Valley Water
SANTA CLARA VALLEY WATER DISTRICT

NON-AGENDA

July 21, 2023

Board Policy EL-7 Communication and Support to the Board
The BAOs shall inform and support the Board in its work.

Page		
		CEO BULLETIN & NEWSLETTERS
		CEO Bulletin: None.
		BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS
4		**BMR/IBMR Weekly Reports:** 07/20/23
5		Memo from Darin Taylor, Chief Financial Officer, to the board, dated 7/18/23, providing follow up to Director Eisenberg's question whether or not certain taxes could be levied in a more progressive manner.
6		Memo from David Cahen, Risk Manager, to the board, dated 7/14/23, providing risk management communications.
11		Memo from Luz Penilla, Assistant Officer, to the board, dated 7/12/23, provide Watershed and Water Utility FY24-28 Operations and Maintenance and Asset Renewal Plans.
		INCOMING BOARD CORRESPONDENCE
112		**Board Correspondence Weekly Report:** 07/20/23
115		Letter from Kevin McDonald, Director of Loan Operations, Corps Water Infrastructure to Chair Varela, dated 7/14/23, thanking Valley Water for role in launching their program and Anderson Dam. C-23-0178
116		Email from Jeffrey Hare to the board, dated 7/14/23, requesting a status of the Measure A Audit requested by the IMC. C-23-0179
117		Email from Hugh Walsh to San Jose Water, copied to the board, dated 7/16/23, expressing dissatisfaction with San Jose Water's rate increase. C-23-0180
118		Email from Fred McCasland to Chair Varela, dated 7/12/23, regarding fallen trees in the creek behind his home on Coyote Creek. C-23-0181
120		Email from Dhruv Khanna to the board, dated 7/18/23, regarding tree planting and recognition and rewards for agricultural activities. C-23-0182
121		Email from Erin Gil to the board, dated 7/18/23, responding to Dhruv Khanna's email regarding tree planting and recognition and rewards for agricultural activities. C-23-0183
123		Email from Chris Freimund to the board, dated 7/18/23, expressing appreciation for sponsorship consideration. C-23-0184

126		Email from Aja Yee, Event Coordinator, Keep Coyote Creek Beautiful, to the board, dated 7/18/23, providing information on cleanups schedule on Coyote Creek on August 13, 2023. C-23-0185
		OUTGOING BOARD CORRESPONDENCE
130		Email from Director Santos to Judie Zamborelli, dated 7/18/23, responding to concerns for weeds growing adjacent to the sidewalk at Helmsley Ponds.

BOARD MEMBER REQUESTS and Informational Items

Report Name: Board Member Requests

Request	Request Date	Director	BAO/Chief	Staff	Description	20 Days Due Date	Expected Completion Date	Disposition
I-23-0018	06/13/23	Eisenberg	Yoke	Mcelroy	Director Eisenberg requests the unfiltered, full comments from the 2023 Employee Survey.	07/03/23		
R-23-0007	06/13/23	Beall	Hakes	Codianne	Participate in a lessons learned discussion on providing housing options to the unhoused along creeks.	07/03/23		
R-23-0009	06/27/23	Keegan	Richardson	Mccarter	Provide the board with an informational memo describing how Valley Water's dams are water supply dams versus electrical power dams like those along the Clamoth River.	07/31/23		

Valley Water

MEMORANDUM

FC 14 (01-25-23)

TO: Board of Directors

FROM: Darin Taylor

SUBJECT: Follow up regarding whether or not certain taxes could be levied in a more progressive manner

DATE: July 18, 2023

During the FY 24 biennial budget proceedings, Director Eisenberg asked if the State Water Project Tax could be levied in a more “progressive manner.” The answer is no because the State Water Project Tax is an ad valorem tax that pays for the contractual obligations associated with imported water from the State Water Project. Ad valorem taxes by definition are levied based on taxable value. The California Constitution establishes a process for determining a property's taxable value for purposes of calculating tax levies.

Similarly, Director Eisenberg also asked if benefit assessment rates could be levied in a more progressive manner. Again, the answer is no. State law allows benefit assessments to be based on the proportionate amount of storm water runoff from each privately-owned parcel of property. Valley Water established five benefit assessment land use categories with voter approval in the 1980's. The rates for each land use category are based on proportionate amount of storm water runoff that each parcel would contribute to receiving flood protection facilities. In other words, benefit assessments are levied in proportion to the estimated benefits received or to be received by each affected parcel. Accordingly, benefit assessment rate increases for each land use category must maintain the voter approved proportionality between each land use category, in order to approximate the benefit received by that property.

_____

Darin Taylor
Chief Financial Officer
Office of the Chief Executive Officer

Valley Water

MEMORANDUM

FC 14 (01-25-23)

TO: Board of Directors **FROM**: David Cahen

SUBJECT: Risk Management Communication **DATE**: July 14, 2023

The purpose of this memorandum is to provide you a with copy of recent Risk Management staff's communication with parties/individuals that have filed a claim against Valley Water.

Please find the following:

1) July 12, 2023 – Notice of Recommended Claim Denial to Mark Woodlief (District 1)
2) July 13, 2023 – Notice of Recommended Claim Denial to Guy Trujillo (District 1)
3) July 13, 2023 – Settlement Letter to Surinder Singh (District 2)
4) July 13, 2023 – Settlement Letter to Alvaro Collazo (District 2)

For additional information, please contact me at 408-630-2213.

DocuSigned by:
David Cahen
62E0EF69C39D435...

David Cahen
Risk Manager
Risk Management Unit

File Name

July 12, 2023

Mark Woodlief
985 Geronimo Street
Gilroy, CA 95020

Re: Claim – L2230036

Dear Mr. Woodlief:

We have investigated your claim and reached the conclusion that the Santa Clara Valley Water District (Valley Water) is not responsible for the damages to your vehicle's windshield due to a flying rock thrown by a weed whacker on April 13, 2023. The photographs you submitted of the work vehicle involved was not a Valley Water vehicle.

Since Valley Water is not responsible for this claim, we will therefore be recommending to our Board of Directors (Board) that the claim be denied.

This item is scheduled to be heard at the August 8, 2023, Board meeting which begins at 1:00 pm. You have the right to appear before the Board to contest our recommendation.

In the event of a Board meeting date change, I will provide you with advance notice. You can also monitor the Board meeting schedule and associated agenda items at: https://scvwd.legistar.com/Calendar.aspx.

If you have any questions, please contact me at (408) 630-2213.

Sincerely,

DocuSigned by:
David Cahen
62F0EF69C3DD435...
David Cahen
Risk Manager

July 13, 2023

Guy Trujillo
96 Sterling Lane
Morgan Hill, CA 95037

Re: Claim – L2230033

Dear Mr. Trujillo:

We have investigated your claim and reached the conclusion that the Santa Clara Valley Water District (Valley Water) is not responsible for the expenses incurred related to the septic tank backflow.

The Right of Way Agreement you signed set forth the terms of the sale of the property and you were to vacate the 17500 Hoot Owl property once the close of escrow was recorded. The recorded Deed in which the ownership was transferred was December 23, 2022, yet you did not vacate the property until March 2, 2023. Thus, you were in illegal possession of the property at the time of the septic tank backflow.

Furthermore, according to the Morton Septic Services Inc. invoice you provided, the inlet line was plugged with roots and tissues and had never been previously pumped indicating that the septic tank leach field was not properly maintained.

Since Valley Water is not responsible for this claim, we will therefore be recommending to our Board of Directors (Board) that the claim be denied.

This item is scheduled to be heard at the August 8, 2023, Board meeting which begins at 1:00 pm. You have the right to appear before the Board to contest our recommendation.

In the event of a Board meeting date change, I will provide you with advance notice. You can also monitor the Board meeting schedule and associated agenda items at:
https://scvwd.legistar.com/Calendar.aspx.

If you have any questions, please contact me at (408) 630-2213.

Sincerely,

DocuSigned by:
David Cahen
62E0EF69C39D435...

David Cahen
Risk Manager

July 13, 2023

Surinder Singh
3650 Buckley St, Apt. 203
Santa Clara, CA 95051

Re: Settlement – L2230023

Dear Mr. Singh:

Enclosed is the final settlement check regarding the above-mentioned claim. The total amount of the settlement is $2,888.19.

On behalf of Valley Water, I apologize for any inconvenience this incident caused and thank you for your cooperation.

Sincerely,

DocuSigned by:
David Cahen
62E0EF69C39D435...

David Cahen
Risk Manager

Enc: Settlement Check #501737

July 13, 2023

Alvaro Collazo
982 Mills Ct.
San Jose, CA 95125

Re: Settlement – L2230027

Dear Mr. Collazo:

Enclosed is the final settlement check regarding the above-mentioned claim. The total amount of the settlement is $325.00.

On behalf of Valley Water, I apologize for any inconvenience this incident caused and thank you for your cooperation.

Sincerely,

DocuSigned by:
David Cahen
62E0EF69C39D435...
David Cahen
Risk Manager

Enc: Settlement Check #501736

Valley Water

MEMORANDUM

FC 14 (08-21-19)

TO: Board of Directors

FROM: Luz Penilla

SUBJECT: Watershed and Water Utility FY 24-28 Operations and Maintenance and Asset Renewal Plan

DATE: July 12, 2023

Introduction

The Fiscal Year (FY) 2024 – 2028 Watersheds Operations and Maintenance and Asset Renewal Plan (WS Plan) was prepared to provide an overview of the maintenance work conducted to ensure flood protection projects and associated facilities continue to function as designed in support of Ends Policies E-3 and E-4. The FY 2024 - 2028 Water Utility Operations and Maintenance and Asset Renewal Plan (WU Plan) was prepared in parallel to provide an overview of the operations and maintenance activities conducted to provide a reliable clean water supply in support of Ends Policy E-2.

Both plans provide an overview of expected operations and maintenance activities and associated expenditures over the next five fiscal years. The plans are five-year rolling plans that will be updated annually and developed in alignment with the annual budget process. Each plan also discusses the unfunded operations activities that are expected to be needed in the next five fiscal years but are not currently budgeted.

Draft plans were presented to the Board on January 10, 2023 to receive comments and feedback. The Plans were finalized following Board adoption of Valley Water's FY 2024 and 2025 budget and are attached for the Board's information and reference.

Watersheds

In total, the Watersheds O&M Division has identified funded resource needs of approximately $292.6 Million and an additional unfunded need of $15.3 Million for the next five years. Of this amount, $58.0 Million funded and $0.7 Million unfunded was identified for FY 2024. The unfunded need would provide support for encampment trash and debris clean up and increased creek erosion repair work.

The plan also discusses additional unfunded asset renewal projects identified through Safe, Clean Water Project F8: Sustainable Creek Infrastructure for Continued Public Safety. This project will identify and prioritize creek infrastructure issues and develop asset management plans for asset renewal projects. Currently this unfunded work is estimated at $388.5 Million. Additional details are described in the attached WS Plan.

Water Utility

In total, the Raw and Treated Water Divisions have identified funded resource needs of approximately $624.9 Million and an additional unfunded need of $10.7 Million over the five years. Of this amount, $122 Million funded and $2.1 Million unfunded was identified for FY 2024. The unfunded need would provide for additional support for the corrosion control program, mechanical engineering, and laboratory and water quality operations.

In addition, the WU Plan incorporates a five-year projection of asset renewal projects that are identified through an annual maintenance work planning process. The WU Plan identifies $36 Million of planned

asset renewal work to be completed over the next five FYs 2024-2028. $4.1 Million of the planned asset renewal work is scheduled for the current FY 2024.

Next Steps

The next update of the plans will begin in Fall of 2023 for FYs 2025-2029. Draft plans are expected to be completed by December 2023 and will align with the FY25 budget process.

Hard copies of these documents are available at the Clerk of the Board office. Electronic copies of these documents can be found at the links below:

Watersheds:
The electronic copy of this document can be found at:
https://aqua.valleywater.org/sites/default/files/home/scvwd/main/water_utility/411/WS_Reports_Library/WS_O%26M_and_AR_Plan_(FY24-28)_FINAL_signed.pdf

Water Utility:
https://aqua.valleywater.org/sites/default/files/home/scvwd/main/water_utility/411/WU_Reports_Library/FY24-28_WUEOMP_Final.pdf

For further information, please contact Business Support and Asset Management Unit Manager, James Bohan, at (408) 630-2575 or jbohan@valleywater.org.

DocuSigned by:
Luz Penilla
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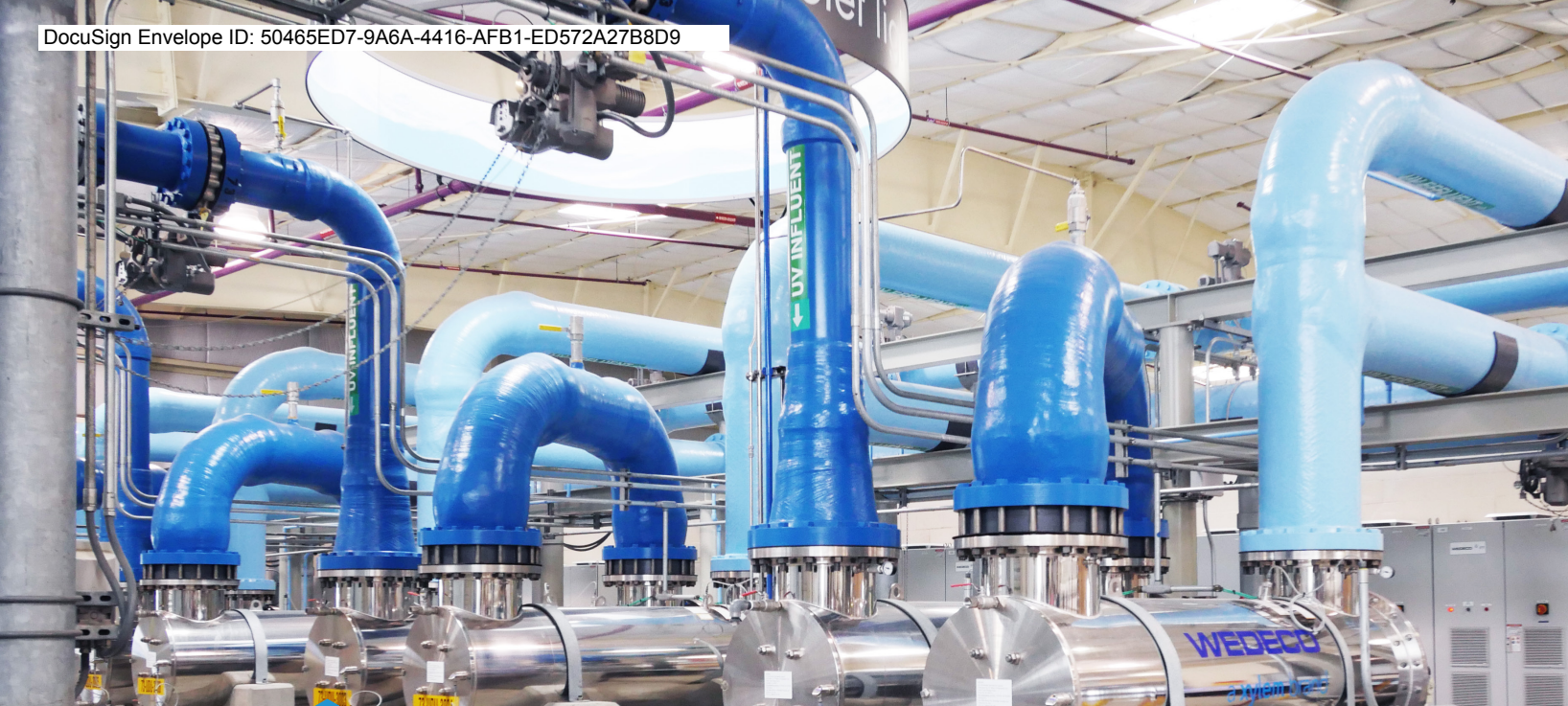
Luz Penilla
Assistant Operating Officer
Office of Integrated Water Management

Attached:
FY 24-28 Watersheds Operations and Maintenance and Asset Renewal Plan
FY 24-28 Water Utility Operations and Maintenance and Asset Renewal Plan

cc: J. Bohan, E.Mercado, L.Yiu, J.Cordero
JB



Valley Water

FY 2024-28

Water Utility Enterprise Five-Year Operations & Maintenance and Asset Renewal Plan

FY 2024-28 Water Utility Enterprise Operations & Maintenance And Asset Renewal Plan

Prepared By:

Jackie Cordero
Associate Engineer
Business Support and Asset Management Unit

Under the Direction of:

Elizabeth Mercado, P.E.
Senior Engineer
Business Support and Asset Management Unit

James Bohan, P.E.
Unit Manager
District-wide Asset Management Unit

Luz Penilla, P.E.
Assistant Operating Officer
Office of Integrated Water Management

Accepted By:

DocuSigned by:
Aaron Baker
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6/27/2023

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

Accepted By:

DocuSigned by:
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6/27/2023

Samuel Bogale
Deputy Operating Officer
Treated Water Division

Accepted By:

DocuSigned by:
Gregory Williams
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6/30/2023

Gregory Williams
Deputy Operating Officer
Raw Water Division

Effective July 1, 2023

TABLE OF CONTENTS

TABLE OF FIGURES

FACILITY ACRONYMS

AHY = Anderson Hydroelectric Facility
CAD = Campbell Distributary
CDL = Coyote Discharge Line
CPL = Central Pipeline
CPP = Coyote Pumping Plant
CVP = Cross Valley Pipeline
DPP = Dutard Pumping Plant
GPP = Greystone Pumping Plant
LEN = Lenihan Dam
PAC = Pacheco Conduit
PPP = Pacheco Pumping Plant
PWTP = Penitencia Water Treatment Plant
RWTP = Rinconada Water Treatment Plant
RW T&D= Raw Water Transmission and Distribution Pipelines
SCC = Santa Clara Conduit
SFI = San Francisco PUC Intertie
STWTP = Santa Teresa Water Treatment Plant
SVA = Silicon Valley Advanced Water Purification Center
ULT = Uvas-Llagas Transfer Pipeline
VPP = Vasona Pumping Plant
WSMS = Water Supply Management Systems (e.g., pond systems)

EXECUTIVE SUMMARY

Report Overview

The purpose of the FY2024-28 Water Utility Enterprise Operation and Maintenance and Asset Renewal Plan (WUE O&M AR Plan) is to provide a summary of activities and costs associated with operating and maintaining Valley Water's Water Utility Infrastructure for the next five fiscal years. Specifically, the WUE O&M AR Plan:

- Documents the baseline and unfunded operations and maintenance project resource needs for the Raw and Treated Water Operations Divisions for the next five fiscal years, 2024 to 2028, and provides an explanation of unfunded needs.
- Identifies the Water Utility Enterprise planned asset renewal projects scheduled for the next five fiscal years, 2024 to 2028, and provides guidance for planning, scheduling, and budgeting this work in Valley Water's operations or capital budgets.
- Provides a summary of asset renewal work completed in the prior fiscal year 2023.

This is a rolling five-year WUE O&M AR Plan is updated annually. Throughout the WUE O&M AR Plan, the term 'baseline' refers to activities that provide current service levels and are assumed to be funded in fund forecasts prepared by Valley Water's Financial Planning and Management Services Division. The final financial information provided in the WUE O&M AR Plan was taken from the Board-adopted budget for FY24 and FY25, as well as the forecast data collected as part of the budget and groundwater charge (rate) setting process. The FY24 and FY25 budget requests and unfunded needs were evaluated throughout the budget process through May 2023.

In the past, Valley Water's Water Utility developed three separate plans that have now been combined into this plan. The previous plans included a Five-Year Operations and Maintenance Plan, a Five-Year Maintenance Work Plan, and a Maintenance Work Plan Review Report.

Overview of O&M Activities

The Water Utility Enterprise budgets and executes operations activities in operating projects, and budgets and executes maintenance work through both operations and capital projects. Work that is budgeted in operations projects includes:

- Operations activities including operator labor, chemical costs, power, etc.
- General maintenance activities including inspections and preventive and corrective maintenance
- Engineering support for operations and general maintenance

Five-year forecasts of baseline and unfunded resource requirements for these operations activities are summarized in Section V of this plan.

Maintenance work that involves rehabilitation or replacement of an asset or group of assets is budgeted in small or individual capital projects. This type of work extends the life of an asset and is therefore capitalized. Asset rehabilitation and replacement work is identified through the maintenance work planning process described in Section III of this plan. An overview of work for the next five years is below.

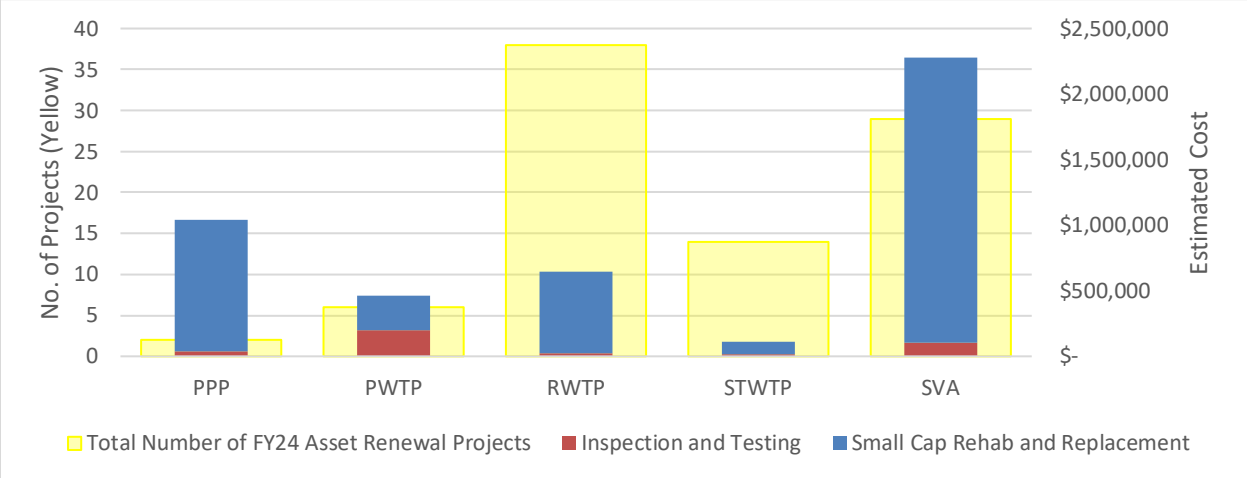
Note this plan does not include individual/large capital projects as these are included in Valley Water's Five-Year CIP. In addition, Valley Water is undertaking infrastructure master planning efforts for its water treatment plants, distribution system, and SCADA system. These efforts will identify major facility

renewal projects for future years. The projects that come from the master plans will likely be too large for maintenance to execute and will be done as individual capital improvement projects and not included in this plan.

FY 24 – 28 Planned Asset Renewal Work

Figure 1 shows 90 planned asset renewal projects scheduled in fiscal year 2024 (FY24) for Water Utility facilities. This work is estimated at nearly $4.1 Million.

Figure 1: FY24 WUE OMP Planned Work

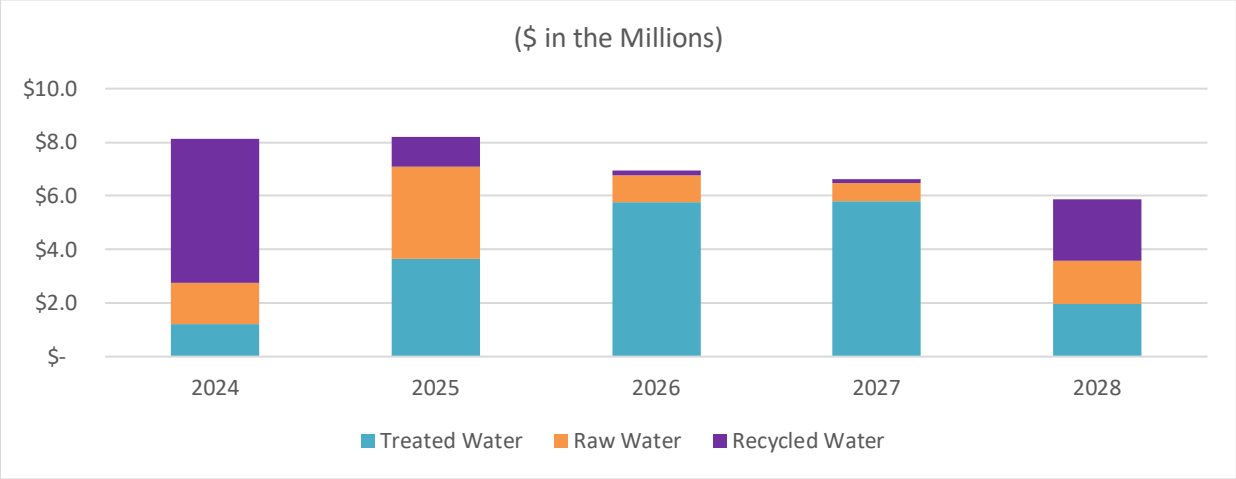


Notes: SVA = Silicon Valley Advanced Water Purification Center; PWTP = Penitencia Water Treatment Plant; STWTP = Santa Teresa Water Treatment Plant; RWTP = Rinconada Water Treatment Plant; CPP = Coyote Pumping Plant; PPP = Pacheco Pumping Plant

FY2024 – FY2028

Figure 2 summarizes costs of projected asset renewal projects to be completed in fiscal years 2024-2028 (FY24-28). Over the next five fiscal years, Valley Water estimates $35.8 Million of planned asset renewal work. The forecasted projects will change once the three Master Plan Implementation plans are completed and integrated with in the Asset Management Planning Tool and Capital Improvements Project Schedule.

Figure 2: Forecasted FY24-28 WUE OMP Work



Note: In this chart, project costs are grouped by facility category rather than individual facility. Raw Water = Raw Water facilities including pipelines, pump stations, and pond systems. Treated Water = Penitencia, Rinconada, and Santa Teresa Water Treatment Plants. Recycled = SCRWA system and Silicon Valley Advanced Water Purification Center

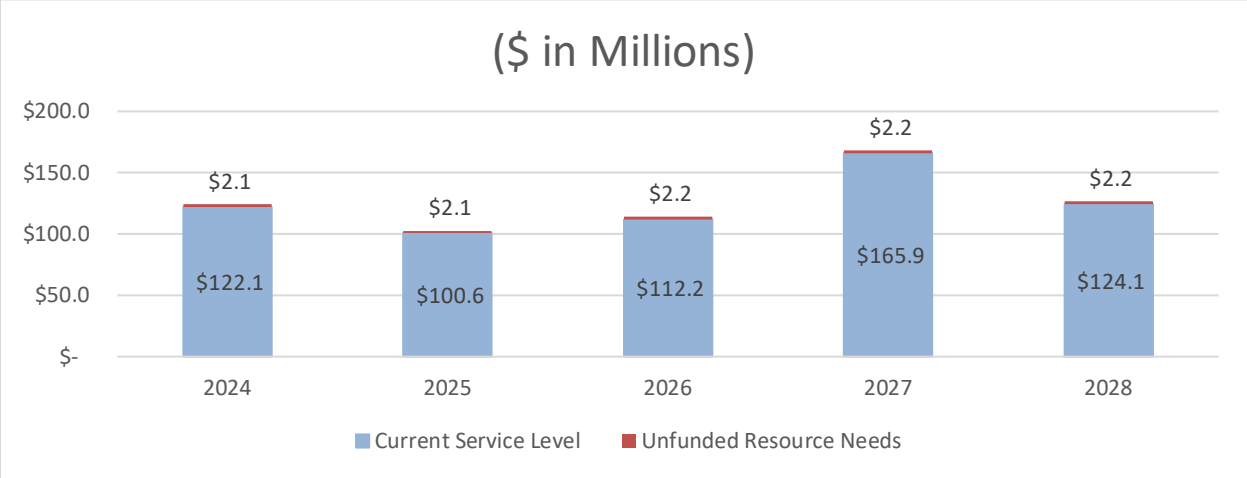
Review of Completed FY2023 Asset Renewal Projects

A total of 31 or approximately 69% of the Asset Renewal Projects from FY 2023 were completed as of June 1, 2023. Only 310 staff hours and $925,580 were documented in Maximo for this work, though the work likely required more resources than documented. These statistics reflect data available in Maximo as of June 1,2023. Actual completed work, hours and dollars may increase as staff closes out work orders during the remainder of the fiscal year through June 30, 2023.

