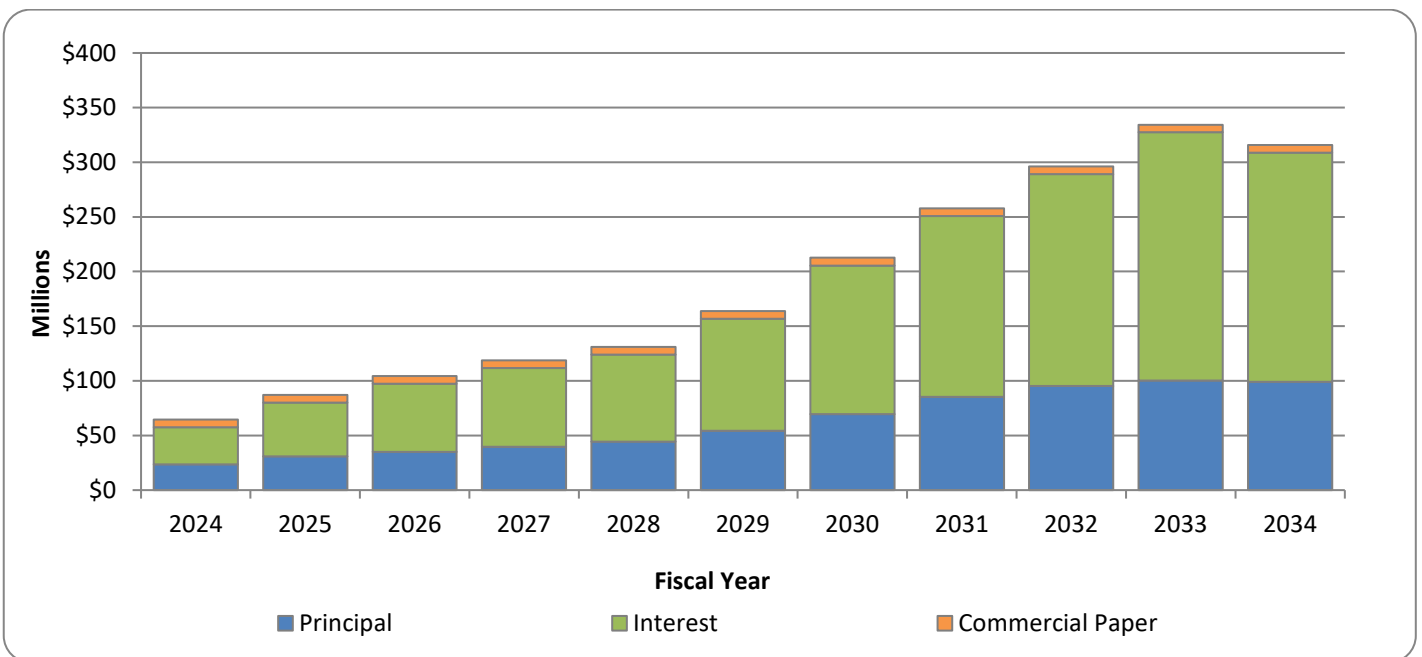
In December 2023, Valley Water submitted two preliminary applications to the U.S. Army Corps of Engineers (Corps) Water Infrastructure Financing Program (CWIFP) to request up to 80% loan funding for the Anderson Dam Seismic Retrofit Project (\$1.2 billion) and the Dam Safety Program consisting of the Almaden, Calero, Guadalupe, and Coyote Dam Projects (\$787 million). If successful, the CWIFP loans could provide long-term, low-cost federal credit assistance to finance these very large infrastructure improvements. If selected by the Corps for funding, Valley Water will work with the Corps to develop the CWIFP Master Agreements and present the credit packages to the Board for approval in late 2024.

Financial Outlook of Water Utility System

Current Water Utility parity lien debt issuances are rated Aa1 from Moody's and AA+ from Fitch. These ratings reflect Valley Water's strong financial position and the highly rated credit worthiness of Valley Water's issued securities. The ratings are among the highest for a water-related governmental entity in the state of California, which helps keep interest costs borne by Valley Water at a minimum.

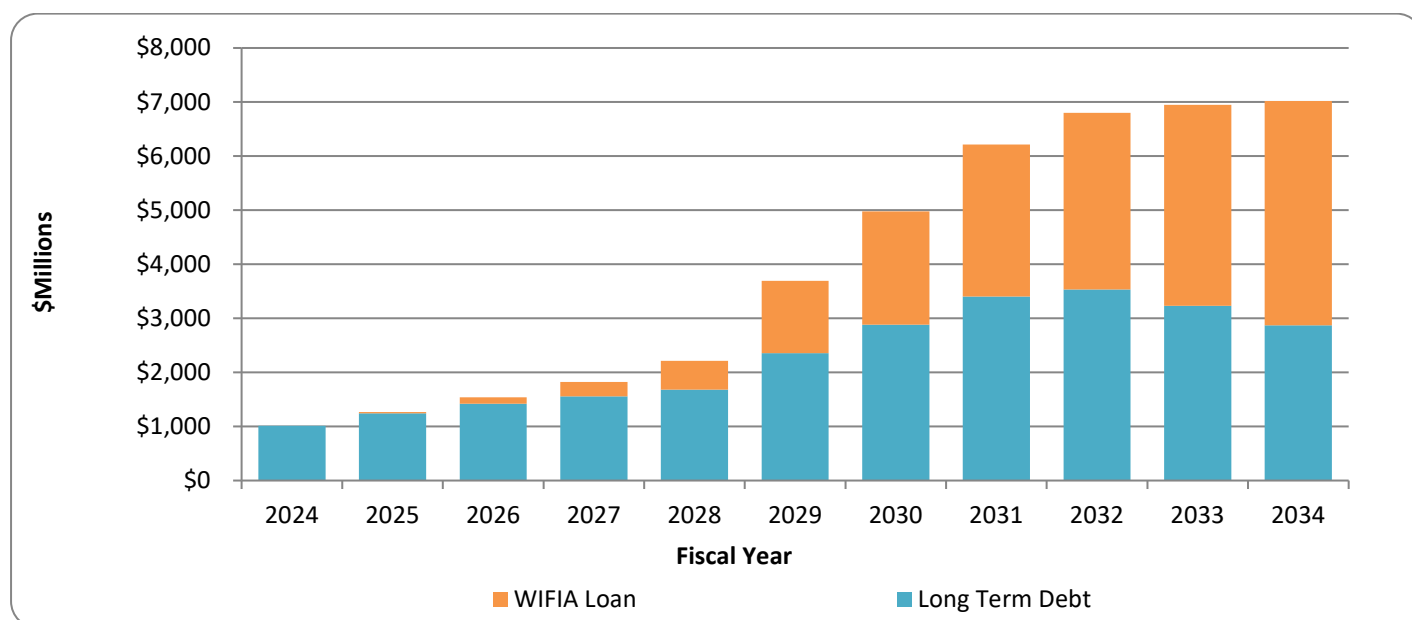
In addition to WIFIA and CWIFP loans, Valley Water is also seeking grants to help fund its capital and operating programs. In FY 2023–24, Valley Water secured two grants to help the Water Utility Enterprise. This includes a U.S. Bureau of Reclamation (Reclamation) grant for the South County Water Reuse Program Feasibility Study Project in the amount of \$299,180, and a Reclamation grant for the San Jose-Santa Clara Purified Water Program Feasibility Study in the amount of \$381,249. Obtaining state and federal grants to fund Valley Water's essential Water Utility Enterprise activities would provide relief to future rate increases.

Figure 4-6.1 Projected Debt Service



Financial Outlook of Water Utility System

Figure 4-6.2 Projected Outstanding Debt



Water Utility Funds Projected Proforma

Table 4-6.1 shows the projected revenues, expenditures, and reserves over the next ten years for the Water Utility Funds. By financing with a combination of debt, current year revenue, and reserves, Valley Water can adequately fund its capital investment plan. Based on the previously discussed multi-year groundwater charge projection, key discretionary reserves (mainly the operating and capital reserve) would be maintained at or above the minimum per Valley Water’s policy. The minimum per policy for these reserves equates to having roughly 3 months’ worth of Water Utility operating outlays in the bank. These reserves serve several purposes including: 1) to meet cash flow needs; 2) provide emergency funding; and 3) to provide a funding source for future operating and capital needs.

During the last two fiscal years, Valley Water leveraged the use of supplemental reserves, such as the rate stabilization and drought contingency reserves, for purchasing emergency water supplies during the drought and minimizing groundwater production charge increases to the greatest extent possible. For FY 2024–25 Valley Water staff propose replenishing the rate stabilization reserve at 50% of policy minimum with the reserve recovering fully in FY 2025–26.

Valley Water’s current reserve policy can be found within the Financial Summaries section of the FY 2023–24 Budget document¹³. The ten-year financial plan shown in Table 4-6.1 reflects a Parity Lien Debt Service

¹³ The FY 2023-24 Budget document is located at <https://www.valleywater.org/how-we-operate/FinanceBudget>.

Financial Outlook of Water Utility System

Coverage Ratio ranging between 1.82 and 2.63 between FY 2024–25 and FY 2033-34. Targeting a ratio of 2.0 or better helps to ensure financial stability and continued high credit ratings.

Financial Outlook of Water Utility System

Table 4-6.1 Ten-Year Water Utility Plan – (\$ in Thousands)

	Actual 2022-23	Budget 2023-24	Projected 2024-25	Projected 2025-26	Projected 2026-27	Projected 2027-28	Projected 2028-29	Projected 2029-30	Projected 2030-31	Projected 2031-32	Projected 2032-33	Projected 2033-34
Operating Revenues												
Groundwater Production Charges	\$106,936	\$150,881	\$184,722	\$219,323	\$241,784	\$266,577	\$293,944	\$324,156	\$358,017	\$395,459	\$436,865	\$471,181
Surface & Recycled Water Charges	\$1,950	\$3,613	\$4,040	\$4,422	\$4,840	\$5,298	\$5,800	\$6,853	\$7,490	\$8,189	\$8,955	\$9,593
Treated Water Charges	\$159,215	\$174,081	\$211,703	\$250,262	\$275,529	\$303,454	\$334,316	\$368,425	\$406,192	\$447,941	\$494,092	\$531,036
Other	\$439	\$471	\$471	\$471	\$471	\$471	\$471	\$471	\$471	\$471	\$471	\$471
Inter-governmental Services	\$5,376	\$1,549	\$3,272	\$9,529	\$9,550	\$12,102	\$12,135	\$12,151	\$12,163	\$12,188	\$12,211	\$12,467
Total Operating Revenue	\$273,916	\$330,595	\$404,208	\$484,007	\$532,174	\$587,903	\$646,667	\$712,057	\$784,334	\$864,249	\$952,594	\$1,024,749
Non-Operating Revenues												
Property Taxes	\$39,394	\$37,315	\$38,604	\$38,975	\$42,359	\$45,757	\$49,668	\$53,594	\$57,035	\$59,491	\$62,963	\$66,952
Interest	\$6,868	\$3,125	\$3,652	\$1,688	\$1,887	\$1,989	\$2,574	\$2,820	\$3,113	\$3,963	\$4,282	\$4,529
Capital Contributions	\$13,624	\$10,266	\$41	\$217	\$30,203	\$59,362	\$67,167	\$106,816	\$112,703	\$113,493	\$4,316	\$0
Other	\$1,591	\$1,213	\$1,221	\$1,230	\$1,240	\$1,249	\$1,260	\$1,270	\$1,281	\$1,293	\$1,305	\$1,318
Total Non-Operating Revenues	\$61,478	\$51,919	\$43,518	\$42,110	\$75,689	\$108,358	\$120,670	\$164,500	\$174,132	\$178,240	\$72,867	\$72,799
Total Revenue	\$335,393	\$382,514	\$447,727	\$526,117	\$607,863	\$696,260	\$767,337	\$876,557	\$958,466	\$1,042,489	\$1,025,461	\$1,097,548
	1.6%	14.0%	17.0%	17.5%	15.5%	14.5%	10.2%	14.2%	9.3%	8.8%	-1.6%	7.0%
Operating Outlays												
Operations	\$223,700	\$249,714	\$283,121	\$280,913	\$292,265	\$312,973	\$329,166	\$348,312	\$365,932	\$384,920	\$408,302	\$460,034
Operating Projects	\$282	\$374	\$457	\$475	\$529	\$544	\$570	\$583	\$593	(\$7,387)	\$4,632	\$4,650
Debt Service	\$50,670	\$64,513	\$87,162	\$104,496	\$118,750	\$131,118	\$163,751	\$212,638	\$257,717	\$296,222	\$334,729	\$316,520
Total Operating Outlays	\$274,652	\$314,600	\$370,740	\$385,884	\$411,544	\$444,635	\$493,488	\$561,534	\$624,242	\$673,755	\$747,664	\$781,204
Operations + OP % Increase	-4.8%	11.7%	13.4%	-0.8%	4.1%	7.1%	5.2%	5.8%	5.1%	3.0%	9.4%	12.5%
Operating Transfers In/(Out)	\$22,187	(\$2,835)	\$2,828	\$2,728	\$2,771	\$6,931	\$11,426	\$12,529	\$15,004	\$15,656	\$8,380	\$10,932
Debt Proceeds	\$241,607	\$196,725	\$261,311	\$288,104	\$308,548	\$422,759	\$1,475,574	\$1,309,401	\$1,270,707	\$659,725	\$271,110	\$187,033
Capital Outlay	(\$311,922)	(\$382,856)	(\$340,689)	(\$407,128)	(\$499,722)	(\$672,883)	(\$1,744,260)	(\$1,620,838)	(\$1,597,014)	(\$1,029,166)	(\$535,679)	(\$507,767)
Total Other Financing Sources/ (Uses)	(\$48,128)	(\$188,966)	(\$76,550)	(\$116,296)	(\$188,403)	(\$243,193)	(\$257,260)	(\$298,909)	(\$311,303)	(\$353,785)	(\$256,189)	(\$309,803)
Balance Available	\$12,614	(\$121,052)	\$436	\$23,937	\$7,916	\$8,433	\$16,589	\$16,114	\$22,921	\$14,948	\$21,609	\$6,541
Reserves:												
Restricted Reserves:												
Drought Contingency Reserve	\$0	\$0	\$0	\$1,000	\$4,000	\$8,000	\$12,000	\$16,000	\$20,000	\$20,000	\$20,000	\$20,000
GP 5 Reserve	\$20,545	\$20,682	\$20,545	\$20,211	\$15,158	\$10,105	\$5,053	(\$0)	(\$0)	(\$0)	(\$0)	(\$0)
WUE - Rate Stabilization Reserve	\$41,067	\$6,067	\$20,043	\$42,607	\$46,170	\$50,165	\$57,499	\$68,058	\$77,792	\$85,769	\$95,778	\$96,752
San Felipe Emergency Reserve	\$3,527	\$3,531	\$3,581	\$3,631	\$3,681	\$3,731	\$3,781	\$3,831	\$3,881	\$3,931	\$3,981	\$4,031
Supplemental Water Supply Appropo.	\$5,277	\$5,277	\$5,277	\$8,677	\$12,077	\$15,477	\$18,877	\$19,277	\$19,677	\$20,077	\$20,477	\$20,877
SVAWPC Sinking Fund	\$1,298	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
State Water Project Tax Reserve	\$13,860	\$11,535	\$9,061	\$5,424	\$3,155	\$1,561	\$737	\$840	\$1,221	\$764	\$311	\$640
Total Restricted	\$85,575	\$47,092	\$58,507	\$81,549	\$84,242	\$89,039	\$97,946	\$108,006	\$122,571	\$130,540	\$140,547	\$142,301
Committed Reserves:												
Currently Authorized Projects	\$87,994	\$30,592	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SJ Potable Reuse Reserve	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Designated for Operating and Capital	\$74,535	\$43,942	\$64,555	\$65,451	\$70,674	\$74,309	\$81,991	\$88,045	\$96,402	\$103,381	\$114,983	\$119,770
Total Designated Reserves	\$162,529	\$75,534	\$64,555	\$65,451	\$70,674	\$74,309	\$81,991	\$88,045	\$96,402	\$103,381	\$114,983	\$119,770
Total Reserves	\$248,103	\$122,626	\$123,062	\$147,000	\$154,915	\$163,348	\$179,937	\$196,051	\$218,972	\$233,921	\$255,529	\$262,071
Debt Service Coverage												
Parity Debt Service Coverage	3.05	2.54	2.02	2.52	2.56	2.63	2.39	2.06	1.90	1.90	1.82	2.01

North County (Zone W-2) Finances

North County, Zone W-2, is generally defined as the portion of the county north of Metcalf Road. North County accounts for approximately 80 percent of District-managed water consumption, but because of higher water charges due to higher North County costs, about 95 percent of the Water Utility Enterprise's revenue.

