SCOTTS VALLEY WATER DISTRICT

AGENDA PACKET

REGULAR BOARD MEETING
08/12/21 at 6:00 p.m.

Santa Margarita Community Room
2 Civic Center Drive, Scotts Valley, California

This meeting is being conducted in a hybrid setting.
Public may attend the meeting remotely or in person.

Public participation is encouraged, members of the public may attend remotely through the meeting link https://zoom.us/j/97693582549 or by phone: 669 900 9128 Meeting ID: 97693582549

The public has opportunities to make comments throughout the meeting: to comment online, use the raise hand option, by phone press *9.

BOARD OF DIRECTORS

Bill Ekwall, President
Ruth Stiles, Vice President
Wade Leishman, Director
Chris Perri, Director
Danny Reber, Director

Noelle Downing, Associate Director
Annie Finch Associate Director

Piret Harmon, General Manager

Water Industry Acronyms

AF – Acre Foot
AFY – Acre Foot per Year
ACWA – Association of California Water Agencies
ACWA JPIA – ACWA Joint Powers Insurance Authority
AWWA – American Water Works Association
BMP – Best Management Practices
CCR – Consumer Confidence Report
CD – Certificate of Deposit
CEQA - California Environmental Quality Act
CSDA – California Special District Association
DHS – Department of Health Services
DWR – Department of Water Resources
EIR – Environmental Impact Report
EPA – Environmental Protection Agency
FY – Fiscal Year
GASB – Governmental Accounting Standards Board
IRWM – Integrated Regional Water Management
JPA – Joint Powers Agreement
LAIF – Local Agency Investment Fund
LAFCO – Local Agency Formation Commission
LID – Low Impact Development
MCL – Maximum Containment Level
MGD – Million Gallons per Day
MGY – Million Gallons per Year
MOU – Memorandum of Understanding
O&M – Operations and Maintenance
PERS – Public Employees Retirement System
PHG – Public Health Goal
PPB – Parts Per Billion
PRV – Pressure Relief Valve
PVC Pipe – Polyvinyl Chloride Pipe
RWMF – Regional Water Management Foundation
RFP – Request for Proposals
ROW – Right-of-way
RWQCB – Regional Water Quality Control Board
SCWD – Santa Cruz Water Department (City of)
SDWA – Safe Drinking Water Act
SGMA – Sustainable Groundwater Management Act
SLVWD – San Lorenzo Valley Water District
SMGWA – Santa Margarita Groundwater Agency
SqCWD – Soquel Creek Water District
SWRCB – State Water Resources Control Board
TP – Treatment Plant
WY – Water Year

SCOTTS VALLEY WATER DISTRICT

Board of Directors

Regular Meeting

08/12/21 at 6:00 p.m.

Santa Margarita Community Room

2 Civic Center Drive, Scotts Valley, California

Agenda

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To comment online, use the raise hand option, by phone press *9.
If experiencing technological difficulties online, then join the meeting via phone.

1. Convene

1.1. Call to Order and Roll Call

1.2. Pledge of Allegiance and Invocation

1.3. Closed Session Report (none)

1.4. Additions/Deletions to the Agenda

1.5. Oral Communications

2. Presentations (none)

3. Administrative

Items are informational in nature and do not include an agenda report.

3.1. Approval of Minutes Regular Board Meeting 07/08/21

3.2. Committee and other Agency Meeting Reports

Executive & Public Affairs Committee (none)
Engineering and Water Resources Committee 07/26/21
Finance & Personnel Committee 07/28/21
Interagency Committee (suspended)
Santa Margarita Groundwater Agency (SMGWA) Board 07/22/21

4. Consent (none)

Items are routine in nature, may be approved by one motion and each item includes an agenda report.

5. Public Hearings (none)

Items include an agenda report with recommendation, an oral staff report or presentation.

6. Business

Items are complex in nature, considered individually, each item includes an agenda report with recommendation and an oral staff report or presentation.

6.1. Leak Adjustment Appeal 230 Mt Hermon #E

Recommendation: Deny an exception to the five-year waiting period and do not approve a leak adjustment credit for 230 Mt. Hermon #E.

6.2. Rate Study and Proposed Rate Increases

Recommendation: Receive the draft report of the Water and Recycled Water Rate Study; authorize the General Manager to issue the notice initiating the 45-day public review period and set the public hearing on recommended water rates for 10/14/21.

6.3. Compensation Adjustment for Exempt Classifications

Recommendation: Approve the compensation adjustments for Finance and Customer Service Manager, Operations Manager and Assistant to General Manager classifications.

6.4. Association of California Water Agencies (ACWA) Region 5 Board Elections for the 2022-2023 Term

Recommendation: Direct the General Manager to submit the Ballot for ACWA Region 5 Board Elections for the 2022-2023 term.

7. Staff Reports

7.1. Legal
District Counsel - oral

7.2. Administrative
General Manager - oral

7.3. Finance
Financial Reports 07/01/20 through 06/30/21

7.4. Operations
Operations Report - oral
Production, Demand and Rainfall Data through 07/31/21
Leak Adjustment Program Report 07/01/20 through 06/30/21

Development Projects 07/2021

8. Directors Reports

Travel and Meetings
ACWA and ACWA/JPIA Updates
Other

9. Written Correspondence

ACWA Region 5 Alerts Affecting Water District General Managers and Board Presidents 07/16/21

10. Community Relations

Water Agencies are Prepared for Drought Challenges, Sentinel 07/07/21
SMGWA to Host Sustainability Event on 07/31/21, Sentinel 07/30/21
July Newsletter

11. Closed Session

11.1. Pursuant to Government Code Section §54957
Public Employee Performance Evaluation
Title: General Manager

12. Report on Closed Session and Additional Items

13. Future Items

City-District Recycled Water Allocation

14. Meetings and Event Calendar

Board Meetings
09/09/21
10/14/21
TBD 11/10/21 or 11/18/21

Committee Meetings
09/20/21 Engineering & Water Resources
09/20/21 Executive & Public Affairs
09/22/21 Finance & Personnel

Santa Margarita Groundwater Agency
Board Meetings
08/26/21

09/23/21
10/28/21

Association of California Water Agencies (ACWA) Events
2021 Fall Conference and Exhibition 11/30/21 – 12/03/21 Pasadena

15. Adjourn

The next meeting of the Scotts Valley Board of Directors is scheduled for 09/09/21 (TBD).

AVAILABILITY OF PUBLIC RECORDS PROVIDED TO THE BOARD OF DIRECTORS: THE DISTRICT WILL MAKE AVAILABLE FOR PUBLIC REVIEW ANY PUBLIC RECORDS FURNISHED TO THE BOARD OF DIRECTORS AT THE SAME TIME SUCH RECORDS ARE FURNISHED TO THE BOARD OF DIRECTORS. **SUCH RECORDS SHALL BE AVAILABLE AT WWW.SVWD.ORG AND AT THE DISTRICT OFFICE DURING NORMAL BUSINESS HOURS.**

PUBLIC ACCESS – ACCOMMODATIONS UNDER THE ADA: PURSUANT TO TITLE II OF THE AMERICANS WITH DISABILITIES ACT OF 1990, THE SCOTTS VALLEY WATER DISTRICT REQUESTS THAT ANY PERSON IN NEED OF ANY TYPE OF SPECIAL EQUIPMENT, ASSISTANCE OR ACCOMMODATION(S) IN ORDER TO EFFECTIVELY COMMUNICATE AT THE DISTRICT'S PUBLIC MEETING PLEASE MAKE SUCH A REQUEST TO THE DISTRICT OFFICE AT THE ABOVE ADDRESS OR BY CALLING (831) 438-2363 A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE SCHEDULED MEETING. ADVANCE NOTIFICATION WITHIN THIS GUIDELINE WILL ENABLE THE DISTRICT TO MAKE REASONABLE ARRANGEMENTS TO ENSURE ACCESSIBILITY.

Board of Directors

Regular Meeting

07/08/21 at 6:00 p.m.

Santa Margarita Community Room

2 Civic Center Drive, Scotts Valley, California

Minutes

1. Convene

1.1. Call to Order and Roll Call

President Ekwall called the meeting to order at 6:00 p.m. The meeting was conducted in a hybrid setting.

Directors	Staff
Bill Ekwall	Piret Harmon, General Manager
Wade Leishman	Nick Kurns, Finance & Customer Service (remote)
Chris Perri	Manager David McNair, Operations Manager (remote)
Danny Reber (remote)	Donna Paul, Assistant to General Manager (remote)
Ruth Stiles	
Associate Directors	**Audience**
Noelle Downing	2 guests
Annie Finch (remote)	

1.2. Pledge of Allegiance and Invocation

Associate Director Finch led the pledge of allegiance and Director Reber provided the invocation.

1.3. Closed Session Report (none)

1.4. Additions/Deletions to the Agenda

None.

1.5. Oral Communications

Joe Serrano, Executive Director of LAFCO invited the Board to attend a webinar hosted by the California Special District Association and LAFCO on 08/11/21.

2. Presentations (none)

3. Administrative

3.1. Approval of Minutes Regular Board Meeting 06/10/21

MOTION carried to approve the minutes of the 06/10/21 Board meeting by unanimous roll call vote.

3.2. Committee and other Agency Meeting Reports

Executive & Public Affairs Committee 06/21/21
There was nothing further to add to the written report.

Engineering and Water Resources Committee 06/21/21
There was nothing further to add to the written report.

Finance & Personnel Committee 06/23/21
There was nothing further to add to the written report.

Interagency Committee (none)

Santa Margarita Groundwater Agency (SMGWA) Board 05/27/21 and 06/24/21
Director Perri that the groundwater sustainability plan goals were reviewed and received updates on the remaining sections.

4. Consent (none)

5. Public Hearings (none)

6. Business

6.1. Rate Study and Proposed Rate Increases

General Manager Harmon provided the staff report.

The Board discussed monthly billing; changing the billing volume to 100-gallon units and residential accounts that are served by ¾" meter but billed at the 5/8" rate and directed staff to provide additional information on these particular accounts.

No action was taken on this item.

6.2. Debt Financing for Capital Projects

Wing See Fox, Urban Futures Inc. provided the report.

MOTION carried to adopt Resolution No. 07-21 authorizing the execution of an installment sale agreement with First Foundation Public Finance to provide funds in the maximum principal amount of $6,300,000 to finance certain improvement to the Water System and approving related documents and actions by unanimous roll call vote.

7. Staff Reports

7.1. Legal (none)

7.2. Administrative

The General Managers reported is appended.

7.3. Finance
Financial Reports 07/01/20 through 05/31/21

The financial reports were accepted without comment.

7.4. Operations
Operations Report - oral
Production, Demand and Rainfall Data (none)
Leak Adjustment Program Report 07/01/20 through 05/31/21

Operations Manager McNair reported on the Orchard Run Water Treatment Plant project and on the upcoming water main replacement project.

8. Directors Reports

Director Stiles reported on difficulties surrounding new data security measures.

Associate Director Downing reported on working at the recycled water fill station.

9. Written Correspondence

Commentary Letter: Santa Cruz County Water Managers
ACWA Advisory: Governor Newsom and Legislature Reach Tentative Agreement of Drought and COVID-19 Water Arrearage Funding

10. Community Relations

June Newsletter

11. Closed Session (none)

12. Report on Closed Session and Additional Items (none)

13. Future Items

City-District Recycled Water Allocation
Water Rate Study and Proposed Rate Increases

14. Meetings and Event Calendar

Board Meetings
08/12/21

09/09/21
10/14/21

Committee Meetings
07/26/21 Engineering & Water Resources
07/26/21 Executive & Public Affairs
07/28/21 Finance & Personnel

Santa Margarita Groundwater Agency
Board Meetings
07/22/21
08/26/21
09/23/21

Association of California Water Agencies (ACWA) Events
2021 Fall Conference and Exhibition 11/30/21 – 12/03/21 Pasadena

15. Adjourn

16. The meeting adjourned at 8:27 p.m.

Approved: Attest:

Bill Ekwall, Board President Piret Harmon, Board Secretary

STAFF REPORT – General Items
Scotts Valley Water District

Date: 07/08/21

To: Board of Directors

From: General Manager

1. Governor Newsom today issued both a Proclamation that expands the state's April 21 drought emergency to include nine additional counties, Santa Cruz being one of them, and an Executive Order calling for Californians to voluntarily reduce water use by 15% compared to 2020 levels.

2. We did the prize drawing for June Water Saving Challenge today. Winner is Alain Dumesny who achieved 30% reduction in water use compared to 2020 June. He converted sprinklers to drip irrigation, replaced a pool cover and identified an underground leak. Mr. Dumesny chose a $100 credit on this water bill.

SCOTTS VALLEY WATER DISTRICT

svwd.org svwater

Engineering and Water Resources Committee
Santa Margarita Conference Room
2 Civic Center Drive, Scotts Valley, California
07/26/21 4:00 p.m.

Meeting Report

1. Convene

The meeting convened at 4:03 p.m. It was conducted in a hybrid setting.

Present

Members: Director Perri (in person), Director Reber (in person), Community Member Krotcov (remote).

Staff: Finance Customer Service Manager Kurns (in person), General Manager Harmon (in person).

2. Business Items

2.1 Leak Adjustment Appeal: 230-E Mt. Hermon Road

Finance Manager Kurns presented the specifics of the Leak Adjustment Request, which was denied due to the once in 5-years rule. The Committee reviewed the email appeal from the account holder and made a recommendation to the Board to decline the appeal.

3. Discussion Items

3.1. Leak Adjustment Program Report 07/01/20 through 06/30/21

The Committee reviewed and discussed the leak adjustment program report. It was highlighted that the total water lost in FY 2021 was 27% less than in FY 2020. The Committee requested staff to present a multi-year trend of the water loss to the Board.

4. Oral Communications

None.

5. Future Agenda Items

City-District Recycled Water Allocation.

6. Adjourn

The meeting adjourned at 4:35 p.m.

SCOTTS VALLEY WATER DISTRICT

svwd.org svwater

Finance and Personnel Committee
District Conference Room
2 Civic Center Drive, Scotts Valley, California

07/28/21 4:00 p.m.

Meeting Report

1. Convene

The meeting convened at 4:04 p.m. It was conducted in a hybrid setting.

Present:

Members: Community Member Callahan (in person), President Ekwall (in person) and Director Reber (remote).

Staff: General Manager Harmon (in person), Finance and Customer Service Manager Kurns (remote) and Assistant to GM Paul (remote).

2. Business Items

2.1 Compensation Adjustment: Exempt Employees

Action Taken: Concurred with the General Manager's recommendation for compensation adjustments.

3. Discussion Items

3.1. Financial Reports 07/01/20 through 06/30/21

The Committee reviewed and discussed the financial reports.

3.2. Water Rate Study Update

Finance and Customer Service Manager Kurns presented the update and provided the proposed five-year water rates chart.

4. Oral Communications

None.

5. Future Agenda Items

Identity Theft Prevention Program (September)

6. Adjourn

The meeting adjourned at 5:11 p.m.

SANTA MARGARITA Groundwater Agency

smgwa.org

Board Meeting Recap: July 2021

Draft Groundwater Sustainability Plan Released

Santa Margarita Groundwater Agency held a board meeting Thursday, July 22, via all-remote, web- and phone-based access due to the coronavirus prevention guidelines. At the meeting, the board reviewed the draft Groundwater Sustainability Plan (GSP), a state-mandated planning document that has been the main focus of the board's work since the agency's inception four years ago.

After discussing the various sections of the document and proposing minor edits, the board approved the release of the draft GSP for a 60-day public comment period. The draft GSP is available for review at www.smgwa.org/GroundwaterSustainabilityPlan and public comments can be submitted on that website.

Under the Sustainable Groundwater Management Act (SGMA), one of the key responsibilities of the Santa Margarita Groundwater Agency (SGMWA) is developing, adopting and submitting a GSP for the Santa Margarita Groundwater Basin (Basin). The Basin forms a roughly triangular area between Felton, Ben Lomond and Scotts Valley. The Basin provides drinking water for the Scotts Valley and San Lorenzo Valley Water Districts, over a dozen small water systems and around 1100 parcels served by private wells. Additionally, the groundwater table influences the surface water in the San Lorenzo River, a primary drinking water source for the City of Santa Cruz and a home to endangered species.

The board also appointed a new Treasurer and a new Auditor for the agency, heard a report on the new website and received an update about the community outreach event the SMGWA held on Saturday, July 31, at Skypark in Scotts Valley. The event, "Drought: Global Challenge — Local Solutions," highlighted the work done for the GSP and encouraged public engagement.

To learn more about the Santa Margarita Groundwater Agency and upcoming events, visit our website at www.smgwa.org.

San Lorenzo Valley WATER DISTRICT

THE COUNTY OF SANTA CRUZ 1850

SCOTTS VALLEY WATER DISTRICT

AGENDA REPORT

Scotts Valley Water District

Date: 08/12/21

To: Board of Directors

Item: Business 6.1

Subject: **Leak Adjustment Appeal 230 Mt. Hermon Unit E**

Reason: Complies with District Administrative Code Section 1.20.010 District Designation

SUMMARY

Recommendation: Deny an exception to the five-year waiting period and do not approve a leak adjustment credit for 230 Mt. Hermon Road Unit E.

Fiscal Impact: There is no fiscal impact associated with this action.

Previous Related Action: On 07/26/21, the Water Resources and Engineering Committee reviewed the appeal and recommended that the Board deny the leak adjustment request.

On 04/18/18, the customer received a leak adjustment credit of $113.05.