Five-Year Operations Project Forecasts

Five-year forecasts of funding for baseline (current) service levels as well as future resource requirements which are not yet funded for the Water Utility Raw and Treated Water Operations Divisions are shown in Figure 3. The final financial information provided in the forecasts was taken from the Board-adopted budget for FY24 and FY25, as well as the forecast data collected as part of the budget and groundwater charge (rate) setting process. The FY24 and FY25 budget requests and unfunded needs were evaluated throughout the budget process through May 2023. The plan was finalized following Board adoption of Valley Water's budget. The final WUE O&M AR Plan documents the budgeted amounts for each project for FY24, planned amounts for FY25, as well as any remaining unfunded needs following the budget and groundwater charge setting process.

Figure 3: Raw & Treated Water Operation Division Forecasts



*Data as of June 16, 2023.

In total, the Raw and Treated Water Operations Divisions have budgeted baseline resource needs of $122 Million for current service levels for FY 2024, as well as identified $2.1 Million of remaining unfunded needs. The unfunded need of $403,000 for Water Treatment Plant General Maintenance support in FY24 was approved. The remaining unfunded needs after the budget process is $1.3 Million. The unfunded resources would provide for the following services:

- Support for laboratory operations and accreditation
- Support for Corrosion Control Cathodic Protection Program
- Support for Water Utility Maintenance Mechanical Engineering program
- Support for Water Quality program

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I. INTRODUCTION

Report Overview

The purpose of this plan is to provide a summary of activities and costs associated with operating and maintaining Valley Water's Water Utility Infrastructure for the next five fiscal years. Specifically, this plan:

- Documents the baseline and unfunded operations and maintenance project resource needs for the Raw and Treated Water Operations Divisions for the next five fiscal years, 2024 to 2028, and provides an explanation of unfunded needs.
- Identifies the water utility planned asset renewal projects scheduled for the next five fiscal years, 2024 to 2028, and provides guidance for planning, scheduling, and budgeting this work in Valley Water's operations or capital budgets.
- Provides a summary of asset renewal work completed in the prior fiscal year 2023.

This is a rolling five-year plan that is updated annually. In the past, Valley Water's Water Utility developed three separate plans that have now been combined into this Water Utility Enterprise Operations and Maintenance Plan (WUE OMP). The three plans were:

- Five-Year Operations and Maintenance Plan: Documented five-year forecasts of all Water Utility operations project costs and unfunded needs
- Five-Year Maintenance Work Plan: Identified asset renewal projects for the coming five fiscal years
- Maintenance Work Plan Review Report: Summarized asset renewal projects completed in the prior fiscal year

Water Utility (WU) O&M activities are carried out to meet the following Board of Directors' (Board) Ends Policies:

- Ends Policy E-2: Valley Water provides a reliable, safe, and affordable water supply for current and future generations in all communities served.

The WU Raw and Treated Water Operations Divisions achieve the Board's Ends Policies by:

- Monitoring and protecting the groundwater basins.
- Conveying local and imported source water to water treatment plants, recharge facilities, and streams.
- Treating and delivering water to retail customers.
- Maintaining the infrastructure needed to conduct the above listed activities.
- Ensuring services are carried out in way that protects the environment.

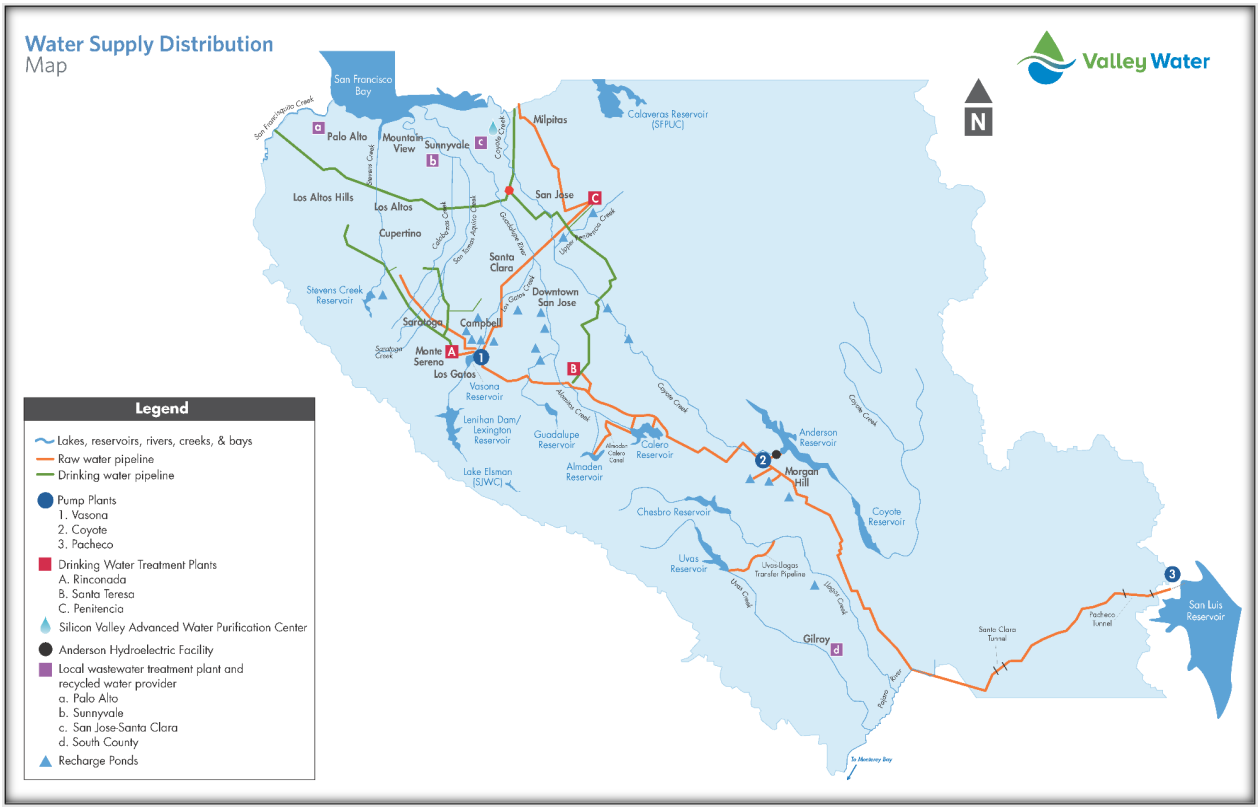
Copies of past years' reports are available on the Valley Water intranet on the asset management web site at http://www.aqua.gov/asset-management-library.

Water Utility Infrastructure

Valley Water manages an integrated water resources system to provide a supply of clean, safe water, flood protection, and stewardship of streams in Santa Clara County (County). Valley Water operates and maintains complex infrastructure and integrates natural and constructed systems to capture, treat and convey raw and treated water for a reliable water supply. Valley Water's system delivers about 300 million gallons of raw water and 200 million gallons of treated drinking water every day (subject to water demand and hydrologic changes).

Valley Water's Water Utility infrastructure includes the following, shown on the map below:

- 10 surface water reservoirs and outlet works
- 10 miles of raw surface water canals (excludes inactive canals)
- 285 acres of groundwater recharge ponds
- 98 miles of controlled in-stream recharge
- 150 miles of raw, treated, and recycled water pipelines
- 3 pumping raw water stations
- 1 hydroelectric facility
- 3 drinking water treatment plants
- 1 advanced water purification center



Related Documents

Documents related to this plan include:

- FY24-28 Capital Improvement Program (CIP): The CIP is a rolling five-year plan that identifies major capital improvements. This WUE OMP feeds directly into the CIP, as it identifies the scope and costs of five Water Utility small capital improvement projects, as well as identifies upcoming large or individual capital projects. The CIP includes master planning efforts that will further define future asset renewal needs for the Water Utility: Water Treatment Plant Implementation Plan, Distribution System Implementation Plan, and the SCADA System Implementation Plan. These plans will identify major future infrastructure improvements for Water Utility infrastructure.

- FY24-28 Watersheds Operation and Maintenance Asset Renewal Plan: The Watersheds Operations and Maintenance Plan is a rolling five-year plan that describes operations and maintenance

activities for the Watershed Operations and Maintenance Division for the next five years. It is similar to this WUE O&M AR Plan FY24-28.

- FY24-39 Long-Term Forecast: The long-term forecast is prepared as the first step of the budget process each year to forecast future funding needs for operations projects. This WUE OMP links to the long-term forecast in two ways. First, it identifies asset renewal costs for the next five years, which is incorporated into long-term forecast for appropriate projects. Second, the operations project five-year forecasts provided in this report are taken from the long-term forecast data. The draft report is prepared using long-term forecast data and unfunded needs requests as of December. The budget requests and unfunded needs are further evaluated throughout the budget and groundwater charge (rate) setting processes through May.

- FY24 & FY 25 Operating and Capital Budget: Valley Water's budget is produced bi-annually to identify the planned operations and capital expenditures and funding sources for the coming fiscal year. It provides an overview of both operations and capital expenses, as well as revenues, for the next fiscal year. This WUE OMP identifies both operations and capital expenditures that are included in the Operating and Capital Budget.

- Protection and Augmentation of Water Supplies (PAWS) Report: The PAWS report is produced each year in accordance with requirements in the District Act section 26.5, and documents the activities undertaken to provide a reliable, clean water supply for the coming fiscal year as a basis for the proposed maximum groundwater production charges. It provides an overview of both operations and capital expenses for the next fiscal year while this plan provides an overview of selected operations and maintenance activities for the next five fiscal years.

II. OVERVIEW OF O&M ACTIVITIES

The Water Utility plans, budgets and executes operations activities in operating projects, and plans, budgets, and executes maintenance work through both operations and capital projects. This section provides an overview of O&M activities and explains what type of work is budgeted in operations projects and what type of work is budgeted in capital projects.

Operations Project Activities

General descriptions of activities budgeted in Water Utility operations projects are provided below. Section IV of this plan provides additional detail on the operations projects and includes a five-year forecast of the projects in which this work is planned, budgeted, and executed.

Operations: Operations activities include operating 150 miles of large diameter transmission pipelines, three pumping plants, 102 ponds used to recharge the groundwater basins, three potable water treatment plants, one well field, and one advanced water purification center. Costs associated with operating these facilities include operator labor, chemical costs, power costs, laboratory operations, and water quality support. Costs associated with these operations activities are budgeted in the operations projects presented in Section V of this plan.

General Maintenance: General maintenance activities include the following, which account for the majority of maintenance labor. These activities are budgeted in the operations projects presented in Section V of this plan:

- *Preventive Maintenance (PM)*: Planned routine maintenance to prevent premature asset failure, such as an oil change or calibration. PM activities occur weekly, monthly, quarterly, semi-annually, or annually, depending on the activity. When a PM work task becomes due for an asset, Maximo (Valley Water's computerized maintenance management system or CMMS), automatically generates a work order for maintenance staff to perform the task. The water utility completes approximately 14,000 PM work orders each year. PM work accounts for approximately 80% of maintenance labor hours.

- *Corrective Maintenance (CM)*: Corrective maintenance addresses unplanned asset failures. CM work accounts for approximately 10% of maintenance labor hours.

- *Inspections and Testing*: Projects that involve inspection or testing activities are not capital investments. They are budgeted and conducted under one of the maintenance operating projects identified in Section V of this plan. Biennial electrical testing or chemical tank inspection are examples of activities budgeted under operating projects. These projects are completed by maintenance staff and may require engineering, environmental and/or contractor support. These projects are identified through the maintenance work plan process described in Section III of this plan.

Engineering Support: Engineering support is needed for various operations initiatives, operations planning, and maintenance projects. Civil, mechanical, electrical and control systems engineers support the operations and maintenance of the Water Utility facilities. Engineering support is budgeted in the planning and engineering projects presented in Section V of this plan.

Capital Project Activities

Maintenance work that involves rehabilitation or replacement of an asset or group of assets is budgeted in small or individual capital projects, as described below. This type of work extends the life of an asset and therefore is capitalized. Asset rehabilitation and replacement work is identified through the maintenance work planning process described in Section III of this plan.

Small Capital Projects: Projects that involve replacement or rehabilitation of a single asset, such as a single pump re-build, are budgeted and executed in the Water Treatment, Treated Water Transmission, Raw Water Transmission, or San Felipe Reach 1-3 Small Capital Improvement Projects in Valley Water's five-year CIP. The scopes of each of the Small Capital Improvement Projects change annually based on the work identified in this Plan. These projects are completed by maintenance staff or contractors. They may require engineering and environmental support thus may need to be competitively bid.

Individual Capital Projects: Occasionally, projects can be grouped together to create an individual capital project. In such case, staff initiates a new project in the CIP. On average, one new capital project is identified through the asset renewal planning process each year. One example is the Vasona Pumping Plant Upgrades, which is a project in Valley Water's current five-year CIP. Several pumps, motors, drives, valves, and other equipment within the pump station were due for replacement in 2016. The multiple asset replacements were combined into one project, to be executed under the CIP.

In addition, the pipeline inspection and rehabilitation projects are identified through the maintenance work planning process. These projects are budgeted and executed in the Ten-Year Pipeline Rehabilitation Capital Project.

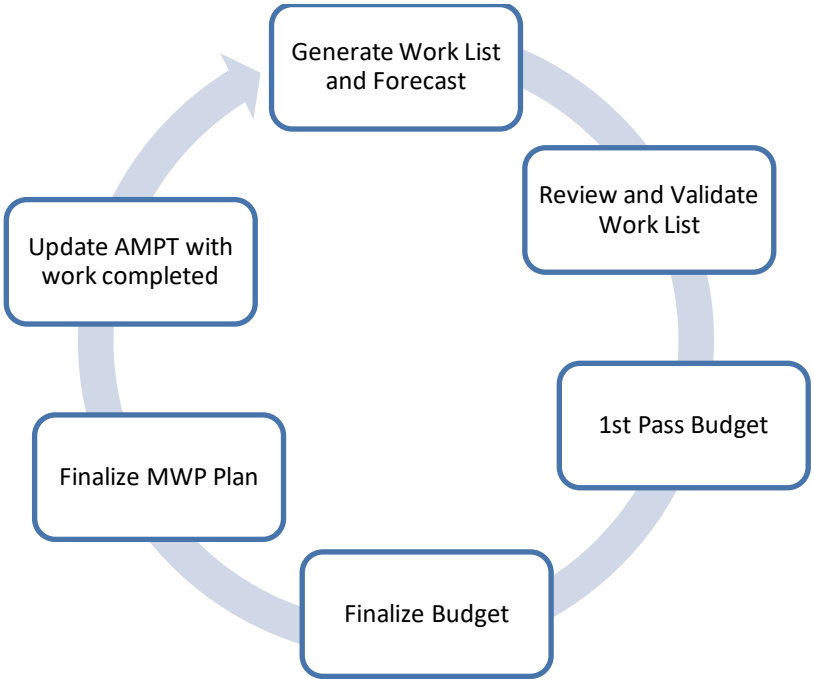
III. WORK PLANNING AND EXECUTION

Work Planning

The Asset Management Program develops forecasts of asset renewal activities and costs using a software tool, Asset Management Planning Tool (AMPT). AMPT contains the database of water utility assets and their planned renewal activities and costs. Asset renewal activities are planned at specific intervals, such as every 5 or 10 years, and are validated as the due dates approach.

Each year, staff generates a list of all renewal activities required for water utility assets for the next five years from the AMPT database. Operations, maintenance, engineering, and asset management validate the list by evaluating field condition and estimated remaining asset life. If assets are found in good condition, renewal projects are rescheduled to future years. The renewal projects are selected to optimize asset performance, maintain, or improve reliability within an acceptable risk tolerance, and to minimize asset life-cycle costs.

Work is planned annually, according to the diagram below, to align with the budget process.



Assets Excluded from the Work Planning Process

The following assets are excluded from the work planning process:

- An asset that has a value less than $5,000 or is not critical for performance
- An asset that is easily accessible (e.g., spare kept on the shelf)
- An asset that is replaced if it fails calibration
- Consumable assets (e.g., air filters)

The following table shows the assets that are not included in the work planning process:

Asset Class	Asset Type
Mechanical	Sump pumps, transfer pumps, metering pumps, sludge pumps and motors, sample pumps, air pressure regulating valve[1] , leak detectors[2]
Instrumentation	Analyzers, turbidimeters, level instruments/indicators, portable leak detectors, wet well float switch, staff gauges, mass flowmeters
Civil	Pump out risers, manholes, drain valves, water supply trash racks, underground petroleum storage tanks[3]

Notes

[1] Ozone air pressure regulating valves are included

[2] Leak detectors preventative maintenance is scheduled and replaced if not functioning.

[3]These tanks are inspected annually and maintained by a trained and certified contractor. These tanks and their appurtenances are not maintained by Valley Water Staff.

Work Execution

Execution of the asset renewal projects is predominately performed through the following units:

- Treatment Plant Maintenance Unit (555)
- Raw Water Field Operations and Pipeline Maintenance Unit (585)
- Additional technical support is provided by
    - Raw Water & Pipeline Maintenance Engineering (435)
    - Raw Water Operations Unit (455)
    - Plant Maintenance Engineering and Commissioning Unit (516)
    - Utility Electrical and Control Systems Engineering Unit (545)
    - Other Valley Water units including Watershed Field Operations units, Facilities management and the Environmental Health and Safety Unit.
    - Outside contractors are used as needed.

IV. PLANNED ASSET RENEWAL WORK

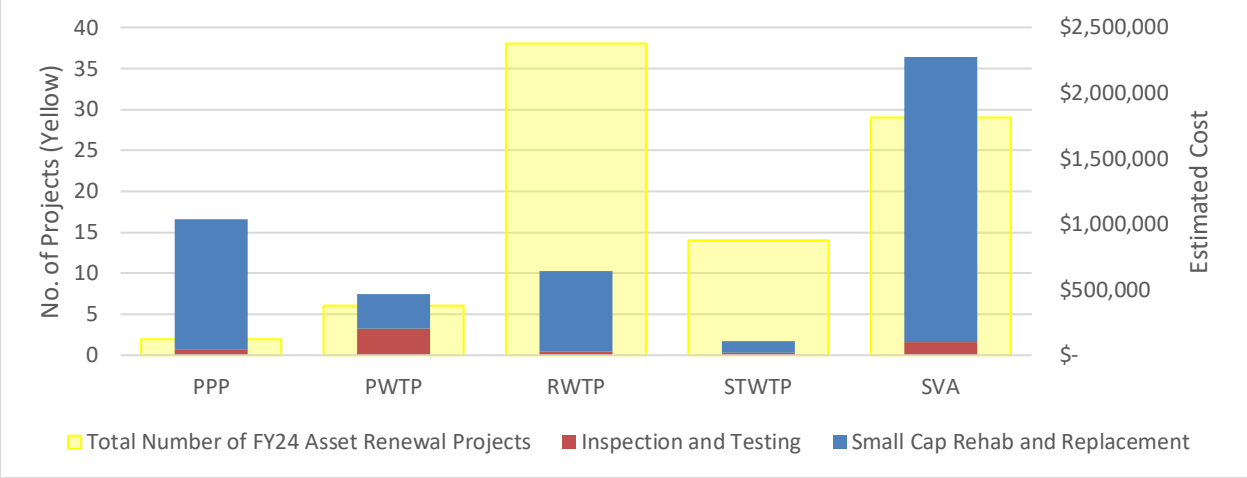
FY 24-28 Planned Asset Renewal Work

The key output of the work planning process is the list of asset renewal work to be conducted over the upcoming five fiscal years. The work identified in this process is incorporated into capital and operations budgets as described in Section II. The work list for the upcoming fiscal year FY24 is fixed, whereas the work listed for the remaining four years of the five-year rolling plan is adjusted based on changing conditions.

FY24 Summary

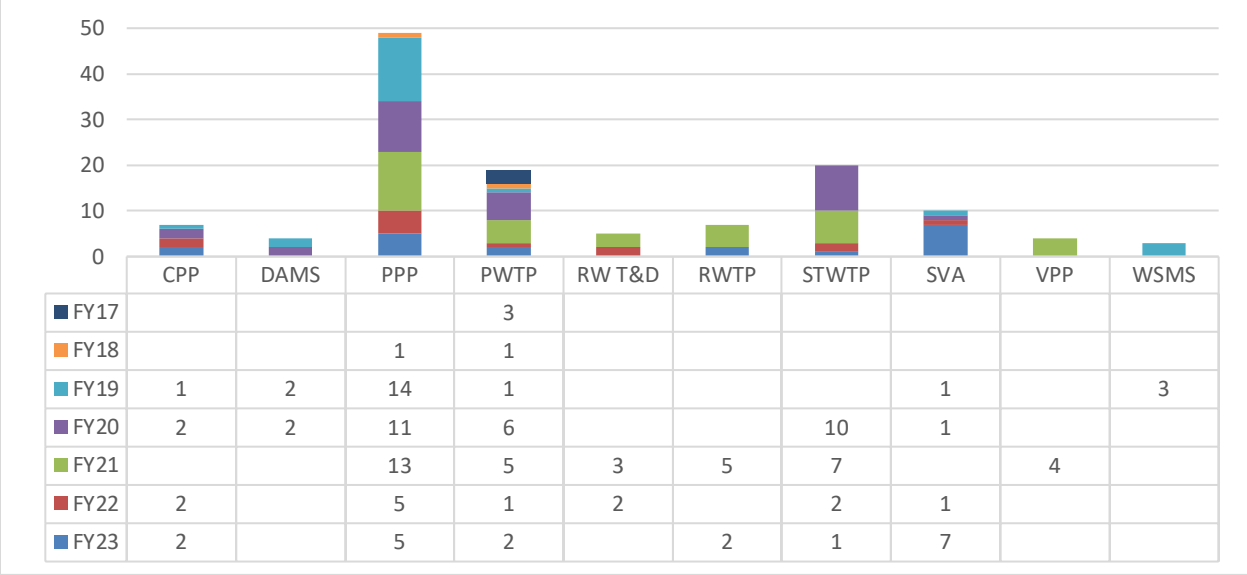
For FY 2024, a total of 90 asset renewal projects were identified, with an estimated total cost of $4 .1 Million. Note this cost includes materials and equipment plus a multiplier for labor and installation costs. In addition to projects identified for FY 2024, staff continues to work on projects identified in prior years. These projects are referred to as “backlog work”. There are a total of 128 backlog projects from prior years FY16-23 that staff continues to work on as of June 9,2023. Figures 4 and 5 provide information about FY24 Planned work and backlog. As shown in Figure 5, many backlog projects are from FY20 and FY21. Many asset renewal projects did not get completed these years due to COVID-19.

Figure 4: FY24 WUE Planned Asset Renewal Work



Note: See Table of Acronyms for Facility Names

Figure 5: WUE Planned Asset Renewal Work Backlog



	CPP	DAMS	PPP	PWTP	RW T&D	RWTP	STWTP	SVA	VPP	WSMS
FY17				3						
FY18			1	1						
FY19	1	2	14	1				1		3
FY20	2	2	11	6			10	1		
FY21			13	5	3	5	7		4	
FY22	2		5	1	2		2	1		
FY23	2		5	2		2	1	7		

Note: See Table of Acronyms for Facility Names. Data as of June 9,2023.

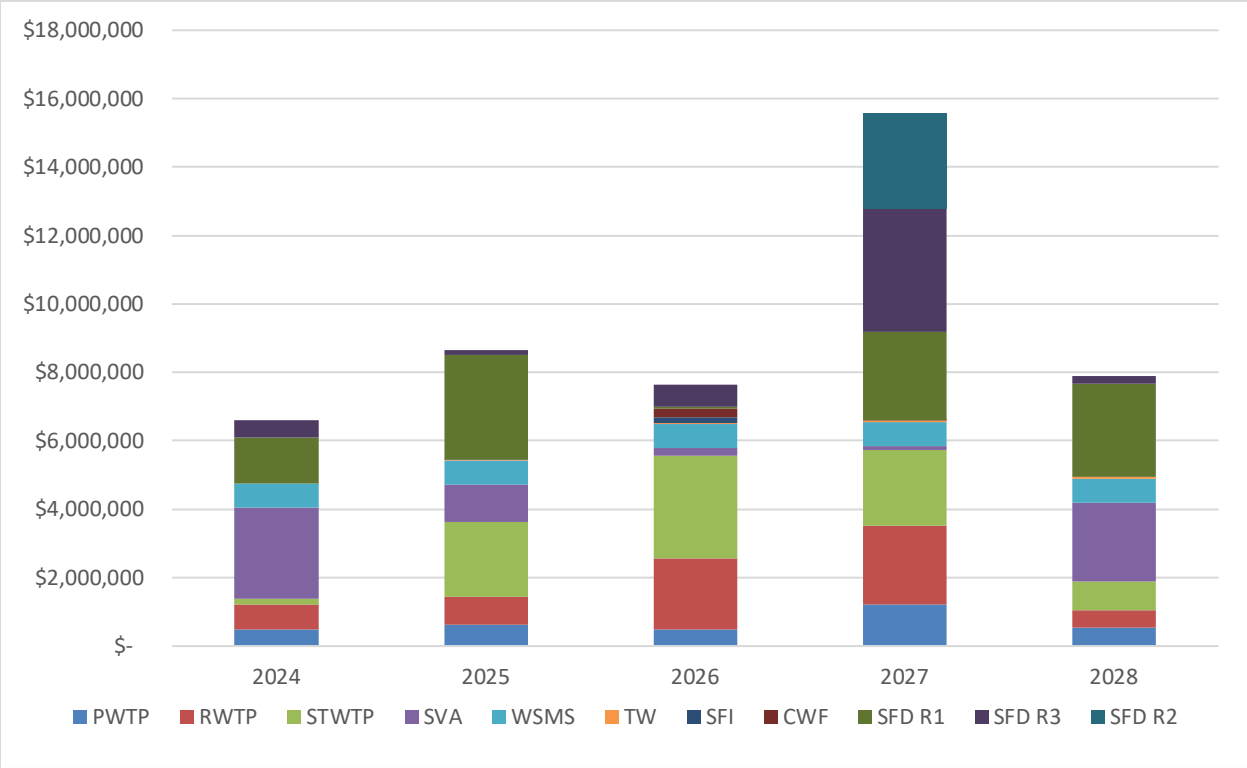
FY2024 – 2028 Summary

Figures 7 through 16 summarize the projected asset renewal projects to be completed in future fiscal years, 2024-2028. The project costs provided in the figures include equipment and material costs. Labor costs are included as a multiplier of the equipment and material costs. The total project costs over five years is $35.8 Million.

Expanding the horizon from a single year to five-years allows staff to review the workload by year and see trends and peaks in workload, asset class, or facility. This also provides staff with an opportunity to look for efficiencies and balance the work between the years.

Asset renewal work for the raw and treated water pipelines for FY 2024 - 2027 is included in the 10-year Pipeline Rehabilitation Project, which is a capital project and included in Valley Water's five-year CIP. Because the costs are included in the CIP, forecasts are not included in this plan. There is, however, a summary of planned pipeline rehabilitation work that will be done as part of the 10-year Pipeline Rehabilitation Project included in the section following figures 6 -16. Also note that Anderson Hydroelectric is planned to be decommissioned. No asset renewal work is scheduled in FY24-28 and therefore there is no forecast for the facility in this plan.