As shown at the beginning of the financial section in Table 4-2.1, the maximum proposed groundwater production charge for M&I or non-agricultural water is \$2,229 per acre-foot, which is a 12.9 percent increase versus prior year. Staff recommends maintaining the surcharge on treated water delivered under the contracts with retail agencies at \$115 per acre-foot, which would result in a total charge of \$2,344 per acre-foot for contract treated water for FY 2024–25, or a 12.2 percent increase compared to FY 2023–24. If adopted by the Board, the average household would experience an increase in their monthly bill \$8.78 or about 29 cents a day. Customers may also experience additional charge increases enacted by their retail water provider.

As outlined in treated water contracts, Valley Water has the discretion to make available treated water in excess of the retailers' basic contract amounts, so-called non-contract treated water, "... at such times and such prices as determined by the District." Staff recommends maintaining the non-contract surcharge at \$200 per acre-foot for FY 2024–25. By recommending \$200 per acre-foot for the non-contract surcharge, retail customers would be encouraged to maintain a reasonable level of pumping from the groundwater basin in situations where retailers need more water than their contracted treated water amounts.

The proposed maximum agricultural groundwater production charge is \$39.80 per acre-foot for FY 2024–25, which is an 8 percent increase or roughly a \$0.49 increase per month per acre for the average agricultural water user.

Staff recommends that the surface water master charge be increased from \$54 per acre-foot to \$61 per acre-foot to align revenues with costs related to managing, operating, and billing for surface water diversions. The increases in the basic user charge and surface water master charge result in a total surface water charge for M&I water of \$2,290 per acre-foot or up to a 12.9 percent increase. The total surface water charge for agricultural water represents up to a 10.9 percent increase at \$100.80 per acre-foot.

To ease the burden on proposed groundwater production charge increases, staff recommends setting the SWP tax collection for FY 2024–25 at \$28 million. Valley Water incurs an annual indebtedness to the State of California pursuant to its Water Supply Contract dated November 20, 1961. Such indebtedness is proportional to Valley Water's allocation of water from the SWP and pays for construction, maintenance,

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and operation of SWP infrastructure and facilities. Staff anticipates that Valley Water’s contractual indebtedness to the State under the State Water Supply Contract for FY 2024–25 will be approximately \$28 million. Not levying the SWP tax in FY 2024–25 would result in revenue loss equivalent to \$155 per acre-foot in terms of the North County Zone W-2 M&I groundwater production charge. In the South County, not levying the SWP tax in FY 2024–25 would result in M&I groundwater production charge revenue loss equivalent to \$33 per acre-foot in Zone W-5, \$55 per acre-foot in Zone W-7 and \$29 per acre-foot in Zone W-8. In terms of the Open Space Credit, if the SWP tax was not levied revenue loss would be equivalent to \$786,588. See Page 73 for further information on the Open Space Credit.

Out of an abundance of caution, staff continues to recommend that the Board not consider use of the SWP tax to pay for the SWP portion of Delta Conveyance until after there is legal certainty that Delta Conveyance is authorized to be financed and repaid for through past SWP or CVP bond acts and voter approvals. If the Board were to direct staff to pay for the State Water Project portion of the Delta Conveyance with the SWP tax instead of with water charges, then the groundwater charge projection shown in the report would be reduced accordingly, and the average annual SWP tax bill for a single-family residence could increase by as much as \$24 per year by FY 2033-34. Today, the average annual SWP tax bill is approximately \$42 per year based on the average assessed value of a single-family residence in Santa Clara County of roughly \$907,000.

Table 4-6.2 shows the relationship between expenditures and the sources of revenue in North County, Zone W-2. The proposed groundwater production charges for FY 2024–25 are necessary to conduct “district activities in the protection and augmentation of the water supplies for users within a zone or zones of the district which are necessary for the public health, welfare, and safety of the people of this State” (District Act, Section 26.3).

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Table 4-6.2 Fiscal Year 2024–25 North County Water Utility Program Requirements and Financing Sources

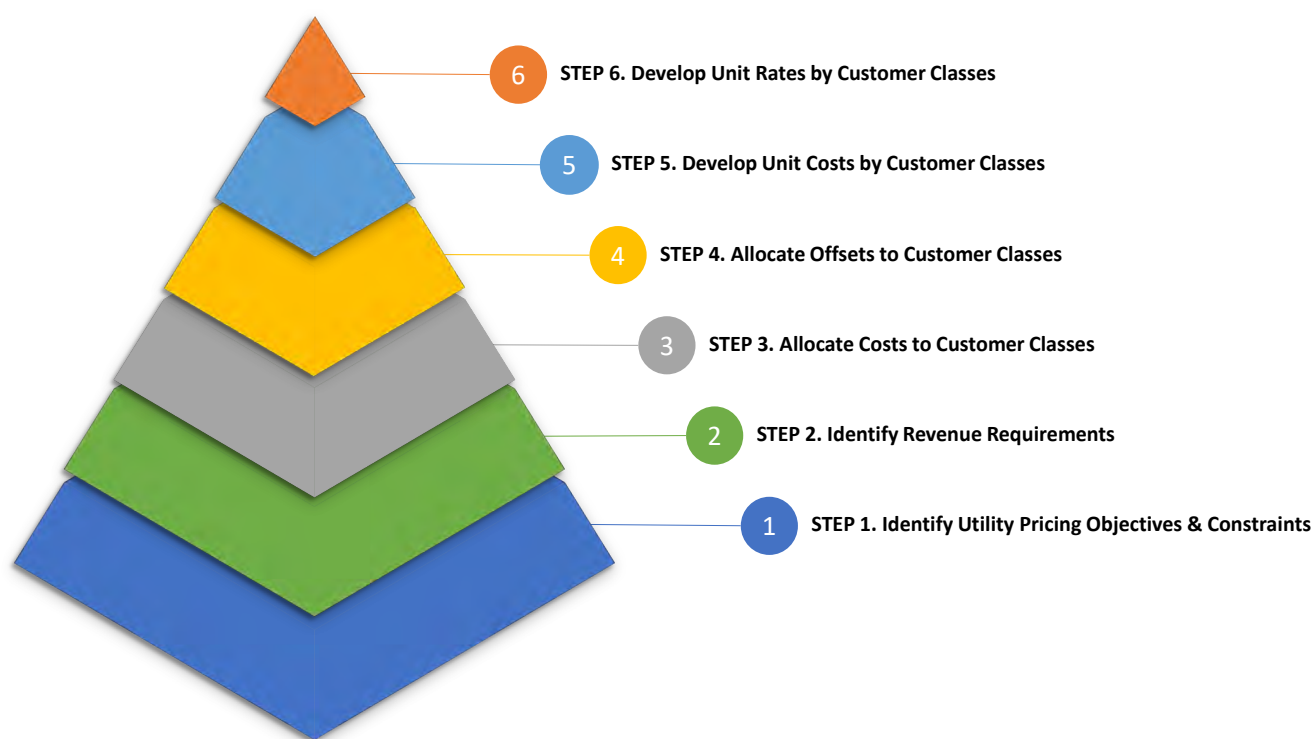
Cost Center	FY 25	Description of Cost Center/Activities
	Projected (\$K)	
Source of Supply	147,762	This cost center contains all the anticipated expenditures that relate to obtaining, producing, and protecting a water supply; including all conservation, reclamation, and importation costs.
Raw Water Transmission & Distribution	15,035	This cost center contains all expenditures relating to the distribution of raw water. The distribution system consists of pipelines, canals, and percolation ponds and includes the use of creek systems.
Water Treatment and Treated Water Transmission & Distribution	59,586	These cost centers contain all expenditures associated with the treatment of water at the Rinconada, Penitencia and Santa Teresa Water Treatment Plants, as well as those expenditures related to the distribution of treated water to water utilities and includes costs associated with the Silicon Valley Advanced Water Purification Center, treated water reservoirs, pumping plants, pipelines, and turnouts.
Administration & General	30,629	This cost center contains all expenditures of an administrative nature which cannot be properly assigned to another of the other four cost centers. Work performed in this cost center cover items such as the collection of groundwater charges, financial and cash flow studies, annual reports, and general water management planning.
Capital & Other		
Debt Service	87,162	Principal and Interest payments on outstanding debt
Capital Improvements	340,689	Capital Improvement Program
Open Space Credit	7,117	Help preserve the open space benefits provided by agricultural lands
Adjust for FY 22 Actuals Versus Plan	-	
Total Program Requirements	22,867	
	710,854	
Financing Sources		
Capital Cost recovery	11,102	
Debt Proceeds	261,311	
Interest & Other	998	
Property Tax	35,041	
Treated Water Sales	211,703	
Surface Water Charges	3,146	
Groundwater Production Charges	166,758	
Capital Carryforward Reserves	30,592	
Change in Reserves	(9,798)	
Total Financing Sources	710,854	

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Figure 4-6.3 and Table 4-6.3 show the cost-of-service analysis by customer class following six industry standard rate making steps:

1. Identify utility pricing objectives and constraints
2. Identify revenue requirements
3. Allocate costs to customer classes
4. Reduce costs by revenue offsets or non-rate related funding sources
5. Develop unit costs by customer class or net revenue requirements by customer class
6. Develop unit rates by customer class

Figure 4-6.3 Industry Standard Rate Making Steps



Water Utility pricing objectives and constraints representing rate making step 1 are identified in Resolution 99-21, the District Act, Proposition 218, Proposition 26, and existing contracts.

Line 10 in Table 4-6.3 represents rate making steps 2 and 3 summarizing the revenue requirements for North County Zone W-2 including operations costs, capital costs and debt service. Step 2 involves allocating Water Utility costs between Zone W-2 (North County) and Zones W-5, W-7, and W-8 (South County) according to the benefits provided in each zone. Appendix B shows the percentage of operations costs allocated to the South County, along with a brief description of the basis of the allocation. Appendix C shows the percentage of capital and debt service costs allocated to South County along with a brief description of the basis of the allocations. Costs not allocated to the South County are allocated to the

Financial Outlook of Water Utility System

North County. Step 3 involves allocating costs directly to each customer class where possible or allocating based on volume where the program services benefit multiple customer classes.

Line 27 in Table 4-6.3 represents rate making steps 4 and 5. It reflects the unit cost per acre-foot by customer class after applying non-rate related offsets to the revenue requirements. Offsets have been allocated directly to each zone and customer class where possible or allocated based on volume where the offset applies to multiple customer classes. FY 2024–25 unit costs include an adjustment for the reconciliation of FY 2021–22 actual costs and revenues against what should have been collected given actual costs.

Line 35 represents rate making step 6. There are two adjustments that have been made to achieve a pricing structure that meets the objectives of Resolution 99-21, namely a structure that facilitates managing surface water (SW) and groundwater (GW) supplies conjunctively to prevent the over use or under use of the groundwater basin. First, non-rate related revenues are offset against the cost of agricultural water. This is referred to as the “Open Space Credit.” The purpose of the credit is to preserve the open space benefits provided by agricultural lands by keeping agricultural groundwater production charges low.

The second adjustment involves reallocating the cost of treated water to groundwater and surface water users based on proportional water usage. Importing water into the county for treatment and subsequent distribution to treated water (TW) users offsets the need to pump water from the ground. Without treated imported water supplies, the groundwater basin would become over drafted, which would also impact surface water users (who are permitted to take surface water in-lieu of pumping it from the ground). Consequently, the reallocation of treated water cost represents the value of treated water to groundwater and surface water users and facilitates a pricing structure that prevents the overuse of the groundwater basin. The 2011 RFC report¹⁴ mentioned earlier in Chapter 4 supports the reasonableness of such an adjustment.

Another aspect of the second adjustment is related to setting the basic user charge for surface water equal to the groundwater production charge. Surface water use is effectively in-lieu groundwater use permitted by the district to help preserve the groundwater basins. As such, the costs related to preserving the groundwater basins provide value to surface water users because it makes available district surface water, which otherwise would only be used for groundwater recharge. Similarly, the costs related to providing surface water benefit groundwater users because surface water usage helps preserve the groundwater basins. The second adjustment reallocates cost between surface water and groundwater customers in

¹⁴ The RFC reports, dated March 5, 2010, February 17, 2011, February 27, 2015, and February 28, 2020 can be found at: <https://www.valleywater.org/ProposedWaterCharges>.

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order to set the basic user charge for surface water equal to the groundwater production charge in recognition of this conjunctive use relationship, and in accordance with board policy.

Table 4-6.3 Fiscal Year 2024–25 North County Zone W-2 Cost of Service by Customer Class

FY 25 Projection (\$ in Thousands)		Zone W-2					Total W-2
		GW		TW	SW		
		M&I	AG	M&I	M&I	Ag	
1	Operating Outlays						
2	Operations/Operating Projects	69,149	597	149,882	1,865	52	221,544
3	SWP Imported Water Costs	7,885	69	23,172	340	9	31,475
4	Debt Service	21,916	190	64,763	285	8	87,162
5	Total Operating Outlays	98,949	856	237,816	2,490	69	340,181
6	Capital & Transfers	Step 2 - Identify revenue reqmnts					
7	Operating Transfers Out	3,848	33	4,646	71	2	8,600
8	Capital Outlays excl. carryforward	96,855	842	210,600	1,751	49	310,096
9	Total Capital & Transfers	100,703	875	215,246	1,822	51	318,697
10	Total Annual Program Costs	199,653	1,731	453,062	4,312	120	658,878
11	Revenue Requirement Offsets	Step 3 - Allocate costs to customer classes					
12	Capital Cost Recovery	(4,967)	(43)	(5,998)	(91)	(3)	(11,102)
13	Debt Proceeds	(81,618)	(709)	(177,467)	(1,476)	(41)	(261,311)
14	Inter-governmental Services	(1,407)	(12)	(1,698)	(26)	(1)	(3,144)
15	SWP Property Tax	(6,594)	(57)	(19,377)	(285)	(8)	(26,320)
16	South County Deficit/Reserve	2,756	24	3,328	51	1	6,160
17	Interest Earnings	(1,634)	(14)	(1,973)	(30)	(1)	(3,652)
18	Inter-zone Interest	15	0	18	0	0	34
19	Capital Contributions	(18)	(0)	(22)	(0)	(0)	(41)
20	Transfers In	(3,336)	(29)	(4,028)	(61)	(2)	(7,455)
21	Other	(741)	(6)	(764)	(11)	(0)	(1,524)
22	Reserve Requirements	2,529	84	7,134	46	5	9,798
23	Adjusted Revenue Requirement (FY 25)	104,638	968	252,216	2,429	71	360,321
24	Adjusted Revenue Requirement (FY 22 adj)	17,505	558	5,364	(574)	14	22,867
25	Total Adjusted Revenue Requirement	122,144	1,525	257,579	1,855	85	383,188
26	Volume (KAF)	74.8	0.7	90.3	1.4	0.0	167.2
27	Revenue Requirement (\$ per AF)	\$ 1,633	\$ 2,346	\$ 2,852	\$ 1,352	\$ 2,227	\$ -
28	Adjustments for Agricultural Preservation	Step 5 - Develop unit costs by customer class					
29	Allocate WU 1% Ad Valorem Prop Tax	-	(1,499)	-	-	(81)	(1,580)
30	Transfer GF 1% Ad valorem Prop Tax	-	-	-	-	-	-
31	Transfer WS 1% Ad Valorem Prop Tax	-	-	-	-	-	-
32	Revenue Requirement (\$ per AF)	\$ 1,633	\$ 40	\$ 2,852	\$ 1,352	\$ 101	\$ -
33	Adjustments to Facilitate Conjunctive Use	Step 6 - Rate Design					
34	Reallocate TW/SW/RW costs	44,588	-	(45,876)	1,288	-	0
35	Water Charge (\$ per AF)	\$ 2,229.00	\$ 39.80	\$ 2,344.00	\$ 2,290.00	\$ 100.80	\$ -
36	Total Revenue (\$K)	\$ 166,732	\$ 26	\$ 211,703	\$ 3,143	\$ 4	\$ 381,608

South County (Zones W-5, W-7, and W-8) Finances

South County Zone W-5 is generally defined as the area overlaying most of the Llagas groundwater subbasin in the southern portion of Santa Clara County including Gilroy, San Martin, and most of Morgan Hill. Zone W-7 overlays the Coyote Valley south of Metcalf Road, and Zone W-8 includes areas below Uvas and Chesbro Reservoirs.