BACKGROUND

The District's current Leak Adjustment Program was approved in July 2020. Among other stipulations, the program specifies that a leak adjustment credit will be granted not more than once in any five-year period for accounts with i-Meters and access to WaterSmart.

A standing item, Leak Adjustment Report has been added to the Water Resources and Engineering Committee meeting agenda to create an efficient method for customers to appeal the decision by staff of a leak adjustment credit.

DISCUSSION

The commercial account had a leak that occurred from 02/26/21 to 04/09/21. On 03/01/21 WaterSmart sent a leak alert to the email on file and on 04/05/21 a letter was mailed. The leak eventually grew to 1,200 gallon per day and on 04/08/21 staff followed up with a phone call. The leak was repaired on 04/09/21 and the leak adjustment request was received on 05/06/21. The request was declined because the account had received a leak adjustment credit on 04/18/18 in the amount of $113.05 and the customer had received an invite to WaterSmart customer engagement portal.

Submitted,

Piret Harmon
General Manager

AGENDA REPORT

Scotts Valley Water District

Date: 08/12/21

To: Board of Directors

Item: Business 6.2

Subject: **Rate Study and Proposed Rate Increases**

Reason: Supports Strategic Goal No 3 Financial Stewardship

SUMMARY

Recommendation: Receive the draft report of the Water and Recycled Water Rate Study; authorize the General Manager to issue the notice initiating the 45-day public review period and set the public hearing on recommended water rates for 10/14/21.

Fiscal Impact: If the proposed rate schedule is adopted, rate revenue is expected to increase from $6.8M in FY 2021 to $9.3M in FY 2026. The revenue is projected to be sufficient to cover operating expenses, capital expenses, debt service payments and maintain adequate reserves.

Previous Related Action: On 12/12/16 the Board held a public hearing and adopted Resolution No 10-16 establishing a new rate structure, setting rates for potable and recycled water beginning on 12/13/16 through 12/13/20, setting fees for new connections effective 12/13/16 and establishing add-on drought rates.

On 12/12/16 the Board approved the Rate Implementation Program.

On 11/09/17 and 11/08/18 the Board evaluated the need for rate increases for the upcoming year and decided to implement the rates as established by Resolution No 10-16.

On 11/14/19 the Board evaluated the need for rate increases for the upcoming year and adopted Resolution 07-19 reducing previously adopted rates and setting water rates and fees effective 12/13/19.

On 11/12/20 the Board evaluated the need for rate increases for the upcoming year and adopted Resolution 07-20 reducing previously adopted rates and setting water rates and fees effective 12/13/20.

On 03/17/21 the Finance and Personnel Committee received a presentation from Raftelis Financial Consultants and provided input to certain aspects of the financial model and rate study.

On 04/08/21 the Board received an update on the work completed: analysis of required revenue and development of financial plan.

On 05/26/21 the staff presented the Finance and Personnel Committee an update on the rate design.

On 06/10/21 the Board received an update on the cost of service analysis and proposed rate development.

On 7/8/21 the Board received information on and provided direction on changes to the structure of the rate schedule (transitioning to monthly billing and updating the billing units).

On 7/28/21 the Finance and Personnel Committee reviewed the proposed 5-year rate schedule.

BACKGROUND

The District's Strategic Goal No. 3 comprises a management objective of designing and managing balanced and fair revenue sources that are sufficient for meeting operating and capital needs while providing for adequate reserves. The District recognizes the challenges as it strives to provide essential services to the community, fully fund the costs of providing and sustaining good service and keep rates and fees fair and affordable.

In October 2020, Raftelis Financial Consultants (RFC) was hired to conduct a Water and Recycled Water Rate Study. The study comprises the following tasks:

- Develop a financial plan to determine the District's potable and recycled water revenue requirements
- Conduct potable and recycled water cost of service analyses
- Develop potable and recycled water rate models that demonstrate a clear nexus between District's costs and customer rates
- Create an administrative report that explains the proportionality of the rates to meet the requirements of Proposition 218 (Prop 218).

The financial plan was completed, and findings presented to the Board in April. The Board was asked to review and provide input on the financial plan scenarios. The cost of service analysis and preliminary rate model were presented to the Board in June. In July, the Board received additional information about significant billing structure changes.

DISCUSSION

The rate study includes a proposed rate schedule based on District revenue requirements as presented in the study. While the fundamentals of the District rate structure, such as basic meter charges and volumetric rates based residential tiered rates or uniform rates, will stay the same, this study does include proposed changes to the water rate structure. The District plans to transition to monthly billing for potable water, beginning in January 2022. All proposed rates, charges and tier allotments presented in the report have been prepared to reflect the monthly basis. In addition, volumetric rate billing units have also changed. Currently, volumetric rates are per 1,000 gallons (kGal). As the rate study report outlines, the District intends to implement volumetric rates per 100 gallons (cGal).

The proposed 5-year potable water rate schedule is presented in the report in Table 1-4 (Page 6.2-21). These rates are the result of the proposed financial plan and cost of service

analyses. All rates and charges are shown on a monthly basis due to the planned transition to monthly billing for potable water customers. Current Basic Meter Charges for potable water customers are also shown on a monthly basis to provide a direct comparison to the proposed charges. The proposed 5-year recycled water rate schedule is also presented in Table 1.5 (Page 6.2.22).

The proposed rates set a maximum allowable increase limit for each of the years. As in the years past, the Board has the prerogative and is fully committed to evaluating the need for increases every year prior to applying the specific rates.

The next phase of the rate study project includes preparation and mailing of the Proposition 218 notice, conducting a public comment period and holding a public hearing. As stipulated by Proposition 218, the District will mail information regarding the proposed rate changes to every property owner and customer in the District's service area. The District Board of Directors will consider approving the proposed rates during a public hearing at least 45 days after the mailing of the notice.

Submitted,

Piret Harmon
General Manager

Enclosed: Water and Recycled Water Rate Study – Draft Report

Scotts Valley Water District

Water and Recycled Water Rate Study

Draft Report / July 30, 2021

SCOTTS VALLEY WATER DISTRICT

RAFTELIS

RAFTELIS

July 30, 2021

Ms. Piret Harmon
General Manager
Scotts Valley Water District
2 Civic Center Drive
Scotts Valley, CA 95066

Subject: Water and Recycled Water Rate Study

Dear Ms. Harmon,

Raftelis is pleased to provide this Water and Recycled Water Rate Study Report to the Scotts Valley Water District. The overall purpose of the study was to develop a proposed five-year schedule of potable and recycled water rates for Fiscal Year (FY) 2022 through FY 2026 that is fair, equitable, and in compliance with Proposition 218 requirements.

The major goals of the study were to:

- Develop a five-year financial plan for the District's Potable Water Fund and Recycled Water Fund to ensure sufficient funding to cover operating and capital needs, maintain adequate reserves, and meet debt coverage requirements
- Conduct a cost of service analysis to ensure a strong nexus between the costs incurred by the District and the proposed rates
- Develop a five-year schedule of proposed potable and recycled water rates in compliance with Proposition 218 requirements

This report details the results and recommendations related to the development of the proposed financial plan, cost of service analysis, and rate calculations. It has been a pleasure working with you and we thank you, Mr. Nick Kurns, Mr. Jessy Manuel, and other District staff for the support provided to Raftelis during this study.

Sincerely,

Sanjay Gaur
Project Director

Charles Diamond
Lead Analyst

445 S Figueroa St, Suite 1925
Los Angeles CA 90071
www.raftelis.com

Table of Contents

List of Tables

List of Figures

List of Abbreviations

AF: Acre-feet
AFY: Acre-feet per year
AWWA: American Water Works Association
Basin: Santa Margarita Groundwater Basin
cGal: One hundred gallons
CIP: Capital Improvement Plan
COS: Cost of Service
District: Scotts Valley Water District
FY: Fiscal year
GPCD: Gallons per capita per day
GPM: Gallons per minute
GW: Groundwater
HCF: One hundred cubic feet
K: Thousand
kGal: One thousand gallons
M: Million
Manual M1: American Water Works Association's *Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices - M1 Seventh Edition*
Max Day: Maximum day water demand
Max Hour: Maximum hour water demand
MG: One million gallons
MGD: One million gallons per day
O&M: Operations and maintenance
R&R: Repair and replacement
SCADA: Supervisory control and data acquisition
Study Period: the rate-setting period of this study which extends through fiscal year 2026
WRF: City of Scotts Valley Water Reclamation Facility

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1. Executive Summary

1.1. Study Overview

Public water utilities in California typically perform a cost of service analysis approximately every five years to ensure that customers are appropriately charged for service based on the costs incurred by the utility to provide service. Scotts Valley Water District (referred to herein as the District) last conducted a cost of service study in 2016, which established proposed rates over a five-year period through fiscal year (FY) 2021. The last year of adopted rates from the prior rate study became effective in December 2020. The District engaged Raftelis in 2020 to conduct a cost of service study to establish a proposed five-year schedule of potable and recycled water rates through FY 2026. The major objectives of this rate study are to:

- Develop a five-year financial plan that sufficiently funds the District's operations and maintenance (O&M) expenses, debt service payments, and capital expenditures while adequately funding reserves and achieving debt coverage requirements.
- Conduct a cost of service analysis that establishes a clear nexus between the District's cost to serve customers and the rates charged to customers, per Proposition 218 and industry standards.
- Review the District's existing potable and recycled water rate structures to ensure that proposed rates achieve the District's financial and policy objectives.
- Develop a five-year schedule of potable and recycled water rates that are fair, equitable, and compliant with Proposition 218 requirements.

1.2. Rate Study Process

This rate study was conducted using industry-standard principles outlined by the American Water Works Association's *Manual M1*. The overall rate study process is outlined below:

1. **Financial Plan:** Develop cash flow projections for the Potable Water Fund and Recycled Water Fund to determine the amount of revenue required from water rates.
2. **Cost of Service Analysis:** Allocate costs to system components and then to various customer classes based on user characteristics.
3. **Rate Design**: Develop rates that generate sufficient revenues based on the results of the financial plan and cost of service analyses and communicate the policy preferences of the agency.
4. **Record Preparation and Rate Adoption:** Develop a study report to document the results of the rate study. Proposed rates may be adopted by the District's Board of Directors only after holding a public hearing in accordance with Proposition 218 requirements.

1.3. Five-Year Financial Plan

Raftelis conducted a status quo cash flow analysis to evaluate whether existing water rates adequately fund the District's various expenses over the five-year study period. Annual projections of revenues, O&M expenses, debt service payments, and Capital Improvement Plan (CIP) expenditures through FY 2026 were developed with input from District staff. Raftelis projects that with no rate increases over the five-year study period, the District's reserves will be fully depleted by the end of the study period in FY 2026 (see Figure 1-1). This demonstrates a clear need for revenue adjustments (i.e., rate revenue increases). Raftelis worked with District staff to develop the following proposed revenue adjustments over the five-year study period (see Table 1-1). A key consideration in selecting the proposed revenue adjustments was creating balance between the competing priorities of financial

resiliency and customer affordability. Higher revenue adjustments were required for recycled water rates compared to potable water rates in order to ensure the financial sufficiency of the Recycled Water Fund. With the inclusion of proposed revenue adjustments, reserves are projected to stabilize at approximately $5 million through the end of the study period (see Figure 1-2).

Table 1-1: Proposed Revenue Adjustments

Revenue Adjustments	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Effective Date	Jan. 1, 2022	Jan. 1, 2023	Jan. 1, 2024	Jan. 1, 2025	Jan. 1, 2026
Potable Water	5.0%	5.0%	5.0%	5.0%	5.0%
Recycled Water	5.0%	5.0%	10.0%	10.0%	10.0%

Figure 1-1: Status Quo Financial Plan

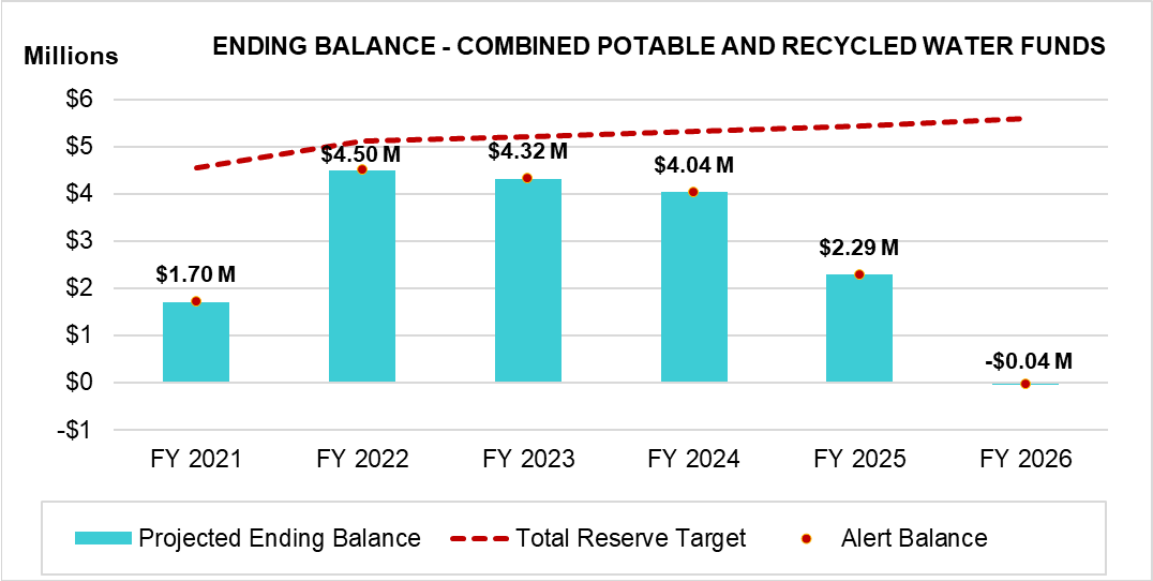
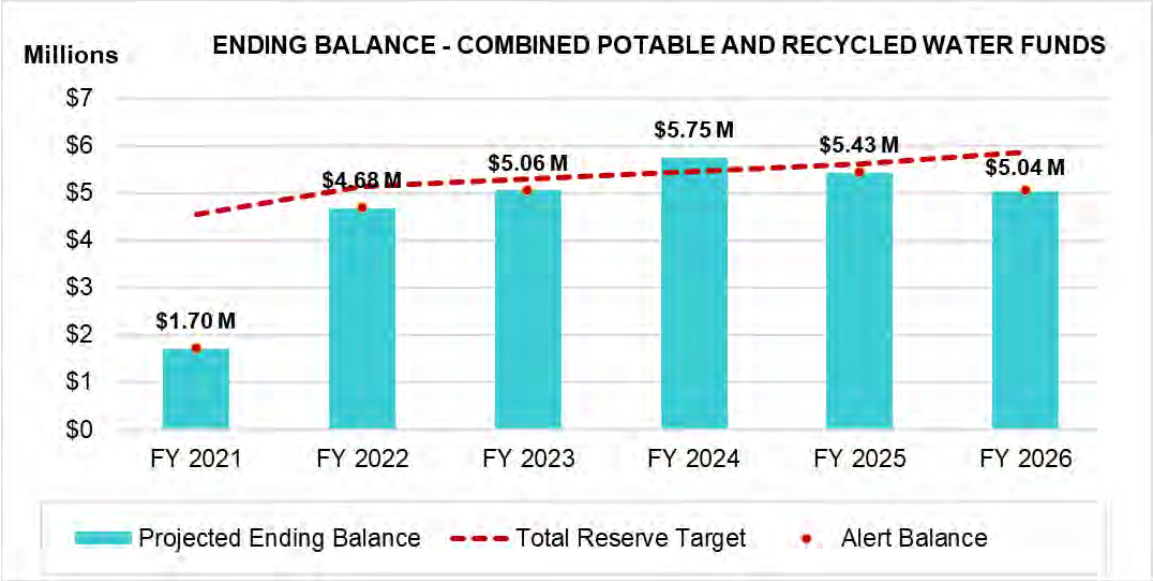


Figure 1-2: Proposed Financial Plan



1.4.Current Water Rate Structure

The District's current water rate structure is generally the same for both potable and recycled water customers. However, potable water customers are currently billed bi-monthly, while recycled water customers are billed monthly. The District's current rate structure consists of the following rates and charges:

- **Basic Meter Charges**: Fixed charge per water meter which varies based on water meter size.
- **Volumetric Rates:** Variable rates charged per thousand gallons (kGal) of water delivered per billing period.
  - **Residential Tiered Rates:** Nearly all residential potable water use is subject to a four-tier volumetric rate structure. Current tier allotments per billing period are different for residential units with individual meters as opposed to multi-family units with master meters.
  - **Uniform Rates:** Residential customers with qualifying medical needs or who qualify for rate assistance are subject to a uniform Volumetric Rate. All non-residential water use is subject a uniform Volumetric Rate associated with one of the following customer classes: Commercial/Industrial/Institutional (CII), Landscape Potable, Landscape Recycled, or Other.

1.5.Proposed Changes to Water Rate Structure

Raftelis worked closely with District staff to evaluate potential changes to the existing potable and recycled water rate structure. All proposed water rates incorporate the following recommended revisions to the existing rate structure.