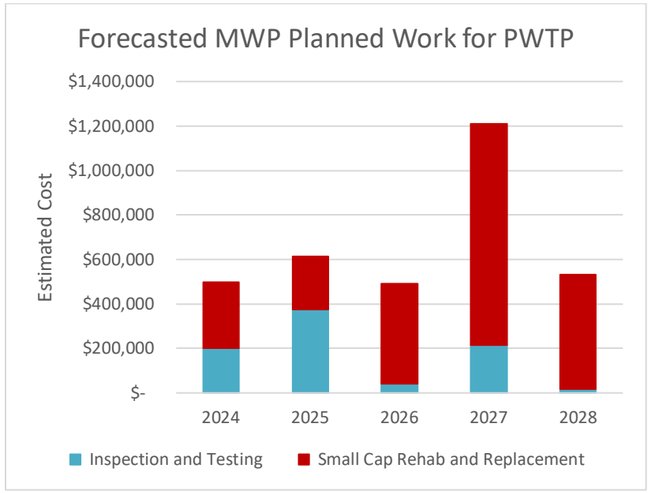
Figure 6: Five-year Forecasted Projects



Note: The forecasted projects will change once the three Master Plan Implementation plans are completed and integrated with in the Asset Management Planning Tool and Capital Improvements Project Schedule.

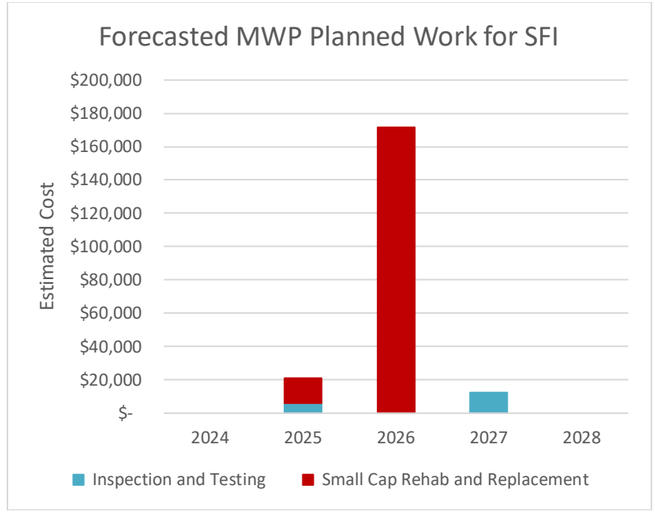
All replacements are pending condition assessment. Replacement activities may be replaced with rehabilitations.

Figure 7: Penitencia Water Treatment Plant (PWTP) FY24-28 Planned and Forecasted Work



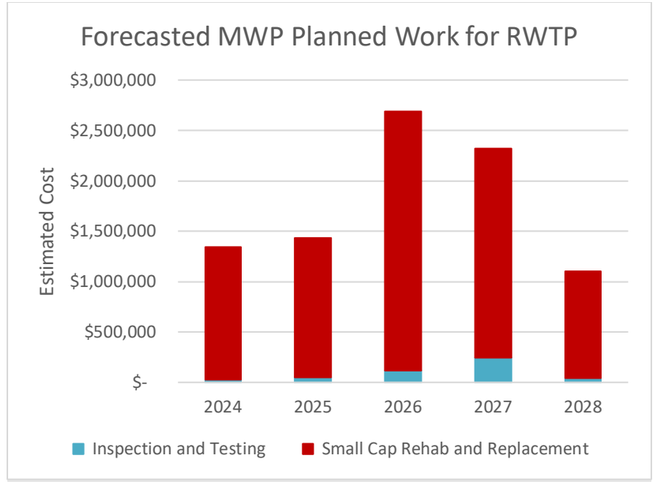
Year	Most Expensive Planned Work for PWTP
2024	-Maintenance and inspection of the Clearwell ($200k) -Replacement of the Phosphoric Acid flow meter (~6k) -Clean and Coat 3 Alum Tanks ($7k total)
2025	-Replacement of Dutard Pump #1 (~53k) -Replacement of Plant Water #2
2026	-Replacement of OCL tank liner in tank #2 (`$33k) -Replacement of Non-Ionic Poly, carbon, ammonia, and sulfuric acid metering pumps ($9k each 9 total) -Replacement of filter flow meters ($6k each 6 total)
2027	-Replacement of PWTP Flocculator drive units ($25k each 9 total) -Replacement of Plant Water piping, Domestic water piping (~$90k) -Replacement of various filter valves ($7k each for 14 total)
2028	-Replacement of PAC dust collectors ($44k each 2 total) -Replacement of OCL storage tank transfer pumps (~$36k each 3 total)
Note: The following assets replacements are not included in the MWP forecast: -Motor control centers included in the WTP Electrical Improvement Project (Capital Project estimated in FY25)	

Figure 8: San Francisco Intertie (SFI) FY24-28 Planned and Forecasted Work



Year	Most Expensive Planned Work for SFI
2024	
2025	-Replacement of SFI station transformer and main control panel (~$6k and $15k respectively)
2026	-Replacement of SFI manifold 42-inch butterfly valves operators ($24k each 6 total)
2027	-Inspection of SFI Phosphoric acid tank
2028	

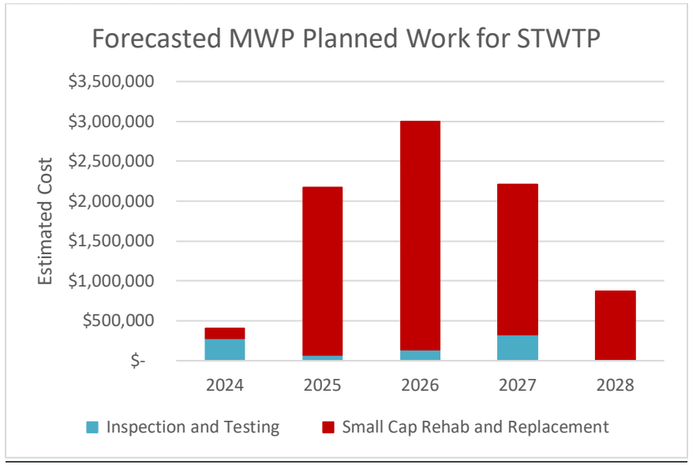
Figure 9: Rinconada Water Treatment Plant (RWTP) FY24-28 Planned and Forecasted Work



Year	Most Expensive Planned Work for RWTP
2024	-Internal Inspection of Caustic Tank #2 (~25k) -Rebuild of More Ave Pump #2 (~$65k) -Rebuild of centrifuges (~$80k each 2 total)
2025	-Replacement of the RWTP TW Booster #1 Pump and Motor (~$250k) -Replacement of OCL tank #2 liner (~$33k)
2026	-Replacement of RWTP Warehouse Fire Sprinklers (~$667k) -Replacement of the RWTP TW Booster #2 Pump and Motor (~$250k) -Replacement of chemical piping (~$250k) -Replacement of OCL tank #1 liner (~$33k) -Replacement of PAC injection line (~$12k)
2027	-Replacement of RFM guard valve (~$288k) -Replacement of some trailers (~$150k each 2 total) -Replacement of various UPS (~$80k each 4 total) -Replacement of Backwash motor and More ave motor (~$80k each 2 total)
2028	-Replacement of trailer (~$150k each 1 total) -Replacement of Standby air compressor generator ($37k) -Replacement of clearwell bypass valve ($24k)
Note: RWTP projected planned work is anticipated to change once AMPT is updated with the newly installed assets per the CIP project. AMPT has been updated with RWTP new assets starting in FY22 and will continue until the CIP completion.	

All replacements are pending condition assessment. Replacement activities may be replaced with rehabilitations.

Figure 10: Santa Teresa Water Treatment Plant (STWTP) FY24-28 Planned and Forecasted Work

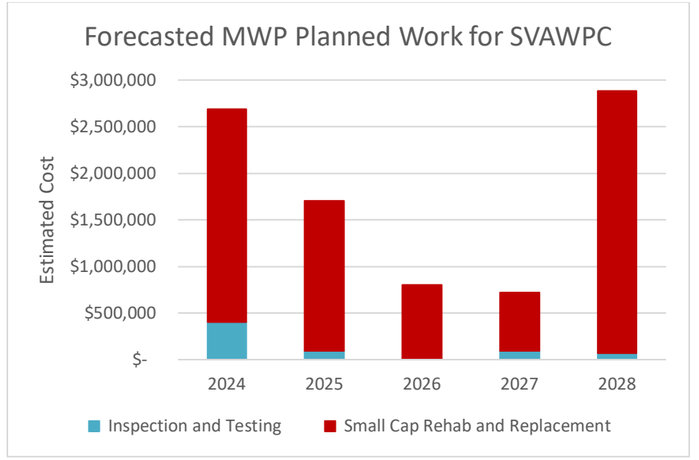


*Includes Graystone pumping station projects

Year	Most Expensive Planned Work for STWTP
2024	-Draining and internal inspection of clearwell (~250k) -Internal inspection of caustic tank (~4k) -Internal inspection of raw water pipeline (~30k) -Internal inspection of filtered/ treated water pipeline (~60k)
2025	-Replacement of Ozone generator power supplies (~$180k 3 total) -Replacement of WWC floc mixer (~$80k) -Replacement of #1E rake, chain, and flights (~$71k)
2026	-Replacement of WWC floc mixers (~$80k 2 total) -Replacement of Liquid Oxygen Vaporizers (~$53k 3 total) -Replacement of WWC return pump #1 (~$52k)
2027	-Replacement of Backwash pump #9 (~190k) -Replacement of WWC floc mixers (~$80k 2 total) -Replacement of Floc Mixers (~$56k each 15 total) -Inspection of the Ozone Generation East and West Contactor (~$133k each) -Replacement of Carbon Dust Collector (~$38k each 2 total)
2028	-Replacement of Washwater Recovery Pump (~$95K 3 total) -Replacement of UPS system in Operations room (~$80k) -Replacement of WWC floc mixers (~$80k)

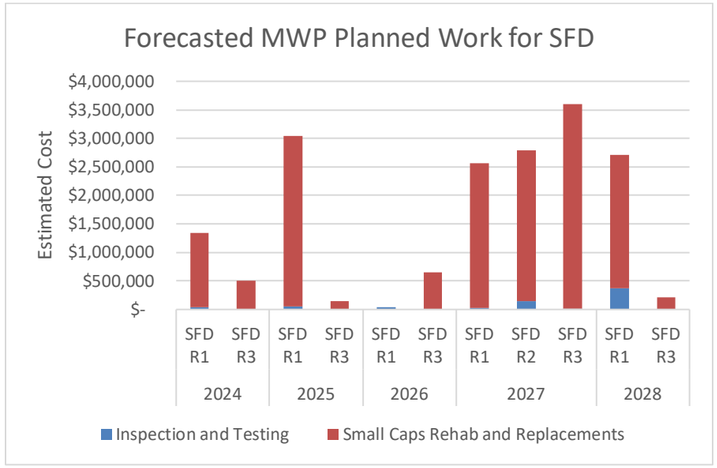
Note: The following assets replacements are not included in the MWP forecast:
-Replacement of Filter Media and Filter valves (Capital Project)
-Motor control centers included in the WTP Electrical Improvement Project (Capital Project estimated in FY24)

Figure 11: Silicon Valley Advanced Water Purification Center (SVAWPC) FY24-28 Planned and Forecasted Work



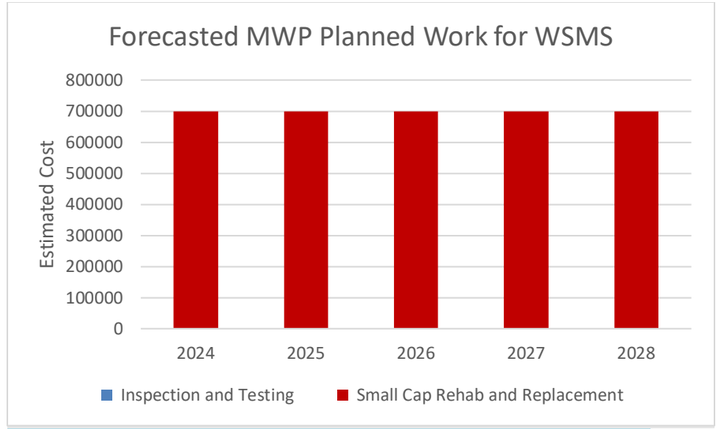
Year	Most Expensive Planned Work for SVAWPC
2024	- Replacement of membranes in MF rack #1 (~400k) -Replacement of membrane in MF rack #2 (~400k) -Replacement of RO transfer Motor (~$15k) -Replacement of RO Membrane (~900k)
2025	-Rehabilitation of fire protection pump (~$28k) -Rehabilitation of flush pump (~$28k) -Inspection and refurbishment of wiper control panels (~$15k each 12 total) -Replacement of membranes in MF rack #3 (~400k) -Replacement of membranes in MF rack #4 (~400k)
2026	-Rehabilitation of Threshold Inhibitor tank mixer (~80k) -Rehabilitation of MF Reverse supply pump #2 (~2$8k) -Replacement of Potable Water 12” overflow valve (~$12k) -Replacement of membranes in MF rack #5 (~400k) -Replacement of membranes in MF rack #6 (~400k)
2027	-Replacement of turbidity meters (~$7K 2 each) -Inspection of chemical tanks -Replacement of membranes in MF rack #7(~400k) -Replacement of membranes in MF rack#8 (~400k)
2028	-Replacement of RO cartridge filters ($104k each 3 total) -Replacement of autostrainers (~$12K each 3 total) -Replacement of various plant and chemical piping scheduled for every 15 years (~$468k total)

Figure 12: San Felipe Division Reach 1-3 FY24-28 Planned and Forecasted Work



Year	Most Expensive Planned Work for SFD
2024	R1 -Rehabilitation of PPP Pump Unit (~$1.32M) -PPP Pump and Motor condition assessment (~$30K) R3: -Rehabilitation of CPP Pump Unit (~$150k)
2025	R1 -Rehabilitation of PPP Pump #1-12 Motors (~$236k each) -PPP Pump and Motor condition assessment (~$30K) R3 -Rehabilitation of CPP Pump Unit (~$150k) -Replacement of Coyote Pump Office Trailer #1 (~$124k)
2026	R1 -Replacement of PPP Regulating Tank External CP Rectifier Anode Bed (~$226k) -Inspection of Pacheco Regulating Tank (~$28k) -PPP Pump and Motor condition assessment (~$30K) R3 -Rehabilitation of CPP Pump Unit (~$150k) -Replacement of Coyote Pump Isolation Control Valves #3&4 (~$92k each)
2027	R1 -Replacement of PPP Mech and HVAC Gallery Chillers CH-1&CH-2 (~$313k each 2 total) -PPP Pump and Motor condition assessment (~$30K) R2 -Rehabilitation of SCC Fault Crossing Pipe (~$1.8M) R3 -Rehabilitation of CPP Pump Unit (~$150k) -Replacement of CPP Distribution Panelboard DNA Transformer (~$1.1M)
2028	R1 -Replacement of PPP AC motor units (~$63k each 3 total) Replacement of office trailers (~$146k each 2 total) -PPP Pump and Motor condition assessment (~$30K) R3: -Replacement of cooling water supply pumps and motors (~$10k each 4 total)
Note: The following assets replacements are not included in the MWP forecast: -Pipeline inspection and rehabilitations for SCC per the 10-year Capital Pipeline Rehabilitation project Scheduled in FY23: Pacheco Tunnel Reach 2, PSV, Santa Clara Tunnel SCT to SV1, and Santa Clara Conduit. Santa Clara Tunnel SV1 to CPP and Coyote Discharge line -CPP ASD Replacement Capital project scheduled in FY23	

Figure 13: Water Supply Management System FY24-28 Planned and Forecasted Work



Year	Most Expensive Planned Work for WSMS
2024	-Pond Cleanings (~$500k) -Bring Ponds Back Up to As-built Levels (~$200k)
2025	-Pond Cleanings (~$500k) -Bring Ponds Back Up to As-built Levels (~$200k)
2026	-Pond Cleanings (~$500k) -Bring Ponds Back Up to As-built Levels (~$200k)
2027	-Pond Cleanings (~$500k) -Bring Ponds Back Up to As-built Levels (~$200k)
2028	-Pond Cleanings (~$500k) -Bring Ponds Back Up to As-built Levels (~$200k)
Note: Projects may be delayed a fiscal year due to material and shipment delays.	

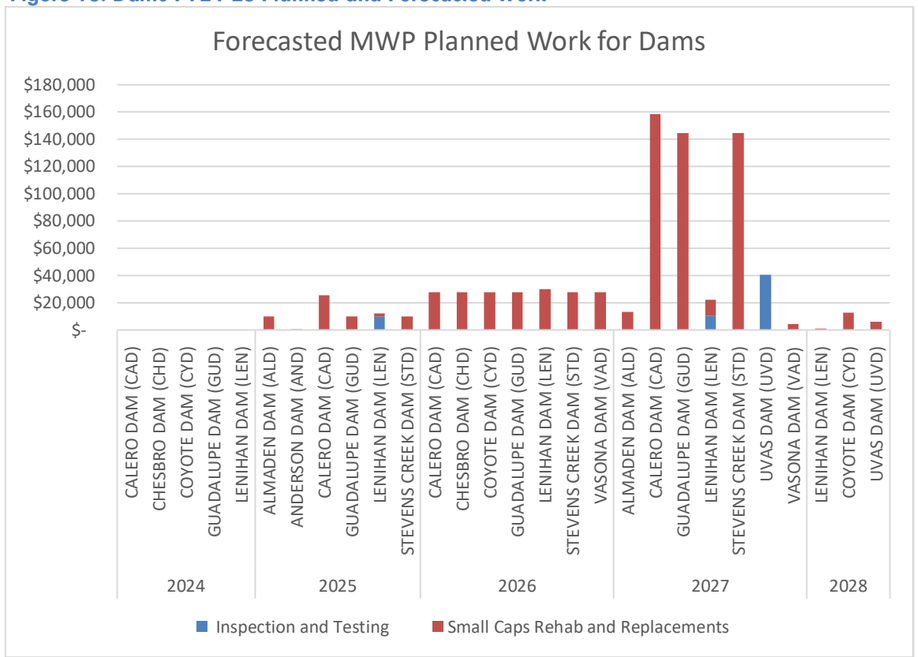
Figure 14: Recycled Water Distribution FY24-28 Planned and Forecasted Work

Year	Most Expensive Planned Work for Gilroy Reclamation Line
2024	- Condition Assessment Date TBD (~$44k)
2025	TBD
2026	TBD
2027	TBD
2028	TBD
Note: An inspection of a portion of the Gilroy Reclamation Line will be schedule during the South Country Recycled Water Pipeline Project (Capital Project). A contractor will conduct a condition assessment of the pipeline. In addition, a full condition assessment of the system will be completed soon. After these inspections, Asset Management will update the planned work.	

Figure 15: Vasona Pumping Plant (VPP) Facility FY24-28 Planned and Forecasted Work

Year	Most Expensive Planned Work for VPP
2024	-Electrical Testing (~$9k)
2025	TBD
2026	TBD
2027	TBD
2028	TBD
Note: Major replacements are scheduled for FY24-25 per Capital project Vasona Upgrade	

Figure 16: Dams FY24-28 Planned and Forecasted Work



Year	Most Expensive Planned Work for Dams
2024	
2025	-Replacement of ALD, CAD, & GUD Oxygenation Trailer RECIP Compressors (~$10k each)
2026	-Replacement of SCADA RTUs (~$195k each)
2027	-Replacement of CAD, GUD, & STD Oxygenation Trailers (~$131k each)
2028	-Replacement of Coyote Dam outlet valve (~$15k)
Note: The Five-Year MWP does not currently include rehabilitation or replacements recommended by the State of California Division of Safety of Dams (DSOD) and Federal Energy Regulatory Commission (FERC). DSOD and FERC annual inspections identify required maintenance activities which Valley Water implements under its Dam Safety Program.	

Individual/Large Capital Project Recommendations

The work planning process recommends some activities for execution as individual or larger capital projects. Individual/large capital projects represent major work efforts that are beyond the capabilities of the maintenance units to perform and meet one of the following criteria: exceeds $5 Million, duration greater than 2 years, or requires right of way purchase. Generally, these projects require multi-year planning and extensive design efforts, which include preparation of plans and specifications for bidding.

No new individual Capital Projects have been identified for FY2024.

10-Year Pipeline Rehabilitation Project

As mentioned above, raw and treated water pipeline renewal work is included in Valley Water's five-year CIP in the 10-Year Pipeline Rehabilitation Project, and therefore forecasts of planned work are not included in this plan. Below is a list of currently planned work for the 10-Year Pipeline Rehabilitation Project.

FY24	• Santa Clara Conduit inspection and rehabilitation from SV1 to CPP • Snell pipeline inspection and rehabilitation from Aborn LV to STWTP
FY25	• West pipeline inspection and rehabilitation from RWTP to Cox
FY26	• West pipeline inspection and rehabilitation from Cox to Mountain View LV • AVP inspection and rehabilitation
FY27	• East pipeline inspection and rehabilitation from PWTP to Thompson LV
FY28	• Milpitas Pipeline inspection and rehabilitation • AVP inspection, rehabilitation, and CFRP repair from Coleman to Calero • AVP inspection, rehabilitation, and CFRP repair from Vasona to Calero • Santa Teresa Force Main Pipeline Inspection and Rehabilitation

Valley Water is undertaking infrastructure master planning efforts for its water treatment plants, distribution system, and SCADA system. These efforts will identify major facility renewal projects for future years. The projects that come from the master plans will likely be too large for maintenance to execute, and will be done as large/individual capital improvement projects.

Planned Work Tracking

Actual scheduling, execution, and reporting on the planned asset renewal projects are primary responsibilities of the assigned units' work within the Maximo work order system. These units communicate the status to Asset Management Unit, which performs QA/QC and reviews at the close of each fiscal year to assess what work was successfully completed. The Asset Management Program tracks asset renewal that is not undertaken since it increases the risk of asset failures.

A review of competed asset renewal work planned for FY23 is provided in Appendix B.

V. FIVE YEAR OPERATIONS FORECASTS

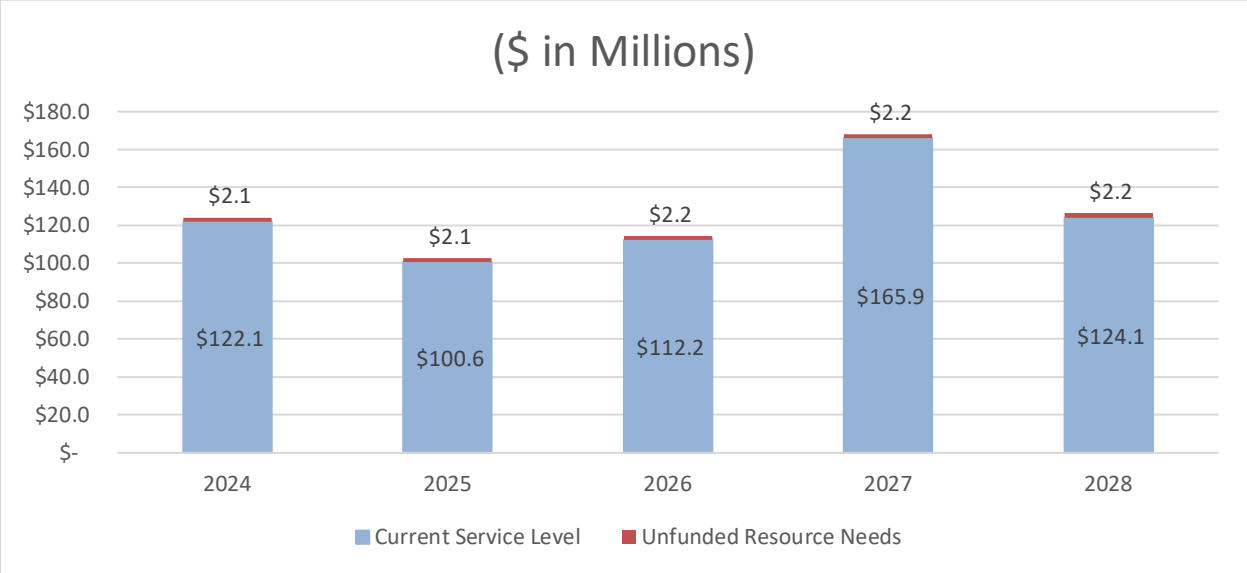
This section provides an overview of the expected operations expenses and unfunded needs for the operations and maintenance activities conducted by the Raw and Treated Water Operations Divisions for the next five fiscal years. These two Divisions are responsible for operations and maintenance of Valley Water's water supply, treatment, and distribution system. The types of activities budgeted in the projects presented in this section are described in Section II.

The final financial information provided in this plan was taken from the Board-adopted budget for FY24 and FY25, as well as the forecast data collected as part of the budget and groundwater charge (rate) setting process. The FY24 and FY25 budget requests and unfunded needs were evaluated throughout the budget process through May 2023. The plan was finalized following Board adoption of Valley Water's budget. The final plan documents the budgeted amounts for each project for FY24, planned amounts for FY25, as well as any remaining unfunded needs following the budget and groundwater charge setting process. Throughout the plan, the term 'baseline' refers to activities that maintain current service levels and are assumed to be funded in fund forecasts prepared by Valley Water's Financial Planning and Management Services Division.

The sections below provide an overview of the Raw and Treated Water Division Units, as well as tables and charts which summarize expected operations expenses and unfunded operations resource needs for fiscal years 24-28.

A summary of the five-year forecasts of funding for current service levels as well as future resource requirements which are not yet funded for the Raw and Treated Water Operations Divisions are shown in the chart below.

Figure 17: Raw & Treated Water Operation Division Forecasts



*Data as of June 16,2023.

In total, the Raw and Treated Water Operations Divisions have identified baseline resource needs of $122 Million for Fiscal Year 2024 for current service levels, as well as $2.1 Million of unfunded resource needs. Additional details on these unfunded resource requests are provided below. The additional requested resources would provide the following services:

- Support for laboratory operations and accreditation
- Support for Corrosion Control Cathodic Protection Program
- Support for Water Utility Maintenance Mechanical Engineering program
- Support for Water Quality program
- Support for Water Treatment Plant General Maintenance
- Support for the Water Use Management and Well Ordinance Programs

Raw Water Division

The Raw Water Division maintains and operates 150 miles of large diameter transmission pipelines including 94 miles of raw water pipelines and tunnels, three pumping plants, and 102 ponds used to recharge the groundwater basins. The use of local and imported raw water supplies are maximized to meet treated water, groundwater recharge, and environmental needs.

Unit 408 is this Division's organizational unit and consists of the Deputy Operating Officer and one Administrative Assistant. This Division manages one project in addition to the Units listed below: 91211005 – SFD Reach 1 Administration. The following Units are included in this Division:

Raw Water & Pipeline Maintenance Engineering (Unit 435)
The Raw Water & Pipeline Maintenance Engineering Unit provides civil and corrosion control engineering and support services for all Water Utility facilities; monitor and maintain pipeline condition assessment equipment (Acoustic Fiber Optic, Transient and Cathodic Protection monitoring); support 10-Year Pipeline Rehabilitation Program; and support O&M, Asset Management, General Engineering, CIP and Small Cap work requests.

Raw Water Operations (Unit 455)
The Raw Water Operations Unit performs the day-to-day operations planning and remote operations of Valley Water's Raw Water System consisting of:

- 10 water supply reservoirs with a combined restricted storage capacity of about 62,701 acre-feet.
- 3 Raw Water Pump Stations with over 37,000 combined horsepower.
- 1 hydroelectric facility. The Anderson Hydroelectric Facility (Facility) has not been in operation since the February 20, 2020, FERC Order to maintain Anderson Reservoir at deadpool. On January 26, 2021, the Valley Water's Board of Directors directed staff to seek approval from FERC to surrender and decommission the Facility after the reconstruction of Anderson Dam.
- 94 miles of large diameter raw water pipelines and tunnels.
- 102 groundwater recharge ponds.
- 98 miles of streams managed for groundwater recharge.

The Unit also performs the required water right and regulatory compliance reporting to maintain and protect local water supply operations.

Groundwater Management (Unit 465)
The Groundwater Management Unit helps ensure continued groundwater sustainability by providing accurate and timely information on current and forecasted groundwater conditions; ensuring continued Valley Water compliance with California Water Code Sustainable Groundwater Management Act (SGMA) requirements; and implementing programs to protect groundwater resources.