Within the Water Utility Fund, Valley Water staff track revenue and costs associated with the South County groundwater benefit zones separately so that a groundwater production charge for services that benefit each South County zone can be calculated. Charges in the South County zones are based on the costs of specific facilities, imported water costs, and operations costs related to managing a conjunctive use program, ensuring water quality, and measuring water supplies and usage. Historically, South County finances have been managed to maintain an approximate balance between cumulative revenues and costs. In order to maintain a smooth and stable water rate projection, cumulative shortfalls or surpluses occur from time to time.

For the South County Zone W-5, staff proposes up to a 6.6 percent increase, or a \$579 per acre-foot groundwater production charge for M&I or non-agricultural water. The average household would experience an increase in their monthly bill of \$1.22 or about 4 cents per day.

For the South County Zone W-7, staff proposes up to a 14.2 percent increase, or a \$750.50 per acre-foot groundwater production charge for M&I or non-agricultural water. The average household would experience an increase in their monthly bill of \$3.20 or about 11 cents per day.

For the South County Zone W-8, staff proposes up to an 8 percent increase, or a \$430 per acre-foot groundwater production charge for M&I or non-agricultural water. The average household would experience an increase in their monthly bill of \$1.10 or about 4 cents per day.

Customers in each zone may also experience additional water charge increases enacted by their retail water provider.

The proposed maximum agricultural groundwater production charge in any groundwater benefit zone is \$39.80 per acre-foot for FY 2024–25, which is up to an 8 percent increase, or roughly a \$0.49 increase per month per acre for the average agricultural water user.

Staff recommends that the surface water master charge be increased from \$54 per acre-foot to \$61 per acre-foot to align revenues with costs related to managing, operating, and billing for surface water

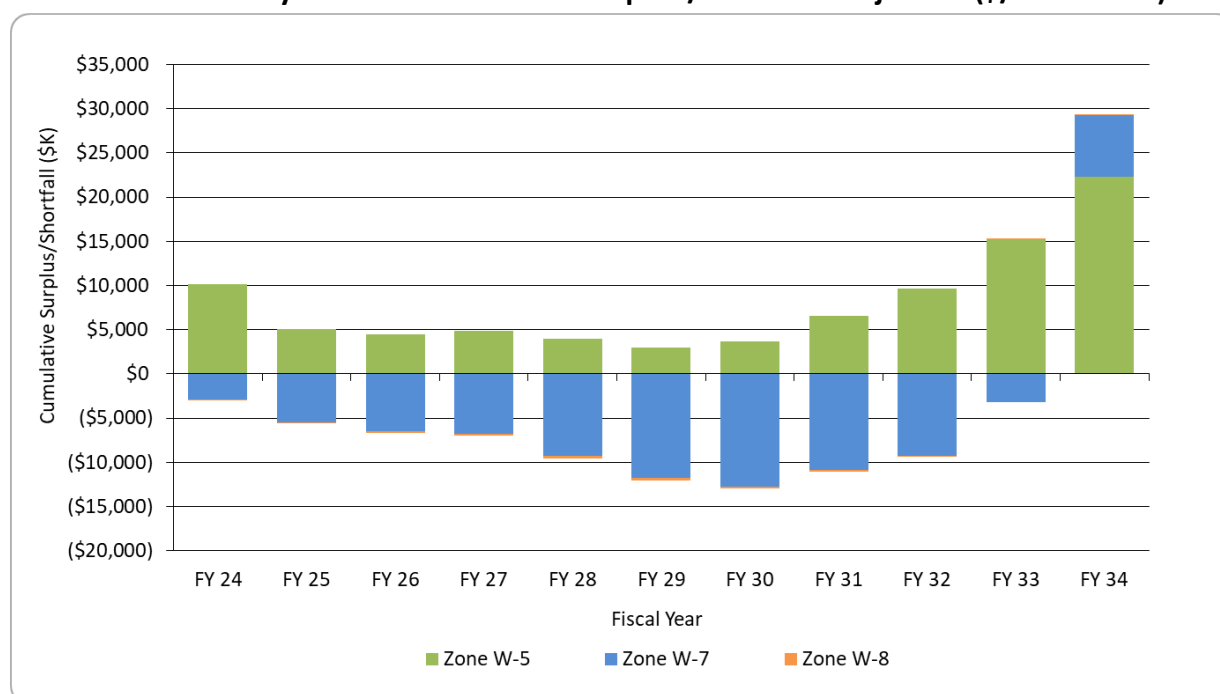
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diversions. The increases in the basic user charge and surface water master charge result in a total surface water charge for M&I water as follows: \$640 per acre-foot, or up to a 7.1 percent increase for Zone W-5; \$811.50 per acre-foot, or up to a 14.1 percent increase for Zone W-7; and \$491.00 per acre-foot, or an up to an 8.6 percent increase for Zone W-8. The total surface water charge for agricultural water represents up to a 10.9 percent increase at \$100.80 per acre-foot.

For recycled water, staff recommends increasing the M&I charge up to 6.7 percent to \$558.50 per acre-foot. For agricultural recycled water, the proposed maximum is a 4.4 percent increase to \$70.15 per acre-foot. This pricing is consistent with the provisions of the “Wholesale-Retailer Agreement for Supply of Recycled Water Between Santa Clara Valley Water District and City of Gilroy.”¹⁵ The proposed rate changes maximize cost recovery while concurrently providing an economic incentive to use recycled water.

For FY 2024–25, costs are estimated to exceed revenues by approximately \$6.2 million for the three South County groundwater benefit zones in aggregate. Figure 4-6.4 shows a cumulative revenue surplus in FY 2024–25; however, the cumulative balance is projected to be negative for multiple years, growing back into a surplus by FY 2033–34. The projection assumes an average increase in the M&I groundwater charge between FY 2024–25 and FY 2033–34 of 6.6 percent for Zone W-5, 14.2 percent for Zone W-7, and 8.0 percent for Zone W-8.

Figure 4-6.4 South County Cumulative Revenue Surplus / Shortfall Projection (\$/Thousands)



¹⁵ The Wholesale-Retailer Agreement for Supply of Recycled Water Between Santa Clara Valley Water District and City of Gilroy can be accessed at <https://www.valleywater.org/ProposedWaterCharges>.

Open Space Credit

The District Act limits agricultural groundwater production charges to a maximum of 25 percent of the M&I groundwater production charges. The agricultural community benefits from the current Board pricing policy limiting the agricultural groundwater charge to no more than 10 percent of the M&I charge. The credit to agricultural water users has become known as the “open space credit.” It is paid for by fungible non-rate related revenue (i.e., 1 percent ad valorem property taxes). The purpose of the open space credit is to help preserve the open space benefits provided by agricultural lands by keeping agricultural groundwater production charges low.

For FY 2024–25 the staff proposed maximum agricultural groundwater production is set at 9.25 percent of the lowest M&I charge, which is for Zone W-8. The resulting charge would be \$39.80 per acre-foot in all zones. The estimated open space credit received by the South County groundwater benefit zones would be \$13 million for FY 2024–25 (funded by 1 percent ad valorem property taxes). This includes an adjustment that reconciles FY 2021–22 actuals against what was projected.

Program Requirements and Financing Sources

Tables 4-6.4a, b, and c show the relationship between expenditures and sources of revenue for the three South County zones in aggregate for FY 2024–25. The specific operating costs allocated to the South County zones can be found in Appendix B. Details on capital cost recovery can be found in Appendix C. The maximum groundwater production charges proposed for FY 2024–25 in the South County Zones W-5, W-7, and W-8 are necessary to conduct, “district activities in the protection and augmentation of the water supplies for users within a zone or zones of the district which are necessary for the public health, welfare, and safety of the people of this State” (District Act, Section 26.3).

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Table 4-6.4a Fiscal Year 2024–25 South County Zone W-5 Water Utility Program Requirements and Financing Sources

	Zone W-5	
	FY 25	
Cost Center	Projected (\$K)	Description of Cost Center/Activities
Source of Supply	9,159	This cost center contains all the anticipated expenditures that relate to obtaining, producing, and protecting a water supply; including all conservation, reclamation, and importation costs.
Raw Water Transmission & Distribution	2,641	This cost center contains all expenditures relating to the distribution of raw water. The distribution system consists of pipelines, canals, and percolation ponds and includes the use of creek systems.
Water Treatment and Treated Water Transmission & Distribution	619	These cost centers contain all expenditures associated with the Water Quality Laboratory.
Administration & General	7,487	This cost center contains all expenditures of an administrative nature which cannot be properly assigned to another of the other four cost centers. Work performed in this cost center cover items such as the collection of groundwater charges, financial and cash flow studies, annual reports, and general water management planning.
Capital & Other		
Capital Cost Recovery	8,576	Annual payment for completed capital facilities and improvements.
Interest (Earned)/Due Utility Reserves	(26)	Based on cumulative revenue surplus at the current interest earnings rate.
Adjust for FY 22 Actuals Versus Plan	(1,323)	
Total Program Requirements	27,134	
Financing Sources		
Open Space Credit	8,418	
Property Tax & Other Revenue	2,934	
Surface Water Charges	316	
Recycled Water Charges	433	
Groundwater Production Charges	11,195	
Total Financing Sources	23,296	
FY 25 Revenue Surplus/(Shortfall)	(3,838)	

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Table 4-6.4b Fiscal Year 2024–25 South County Zone W-7 Water Utility Program Requirements and Financing Sources

	Zone W-7	
	FY 25	
Cost Center	Projected (\$K)	Description of Cost Center/Activities
Source of Supply	6,115	This cost center contains all the anticipated expenditures that relate to obtaining, producing, and protecting a water supply; including all conservation, reclamation, and importation costs.
Raw Water Transmission & Distribution	1,603	This cost center contains all expenditures relating to the distribution of raw water. The distribution system consists of pipelines, canals, and percolation ponds and includes the use of creek systems.
Water Treatment and Treated Water Transmission & Distribution	52	These cost centers contain all expenditures associated with the Water Quality Laboratory
Administration & General	2,386	This cost center contains all expenditures of an administrative nature which cannot be properly assigned to another of the other four cost centers. Work performed in this cost center cover items such as the collection of groundwater charges, financial and cash flow studies, annual reports, and general water management planning.
Capital & Other		
Capital Cost Recovery	2,487	Annual payment for completed capital facilities and improvements
Interest (Earned)/Due Utility Reserves	(8)	Based on cumulative revenue surplus at the current interest earnings rate
Adjust for FY 22 Actuals Versus Plan	(334)	
Total Program Requirements	12,303	
Financing Sources		
Open Space Credit	2,484	
Property Tax & Other Revenue	881	
Surface Water Charges	107	
Recycled Water Charges	-	
Groundwater Production Charges	6,608	
Total Financing Sources	10,080	
FY 25 Revenue Surplus/(Shortfall)	(2,223)	

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Table 4-6.4c Fiscal Year 2024–25 South County Zone W-8 Water Utility Program Requirements and Financing Sources

	Zone W-8	
	FY 25	
Cost Center	Projected (\$K)	Description of Cost Center/Activities
Source of Supply	141	This cost center contains all the anticipated expenditures that relate to obtaining, producing, and protecting a water supply; including all conservation, reclamation, and importation costs.
Raw Water Transmission & Distribution	8	This cost center contains all expenditures relating to the distribution of raw water. The distribution system consists of pipelines, canals, and percolation ponds and includes the use of creek systems.
Water Treatment and Treated Water Transmission & Distribution	5	These cost centers contain all expenditures associated with the Water Quality Laboratory
Administration & General	342	This cost center contains all expenditures of an administrative nature which cannot be properly assigned to another of the other four cost centers. Work performed in this cost center cover items such as the collection of groundwater charges, financial and cash flow studies, annual reports, and general water management planning.
Capital & Other		
Capital Cost Recovery	38	Annual payment for completed capital facilities and improvements
Interest (Earned)/Due Utility Reserves	(1)	Based on cumulative revenue surplus at the current interest earnings rate
Adjust for FY 22 Actuals Versus Plan	20	
Total Program Requirements	554	
Financing Sources		
Open Space Credit	188	
Property Tax & Other Revenue	69	
Surface Water Charges	38	
Recycled Water Charges	-	
Groundwater Production Charges	161	
Total Financing Sources	456	
FY 25 Revenue Surplus/(Shortfall)	(99)	

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Figure 4-6.3 and Tables 4-6.5a, b, and c show the cost-of-service analysis by customer class following the six industry standard rate making steps for South County Zones W-5, W-7, and W-8:

1. Identify utility pricing objectives and constraints
2. Identify revenue requirements
3. Allocate costs to customer classes
4. Reduce costs by revenue offsets or non-rate related funding sources
5. Develop unit costs by customer class or net revenue requirements by customer class
6. Develop unit rates by customer class

As previously discussed, Water Utility pricing objectives and constraints representing rate making step 1 are identified in Resolution 99-21, the District Act, Proposition 218, Proposition 26, and existing contracts.

Line 10 in Tables 4-6.5a, b, and c represents rate making steps 2 and 3 summarizing the revenue requirements for South County Zones W-5, W-7, and W-8. Costs have been allocated directly to each customer class where possible or allocated based on volume where the costs benefit multiple customer classes.

Line 27 in Tables 4-6.5a, b, and c represents rate making steps 4 and 5. It reflects the unit cost per acre-foot by customer class after applying non-rate related offsets to the revenue requirements. Offsets have been allocated directly to each customer class where possible or allocated based on volume where the offset applies to multiple customer classes. FY 2024–25, unit costs include an adjustment for the reconciliation of FY 2021–22 actual costs and revenue against what should have been collected given actual costs.

Line 35 represents rate making step 6. There are two adjustments that have been made to achieve a pricing structure that meets the objectives of Resolution 99-21, namely a structure that facilitates managing surface water and groundwater supplies conjunctively to prevent the over use or under use of the groundwater basins. First, non-rate related revenues are offset against the cost of agricultural water. This is referred to as the “Open Space Credit”. The purpose of the credit is to help preserve the open space benefits provided by agricultural lands by keeping agricultural groundwater production charges low.

The second adjustment is related to setting the basic user charge for surface water equal to the groundwater production charge. Surface water use is effectively in-lieu groundwater use permitted by Valley Water to help preserve the groundwater basins. As such, the costs related to preserving the groundwater basins provide value to surface water users because it makes available surface water which otherwise would only be used for groundwater recharge. Similarly, the costs related to providing surface water benefit groundwater users because surface water usage helps preserve the groundwater basins. The second adjustment reallocates cost between surface water and groundwater customers in order to set the

Financial Outlook of Water Utility System

basic user charge for surface water equal to the groundwater production charge in recognition of this conjunctive use relationship, and in accord with board policy.