1. **Adjust Potable Water Rates Schedule to Reflect Monthly Billing Basis**: The District plans to transition its potable water customers from billing on a bi-monthly basis to a monthly basis beginning in January 2022. Therefore, all proposed rates, charges, and residential tier allotments shown are on a monthly basis. Current recycled water rates are already on a monthly basis.
2. **Implement Volumetric Rates per 100 gallons:** All current Volumetric Rates are per 1,000 gallons (kGal). Raftelis recommends that the District implement Volumetric Rates per 100 gallons (cGal). This proposed change is intended to improve customer understanding, as 100 gallon units are easier for customers to visualize and comprehend compared to 1,000 gallon units.
3. **Implement Same Basic Meter Charges for Potable and Recycled Customers**: Potable and recycled water customers are currently subject to different Basic Meter Charges. Raftelis recommends that all customers be subject to the same Basic Meter Charges. This proposed change will simplify the District's rate structure, and reflects the fact that billing/customer service/meter-related costs (which are recovered by Basic Meter Charges) do not vary significantly between potable and recycled water customers.
4. **Eliminate the "Other" Potable Water Volumetric Rate:** Little to no potable water use has been charged at the Volumetric Rate for "Other" over the past few years. Raftelis therefore recommends that the "Other" customer class be eliminated from the proposed rate schedule to simplify the rate structure.
5. **Update Residential Tier Allotments:** Raftelis recommends that the methodology used to calculate the existing residential tier allotments be maintained. However, the tier allotment calculations used in the prior rate study must be refined to reflect updated data. The proposed refinements result in a reduction to the Tier 3 allotment (see Table 1-2). All proposed residential tier allotments are shown on a monthly basis due to the planned transition to monthly billing for potable water customers.

Table 1-2: Proposed Changes to Residential Tier Allotments

Tier	Current Monthly Allotment (gallons)	Updated Monthly Allotment (gallons)	Basis
Residential Units with Individual Meters			
Tier 1	0-3,000	0-3,000	Efficient indoor water use for average household size
Tier 2	3,001-6,000	3,001-6,000	Efficient outdoor water use for typical single family residential landscape area
Tier 3	6,001-8,000	6,001-7,000	Additional water use within groundwater basin safe yield
Tier 4	Over 8,000	Over 7,000	All use in excess of groundwater basin safe yield
Multi-Residential Units with Master Meters (per Dwelling Unit)			
Tier 1	0-3,000	0-3,000	Efficient indoor water use for average household size
Tier 2	3,001-3,200	3,001-3,200	Efficient outdoor water use for typical multi-family residential landscape area
Tier 3	3,201-8,000	3,201-7,000	Additional water use within groundwater basin safe yield
Tier 4	Over 8,000	Over 7,000	All use in excess of groundwater basin safe yield

1.6.Cost of Service Analysis

The proposed financial plan determines the amount of revenue that must be recovered from water rates in each year over the study period. The purpose of the cost of service analysis is to appropriately allocate this total rate revenue requirement to the District's various customer classes. Raftelis performed a cost of service analysis for FY 2021 based on industry-standard principles outlined in the American Water Works Association's *Manual M1*. Raftelis adhered closely to cost of service principles to ensure that proposed rates are in accordance with California Proposition 218 (which requires a clear nexus between the cost burden imposed by customers and the rates those customers are charged). Table 1-3 shows the current versus proposed distribution of the rate revenue requirement to the District's various charges/customer classes based on the results of the FY 2021 cost of service analysis. Note that Table 1-3 is limited to potable water service, as the cost of service does not result in any distributional impacts to the District's recycled water customers.

Table 1-3: Current Versus Proposed Cost of Service Allocations

[A]	[B]	[C]	[D]
Line	Charge/Customer Class	Current Rates	Proposed Rates
1	**Basic Fixed Charges**		
2	Basic Meter Charge (excluding 5/8" Fire Service)	33.9%	33.7%
3	Basic Meter Charge (5/8" Fire Service)	1.0%	0.9%
4	**Subtotal**	**34.9%**	**34.6%**
5			
6	**Volumetric Rates**		
7	Residential	40.6%	45.0%
9	CII	18.8%	14.5%
10	Landscape Potable	5.8%	5.9%
12	**Subtotal**	**65.1%**	**65.4%**
13			
14	**Total**	**100.0%**	**100.0%**

1.7.Proposed Water Rates

Raftelis developed an updated five-year schedule of water rates based on the results of the proposed financial plan and cost of service analyses. Proposed water rates through FY 2026 are shown for potable water customers in Table 1-4 and for recycled water customers in Table 1-5 on the following pages. Proposed rates are assumed to be implemented in January of each fiscal year. All rates and charges are shown on a monthly basis due to the planned transition to monthly billing for potable water customers. Current FY 2021 Basic Meter Charges for potable water customers are also shown on a monthly basis to provide a direct comparison to the proposed charges. Proposed Volumetric Rates are shown per hundred gallons in accordance with proposed changes to the District's rate structure. Current FY 2021 Volumetric Rates are also shown per hundred gallons to provide a direct comparison to the proposed rates. Volumetric Rates for the "Other" customer class are omitted from Table 1-4 due to the proposed elimination of this customer class.

Table 1-4: Proposed Five-Year Potable Water Rate Schedule (Monthly)

Monthly Potable Water Rates	Current FY 2021 (Dec. 2020)	Proposed FY 2022 (Jan. 2022)	Proposed FY 2023 (Jan. 2023)	Proposed FY 2024 (Jan. 2024)	Proposed FY 2025 (Jan. 2025)	Proposed FY 2026 (Jan. 2026)
Monthly Basic Meter Charge						
5/8"	$42.95	$44.07	$46.28	$48.59	$51.02	$53.57
5/8" Fire Service (Residential/Commercial)	$11.69	$11.66	$12.24	$12.85	$13.49	$14.17
3/4" (Multi-Residential, incl Fire Service)	$54.64	$55.73	$58.51	$61.44	$64.51	$67.74
3/4"	$67.58	$61.61	$64.69	$67.92	$71.32	$74.88
1"	$72.70	$96.81	$101.65	$106.73	$112.07	$117.67
1 1/2"	$170.84	$192.74	$202.38	$212.50	$223.12	$234.28
2"	$231.97	$310.24	$325.75	$342.04	$359.14	$377.10
3"	$413.56	$643.91	$676.10	$709.91	$745.40	$782.67
4"	$723.10	$1,138.55	$1,195.48	$1,255.25	$1,318.01	$1,383.91
6”	$1,544.64	$2,269.80	$2,383.29	$2,502.46	$2,627.58	$2,758.96
Volumetric Rates (per 100 gallons)						
Residential Units with Individual Meters						
Tier 1 *(0-3,000 gallons per monthly billing period)*	$0.70	$0.83	$0.87	$0.91	$0.96	$1.00
Tier 2 *(3,001-6,000 gallons per monthly billing period)*	$1.22	$1.33	$1.39	$1.46	$1.53	$1.61
Tier 3 *(6,001-7,000 gallons per monthly billing period)*	$1.96	$2.40	$2.52	$2.64	$2.77	$2.91
Tier 4 (*Over 7,000 gallons per monthly billing period)*	$2.36	$2.88	$3.03	$3.18	$3.34	$3.50
Tier 1 *(0-3,000 gallons per monthly billing period)*	$0.70	$0.83	$0.87	$0.91	$0.96	$1.00
Tier 2 *(3,001-3,200 gallons per monthly billing period)*	$1.22	$1.33	$1.39	$1.46	$1.53	$1.61
Tier 3 *(3,201-7,000 gallons per monthly billing period)*	$1.96	$2.40	$2.52	$2.64	$2.77	$2.91
Tier 4 *(Over 7,000 gallons per monthly billing period)*	$2.36	$2.88	$3.03	$3.18	$3.34	$3.50
Uniform Rates						
Commercial, Industrial, Institutional (CII)	$1.64	$1.35	$1.42	$1.49	$1.56	$1.64
Landscape Potable	$2.05	$2.22	$2.33	$2.45	$2.57	$2.70
Qualifying Medical Needs (Residential)	$1.22	$1.33	$1.39	$1.46	$1.53	$1.61
Rate Assistance (Residential)	$0.70	$0.83	$0.87	$0.91	$0.96	$1.00

Table 1-5: Proposed Five-Year Recycled Water Rate Schedule (Monthly)

Monthly Recycled Water Rates	Current FY 2021 (Dec. 2020)	Proposed FY 2022 (Jan. 2022)	Proposed FY 2023 (Jan. 2023)	Proposed FY 2024 (Jan. 2024)	Proposed FY 2025 (Jan. 2025)	Proposed FY 2026 (Jan. 2026)
Monthly Basic Meter Charge						
5/8"	$45.88	$44.07	$46.28	$48.59	$51.02	$53.57
3/4"	$72.18	$61.61	$64.69	$67.92	$71.32	$74.88
1"	$77.64	$96.81	$101.65	$106.73	$112.07	$117.67
1 1/2"	$182.46	$192.74	$202.38	$212.50	$223.12	$234.28
2"	$247.74	$310.24	$325.75	$342.04	$359.14	$377.10
3"	$441.67	$643.91	$676.10	$709.91	$745.40	$782.67
4"	$772.25	$1,138.55	$1,195.48	$1,255.25	$1,318.01	$1,383.91
6”	$1,649.63	$2,269.80	$2,383.29	$2,502.46	$2,627.58	$2,758.96
Volumetric Rates (per 100 gallons)						
Landscape Recycled	$1.36	$1.41	$1.48	$1.64	$1.82	$2.01

1.8.Customer Bill Impacts

FY 2022 Residential Monthly Bill Impacts

Figure 1-3 shows sample monthly water bills for residential customers with individual meters receiving potable water service from the District. Sample bills shown are for a customer with a 5/8-inch water meter at varying levels of water use under both current FY 2021 and proposed FY 2022 potable water rates. Note that over 97 percent of residential customers with individual meters have a 5/8-inch water meter. The five water use levels shown are defined in Table 1-6, and were calculated based on account-level potable water billing data for FY 2020.

Figure 1-3: Monthly Bill Impacts for Residential Units with Individual Meters (FY 2022)

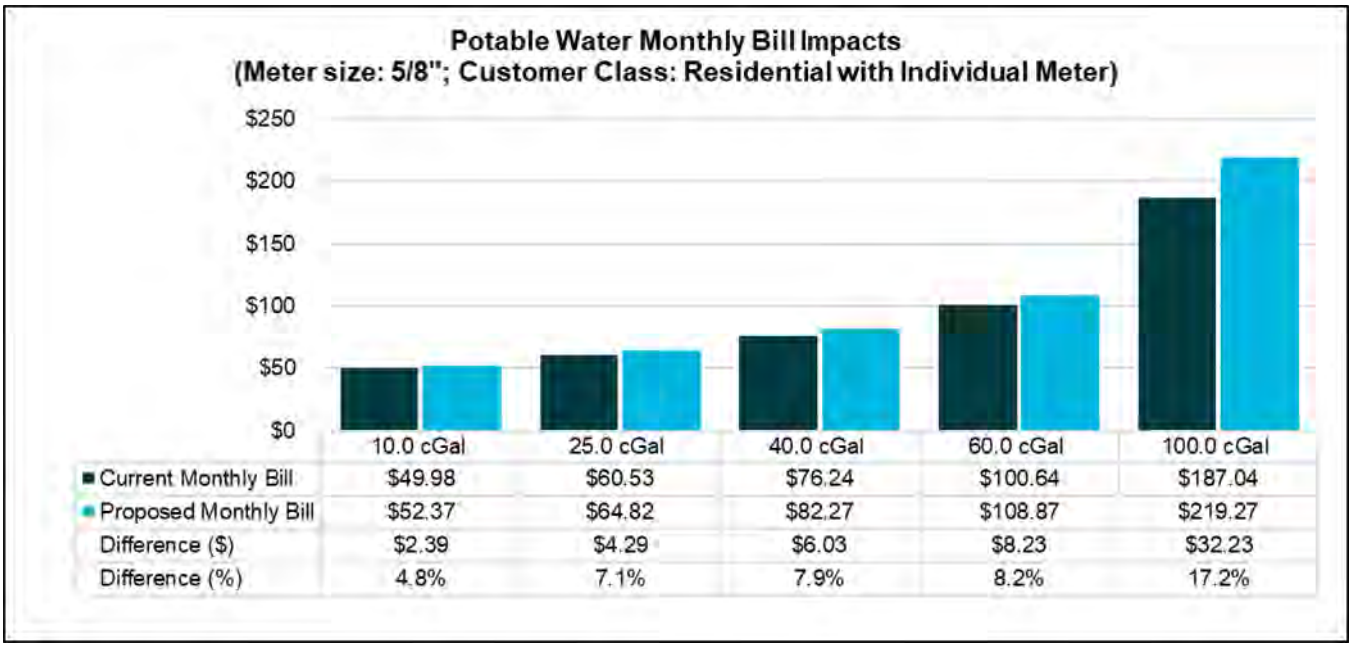


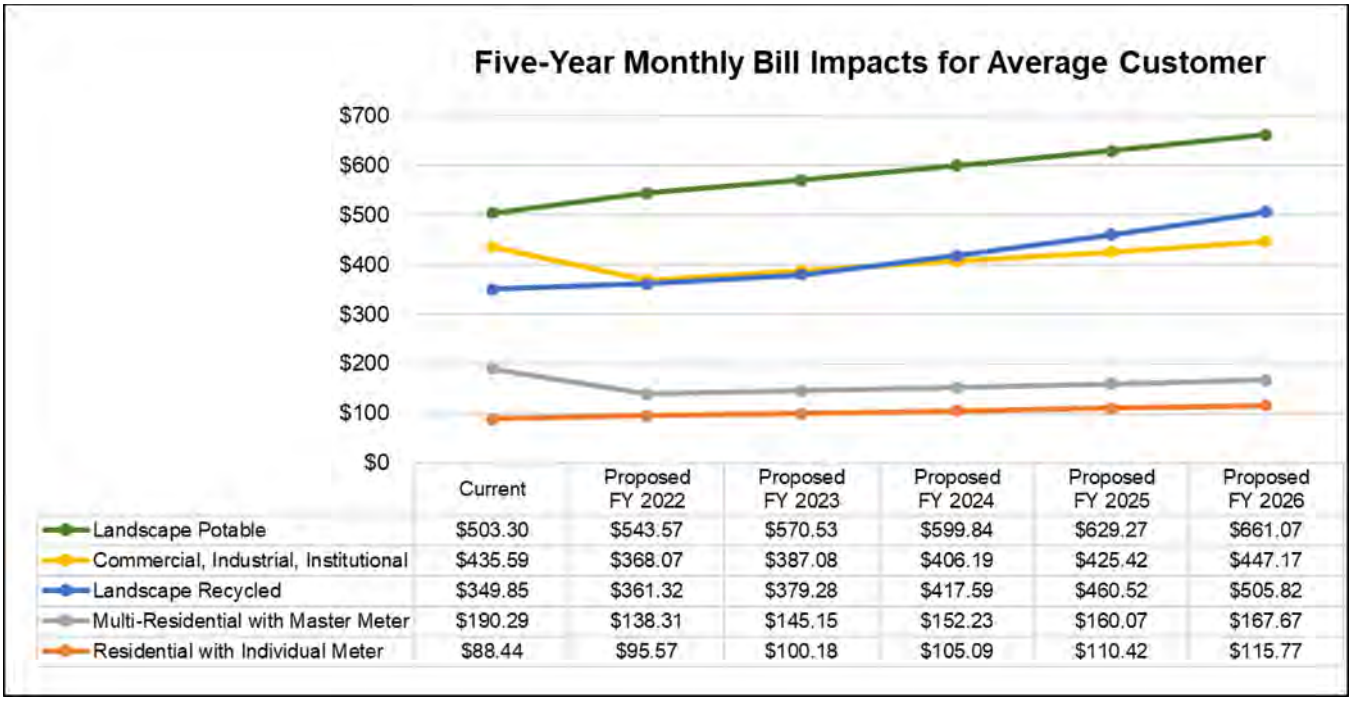
Table 1-6: FY 2020 Water Use for Residential Units with Individual Meters

Residential Units with Individual Meters	FY 2020 Monthly Water Use
10th Percentile	10 cGal
25th Percentile	25 cGal
Median	40 cGal
75th Percentile	60 cGal
90th Percentile	100 cGal

Five-Year Monthly Bill Impacts by Customer Class

Figure 1-4 shows sample monthly water bills based on current and proposed water rates over the next five years for an average customer within each customer class. Average customers are defined in Table 1-7 based on the most common meter size and average monthly water use in FY 2020. For multi-residential customers with master meters, the average number of dwelling units per water meter is estimated at 4 dwelling units. Monthly bill impacts in FY 2022 vary by customer class due to the distributional impacts of the cost of service analysis. Beyond FY 2022, all customer bills increases are equal to proposed revenue adjustments. Recycled water customers experience greater increases in the final three years of the study period because recycled water rates are subject 10 percent annual revenue adjustments in FY 2024 through FY 2026 (compared to 5 percent annual revenue adjustments for potable water rates).