Wells & Water Measurement (Unit 475)
The Wells & Water Measurement Unit conducts preventive, corrective and rehabilitative maintenance for backflow prevention devices and measurement assets for treated water, raw water, and groundwater production. The Well Ordinance Program helps protect Valley Water's groundwater resource by providing services used for the implementation of Valley Water's Well Ordinance (Ordinance 90-1). Implementation of the well ordinance includes well permitting, well inspection, well

data management, and violation enforcement for all wells located in Santa Clara County. Unit 475 ensures that wells and other deep excavations are constructed, maintained, and destroyed in such a manner that they do not harm the Valley Water's groundwater resources.

Treatment Plant Maintenance (Unit 555)
The Treatment Plant Maintenance Unit conducts preventive, corrective and rehabilitative maintenance required to sustain operations of the Santa Teresa Water Treatment Plant, Penitencia Water Treatment Plant (PWTP), Rinconada Water Treatment Plant (RWTP), Campbell Well Field, and San Francisco Intertie.

Raw Water Field Operations and Pipeline Maintenance (Unit 585)
The Raw Water Field Operations and Pipeline Maintenance Unit is responsible for the mechanical, electrical, and control system preventive, corrective, and rehabilitative maintenance of the distribution system infrastructure which includes three pump stations (Pacheco, Coyote, and Vasona) and 150 miles of pipeline. Also included is the operation of recharge and water distribution systems for groundwater basins, reservoirs, canals, and other water supply infrastructure.

Funding for current service levels as well as future resource requirements which are not yet funded for the operations projects managed by this Division are included in the tables below. The resource requirements and unfunded needs are summarized by project.

Resource Requirements for Current Service Levels*

PROJECT NAME & NUMBER	Unit No.	FY24 Adopted	FY25 Projected	FY26 Projected	FY27 Projected	FY28 Projected
Groundwater Management Program - 91041018	465	$ 5,692	$ 5,997	$ 6,633	$ 6,651	$ 6,851
Hollister Groundwater Mgm - 60041003	465	$ 53	$ 55	$ 139	$ 108	$ 89
Raw Water Corrosion Control - 92781002	435	$ 804	$ 893	$ 903	$ 930	$ 960
Raw Water T&D Eng Other - 92761083	435	$ 1,232	$ 1,426	$ 1,822	$ 1,876	$ 1,937
SF Reach 1-Engineering - Other - 91211085	435	$ 589	$ 394	$ 400	$ 412	$ 425
SF Reach 2-Engineering - Other - 91221006	435	$ 281	$ 356	$ 412	$ 424	$ 438

PROJECT NAME & NUMBER	Unit No.	FY24 Adopted	FY25 Projected	FY26 Projected	FY27 Projected	FY28 Projected
SF Reach 3-Engineering - Other - 91231085	435	$ 608	$ 433	$ 521	$ 536	$ 553
SFD Reach 1 Administration - 91211005	408	$ 11	$ 12	$ 19	$ 19	$ 20
Treated Water T/D Corrosion - 94781001	435	$ 676	$ 766	$ 783	$ 806	$ 833
TW T&D - Engineering - Other - 94761005	435	$ 607	$ 904	$ 1,100	$ 1,132	$ 1,169
Water Operations Planning - 91041012	455	$ 500	$ 520	$ 700	$ 721	$ 745
Water Rights - 91111001	455	$ 740	$ 749	$ 1,022	$ 1,054	$ 1,091
Water Treatment Plant Engineer - 93081009	435	$ 419	$ 409	$ 504	$ 519	$ 536
Rinconada WTP General Maint - 93291099	555	$ 4,226	$ 4,682	$ 5,082	$ 5,2288	$ 5,237
Penitencia WTP General Maint - 93231099	555	$ 3,569	$ 3,473	$ 3,882	$ 3,992	$ 4,149
Santa Teresa WTP General Maint - 93281099	555	$ 4,048	$ 4,193	$ 4,446	$ 4,572	$ 4,752
Campbell Well Field Maint - 93761005	555	$ 131	$ 136	$ 148	$ 152	$ 157
SF/SCVWD Intertie Gen Maint - 93761099	555	$ 166	$ 164	$ 179	$ 185	$ 191
San Felipe Reach 1 Gen Maint - 91211099	585	$ 1,019	$ 1,062	$ 1,118	$ 1,149	$ 1,206

PROJECT NAME & NUMBER	Unit No.	FY24 Adopted	FY25 Projected	FY26 Projected	FY27 Projected	FY28 Projected
San Felipe Reach 2 Gen Maint - 91221099	585	$ 162	$ 168	$ 194	$ 200	$ 209
San Felipe Reach 3 Gen Maint - 91231099	585	$ 1,343	$ 1,395	$ 1,446	$ 1,407	$ 1,477
Vasona Pump Station Gen Main - 92261099	585	$ 304	$ 314	$ 255	$ 283	$ 268
Recycled Water T&D Genrl Maint - 92761008	585	$ 235	$ 314	$ 292	$ 301	$ 311
Recharge/RW Field Ops - 92761009	585	$ 3,650	$ 3,662	$ 4,729	$ 4,859	$ 5,086
Rchrg / RW Field Fac Maint - 92761010	585	$ 1,751	$ 1,910	$ 1,703	$ 1,753	$ 1,816
Anderson Hydrelctrc Fclty Main - 92761085	585	$ 113	$ 1119	$ 255	$ 283	$ 268
Raw Water T / D Gen Maint - 92761099	585	$ 2,6875	$ 2,969	$ 3,242	$ 3,330	$ 3,504
Treated Water T/D Gen Maint - 94761099	585	$ 1,616	$ 1,16	$ 2,088	$ 2,132	$ 2,248
San Felipe Reach 1 Operation - 91211004	455	$ 776	$ 803	$ 915	$ 942	$ 973
San Felipe Reach 2 Operation - 91221002	455	$ 81	$ 84	$ 108	$ 111	$ 115
San Felipe Reach 3 Operation - 91231002	455	$ 329	$ 339	$ 375	$ 386	$ 410
Local Res/Div Plan & Analysis - 91761001	455	$ 2,384	$ 2,382	$ 2,586	$ 2,662	$ 2,750

PROJECT NAME & NUMBER	Unit No.	FY24 Adopted	FY25 Projected	FY26 Projected	FY27 Projected	FY28 Projected
Raw Water T&D Gen'l Oper - 92761001	455	$ 1,838	$ 1,908	$ 2,112	$ 2,177	$ 2,251
Untreated Water Prog Plan - 92761012	455	$ 345	$ 340	$ 499	$ 513	$ 534
Water Use Measurement - 95111003	475	$2,445	$ 2,538	$ 2,624	$ 2,702	$ 2,762
Well Ordinance Program - 91451002	475	$2,388	$ 2,548	$ 2,636	$ 2,713	$ 2,804
Total		$72,006	$49,417	$53,512	$103,131	$59,105

***In thousands.** Data as of October 18, 2022.

Key Milestones for Current Service Levels

- Complete all required corrosion control and cathodic protection monitoring and minor repair work on all utility facilities.
- Provide engineering support for both planned and unplanned work requests and monitor condition of all utility facilities.
- Operate and maintain the Almaden Valley Pipeline, Central Pipeline, Cross Valley Pipeline, and Calero Pipeline, and Santa Clara Conduit and Pacheco Conduit Acoustic Fiber Monitoring Systems
- Ensure pipelines are protected by operating rectifiers based upon industry established criteria per NACE SP0100-2019.
- Update raw water operations plans as water supply conditions change and operations evolve, or at least monthly.
- Submit and maintain Central Valley Project (CVP) and State Water Project (SWP) annual delivery schedules per contract requirements.
- Coordinate San Felipe Division Reach 1 Operations with the United States Bureau of Reclamation (USBR) and San Benito County Water District (SBCWD).
- Manage the untreated surface water program and prepare annual report on previous fiscal year (FY).
- Submit the annual water rights reports to State Water Resources Control Board and pay the associated fees.
- Prepare Lake or Streambed Alteration Agreement (LSAA) South County operating strategy annual compliance report and Annual Report on North County LSAAs.
- Measure groundwater elevation in 200 wells and complete monthly Groundwater Condition Reports.
- Submit annual SGMA report and semi-annual groundwater elevation data to the California Department of Water Resources.
- Implement alternative Groundwater Sustainability Plan and ensure continued SGMA compliance.
- Complete identified Preventive Maintenance (PM) and Corrective Maintenance (CM) work for all water utility facilities.

- Manage operations of off stream recharge, in-stream recharge, canals, ditches, low-pressure pipelines, in-stream diversion facilities, fish screens, and fish ladders.
- Provide on-call support 24 hours per day.
- Plan and execute work projects identified in the 5-year Maintenance Work Plan.
- Perform condition assessments for all water utility facilities.
- Provide accurate measurement of treated water, raw water, and groundwater production.
- Issue permits for construction, destruction and reactivation of wells and perform inspections.
- Conduct enforcement of abandoned wells in accordance with the plan per the Wells Ordinance.

Additional Resource Needs (Unfunded)*

PROJECT NAME & NUMBER	Unit No.	FY24	FY25	FY26	FY27	FY28
Raw Water Corrosion Control - 92781002	435	$ 409	$ 422	$ 437	$ 451	$ 464
Penitencia WTP General Maint - 93231099	555	$ 135	$ 140	$ 145	$ 144	$ 151
Santa Teresa WTP General Maint - 93281099	555	$ 137	$ 142	$ 146	$ 146	$ 152
Rinconada WTP General Maint - 93291099	555	$ 131	$ 136	$ 140	$ 140	$ 146
Water Use Measurement - 95111003	475	$ 11	$ 12	$ 12	$ 12	$ 13
Well Ordinance Program - 91451002	475	$ 367	$ 379	$ 392	$ 393	$ 406
Total		$1,190	$1,231	$1,272	$1,286	$1,332

***$ in thousands.** Data as of October 18,2022.

Description of Services to be Provided with Additional Resources

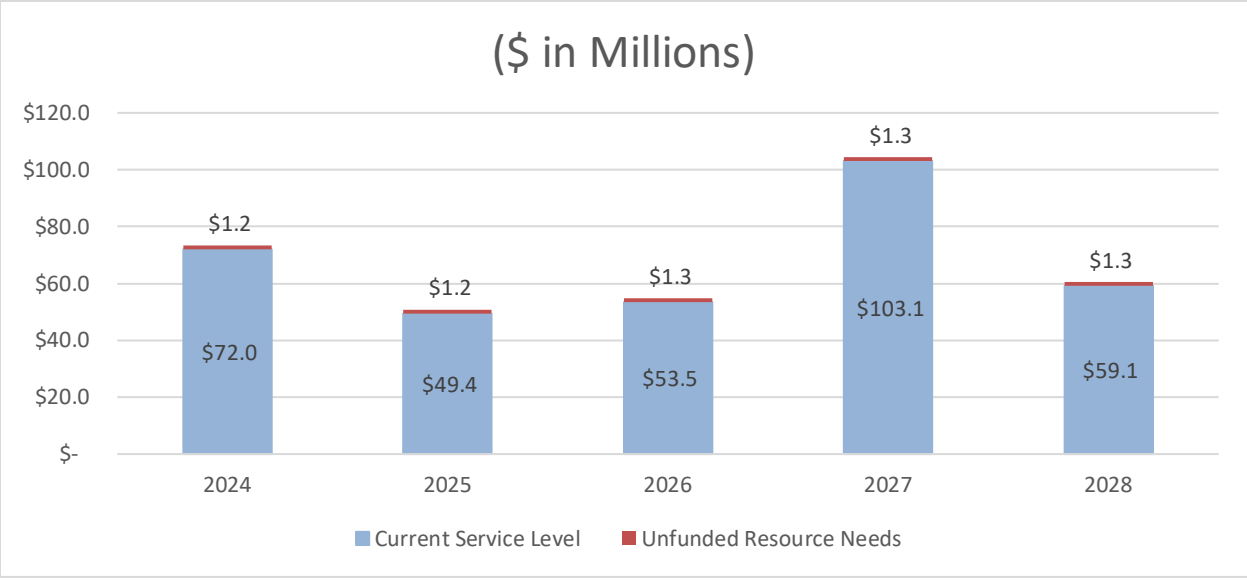
The following request was approved for FY24:

- Support for Treated Water Treatment Plant General Maintenance of instrumentation and controls assets. The request cost are spread across the 3 water treatment plant general maintenance operating budgets.

The additional requested resources were not approved through the groundwater charge setting and budget process. The requested resources will provide for:

- Support for Corrosion Control Cathodic Protection Program to compile, analyze and assess data; coordinate and administer on-call contract; coordinate and schedule equipment maintenance and replacement projects; coordinate, plan and schedule CSI and ECDA surveys; and assist with incorporation of data into overall pipeline and infrastructure condition assessment and management strategies.
- Support the Water Use Measurement and Wells Ordinance program

Figure 18: Raw Water Operations Division Five Year Projection – Summary



*Data as of June 16,2023.

Treated Water Division

The Treated Water Division (Division) is responsible for managing the operation of Valley Water's three conventional drinking water treatment plants and the Campbell Well Field to provide a reliable, high-quality drinking water supply to the Santa Clara County residents. The Division also manages the operation and maintenance of the Silicon Valley Advanced Water Purification Center to enhance the quality and advance the use of recycled water in the county.

In addition, the Division manages business units that provide leadership and technical support in areas of laboratory services; water quality process engineering; electrical and control systems engineering; and plant maintenance engineering to improve the overall safety, quality, and reliability of current facilities and the commissioning of new facilities upon capital construction handover to Operations and Maintenance (O&M). Furthermore, the Division regularly communicates with Valley Water's drinking water retailers to maintain a collaborative working relationship and conducts annual check-ins and ad-hoc meetings with the State Water Resources Control Board (SWRCB) for ongoing and annual updates of drinking and recycled water regulations.

Unit 515 is this Division's organizational unit and consists of the Deputy Operating Officer, a Senior Management Analyst, and one Administrative Assistant. The following Units are included in this Division:

Plant Maintenance Engineering and Commissioning (Unit 516)
The Plant Maintenance Engineering and Commissioning Unit leads and coordinates the commissioning and start-up activities at Valley Water's treatment plants and treated water pipelines. The unit supports and implements the integration of large capital projects, throughout all phases, to our treatment plants and treated water pipelines. The unit also provides mechanical engineering support services for operations, maintenance, asset management and capital improvements at treatment plants and pump stations.

Water Quality (Unit 525)
The Water Quality Unit is responsible for providing water quality operational, process, and project support directly to the treated water managers and water treatment plant supervisors and operators. The unit is also responsible for tracking drinking water-related regulatory development, providing recommendations for regulatory compliance strategy, and communicating with DDW on various regulatory issues and retailers on various water quality issues. The unit provides leadership in water quality and treatment research through collaboration with other agencies and involvement in professional drinking water organizations. In addition, the unit oversees Source Water Quality Management and Invasive Mussel Prevention Programs and supports internal and external groups on source water quality management and protection.

Laboratory Services (Unit 535)
The Laboratory Services Unit is responsible for providing analytical and sampling services to the Water Utility Enterprise. The state-of-the-art laboratory is accredited with the California Environmental Laboratory Accreditation Program (ELAP), maintains a robust quality assurance and quality control program, and tests water produced from each of our drinking water treatment plants, distribution lines, the Silicon Valley Advanced Water Purification Center, surface water reservoirs and groundwater basins.

Utility Electrical and Control Systems Engineering (Unit 545)
The Utility Electrical and Control Systems Engineering Unit provides electrical, control systems, Supervisory Control and Data Acquisition (SCADA), and imported electricity management engineering

services, including direct technical services, in support of Valley Water's critical infrastructure and systems used in the day-to-day (24 hours a day, 7 days a week) operations and maintenance of its complex, countywide raw and treated water conveyance system (including three raw water pump stations and pipelines), three drinking water treatment plants, one advanced purified water processing plant, the headquarters office campus, and watershed facilities. The imported electricity management saved Valley Water approximately $1 Million in annual electrical energy expenditures and is 100 percent carbon-free in 2021.

North Water Treatment Operations (Unit 565)
The North Water Treatment Operations Unit provides safe, clean, and high-quality drinking water to Valley Water's three (3) treated water retailers along the East/Milpitas Pipelines, including San Jose Water Company, City of San Jose, and City of Milpitas. The unit is responsible for safe and cost-effective operations (24 hours a day, 7 days a week) and management of the Penitencia Water Treatment Plant (PWTP), the joint San Francisco Public Utilities Commission (SFPUC)-Valley Water (VW) Intertie facility, and the East/Milpitas Pipeline turnouts. The unit is also responsible for cost-effective operations and maintenance of the Silicon Valley Advanced Water Purification Center (SVAWPC).

South Water Treatment Operations (Unit 566)
The South Water Treatment Operations Unit provides safe, clean, and high-quality drinking water and a backup supply of drinking water to Valley Water's seven (7) treated water retailers, and ultimately to the residents of Santa Clara County. The unit is responsible for providing safe and cost-effective operations (24 hours a day, 7 days a week) and management of the Santa Teresa Water Treatment Plant (STWTP), the Rinconada Water Treatment Plant (RWTP), the Campbell Well Field, and the West and Snell/East Pipeline turnouts.

Funding for current service levels as well as future resource requirements which are not yet funded for the operations projects managed by this Division are included in the tables below. The resource requirements and unfunded needs are summarized by project.

Resource Requirements for Current Service Levels*

PROJECT NAME & NUMBER	Unit No.	FY23 Adopted	FY24 Adopted	FY25 Projection	FY26 Projection	FY27 Projection	FY28 Projection
Campbell Well Field Operations - 93761004	566	$ 102	$ 109	$ 104	$ 118	$ 121	$ 124
Energy Management - 21008	545	$ 380	$ 415	$ 434	$ 460	$ 473	$ 488
Invasive Mussel Prevention - 91451011	525	$ 717	$ 796	$ 804	$ 829	$ 853	$ 880
Plant Maintenance Engineering & Commissioning	516	$ 953	$ 746	$ 1,236	$ 1,405	$ 1,432	$ 1,473

PROJECT NAME & NUMBER	Unit No.	FY23 Adopted	FY24 Adopted	FY25 Projection	FY26 Projection	FY27 Projection	FY28 Projection
Project - 93081002							
PWTP General Operations - 93231009	565	$ 7,079	$ 7,809	$ 7,806	$ 8,954	$ 9,230	$ 9,538
Raw Water T&D Ctrl and Electr - 92761082	545	$ 874	$ 690	$ 699	$ 968	$ 996	$1,028
RWTP General Operations - 93291012	566	$ 10,616	$ 10,910	$ 10,666	$ 12,555	$ 13,810	$ 14,294
San Felipe Reach1 Ctrl and Ele - 91211084	545	$ 464	$ 330	$ 386	$ 442	$ 455	$ 469
San Felipe Reach3 Ctrl and Ele - 91231084	545	$ 294	$ 243	$ 233	$ 384	$ 395	$ 408
SF/SCVWD Intertie General Ops - 93761001	565	$ 170	$ 176	$ 182	$ 195	$ 201	$ 207
Source Water Quality Mgmt - 91451005	525	$ 396	$ 413	$ 437	$ 749	$ 496	$ 513
STWTP - General Operations - 93281005	566	$ 7,375	$ 6,734	$ 7,406	$ 8,562	$ 9,417	$ 9,697
SVAWPC Facility Maintenanc - 91281008	565	$ 3,142	$ 3,891	$ 3,312	$ 2,470	$ 3,668	$ 5,174
SVAWPC Facility Operation - 91281007	565	$ 2,985	$ 3,690	$3,582	$ 4,291	$ 4,444	$ 4,610
Treated Water Ctrl & Elec Eng - 93761006	545	$ 2,974	$ 3,158	$ 3,326	$ 3,641	$ 3,747	$ 3,870
W T General Water Quality - 93081008	525	$ 2,798	$ 2,801	$ 2866	$ 3,132	$ 3,225	$ 3,331

PROJECT NAME & NUMBER	Unit No.	FY23 Adopted	FY24 Adopted	FY25 Projection	FY26 Projection	FY27 Projection	FY28 Projection
Water District Laboratory - 93401002	535	$ 6,532	$ 6,982	$ 7,494	$ 8,324	$ 8,599	$ 8,902
Wolfe Road Recycled Water Facilit - 91241001	565	$ 100	$ 206	$ 206	$ 229	$ 236	$ 243
SCADA Systems Upgrade - 761013	545	$ 868	$ 0	$ 0	$ 977	$ 1,007	$ -
Total		$48,819	$50,099	$51,179	$58,685	$62,805	$65,006

***In thousands.** Data as of October 18,2022

Key Milestones for Current Service Levels

- 100% of the treated water delivered to customers meets and/or surpasses all applicable primary drinking water quality regulatory standards.
- Provide cost-effective service to our retailers, ensuring that the annually contracted volume of treated water is delivered effectively and efficiently.
- Supply recycled water, up to 8 million gallons per day with a a target of 500 mg/L (+/- 50 mg/L) for total dissolved solids, into the South Bay Water Recycling distribution system.
- Provide water to SFPUC through the Intertie as needed, consistent with the SFPUC-Valley Water agreement.
- Maintain state accreditation through California ELAP for majority of drinking water parameters, through the successful completion of on-site audits, proficiency testing studies, and payment of applicable fees.
- Submit all regulatory compliance reports for drinking water testing by the required due dates.
- Provide technical expertise and leadership for all commissioning-related work to improve overall safety, quality, and reliability upon capital construction handover to Operations and Maintenance.
- Provide mechanical engineering support services for operations, maintenance, asset management and capital improvements of treatment plants and pump stations.
- Actively track drinking water regulations and provide annual updates on the status of regulations.
- Maintain regular communications and participate in the annual check-in with DDW.
- Maintain timely and regular communication with retailers on water quality issues.
- Support continual operation of critical water utility facilities, dam safety projects, new reservoir projects, and raw and treated water capital projects by providing essential electrical, control systems, and SCADA engineering services to capital project teams.
- Continue to manage a cost-effective and carbon-free imported electricity program.
- Support the development of the water treatment plant, distribution system and SCADA master plans.

Additional Resource Needs (Unfunded)*

PROJECT NAME & NUMBER	Unit No.	FY24 Projection	FY25 Projection	FY26 Projection	FY27 Projection	FY28 Projection
Plant Maintenance Engineering & Commissioning Project - 93081002	516	$ 470	$ 485	$ 502	$ 502	$ 517
W T General Water Quality - 93081008	525	$ 472	$ -	$ -	$ -	$ -
Water District Laboratory - 93401002	535	$ 412	$ 425	$ 440	$ 440	$ 455
Total		$942	$910	$942	$942	$972

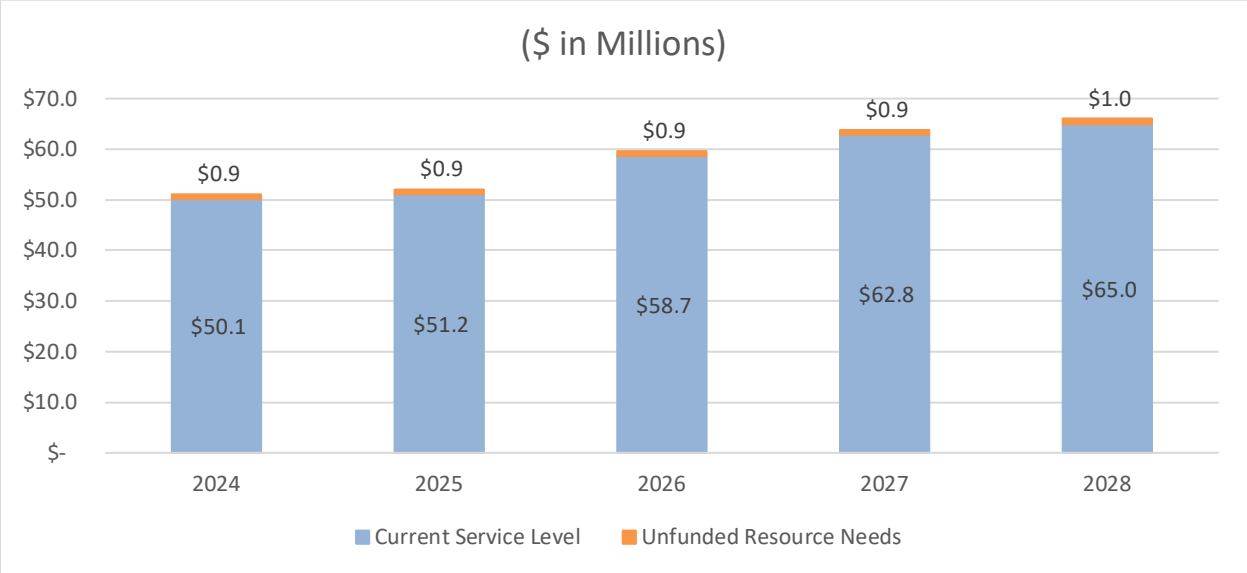
***$ in thousands.** Data as of October 18,2022

Description of Services to be Provided with Additional Resources

The additional requested resources were reviewed through the groundwater charge setting and budget process. The resources will provide for:

- Support for the implementation of the quality assurance and quality control requirements per new ELAP laboratory accreditation standards required by January 1, 2024, and to support sampling and testing activities for emerging contaminants such as PFAS, algaltoxins, and Microplastics.
- Support for mechanical engineering work for operations, maintenance, asset management and capital projects and programs for four treatment plants, three pump stations, SFPUC-VW Intertie, and related transmission facilities.
- Support for Water Quality program's pilot and full-scale testing, troubleshooting and recommendations on various water quality issues. Conduct water quality data and plant performance evaluation with effective data query tools.

Figure 19: Treated Water Operations Division Five Year Projection – Summary



*Data as of June 1,2023.

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APPENDIX A: FISCAL YEAR 2024 (FY2024) PLANNED ASSET RENEWAL WORK

Overview

Appendix A contains tables conveying the FY2024 Planned Asset Renewal Work (PARW) details per facility. Each facility has one table for planned work which may span multiple pages. In addition, one table has been made to convey the backlog.

Notes for the PW tables:

- The project costs provided in the tables include services and supply costs; and required labor hours are estimated. The required labor hours are provided by staff and are conservative.
- **Work order number will be generated in Maximo and effective July 1,2023.**

Description	Figure No.
FY2024 PW for PWTP	20
FY2024 PW for SFI	21
FY2024 PW for RWTP	22
FY2024 PW for STWTP	23
FY2024 PW for SVAWPC	24
FY2024 PW for San Felipe Reaches	25
FY2024 PW for Water Supply Management System	26

APPENDIX A: FY2023 PLANNED ASSET RENEWAL WORK (PARW) PLANNED WORK

Figure 20: FY24 Planned Asset Renewal Work for PWTP

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
PWTP ALUM/FERRIC SYSTEM	Clean and coat Alum Tank #1 (internal staff) - AP10017	$ 2,500	1
	Clean and coat Alum Tank #2 (internal staff) - AP10018	$ 2,500	2
	Clean and coat Alum Tank #3 (internal staff) - AP10019	$ 2,500	3
PWTP CLEARWELL SYSTEM	Maintenance & Inspection of PWTP CLEARWELL - AP10151	$200,000	4
	PWTP Clearwell bypass install BFVs	$250,000	5
PWTP ZINC/PHOSPHORIC ACID SYSTEM	Replacement of PWTP PHOSPHORIC ACID FLOW METER - AP10671	$ 6,365	6
PWTP has 6 total FY24 Renewal Projects with an estimated cost of ~$463,865K.			

Figure 21: FY24 Planned Asset Renewal Work for SFI

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
SFI has 0 total FY24 Renewal Projects with an estimated cost of ~$0.			