Another aspect of the second adjustment involves reallocating the cost of recycled water (RW) to groundwater and surface water users in Zone W-5 only. Without recycled water supplies, there would be additional demand on the groundwater basins and a higher risk of overdraft, which would also impact surface water users (who are permitted to take surface water in lieu of pumping it from the ground). Consequently, the reallocation of recycled water cost represents the value of recycled water to groundwater and surface water users and facilitates a pricing structure that helps prevent the overuse of the groundwater basins. The 2015 RFC report¹⁶ mentioned earlier in Chapter 4 supports the reasonableness of these recycled and surface water conjunctive use adjustments.

¹⁶ The RFC reports, dated March 5, 2010, February 17, 2011, February 27, 2015, and February 28, 2020 can be found at: <https://www.valleywater.org/ProposedWaterCharges>.

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Table 4-6.5a Fiscal Year 2024–25 South County Zone W-5 Cost of Service by Customer Class

FY 25 Projection (\$ in Thousands)		Zone W-5							
		GW		SW		RW		Total W-5	
		M&I	AG	M&I	AG	M&I	AG		
1	Operating Outlays								
2	Operations/Operating Projects	8,431	10,179	231	595	254	218	19,906	
3	SWP Imported Water Costs	-	-	-	-	-	-	-	
4	Debt Service	-	-	-	-	-	-	-	
5	Total Operating Outlays	8,431	10,179	231	595	254	218	19,906	
6	Capital & Transfers	Step 2- Identify revenue reqmnts							
7	Operating Transfers Out	-	-	-	-	-	-	-	
8	Capital Outlays excl. carryforward	-	-	-	-	-	-	-	
9	Total Capital & Transfers	-	-	-	-	-	-	-	
10	Total Annual Program Costs	8,431	10,179	231	595	254	218	19,906	
11	Revenue Requirement Offsets	Step 3 - Allocate costs to customer classes							
12	Capital Cost Recovery	2,053	2,506	40	105	2,085	1,787	8,576	
13	Debt Proceeds	-	-	-	-	-	-	-	
14	Inter-governmental Services	(29)	(35)	(1)	(1)	-	-	(66)	
15	SWP Property Tax	(540)	(659)	(11)	(28)	(21)	(18)	(1,277)	
16	South County Deficit/Reserve	(850)	(2,782)	(26)	(116)	13	(77)	(3,838)	
17	Interest Earnings	-	-	-	-	-	-	-	
18	Inter-zone Interest	(11)	(13)	(0)	(1)	(0)	(0)	(26)	
19	Capital Contributions	-	-	-	-	-	-	-	
20	Transfers In	-	-	-	-	-	-	-	
21	Other	(60)	(74)	(1)	(2)	(1)	(1)	(138)	
22	Reserve Requirements	-	-	-	-	-	-	-	
23	Adjusted Revenue Requirement (FY 25)	8,993	9,121	233	552	2,329	1,908	23,137	
24	Adjusted Revenue Requirement (FY 22 adj)	(490)	(541)	(19)	10	(103)	(180)	(1,323)	
25	Total Adjusted Revenue Requirement	8,503	8,580	214	562	2,226	1,729	21,815	
26	Volume (KAF)	17.8	21.8	0.4	0.9	0.7	0.6	42.2	
27	Revenue Requirement (\$ per AF)	\$ 477	\$ 394	\$ 612	\$ 618	\$ 3,181	\$ 2,881		
28	Adjustments for Agricultural Preservation	Step 5 - Develop unit costs by customer class							
29	Allocate WU 1% Ad Valorem Prop Tax	-	(7,714)	-	(471)	-	(839)	(9,024)	
30	Transfer GF 1% Ad valorem Prop Tax	-	-	-	-	-	(847)	(847)	
31	Transfer WS 1% Ad Valorem Prop Tax	-	-	-	-	-	-	-	
32	Revenue Requirement (\$ per AF)	\$ 477	\$ 40	\$ 612	\$ 101	\$ 3,181	\$ 70		
33	Adjustments to Facilitate Conjunctive Use	Step 6 - Rate Design							
34	Reallocate TW/SW/RW costs	1,825	-	10	-	(1,835)	-	-	
35	Water Charge (\$ per AF)	\$ 579.00	\$ 39.80	\$ 640.00	\$ 100.80	\$ 559.00	\$ 70.15		
36	Total Revenue (\$K)	\$10,328	\$867	\$224	\$92	\$391	\$42	\$11,944	

Financial Outlook of Water Utility System

Table 4-6.5b Fiscal Year 2024–25 South County Zone W-7 Cost of Service by Customer Class

FY 25 Projection (\$ in Thousands)		Zone W-7				Total W-7
		GW		SW		
		M&I	AG	M&I	AG	
1	Operating Outlays					
2	Operations/Operating Projects	7,038	2,538	164	418	10,157
3	SWP Imported Water Costs	-	-	-	-	-
4	Debt Service	-	-	-	-	-
5	Total Operating Outlays	7,038	2,538	164	418	10,157
6	Capital & Transfers	-	-	-	-	
	Operating Transfers Out	-	-	-	-	-
	Capital Outlays excl. carryforward	-	-	-	-	-
	Total Capital & Transfers	-	-	-	-	-
	Total Annual Program Costs	7,038	2,538	164	418	10,157
11	Revenue Requirement Offsets	Step 3 - Allocate costs to customer classes				
12	Capital Cost Recovery	1,757	657	20	53	2,487
13	Debt Proceeds	-	-	-	-	-
14	Inter-governmental Services	(44)	(16)	(1)	(1)	(62)
15	SWP Property Tax	(261)	(98)	(3)	(8)	(370)
16	South County Deficit/Reserve	(1,773)	(412)	(5)	(33)	(2,223)
17	Interest Earnings	-	-	-	-	-
	Inter-zone Interest	(5)	(2)	(0)	(0)	(8)
	Capital Contributions	-	-	-	-	-
	Perchlorate Response	-	-	-	-	-
	Other	(20)	(8)	(0)	(0)	(28)
22	Reserve Requirements	-	-	-	-	-
23	Adjusted Revenue Requirement (FY 25)	6,692	2,659	175	428	9,954
24	Adjusted Revenue Requirement (FY 22 adj)	(299)	34	(8)	(62)	(334)
25	Total Adjusted Revenue Requirement	6,393	2,693	168	367	9,620
26	Volume (KAF)	8.6	3.2	0.1	0.3	12.2
27	Revenue Requirement (\$ per AF)	\$ 740	\$ 835	\$ 1,676	\$ 1,410	
28		Step 5 - Develop unit costs by customer				
29	Allocate WU 1% Ad Valorem Prop Tax	-	-	-	-	-
30	Transfer GF 1% Ad valorem Prop Tax	-	(2,565)	-	(340)	(2,905)
31	Transfer WS 1% Ad Valorem Prop Tax	-	-	-	-	-
32	Revenue Requirement (\$ per AF)	\$ 740	\$ 40	\$ 1,676	\$ 101	
33	Adjustments to Facilitate Conjunctive Use	Step 6 - Rate Design				
	Reallocate TW/SW/RW costs	86	-	(86)	-	-
	Water Charge (\$ per AF)	\$ 750.50	\$ 39.80	\$ 811.50	\$ 100.80	
36	Total Revenue (\$K)	\$6,479	\$128	\$81	\$26	\$6,715

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Table 4-6.5c Fiscal Year 2024–25 South County Zone W-8 Cost of Service by Customer Class

FY 25 Projection (\$ in Thousands)		Zone W-8				Total W-8	Total South County
		GW		SW			
		M&I	AG	M&I	AG		
1	Operating Outlays						
2	Operations/Operating Projects	184	230	23	59	496	30,559
3	SWP Imported Water Costs	-	-	-	-	-	-
4	Debt Service	-	-	-	-	-	-
5	Total Operating Outlays	184	230	23	59	496	30,559
6	Capital & Transfers	-	-	-	-		
7	Operating Transfers Out	-	-	-	-	-	-
8	Capital Outlays excl. carryforward	-	-	-	-	-	-
9	Total Capital & Transfers	-	-	-	-	-	-
10	Total Annual Program Costs	184	230	23	59	496	30,559
11	Revenue Requirement Offsets	Step 3 - Allocate costs to customer classes					
12	Capital Cost Recovery	14	17	2	5	38	11,102
13	Debt Proceeds	-	-	-	-	-	-
14	Inter-governmental Services	(0)	(0)	(0)	(0)	(0)	(128)
15	SWP Property Tax	(12)	(15)	(2)	(5)	(34)	(1,680)
16	South County Deficit/Reserve	(22)	(54)	(6)	(17)	(98)	(6,160)
17	Interest Earnings	-	-	-	-	-	-
18	Inter-zone Interest	(0)	(0)	(0)	(0)	(1)	(34)
19	Capital Contributions	-	-	-	-	-	-
20	Perchlorate Response	-	-	-	-	-	-
21	Other	(1)	(1)	(0)	(0)	(2)	(169)
22	Reserve Requirements	-	-	-	-	-	-
23	Adjusted Revenue Requirement (FY 25)	162	177	17	43	399	33,490
24	Adjusted Revenue Requirement (FY 22 adj)	(9)	26	(1)	5	20	(1,636)
25	Total Adjusted Revenue Requirement	153	202	17	48	419	31,854
26	Volume (KAF)	0.3	0.4	0.1	0.1	0.9	55.3
27	Revenue Requirement (\$ per AF)	\$ 454	\$ 480	\$ 331	\$ 369		
28		Step 5 - Develop unit costs by customer class					
29	Allocate WU 1% Ad Valorem Prop Tax	-	-	-	-	-	(9,024)
30	Transfer GF 1% Ad valorem Prop Tax	-	(186)	-	(35)	(220)	(3,973)
31	Transfer WS 1% Ad Valorem Prop Tax	-	-	-	-	-	-
32	Revenue Requirement (\$ per AF)	\$ 454	\$ 40	\$ 331	\$ 101		
33	Adjustments to Facilitate Conjunctive Use	Step 6 - Rate Design					
34	Reallocate TW/SW/RW costs	(8)	-	8	-	-	-
35	Water Charge (\$ per AF)	\$ 430.00	\$ 39.80	\$ 491.00	\$ 100.80		
36	Total Revenue (\$K)	\$145	\$17	\$25	\$13	\$199	\$18,858

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APPENDIX A - WATER UTILITY CHARGE COMPONENTS AND PROPOSED CHARGES

Table A-1 Proposed Charge Components for Fiscal Year 2024–25

Component	Charge (\$/AF)
Basic User, Zone W-2 (North County)	
Agricultural	39.80
Municipal & Industrial	2,229.00
Basic User, Zone W-5 (South County/Llagas Subbasin)	
Agricultural	39.80
Municipal & Industrial	579.00
Basic User, Zone W-7 (South County/Coyote Valley)	
Agricultural	39.80
Municipal & Industrial	750.50
Basic User, Zone W-8 (South County/Uvas And Chesbro)	
Agricultural	39.80
Municipal & Industrial	430.00
Treated Water Surcharge	
Contract	115.00
Non-contract	200.00
Surface Water Charge Water Master	61.00

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Table A-2 Proposed Charge Components for Fiscal Year 2024–25

Type of Charge	AG Water (\$/AF)	M&I Water (\$/AF)
Groundwater Production / Basic User Charge		
Zone W-2	\$39.80	\$2,229.00
Zone W-5	\$39.80	\$579.00
Zone W-7	\$39.80	\$750.50
Zone W-8	\$39.80	\$430.00
Surface Water ¹		
Other Zone W-2 Deliveries ²	\$94.00	\$2,290.00
Other Zone W-5 Deliveries ³	\$94.00	\$640.00
Other Zone W-7 Deliveries ⁴	\$94.00	\$811.50
Other Zone W-8 Deliveries ⁵	\$94.00	\$491.00
Treated Water		
Contract ⁶	N/A	\$2,344.00
Non-contract ⁷	N/A	\$2,429.00
Recycled Water		
Gilroy	\$70.15	\$559.00

¹Surface water charge is the sum of the basic user charge plus the water master charge.

²Other Zone W-2 Deliveries = Basic User (AG or M&I @ \$39.80/AF or \$2,229.00/AF) + Water Master (\$61.00/AF).

³Other Zone W-5 Deliveries = Basic User (AG or M&I @ \$39.80/AF or \$543.50/AF) + Water Master (\$61.00/AF).

⁴Other Zone W-7 Deliveries = Basic User (AG or M&I @ \$39.80/AF or \$750.50/AF) + Water Master (\$61.00/AF).

⁵Other Zone W-8 Deliveries = Basic User (AG or M&I @ \$39.80/AF or \$430.00/AF) + Water Master (\$61.00/AF).

⁶Treated Water Charge is the sum of Basic User (\$2,229.00/AF) and Treated Water Surcharge (\$115.00/AF).

⁷The charge for non-contract deliveries is the sum of the basic user charge (\$2,229.00/AF) and the treated water surcharge for non-contract water (\$200.00/AF).

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APPENDIX B – BASIS OF COST ALLOCATIONS BETWEEN NORTH AND SOUTH ZONES