Figure 1-4: Five-Year Monthly Bill Impacts for Average Customer by Customer Class



	Current	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
Landscape Potable	$503.30	$543.57	$570.53	$599.84	$629.27	$661.07
Commercial, Industrial, Institutional	$435.59	$368.07	$387.08	$406.19	$425.42	$447.17
Landscape Recycled	$349.85	$361.32	$379.28	$417.59	$460.52	$505.82
Multi-Residential with Master Meter	$190.29	$138.31	$145.15	$152.23	$160.07	$167.67
Residential with Individual Meter	$88.44	$95.57	$100.18	$105.09	$110.42	$115.77

Table 1-7: Definition of Average Customer by Customer Class

Customer Class	Most Common Meter Size	Average Monthly Water Use (FY 2020)	Average Number of Dwelling Units
Residential Units with Individual Meters	5/8"	50 cGal	N/A
Multi-Residential Units with Master Meters	1"	140 cGal	4
Commercial, Industrial, Institutional	5/8"	240 cGal	N/A
Landscape Potable/Recycled	5/8"	225 cGal	N/A

2.Introduction

2.1.Agency Overview

Scotts Valley Water District (referred to herein as the District) was established in 1961 to provide water for household consumption and commercial, municipal, and firefighting purposes. The District serves most of the City of Scotts Valley and some unincorporated areas north of the City. It is governed by a publicly elected five-member Board of Directors. Directors are elected for a period of four-years and serve overlapping terms. The District provides potable and recycled water to its customers, while sewer service is provided by the City of Scotts Valley. The District covers an area of 4.8 square miles, with a population of about 10,800. Customers are predominantly residential, but there are also commercial, industrial, institutional (such as schools and medical facilities), and landscape/irrigation customers. In addition, there are landscape customers who use either potable or recycled water for irrigation. The District provides fire protection through fire hydrants and private fire connections.

The only source of potable water for the District is water from the Santa Margarita Groundwater Basin. The District shares the basin with neighboring San Lorenzo Valley Water District, Mount Hermon Association, and other private pumpers. The District may need to pursue supplemental water supply projects in the near future to augment existing water supply supplies. However, supplemental water supply project(s) details, costs, and timing are difficult to estimate at this time. From the early 1980s, population growth and increased demand, along with the urbanization of the region and droughts caused a significant drop in the groundwater levels, especially in Lompico – the main production aquifers for Scotts Valley Water District. The measures taken since the beginning of this century focused on water use efficiency, proactive groundwater management, and distribution of recycled water in order to mitigate overdraft in the Basin. Those measures helped stabilize the groundwater levels in the basin, but the potential consequences of climate change require continued planning and implementation of projects that ensure the sustainability of the groundwater resources.

Cooperation between the District and the City of Scotts Valley resulted in the development of a recycled water system and, since 2002, recycled water has been provided as an offset to potable water demand. Recycled water is essentially wastewater generated within the City's sewer service area, collected and treated in the Scotts Valley Water Reclamation Facility, and distributed by the District. The wastewater is treated to the standards of tertiary disinfected recycled water, suitable for unrestricted non-potable use, and is sold to the District's recycled water customers.

2.2. Study Overview

Public water utilities in California typically perform a cost of service analysis approximately every five years to ensure that customers are appropriately charged for service based on the costs incurred by the utility to provide service. The District last conducted a cost of service study in 2016, which established proposed rates over a five-year period through fiscal year (FY) 2021. The last year of adopted rates from the prior rate study became effective in December 2020.

The District engaged Raftelis in 2020 to conduct a cost of service study to establish a proposed five-year schedule of potable and recycled water rates through FY 2026. The results of the study are documented within this report. Note that proposed rates cannot be implemented until formally adopted by the District's Board of Directors after a public hearing. Proposition 218 requires that the District must mail its customers a public hearing notice detailing any proposed rate changes no fewer than 45 days before the public hearing. The notice must include instructions on how a customer can formally protest the rate proposal.

2.2.1.STUDY OBJECTIVES

The major objectives of this study are to:

- Develop a five-year financial plan that sufficiently funds the District's potable and recycled water operations and maintenance (O&M) expenses, debt service payments, and capital expenditures while adequately funding reserves and achieving debt coverage requirements.
- Conduct a cost of service analysis that establish a clear nexus between the District's cost to serve customers and the rates charged to customers, per Proposition 218 and industry standards.
- Review the District's existing potable and recycled water rate structures to ensure that proposed rates achieve the District's financial and policy objectives.
- Develop a five-year schedule of potable and recycled water rates that are fair, equitable, and compliant with Proposition 218 requirements.

3. Legal Requirements and Rate Setting Methodology

3.1. Legal Requirements

3.1.1. CALIFORNIA CONSTITUTION - ARTICLE XIII D, SECTION 6 (PROPOSITION 218)

Proposition 218, reflected in the California Constitution as Article XIII D, was enacted in 1996 to ensure that rates and fees are reasonable and proportional to the cost of providing service. The principal requirements, as they relate to public water service are as follows:

1. A property-related charge (which include water rates) imposed by a public agency on a parcel shall not exceed the costs required to provide the property-related service.
2. Revenues derived by the charge shall not be used for any purpose other than that for which the charge was imposed.
3. The amount of the charge imposed upon any parcel shall not exceed the proportional cost of service attributable to the parcel.
4. No charge may be imposed for a service unless that service is actually used or immediately available to the owner of the property.
5. A written notice of the proposed charge shall be mailed to both the customer of record and owner of record of each parcel at least 45 days prior to the public hearing, when the agency considers all written protests against the charge.

As stated in the American Water Works Association's (AWWA) *Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices - M1 Seventh Edition* (Manual M1), "water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." Raftelis follows industry standard rate setting methodologies set forth by the AWWA's *Manual M1* to ensure the water cost of service analysis presented in this study meets Proposition 218 requirements and establishes rates that do not exceed the proportionate cost of providing water services on a parcel basis. The methodology in the Manual M1 is a nationally recognized industry ratemaking standard which courts have recognized as consistent with Proposition 218.

3.1.2. CALIFORNIA CONSTITUTION ARTICLE X, SECTION 2

California Constitution Article X, Section 2 mandates that water resources be put to beneficial use and that the waste or unreasonable use of water be prevented. Section 106 of the Water Code declares that the highest priority use of water is for domestic purposes, with Non-Residential Irrigation the next highest priority. Thus, management of water resources is part of the property-related service provided by public water suppliers to ensure the resource is available over time. The District currently has inclining tiered (also known as inclining block) water rates to incentivize residential customers to conserve water. The inclining tiered rates must be based on the proportionate costs incurred to provide water to customers to achieve compliance with Proposition 218. "Inclining" tiered rate structures (which are synonymous with "increasing" tier rate structures and "tiered" rates), when properly designed, allow a water utility to send conservation price signals to customers. Due to heightened interest in water conservation and efficiency of water use, tiered water rates have gained widespread use, especially in relatively water-scarce regions like Southern California. Tiered rates meet the requirements of Proposition 218 as long as they reasonably reflect the proportionate cost of providing service for each tier.

3.2.Rate-Setting Methodology

This study was conducted using industry-standard principles outlined by the AWWA's *Manual M1*. The process and approach Raftelis utilized in the study to determine rates is informed by the District's policy objectives, the current system of rates, and the legal requirements in California (namely, Proposition 218). The resulting financial plan, cost of service analysis, and rate design process follows four key steps, outlined below, to determine proposed rates that fulfill the District's objectives, meet industry standards, and comply with relevant regulations.

STEP 1: FINANCIAL PLAN DEVELOPMENT

The rate-making process begins with the development of a multi-year financial plan. The financial plan projects annual revenues under existing rates as well as various revenue requirements including operating expenses, capital expenditures, and reserve funding. If existing rates generate revenues that are insufficient to adequately fund all revenue requirements, the appropriate magnitude of annual "revenue adjustments" (i.e., rate increases) is evaluated. The key result of the multi-year financial plan is the amount of revenue from water rates required each year to adequately fund all revenue requirements.

STEP 2: COST OF SERVICE ANALYSIS

The annual cost of providing water service is distributed among customer classes commensurate with their service requirements. A cost of service analysis involves the following tasks:

1. **Calculate revenue requirement:** The cost of service process starts by determining the test year (rate-setting year) revenue requirement, which for this study is FY 2020.
2. **Functionalize costs:** Operating and capital costs are categorized based on function. Examples of functions are supply, treatment, transmission, distribution, storage, meter service, and customer service.
3. **Allocate functionalized costs to cost causation components**: Functionalized costs are next allocated to cost causation components. Examples of cost causation components include supply, base delivery, maximum day, maximum hour, conservation, meter service, and customer service.
4. **Distribute cost causation components**: The portion of the total rate revenue requirement attributed to each cost causation component is allocated to customers in proportion to their demands on and use of the water system.

A cost of service analysis considers both the average quantity of water consumed (base costs) and the peak rate at which it is consumed (peaking costs). Peaking costs are costs that are incurred during times of peak water use. There are additional costs associated with designing, constructing, operating, and maintaining facilities to meet peak demands. These peak demand costs need to be allocated to those imposing such costs on the water system. In other words, not all customer classes share the same responsibility for peaking-related costs.

STEP 3: RATE DESIGN

Proposed rates are calculated based on the results of the proposed financial plan and cost of service analysis. Within the legal framework and industry standards, properly designed rates should support and optimize a blend of various utility objectives, such as promoting water conservation, affordability for essential needs, and revenue stability among other objectives. Rates may also act as a public information tool in communicating policy objectives to customers.

Step 4: REPORT PREPARATION AND RATE ADOPTION

The final step in a rate study is to develop a study report in conjunction with the rate adoption process. The study report documents the study results and presents the methodologies, rationale, justifications, and calculations used

to determine the proposed rates. Proposed rates may not be implemented until formal adoption by the District's Board of Directors after a public hearing. Proposition 218 requires that the District's customers must be mailed a public hearing notice detailing any proposed rate changes no fewer than 45 days before the public hearing date.

4.Financial Plan

The financial plan provides multi-year financial projections for the Potable Water Fund (Fund 01) and Recycled Water Fund (Fund 02) based on projected revenues, operations & maintenance (O&M) expenses, Capital Improvement Plan (CIP) expenditures, and debt service payments. The primary results of the financial plan include annual cash flow, reserve balance, and debt coverage projections which determine the amount of rate revenues required in each year to achieve financial sufficiency. The following subsections describe the assumptions and calculation methodologies used to project revenues, O&M expenses, debt service, CIP expenditures, and reserve targets. The financial plan timeframe spans from FY 2021 through FY 2026. No revenue adjustments (i.e., rate increases) are considered prior to FY 2022 however, as implementation of updated rates is planned to occur beginning in January 2022. Financial plan results are presented separately for the Potable Water Fund (Section 4.2) and Recycled Water Fund (Section 4.3), as well as District-wide with all funds combined (Section 4.4).

4.1.Financial Policies

Key financial policies incorporated into the financial plan projections include debt coverage requirements and reserve targets. Financial plan results presented in subsequent sections are evaluated in part by comparing projected debt coverage and reserve levels to the financial policy requirements/targets outlined below. All financial policies apply to both the Potable Water Fund and Recycled Water Fund.

4.1.1.DEBT COVERAGE

The District is required to meet debt coverage requirements on its outstanding debt. The required debt coverage ratio is 1.20, meaning that the District's annual net operating revenues (i.e., total revenues less operating expenses) must amount to at least 1.10 times the amount of annual debt service. Failure to meet debt service coverage may result in technical default, which without foreseeable remedial action such as implementing rate increases, could result in a downgrade of credit rating, higher costs in future debt issuance, or even denial of credit.

4.1.2.RESERVE TARGETS

A reserve policy is a written document that establishes reserve goals and targets. It provides guidelines for sound financial management with an overall long-range perspective to maintain financial solvency and mitigate financial risks associated with revenue instability, volatile capital costs, and emergencies. Adopting and adhering to a sustainable reserve policy enhances financial management transparency and can help achieve or maintain a preferred credit rating for future debt issues. Reserves can offset unanticipated reductions in revenues, fluctuations in costs, and fiscal emergencies such as revenue shortfalls, asset failure, and natural disaster. Capital reserves set funds aside for capital asset replacement as well as for new capital projects.

The appropriate amount of reserves and reserve types are determined by a variety of factors, such as the size of the operating budget, the amount of outstanding debt, the type of rate structure, and risk of natural disaster. However, reserves tend to fall into the following categories: operating reserves, rate stabilization reserves, capital reserves, and debt service reserves. The District's existing reserve policy is shown in Table 4-1 below, which provides the basis for determining target levels for each reserve. Please refer to the District's Policy P200-17-2 (Cash Reserves Policy) for additional information on each reserve target.

Table 4-1: District Financial Policies

Financial Policy	Requirement/Target
Debt Coverage	
Required Debt Coverage Ratio	1.20
Reserve Targets	
Operating Reserve Target	90 days of operating expenses
Rate Stabilization Reserve Target	20% of volumetric water sales revenue
Emergency Reserve Target	2.5% of asset valuation
Capital Reserve Target	One year of depreciation
Debt Service Reserve Target	100% of debt service

4.2.Potable Water Fund Financial Plan

4.2.1.POTABLE WATER FUND REVENUES FROM EXISTING RATES

In order to evaluate the need for potable water rate increases, annual Potable Water Fund revenues are first projected over the financial plan study period under a status quo scenario (i.e., no change in the current rates). This requires the projection of rate revenues based on current potable water rates (see Table 4-3) and projected billing units of service. The District's potable water customers are currently billed bi-monthly. The potable water rate structure consists of the following rates and charges:

- **Basic Meter Charge:** Bi-monthly fixed charge per water meter; varies based on water meter size. Water meters associated with fire protection services (i.e., automatic sprinkler systems) are subject to a distinct Basic Meter Charge rate.
- **Volumetric Rates:** Volumetric rates are charged per thousand gallons (kGal) of water delivered per billing period.
  - **Tiered Rates:** Nearly all residential water use is subject to a four-tier volumetric rate structure. Bi-monthly tier allotments determine the amount of water charged at each tier rate per bi-monthly billing period (see Table 4-2). Residential units with individual units have a larger Tier 2 allotment than multi-residential units with a master meter. This is because single family residences with individual meters have greater landscape irrigation needs than multi-family residences with multiple units.
  - **Uniform Rates:** Residential customers with qualifying medical needs are subject to a uniform Volumetric Rate equal to the Tier 2 rate. Residential customers who qualify for rate assistance are subject to a uniform Volumetric Rate equal to the Tier 1 rate. All non-residential water use is subject a uniform Volumetric Rate associated with one of the following customer classes: Commercial/Industrial/Institutional (CII), Landscape Potable, or Other.

Table 4-2: Current Bi-Monthly Residential Tier Allotments

Tier	Residential Units with Individual Meters	Multi-Residential Units with Master Meters (per Dwelling Unit)
Tier 1	0-6,000 gallons	0-6,000 gallons
Tier 2	6,001-12,000 gallons	6,001-6,400 gallons
Tier 3	12,001-16,000 gallons	6,401-16,000 gallons
Tier 4	Over 16,000 gallons	Over 16,000 gallons

Table 4-3: Current Potable Water Rates

Current Potable Water Rates	FY 2020 (12/13/2019)	FY 2021 (12/13/2020)
Bi-Monthly Basic Meter Charge		
5/8"	$78.09	$85.90
5/8" Rate Assistance (Residential)	$54.67	$60.14
5/8" Fire Service (Residential/Commercial)	$21.25	$23.38
3/4" (Multi-Residential, incl Fire Service)	$99.34	$109.27
3/4"	$122.87	$135.16
1"	$132.17	$145.39
1 1/2"	$310.62	$341.68
2"	$421.75	$463.93
3"	$751.92	$827.11
4"	$1,314.72	$1,446.19
6”	$2,808.44	$3,089.28
Volumetric Rates (per 1,000 gallons)		
Residential Tiered Rates		
Tier 1	$6.39	$7.03
Tier 2	$11.09	$12.20
Tier 3	$17.78	$19.56
Tier 4	$21.49	$23.64
Uniform Rates		
Commercial, Industrial, Institutional (CII)	$14.87	$16.36
Landscape Potable	$18.60	$20.46
Other	$16.57	$18.23
Qualifying Medical Needs (Residential)	$11.09	$12.20
Rate Assistance (Residential)	$6.39	$7.03

Potable water connection growth projections are necessary to estimate water demand and rate revenues over the study period. District staff provided Raftelis with the projected number of new potable water connections by customer class and meter size over the study period based on planned and anticipated development. Based on detailed discussions between District staff and Raftelis, it was determined that Raftelis' financial plan analysis should incorporate only 50 percent of new connections from the District projections (see Table 4-4). If not all projected growth occurs, the District is at significant risk of under-collecting revenue from rates. The reduction of District growth projections by 50 percent mitigates this risk.

Table 4-4: Potable Water Account Growth Assumptions

Projected Increase in Water Meters	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
District Projections	40	47	45	29	40
50% of District Projections	20	24	22	15	20

Raftelis projected the number of potable water meters[1] for FY 2022-FY 2026 (see Table 4-5) by adding 50 percent of projected new potable water connections (from Table 4-4) to actual meter counts for FY 2021 (provided by District staff). This results in an average annual increase in potable water meters of 0.5 percent over the study period. Over 90 percent of new connections are expected to be residential.

Table 4-5: Number of Potable Water Meters

Number of Water Meters	FY 2021 (Actual)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
5/8"	3,549	3,556	3,567	3,587	3,600	3,611
5/8" Rate Assistance (Residential)	12	12	12	12	12	12
5/8" Fire Service (Residential/Commercial)	461	461	461	461	461	461
3/4" (Multi-Residential, incl Fire Service)	27	31	31	31	31	32
3/4"	60	70	80	80	80	87
1"	117	117	117	117	117	117
1 1/2"	44	44	45	46	46	46
2"	32	32	33	35	36	37
3"	3	3	3	3	3	3
4"	1	1	1	1	1	1
6"	0	0	0	0	0	0
Total	**4,306**	**4,326**	**4,350**	**4,372**	**4,387**	**4,407**
% Change		*0.5%*	*0.5%*	*0.5%*	*0.3%*	*0.5%*

District staff provided Raftelis with actual water use data by customer class and tier for FY 2020. Raftelis then worked with District staff to develop five-year projections of potable water use through FY 2026 (see Table 4-6). Projected water use in FY 2021 was informed by partial year actuals and represents a reduction relative to FY 2020 due to the impacts of COVID-19 and other factors. District staff directed Raftelis to assume a rebound in water demand in FY 2022. Beyond FY 2022, projected water use was increased in proportion to increases in meter capacity resulting from new potable water connections (from Table 4-4). Water use increases beyond FY 2022 are therefore assumed to result from new residential water connections to the potable water system. All water use projections shown in Table 4-6 are based on the current rate structure and tier allotments (which are subject to revision in Section 5).