Figure 22: FY24 Planned Asset Renewal Work for RWTP

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
RWTP AQUA AMMONIA SYSTEM	Replacement of RWTP AQUA NH4 FLOWMETER # 1-1/4INCH - AP20375	$ 6,000	1
	Replacement of RWTP AQUA NH4 FLOWMETER # 2- 1/10INCH - AP20376	$ 6,000	2
	Removal of tank liner for RWTP AQUA NH4 STORAGE TANK - AP20030	$ 130,000	3
RWTP CARBON SYSTEM	Replacement of RWTP Chemical Feed Pump- purchase 1 spare	$ 14,000	4
	Replacement of RWTP PAC DUST COLLECTOR #1 - AP20100	$ 60,000	5
RWTP DEWATERING SYSTEM	Rebuild RWTP SLUDGE DEWATERING CENTRIFUGE #2 (RDWTCFG02) - AP66934	$80,000	6
	Rebuild RWTP SLUDGE DEWATERING CENTRIFUGE #1 (RDWTCFG01) - AP66933	$80,000	7
RWTP FILTER POLY SYSTEM (NON-IONIC)	Replacement of RWTP NON-IONIC FILTER POLY FLOW METER; FLOC #1 - AP50158	$ 6,365	8
	Replacement of RWTP NON-IONIC FILTER POLY FLOW METER; FLOC #2 - AP50159	$ 6,365	9
	Replacement of RWTP NON-IONIC FILTER POLY FLOW METER; FLOC #3 - AP50160	$ 6,365	10

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
	Replacement of RWTP NON-IONIC FILTER POLY FLOW METER; FLOC #4 - AP50161	$ 6,365	11
RWTP FILTER SYSTEM	Replacement of RWTP FILTER #2 LEVEL TRANSMITTER (SOUTH) - AP20209	$ 4,000	12
	Replacement of RWTP FILTER #3 LEVEL TRANSMITTER (SOUTH) - AP20222	$ 4,000	13
	Replacement of RWTP FILTER #2 LEVEL TRANSMITTER (NORTH) - AP20208	$ 4,000	14
	Replacement of RWTP FILTER #3 LEVEL TRANSMITTER (NORTH) - AP20221	$ 4,000	15
	Replacement of RWTP FILTER #6 LEVEL TRANSMITTER (SOUTH) - AP54304	$ 4,000	16
	Replacement of RWTP FILTER #6 LEVEL TRANSMITTER (NORTH) - AP54303	$ 4,000	17
	Replacement of RWTP FILTER #5 LEVEL TRANSMITTER (SOUTH) - AP54302	$ 4,000	18
	Replacement of RWTP FILTER #5 LEVEL TRANSMITTER (NORTH) - AP54301	$ 4,000	19
	Replacement of RWTP FILTER #1 LEVEL TRANSMITTER (SOUTH) - AP20197	$ 4,000	20
	Replacement of RWTP FILTER #1 LEVEL TRANSMITTER (NORTH) - AP20196	$ 4,000	21
	Replacement of RWTP FILTER #4 LEVEL TRANSMITTER (SOUTH) - AP20234	$ 4,000	22
	Replacement of RWTP FILTER #4 LEVEL TRANSMITTER (NORTH) - AP20233	$ 4,000	23
	Replacement of RWTP FILTER #4 RFCV HEADLOSS METER - AP46662	$ 6,365	24
	Replacement of RWTP FILTER #2 RFCV HEADLOSS METER - AP46661	$ 6,365	25
	Replacement of RWTP FILTER #5 RFCV HEADLOSS METER - AP46660	$ 6,365	26
	Replacement of RWTP FILTER #3 RFCV HEADLOSS METER - AP46659	$ 6,365	27
	Replacement of RWTP FILTER #1 RFCV HEADLOSS METER - AP46658	$ 6,365	28
	Replacement of RWTP FILTER #6 RFCV HEADLOSS METER - AP49756	$ 6,365	29
RWTP SODIUM HYDROXIDE (CAUSTIC) SYSTEM	Replacement of RWTP CAUSTIC METER PUMP # 1; FLOWMETER (FIT-303) - AP50217	$ 6,365	30
	Replacement of RWTP CAUSTIC METER PUMP # 2; FLOWMETER (FIT-302) - AP50218	$ 6,365	31
	Replacement of RWTP CAUSTIC METER PUMP # 3; FLOW METER (FIT-301) - AP50219	$ 6,365	32

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
	Internal Inspection of Caustic Tank #2 - AP50903	$ 25,000	33
RWTP WATER MONITORING SYSTEM	Replacement of RWTP 2100N TURBIDIMETER (SPARE) - BENCHTOP - AP20592	$7,966	34
RWTP ZINC/PHOSPHORIC ACID SYSTEM	Replacement of RWT PHOSPHORIC ACID TANK #1; LEVEL SENSOR (LIT 201) - AP50746	$6,565	35
	Replacement of RWT PHOSPHORIC ACID TANK #2; LEVEL SENSOR (LIT 202) - AP50747	$6,565	36
	Replacement of RWT PHORPHORIC ACID SUMP TANK LEVEL SENSOR - AP50769	$6,565	37
RWTP MORE AVE PUMP SYSTEM	Rebuild RWTP MORE AVENUE PUMP STATION PUMP #2 - AP21038	$65,000	38
RWTP has 38 total FY24 Renewal Projects with an estimated cost of $620,141			

Figure 23: FY24 Planned Asset Renewal Work for STWTP

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
STWTP CARBON SYSTEM	Replacement of STWTP CARBON DUST COLLECT BLOW MOTOR NORTH ME-51 - AP30103	$6,365	1
	Replacement of STWTP CARBON DUST COLLECT BLOW MOTOR SOUTH ME-50 - AP30108	$6,365	2
	Replacement of STWTP CARBON METER PUMP MOTOR #1 VFD FD-28 - AP43072	$4,249	3
	Replacement of STWTP CARBON METER PUMP MOTOR #2 VFD FD-29 - AP43073	$4,249	4
	Replacement of STWTP CARBON METER PUMP MOTOR #3 VFD FD-30 - AP43074	$4,249	5
	Replacement of STWTP CARBON MIXER DRIVE MOTOR - NORTH MX-43 - AP30106	$6,365	6
	Replacement of STWTP CARBON MIXER DRIVE MOTOR - SOUTH MX-42 - AP30111	$6,365	7
STWTP CATIONIC POLYMER SYSTEM	Replacement of STWTP CATIONIC POLY TANK #10 MIXER MOTOR (MX-1) -AP43055 and MIXER (MX-1) - AP30330	$15,000	8
	Replacement of STWTP CATIONIC POLY TANK #11 MIXER MOTOR (MX-2) -AP43056 and MIXER (MX-2) - AP30332	$15,000	9
STWTP CLEARWELL	Inspection of Clearwell - AP42738 Originally scheduled and budged for in FY21, but scheduled in FY24 to align with pipeline shutdown.	$50,000	10
STWTP MAIN ELECTRICAL SYSTEM	Maintenance & Inspection of STWTP MAIN SWITCHBOARD A - OZONE GEN ELEC ROOM - AP45081	$6,293	11
	Maintenance & Inspection of STWTP MAIN SWITCHBOARD B - OZONE GEN ELEC ROOM - AP45082	$6,293	12

	Maintenance & Inspection of STWTP MAIN SWITCHGEAR (MSG-21KV) - AP52060	$6,293	13
STWTP NON-IONIC POLY SYSTEM	Replacement of STWTP FLOC MIXER 3RD STG MX-13 - AP30737, MIXER DRIVE MOTOR 3RD STG MX-13 - AP30739, and MIXER MOTOR (MX-3) - AP43058	$15,000	14
STWTP SODIUM HYPOCHLORITE (OCL) SYSTEM	Replacement of liner for STWTP OCL STORAGE TANK #1 - AP30138	$20,000	15
STWTP has 15 total FY24 Renewal Projects with an estimated cost of ~$160,000.			

Figure 24: FY24 Planned Asset Renewal Work for SVAWPC

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
SVA AQUA AMMONIA SYSTEM	Replacement of SVA AQUA AMMONIA FEED PUMP #1 (PMP-8201) - AP52383	$9,281	1
SVA DECARBONATION SYSTEM	Rehabilitation of SVA Decarbonation Tower #1 Blower (BLO-2901) - AP52667	$7,219	2
	Rehabilitation of SVA Decarbonation Tower #2 Blower (BLO-2902) - AP52672	$7,219	3
	Rehabilitation of SVA PRODUCT WATER TRANSFER PUMP #1 (PMP-2911) - AP52680	$29,699	4
SVA INFLUENT PUMPS AND STRAINERS	AP52901 - SVA INFLUENT PUMP #1; CHECK VALVE (VLV-1112)	$25,000	5
	AP52905 - SVA INFLUENT PUMP #2; CHECK VALVE (VLV-1122)	$25,000	6
	AP52907 - SVA INFLUENT PUMP #3; CHECK VALVE (VLV-1132)	$25,000	7
	AP52910 - SVA INFLUENT PUMP #4; CHECK VALVE (VLV-1142)	$25,000	8
SVA INFLUENT PUMPS AND STRAINERS	SVA AUTOSTRAINER UNIT #1 16 in CHECK VALVE (VLV-1161)	$15,000	9
	SVA AUTOSTRAINER UNIT #2 16 in CHECK VALVE (VLV-1171)	$15,000	10
	SVA AUTOSTRAINER UNIT #3 16 in CHECK VALVE (VLV-1181)	$15,000	11
	SVA AUTOSTRAINER UNIT #4 16 in CHECK VALVE (VLV-1191)	$15,000	12
SVA MF AERATION SYSTEM	Replacement of SVA MF SCRUB AIR BLOWER #1; MOTOR (MTR-1901) - AP52491	$5,150	13
	Replacement of SVA MF SCRUB AIR BLOWER #2; MOTOR (MTR-1902) - AP52494	$5,150	14
SVA MF CIP SYSTEM	Rehabilitation of SVA MF CIP CIRCULATION PUMP #2 (PMP-1602) - AP52518	$28,511	15
SVA MF HIGH PRESSURE AIR SYSTEM	Inspection of SVA MF COMPRESSED AIR RECEIVER TANK (TNK-1801) - AP52485	$1,815	16

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
SVA MICROFILTRATION MEMBRANE (MF) SYSTEM	Replacement of MF membranes in rack #1 - AP53214	$400,000	17
	Replacement of MF membranes in rack #2 - AP53327	$400,000	18
SVA PRODUCT WATER STORAGE SYSTEM	Inspection of SVA PRODUCT WATER STORAGE TANK (PWST-4001) TNK - AP52770 *cost provided by Techcorr*	$45,000	19
SVA RO INTERPROCESS SYSTEM	Inspection of SVA Inter-Process Storage Tank (IST-1301) - AP70378 *cost provided by Techcorr*	$55,000	20
SVA RO TRANSFER PUMP SYSTEM	Replacement of RO Transfer Motor # 1 - AP52782	$15,000	21
SVA SODIUM HYPOCHLORITE (OCL) SYSTEM	Replacement of SVA SODIUM HYPOCHLORITE FEED PUMP #2 (PMP-8102) - AP67783	$9,559	22
	Replacement of SVA SODIUM HYPOCHLORITE FEED PUMP #3 (PMP-8103) - AP52373	$9,281	23
	Replacement of SVA SODIUM HYPOCHLORITE PUMP #1 MOTOR (MTR-8101) - AP69685	$5,000	24
	Replacement of SVA SODIUM HYPOCHLORITE PUMP #2 MOTOR (MTR-8102) - AP69686	$5,000	25
SVA WASTE EQUALIZATION SYSTEM	AP70342 - SVA Wetwell Pump 5001 Check Valve (VLV-5011)	$12,000	26
	AP70345 - SVA Wetwell Pump 5002 Check Valve (VLV-5021)	$12,000	27
	AP70348 - SVA Wetwell Pump 5003 Check Valve (VLV-5031)	$12,000	28
Other	Spare parts for 10 control panels; change out components on an as need basis.	$20,000	29
SVAWPC has 29 total FY24 Renewal Projects with an estimated cost of ~$2.3M.			

Figure 25: FY 24 Planned Asset Renewal Work for San Felipe Reaches

System	Renewal Project Description and Maximo work order number	Estimated Cost	#
REACH 1 PPP – MAIN PUMP	Rehabilitation of PPP Pump Unit (Unit TBD) **Maximo work order: to be created in July 2022**	$ 1,320,000	1
	Inspection and Rehabilitation of PPP Motor (Unit TBD) **Maximo work order: to be created in July 2022**	$ 240,000	2
REACH 1 PPP – BUILDINGS AND GROUNDS	Installation of crane remote control	$ 12,000	3
San Felipe Reaches 1 has 3 total FY24 Renewal Projects with an estimated cost of ~$1.04M			

Figure 26: FY24 Planned Asset Renewal Work for WSMS

System	MWP Activity Description and Maximo work order number	Estimated Cost	#
WSMS has 0 total FY24 Renewal Projects with an estimated cost of ~$0M. WSMS work orders are created by Raw Water Field Operations & Pipeline Maintenance Unit Field Operations Admin.			

Valley Water

Water Utility Enterprise Operation and Maintenance Asset Renewal Plan
Fiscal year 2024-2028

APPENDIX B: REVIEW OF FISCAL YEAR 2023 (FY23) PLANNED ASSET RENEWAL WORK

Program Success

The Water Utility Asset Management Program success is defined by:

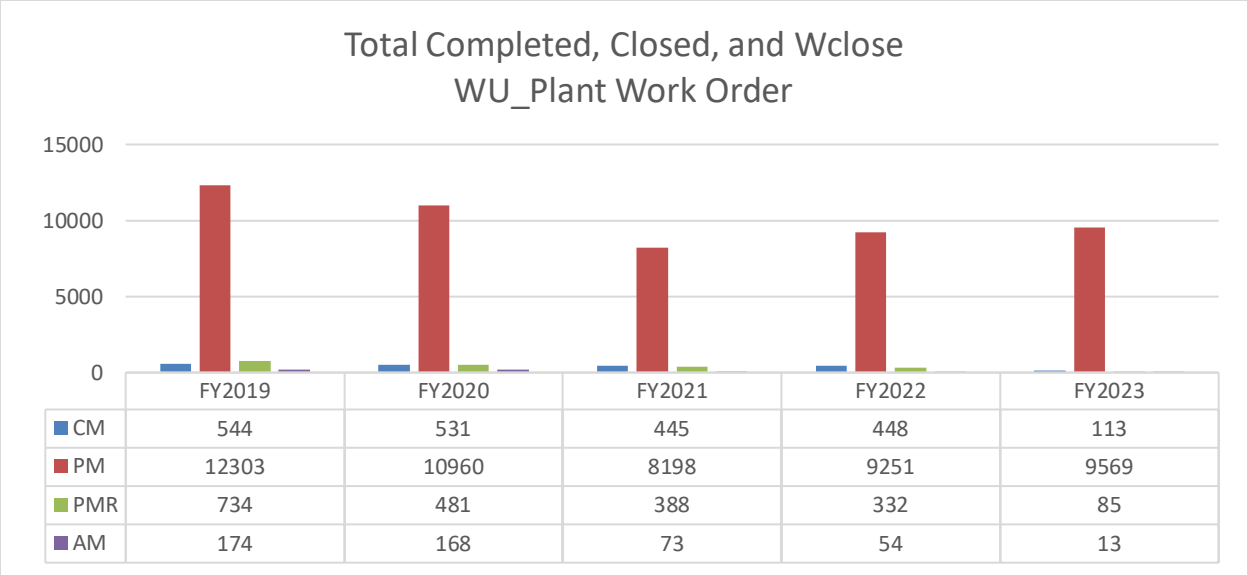
- 40% or better completion rate of the planned asset renewal projects which are AM work orders in Maximo.
- Ratio of corrective maintenance to preventative maintenance total cost below 0.8, which has historically exceeded 1.0.

Review

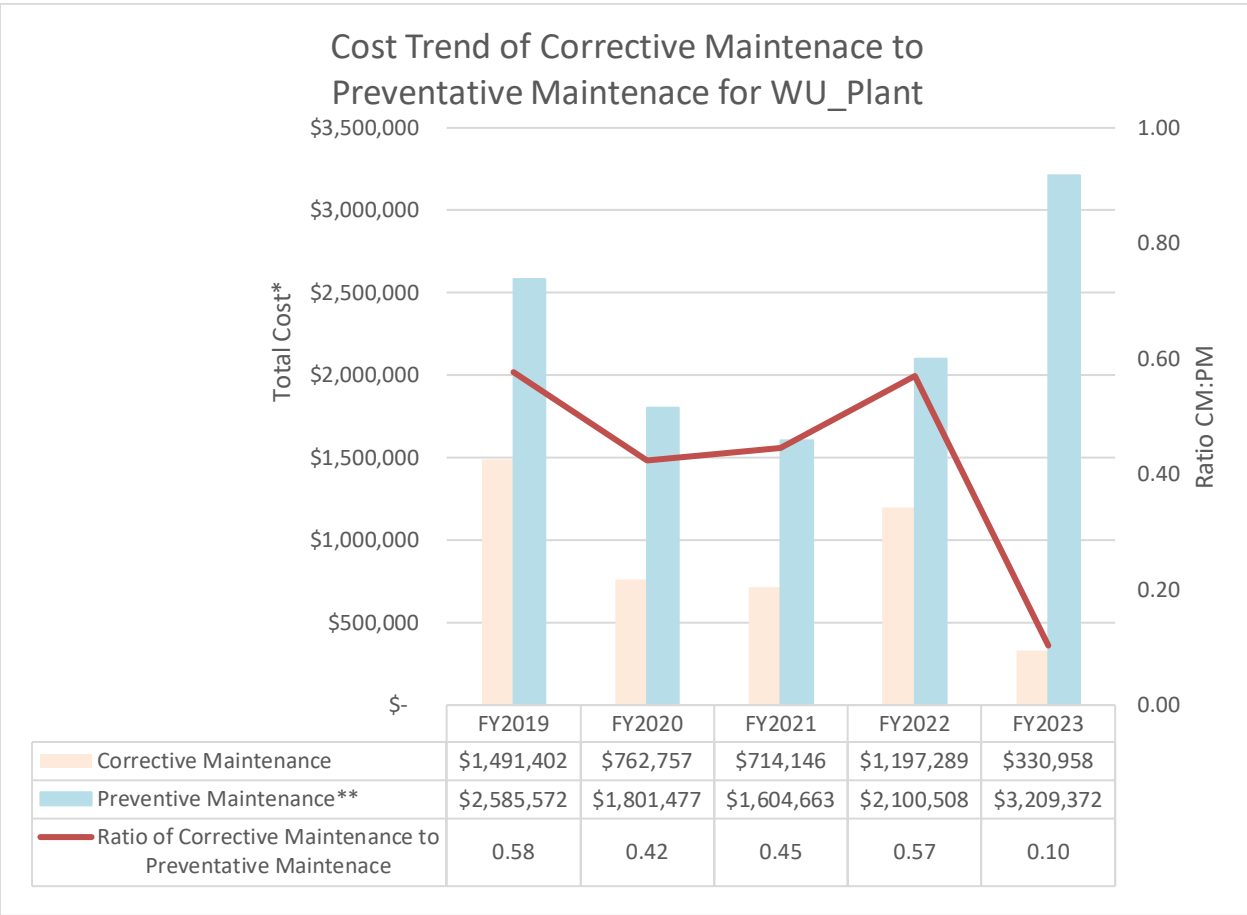
The ratio of corrective maintenance to preventative maintenance is 0.10 for the Water Treatment Plants Maintenance and 0.23 for Raw Water Maintenance. This meets the program success criteria as it is below 0.8.

A total of 31 or 69% of the Asset Renewal Projects FY23 recommended projects were completed as of June 1, 2023. Only 310 staff hours and ~$925,580 were documented in Maximo, though the work likely required more resources than documented.

Disclaimer: The statistics above are a reflection of data available in Maximo as of June 1,2023. These statistics may increase as staff closes out work orders during the remainder of the fiscal year.



	FY2019	FY2020	FY2021	FY2022	FY2023
CM	544	531	445	448	113
PM	12303	10960	8198	9251	9569
PMR	734	481	388	332	85
AM	174	168	73	54	13

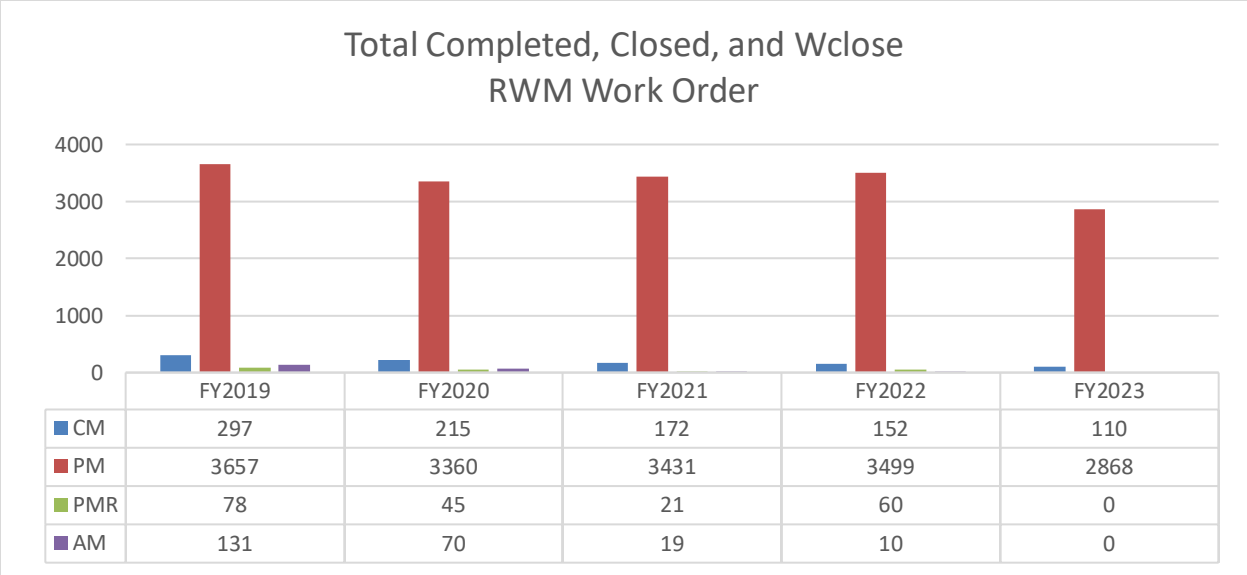


	FY2019	FY2020	FY2021	FY2022	FY2023
Corrective Maintenance	$1,491,402	$762,757	$714,146	$1,197,289	$330,958
Preventive Maintenance**	$2,585,572	$1,801,477	$1,604,663	$2,100,508	$3,209,372
Ratio of Corrective Maintenance to Preventative Maintenace	0.58	0.42	0.45	0.57	0.10

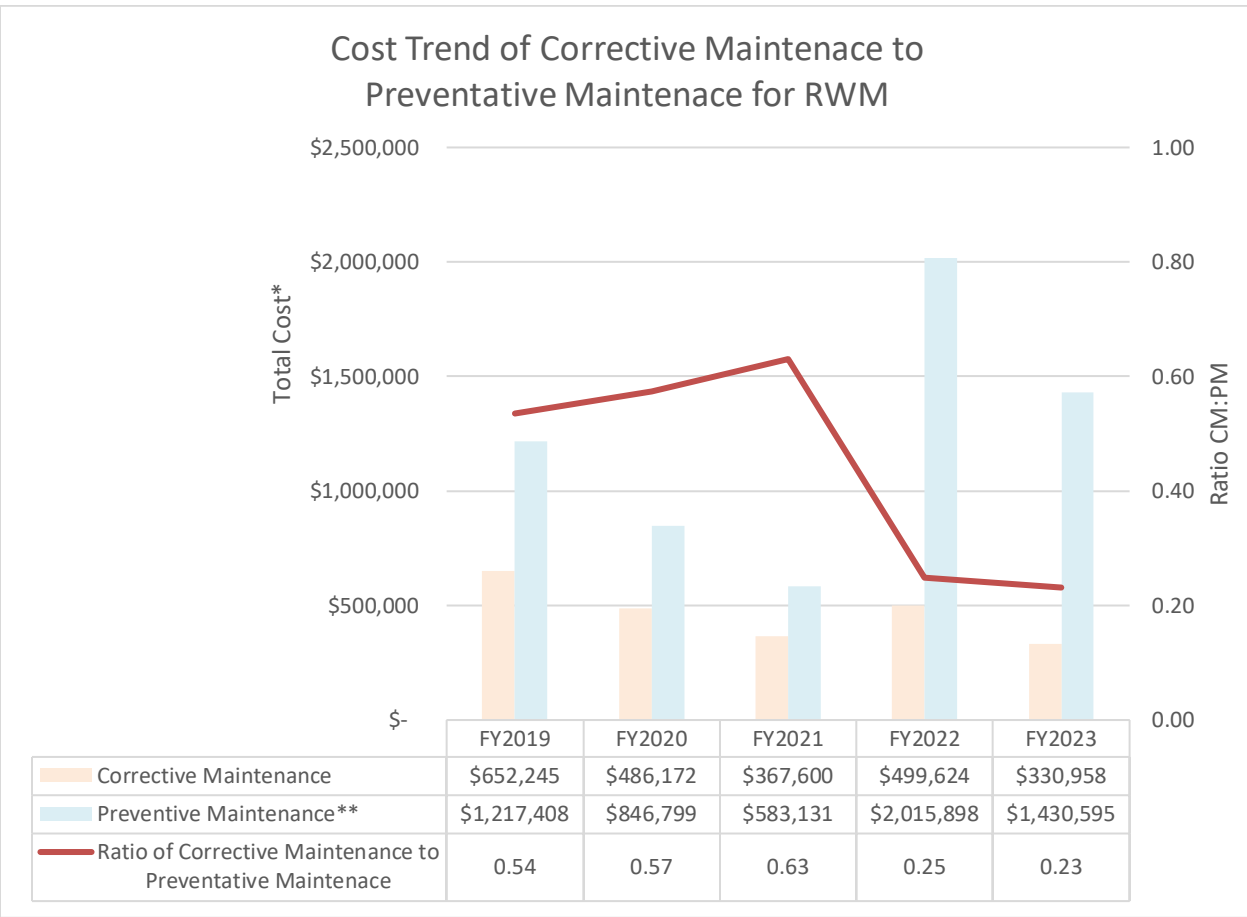
*Total cost recorded in Maximo as of June 1,2023

** Includes PM, PMR, AM work types as of June 1,2023

***Lower CM:PM ratio is better than higher. Below 0.8 is the success criteria.



	FY2019	FY2020	FY2021	FY2022	FY2023
CM	297	215	172	152	110
PM	3657	3360	3431	3499	2868
PMR	78	45	21	60	0
AM	131	70	19	10	0



	FY2019	FY2020	FY2021	FY2022	FY2023
Corrective Maintenance	$652,245	$486,172	$367,600	$499,624	$330,958
Preventive Maintenance**	$1,217,408	$846,799	$583,131	$2,015,898	$1,430,595
Ratio of Corrective Maintenance to Preventative Maintenace	0.54	0.57	0.63	0.25	0.23

*Total cost recorded in Maximo as of June 1,2023

** Includes PM, PMR, AM work types as of June 1,2023

***Lower CM:PM ratio is better than higher. Below 0.8 is the criteria.

The drought conditions contributed to the increase of preventative maintenance observed in FY2022 and FY2023.

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Valley Water

Clean Water • Healthy Environment • Flood Protection

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Valley Water

FY 2024-28

Watersheds Operations & Maintenance and Asset Renewal Plan

FY 2024-2028
Watersheds Operations & Maintenance and Asset Renewal Plan

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TABLE OF CONTENTS

List of Figures

List of Tables

List of Acronyms

AMP	Asset Management Plan
BMP	Best Management Practice
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	Capital Improvement Program
DBH	Diameter at Breast Height
LWD	Large Woody Debris
MOA	Memorandum of Agreement
NPW	Notice of Proposed Work
NRCS	Natural Resources Conservation Service
O&M	Operations and Maintenance
SMP	Stream Maintenance Program
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VHP	Valley Habitat Conservation Plan
WARP	Watersheds Asset Rehabilitation Program
WS	Watersheds

EXECUTIVE SUMMARY

Report Overview

This Watersheds Operations & Maintenance and Asset Renewal Plan (WS O&M and AR Plan) describes Valley Water's Watersheds O&M activities and the projected funding allocated for these activities over the next five years. In addition, it discusses planning for future asset rehabilitation needs. It is a rolling plan that will be evaluated and updated annually. Specifically, this plan:

- Documents the baseline and unfunded operations and maintenance project resource needs for the Watersheds Operations and Maintenance Division (WS O&M Division) for the next five fiscal years, 2024 to 2028, and explains unfunded needs.