Cost Center	Project Name	Allocations Between North and South											Basis of Allocation
		Total County	North County W-2		South County								
					Total South County		Zone W-5		Zone W-7		Zone W-8		
		\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	
Source of Supply	Water Operations Planning	\$ 688	83.7%	\$ 576	16.3%	\$ 112	10.0%	\$ 69	6.3%	\$ 43	0.0%	\$ -	Raw Water Deliveries
	Groundwater Management Protocols	\$ 6,000	54.6%	\$ 3,276	45.4%	\$ 2,724	34.7%	\$ 2,082	9.7%	\$ 582	1.0%	\$ 60	Groundwater Production Ratio
	Districtwide Salary Savings	\$ (1,138)	76.2%	\$ (867)	23.8%	\$ (271)	18.3%	\$ (208)	5.1%	\$ (58)	0.4%	\$ (4)	Water Usage Ratio
	Environmental Compliance Support	\$ 58	83.7%	\$ 49	16.3%	\$ 9	10.0%	\$ 6	6.3%	\$ 4	0.0%	\$ 0	Raw Water Deliveries
	Dam Safety Program	\$ 2,356	77.4%	\$ 1,824	22.6%	\$ 532	20.1%	\$ 475	2.1%	\$ 48	0.4%	\$ 9	Program Benefit Calculation
	Recycled Water Program	\$ 5,968	93.5%	\$ 5,580	6.5%	\$ 388	6.5%	\$ 388	0.0%	\$ -	0.0%	\$ -	Population
	Water Rights and Accounting	\$ 831	83.7%	\$ 695	16.3%	\$ 135	10.0%	\$ 83	6.3%	\$ 52	0.0%	\$ -	Raw Water Deliveries
	Delta Policy & Imported Water Program	\$ 6,406	89.1%	\$ 5,708	10.9%	\$ 698	4.6%	\$ 295	6.3%	\$ 404	0.0%	\$ -	Imported Water Ratio
	San Felipe Division Deliveries	\$ 22,619	82.2%	\$ 18,593	17.8%	\$ 4,026	7.5%	\$ 1,696	10.3%	\$ 2,330	0.0%	\$ -	Program Benefit Calculation
	South Bay Aqueduct Deliveries	\$ 4,873	100.0%	\$ 4,873	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	State Water Project Costs	\$ 31,475	100.0%	\$ 31,475	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Water Conservation Program	\$ 12,314	90.5%	\$ 11,145	9.5%	\$ 1,170	8.7%	\$ 1,071	0.4%	\$ 49	0.4%	\$ 49	Program Benefit Calculation
	Recycled/Purified Water Public Engagement	\$ 1,326	93.5%	\$ 1,240	6.5%	\$ 86	6.5%	\$ 86	0.0%	\$ -	0.0%	\$ -	Population
	Water Banking Operations	\$ 5,905	89.1%	\$ 5,262	10.9%	\$ 644	4.6%	\$ 272	6.3%	\$ 372	0.0%	\$ -	Imported Water Ratio
	GP5 Reimbursement Program	\$ 4,718	100.0%	\$ 4,718	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	San Felipe Reach 1 Operations	\$ 816	81.3%	\$ 664	18.7%	\$ 153	7.9%	\$ 64	10.8%	\$ 88	0.0%	\$ -	CVP Imported Water Ratio
	SFD Reach 1 Administration	\$ 11	81.4%	\$ 9	18.6%	\$ 2	7.9%	\$ 1	10.8%	\$ 1	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach1 Ctrl and Ele	\$ 386	81.4%	\$ 314	18.6%	\$ 72	7.9%	\$ 30	10.8%	\$ 42	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach 1 Eng Other	\$ 334	81.4%	\$ 272	18.6%	\$ 62	7.9%	\$ 26	10.8%	\$ 36	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach 1 Gen Maint	\$ 1,117	81.4%	\$ 909	18.6%	\$ 208	7.9%	\$ 88	10.8%	\$ 120	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach 2 Operations	\$ 85	81.3%	\$ 69	18.7%	\$ 16	7.9%	\$ 7	10.8%	\$ 9	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach 2 Eng Other	\$ 345	81.4%	\$ 281	18.6%	\$ 64	7.9%	\$ 27	10.8%	\$ 37	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach 2 Gen Maint	\$ 169	81.4%	\$ 137	18.6%	\$ 31	7.9%	\$ 13	10.8%	\$ 18	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach 3 Operations	\$ 344	81.3%	\$ 303	18.7%	\$ 41	7.9%	\$ 9	10.8%	\$ 32	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach3 Ctrl and Ele	\$ 251	81.4%	\$ 221	18.6%	\$ 30	7.9%	\$ 7	10.8%	\$ 23	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach 3 Eng Other	\$ 407	81.4%	\$ 359	18.6%	\$ 49	7.9%	\$ 11	10.8%	\$ 38	0.0%	\$ -	CVP Imported Water Ratio
	San Felipe Reach 3 Gen Maint	\$ 1,297	81.4%	\$ 1,142	18.6%	\$ 155	7.9%	\$ 35	10.8%	\$ 120	0.0%	\$ -	CVP Imported Water Ratio
	Wolfe Road Recycled Water Facility	\$ 221	100.0%	\$ 221	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Los Vaqueros Reservoir Expansion (Los Vaqueros-Bethany T	\$ 4,000	100.0%	\$ 4,000	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Palo Alto Water Reuse Agreement	\$ 14,344	100.0%	\$ 14,344	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	SVAWPC Facility Operations	\$ 4,306	100.0%	\$ 4,306	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	SVAWPC Facility Maintenance	\$ 3,450	100.0%	\$ 3,450	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Desalination	\$ 85	76.2%	\$ 65	23.8%	\$ 20	18.3%	\$ 16	5.1%	\$ 4	0.4%	\$ 0	Water Usage Ratio
	Well Ordinance Program	\$ 2,454	92.4%	\$ 2,268	7.6%	\$ 187	5.8%	\$ 142	1.8%	\$ 44	0.0%	\$ -	Well Permits and Inspections
	Source Water Quality Management	\$ 441	76.2%	\$ 336	23.8%	\$ 105	18.3%	\$ 81	5.1%	\$ 23	0.4%	\$ 2	Water Usage Ratio
	Invasive Mussel Prevention	\$ 807	83.7%	\$ 675	16.3%	\$ 132	10.0%	\$ 81	6.3%	\$ 50	0.0%	\$ 0	Raw Water Deliveries
Delta Conveyance	\$ 5,833	89.1%	\$ 5,197	10.9%	\$ 636	4.6%	\$ 268	6.3%	\$ 367	0.0%	\$ -	Imported Water Ratio	
Local Reservoir & Diversion Ops Planning & Analysis	\$ 2,590	76.2%	\$ 1,974	23.8%	\$ 616	18.3%	\$ 474	5.1%	\$ 132	0.4%	\$ 10	Water Usage Ratio	
Dams & Reservoir Gen Maint	\$ 3,720	78.4%	\$ 2,918	21.6%	\$ 802	19.2%	\$ 715	2.0%	\$ 73	0.4%	\$ 14	Program Benefit Calculation	
San Felipe Division Deliveries - Sisk Dam Raise portion DS Or	\$ 10,000	82.2%	\$ 8,220	17.8%	\$ 1,780	7.5%	\$ 750	10.3%	\$ 1,030	0.0%	\$ -	Program Benefit Calculation	
Adjustment for Anticipated Budget Changes	\$ 962	100.0%	\$ 962		\$ -		\$ -		\$ -		\$ -	No South County Benefit	
	Total: Source of Supply	\$ 163,178		\$ 147,762		\$ 15,416		\$ 9,159		\$ 6,115		\$ 141	

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APPENDIX B – BASIS OF COST ALLOCATIONS BETWEEN NORTH AND SOUTH ZONES ... CONTINUED

Cost Center	Project Name	Allocations Between North and South											Basis of Allocation
		Total County	North County W-2		South County								
					Total South County		Zone W-5		Zone W-7		Zone W-8		
		\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	
Raw Water Transmission & Distribution	FAHCE/Three Creeks HCP Project	\$ 4,100	93.7%	\$ 3,844	6.3%	\$ 257	2.6%	\$ 108	3.6%	\$ 149	0.0%	\$ -	Coyote Water Supply Ratio
	Environmental Compliance Support	\$ 105	83.7%	\$ 88	16.3%	\$ 17	10.0%	\$ 10	6.3%	\$ 7	0.0%	\$ 0	Raw Water Deliveries
	Vasona Pump Station General Maintenance	\$ 318	100.0%	\$ 318	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Raw Water T&D Gen'l Oper	\$ 2,155	83.7%	\$ 1,804	16.3%	\$ 351	10.0%	\$ 216	6.3%	\$ 136	0.0%	\$ -	Raw Water Deliveries
	Recycled Water T&D General Maint	\$ 244	0.0%	\$ -	100.0%	\$ 244	100.0%	\$ 244	0.0%	\$ -	0.0%	\$ -	Benefits Only South County
	Recharge/RW Field Ops	\$ 3,844	63.1%	\$ 2,427	36.9%	\$ 1,417	23.0%	\$ 883	13.8%	\$ 530	0.1%	\$ 4	Groundwater Recharge Ratio
	Recharge/RW Field Fac Maint	\$ 1,953	63.1%	\$ 1,233	36.9%	\$ 720	23.0%	\$ 449	13.8%	\$ 269	0.1%	\$ 2	Groundwater Recharge Ratio
	Untreated Water Program Planning & Analysis	\$ 391	39.6%	\$ 155	60.4%	\$ 236	29.5%	\$ 115	30.9%	\$ 121	0.0%	\$ -	Untreated Water Deliveries Ratio
	Raw Water T&D Ctrl and Elec Eng	\$ 684	83.7%	\$ 572	16.3%	\$ 111	10.0%	\$ 68	6.3%	\$ 43	0.0%	\$ 0	Raw Water Deliveries
	Raw Water T&D Eng Othr	\$ 1,410	83.7%	\$ 1,180	16.3%	\$ 230	10.0%	\$ 141	6.3%	\$ 88	0.0%	\$ 1	Raw Water Deliveries
	Anderson Hydroelectrc Fclty Main	\$ 119	81.4%	\$ 97	18.6%	\$ 22	7.9%	\$ 9	10.8%	\$ 13	0.0%	\$ -	Anderson Water Deliveries Ratio
	Raw Water Trans & Dist Gen Mnt	\$ 3,159	83.7%	\$ 2,644	16.3%	\$ 515	10.0%	\$ 316	6.3%	\$ 198	0.0%	\$ 1	Raw Water Deliveries
	RW Corrosion Control	\$ 805	83.7%	\$ 674	16.3%	\$ 131	10.0%	\$ 81	6.3%	\$ 50	0.0%	\$ 0	Raw Water Deliveries
	Total: Raw Water Transmission & Distribution	\$ 19,287		\$ 15,035		\$ 4,252		\$ 2,641		\$ 1,603		\$ 8	
Water Treatment and Treated Water Transmission & Distribution	Environmental Compliance Support	\$ 710	100.0%	\$ 710	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Treatment Plant Process & Commissioning	\$ 945	100.0%	\$ 945	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	W T General Water Quality	\$ 2,957	100.0%	\$ 2,957	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Water Treatment Plant - Engineering Other	\$ 436	100.0%	\$ 436	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	PWTP Operations General	\$ 8,297	100.0%	\$ 8,297	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Penitencia WTP General Maint	\$ 3,643	100.0%	\$ 3,643	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	STWTP - General Operations	\$ 8,410	100.0%	\$ 8,410	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Santa Teresa Wtr General Maint	\$ 4,242	100.0%	\$ 4,242	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	RWTP General Operations	\$ 10,864	100.0%	\$ 10,864	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Rinconada WTP General Maint	\$ 4,960	100.0%	\$ 4,960	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Wtr District Laboratory	\$ 7,471	91.0%	\$ 6,795	9.0%	\$ 676	8.3%	\$ 619	0.7%	\$ 52	0.1%	\$ 5	Lab Analyses
	SF/SCVWD Intertie General Oper	\$ 185	100.0%	\$ 185	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Campbell Wellfield Operations	\$ 106	100.0%	\$ 106	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Campbell Wellfield Maintenance	\$ 148	100.0%	\$ 148	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Treated Water Ctrl & Elec Eng	\$ 3,346	100.0%	\$ 3,346	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	SF/SCVWD Intertie General Maint	\$ 305	100.0%	\$ 305	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Treated Water T&D IPU Ops Eng	\$ 900	100.0%	\$ 900	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
	Treated Water T&D Gen Maint	\$ 1,673	100.0%	\$ 1,673	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit
TW T&D Corrosion Control	\$ 663	100.0%	\$ 663	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit	
	Total: Water Treatment and Treated Water Transmission & Distribution	\$ 60,261		\$ 59,586		\$ 676		\$ 619		\$ 52		\$ 5	

Appendices

APPENDIX B – BASIS OF COST ALLOCATIONS BETWEEN NORTH AND SOUTH ZONES ... CONTINUED

Cost Center	Project Name	Allocations Between North and South												Basis of Allocation
		Total County	North County W-2		South County									
					Total South County		Zone W-5		Zone W-7		Zone W-8			
			\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	% Allocation	\$ Allocation	
Administration & General	Unscoped Operation Activities	\$ 150	76%	\$ 114	23.8%	\$ 36	18.3%	\$ 27	5.1%	\$ 8	0.4%	\$ 1	Water Usage Ratio	
	Asset Protection Support	\$ 1,434	95%	\$ 1,362	5.0%	\$ 72	3.9%	\$ 56	1.1%	\$ 16	0.1%	\$ 1	Program Benefit Calculation	
	Electrical Power Support	\$ 246	98%	\$ 242	1.5%	\$ 4	1.2%	\$ 3	0.3%	\$ 1	0.0%	\$ 0	Labor Hours	
	Grants Management	\$ 959	58%	\$ 553	42.3%	\$ 405	32.6%	\$ 312	9.1%	\$ 87	0.7%	\$ 6	Program Benefit Calculation	
	Integrated Regional Water Mgmt	\$ 91	76%	\$ 69	23.8%	\$ 22	18.3%	\$ 17	5.1%	\$ 5	0.4%	\$ 0	Water Usage Ratio	
	Residntl Rental Exp San Pedro, MH	\$ 49	0%	\$ -	100.0%	\$ 49	100.0%	\$ 49	0.0%	\$ -	0.0%	\$ -	Benefits only South County	
	Rent Exp Coyote	\$ 230	0%	\$ -	100.0%	\$ 230	0.0%	\$ -	100.0%	\$ 230	0.0%	\$ -	No South County Benefit	
	WUE Administration	\$ 12,128	76%	\$ 9,241	23.8%	\$ 2,887	18.3%	\$ 2,220	5.1%	\$ 622	0.4%	\$ 45	Water Usage Ratio	
	District Asset Management Framework	\$ 2,448	76%	\$ 1,865	23.8%	\$ 583	18.3%	\$ 448	5.1%	\$ 126	0.4%	\$ 9	No South County Benefit	
	Climate Change Adaptation/Mitg	\$ 197	76%	\$ 150	23.8%	\$ 47	18.3%	\$ 36	5.1%	\$ 10	0.4%	\$ 1	Water Usage Ratio	
	Office of Integrated Wtr Mgmt	\$ 1,985	76%	\$ 1,512	23.8%	\$ 472	18.3%	\$ 363	5.1%	\$ 102	0.4%	\$ 7	Program Benefit Calculation	
	Lands Management Program	\$ 610	76%	\$ 465	23.8%	\$ 145	18.3%	\$ 112	5.1%	\$ 31	0.4%	\$ 2	Program Benefit Calculation	
	Workforce Development Technical Training Program	\$ 614	76%	\$ 468	23.8%	\$ 146	18.3%	\$ 112	5.1%	\$ 32	0.4%	\$ 2	No South County Benefit	
	Welding Services	\$ 604	98%	\$ 593	1.7%	\$ 10	1.3%	\$ 8	0.4%	\$ 2	0.0%	\$ 0	Program Benefit Calculation	
	W2 W5 Wtr Revenue Program	\$ 2,312	37%	\$ 856	63.0%	\$ 1,457	48.0%	\$ 1,109	14.0%	\$ 324	1.0%	\$ 24	Labor Hours	
	Water Use Measurement General	\$ 2,531	52%	\$ 1,325	47.6%	\$ 1,206	40.4%	\$ 1,023	5.3%	\$ 134	1.9%	\$ 49	Labor Hours	
	Long Term Financial Planning	\$ 683	76%	\$ 520	23.8%	\$ 163	18.3%	\$ 125	5.1%	\$ 35	0.4%	\$ 3	Water Usage Ratio	
	Water Utility Customer Relations	\$ 1,050	94%	\$ 981	6.5%	\$ 68	6.5%	\$ 68	0.0%	\$ -	0.0%	\$ -	Population	
	WUE Long-term Planning	\$ 3,367	76%	\$ 2,565	23.8%	\$ 802	18.3%	\$ 616	5.1%	\$ 173	0.4%	\$ 13	Water Usage Ratio	
	Water Resources EnvPlng and Permitting	\$ 2,448	94%	\$ 2,301	6.0%	\$ 147	4.6%	\$ 113	1.3%	\$ 32	0.1%	\$ 2	Program Benefit Calculation	
	SCADA Network Administration	\$ 960	84%	\$ 803	16.3%	\$ 157	10.0%	\$ 96	6.3%	\$ 60	0.0%	\$ 0	Raw Water Deliveries	
	Emergency Preparednes Prog (50% WU)	\$ 1,518	94%	\$ 1,419	6.5%	\$ 99	6.5%	\$ 99	0.0%	\$ -	0.0%	\$ -	Population	
	Tree Maintenance Program	\$ 457	76%	\$ 348	23.8%	\$ 109	18.3%	\$ 84	5.1%	\$ 23	0.4%	\$ 2	Water Usage Ratio	
	InterAgency Urban Runoff Program	\$ 574	84%	\$ 481	16.3%	\$ 94	10.0%	\$ 57	6.3%	\$ 36	0.0%	\$ 0	Raw Water Deliveries	
	HAZMAT Emergency Response	\$ 103	92%	\$ 95	7.5%	\$ 8	6.5%	\$ 7	0.7%	\$ 1	0.3%	\$ 0	Emergency Response Events	
	Hydrologic Data Msrmt & Mgmt Alloc-50% WU	\$ 1,391	66%	\$ 915	34.2%	\$ 476	5.9%	\$ 82	16.4%	\$ 228	11.9%	\$ 166	Stream Gauge Location	
	Warehouse Svcs 50% WU	\$ 716	76%	\$ 546	23.8%	\$ 170	18.3%	\$ 131	5.1%	\$ 37	0.4%	\$ 3	Water Usage Ratio	
	X Valley Subsidence Survey	\$ 444	95%	\$ 423	4.9%	\$ 22	3.0%	\$ 13	1.1%	\$ 5	0.8%	\$ 3	Program Benefit Calculation	
	District Real Property Admin	\$ 554	76%	\$ 422	23.8%	\$ 132	18.3%	\$ 101	5.1%	\$ 28	0.4%	\$ 2	Program Benefit Calculation	
	Adjustment for Anticipated Budget Changes	\$ -	100%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	No South County Benefit	
	Total: Administration & General	\$ 40,851		\$ 30,636		\$ 10,216		\$ 7,487		\$ 2,386		\$ 342		
	GRAND TOTAL	\$ 283,578		\$ 253,019		\$ 30,559		\$ 19,906		\$ 10,157		\$ 496		

Note: San Felipe Reach 3 Projects (Source of Supply) have been adjusted for the Coyote Pumping Plant costs.