[1] Potable water meter counts shown exclude water meters associated with bulk water use, which are not subject to Basic Meter Charges.

Table 4-6: Projected Water Use Under Existing Rate Structure

Water Use (kGal)	FY 2020 (Actual)	FY 2021 (Projected)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
Residential Tiered Rates							
Tier 1	121,374	118,315	119,084	119,897	120,494	121,518	122,174
Tier 2	55,091	53,497	53,898	54,322	54,633	54,860	55,202
Tier 3	20,668	20,162	20,289	20,423	20,522	20,713	20,822
Tier 4	33,080	32,115	32,358	32,614	32,803	32,930	33,137
Subtotal	**230,214**	**224,089**	**225,628**	**227,256**	**228,451**	**230,020**	**231,335**
Uniform Rates							
CII	79,545	74,773	79,637	80,595	82,147	82,512	83,516
Landscape Potable	19,540	18,368	19,540	19,540	19,540	19,540	19,540
Other	0	0	0	0	0	0	0
Qualifying Medical Needs	240	233	235	237	238	239	241
Rate Assistance	96	93	93	94	95	95	96
Subtotal	**99,421**	**93,466**	**99,505**	**100,466**	**102,020**	**102,386**	**103,393**
Total (kGal)	**329,635**	**317,555**	**325,133**	**327,722**	**330,471**	**332,407**	**334,727**
Total (AF)	**1,012**	**975**	**998**	**1,006**	**1,014**	**1,020**	**1,027**
% Change		*-3.7%*	*2.4%*	*0.8%*	*0.8%*	*0.6%*	*0.7%*

Raftelis projected annual potable water rate revenue from Basic Meter Charges and Volumetric Rates over the study period based on current FY 2021 rates (from Table 4-3)[2], projected number of water meters (from Table 4-5), and projected annual water use (from Table 4-6). Projected Basic Meter Charge revenue (see Table 4-7) and Volumetric Rate revenue (see Table 4-8) is calculated in each year of the study period as follows:

Basic Meter Charge Revenue = [Current Bi-monthly charge] × [Number of water meters] × [6 Bills per year]

Volumetric Rate Revenue = [Current rate per kGal] × [Annual water use in kGal]

[2] FY 2021 rate revenues were calculated based on an average of FY 2020 and FY 2021 rates (from Table 4-3), as FY 2021 rates did not become effective until the mid-point of FY 2021 in mid-December 2020. Therefore, FY 2020 rate remained effective for approximately half of customer bills in FY 2021.

Table 4-7: Projected Potable Water Basic Meter Charge Revenue from Existing Rates

Basic Meter Charge Revenue	FY 2021 (Projected)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
5/8"	$1,746,002	$1,832,505	$1,838,432	$1,848,740	$1,855,440	$1,860,852
5/8" Rate Assistance (Residential)	$4,133	$4,330	$4,330	$4,330	$4,330	$4,330
5/8" Fire Service (Residential/Commercial)	$61,723	$64,669	$64,669	$64,669	$64,669	$64,669
3/4" (Multi-Residential, incl Fire Service)	$16,897	$19,996	$20,324	$20,324	$20,324	$20,980
3/4"	$46,445	$56,767	$64,877	$64,877	$64,877	$70,554
1"	$97,424	$102,064	$102,064	$102,064	$102,064	$102,064
1 1/2"	$86,104	$90,204	$91,229	$93,279	$93,279	$94,304
2"	$85,025	$89,075	$91,858	$96,034	$100,209	$102,992
3"	$14,211	$14,888	$14,888	$14,888	$14,888	$14,888
4"	$8,283	$8,677	$8,677	$8,677	$8,677	$8,677
6”	$0	$0	$0	$0	$0	$0
Total	**$2,166,247**	**$2,283,174**	**$2,301,348**	**$2,317,881**	**$2,328,757**	**$2,344,309**

Table 4-8: Projected Potable Water Volumetric Rate Revenue from Existing Rates

Volumetric Rate Revenue	FY 2021 (Projected)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
Residential Tiered Rates						
Tier 1	$793,894	$837,158	$842,875	$847,072	$854,269	$858,885
Tier 2	$622,974	$657,551	$662,723	$666,518	$669,286	$673,461
Tier 3	$376,416	$396,848	$399,481	$401,414	$405,152	$407,278
Tier 4	$724,680	$764,935	$771,000	$775,452	$778,462	$783,358
Subtotal	**$2,517,963**	**$2,656,492**	**$2,676,079**	**$2,690,455**	**$2,707,169**	**$2,722,983**
Uniform Rates						
CII	$1,167,576	$1,302,857	$1,318,536	$1,343,922	$1,349,895	$1,366,321
Landscape Potable	$358,724	$399,794	$399,794	$399,794	$399,794	$399,794
Other	$0	$0	$0	$0	$0	$0
Qualifying Medical Needs	$2,715	$2,866	$2,889	$2,906	$2,917	$2,935
Rate Assistance	$622	$657	$662	$666	$668	$673
Subtotal	**$1,529,638**	**$1,706,174**	**$1,721,882**	**$1,747,288**	**$1,753,275**	**$1,769,723**
Total	**$4,047,601**	**$4,362,666**	**$4,397,961**	**$4,437,743**	**$4,460,443**	**$4,492,706**

In addition to rate revenue, the Potable Water Fund collects revenues from property tax, capacity fees (one-time fees paid by new development), interest earnings on cash reserves, and other miscellaneous revenue (such as miscellaneous fees). Non-rate revenue assumptions (see Table 4-9) were used to project Potable Water Fund non-rate revenues over the study period (see Table 4-10). Non-rate revenues in FY 2021 are equal to the FY 2021 budget, with the exception of capacity fees which are based on estimated actuals.

Beyond FY 2021, property tax is projected to increase by 2 percent per year. Raftelis recommends that a portion of property tax revenue be reallocated to the Recycled Water Fund beginning in FY 2022 based on the ratio of recycled water sales to total water sales (see Table 4-30 in Section 4.3 for details). Capacity fee projections beyond FY 2021 are equal to 50 percent of District staff's capacity fee projections to ensure consistency with account growth assumptions (from Table 4-4). Interest earnings beyond FY 2021 are projected by multiplying the average annual reserve balance (projected in later subsections) by an assumed 1.0 percent annual interest rate on cash reserves. Other miscellaneous revenue is not escalated beyond FY 2021 to ensure sufficiently conservative revenue projections.

Table 4-9: Potable Water Fund Non-Rate Revenue Assumptions

Description	Value
Annual Escalation	
Property Tax	2.0%
Miscellaneous	0.0%
Interest Earnings	
Annual Interest Rate	1.0%

Table 4-10: Potable Water Fund Non-Rate Revenues

Non-Rate Revenues	FY 2021 (Budget)[3]	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
Property Tax	$1,077,212	$1,098,756	$1,120,731	$1,143,146	$1,166,009	$1,189,329
Reallocation of Property Tax to Recycled Water Fund	$0	($50,938)	($103,168)	($104,436)	($105,961)	($107,399)
Capacity Fees	$350,696	$508,022	$801,852	$676,705	$471,267	$347,119
Interest Earnings	$52,500	$27,870	$43,956	$48,335	$49,439	$45,190
Other Miscellaneous Revenue	$106,561	$106,561	$106,561	$106,561	$106,561	$106,561
Total	**$1,586,969**	**$1,690,271**	**$1,969,933**	**$1,870,310**	**$1,687,314**	**$1,580,801**

A summary of Potable Water Fund revenues under current rates is shown in Table 4-11. Even in the absence of any rate increases, revenues from rates are projected to increase over the study period due to new customers connecting to the water system. Capacity fees represent the most volatile source of revenue, as capacity fee revenue is directly related to the level of new construction/development in each year. Total revenues are projected to increase by nearly 2 percent per year on average in the absence of any rate increase, largely due to customer growth and increases in property tax.

[3] FY 2021 Capacity Fee revenue is based on estimated actuals rather than the budget.

Table 4-11: Summary of Projected Potable Water Fund Revenues from Existing Rates

Revenues	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Rate Revenue						
Basic Meter Charges	$2,166,247	$2,283,174	$2,301,348	$2,317,881	$2,328,757	$2,344,309
Volumetric Rates	$4,047,601	$4,362,666	$4,397,961	$4,437,743	$4,460,443	$4,492,706
Subtotal	**$6,213,849**	**$6,645,840**	**$6,699,308**	**$6,755,624**	**$6,789,200**	**$6,837,015**
Non-Rate Revenue						
Property Tax	$1,077,212	$1,098,756	$1,120,731	$1,143,146	$1,166,009	$1,189,329
Reallocation of Property Tax to Recycled Water Fund	$0	($50,938)	($103,168)	($104,436)	($105,961)	($107,399)
Capacity Fees	$350,696	$508,022	$801,852	$676,705	$471,267	$347,119
Interest Earnings	$52,500	$27,870	$43,956	$48,335	$49,439	$45,190
Other Miscellaneous Revenue	$106,561	$106,561	$106,561	$106,561	$106,561	$106,561
Subtotal	**$1,586,969**	**$1,690,271**	**$1,969,933**	**$1,870,310**	**$1,687,314**	**$1,580,801**
Total	**$7,800,817**	**$8,336,111**	**$8,669,241**	**$8,625,935**	**$8,476,514**	**$8,417,816**

4.2.2.POTABLE WATER FUND O&M EXPENSES

Raftelis projected annual Potable Water Fund O&M expenses over the study period by escalating the FY 2021 budget by annual inflationary factors (see Table 4-12). Inflationary assumptions were established by Raftelis and District staff based on historical increases as well as industry trends and expectations. Raftelis assigned each line item in the Potable Water Fund operating budget to one of the expense categories shown in Table 4-12 in order to apply the inflationary increases in each year of the study period. While the projections were primarily determined by applying annual inflationary increases, District staff directed Raftelis to incorporate the following adjustments:

- **Department 100 Salaries & Benefits** was reduced in FY 2022 to account for a reduction in unfunded pension liability.
- **Department 100 Services** was reduced in FY 2022 to account for FY 2021 expenses that do not recur annually (including the Urban Water Management Plan and the Risk & Resilience Study); these costs are assumed to recur in FY 2026.
- **Department 200 Services**: was reduced in FY 2022 to account for FY 2021 expenses that do not recur annually (including this rate study); these costs are assumed to recur in FY 2026.
- **Department 400 Services**: was reduced in FY 2022 to account for FY 2021 expenses that do not recur annually (including the Pressure Analysis Study)

Table 4-12: Potable Water Fund Inflationary Assumptions

Expense Categories	Annual Inflation
General	3.0%
Salaries	5.0%
Benefits	8.0%
Water Supply	5.0%
Utilities	5.0%
Chemicals	5.0%

O&M expenses are projected to increase by approximately 4.1 percent per year on average over the study period (see Table 4-13). The O&M projections for Department 200 exclude depreciation (which is a non-cash expense) and debt service payments (which are incorporated separately into the financial plan projections).

Table 4-13: Projected Water Fund O&M Expenses

O&M Expenses	FY 2021 (Budget)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
Administration (Dept 100)						
Salaries & Benefits	$577,145	$453,362	$477,564	$503,147	$530,197	$558,805
Services	$423,769	$316,225	$325,976	$336,034	$346,407	$435,358
Supplies	$15,480	$15,944	$16,423	$16,915	$17,423	$17,946
Source of Supply	$330,490	$347,015	$364,365	$382,583	$401,713	$421,798
Other	$5,000	$5,150	$5,305	$5,464	$5,628	$5,796
Subtotal	**$1,351,884**	**$1,137,696**	**$1,189,633**	**$1,244,144**	**$1,301,368**	**$1,439,702**
Finance & Customer Service (Dept 200)						
Salaries & Benefits	$507,570	$537,315	$568,909	$602,476	$638,147	$676,061
Services	$189,147	$129,931	$133,829	$137,844	$141,979	$219,273
Supplies	$3,600	$3,708	$3,819	$3,934	$4,052	$4,173
Customer Accounts	$190,940	$196,668	$202,568	$208,645	$214,905	$221,352
Other	$1,038	$1,069	$1,101	$1,134	$1,168	$1,203
Subtotal	**$892,295**	**$868,691**	**$910,227**	**$954,033**	**$1,000,251**	**$1,122,062**
Operations (Dept 300)						
Salaries & Benefits	$1,457,153	$1,541,331	$1,630,666	$1,725,494	$1,826,175	$1,933,094
Services	$184,734	$190,350	$196,138	$202,104	$208,253	$214,590
Supplies	$15,300	$15,759	$16,232	$16,719	$17,220	$17,737
General Production Costs	$80,100	$82,503	$84,978	$87,527	$90,153	$92,858
Source of Supply	$130,000	$133,900	$137,917	$142,055	$146,316	$150,706
Pumping	$461,900	$494,315	$521,704	$550,856	$580,357	$612,092
Water Treatment	$300,000	$312,830	$324,806	$337,337	$350,134	$363,594
Transmission & Distribution	$117,700	$121,231	$124,868	$128,614	$132,472	$136,447
Subtotal	**$2,746,887**	**$2,892,219**	**$3,037,309**	**$3,190,705**	**$3,351,082**	**$3,521,117**
Engineering (Dept 400)						
Salaries & Benefits	$95,139	$100,260	$105,670	$111,385	$117,423	$123,804
Services	$170,910	$157,497	$162,222	$167,089	$172,102	$177,265
Supplies	$900	$927	$955	$983	$1,013	$1,043
Subtotal	**$266,949**	**$258,685**	**$268,847**	**$279,457**	**$290,537**	**$302,112**
Board of Directors (Dept 900)						
Salaries & Benefits	$108,069	$115,748	$123,995	$132,854	$142,372	$152,599
Services	$20,520	$21,136	$21,770	$22,423	$23,095	$23,788
Supplies	$720	$742	$764	$787	$810	$835
Subtotal	**$129,309**	**$137,625**	**$146,528**	**$156,063**	**$166,278**	**$177,222**
Total	**$5,387,325**	**$5,294,915**	**$5,552,544**	**$5,824,402**	**$6,109,515**	**$6,562,215**
% Change		*-1.7%*	*4.9%*	*4.9%*	*4.9%*	*7.4%*

Additional expenses not included in the operating budget were incorporated into the Potable Water Fund financial plan (see Table 4-14). District staff directed Raftelis to incorporate $2 million of additional expenses in FY 2022 to account for additional discretionary payments for public employees' retirement system unfunded accrued liability (PERS UAL). Additionally, Raftelis recommends that the District transfer funds from the Potable Water Fund to the Recycled Water Fund each year to support the capital needs of the Recycled Water Fund (see Table 4-38 in Section 4.3 for details).

Table 4-14: Potable Water Fund Additional Expenses

Revenues	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
PERS UAL Additional Discretionary Payment	$0	$2,000,000	$0	$0	$0	$0
Transfer to Recycled Water Fund	$289,515	$414,575	$417,166	$431,215	$417,741	$425,289
Total	**$289,515**	**$2,414,575**	**$417,166**	**$431,215**	**$417,741**	**$425,289**

4.2.3.POTABLE WATER FUND DEBT SERVICE

District staff provided Raftelis with a schedule of existing debt service payments over the study period for the Potable Water Fund (see Table 4-15). The District's only outstanding debt is associated with its 2016 JP Morgan loan, which was issued to refund a 2011 bank loan and 2004 Certificates of Participation (COPs).

Table 4-15: Potable Water Fund Existing Debt Service

2016 JP Morgan Loan	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Principal	$344,236	$402,206	$407,764	$415,852	$423,431	$433,500
Interest	$49,218	$42,313	$34,821	$27,203	$19,439	$11,513
Total	**$393,454**	**$444,519**	**$442,585**	**$443,055**	**$442,870**	**$445,013**

In addition to existing debt, the District plans to issue new debt in FY 2022 to finance a portion of Capital Improvement Plan (CIP) costs over the study period. District staff directed Raftelis to assume that this new debt issuance will provide $6 million in debt proceeds to finance CIP costs in FY 2021 and FY 2022. Raftelis worked with District staff to establish key assumptions (see Table 4-16) necessary to estimate annual debt service payments associated with the new debt issuance. Based on the established assumptions, Raftelis estimated new debt service at $411,525 per year beginning in FY 2022. As a result of the new debt issuance, Raftelis estimates that annual debt service will increase from approximately $393,000 in FY 2021 to $856,000 in FY 2022 (see Table 4-17).

Table 4-16: Proposed Debt Assumptions

Description	Value
Debt Proceeds	$6,000,000
Issuance Costs	2.0%
Total Debt Issuance[4]	$6,122,449
Interest Rate	3.0%
Term	20 years
Annual Debt Service[5]	$411,525

[4] Total Debt Issuance = [Debt Proceeds] ÷ [100% - Issuance Cost %].
[5] Estimated using the PMT function in Microsoft Excel; assumes level principal plus interest payments each year over the life of the loan beginning in the year of issue (FY 2022).