- Discusses planning for additional asset rehabilitation projects identified through Project F8: Sustainable Creek Infrastructure for Continued Public Safety (Project F8) under the renewed Safe, Clean Water and Natural Flood Protection (Safe, Clean Water) Program.

Throughout the plan, the term 'baseline' refers to activities that provide current service levels and are assumed to be funded in fund forecasts prepared by Valley Water's Financial Planning and Management Services Division.

Work Planning and Execution

Currently, the majority of Valley Water's stream maintenance work is conducted under the Stream Maintenance Program (SMP). Valley Water regularly inspects creeks, floodwalls and levees, and on an annual basis, develops a proposed work plan for stream maintenance activities, secures state and federal regulatory agencies' approval of the work plan, and performs approved maintenance activities. Sediment removal, vegetation management, trash and debris clearing, bank stabilization, and mitigation activities are performed under the SMP. This work is included in the five-year operations forecasts presented in Section V of this plan.

To supplement O&M resources or for projects outside the scope of the SMP, stream maintenance work may also be performed through Valley Water's Watersheds Asset Rehabilitation Program (WARP), a small capital improvement project. Projects conducted as part of the WARP are not included in the financial charts in this plan, as they are included in Valley Water's five-year Capital Improvement Program (CIP).

Strategic Planning for Future Asset Rehabilitation

While work conducted as part of the SMP and WARP has been successful in planning and executing necessary stream maintenance projects, Valley Water recognized the need to evaluate stream maintenance from a more strategic and holistic planning approach, as well as to identify asset rehabilitation needs for past flood protection projects. Consequently, Valley Water initiated a new project as part of the renewed Safe, Clean Water Program, approved by voters in 2020.

Under Project F8, the Sustainable Creek Infrastructure project, Valley Water is working to identify, prioritize, and implement needed creek asset rehabilitation projects. The types of asset rehabilitation work being identified include restoring the level of service originally intended for flood protection infrastructure, extending the life of flood protection infrastructure, and improving the reliability of flood protection infrastructure.

Over the past two years, Valley Water has analyzed approximately 85 creeks to identify creek asset rehabilitation needs and has further evaluated approximately 20 individual creeks to determine how to best address those needs, either through routine maintenance, a small capital project through WARP, or as a new capital project. For approximately eight (8) creeks where a solution is not clear, or the creeks could benefit from a holistic planning approach, Valley Water will develop asset management plans to help identify the most effective rehabilitation strategy.

Based on analysis so far, the magnitude of future Watersheds' asset rehabilitation work is estimated at $388.5 million. This estimated cost is preliminary and will be refined on an ongoing basis. The work may be phased over 10 to 30 years as funding becomes available. Some of the asset rehabilitation projects identified through this effort may be funded by Project F8, which is allocated $15 million over 15 years (FY22-36) (half funded by Safe, Clean Water Fund and half by the Watershed and Stream Stewardship Fund), and/or by the WARP small capital improvement project, which is currently funded at approximately $7.5 - $8 million per year. Valley Water will also be pursuing available grant funding. It is likely that in some future years, the magnitude of work will exceed available funding.

Five-Year Operations Forecasts

Five-year funding forecasts for current service levels as well as future resource requirements not yet funded for the Watersheds Operations and Maintenance (WS O&M) Division are shown in the chart below. The final financial information provided in this section was taken from the Board-adopted budget for FY24 and FY25, as well as the forecast data that is collected as part of the budget process. The FY24 and FY25 budget requests and unfunded needs were evaluated throughout the budget process through May 2023. The plan was finalized following the Board's adoption of Valley Water's budget. The final plan documents the final budgeted amounts for each project for FY24, planned budget amounts for FY25, and any remaining unfunded needs following the budget process.

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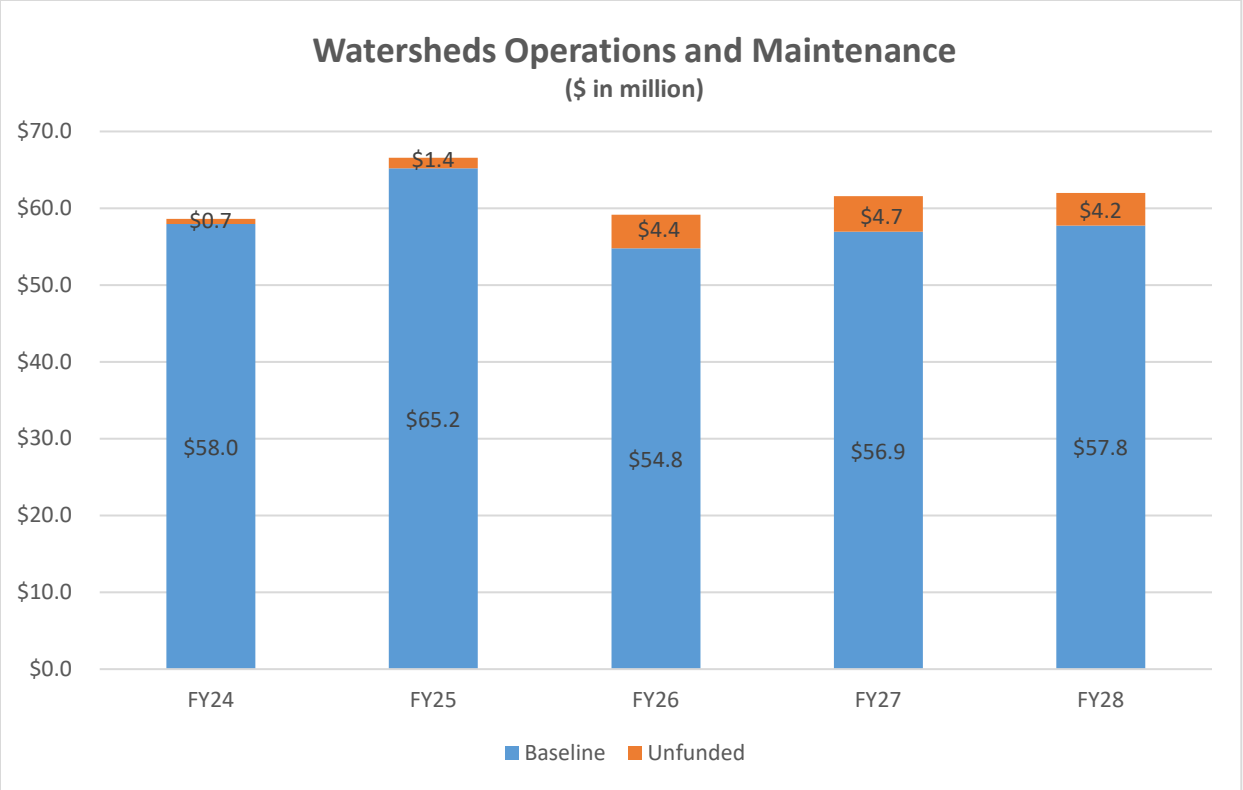

Note: Data as of May 2023

In total, the WS O&M Division has identified an additional unfunded need of $15.3 million for the next five years to support encampment clean up, increased creek erosion repair work, the Saratoga Creek Hazard Tree Removal and Restoration project, SMP permit compliance, and the upcoming Valley Habitat Plan reopening and associated fees.

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I. INTRODUCTION

Report Overview

This Watersheds Operations & Maintenance and Asset Renewal Plan (WS O&M and AR Plan) describes Valley Water's Watersheds O&M activities and the projected funding allocated for these activities over the next five years. In addition, it discusses planning for future asset rehabilitation needs. It is a rolling plan that will be evaluated and updated annually. Specifically, this plan:

- Documents the baseline and unfunded operations and maintenance project resource needs for the Watersheds Operations and Maintenance Division (WS O&M Division) for the next five fiscal years, 2024 to 2028, and provides an explanation of unfunded needs.

- Discusses planning for additional asset rehabilitation projects that are being identified through Project F8: Sustainable Creek Infrastructure for Continued Public Safety (Project F8) under the renewed Safe, Clean Water and Natural Flood Protection (Safe, Clean Water) Program.

Throughout the plan, the term 'baseline' refers to activities that provide current service levels assumed to be funded in fund forecasts prepared by Valley Water's Financial Planning and Management Services Division.

WS O&M and Asset Renewal activities are carried out to meet the following Board of Directors' (Board) Ends Policies:

- Ends Policy E-3: Natural flood protection is provided to reduce risk and improve health and safety for residents, businesses, and visitors, now and into the future.
- Ends Policy E-4: Water resources stewardship protects and enhances ecosystem health.

The WS O&M Division achieves the Board's Ends Policies by:

- Maintaining flood protection facilities to the designed levels of protection
- Maintaining the structural and functional integrity of Valley Water facilities
- Fulfilling regulatory permit obligations
- Meeting Safe, Clean Water and Natural Flood Protection Program obligations
- Avoiding, minimizing, or mitigating impacts on the environment by identifying when maintenance work is necessary and incorporating stream stewardship measures to further reduce potential impacts and enhance conditions where possible
- Complying with city and county codes and state and federal regulations (e.g., Endangered Species Act)
- Assisting people, businesses, schools, and communities to prepare for, respond to, and recover from flooding through equitable and effective engagement
- Increasing the health and safety of residents countywide by reducing community flood risk

This plan, covering FY24-28, now includes progress updates on Project F8 and future asset rehabilitation needs; thus, the plan title is renamed to the WS O&M and AR Plan. It was previously titled, "Watersheds Operations and Maintenance Plan." Copies of past years' plans

are available on the Valley Water intranet on the asset management web site at https://aqua.valleywater.org/watershed-documents.

Watersheds Infrastructure

Valley Water manages an integrated water resources system that provides for the supply of clean, safe water, flood protection, and stewardship of streams in Santa Clara County (County). Valley Water oversees five distinct watersheds within the County and is responsible for the overall stream stewardship of these geographic areas, namely Coyote, Guadalupe, Lower Peninsula, Pajaro (Uvas/Llagas), and West Valley watersheds (see Figure I-1).

To fulfill its mission, Valley Water constructs flood protection projects to protect homes, businesses, and infrastructure. Once those flood protection projects are completed, Valley Water's WS O&M Division conducts inspections and maintenance to ensure those projects and associated facilities continue to function as required. This work is carried out using best management practices to avoid, minimize, or mitigate potential environmental impacts, and, where possible, enhance habitat values.

Valley Water's watersheds infrastructure includes the following:

- 295 miles of creeks (owned by Valley Water)
- 126 miles of levees (including both accredited and non-accredited levees)
- 44 miles of concrete-lined channels
- 3,000+ individual assets (e.g., drop structures, weirs, fish ladders, mitigation areas)

Figure I-1 Santa Clara County Watersheds

Related Documents

Documents related to this Plan include:

- FY24-28 Capital Improvement Program (CIP): The CIP is a rolling five-year plan that identifies major capital improvements. This WS O&M and AR Plan discusses maintenance needs for improvements identified in the CIP. This Plan also identifies improvements that are included in WARP, which is a small capital improvement project, and may identify improvements as individual capital improvement projects in the future.

- FY24-28 Water Utility Operations and Maintenance Work Plan: The Water Utility Operations and Maintenance Plan is a rolling five-year plan that describes operations and maintenance activities for the Water Utility Operations and Maintenance Divisions for the next five years. It is similar to this WS O&M and AR Plan.

- FY24-33 Long-Term Forecast: The long-term forecast is prepared as the first step of the budget process each year to forecast future funding needs for operations projects. The operations projects' five-year forecasts provided in this report are taken from the long-term forecast data. This draft report is prepared using long-term forecast data and unfunded needs requests as of December 2022. Budget requests and unfunded needs are further evaluated throughout the budget processes through May 2023.

- FY24-FY25 Operating and Capital Budget: Valley Water's budget is produced each year to identify the planned operations and capital expenditures and funding sources for the coming and subsequent fiscal years. It provides an overview of both operations and capital expenses, as well as revenues, for the next two fiscal years. This WS O&M and AR Plan identifies operations expenditures that are included in the Operating Budget.

- 2016 Watersheds Asset Management Plan (AMP) The Watersheds AMP is a comprehensive plan that documents the current state and future needs of Valley Water's watersheds assets. The plan provides a high-level, 100-year forecast of asset maintenance activities, while this WS O&M and AR Plan provides more detail on the next five-year forecast. Ideally, the plan would be updated every 5 years.

- Stream Maintenance Program (SMP) Manual: The SMP Manual defines the overall routine stream maintenance program and describes the authorized avoidance measures, best management practices (BMPs), mitigation activities, and program management actions. The manual serves as a guide for performing much of the maintenance work described in this WS O&M and AR Plan, and helps inform the design, schedule, cost, and labor for O&M projects conducted under the SMP.

- Safe Clean Water Program (Measure S [2020]): The Safe, Clean Water Program is a long-term strategy to ensure continued water resources services in Santa Clara County. In November 2020, Santa Clara County voters approved Measure S, the renewed Safe, Clean Water Program and provide funding to ensure a seamless continuation of critical water resources-related services to the community. The renewed Safe, Clean Water Program provides funding, and in some instances increased funding, for various WS O&M efforts,

including vegetation control and sediment removal for capacity; vegetation management for access and fire safety; encampment cleanups; graffiti and litter removal, and management of riparian planting and invasive plant removal. It also includes funding for Project F8: Sustainable Creek Infrastructure for Continued Public Safety.

- Safe Clean Water Program 5-Year Implementation Plan for Fiscal Years 2024-2028: This plan describes how Valley Water will implement the Safe, Clean Water Program over the five-year period to deliver the Key Performance Indicators (KPIs) associated with various projects.

In addition, WS O&M and AR Plans from previous years are available starting in FY21-25 and provide additional context on the origins of this plan as well as additional detail on each WS O&M Division unit. Starting with the FY24-28 plan, the plan includes progress updates on Project F8 and future asset rehabilitation needs; thus, the plan is renamed to the WS O&M and AR Plan. It was previously titled, “Watersheds Operations and Maintenance Plan” or WS O&M Plan.

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II. OVERVIEW OF WATERSHEDS O&M ACTIVITIES

This section describes the types of Watersheds O&M activities conducted by Valley Water. There are more than 800 miles of creeks on the County valley floor; however, Valley Water only has right-of-way (ownership or easement) for 295 miles, which are maintained by Valley Water.

Valley Water has constructed flood protection projects on approximately 183 miles of creeks within the 295 miles of right-of-way. Maintaining these 183 miles of constructed and improved channels is a top priority for Valley Water. Valley Water also conducts many maintenance activities outside the limits of constructed projects but still within sections of Valley Water right-of-way. These may be performed for maintenance access, water quality, fire code compliance, erosion repair, and mitigation purposes.

Section III describes how this work is planned and executed through the Stream Maintenance Program (SMP) or as small capital improvement project work through WARP.

Watersheds O&M work includes:

- Sediment removal
- Bank erosion repair
- Levee maintenance
- Vegetation management
- Mitigation site maintenance
- Riparian planting
- Invasive plant management
- Trash and debris removal
- Installation of fisheries improvement projects
- Access road maintenance
- Weir, grade control structure maintenance
- Large woody debris management
- Fence repairs and graffiti removal
- Fish ladder maintenance
- Inspections, monitoring, and condition assessment
- Concrete channel lining repair
- Management of animal conflict

Valley Water identifies this maintenance work in four main categories: preventive, preventive maintenance repair, corrective, and deferred. Valley Water gives high priority to service requests that are generally preventive or corrective in nature. While Valley Water strives to balance community requests with other required corrective and preventive work activities, limited resources, time, and other factors often lead to deferrals and delays in planned maintenance. The four categories of maintenance are described below.

Preventive Maintenance: This is routine planned maintenance work to keep an asset at a required level of service and to reduce the likelihood of failure. It includes the maintenance of completed CIP flood protection projects. Project-specific maintenance guidelines or manuals guide preventive maintenance. In some instances, these manuals are developed in partnership with project sponsors, such as the Natural Resources Conservation Service (NRCS) and the U.S. Army Corps of Engineers (USACE). For example, the Uvas Creek Operations, Maintenance, Repair, Replacement and Rehabilitation Manual, issued by USACE, provides O&M staff with the information, guidance, and requirements for the proper operation and maintenance of a federally-constructed project on Uvas Creek.

Non-capital project preventive maintenance includes maintenance of all mitigation sites (riparian planting and invasive plant management), and routine maintenance required for instream flow conveyance, maintenance access, and fire code compliance.

Preventive maintenance responsibilities are projected to increase as more flood protection capital projects and updated maintenance guidelines are completed and turned over to the WS O&M Division. In addition, preventive maintenance responsibilities will likely increase after deferred maintenance projects have been addressed under WARP or Project F8.

Preventive Maintenance Repair: This is non-routine maintenance work that is identified and addressed proactively prior to failure instead of allowing the issue to progress and having to be addressed later by corrective maintenance. This work is first identified in the field during inspections, where it has been determined that a creek's ability to meet its level of service is compromised. Under preventive maintenance repair, infrastructure is repaired or rehabilitated after an issue is identified in the field, but prior to complete failure requiring Corrective Maintenance. Examples of preventive maintenance repair include repairing a creek bank or levee, removing sediment or vegetation, and maintaining Valley Water access roads to design conditions, all of which have been identified by previous inspections.

Corrective Maintenance: This is non-routine or unplanned maintenance. Under corrective maintenance, infrastructure is repaired or replaced after unexpected failure and the asset is no longer meeting its level of service. Examples of corrective maintenance include emergency repair of a creek bank or levee damaged from winter storms, emergency removal of fallen trees or trash and debris, and repair or replacement of damaged Valley Water fences, gates, and signs.

Weather events may prompt the need to perform corrective maintenance work. During heavy storms, vegetation and sediment washed down from areas upstream can restrict the flow of water, and, in some areas, cause a back-up, increasing the risk of flooding and/or bank erosion. WS O&M regularly monitors known "hot spots" for vegetation and debris buildups, and, where needed and safe to do so, takes action to remove these blockages and reduce the threat of localized flooding.

Deferred Maintenance: This is preventive or corrective maintenance that has been postponed to a future period for various reasons, such as limited availability of resources, constraints of existing regulatory permits, or managing the volume of public requests. Deferred maintenance is required to repair, restore, or rehabilitate infrastructure, and failure to do so would contribute to asset deterioration and, ultimately, asset impairment. This work is prioritized and accomplished subject to the availability of resources. Generally, a policy of continued deferred maintenance may result in higher costs, difficulty in obtaining required permits, infrastructure failure and, in some cases, health and safety implications. Deferred maintenance activities can include sediment removal, larger-scale instream vegetation or tree removal for flow conveyance (not currently allowed under existing environmental documentation and regulatory permits), infrastructure repair and rehabilitation, and erosion repairs.

In addition to O&M activities, all units also provide O&M review of CIP flood protection projects and Community Projects Review Unit (CPRU) submittals, which may entail reviewing third-party projects adjacent to or on Valley Water right-of-way. The Watersheds Operations and

Maintenance Engineering Support Unit (298), Vegetation Field Operations Unit (295), and Watersheds Field Operations Unit (253) also prepare work orders to address identified deficiencies and public requests made through Valley Water's online customer relationship management portal related to Watersheds' infrastructure.

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III. WORK PLANNING AND EXECUTION

This section describes the process for planning and executing the O&M activities described in Section II. The majority of Watersheds O&M activities are conducted under the Stream Maintenance Program (SMP). Some of this work is conducted as small capital projects under the WARP; depending on the nature of the work, the SMP may also provide coverage for WARP activities. It is noted the Watersheds O&M Division also provides support for Valley Water's Water Utility Enterprise (e.g., conducts maintenance work on raw water pipelines, percolation ponds, dams, canals, etc.). Additional information and corresponding funding related to this work is not included herein as this work is funded by the Water Utility Enterprise Fund.

The WARP project costs are not included in this plan as they are included in Valley Water's five-year CIP. In addition, Section IV describes recent efforts to augment these current processes and develop a program to holistically address creek maintenance needs.

Because of the dynamic nature of creek systems, it is challenging for Valley Water to provide specificity regarding future stream maintenance projects. For instance, an active rainy season could create more erosion- and sediment-related issues in creeks than a dry winter. In addition, it is not always clear what deficient sites can be taken on as maintenance projects by the WS O&M Division, or what sites might be clustered together and addressed via WARP.

Maintenance requirements and schedules are based on several factors, including Board policies, condition assessments, stream maintenance guidelines, commitments to federal project partners (NRCS, USACE), regulatory permit requirements, code compliance (county or city codes) and Safe, Clean Water Program commitments.

Stream Maintenance Program (SMP)

Valley Water performs preventive, preventive repair, corrective, and deferred maintenance activities under the SMP. SMP-2 is a 10-year program approved in 2013 by seven state and federal regulatory agencies and is set to expire in 2023. With a subsequent 10-year SMP program, SMP-3, currently in negotiation, Valley Water is seeking permit extensions for SMP-2 through 2026. SMP work is included in the fund forecasts in Section V.

WS O&M staff regularly inspects creeks and flood protection infrastructure such as levees, berms, and floodwalls. In April, staff finalizes a proposed work plan for the upcoming SMP work season. When generating this list of projects, staff analyzes and prioritizes hundreds of inspections/condition assessments where creek assets are at risk of not meeting their level of service. Staff also considers resource availability in the Field Operations Unit to construct within one SMP season (June to October), and ability for the Vegetation Field Operations Unit and others to conduct corresponding mitigation implementation and monitoring for associated impacts.

From June to October, after securing state and federal regulatory agencies' approval of the work plan, WS O&M staff performs maintenance activities in streams to remove sediment, manage vegetation, clear trash and debris, and stabilize eroded creek banks. Stream maintenance work also includes an integrated vegetation management program that provides many benefits, including: removal of instream vegetation to maintain flow conveyance; upland vegetation

management to meet fire code compliance and sustain maintenance access; and native planting and invasive plant management to improve the ecological habitat of the riparian ecosystem. While much of this instream work takes place in the summer, stream maintenance is a year-round effort.

The WS O&M Engineering Support Unit designs SMP bank stabilization, sediment removal, instream habitat complexity mitigation, and some compensatory mitigation projects, which are, in general, carried out by the Watersheds Field Operations Unit. The Vegetation Field Operations Unit performs instream vegetation removal, upland vegetation management, and riparian planting and invasive plant management mitigation projects.

Approximately 30 SMP bank stabilization and sediment removal projects are initiated by the WS O&M Engineering Support Unit each year. A list of proposed SMP projects for FY24 is provided in Appendix A. Vegetation-related SMP projects are not included in this list; the Vegetation Field Operations Unit performs hundreds of projects each year.

Watersheds Asset Rehabilitation Program (WARP)

To supplement WS O&M Division resources, stream maintenance work may also be performed through Valley Water's WARP, which was initiated as a small capital improvement project in Valley Water's Capital Improvement Program in 2013. With WARP, Valley Water seeks to address a backlog of asset rehabilitation projects determined to be either outside the scope of the SMP and/or identified as those which Valley Water would be better served having contractors undertake due to WS O&M Division resource limitations or the extent of work. The total project budget for WARP is approximately $147 million (or $177 million with inflation).

Each fiscal year, the WARP project list is reviewed and re-prioritized as needed based on field conditions and the risks associated with the consequences of watersheds asset failure. This list is included in Appendix B. As of 2022, 21 higher-priority projects were completed out of 34 identified projects. WARP projects are typically carried out during the same annual work season as SMP work (generally, June 15 through October 15). Depending on the scope of a particular WARP project, the work may or may not be covered by the SMP. WARP planning and design work is led by Valley Water's Watersheds Design and Construction Unit #5, and WARP construction work is conducted by contractors. WARP work is conducted in close consultation with the WS O&M Engineering Support Unit and other units within the WS O&M Division.

While a list of WARP projects is provided for information, the WARP project costs are not included in the financial charts in this plan, as those projects are accounted for in Valley Water's Five-Year CIP.

Safe, Clean Water Project F8: Sustainable Creek Infrastructure for Continued Public Safety

To further supplement WS O&M Division resources and improve the effectiveness and cost-efficiency of current O&M management strategies, Valley Water recognized the need to address stream maintenance work from a holistic and geomorphic approach and identify asset

rehabilitation needs for past flood protection projects and creek infrastructure. This work, under Project F8, is led by the Asset Management Unit.

Some of the watershed assets currently on the deferred O&M maintenance list are within the limits of a few of the asset rehabilitation projects and therefore, may be addressed and funded by Project F8. The list of potential asset rehabilitation projects is included in Appendix C.

While a list of asset rehabilitation projects is provided for information, costs for asset rehabilitation projects are not included in the financial charts in this plan; such costs will be included after Valley Water's CIP validation process is completed for these potential projects.

Work Execution

Execution of the Watersheds O&M projects is predominantly performed through the following units, as described above:

- Watersheds Operations and Maintenance Engineering Support Unit (298)
- Operations and Maintenance Environmental Support Unit (297)
- Vegetation Field Operations Unit (295)
- Watersheds Field Operations Unit (253)
- Watersheds Design and Construction Unit #5 (336)

Additional technical support is provided by the following units that are all involved in the Project F8/WARP development:

- Business Support and Asset Management Unit (411)
- Watershed Stewardship and Planning Division (241)
- Hydrology, Hydraulics, and Geomorphology Unit (296)

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IV. STRATEGIC PLANNING FOR FUTURE ASSET REHABILITATION: PROJECT F8

While the SMP and WARP have been successful in planning and executing necessary stream maintenance projects, Valley Water recognized the need to evaluate stream maintenance from a more strategic and holistic planning approach, as well as to identify asset rehabilitation needs for past flood protection projects. Consequently, Valley Water initiated a new project as part of the renewed Safe, Clean Water Program that voters approved in 2020. Under Project F8, the Sustainable Creek Infrastructure project, Valley Water is working to identify, prioritize, and implement needed asset rehabilitation projects. Asset rehabilitation work being investigated and identified as part of this project includes:

- restoring the level of service originally intended for flood protection infrastructure
- extending the life of flood protection infrastructure
- improving the reliability of flood protection infrastructure

Goal and Approach

The goal of Project F8 is to identify and prioritize asset rehabilitation needs and determine how to best address the issues through routine maintenance, small capital, or larger capital improvements. Some deficiencies are easily addressed through routine maintenance (e.g., trash and debris removal, fence and gate repairs, etc.); however, for more complex issues (e.g., erosion of a creek embankment or levee, compromised flow conveyance capacity beyond routine maintenance capabilities), addressing the root of the problem may require a small capital or capital improvement. Additionally, in many instances, the most effective solution is not clear, and a holistic planning effort or asset management plan is needed.

Similar to O&M projects, asset rehabilitation work includes restoring creek infrastructure to the level of service originally intended. The most apparent differences among O&M projects, WARP projects, and asset rehabilitation are typically the size, scope, and cost. Asset rehabilitation projects address systemic issues, restore the creek back to as-built or steady-state condition, and generally possess larger project footprints, higher costs, and longer design and construction schedules compared to conventional maintenance and WARP projects. In addition, these projects further extend the useful life of creek assets. For projects Valley Water typically identifies as needing more immediate attention beyond what the WS O&M Division can undertake, the WARP is employed. Asset rehabilitation projects are generally pursued when Valley Water determines there is time to spare for a more in-depth planning study. For an overview of the differences between WARP and Project F8, please refer to Table IV-1 below.