Appendices

APPENDIX C – SOUTH COUNTY ZONE W-5 CAPITAL COST RECOVERY (in Thousands \$)

(In Thousands \$)						
Project Name	Total Project Cost	South County Zone W-5 %	South County Zone W-5 Cost	FY 2025 Cost Recovery*	Year Cost Recovery is Complete	Basis of Allocation to South County Zone W-5
San Pedro Recharge House	\$ 700	100.0%	\$ 700	\$ 47	FY 31	Benefits Only South County
South County Recycling I	\$ 7,232	100.0%	\$ 7,232	\$ 481	FY 31	Benefits Only South County Zone W-5
South County Recycling II	\$ 118	100.0%	\$ 118	\$ 8	FY 33	Benefits Only South County Zone W-5
South County Recycling III	\$ 1,721	100.0%	\$ 1,721	\$ 115	FY 33	Benefits Only South County Zone W-5
Water Banking Rights	\$ 6,226	3.6%	\$ 225	\$ 15	FY 35	Total Imported Water Ratio
Dam Instrumentation	\$ 6,243	16.0%	\$ 999	\$ 66	FY 41	Program Benefit Calculation
Geodetic Control Maintenance	\$ 236	26.7%	\$ 63	\$ 4	FY 36	Survey Analysis
Dam Maintenance Mitigation	\$ 244	16.7%	\$ 41	\$ 3	FY 45	Program Benefit Calculation
South County Recycled Water Masterplan, Immediate Term, SCRWA Filter Upgrade	\$ 3,257	100.0%	\$ 3,257	\$ 216	FY 37	Benefits Only South County Zone W-5
South County Recycled Water Masterplan, Short-Term Implementation 1A	\$ 4,314	100.0%	\$ 4,314	\$ 286	FY 42	Benefits Only South County Zone W-5
South County Recycled Water Masterplan, Short-Term Implementation 1B	\$ 45,404	100.0%	\$ 45,404	\$ 2,316	FY 52	Benefits Only South County Zone W-5
South County Recycled Water Fund	\$ 8,678	100.0%	\$ 8,678	\$ 450	FY 50	Benefits Only South County Zone W-5
Water Banking FY 2006	\$ 18,895	4.1%	\$ 769	\$ 51	FY 36	Total Imported Water Ratio
San Felipe Division Capital	\$ 12,375	5.4%	\$ 668	\$ 668	N/A	Repayment Cost Distribution
Pacheco Conduit Inspection and Rehabilitation	\$ 6,696	7.9%	\$ 526	\$ 27	FY 49	CVP Imported Water Ratio
Pacheco Pumping Plant Regulating Tank Recoating	\$ 2,550	7.7%	\$ 196	\$ 13	FY 42	CVP Imported Water Ratio
San Felipe Communications Cable Replacement	\$ 235	7.7%	\$ 18	\$ 1	FY 42	CVP Imported Water Ratio
Small Caps, San Felipe Reach 1	\$ 2,504	7.9%	\$ 197	\$ 197	N/A	CVP Imported Water Ratio
Santa Clara Tunnel Landslide	\$ 4,509	6.8%	\$ 308	\$ 20	FY 39	CVP Imported Water Ratio
Santa Clara Tunnel Landslide Mitigation	\$ 217	7.6%	\$ 17	\$ 1	FY 39	CVP Imported Water Ratio
Small Caps, San Felipe Reach 3	\$ 618	7.9%	\$ 49	\$ 49	N/A	CVP Imported Water Ratio
Coyote Pumping Plant Warehouse	\$ 9,844	18.3%	\$ 1,802	\$ 93	FY 53	Water Usage Ratio
Water Infrastructure Reliability Program	\$ 2,134	1.1%	\$ 24	\$ 2	FY 36	Program Benefit Calculation
Water Infrastructure Baseline Improvement	\$ 2,403	2.7%	\$ 66	\$ 4	FY 38	Spare Pipe Usage
Cross Valley Pipeline Extension	\$ 13,747	7.9%	\$ 1,079	\$ 56	FY 53	CVP Imported Water Ratio
Coyote Dam Control Building Improvements	\$ 576	8.9%	\$ 51	\$ 3	FY 42	Anderson Deliveries Ratio
Pacheco Pumping Plant ASD Replacement	\$ 18,518	8.4%	\$ 1,557	\$ 103	FY 45	CVP Imported Water Ratio
South County Recycled Water Pipeline Land Rights	\$ 7,287	100.0%	\$ 7,287	\$ 372	FY 54	Benefits Only South County Zone W-5
Radio Repeater Infill	\$ 5	8.5%	\$ 0	\$ 0	FY 42	Water Usage Ratio
Santa Clara Conduit Rehabilitation	\$ 1,814	7.7%	\$ 139	\$ 9	FY 42	CVP Imported Water Ratio
Raw Water Control System	\$ 9,188	2.8%	\$ 260	\$ 17	FY 37	Program Benefit Calculation
Small Caps, Raw Water Transmission and Distribution	\$ 2,274	10.0%	\$ 228	\$ 228	N/A	Raw Water Usage
Main and Madrone Pipeline Restoration	\$ 11,378	87.9%	\$ 10,001	\$ 519	FY 48	Benefits Only South County
Inf Reliability Master Plan	\$ 2,065	9.4%	\$ 194	\$ 12	FY 46	Water Usage Ratio
Water Protection	\$ 11,387	1.7%	\$ 199	\$ 13	FY 45	Program Benefit Calculation
Microwave Telecommunications	\$ 4,595	7.0%	\$ 320	\$ 21	FY 44	Water Usage Ratio
5-year Pipeline Rehabilitation	\$ 22,059	3.5%	\$ 775	\$ 49	FY 47	Program Benefit Calculation
Pipeline Hydraulic Reliability Upgrades	\$ 335	1.7%	\$ 6	\$ 0	FY 45	Program Benefit Calculation
WTP WQL Network Equipment	\$ 2,021	18.3%	\$ 370	\$ 370	N/A	Water Usage Ratio
Winfield Capital Improvement	\$ 481	9.7%	\$ 47	\$ 2	FY 48	Water Usage Ratio
Corp Yard Relocation	\$ 26	7.8%	\$ 2	\$ 0	FY 40	Water Usage Ratio
ISMP CMMS/ERP/WRIS	\$ 5,802	7.5%	\$ 433	\$ 29	FY 40	Water Usage Ratio
Peoplesoft Upgrade	\$ 78	7.5%	\$ 6	\$ 0	FY 39	Water Usage Ratio
Fleet Building Improvement	\$ 2,512	8.6%	\$ 216	\$ 14	FY 44	Water Usage Ratio
Fleet and Facility Annex Improvements	\$ 3,023	18.3%	\$ 553	\$ 28	FY 54	Water Usage Ratio
Peoplesoft System Upgrade & Expansion	\$ 1,217	9.4%	\$ 114	\$ 7	FY 46	Water Usage Ratio
Capital Construction Management System	\$ 2,806	18.3%	\$ 514	\$ 28	FY 52	Water Usage Ratio
Uvas Property Acquisition	\$ 1,251	97.7%	\$ 1,223	\$ 77	FY 46	Benefits Only South County
IT Capital Fund Transfers	\$ 4,520	18.3%	\$ 827	\$ 827	N/A	Water Usage Ratio
CPSD/TSD Admin Amortization	\$ 6,238	10.5%	\$ 658	\$ 658	N/A	Total Capital Cost Ratio
Grand Total	\$ 282,555		\$ 104,448	\$ 8,576		

* Capital projects that benefit South County are paid for over the life of the project (typically 30 years) beginning when the project is completed.

Appendices

APPENDIX C (CONTINUED) – SOUTH COUNTY ZONE W-7 CAPITAL COST RECOVERY (in Thousands \$)

(In Thousands \$)						
	Total Project Cost	South County Zone W-7 %	South County Zone W-7 Cost	FY 2025 Cost Recovery*	Year Cost Recovery is Complete	Basis of Allocation to South County Zone W-7
San Pedro Recharge House	\$ 700	0.0%	\$ -	\$ -	FY 31	Benefits Only South County
South County Recycling I	\$ 7,232	0.0%	\$ -	\$ -	FY 31	Benefits Only South County Zone W-5
South County Recycling II	\$ 118	0.0%	\$ -	\$ -	FY 33	Benefits Only South County Zone W-5
South County Recycling III	\$ 1,721	0.0%	\$ -	\$ -	FY 33	Benefits Only South County Zone W-5
Water Banking Rights	\$ 6,226	4.4%	\$ 273	\$ 18	FY 35	Total Imported Water Ratio
Dam Instrumentation	\$ 6,243	4.6%	\$ 289	\$ 19	FY 41	Program Benefit Calculation
Geodetic Control Maintenance	\$ 236	14.0%	\$ 33	\$ 2	FY 36	Survey Analysis
Dam Maintenance Mitigation	\$ 244	4.8%	\$ 12	\$ 1	FY 45	Program Benefit Calculation
South County Recycled Water Masterplan, Immediate Term, SCRWA Filter Upgrade	\$ 3,257	0.0%	\$ -	\$ -	FY 37	Benefits Only South County Zone W-5
South County Recycled Water Masterplan, Short-Term Implementation 1A	\$ 4,314	0.0%	\$ -	\$ -	FY 42	Benefits Only South County Zone W-5
South County Recycled Water Masterplan, Short-Term Implementation 1B	\$ 45,404	0.0%	\$ -	\$ -	FY 52	Benefits Only South County Zone W-5
South County Recycled Water Fund	\$ 8,678	0.0%	\$ -	\$ -	FY 50	Benefits Only South County Zone W-5
Water Banking FY 2006	\$ 18,895	4.9%	\$ 932	\$ 62	FY 36	Total Imported Water Ratio
San Felipe Division Capital	\$ 12,375	7.4%	\$ 916	\$ 916	N/A	Repayment Cost Distribution
Pacheco Conduit Inspection and Rehabilitation	\$ 6,696	10.8%	\$ 722	\$ 37	FY 49	CVP Imported Water Ratio
Pacheco Pumping Plant Regulating Tank Recoating	\$ 2,550	9.3%	\$ 238	\$ 16	FY 42	CVP Imported Water Ratio
San Felipe Communications Cable Replacement	\$ 235	9.3%	\$ 22	\$ 1	FY 42	CVP Imported Water Ratio
Small Caps, San Felipe Reach 1	\$ 2,504	10.8%	\$ 270	\$ 270	N/A	CVP Imported Water Ratio
Santa Clara Tunnel Landslide	\$ 4,509	8.3%	\$ 373	\$ 25	FY 39	CVP Imported Water Ratio
Santa Clara Tunnel Landslide Mitigation	\$ 217	9.3%	\$ 20	\$ 1	FY 39	CVP Imported Water Ratio
Small Caps, San Felipe Reach 3	\$ 618	10.8%	\$ 67	\$ 67	N/A	CVP Imported Water Ratio
Coyote Pumping Plant Warehouse	\$ 9,844	5.1%	\$ 505	\$ 26	FY 53	Water Usage Ratio
Water Infrastructure Reliability Program	\$ 2,134	0.3%	\$ 7	\$ 0	FY 36	Program Benefit Calculation
Water Infrastructure Baseline Improvement	\$ 2,403	0.8%	\$ 19	\$ 1	FY 38	Spare Pipe Usage
Cross Valley Pipeline Extension	\$ 13,747	10.8%	\$ 1,482	\$ 77	FY 53	CVP Imported Water Ratio
Coyote Dam Control Building Improvements	\$ 576	10.7%	\$ 62	\$ 4	FY 42	Anderson Deliveries Ratio
Pacheco Pumping Plant ASD Replacement	\$ 18,518	10.2%	\$ 1,888	\$ 125	FY 45	CVP Imported Water Ratio
South County Recycled Water Pipeline Land Rights	\$ 7,287	0.0%	\$ -	\$ -	FY 54	Benefits Only South County Zone W-5
Radio Repeater Infill	\$ 5	2.4%	\$ 0	\$ 0	FY 42	Water Usage Ratio
Santa Clara Conduit Rehabilitation	\$ 1,814	9.3%	\$ 169	\$ 11	FY 42	CVP Imported Water Ratio
Raw Water Control System	\$ 9,188	1.5%	\$ 136	\$ 9	FY 37	Program Benefit Calculation
Small Caps, Raw Water Transmission and Distribution	\$ 2,274	6.3%	\$ 142	\$ 142	N/A	Raw Water Usage
Main and Madrone Pipeline Restoration	\$ 11,378	12.1%	\$ 1,377	\$ 71	FY 48	Benefits Only South County
Inf Reliability Master Plan	\$ 2,065	2.7%	\$ 56	\$ 4	FY 46	Water Usage Ratio
Water Protection	\$ 11,387	0.5%	\$ 57	\$ 4	FY 45	Program Benefit Calculation
Microwave Telecommunications	\$ 4,595	2.0%	\$ 93	\$ 6	FY 44	Water Usage Ratio
5-year Pipeline Rehabilitation	\$ 22,059	1.0%	\$ 221	\$ 14	FY 47	Program Benefit Calculation
Pipeline Hydraulic Reliability Upgrades	\$ 335	0.5%	\$ 2	\$ 0	FY 45	Program Benefit Calculation
WTP WQL Network Equipment	\$ 2,021	5.1%	\$ 104	\$ 104	N/A	Water Usage Ratio
Winfield Capital Improvement	\$ 481	2.8%	\$ 13	\$ 1	FY 48	Water Usage Ratio
Corp Yard Relocation	\$ 26	2.2%	\$ 1	\$ 0	FY 40	Water Usage Ratio
ISMP CMMS/ERP/WRIS	\$ 5,802	2.2%	\$ 125	\$ 8	FY 40	Water Usage Ratio
Peoplesoft Upgrade	\$ 78	2.2%	\$ 2	\$ 0	FY 39	Water Usage Ratio
Fleet Building Improvement	\$ 2,512	2.5%	\$ 63	\$ 4	FY 44	Water Usage Ratio
Fleet and Facility Annex Improvements	\$ 3,023	5.1%	\$ 155	\$ 8	FY 54	Water Usage Ratio
Peoplesoft System Upgrade & Expansion	\$ 1,217	2.7%	\$ 33	\$ 2	FY 46	Water Usage Ratio
Capital Construction Management System	\$ 2,806	5.1%	\$ 144	\$ 8	FY 52	Water Usage Ratio
Uvas Property Acquisition	\$ 1,251	0.0%	\$ -	\$ -	FY 46	Benefits Only South County
IT Capital Fund Transfers	\$ 4,520	5.1%	\$ 232	\$ 232	N/A	Water Usage Ratio
CPSD/TSD Admin Amortization	\$ 6,238	3.1%	\$ 191	\$ 191	N/A	Total Capital Cost Ratio
Grand Total	\$ 282,555		\$ 11,443	\$ 2,487		

* Capital projects that benefit South County are paid for over the life of the project (typically 30 years) beginning when the project is completed.