Table 4-17: Potable Water Fund Debt Service Summary

Debt Service	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Existing	$393,454	$444,519	$442,585	$443,055	$442,870	$445,013
Proposed	$0	$411,525	$411,525	$411,525	$411,525	$411,525
Total	**$393,454**	**$856,044**	**$854,110**	**$854,579**	**$854,395**	**$856,537**

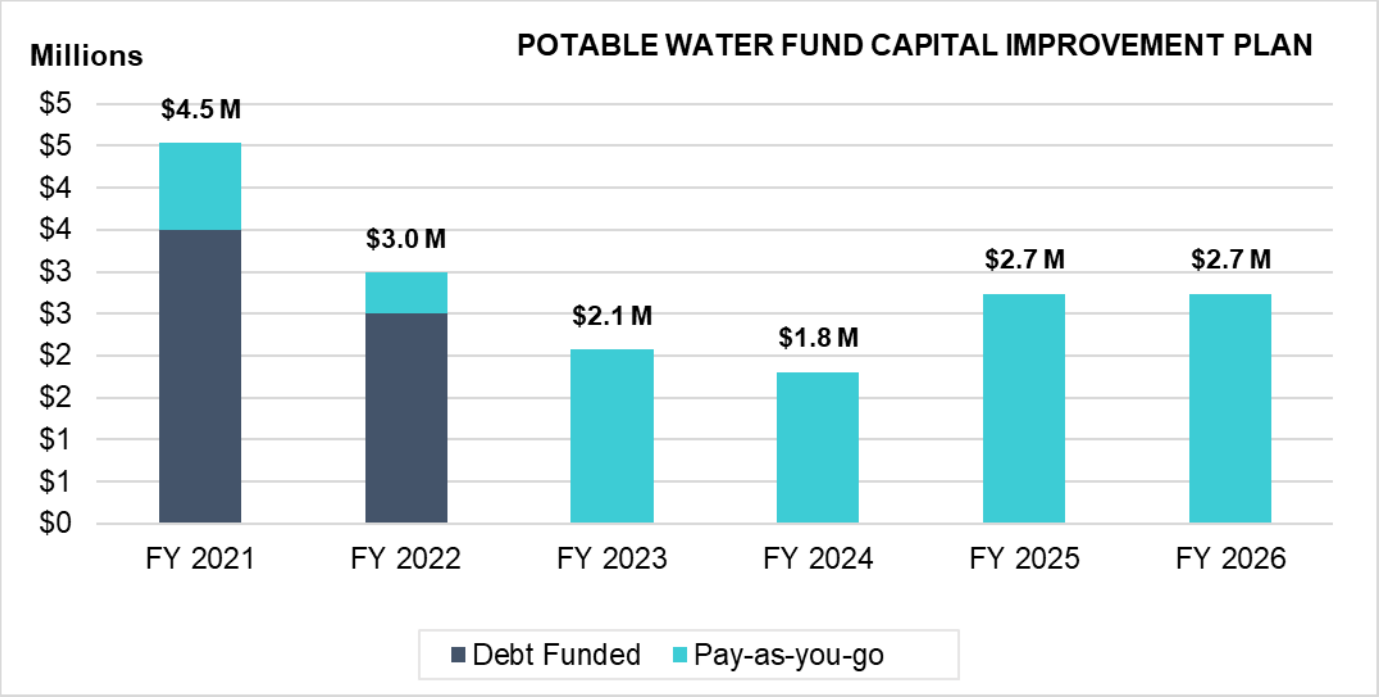
4.2.4.POTABLE WATER FUND CAPITAL IMPROVEMENT PLAN

District staff provided Raftelis with a schedule of annual Potable Water Fund Capital Improvement Plan (CIP) expenditures over the study period. Potable Water Fund CIP projects include repair, replacement, or new construction of capital assets including pipelines, water meters, groundwater wells, water treatment plants, pump stations, water tanks and other infrastructure. CIP expenditures in FY 2025 and FY 2026 include an additional $1 million in each year to account for potential supplemental water supply project costs. At the time of this study, the timing and cost of supplemental supply-related CIP are difficult to project. Because the potential need for supplemental supply projects represents a significant cost liability in the future, Raftelis and District staff determined that the addition of $1 million in FY 2025 and FY 2026 was most appropriate. All CIP cost estimates assume annual cost inflation of 3 percent. New debt proceeds amounting to $6 million (from Table 4-16) are assumed to be utilized to fund a portion of CIP costs in FY 2021 and FY 2022 (see Table 4-18 and Figure 4-1).

Table 4-18: Potable Water Fund CIP

CIP	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Debt Funded	$3,500,000	$2,500,000	$0	$0	$0	$0
Pay-as-you-go	$1,034,771	$490,939	$2,068,625	$1,801,880	$2,732,235	$2,738,075
Total	**$4,534,771**	**$2,990,939**	**$2,068,625**	**$1,801,880**	**$2,732,235**	**$2,738,075**

Figure 4-1: Potable Water Fund CIP



4.2.5.POTABLE WATER FUND RESERVE TARGET

Raftelis calculated annual reserve targets (see Table 4-19) based on the District's formal reserve policy (from Table 4-1):

- The Operating Reserve target is equal to [90 days ÷ 365 days per year] × [annual Potable Water Fund O&M expenses (from Table 4-13)].
- The Rate Stabilization Reserve target is equal to [20 percent] × [annual Potable Water Fund Volumetric Rate revenue].[6]
- The Emergency Reserve target is equal to [2.5 percent] × [net book value of Potable Water Fund capital assets][7]
- The Capital Reserve target is equal to actual depreciation in FY 2021 and escalated by 3 percent per year thereafter (consistent with CIP inflationary assumptions in Section 4.2.4).
- The Debt Service Reserve target is equal to total annual debt service (from Table 4-17).

Table 4-19: Potable Water Fund Projected Reserve Targets

Reserve Target	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Reserve	$1,328,381	$1,305,596	$1,369,120	$1,436,154	$1,506,456	$1,618,080
Rate Stabilization Reserve	$809,520	$894,347	$946,661	$1,002,985	$1,058,522	$1,119,487
Emergency Reserve	$397,640	$397,640	$397,640	$397,640	$397,640	$397,640
Capital Reserve	$878,629	$904,988	$932,137	$960,102	$988,905	$1,018,572
Debt Service Reserve	$393,454	$856,044	$854,110	$854,579	$854,395	$856,537
Total	**$3,807,625**	**$4,358,614**	**$4,499,669**	**$4,651,461**	**$4,805,918**	**$5,010,317**

4.2.6.POTABLE WATER FUND STATUS QUO FINANCIAL PLAN

To evaluate the need for potable water revenue adjustments (i.e., rate increases), Raftelis first developed a status quo financial plan. The status quo financial plan assumes that current potable water rates remain in effect over the study period. The Potable Water Fund status quo financial plan (see Table 4-20) combines projected revenues based on existing rates (from Table 4-11) , O&M expenses (from Table 4-13), additional expenses (from Table 4-14), debt service payments (from Table 4-17), and CIP expenditures (from Table 4-18) to develop cash flow projections through FY 2026.[8] Projected ending reserve balances in each year are compared to projected reserve targets (from Table 4-19). Debt coverage is not evaluated individually for the Potable Water Fund but is calculated for all funds combined (shown subsequently in Section 4.4).

The status quo financial plan (see Table 4-20 and Figure 4-2) demonstrates that in the absence of any revenue adjustments, Potable Water Fund reserves are projected to be fully depleted by the end of the study period. Revenues under the status quo financial plan are sufficient to cover O&M expenses and debt service each year. However, reserves must be drawn down and depleted to cover projected CIP expenditures through FY 2026. The results of the status quo financial plan clearly illustrate that revenue adjustments are necessary over the next five years to maintain adequate reserves within the Potable Water Fund.

[6] Volumetric rate revenue estimated at approximately 65% of total Potable Water Fund rate revenue inclusive of revenue adjustments (from Table 4-23).
[7] Potable Water Fund capital asset net book value is $15,905,616.
[8] Cash flow projections start from the beginning of FY 2021 based on actual cash balance of $4,132,280 as of 6/30/2020.

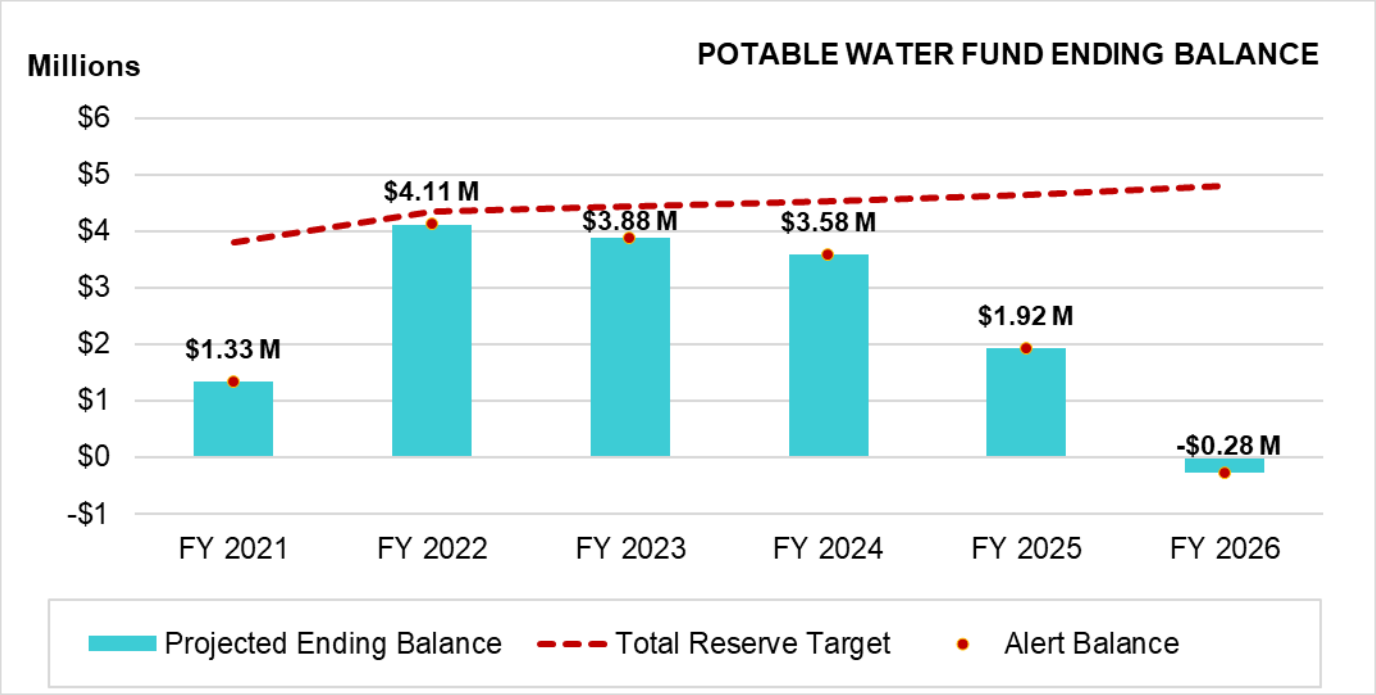
Table 4-20: Potable Water Fund Status Quo Financial Plan Proforma

Line	Potable Water Fund	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1	**Beginning Balance**	**$4,132,280**	**$1,328,033**	**$4,106,840**	**$3,879,412**	**$3,582,057**	**$1,922,632**
2							
3	**Source of Funds**						
4	Revenue from Existing Rates	$6,213,849	$6,645,840	$6,699,308	$6,755,624	$6,789,200	$6,837,015
5	Property Tax	$1,077,212	$1,047,818	$1,017,563	$1,038,710	$1,060,048	$1,081,930
6	Capacity Fees	$350,696	$508,022	$801,852	$676,705	$471,267	$347,119
7	Interest Earnings[9]	$52,500	$27,039	$39,733	$37,122	$27,387	$8,179
8	Other Miscellaneous Revenue	$106,561	$106,561	$106,561	$106,561	$106,561	$106,561
9	Debt Proceeds for CIP	$0	$6,000,000	$0	$0	$0	$0
10	**Total Source of Funds**	**$7,800,817**	**$14,335,280**	**$8,665,017**	**$8,614,721**	**$8,454,462**	**$8,380,804**
11							
12	**Use of Funds**						
13	O&M Expenses	$5,387,325	$5,294,915	$5,552,544	$5,824,402	$6,109,515	$6,562,215
14	PERS UAL Additional Discretionary Payment	$0	$2,000,000	$0	$0	$0	$0
15	Transfer to Recycled Water Fund	$289,515	$414,575	$417,166	$431,215	$417,741	$425,289
16	Existing Debt Service	$393,454	$444,519	$442,585	$443,055	$442,870	$445,013
17	Proposed Debt Service	$0	$411,525	$411,525	$411,525	$411,525	$411,525
18	Debt Funded CIP	$3,500,000	$2,500,000	$0	$0	$0	$0
19	Pay-as-you-go CIP	$1,034,771	$490,939	$2,068,625	$1,801,880	$2,732,235	$2,738,075
21	**Total Use of Funds**	**$10,605,064**	**$11,556,473**	**$8,892,444**	**$8,912,077**	**$10,113,886**	**$10,582,117**
22							
23	**Ending Balance**	**$1,328,033**	**$4,106,840**	**$3,879,412**	**$3,582,057**	**$1,922,632**	**($278,681)**
24	*Target Balance*[10]	*$3,807,625*	*$4,336,801*	*$4,432,600*	*$4,536,024*	*$4,639,484*	*$4,789,371*

[9] Interest earnings in Table 4-20 differ from what was previously shown in Table 4-10. This is because the depletion of reserves under the status quo results in lower interest earnings. Table 4-10 reflects interest earnings under the proposed financial plan scenario (presented in Table 4-23).

[10] The reserve target balance in Table 4-20 differs from what was previously shown in Table 4-19. This is because the Rate Stabilization Reserve target is lower under the status quo due to decreased Volumetric Rate revenue. Table 4-19 reflects the reserve target balance under the proposed financial plan scenario after the incorporation of additional Volumetric Rate revenue from revenue adjustments (presented in Table 4-23).

Figure 4-2: Potable Water Fund Status Quo Financial Plan



4.2.7.POTABLE WATER FUND PROPOSED FINANCIAL PLAN

The Potable Water Fund must increase its revenues from water rates over the study period to adequately fund its CIP expenditures and maintain sufficient reserve levels. Raftelis worked closely with District staff to identify financial plan options for the District's Board of Directors to consider. After a water rate workshop led by Raftelis at a District Board meeting, the Board of Directors instructed District staff and Raftelis to proceed with the proposed potable water revenue adjustments presented below (see Table 4-21). Revenue adjustments are shown as annual percent increases in rate revenue and represent incremental increases in rate revenue collected as a result of proposed rate increases. The proposed Potable Water Fund financial plan provides for 5 percent annual revenue adjustments each year beginning in FY 2022. All revenue adjustments are proposed to be implemented in January of each fiscal year (i.e., the midpoint of each fiscal year).

Table 4-21: Proposed Potable Water Revenue Adjustment Schedule

Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Effective Date	Jan. 1, 2022	Jan. 1, 2023	Jan. 1, 2024	Jan. 1, 2025	Jan. 1, 2026
Revenue Adjustment	5.0%	5.0%	5.0%	5.0%	5.0%

The increases in annual rate revenue resulting from the proposed revenue adjustments are calculated based on revenue from current rates and the proposed revenue adjustment percentages (see Table 4-22). All revenue adjustment calculations account for the cumulative impact of annual revenue adjustments, and also take into account that rate increases will occur in January of each fiscal year (i.e., the midpoint of each fiscal year).

The proposed Potable Water Fund financial plan proforma (see Table 4-23 and Figure 4-3) shows the reserve balance projections after incorporation of revenue adjustments (from Table 4-22). Proposed financial plan proforma results are calculated in the same manner as the status quo financial plan proforma (from Table 4-20). Under the proposed financial plan, reserves are projected to drop significantly in FY 2021 because debt proceeds

used to fund FY 2021 CIP will not be disbursed to the District until FY 2022. Once debt proceeds are disbursed in FY 2022, reserve balances are projected to rebound. By FY 2026, Raftelis projects that the Potable Water Fund reserve balance will be slightly under the projected reserve target. Raftelis and District staff determined that the magnitude of revenue adjustments necessary to exceed the reserve target in FY 2026 was not feasible due to the unacceptably high customer bill increases that would occur. A key consideration in selecting the proposed revenue adjustments was creating balance between the competing priorities of financial resiliency and customer affordability.