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Table IV-1 Comparison of WARP and Project F8: Sustainable Creek Infrastructure for Continued Public Safety

Blue shaded boxes indicate a key purpose of the program	WARP	F8
O&M work beyond SMP limits	Yes	Yes
Asset Rehabilitation	Yes	Yes
Restoration of Existing Flood Level of Service (LOS)	Yes	Yes
Asset Management Plan or Planning Study	No	Yes
New Flood Protection LOS or Environmental Enhancement	No	No
Timing/Urgency	Quickest solution: Ideal for high-risk or already failed assets	Few years to construction: Ideal for moderate- to high-risk assets that would benefit from a planning study
Typical Cost	$1-$19M	Over $20M
Total Program Cost (uninflated)	Currently $147M	Currently $388.5M

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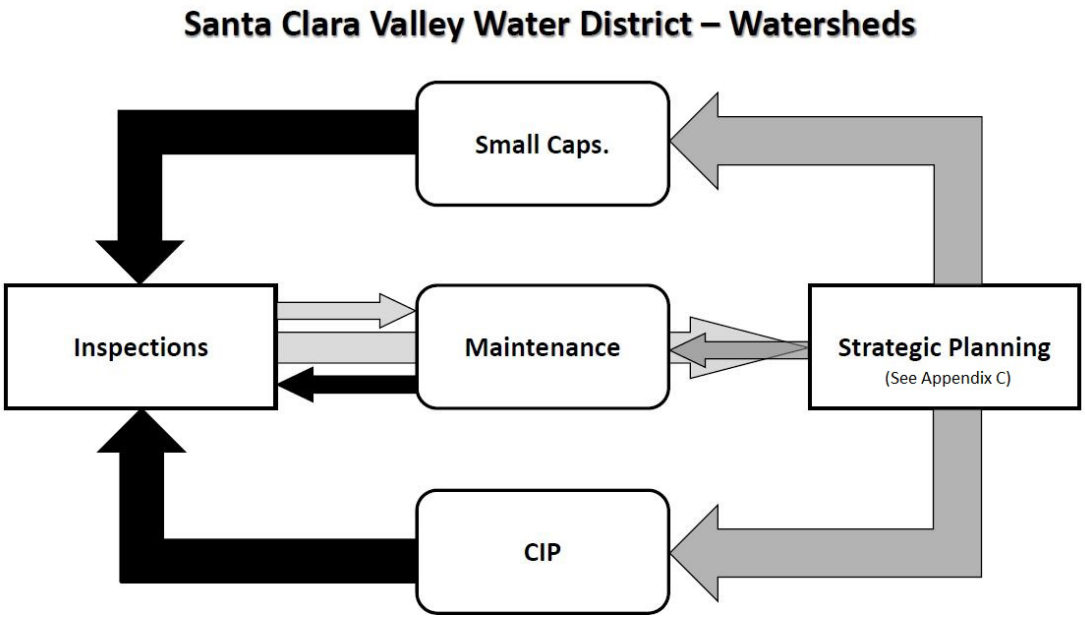
The Project F8 approach is described further in the following Figure IV-1, as well as a draft workflow that includes detailed steps of strategic planning (box shown in Figure IV-1) provided in Appendix C.

Figure IV-1 Strategic Planning Approach



1. Light grey arrows (to the right): Inspections lead to maintenance (much of which is routine) but can or should also lead to strategic planning.
2. Dark grey arrows (to the left): Strategic planning, including identification and prioritization of assets, and preparation of implementable asset management plans, should result in recommendations that would either lead to conducting work via routine maintenance, small caps., or a new CIP.
3. Black arrows (to the left): Once any of these three efforts (maintenance, small caps, CIP) are done, inspections should be undertaken.

Work Completed

Over the past two years, Valley Water has analyzed approximately 85 creeks to identify creek asset rehabilitation needs and has further evaluated 20 individual creeks to determine how to best address those needs, either through routine maintenance, a small capital project through the WARP program, or as a new capital project. For approximately eight (8) creeks where the solution is not clear, or the creeks could benefit from a holistic planning approach, Valley Water will develop asset management plans to help identify the most effective rehabilitation strategy.

An initial analysis for each creek was done using inspection records from the last five years and prioritized based on business risk exposure (BRE). BRE is a standard asset management metric used to quantify the nature and level of exposure an organization is likely to confront through a potential failure of an asset or group of assets. The BRE score is a product of an asset's probability of failure and the consequence of failure. The probability of failure score is

determined during inspections based on the asset's maintenance guidelines and the consequence of failure score is based on the asset's level of service, adjacent properties and geography, financial impact, environmental impact, and safety.

Following the initial analysis, which resulted in a prioritized list of high-risk creek reaches, a more detailed analysis of each creek is being conducted to determine if issues can be addressed through maintenance, or if a more substantial small or individual capital project is needed. Valley Water has conducted this more detailed analysis on 20 creeks, and the preliminary results are discussed below. Analysis of the remaining creeks is ongoing.

The initial and following detailed creek analysis was conducted through regular meetings of staff from the Watersheds Operations and Maintenance Engineering Support Unit (298), Vegetation Field Operations Unit (295), Hydrology, Hydraulics, and Geomorphology Unit (296), Watersheds Stewardship and Planning Division (241), Environmental Mitigation and Monitoring Unit (244), Watersheds Small Capital Design and Construction Unit #5 (336), and Asset Management Unit (411). During these regular project meetings, the workflow discussed above and provided in Appendix C was used to help the team determine if a creek asset (or group of assets) is due for capital improvement, rehabilitation, maintenance, and/or an updated asset management plan.

Preliminary Results

A working list (draft) of asset rehabilitation work identified so far through Project F8 is provided in Appendix D. This list is preliminary and will continue to be refined over time.

Based on analysis so far, the magnitude of future watersheds asset rehabilitation work is estimated at $388.5 million. This estimated cost is preliminary and will be refined on an ongoing basis. The work may be phased over 10 to 30 years as funding becomes available. Some of the asset rehabilitation projects identified through this effort may be funded by Project F8, which is allocated $15 million over 15 years (FY22-36) (half funded by the Safe, Clean Water Fund and half by the Watershed and Stream Stewardship Fund), and/or by the WARP small capital improvement project, which is currently funded at approximately $7.5 - $8 million per year. Valley Water will also be pursuing available grant funding. It is likely that the magnitude of future work will exceed available funding in some future years.

To this end, some next steps have been taken, as listed below:

- A business case report was submitted in 2022 to the capital improvement program to initiate new capital projects for San Tomas Creek Aquino Creek to address high-priority issues.
- A decision was made to develop a business case report to create a new capital project, called Sustainable Creek Infrastructure Program (SCIP), in which work resulting from Project F8 analyses can be executed called Sustainable Creek Infrastructure Program (SCIP).
- Evaluating small capital improvement options for Randol and Adobe Creeks to be undertaken under WARP.
- An asset management plan is in progress for Stevens Creek.
- A Regnart Creek Rehabilitation Design Study that developed a holistic design concept that applies geomorphic principles from Festival Drive to Bubb Road.

- It was determined that asset management plans will be beneficial prior to asset rehabilitation project planning for 7 creeks: Sunnyvale East and West Channels, Calabazas, Permanente, San Francisquito, Matadero, and Thompson Creeks.

V. FIVE YEAR OPERATIONS FORECASTS

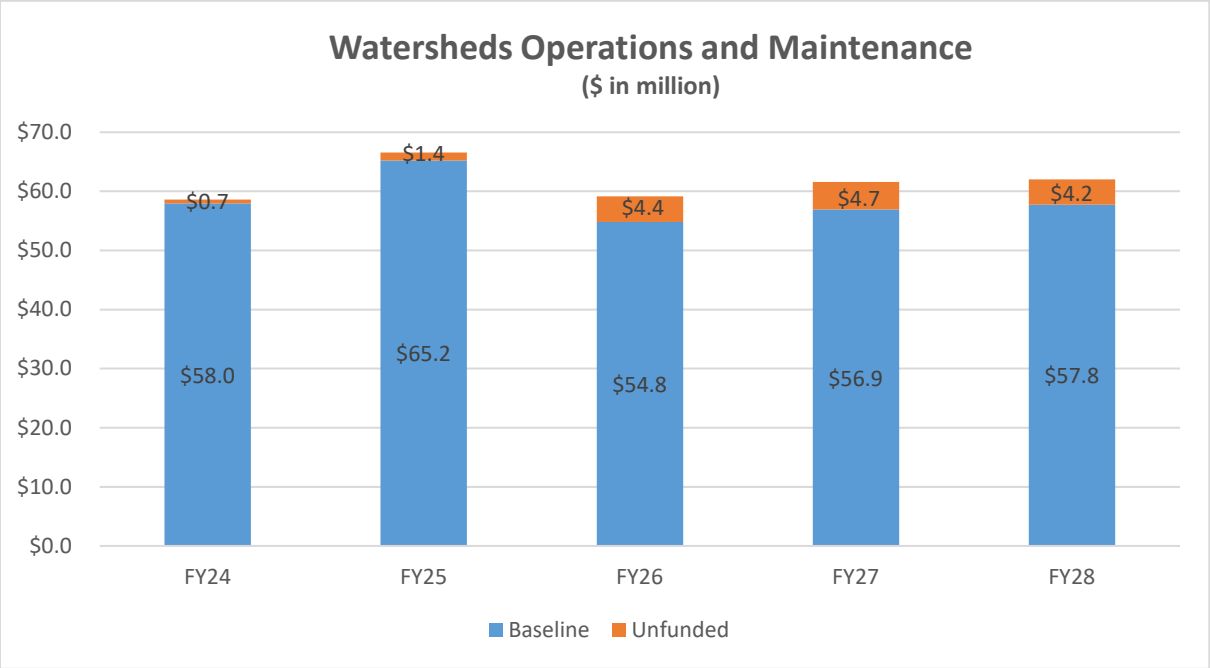
This section provides an overview of the expected operations expenses and unfunded needs for the operations and maintenance activities conducted by the WS O&M Division for the next five fiscal years. The types of activities budgeted in the projects presented in this section are described in Section II. Note that the forecasts do not include O&M activities conducted under WARP.

The final financial information provided in this section was taken from the Board-adopted budget for FY24 and FY25 as well as the forecast data that is collected as part of the budget process. The FY24 and FY25 budget requests and unfunded needs were evaluated throughout the budget process through May 2023. The plan is finalized following the Board adoption of Valley Water's budget. The final plan documents the budgeted amounts for each project for FY24, planned amounts for FY25, as well as any remaining unfunded needs following the budget process.

The sections below provide an overview of the WS O&M Division units, as well as tables and charts that summarize expected operations expenses and unfunded operations resource needs for FY24-28. The term 'baseline' refers to activities that provide current service levels and are assumed to be funded in fund forecasts prepared by Valley Water's Financial Planning and Management Services Division.

A summary of the five-year forecasts of funding for current service levels as well as future resource requirements which are not yet funded for the WS O&M Division is shown in the chart below. Unit-specific information is provided in the following sections.

Figure V-1 FY2024-28 Projected Resource Requirements for WS O&M Division



Note: Data as of May 2023

The WS O&M Division has identified additional unfunded needs of $15.3 million for the next five years to support encampment clean up, increased creek erosion repair work, the Saratoga Creek Hazard Tree Removal and Restoration project, SMP permit compliance, and the upcoming Valley Habitat Plan reopening and associated fees. It is important to note that in addition to these unfunded needs, additional asset rehabilitation needs identified through Project F8 are not funded. As a high-level estimate, staff estimates the current list of projects will cost $388.5 million, which will be further refined through Project F8 as described in Section IV.

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Watersheds O&M Engineering Support Unit (298)

The WS O&M Engineering Support Unit is responsible for conducting creek and levee inspections, preparing work orders, and providing engineering support for operations and maintenance activities for streams, levees, and other watersheds assets within Santa Clara County over which Valley Water has responsibility. This work supports the flood protection and watersheds stewardship components of Valley Water's mission.

This unit updates stream maintenance guidelines and carries out general engineering planning to support the watersheds operation and maintenance activities throughout the county. Stream maintenance guidelines are vital to ensuring that Valley Water continues to provide flood protection to the community while complying with regulatory permits. The guidelines inform when a modified creek facility requires routine maintenance work, such as sediment removal, vegetation management, rodent control measures, and road repairs, among other work activities, to provide the levels of service intended by the original construction of the facility and to ensure the functionality of designed project elements.

Engineering and inspection support includes preliminary development of planning for projects, working with municipalities and other entities, pre-project planning, developing environmental documentation and acquiring permits for non-Stream Maintenance Program (non-SMP) projects, and managing Pond A8 activities resulting from requirements under an agreement with the U.S. Fish and Wildlife Service (USFWS). This unit also supports the watersheds strategic planning and analysis efforts as part of Project F8; these efforts have led to development of a working list (draft) of asset renewal work, as reflected in Appendix D.

Staff measuring extent of bank erosion along Calabazas Creek

In addition, this unit provides for regular inspection and documentation of watersheds infrastructure, such as flood protection structures (e.g., levees, floodwalls, berms), streams, and banks, to determine maintenance required and ensure those assets are safe and maintained to their design conditions. The unit inspects USACE-constructed flood protection projects along sections of Guadalupe River, Coyote Creek, and Uvas Creek, and the NRCS-constructed Lower

Llagas Creek Flood Protection Project. As the local sponsor for these projects, Valley Water is responsible for maintaining these facilities for flood protection.
Creek inspection work is expected to grow in the coming years as capital flood protection projects are completed and turned over to the WS O&M Division for inspection and maintenance.

In addition, the unit assists with reviews of flood-related emergency action plans and is integral in overseeing related field information team (FIT) efforts.

Figure V-2 FY2024-28 Projected Resource Requirements for Watersheds O&M Engineering Support

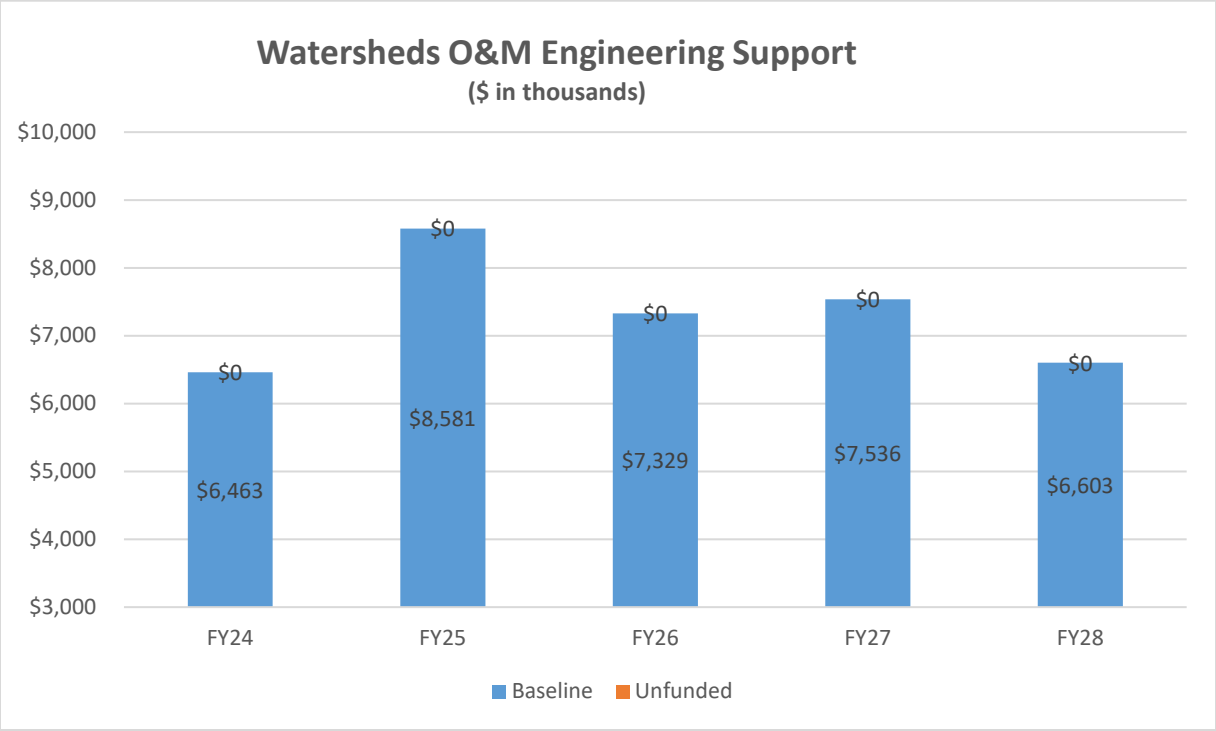

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Table V-1 Projected Resource Requirements by Projects for Watersheds O&M Engineering Support

Watersheds O&M Engineering Support ($ in thousand)								
Program	**Project Number(s)**	**FY22 (Actuals)**	**FY23 (Adopted)**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Watersheds O&M Engineering and Inspection Support	62021009	$1,816	$1,839	$2,203	$2,799	$2,597	$2,677	$2,756
Watersheds Maintenance Guideline Update	62042050	$670	$974	$931	$0	$0	$0	$0
Watershed Facility Condition Assessment	62761024	$2,011	$2,559	$2,805	$2,966	$2,991	$3,098	$3,184
Non SMP Vegetation Removal for Conveyance	62761080	$6	$328	$525	$2,816	$1,741	$1,762	$662
		$4,503	**$5,699**	**$6,463**	**$8,581**	**$7,329**	**$7,536**	**$6,603**

Table V-2 Additional Resource Needs (Unfunded) for Watersheds O&M Engineering Support

There are no projected additional resource needs over the next five years.

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Watersheds Field Operations Unit (253)

The Watersheds Field Operations Unit is responsible for the coordination and management of field construction and O&M activities (noted in section II) within the WS O&M Division, coordination of emergency response services, and monitoring of safety procedures.

One of the many O&M activities that this unit is responsible for is maintaining all Watersheds assets to design capacity to allow stormwater to flow through the creeks as designed. High and/or sustained flows can cause extensive damage to creek banks or levees, while sediment buildup can restrict the flow of water, increasing the risk of flooding. To allow water to flow through the creeks as designed, Valley Water removes sediment, manages vegetation, and repairs banks and levees. This effort also helps ensure that Valley Water meets the requirements identified in the Safe, Clean Water Program's Project F1: Vegetation Control and Sediment Removal for Capacity. When specific criteria are met, the removed sediment may also be reused to support the South Bay Salt Pond Restoration Project or other environmental enhancement and restoration projects under the Safe, Clean Water Program's Project D3: Sediment Reuse to Support Shoreline Restoration. These operations are expected to grow as new capital flood protection projects are completed and turned over to the WS O&M Division for inspection and maintenance.

Sediment removal activities

In addition to maintaining WS projects, this unit is also responsible for several other programs and general maintenance of Valley Water properties and facilities under watersheds such as debris removal, encampment clean up (supported by the Safe, Clean Water Project F5: Good Neighbor Program: Encampment Cleanup), Pond A4 operations, graffiti and litter removal (supported by the Safe, Clean Water Program's Project F6: Good Neighbor Program: Graffiti and

Litter Removal and Public Art), and other general field maintenance such as access road repairs, fence repair and installation, and sign installation.

Figure V-3 FY2024-28 Projected Resource Requirements for Watersheds Field Operations

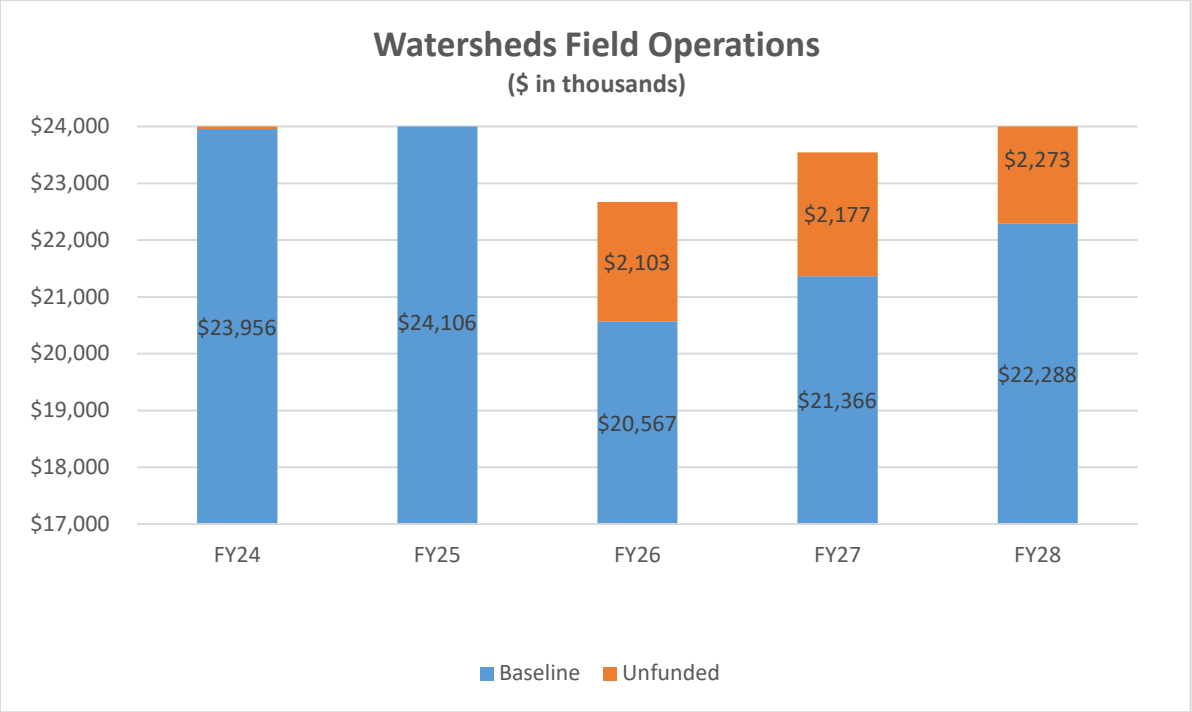

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Table V-3 Projected Resource Requirements by Projects for Watersheds Field Operations

Watersheds Field Operations ($ in thousand)								
Program	**Project Number(s)**	**FY22 (Actuals)**	**FY23 (Adopted)**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
WS Good Neighbor Maintenance	00761022	$1,541	$2,059	$2,239	$2,106	$1,480	$1,536	$1,592
Watershed Sediment Removal	00761023	$3,777	$6,778	$7,430	$7,524	$7,248	$7,567	$8,025
D3 SCW Sediment Reuse to Support Shoreline	26441003	$202	$277	$307	$329	$244	$251	$259
Encampment Cleanup Program	26771027	$2,216	$2,407	$4,130	$4,141	$2,761	$2,846	$2,961
Pond A4 Operations	62761009	$38	$107	$127	$108	$113	$142	$123
General Field Maintenance	62761025	$2,707	$3,655	$3,479	$2,881	$2,521	$2,598	$2,675
Watershed Debris Removal	62761026	$1,521	$1,797	$1,817	$1,840	$1,695	$1,751	$1,808
Watershed Erosion Protection	62761027	$4,505	$4,052	$3,546	$4,156	$3,661	$3,800	$3,941
Watershed Levee Maintenance	62761028	$1,136	$844	$881	$1,021	$843	$873	$904
		$17,643	**$21,975**	**$23,956**	**$24,106**	**$20,567**	**$21,366**	**$22,288**

Table V-4 Additional Resource Needs (Unfunded) for Watersheds Field Operations

Watersheds Field Operations ($ in thousand)						
Program	**Project Number(s)**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Encampment Cleanup Program	26771027	$0	$0	$1,379	$1,417	$1,475
Watershed Erosion Protection	62761027	$656	$689	$724	$760	$798
		$656	**$689**	**$2,103**	**$2,177**	**$2,273**

The projected additional resource needs over the next five years FY24-28 are estimated at $7.9 million. Part of this need will support encampment trash and debris clean up, and thus, reduce the number of public complaints and minimize the amount of trash and debris entering our waterways. The unfunded needs also include requests for additional labor and resources to repair erosion issues within creeks throughout the county and the increased costs for sediment removal dumping costs as the testing criteria for reuse of materials have become much more stringent.

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Vegetation Field Operations Unit (295)

The Vegetation Field Operations Unit is responsible for the coordination and management of integrated vegetation management programs, riparian planting and invasive plant management mitigation projects, hazard tree program, and the sandbag program county-wide, including capital projects and water utility sites.

This unit supports Valley Water meeting the requirements identified in the Safe, Clean Water Program's Project D1: Management of Riparian Planting and Invasive Plant Removal. This project provides for the maintenance and management of existing and future revegetation projects throughout the county to ensure that Valley Water meets its regulatory requirements. Revegetation sites provide mitigation to compensate for impacts to habitat from flood protection and maintenance projects.

In addition, Project D1 provides for removing non-native invasive plants to mitigate for temporary impacts generated from SMP activities on various riparian corridors throughout the county. It is a required mitigation condition of USACE, USFWS, and California Department of Fish and Wildlife (CDFW) permits for the SMP, which is critical to preserving the flood conveyance capacity as well as maintaining the integrity of Valley Water's flood protection projects and the health of the stream corridors.

The Vegetation Field Operations Unit also supports a variety of other programs that include instream vegetation removal for flow conveyance, vegetation maintenance for access and fire safety (supported by Safe Clean Water Program's projects F1: Vegetation Control & Sediment Removal for Capacity and F4: Vegetation Management for Access and Fire Safety), hazard tree removal, and sandbags.

Pictured: Invasive species removal along Coyote Creek in San José

Figure V-4 FY2024-28 Projected Resource Requirements for Vegetation Field Operations

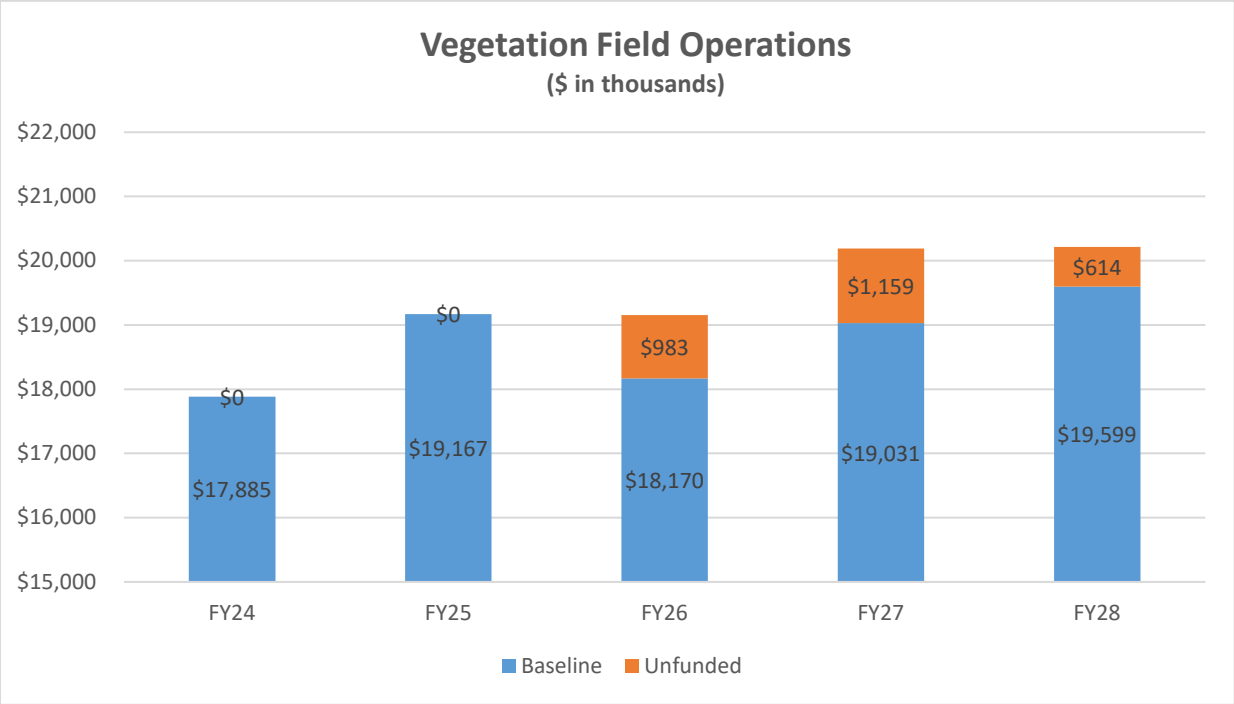

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Table V-5 Projected Resource Requirements by Projects for Vegetation Field Operations

Vegetation Field Operations ($ in thousand)								
Program	**Project Number(s)**	**FY22 (Actuals)**	**FY23 (Adopted)**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Revegetation Project Management	761075	$2,361	$3,818	$3,695	$4,290	$4,293	$4,875	$5,136
Invasive Plant Management	62761006	$1,300	$2,424	$2,588	$2,689	$2,650	$2,730	$2,811
Stream Capacity Vegetation Con	26771067	$2,203	$3,344	$3,531	$3,876	$3,819	$3,936	$4,053
Vegetation Management for Access	00761078	$4,920	$4,421	$4,732	$4,884	$4,849	$4,998	$5,123
Tree Maintenance Program	00762011	$877	$1,148	$1,246	$1,298	$1,394	$1,437	$1,480
Drought Induced Tree Removal	60061058	$1,523	$1,779	$1,529	$1,556	$568	$440	$363
Sandbag Program	62761008	$474	$576	$564	$574	$597	$615	$633
		$13,657	**$17,509**	**$17,885**	**$19,167**	**$18,170**	**$19,031**	**$19,599**

Table V-6 Additional Resource Needs (Unfunded) for Vegetation Field Operations

Vegetation Field Operations ($ in thousand)						
Program	**Project Number(s)**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Drought Induced Tree Removal	60061058	$0	$0	$983	$1,159	$614
		$0	**$0**	**$983**	**$1,159**	**$614**

The projected additional resource needs over the next five years FY24-28 are estimated at $2.8 million due to a contractor bid coming in unexpectedly high for the Saratoga Creek Hazard Tree Removal and Restoration project. The increase in the bid from the original requested amount is due to multiple factors, including inflation, time in between award of contract to design, etc.