Appendices

APPENDIX C (CONTINUED) – SOUTH COUNTY ZONE W-8 CAPITAL COST RECOVERY (in Thousands \$)

(In Thousands \$)						
	Total Project Cost	South County Zone W-8 %	South County Zone W-8 Cost	FY 2025 Cost Recovery*	Year Cost Recovery is Complete	Basis of Allocation to South County Zone W-8
San Pedro Recharge House	\$ 700	0.0%	\$ -	\$ -	FY 31	Benefits Only South County
South County Recycling I	\$ 7,232	0.0%	\$ -	\$ -	FY 31	Benefits Only South County Zone W-5
South County Recycling II	\$ 118	0.0%	\$ -	\$ -	FY 33	Benefits Only South County Zone W-5
South County Recycling III	\$ 1,721	0.0%	\$ -	\$ -	FY 33	Benefits Only South County Zone W-5
Water Banking Rights	\$ 6,226	0.0%	\$ -	\$ -	FY 35	Total Imported Water Ratio
Dam Instrumentation	\$ 6,243	0.4%	\$ 23	\$ 2	FY 41	Program Benefit Calculation
Geodetic Control Maintenance	\$ 236	0.3%	\$ 1	\$ 0	FY 36	Survey Analysis
Dam Maintenance Mitigation	\$ 244	0.4%	\$ 1	\$ 0	FY 45	Program Benefit Calculation
South County Recycled Water Masterplan, Immediate Term, SCRWA Filter Upgrade	\$ 3,257	0.0%	\$ -	\$ -	FY 37	Benefits Only South County Zone W-5
South County Recycled Water Masterplan, Short-Term Implementation 1A	\$ 4,314	0.0%	\$ -	\$ -	FY 42	Benefits Only South County Zone W-5
South County Recycled Water Masterplan, Short-Term Implementation 1B	\$ 45,404	0.0%	\$ -	\$ -	FY 52	Benefits Only South County Zone W-5
South County Recycled Water Fund	\$ 8,678	0.0%	\$ -	\$ -	FY 50	Benefits Only South County Zone W-5
Water Banking FY 2006	\$ 18,895	0.0%	\$ -	\$ -	FY 36	Total Imported Water Ratio
San Felipe Division Capital	\$ 12,375	0.0%	\$ -	\$ -	N/A	Repayment Cost Distribution
Pacheco Conduit Inspection and Rehabilitation	\$ 6,696	0.0%	\$ -	\$ -	FY 49	CVP Imported Water Ratio
Pacheco Pumping Plant Regulating Tank Recoating	\$ 2,550	0.0%	\$ -	\$ -	FY 42	CVP Imported Water Ratio
San Felipe Communications Cable Replacement	\$ 235	0.0%	\$ -	\$ -	FY 42	CVP Imported Water Ratio
Small Caps, San Felipe Reach 1	\$ 2,504	0.0%	\$ -	\$ -	N/A	CVP Imported Water Ratio
Santa Clara Tunnel Landslide	\$ 4,509	0.0%	\$ -	\$ -	FY 39	CVP Imported Water Ratio
Santa Clara Tunnel Landslide Mitigation	\$ 217	0.0%	\$ -	\$ -	FY 39	CVP Imported Water Ratio
Small Caps, San Felipe Reach 3	\$ 618	0.0%	\$ -	\$ -	N/A	CVP Imported Water Ratio
Coyote Pumping Plant Warehouse	\$ 9,844	0.4%	\$ 37	\$ 2	FY 53	Water Usage Ratio
Water Infrastructure Reliability Program	\$ 2,134	0.0%	\$ 1	\$ 0	FY 36	Program Benefit Calculation
Water Infrastructure Baseline Improvement	\$ 2,403	0.1%	\$ 2	\$ 0	FY 38	Spare Pipe Usage
Cross Valley Pipeline Extension	\$ 13,747	0.0%	\$ -	\$ -	FY 53	CVP Imported Water Ratio
Coyote Dam Control Building Improvements	\$ 576	0.0%	\$ -	\$ -	FY 42	Anderson Deliveries Ratio
Pacheco Pumping Plant ASD Replacement	\$ 18,518	0.0%	\$ -	\$ -	FY 45	CVP Imported Water Ratio
South County Recycled Water Pipeline Land Rights	\$ 7,287	0.0%	\$ -	\$ -	FY 54	Benefits Only South County Zone W-5
Radio Repeater Infill	\$ 5	0.2%	\$ 0	\$ 0	FY 42	Water Usage Ratio
Santa Clara Conduit Rehabilitation	\$ 1,814	0.0%	\$ -	\$ -	FY 42	CVP Imported Water Ratio
Raw Water Control System	\$ 9,188	0.0%	\$ 2	\$ 0	FY 37	Program Benefit Calculation
Small Caps, Raw Water Transmission and Distribution	\$ 2,274	0.0%	\$ 1	\$ 1	N/A	Raw Water Usage
Main and Madrone Pipeline Restoration	\$ 11,378	0.0%	\$ -	\$ -	FY 48	Benefits Only South County
Inf Reliability Master Plan	\$ 2,065	0.2%	\$ 4	\$ 0	FY 46	Water Usage Ratio
Water Protection	\$ 11,387	0.0%	\$ 5	\$ 0	FY 45	Program Benefit Calculation
Microwave Telecommunications	\$ 4,595	0.2%	\$ 7	\$ 0	FY 44	Water Usage Ratio
5-year Pipeline Rehabilitation	\$ 22,059	0.1%	\$ 18	\$ 1	FY 47	Program Benefit Calculation
Pipeline Hydraulic Reliability Upgrades	\$ 335	0.0%	\$ 0	\$ 0	FY 45	Program Benefit Calculation
WTP WQL Network Equipment	\$ 2,021	0.4%	\$ 8	\$ 8	N/A	Water Usage Ratio
Winfield Capital Improvement	\$ 481	0.2%	\$ 1	\$ 0	FY 48	Water Usage Ratio
Corp Yard Relocation	\$ 26	0.2%	\$ 0	\$ 0	FY 40	Water Usage Ratio
ISMP CMMS/ERP/WRIS	\$ 5,802	0.2%	\$ 10	\$ 1	FY 40	Water Usage Ratio
Peoplesoft Upgrade	\$ 78	0.2%	\$ 0	\$ 0	FY 39	Water Usage Ratio
Fleet Building Improvement	\$ 2,512	0.0%	\$ -	\$ -	FY 44	Water Usage Ratio
Fleet and Facility Annex Improvements	\$ 3,023	0.4%	\$ 11	\$ 1	FY 54	Water Usage Ratio
Peoplesoft System Upgrade & Expansion	\$ 1,217	0.2%	\$ 3	\$ 0	FY 46	Water Usage Ratio
Capital Construction Management System	\$ 2,806	0.4%	\$ 10	\$ 1	FY 52	Water Usage Ratio
Uvas Property Acquisition	\$ 1,251	2.3%	\$ 28	\$ 2	FY 46	Benefits Only South County
IT Capital Fund Transfers	\$ 4,520	0.4%	\$ 17	\$ 17	N/A	Water Usage Ratio
CPSD/TSD Admin Amortization	\$ 6,238	0.0%	\$ 3	\$ 3	N/A	Total Capital Cost Ratio
Grand Total	\$ 282,555		\$ 193	\$ 38		

* Capital projects that benefit South County are paid for over the life of the project (typically 30 years) beginning when the project is completed.

Appendices

APPENDIX D – ACRONYMS

ADSR	Anderson Dam Seismic Retrofit Project
ADTP	Anderson Dam Tunnel Project
AF	Acre-Foot or Acre-Feet
AFY	Acre-Feet of Year
AG	Agriculture
AMM	Avoidance and Minimization Measures
AWPF	Advanced Water Purification Facility
Basin	San Joaquin Basin
Bay-Delta Plan	San Francisco/Sacramento-San Joaquin Delta Estuary
Board	Board of Directors
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CIP	Capital Improvement Program
CoRe Plan	Countywide Water Reuse Master Plan
CVP	Central Valley Project
CWIFP	U.S. Army Corps of Engineers Water Infrastructure Financing Program
Delta	Sacramento-San Joaquin Delta
DPR	Direct Potable Reuse
DSOD	Department of Water Resources, Division of Safety of Dams
DWR	Department of Water Resources
EIR	Environmental Impact Report
ESA	Endangered Species Act
FAHCE	Fish and Aquatic Habitat Collaborative Effort
FERC	Federal Energy Regulatory Commission
FHRP	FAHCE Fish Habitat Restoration Plan
FOCP	FERC Order Compliance Project
FWS	Fish and Wildlife Service
FY	Fiscal Year
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GW	Groundwater
GWMP	Groundwater Management Plan
HCP	Habitat Conservation Plan
HH&S	Human Health and Safety
IPR	Indirect Potable Reuse
JPA	Joint Powers Authority
Llagas Subbasin	Groundwater Subbasin as defined by DWR bulletin 118-2003 and as shown in map of Groundwater Subbasins, area south of Cochrane Road
LVE	Los Vaqueros Expansion
MAP	Water Supply Master Plan's Monitoring and Assessment Program
MCED	Maximum Conditional Eligibility Determination
M&I	Municipal and Industrial
NMFS	National Marine Fisheries Service
NPR	Non-Potable Recycled

Appendices

APPENDIX D – ACRONYMS (CONTINUED)

North County	Northern Santa Clara County, north of Metcalf Road
P3	Public-Private Partnership
PHS	Public Health and Safety
Reclamation	Bureau of Reclamation
RFC	Raftelis Financial Consultants, Inc.
RW	Recycled Water
RWF	Regional Wastewater Facility
RWS	Recycled Water System
Santa Clara Subbasin	Groundwater Subbasin as defined by DWR bulletin 118-2003 and as shown in map of Groundwater Subbasins, area north of Cochrane Road and includes Coyote Valley
SBWR	South Bay Water Recycling
SCADA	Supervisory Control and Data Acquisition
SCRWA	South County Regional Wastewater Authority
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SLDMWA	San Luis & Delta-Mendota Water Authority
South County	Southern Santa Clara County, south of Metcalf Road
Strategic Plan	Water Conservation Strategic Plan
SW	Surface Water
SWP	State Water Project
SWRCB	State Water Resources Control Board
Three Creeks	Guadalupe River, Coyote Creek and Stevens Creek
TW	Treated Water
Valley Water	Santa Clara Valley Water District
WIFIA	Water Infrastructure Finance and Innovation Act
WSIP	Water Storage Investment Program

Appendices

APPENDIX E – MAPS

VALLEY WATER SYSTEM MAP

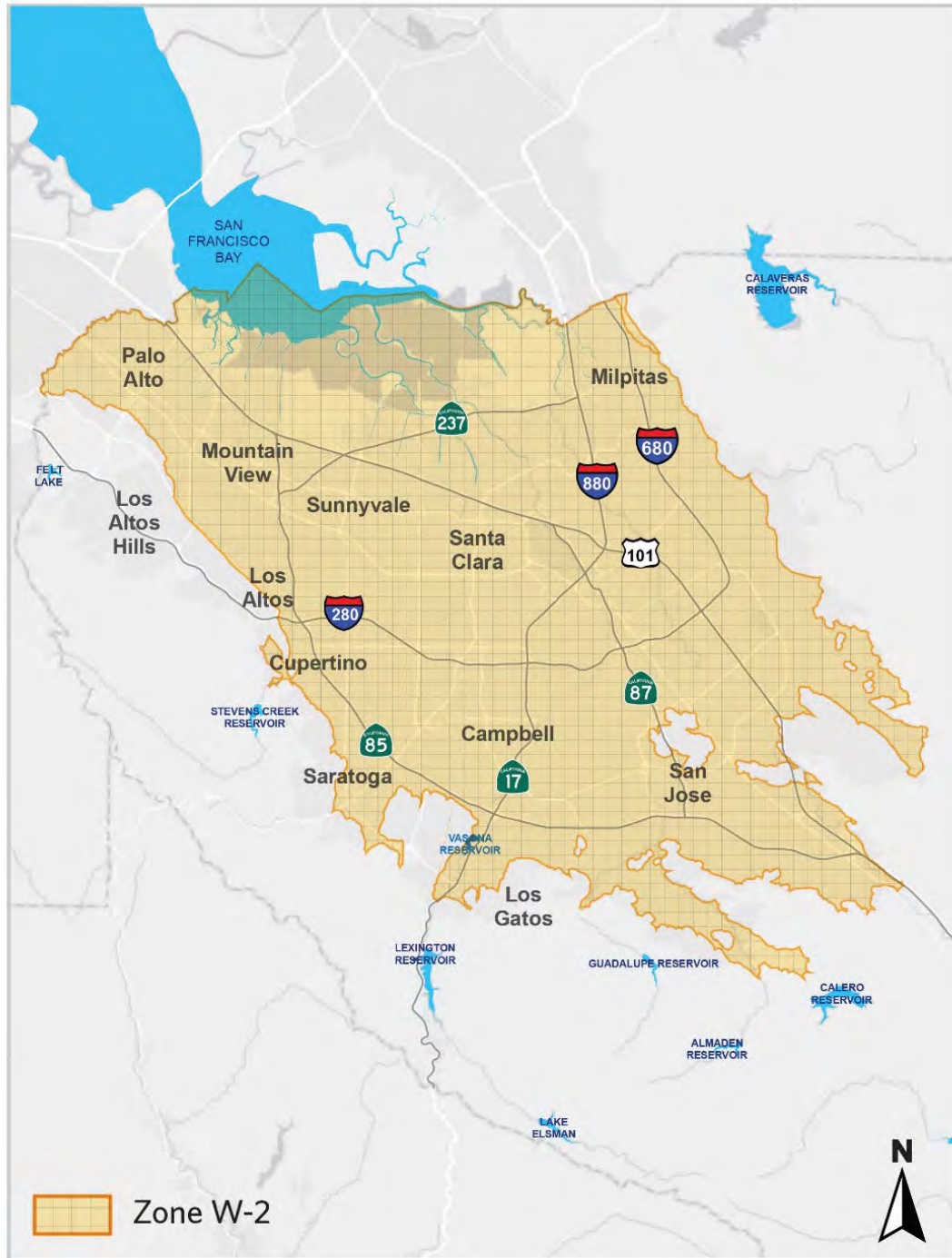
Water Supply Distribution
Map



Appendices

APPENDIX E – MAPS (CONTINUED)