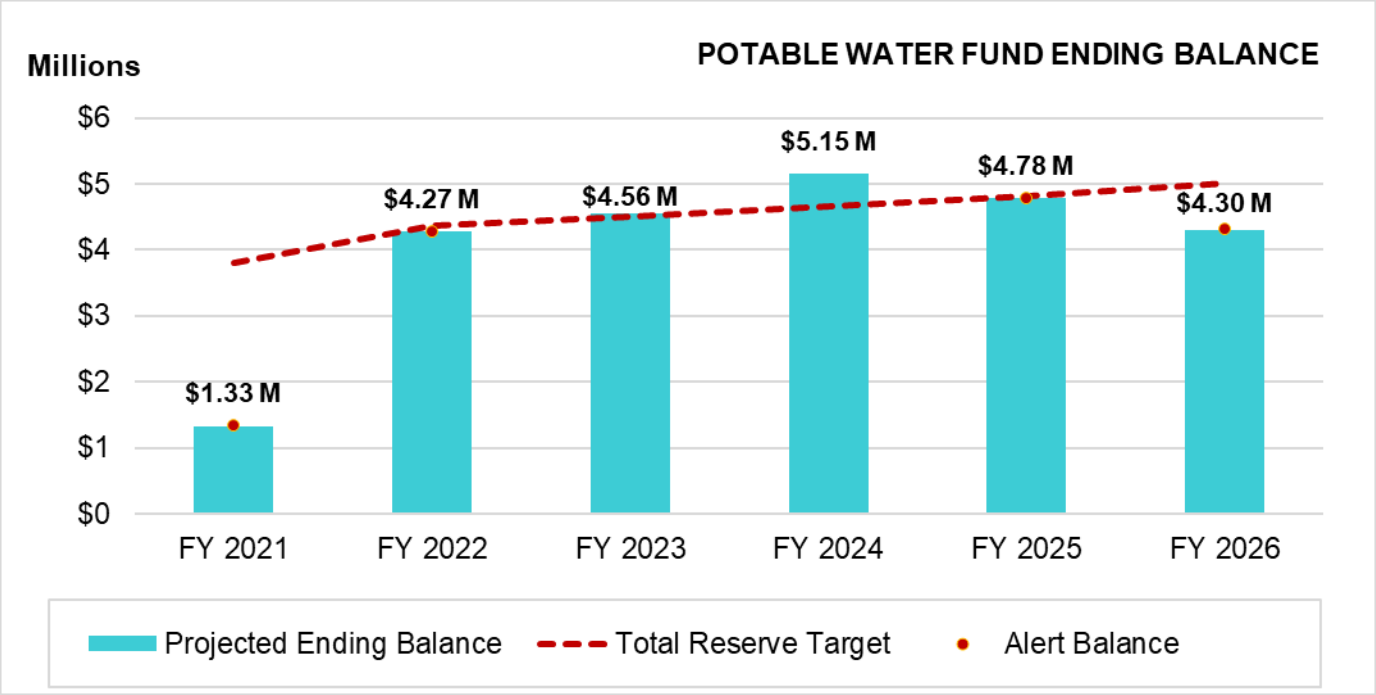
Table 4-22: Proposed Potable Water Fund Revenue Adjustments

Line	Description		FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1	Rate Revenue from Existing Rates		$6,213,849	$6,645,840	$6,699,308	$6,755,624	$6,789,200	$6,837,015
2								
3	**Fiscal Year**	**Revenue Adjustment**						
4	FY 2022	5.0%	$0	$166,146	$334,965	$337,781	$339,460	$341,851
5	FY 2023	5.0%			$175,857	$354,670	$356,433	$358,943
6	FY 2024	5.0%				$186,202	$374,255	$376,890
7	FY 2025	5.0%					$196,484	$395,735
8	FY 2026	5.0%						$207,761
9			**$0**	**$166,146**	**$510,822**	**$878,653**	**$1,266,631**	**$1,681,180**

Table 4-23: Potable Water Fund Proposed Financial Plan Proforma

Line	Potable Water Fund	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1	**Beginning Balance**	**$4,132,280**	**$1,328,033**	**$4,273,816**	**$4,561,435**	**$5,153,946**	**$4,783,205**
2							
3	**Source of Funds**						
4	Revenue from Existing Rates	$6,213,849	$6,645,840	$6,699,308	$6,755,624	$6,789,200	$6,837,015
5	Revenue Adjustments	$0	$166,146	$510,822	$878,653	$1,266,631	$1,681,180
6	Property Tax	$1,077,212	$1,047,818	$1,017,563	$1,038,710	$1,060,048	$1,081,930
7	Capacity Fees	$350,696	$508,022	$801,852	$676,705	$471,267	$347,119
8	Interest Earnings	$52,500	$27,870	$43,956	$48,335	$49,439	$45,190
9	Other Miscellaneous Revenue	$106,561	$106,561	$106,561	$106,561	$106,561	$106,561
10	Debt Proceeds for CIP	$0	$6,000,000	$0	$0	$0	$0
11	**Total Source of Funds**	**$7,800,817**	**$14,502,257**	**$9,180,063**	**$9,504,588**	**$9,743,145**	**$10,098,996**
12							
13	**Use of Funds**						
14	O&M Expenses	$5,387,325	$5,294,915	$5,552,544	$5,824,402	$6,109,515	$6,562,215
15	PERS UAL Additional Discretionary Payment	$0	$2,000,000	$0	$0	$0	$0
16	Transfer to Recycled Water Fund	$289,515	$414,575	$417,166	$431,215	$417,741	$425,289
17	Existing Debt Service	$393,454	$444,519	$442,585	$443,055	$442,870	$445,013
18	Proposed Debt Service	$0	$411,525	$411,525	$411,525	$411,525	$411,525
19	Debt Funded CIP	$3,500,000	$2,500,000	$0	$0	$0	$0
21	Pay-as-you-go CIP	$1,034,771	$490,939	$2,068,625	$1,801,880	$2,732,235	$2,738,075
22	**Total Use of Funds**	**$10,605,064**	**$11,556,473**	**$8,892,444**	**$8,912,077**	**$10,113,886**	**$10,582,117**
23							
24	**Ending Balance**	**$1,328,033**	**$4,273,816**	**$4,561,435**	**$5,153,946**	**$4,783,205**	**$4,300,084**
25	*Target Balance*	*$3,807,625*	*$4,358,614*	*$4,499,669*	*$4,651,461*	*$4,805,918*	*$5,010,317*

Figure 4-3: Potable Water Fund Proposed Financial Plan



4.3.Recycled Water Fund Financial Plan

4.3.1.RECYCLED WATER FUND REVENUES FROM EXISTING RATES

Raftelis developed financial plan projections for the Recycled Water Fund using the same methodology presented for the Potable Water Fund (in Section 4.2). Recycled Water Fund revenues are first projected over the financial plan study period under a status quo scenario. This requires the projection of rate revenues based on current recycled water rates (see Table 4-24) and projected billing units of service. The District's recycled water customers are currently billed monthly. Note that the largest current recycled water user (Spring Lakes Mobile Home Park) has a contract with the District establishing its rates for recycled water. These contract rates are not subject to Proposition 218 and are out of the scope of this study. The recycled water rate structure is similar to potable water and consists of the following rates and charges.

- **Basic Meter Charge:** Monthly fixed charge per water meter; varies based on water meter size. Recycled water Basic Meter Charges currently differ from potable water Basic Meter Charges.
- **Volumetric Rates:** Volumetric rates are charged per thousand gallons (kGal) of water delivered per billing period. Recycled water users are subject to a uniform Volumetric Rate. Spring Lakes Mobile Home Park is subject to a unique rate as defined in its contract with the District.

Table 4-24: Current Recycled Water Rates

Current Potable Water Rates	FY 2020 (12/13/2019)	FY 2021 (12/13/2020)
Monthly Basic Meter Charge		
5/8"	$33.37	$45.88
3/4"	$52.49	$72.18
1"	$56.47	$77.64
1 1/2"	$132.70	$182.46
2"	$180.17	$247.74
3"	$321.22	$441.67
4"	$561.64	$772.25
6"	$1,199.73	$1,649.63
Volumetric Rates (per 1,000 gallons)		
Landscape Recycled	$13.37	$13.64
Spring Lakes Mobile Home Park	$3.72	$4.09

District staff provided Raftelis with the projected number of new recycled water connections by customer class and meter size over the study period based on planned and anticipated development. Consistent with the potable water financial plan, it was determined that Raftelis' financial plan analysis should incorporate only 50 percent of new connections from the District projections (see Table 4-25). The financial plan therefore assumes that six new water meters will connect to the recycled water system over the study period. Raftelis projected the number of recycled water meters[11] for FY 2022-FY 2026 (see Table 4-26) by adding 50 percent of projected new recycled water connections (from Table 4-25) to actual meter counts for FY 2021 (provided by District staff).

Table 4-25: Recycled Water Account Growth Assumptions

Projected Increase in Water Meters	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
District Projections	3	3	2	1	2
50% of District Projections	2	1	1	1	1

Table 4-26: Number of Recycled Water Meters

Number of Water Meters	FY 2021 (Actual)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
5/8"	21	23	24	24	24	25
3/4"	6	6	6	6	6	6
1"	17	17	18	18	19	19
1 1/2"	4	4	4	4	4	4
2"	7	7	7	7	7	7
3"	2	2	2	2	2	2
4"	0	0	0	0	0	0
6"	0	0	0	0	0	0
Total	**57**	**59**	**60**	**61**	**62**	**63**
% Change		*2.6%*	*2.6%*	*1.7%*	*0.8%*	*1.6%*

[11] Recycled water meter counts shown exclude water meters associated with bulk or exempt water use, which are not subject to Basic Meter Charges.

District staff provided Raftelis with estimated recycled water use for FY 2020. District staff anticipates that recycled water demand will remain relatively stable beyond FY 2020. Projected water use in each year is therefore set equal to FY 2020 estimated water use with the exception of Spring Lakes Mobile Home Park. Because the District's contract with Spring Lakes Mobile Home Park is set to expire by FY 2025, Raftelis was directed to assume that Spring Lakes will no longer purchase any recycled water in the final two years of the study period. Note that "Recycled Bulk" water use is subject to the Volumetric Rate for Landscape Recycled, while "Recycled Exempt" water use is not subject to any rates or charges.

Table 4-27: Projected Recycled Water Use Under Existing Rate Structure

Water Use (kGal)	FY 2020 (Estimate)	FY 2021 (Projected)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
Landscape Recycled	32,700	32,700	32,700	32,700	32,700	32,700	32,700
Recycled Bulk	527	527	527	527	527	527	527
Spring Lakes Mobile Home Park	16,200	16,200	16,200	16,200	16,200	0	0
Recycled Exempt	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Total (kGal)	**61,427**	**61,427**	**61,427**	**61,427**	**61,427**	**45,227**	**45,227**
Total (AF)	**189**	**189**	**189**	**189**	**189**	**139**	**139**
% Change		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*-26.4%*	*0.0%*

Raftelis projected annual recycled water rate revenue from Basic Meter Charges and Volumetric Rates over the study period based on current FY 2021 rates (from Table 4-24)[12], projected number of water meters (from Table 4-26), and projected annual water use (from Table 4-27). Projected Basic Meter Charge revenue (see Table 4-28) and Volumetric Rate revenue (see Table 4-29) is calculated in each year of the study period as follows:

Basic Meter Charge Revenue = [Current monthly charge] × [Number of water meters] × [12 bills per year]
Volumetric Rate Revenue = [Current rate per kGal] × [Annual water use in kGal]

Table 4-28: Projected Recycled Water Basic Meter Charge Revenue from Existing Rates

Basic Meter Charge Revenue	FY 2021 (Projected)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
5/8"	$9,986	$12,388	$12,938	$13,213	$13,213	$13,489
3/4"	$4,488	$5,197	$5,197	$5,197	$5,197	$5,197
1"	$13,679	$15,839	$16,304	$16,770	$17,236	$17,702
1 1/2"	$7,564	$8,758	$8,758	$8,758	$8,758	$8,758
2"	$17,972	$20,810	$20,810	$20,810	$20,810	$20,810
3"	$9,155	$10,600	$10,600	$10,600	$10,600	$10,600
4"	$0	$0	$0	$0	$0	$0
6"	$0	$0	$0	$0	$0	$0
Total	**$62,844**	**$73,591**	**$74,608**	**$75,349**	**$75,815**	**$76,556**

[12] FY 2021 rate revenues were calculated based on an average of FY 2020 and FY 2021 rates (from Table 4-3), as FY 2021 rates did not become effective until the mid-point of FY 2021 in mid-December 2020. Therefore, FY 2020 rate remained effective for approximately half of customer bills in FY 2021.

Table 4-29: Projected Recycled Water Volumetric Rate Revenue from Existing Rates

Volumetric Rate Revenue	FY 2021 (Projected)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
Landscape Recycled	$441,614	$446,028	$446,028	$446,028	$446,028	$446,028
Recycled Bulk	$7,117	$7,188	$7,188	$7,188	$7,188	$7,188
Spring Lakes Mobile Home Park	$63,261	$66,258	$66,258	$66,258	$0	$0
Recycled Exempt	$0	$0	$0	$0	$0	$0
Total	**$511,992**	**$519,474**	**$519,474**	**$519,474**	**$453,216**	**$453,216**

Raftelis recommends that a portion of property tax revenue from the Potable Water Fund be reallocated to the Recycled Water Fund beginning in FY 2022 based on the ratio of recycled water sales (excluding Spring Lakes Mobile Home Park and exempt) to total water sales (see Table 4-30). This proposed change will improve customer equity and help maintain the affordability of the District's recycled water service. Approximately 9 percent of property tax revenue will be reallocated to the Recycled Water Fund under this proposed change.

Table 4-30: Property Tax Reallocation

Property Tax Allocation	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Water Use (kGal)					
Landscape/Bulk Recycled Water Use	33,227	33,227	33,227	33,227	33,227
Potable Water Use	325,133	327,722	330,471	332,407	334,727
Total	**358,360**	**360,949**	**363,698**	**365,634**	**367,954**
Water Use (%)					
Landscape/Bulk Recycled Water Use	9.3%	9.2%	9.1%	9.1%	9.0%
Potable Water	90.7%	90.8%	90.9%	90.9%	91.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Property Tax Allocation ($)					
Recycled Water	$101,876	$103,168	$104,436	$105,961	$107,399
Potable Water	$996,880	$1,017,563	$1,038,710	$1,060,048	$1,081,930
Total	**$1,098,756**	**$1,120,731**	**$1,143,146**	**$1,166,009**	**$1,189,329**

The Recycled Water Fund also collects revenues from capacity fees, interest earnings on cash reserves, and other miscellaneous revenue. Non-rate revenue assumptions (see Table 4-31) were used to project Recycled Water Fund non-rate revenues over the study period (see Table 4-32). Non-rate revenues in FY 2021 are equal to the FY 2021 budget, with the exception of capacity fees which are based on estimated actuals. Capacity fee projections beyond FY 2021 are equal to 50 percent of District staff's capacity fee projections to ensure consistency with account growth assumptions (from Table 4-25). Interest earnings beyond FY 2021 are projected by multiplying the average annual reserve balance (projected in later subsections) by an assumed 1.0 percent annual interest rate on cash reserves. Other miscellaneous revenue is reduced in FY 2022 to account for non-recurring revenues, and is held constant beyond FY 2022 to ensure sufficiently conservative revenue projections. Reallocated property tax (from Table 4-30) is also included as a source of non-rate revenue.[13]

[13] Because the proposed change in property tax reallocation will begin in January 2022 when the first rate increase is expected to become effective, only half of the calculated reallocation (from Table 4-30) is incorporated in FY 2022.

Table 4-31: Recycled Water Fund Non-Rate Revenue Assumptions

Description	Value
Annual Escalation	
Miscellaneous	0.0%
Interest Earnings	
Annual Interest Rate	1.0%

Table 4-32: Recycled Water Fund Non-Rate Revenues

Non-Rate Revenues	FY 2021 (Budget)[14]	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
Reallocation of Property Tax from Potable Water Fund	$0	$50,938	$103,168	$104,436	$105,961	$107,399
Capacity Fees	$0	$9,542	$14,599	$11,582	$8,438	$25,714
Interest Earnings	$8,573	$1,587	$1,899	$2,736	$3,568	$4,279
Other Miscellaneous Revenue	$170,237	$825	$825	$825	$825	$825
Total	**$178,810**	**$62,892**	**$120,491**	**$119,579**	**$118,793**	**$138,218**

A summary of Recycled Water Fund revenues under current rates is shown in Table 4-33. A reduction in revenue relative to FY 2021 is largely due to non-recurring miscellaneous revenue in FY 2021 and the elimination of rate revenue from Spring Lakes Mobile Home Park beginning in FY 2025. The reallocation of property tax from the Potable Water Fund has a positive impact on Recycled Water Fund revenues beginning in FY 2022.

Table 4-33: Summary of Projected Recycled Water Fund Revenues from Existing Rates

Revenues	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Rate Revenue						
Basic Meter Charges	$62,844	$73,591	$74,608	$75,349	$75,815	$76,556
Volumetric Rates	$511,992	$519,474	$519,474	$519,474	$453,216	$453,216
Subtotal	**$574,835**	**$593,066**	**$594,082**	**$594,823**	**$529,031**	**$529,772**
Non-Rate Revenue						
Reallocation of Property Tax from Potable Water Fund	$0	$50,938	$103,168	$104,436	$105,961	$107,399
Capacity Fees	$0	$9,542	$14,599	$11,582	$8,438	$25,714
Interest Earnings	$8,573	$1,587	$1,899	$2,736	$3,568	$4,279
Other Miscellaneous Revenue	$170,237	$825	$825	$825	$825	$825
Subtotal	**$178,810**	**$62,892**	**$120,491**	**$119,579**	**$118,793**	**$138,218**
Total	**$753,645**	**$655,957**	**$714,573**	**$714,402**	**$647,824**	**$667,990**

[14] FY 2021 Capacity Fee revenue based on estimated actuals rather than the budget.