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Operations and Maintenance Environmental Support Unit (297)

The Operations and Maintenance Environmental Support Unit is responsible for managing Valley Water's SMP, implementing instream habitat complexity projects, and providing additional Water Utility field operations support.

This unit coordinates routine maintenance activities under the SMP, including sediment removal, vegetation management, and bank protection. The goal is to ensure activities are carried out in compliance with various regulatory permits and in a manner that minimizes environmental impact to the stream systems. Instream habitat complexity projects are an SMP-2 requirement, compelling Valley Water to conduct gravel augmentation and/or large woody debris (LWD) projects in each of the five watersheds--Coyote, Guadalupe, Lower Peninsula, Pajaro, and West Valley. Since FY23, two new efforts will commence and be led by this unit – the Evelyn Avenue Fish Ladder Rehabilitation Project and the SMP portion of reopening the Valley Habitat Plan (VHP).

Pictured: Stevens Creek streambed restoration

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Figure V-5 FY2024-28 Projected Resource Requirements for O&M Environmental Support Unit

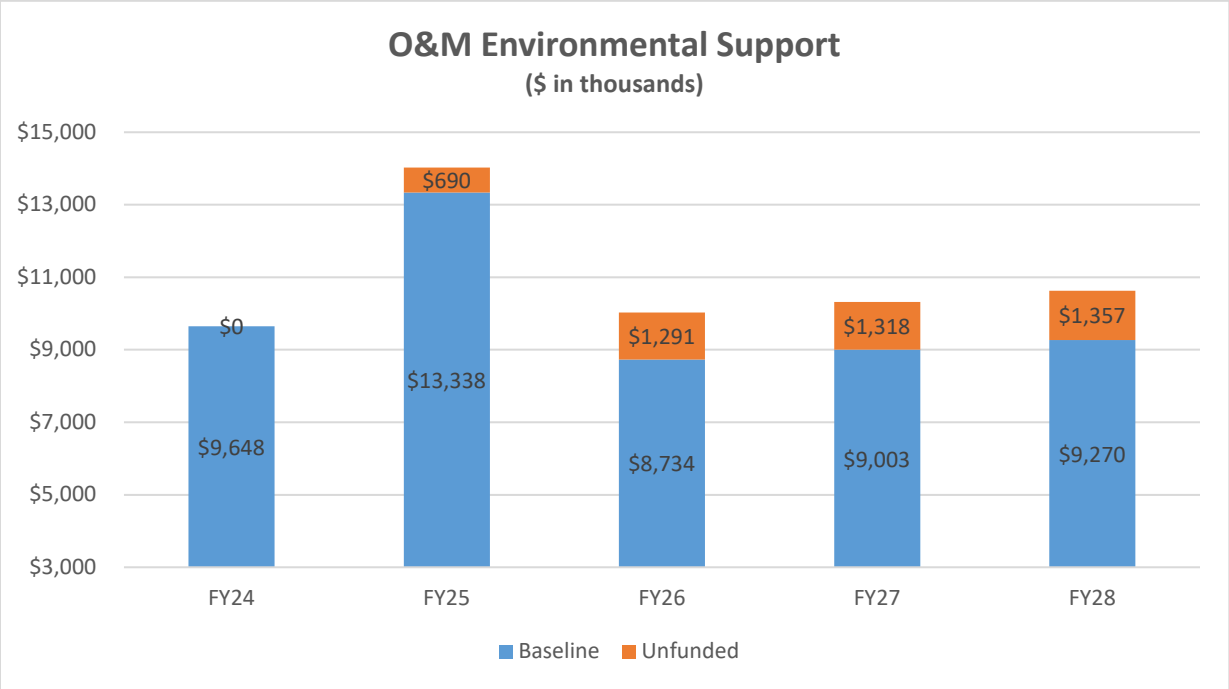

Table V-7 Projected Resource Requirements by Projects for Operations & Maintenance Environmental Support

Operations & Maintenance Environmental Support ($ in thousand)								
Program	**Project Number(s)**	**FY22 (Actuals)**	**FY23 (Adopted)**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Stream Maintenance Program Management	00041022	$4,605	$4,512	$5,389	$5,523	$5,244	$5,406	$5,566
Instream Habitat Complexity	62181006	$126	$1,311	$982	$4,616	$137	$141	$146
Field Operations Support	62061029	$646	$707	$744	$766	$816	$842	$866
Water Resources Environmental Planning and Permitting	00741042	$2,005	$1,929	$2,533	$2,432	$2,536	$2,614	$2,691
		$7,383	**$8,460**	**$9,648**	**$13,338**	**$8,734**	**$9,003**	**$9,270**

Table V-8 Additional Resource Needs (Unfunded) for O&M Environmental Support

Operations & Maintenance Environmental Support ($ in thousand)						
Program	**Project Number(s)**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28**
Stream Maintenance Program Management	00041022	$0	$0	$581	$586	$603
Instream Habitat Complexity	62181006	$0	$690	$710	$732	$754
		$0	**$690**	**$1,291**	**$1,318**	**$1,357**

The projected additional resource needs over the next five years from FY24-28 are estimated at $4.7 million. This covers the request for an Assistant Water Resources Specialist II to support the Stream Maintenance Program permit compliance and the VHP reopening and associated fees to support mitigating for impacts anticipated under the SMP-3. The unit also requested an Assistant Environmental Planner II position to support environmental review and permitting services for operations and maintenance activities. However, this effort would support the Water Utility Enterprise, and thus, is not included in the unfunded needs for this WS O&M and AR Plan.

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VI. CONCLUSION

In this FY24-28 WS O&M and AR Plan, an immediate need is identified for an additional $15.3 million of funding for the WS O&M Division that would provide resources for encampment clean up, increased creek erosion repair work, the Saratoga Creek Hazard Tree Removal and Restoration project, SMP permit compliance, and the upcoming Valley Habitat Plan reopening and associated fees.

In addition to the immediate O&M need, additional asset rehabilitation needs are currently estimated at approximately $388.5 million. This estimated cost is preliminary and will be refined over the next few years. The work may be phased over 10 to 30 years as funding becomes available. Some of the asset rehabilitation projects identified through this effort may be funded by Project F8, which is allocated $15 million over 15 years (FY22-36) (half funded by the Safe, Clean Water Fund and half by the Watershed and Stream Stewardship Fund), and/or by the WARP small capital improvement project, which is currently funded at approximately $7.5-$8 million per year. Valley Water will also be pursuing grant funding. It is likely that the magnitude of future work will exceed available funding in some future years.

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VII. APPENDIX A – 2023 SMP PROJECTS

2023 SMP Project List*								
Item	**Watershed**	**Creek / Facility**	**Deficiency**	**Location**	**Sta (From)**	**Sta (To)**	**Length (Feet)**	**Project Type**
1	Lower Peninsula	San Francisquito Creek	Erosion	d/s University Ave.	131+50	132+00	50	Boulder revetment
2	Lower Peninsula	Barron Creek	Rodent damage	u/s Adobe Creek confluence	1+20	7+20	600	Surface compaction of levee face
3	Lower Peninsula	Permanente Creek	Sediment	u/s Highway 101	132+00	156+00	2,400	Sediment removal
4	Lower Peninsula	Stevens Creek	Erosion	d/s La Avenida	127+50	133+50	600	Earth repair
5	Lower Peninsula	Stevens Creek	Sediment	d/s La Avenida	127+50	133+50	600	Sediment removal
6	West Valley	Calabazas Creek	Erosion	d/s Highway 237	3+00	13+00	1,000	Earth repair
7	West Valley	Calabazas Creek	Sediment	d/s Highway 101	49+00	109+20	6,020	Sediment removal
8	West Valley	San Tomas Aquino Creek	Sediment	d/s Agnew Rd.	91+20	130+80	3,960	Sediment removal
9	West Valley	Saratoga Creek	Erosion	u/s Pruneridge Ave.	141+40	153+00	1,160	Earth repair with rock base not vegetated
10	West Valley	Regnart Creek	Erosion	u/s Antoinette Dr.	48+20	64+75	1,655	Earth repair
11	West Valley	Regnart Creek	Erosion	u/s Antoinette Dr.	62+75	63+00	25	Add rock to invert
12	West Valley	Calabazas Creek	Sediment	at Comer Dr.	592+50	596+50	400	Sediment removal
13	Guadalupe	Guadalupe River	Rodent damage	d/s Montague Expwy.	358+50	407+50	4,900	Surface compaction of levee face

2023 SMP Project List*								
Item	**Watershed**	**Creek / Facility**	**Deficiency**	**Location**	**Sta (From)**	**Sta (To)**	**Length (Feet)**	**Project Type**
14	Guadalupe	Guadalupe River	Sediment	at Trimble Rd.	472+00	478+50	650	Sediment removal
15	Guadalupe	Guadalupe River	Erosion	u/s San Carlos St.	723+03	726+00	297	Earth repair with rock base not vegetated
16	Guadalupe	Los Gatos Creek	Erosion	u/s San Tomas Expwy.	316+97	317+23	26	Boulder revetment
17	Guadalupe	Canoas Creek	Erosion	d/s Nightingale Dr.	2+00	6+80	480	Earth repair
18	Guadalupe	Canoas Creek	Erosion	u/s Hillsdale Ave.	95+50	95+80	30	Surface matting
19	Guadalupe	Canoas Creek	Erosion	u/s Hillsdale Ave.	97+00	108+00	1,100	Surface matting
20	Guadalupe	Canoas Creek	Erosion	d/s Albion Dr.	112+00	125+50	1,350	Earth repair
21	Guadalupe	Canoas Creek	Sediment	d/s Edelweiss Dr.	133+00	135+90	290	Sediment removal
22	Guadalupe	Canoas Creek	Sediment	d/s Branham Ln.	148+50	155+80	730	Sediment removal
23	Guadalupe	Canoas Creek	Sediment	d/s Calero Ave.	241+27	243+75	248	Sediment removal
24	Guadalupe	Canoas Creek	Sediment	Blossom Ave. to Tillamook Dr.	276+00	296+50	2,050	Sediment removal
25	Guadalupe	Canoas Creek	Sediment	Snell Ave. to Dunn Ave.	306+00	342+70	3,670	Sediment removal
26	Guadalupe	Ross Creek	Sediment	at Cherry Ave.	26+80	30+20	340	Sediment removal

2023 SMP Project List*								
Item	**Watershed**	**Creek / Facility**	**Deficiency**	**Location**	**Sta (From)**	**Sta (To)**	**Length (Feet)**	**Project Type**
27	Guadalupe	Ross Creek	Sediment	at Jarvis Ave.	42+20	45+00	280	Sediment removal
28	Guadalupe	Ross Creek	Sediment	at Meridian Ave.	71+60	74+80	320	Sediment removal
29	Guadalupe	Ross Creek	Erosion	d/s Camino del Cerro	214+40	221+30	690	Boulder revetment
30	Guadalupe	Ross Creek	Sediment	d/s Camino del Cerro	214+40	221+30	690	Sediment removal
31	Guadalupe	Ross Creek	Sediment	d/s Topping Way	295+00	305+80	1,080	Sediment removal
32	Coyote	Calera Creek	Sediment	u/s Escuela Pkwy.	38+75	43+50	475	Sediment removal
33	Coyote	Tularcitos Creek	Sediment	d/s Interstate 680	2+00	37+00	3,500	Sediment removal
34	Coyote	Los Coches Creek	Sediment	d/s Dempsey Rd.	16+00	17+50	150	Sediment removal
35	Coyote	Piedmont Creek	Erosion	u/s Vista Way	4+87	8+47	360	Earth repair
36	Coyote	Piedmont Creek	(Compensatory mitigation)	u/s Vista Way	7+57	7+97	40	Earth repair
37	Coyote	Piedmont Creek	Erosion	u/s Vista Way	9+26	11+94	268	Earth repair
38	Coyote	Sierra Creek	Erosion	u/s Knights Bridge Rd.	15+00	16+20	120	Boulder revetment
39	Coyote	Berryessa Creek	Sediment	Cropley Ave. to Morrill Ave.	224+50	240+00	1,550	Sediment removal
40	Coyote	Berryessa Creek	Sediment	d/s Messina Dr.	248+32	259+25	1,093	Sediment removal

2023 SMP Project List*								
Item	**Watershed**	**Creek / Facility**	**Deficiency**	**Location**	**Sta (From)**	**Sta (To)**	**Length (Feet)**	**Project Type**
41	Coyote	Berryessa Creek	Sediment	d/s Piedmont Rd.	286+36	293+58	722	Sediment removal
42	Coyote	Upper Penitencia Creek	Sediment	d/s Jackson Ave.	40+75	84+00	4,325	Sediment removal
43	Coyote	Lower Silver Creek	Sediment	u/s Tully Rd.	293+15	318+26	2,511	Sediment removal
44	Coyote	Thompson Creek	Sediment	d/s Quimby Rd.	0+00	10+50	1,050	Sediment removal
45	Coyote	Thompson Creek	Erosion	d/s Aborn Rd.	47+20	48+00	80	Cellular confinement system
46	Pajaro	Tennant Creek	Erosion	u/s Hill Rd.	96+50	98+25	175	Earth repair
47	Pajaro	Lions Creek	Erosion	d/s Santa Teresa Blvd.	29+00	42+00	1,300	Earth repair
48	Pajaro	West Branch Llagas Creek	Erosion	d/s Murray Ave.	137+00	138+42	142	Earth repair
49	Pajaro	Llagas Creek	Erosion	d/s Buena Vista Ave.	343+90	377+80	3,390	Earth repair
50	Pajaro	Jones Creek	Sediment	d/s Highway 152	104+70	135+60	3,090	Sediment removal

* This is SMP work anticipated to be conducted in 2023 (FY24). While Valley Water will make every effort to undertake these projects, work may not be conducted for multiple reasons, including delays in receipt of regulatory agencies' approvals, wildlife considerations, unforeseen site conditions, and unavailability of resources, among other circumstances.

VIII. APPENDIX B – WARP PROJECT LIST (IN PROGRESS & PLANNED)

Small Caps/WARP Project List						
Creek	**Location**	**Work type**	**Planning**	**Design**	**Construction[i]**	**Cost Estimate[ii]**
Funded						
Calabazas	Miller Ave. to Bollinger Rd.	ERO	FY18, FY19	FY19, FY20	FY22, FY23	$18 million
Guadalupe River	at Blossom Hill Rd.	ERO (gabion repair)	FY22	FY22, FY23	FY23	$1 million
Guadalupe River	at Malone Rd.	ERO (retaining wall repair)	FY22	FY22, FY23	FY23	$2 million
Coyote	Hwy. 237 to Tasman Dr.	ERO (levee repair)	FY22	FY22, FY23	FY23	$2.5 million
Permanente + Hale	Mountain View Ave. to Park Ave. + Arboleda Dr. to Rosita Ave.	ERO (interim concrete repair)	FY21, FY22	FY23, FY24	FY25	$6 million
Unfunded						
Coyote[iii]	u/s Julian St.	ERO	FY23	FY23, FY24	FY24	$4 million
Llagas	d/s Bloomfield Ave.	ERO (levee)	TBD	TBD	TBD	$0.5 million
Randol	u/s Camden Ave.	Restore LOS, levee rehabilitation	TBD	TBD	TBD	$1 million
					Total WARP Unfunded	$5.5 million

i. Construction FY refers to the fiscal year in which the project is awarded for construction and funds are encumbered (e.g., FY24 means project would be awarded, say, in spring 2024, with construction to start in summer 2024 (FY25)).
ii. Conceptual, high-level cost estimate that includes project management and construction and is subject to change.
iii. Project may be subject to cost-sharing agreement with other(s).

IX. APPENDIX C – WATERSHEDS STRATEGIC PLANNING WORKFLOW

SCI F8 - WATERSHED STRATEGIC PLANNING PROGRAM WORKFLOW

Vegetation Management Unit - 295

All Units/F8** Comittee

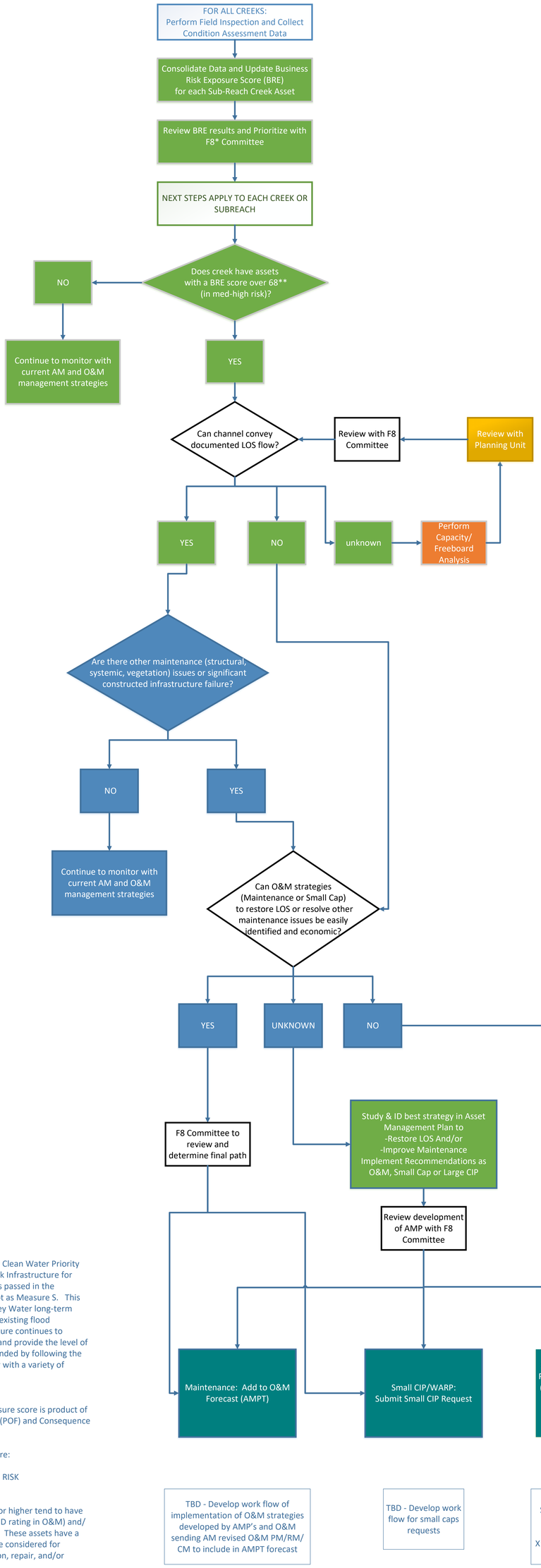
O&M Unit- 298

AM Unit - 411

H&H Unit - 296

Water Resource Planning Unit - 245

FREQUENCY OF WORKFLOW PROCESS (2020): 5 CREEKS EVERY MONTHS TO BE ANALYZED, REVIEWED, AND PRIORITIZED BY WATERSHED UNITS
FUTURE GOAL: FREQUENCY TO REDUCE TO BI-ANNUALLY WITH UPDATED RISK SCORES AND PRIORITIZATION



*F8 refers to the Safe Clean Water Priority F8 – Sustainable Creek Infrastructure for Public Safety that was passed in the November 2020 Ballot as Measure S. This project supports Valley Water long-term effors to ensure that existing flood protection infrastructure continues to function sustainable and provide the level of service originally intended by following the steps in the workflow with a variety of watershed units.

**Business Risk Exposure score is product of Probability of Failure (POF) and Consequence of Failure (COF).

Assets with a BRE score:
0 – 59 LOW RISK
60 – 75 MODERATE RISK
76 – 150 HIGH RISK

Assets with score 68 or higher tend to have POF score of 4 (a.k.a. D rating in O&M) and/or COF score over 17. These assets have a risk high enough to be considered for potential rehabilitation, repair, and/or improvement.

X. APPENDIX D – ASSET REHABILITATION PROJECT LIST

Asset Rehabilitation Project List				
Creek or Project Name	**Location**	**Asset Rehabilitation Notes**	**Approximate Length**	**Cost Estimate[i]**
San Tomas Aquino[ii]	Bay to Tasman Dr. d/s Williams Rd. and u/s Smith Creek confluence Westmont Ave. to Wildcat Creek confluence	Aging concrete and modified levees and banks	2 miles	$60 million
Stevens[iii]	Crittenden Ln. to I-280	Aging concrete and modified levees and deferred creek improvements[iv]	3 miles	$100 million
Adobe Bypass	Adobe Ln. and El Monte Road	Aging concrete and banks	0.25 mile	$8 million
Berryessa	Montague Expwy. to I-680 to Sierra Creek confluence (concrete) Morrill Ave. to Messina Dr. (concrete) Messina Dr. to u/s Cropley Ave. (natural)	Aging concrete and modified banks	2.5 miles	$1 million
Lower Coyote	McCarthy Blvd. to Montague Expwy.	Eroding banks/levees with rodent damage	3.5 miles	$30 million
Calabazas	Old Mountain View Rd. to Hwy. 101	Aging concrete floodwalls and banks	1.5 miles	$30 million
Permanente + Hale	Mountain View Ave. to Park Ave. + Arboleda Dr. to Rosita Ave.	Concrete replacement/improvement	0.50 mile	$15 million
Permanente	Amphitheater Pkwy. to Hwy. 101	Eroding banks with rodent damage	0.5 mile	$7 million

Asset Rehabilitation Project List				
Creek or Project Name	**Location**	**Asset Rehabilitation Notes**	**Approximate Length**	**Cost Estimate[i]**
Matadero	SF Bay to Middlefield Rd.	Aging concrete and eroding banks with rodent damage	2.7 miles	$6 million
San Francisquito	d/s Friendship Bridge	Eroding banks with rodent damage	0.6 mile	$7 million
Thompson	Lower Silver Creek confluence to Quimby Creek	Asset Management Plan or geomorphic study to address eroding banks and sediment build-up	1.1 miles	$25 million
Ross	Kirk Rd. to Camden Ave. Union Ave. to Camino del Cerro	Erosion and potential hydraulic improvements	1.5 miles	$11 million
Canoas	Guadalupe River confluence to Hillsdale Ave.	Erosion and potential hydraulic improvements	1.6 miles	$50 million
Guadalupe River	Bay to Tasman Dr.	Levees with severe rodent damage	1 mile	$20 million
Regnart Creek	Festival Dr. to Bubb Rd.	Eroded banks and bed	0.5 mile	$8 million
Creek in Pipe Program	Inspection and maintenance of creek in underground pipe and culverts county-wide	Preventive maintenance of creeks in pipe	N/A	$5 million
Rodent Control Bank/Levee Program	Address rodent damage on creek banks county-wide	Levee/banks with rodent damage	N/A	TBD
			Total Asset Renewal	**$383 million**
			Total WARP unfunded	**$5.5 million**
			Total unfunded	**$388.5 million**

i. Conceptual, high-level cost estimate and is subject to change.
ii. A business case report for a Capital Improvement Planning Study and Project for San Tomas Aquino Creek was submitted in FY22 but not validated. The Sustainable Infrastructure project team will revise and re-submit in FY24.
iii. The Sustainable Infrastructure project team determined that the appropriate next step for Stevens Creek is to move forward with preparation of an updated asset management plan to develop the most sustainable and economic management strategies.
iv. Improvement indicates an element that was omitted from original construction

Valley Water

Clean Water • Healthy Environment • Flood Protection

Santa Clara Valley Water District
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www.valleywater.org

INCOMING BOARD CORRESPONDENCE

Correspond No	Rec'd By District	Rec'd By COB	Letter To	Letter From	Description	Disposition	BAO/ Chief	Staff	Draft Response Due Date	Draft Response Submitted	Writer Ack. Sent	Final Response Due Date
C-23-0030	01/18/23	01/18/23	All	STEPHEN QUAN	Email from Stephen Quan, to the Board of Directors, dated 01/18/23, regarding Dam Levels and the Drought.	Refer to Staff	Baker	Williams	01/26/23	01/31/23	n/a	02/01/23
C-23-0045	02/23/23	02/24/23	All	MELISSA MALLORY	EMail from Melissa Mallory regarding unhouse along Los Gatos Creek Trail.	Refer to Staff	Blank	Codianne Yerrapotu	03/04/23	03/03/23	n/a	03/10/23
C-23-0076	03/31/23	04/03/23	All	H.K. WILLARD	Email from H.K. Willard to the Board dated 3/31/23 regarding misleading information in March Water News.	Refer to Staff	Gibson	Rocha	04/11/23	04/07/23	n/a	04/17/23
C-23-0101	05/12/23	05/12/23	All	STEVE KELLY	Email from Steve Kelly, to the Board, dated 5/12/23, regarding concern for unhoused that may cause threat to residents living near the creeks in	Refer to Staff	Blank Yerrapotu	Codianne	05/20/23	05/22/23	n/a	05/26/23

Correspond No	Rec'd By District	Rec'd By COB	Letter To	Letter From	Description	Disposition	BAO/ Chief	Staff	Draft Response Due Date	Draft Response Submitted	Writer Ack. Sent	Final Response Due Date
					Santa Clara.							
C-23-0117	05/28/23	05/30/23	All	RAYMOND WHITE	Email from Dr. Raymond White to the Board, dated 5/28/23, requesting flouride warning message.	Refer to Staff	Baker	Bogale	06/07/23	06/02/23	n/a	06/13/23
C-23-0177	07/10/23	07/10/23	All	IQ4RENT SC	Email from iq4rent sc to the board, dated 7/10/23 regarding Old Almaden Road/Capitol Clean up - animals at issue.	Refer to Staff	Hakes	Codianne	07/18/23	07/12/23	n/a	07/24/23
C-23-0179	07/14/23	07/17/23	All	JEFFREY HARE	Email from Jeffrey Hare to the Board, dated 7/14/23, equesting a status update on the IMC's request for an audit.	Refer to Staff	Richardson Yerrapotu	Penilla	07/25/23	-	n/a	07/31/23
C-23-0181	07/17/23	07/17/23	Keegan Varela	FRED MCCASLAND	Email from Fred McCasland to Chair Varela, dated 7/12/23, requesting assistance with trees that have fallen in Coyote Creek behind 408	Refer to Staff	Hakes	Codianne	07/25/23	-	n/a	07/31/23

Correspond No	Rec'd By District	Rec'd By COB	Letter To	Letter From	Description	Disposition	BAO/ Chief	Staff	Draft Response Due Date	Draft Response Submitted	Writer Ack. Sent	Final Response Due Date
					Terrace Dr.							
C-23-0187	07/20/23	07/20/23	Santos	DAVID COHEN City of San Jose	Email from Councilmember Cohen to Director Santos, dated 7/20/23, regarding emptying of the perc ponds at Penitencia Creek Park.	Refer to Staff	Baker	Williams	07/28/23	-	n/a	08/03/23