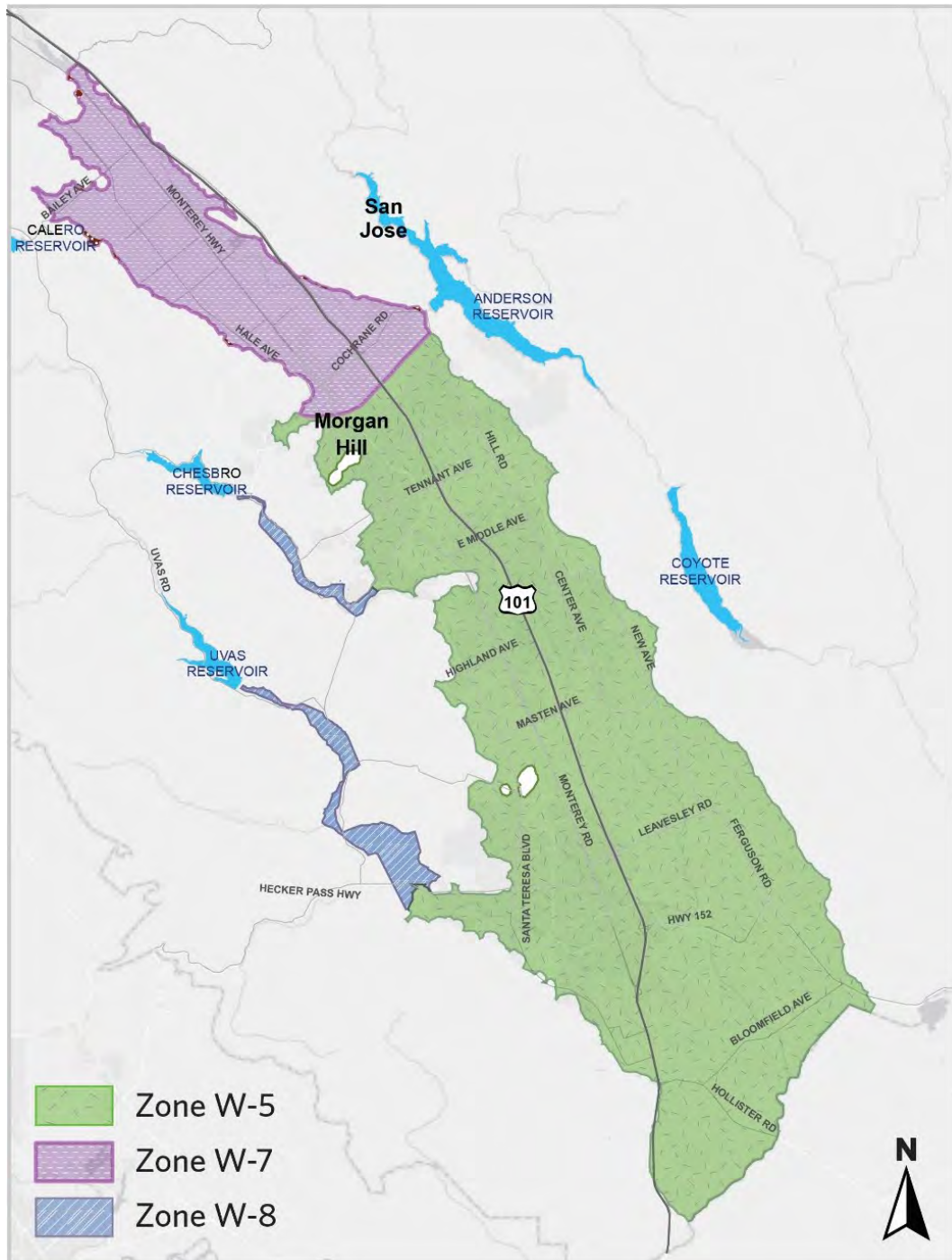
WATER UTILITY ZONE W-2 IN NORTH SANTA CLARA COUNTY



Appendices

APPENDIX E – MAPS (CONTINUED)

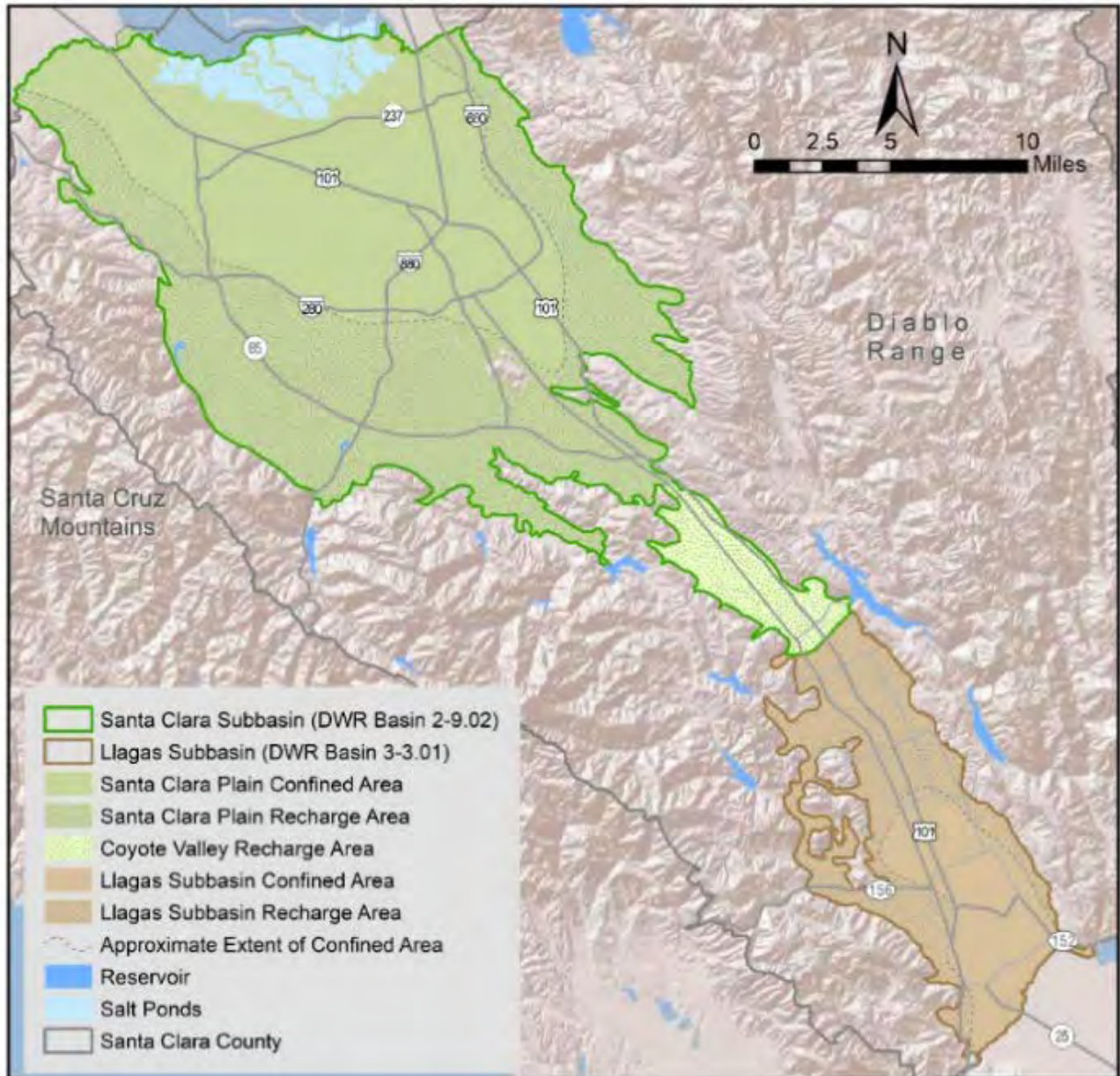
WATER UTILITY ZONES W-5, W-7, AND W-8 IN SOUTH SANTA CLARA COUNTY



Appendices

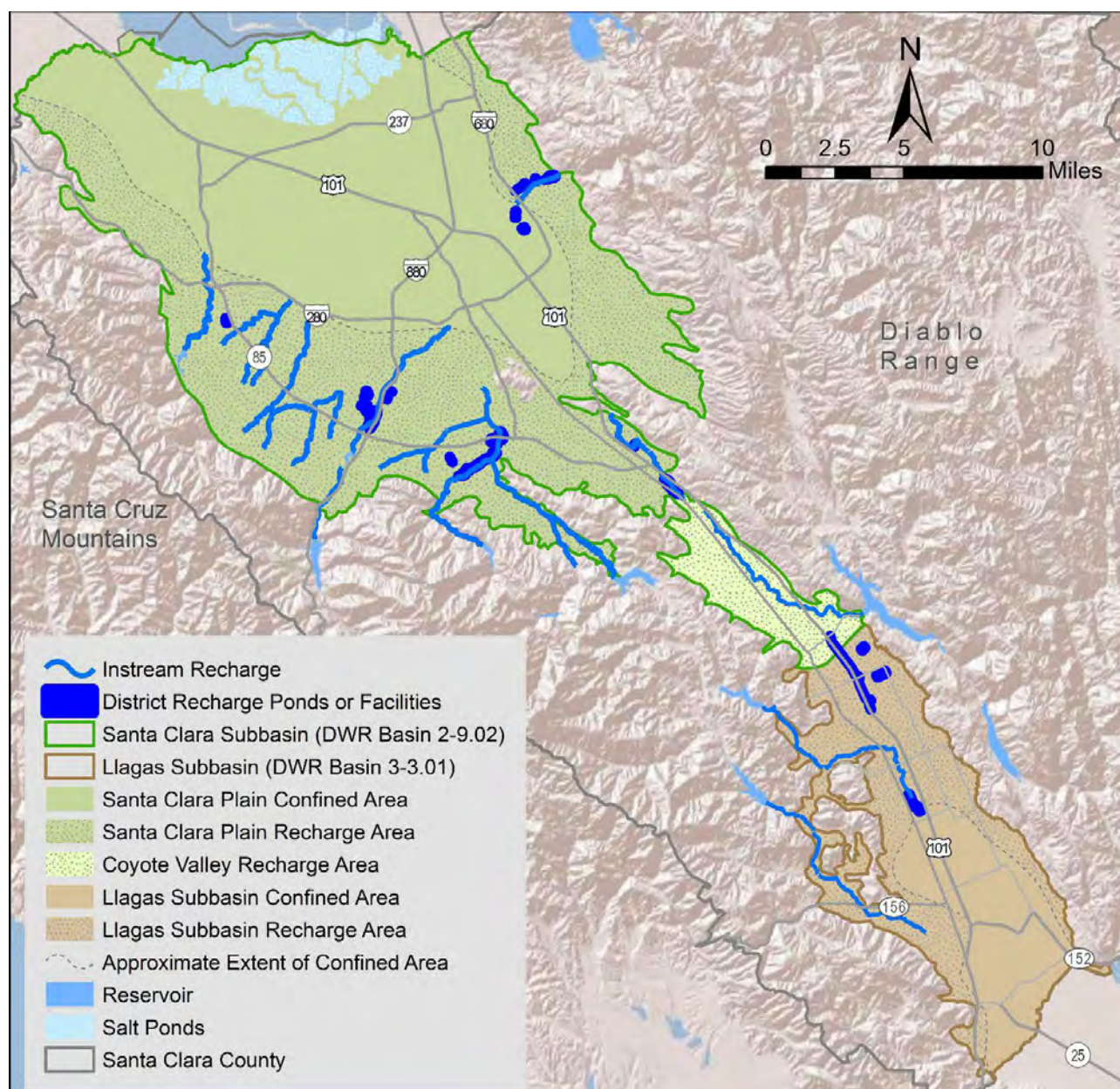
APPENDIX E – MAPS (CONTINUED)

SANTA CLARA AND LLAGAS SUBBASINS IN SANTA CLARA COUNTY



APPENDIX E – MAPS (CONTINUED)

GROUNDWATER RECHARGE FACILITIES IN THE SANTA CLARA AND LLAGAS SUBBASINS IN SANTA CLARA COUNTY



Appendices

APPENDIX F – GROUNDWATER PRODUCTION AND MANAGED RECHARGE BY GW BENEFIT ZONE (NORTH)

North County Charge Zone						
Calendar Year	Charge Zone	Groundwater Production, acre-feet			Managed Recharge	Recharge %
		Groundwater Agricultural (AF)	Groundwater Non Agricultural (AF)	Groundwater Total (AF)	Recharge (AF)	
Est. 2023	W2	700	53,500	54,200	87,900	162%
Prelim. 2022	W2	800	67,600	68,400	61,400	90%
2021	W2	900	78,600	79,500	38,200	48%
2020	W2	800	79,500	80,300	44,500	55%
2019	W2	324	56,840	57,164	43,100	75%
2018	W2	486	62,985	63,471	66,100	104%
2017	W2	312	69,295	69,607	66,200	95%
2016	W2	398	55,318	55,716	93,100	167%
2015	W2	556	65,340	65,896	28,300	43%
2014	W2	885	113,726	114,611	11,200	10%
2013	W2	502	94,774	95,276	53,900	57%
2012	W2	425	75,930	76,355	55,940	73%
2011	W2	279	71,008	71,287	54,820	77%
2010	W2	437	84,185	84,622	58,540	69%
2009	W2	605	97,233	97,838	63,000	64%
2008	W2	1,058	106,592	107,650	51,290	48%
2007	W2	1,032	108,771	109,803	58,000	53%
2006	W2	387	82,380	82,767	65,770	79%
2005	W2	834	86,615	87,449	69,200	79%
2004	W2	552	105,114	105,666	66,700	63%

Values are based on best available information and are refined as additional data becomes available. The Board adopted new and modified groundwater benefit zones that went into effect on July 1, 2020. Groundwater production shown for 2020 reflects the new/modified zones, and production for all other years reflects usage in the zones in effect at the time. Managed recharge reflects the volume applied on the land surface at Valley Water recharge facilities; subsurface flow is not considered in the above graph.

Appendices

APPENDIX F – GROUNDWATER PRODUCTION AND MANAGED RECHARGE BY GW BENEFIT ZONE (SOUTH)

South County Charge Zones						
Calendar Year	Charge Zone	Groundwater Production, acre-feet			Managed Recharge	Recharge %
		Groundwater Agricultural (AF)	Groundwater Non Agricultural (AF)	Groundwater Total (AF)	Recharge (AF)	
Est. 2023	W5	25,400	17,600	43,000	17,000	40%
	W7	3,400	10,800	14,200	14,600	103%
	W8	400	400	800	5,100	638%
	Subtotal	29,200	28,800	58,000	36,700	63%
Prelim. 2022	W5	25,400	17,900	43,300	12,000	28%
	W7	3,300	9,700	13,000	11,100	85%
	W8	400	400	800	6,700	838%
	Subtotal	29,100	28,000	57,100	29,800	52%
2021	W5	23,900	18,000	41,900	11,700	28%
	W7	3,300	9,800	13,100	17,100	131%
	W8	500	400	900	3,200	356%
	Subtotal	27,700	28,200	55,900	32,000	57%
2020	W5	21,900	19,100	41,000	12,700	31%
	W7	2,800	8,400	11,200	19,100	171%
	W8	500	400	900	5,600	622%
	Subtotal	25,200	27,900	53,100	37,400	70%
2019	W5	24,481	26,654	51,135	41,700	82%
2018	W5	26,610	28,461	55,071	34,600	63%
2017	W5	25,502	28,620	54,122	34,400	64%
2016	W5	25,321	26,293	51,614	46,700	90%
2015	W5	24,697	24,941	49,638	26,100	53%
2014	W5	25,906	28,578	54,484	15,000	28%
2013	W5	26,359	32,948	59,307	37,100	63%
2012	W5	24,934	30,892	55,825	40,790	73%
2011	W5	22,444	29,827	52,271	39,360	75%
2010	W5	22,037	30,249	52,286	42,210	81%
2009	W5	24,853	32,441	57,293	39,100	68%
2008	W5	28,341	33,478	61,819	36,100	58%
2007	W5	27,697	31,332	59,029	33,410	57%
2006	W5	24,492	30,336	54,828	30,440	56%
2005	W5	25,149	25,238	50,387	32,500	65%
2004	W5	27,547	25,563	53,110	31,000	58%

Values are based on best available information and are refined as additional data becomes available. The Board adopted new and modified groundwater benefit zones that went into effect on July 1, 2020. Groundwater production shown for 2020 reflects the new/modified zones, and production for all other years reflects usage in the zones in effect at the time. Managed recharge reflects the volume applied on the land surface; subsurface flow is not considered in the above graph.



Valley Water

Clean Water • Healthy Environment • Flood Protection

Santa Clara Valley Water District
5750 Almaden Expressway, San José, CA 95118-3686
Phone: (408) 265-2600 Fax: (408) 266-0271
www.valleywater.org