4.3.2.RECYCLED WATER FUND O&M EXPENSES

Raftelis projected annual Recycled Water Fund O&M expenses over the study period by escalating the FY 2021 budget by annual inflationary factors (see Table 4-34). Inflationary assumptions shown below are consistent with assumptions used to project Potable Water Fund O&M expenses (from Section 4.2.2). Raftelis assigned each line item in the Recycled Water Fund operating budget to one of the expense categories shown in Table 4-34 in order to apply the inflationary increases in each year of the study period. While the projections were primarily determined by applying annual inflationary increases, District staff directed Raftelis to incorporate the following adjustments:

- **Department 100 Services** was reduced in FY 2022 to account for FY 2021 expenses that do not recur annually (including the Urban Water Management Plan and the Risk & Resilience Study); these costs are assumed to recur in FY 2026.
- **Department 200 Services** was reduced in FY 2022 to account for FY 2021 expenses that do not recur annually (including this rate study); these costs are assumed to recur in FY 2026.
- **Department 400 Services** was reduced in FY 2022 to account for FY 2021 expenses that do not recur annually (including the Pressure Analysis Study)

Table 4-34: Recycled Water Fund Inflationary Assumptions

Expense Categories	Annual Inflation
General	3.0%
Salaries	5.0%
Benefits	8.0%
Utilities	5.0%

Recycled Water Fund O&M expenses are projected to increase by approximately 4.0 percent per year on average over the study period (see Table 4-35). The O&M projections for Department 200 exclude depreciation (which is a non-cash expense) and debt service payments (which are incorporated separately into the financial plan projections).

Table 4-35: Recycled Water Fund O&M Expenses

O&M Expenses	FY 2021 (Budget)	FY 2022 (Projected)	FY 2023 (Projected)	FY 2024 (Projected)	FY 2025 (Projected)	FY 2026 (Projected)
Administration (Dept 100)						
Salaries & Benefits	$64,127	$68,296	$72,735	$77,462	$82,498	$87,860
Services	$47,049	$35,070	$36,122	$37,206	$38,322	$48,166
Supplies	$1,720	$1,772	$1,825	$1,879	$1,936	$1,994
Subtotal	**$112,896**	**$105,137**	**$110,682**	**$116,548**	**$122,755**	**$138,020**
Finance & Customer Service (Dept 200)						
Salaries & Benefits	$56,397	$60,062	$63,967	$68,124	$72,552	$77,268
Services	$21,016	$14,437	$14,870	$15,316	$15,775	$24,364
Supplies	$400	$412	$424	$437	$450	$464
Customer Accounts	$16,173	$16,658	$17,158	$17,672	$18,203	$18,749
Subtotal	**$93,986**	**$91,569**	**$96,419**	**$101,550**	**$106,981**	**$120,844**
Operations (Dept 300)						
Salaries & Benefits	$161,906	$172,430	$183,638	$195,574	$208,286	$221,825
Services	$20,526	$21,142	$21,776	$22,429	$23,102	$23,795
Supplies	$1,700	$1,751	$1,804	$1,858	$1,913	$1,971
General Production Costs	$16,900	$17,407	$17,929	$18,467	$19,021	$19,592
Pumping	$51,500	$53,075	$54,699	$56,373	$57,618	$59,373
Water Treatment	$130,000	$133,900	$137,917	$142,055	$146,316	$150,706
Transmission & Distribution	$13,500	$13,905	$14,322	$14,752	$15,194	$15,650
Subtotal	**$396,032**	**$413,610**	**$432,084**	**$451,507**	**$471,452**	**$492,912**
Engineering (Dept 400)						
Salaries & Benefits	$10,571	$11,258	$11,990	$12,769	$13,599	$14,483
Services	$18,990	$1,020	$1,050	$1,082	$1,114	$1,148
Supplies	$100	$103	$106	$109	$113	$116
Subtotal	**$29,661**	**$12,381**	**$13,146**	**$13,960**	**$14,826**	**$15,747**
Board of Directors (Dept 900)						
Salaries & Benefits	$12,008	$12,788	$13,619	$14,505	$15,448	$16,452
Services	$2,280	$2,348	$2,419	$2,491	$2,566	$2,643
Supplies	$80	$82	$85	$87	$90	$93
Subtotal	**$14,368**	**$15,219**	**$16,123**	**$17,084**	**$18,104**	**$19,187**
Total	**$646,942**	**$637,916**	**$668,454**	**$700,649**	**$734,117**	**$786,711**
% Change		*-1.4%*	*4.8%*	*4.8%*	*4.8%*	*7.2%*

4.3.3.RECYCLED WATER FUND DEBT SERVICE

District staff provided Raftelis with a schedule of existing debt service payments over the study period for the Recycled Water Fund (see Table 4-36). The District's only outstanding debt is associated with its 2016 JP Morgan loan, which was issued to refund a 2011 bank loan and 2004 Certificates of Participation (COPs). The Recycled Water Fund financial plan assumes that no new debt will be issued over the study period to finance Recycled Water Fund CIP. The proposed debt issuance outlined in Section 4.2.3 pertains to the Potable Water Fund only.

Table 4-36: Recycled Water Fund Existing Debt Service

2016 JP Morgan Loan	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Principal	$223,062	$260,626	$264,227	$269,468	$274,380	$280,904
Interest	$31,893	$27,419	$22,564	$17,627	$12,596	$7,460
Total	**$254,955**	**$288,045**	**$286,791**	**$287,095**	**$286,976**	**$288,364**

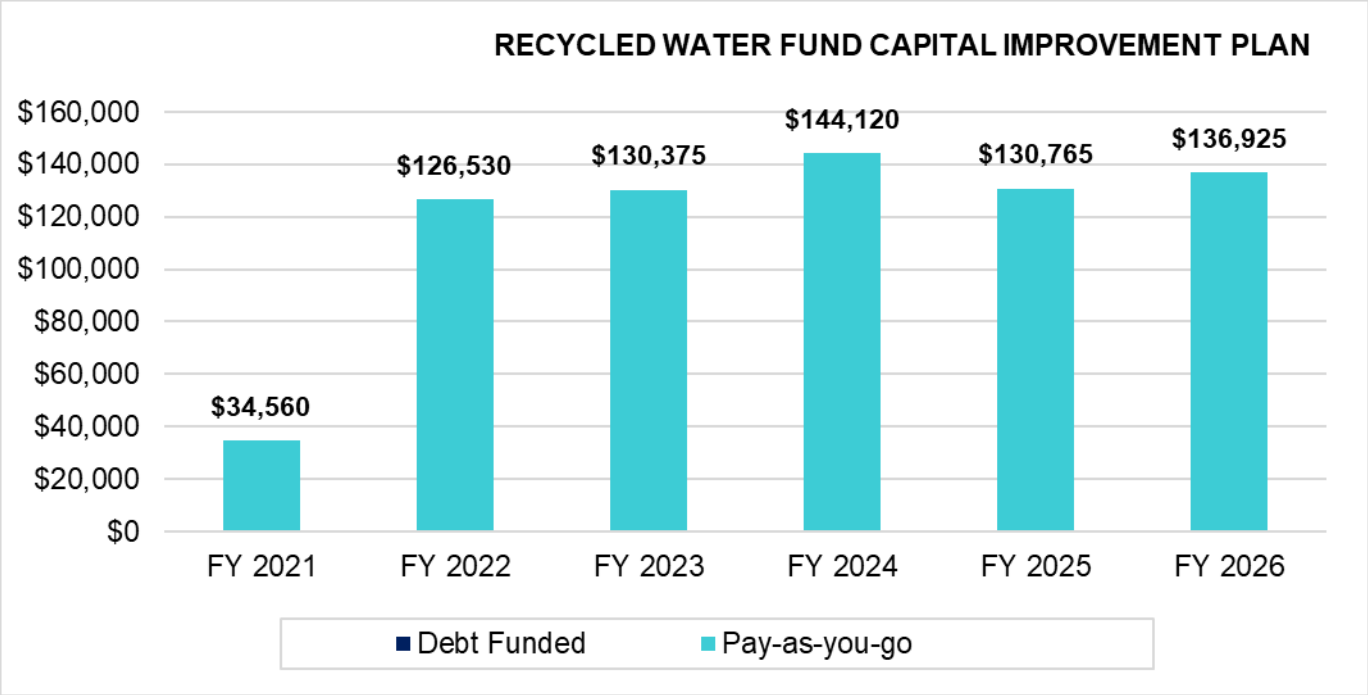
4.3.4.RECYCLED WATER FUND CAPITAL IMPROVEMENT PLAN

District staff provided Raftelis with a schedule of annual Recycled Water Fund CIP expenditures over the study period (see Table 4-37 and Figure 4-4). Recycled Water Fund CIP projects include repair, replacement, or new construction of capital assets including pipelines, water meters, water tanks, and other infrastructure. CIP expenditures also include an additional $125,000 in each year beginning in FY 2022 to account for potential CIP costs associated with the Scotts Valley Water Reclamation Facility (WRF), which is operated by the City of Scotts Valley. The District obtains its recycled water supply from treated effluent from the WRF, and therefore is responsible for a portion of capital-related treatment plant costs. Capital needs at the WRF are uncertain over the next five years, and it is therefore difficult for District staff to accurately project the timing and cost of WRF CIP projects. Raftelis and District staff determined that the addition of $125,000 in each year beginning in FY 2022 was most appropriate to account for liability associated with unknown WRF CIP costs through FY 2026. All CIP cost estimates assume annual cost inflation of 3 percent.

Table 4-37: Recycled Water Fund CIP

CIP	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Debt Funded	$0	$0	$0	$0	$0	$0
Pay-as-you-go	$34,560	$126,530	$130,375	$144,120	$130,765	$136,925
Total	**$34,560**	**$126,530**	**$130,375**	**$144,120**	**$130,765**	**$136,925**

Figure 4-4: Recycled Water Fund CIP



4.3.5.PROPOSED TRANSFERS FROM POTABLE WATER FUND

Even with significant recycled water rate increases, Raftelis projects that Recycled Water Fund revenues will be sufficient to recover Recycled Water Fund O&M expenses but not debt service or CIP over the study period. Raftelis therefore recommends that the District transfer funds each year over the study period from the Potable Water Fund to the Recycled Water Fund to cover Recycled Water Fund debt service and CIP (see Table 4-38). The recycled water system clearly benefits potable water users by augmenting the District's overall water supply and reducing the strain on scarce groundwater resources. Therefore, it is appropriate for the potable water system to support a portion of recycled water system costs. This will allow the District to adequately fund recycled water system needs while incentivizing recycled water use by maintaining affordability.

Table 4-38: Proposed Transfers from Potable Water Fund

Description	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Recycled Water Fund Debt Service	$254,955	$288,045	$286,791	$287,095	$286,976	$288,364
Recycled Water Fund CIP	$34,560	$126,530	$130,375	$144,120	$130,765	$136,925
Total Transfer	**$289,515**	**$414,575**	**$417,166**	**$431,215**	**$417,741**	**$425,289**

4.3.6.RECYCLED WATER FUND RESERVE TARGET

Raftelis calculated annual reserve targets (see Table 4-39) based on the District's formal reserve policy (from Table 4-1). All calculations are consistent with the methodology used to project Potable Water Fund reserve targets (from 4.2.5):

- The Operating Reserve target is equal to [90 days ÷ 365 days per year] × [annual Recycled Water Fund O&M expenses (from Table 4-35)].

- The Rate Stabilization Reserve target is equal to [20 percent] × [annual Recycled Water Fund Volumetric Rate revenue].[15]
- The Emergency Reserve target is equal to [2.5 percent] × [net book value of Recycled Water Fund capital assets][16]
- The Capital Reserve target is equal to actual depreciation in FY 2021 and escalated by 3 percent per year thereafter (consistent with CIP inflationary assumptions in Section 4.3.4).
- The Debt Service Reserve target is equal to total annual debt service (from Table 4-36).

Table 4-39: Recycled Water Fund Projected Reserve Targets

Reserve Target	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Operating Reserve	$159,520	$157,294	$164,824	$172,763	$181,015	$193,983
Rate Stabilization Reserve	$102,398	$106,202	$110,933	$118,447	$115,424	$126,966
Emergency Reserve	$132,977	$132,977	$132,977	$132,977	$132,977	$132,977
Capital Reserve	$89,118	$91,791	$94,545	$97,381	$100,303	$103,312
Debt Service Reserve	$254,955	$288,045	$286,791	$287,095	$286,976	$288,364
Total	**$738,968**	**$776,309**	**$790,070**	**$808,663**	**$816,695**	**$845,603**

4.3.7.RECYCLED WATER FUND STATUS QUO FINANCIAL PLAN

To evaluate the need for recycled water revenue adjustments (i.e., rate increases), Raftelis first developed a status quo financial plan. The status quo financial plan assumes that current recycled water rates remain in effect over the study period. The Recycled Water Fund status quo financial plan (see Table 4-40) combines projected revenues based on existing rates (from Table 4-33) , O&M expenses (from Table 4-35), debt service payments (from Table 4-36), CIP expenditures (from Table 4-37), and fund transfers (from Table 4-38) to develop cash flow projections through FY 2026.[17] Projected ending reserve balances in each year are compared to projected reserve targets (from Table 4-39). Debt coverage is not evaluated individually for the Recycled Water Fund but is calculated for all funds combined (shown subsequently in Section 4.4).

The status quo financial plan (see Table 4-40 and Figure 4-5) demonstrates that in the absence of any revenue adjustments, Recycled Water Fund reserves are projected to remain well below target throughout the study period. Revenues under the status quo financial plan are sufficient to cover O&M expenses only through FY 2024. Beginning in FY 2025, the Recycled Water Fund is projected to experience an operating deficit under the status quo financial plan. The results of the status quo financial plan clearly illustrate that revenue adjustments are necessary over the next five years to recover operating costs and maintain adequate Recycled Water Fund reserves.

[15] Volumetric rate revenue estimated at approximately 87% of total Recycled Water Fund rate revenue inclusive of revenue adjustments (from Table 4-43).
[16] Recycled Water Fund capital asset net book value is $5,319,070.
[17] Cash flow projections start from the beginning of FY 2021 based on actual cash balance of $269,953 as of 6/30/2020.

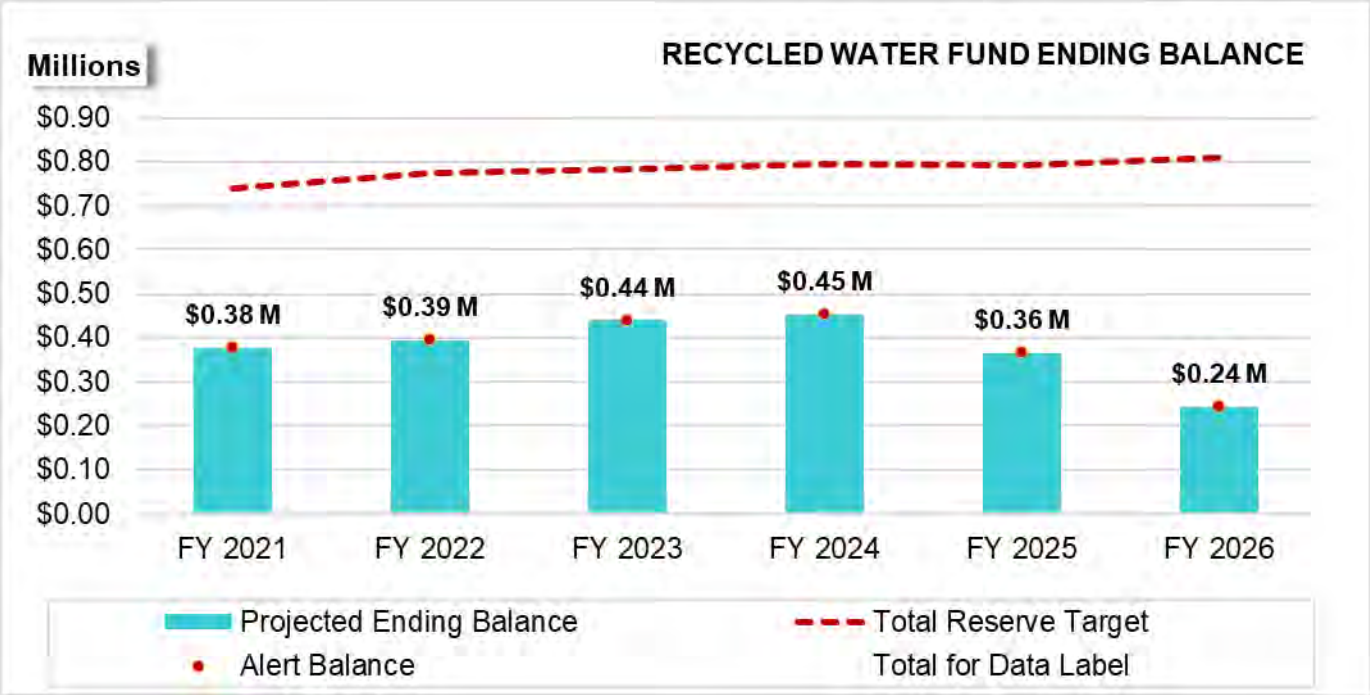
Table 4-40: Recycled Water Fund Status Quo Financial Plan Proforma

Line	Recycled Water Fund	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1	**Beginning Balance**	**$269,953**	**$376,656**	**$394,632**	**$440,418**	**$453,216**	**$364,818**
2							
3	**Source of Funds**						
4	Revenue from Existing Rates	$574,835	$593,066	$594,082	$594,823	$529,031	$529,772
5	Reallocation of Property Tax from Potable Water Fund	$0	$50,938	$103,168	$104,436	$105,961	$107,399
6	Capacity Fees	$0	$9,542	$14,599	$11,582	$8,438	$25,714
7	Interest Earnings[18]	$8,573	$1,521	$1,566	$1,781	$1,464	$370
8	Other Miscellaneous Revenue	$170,237	$825	$825	$825	$825	$825
9	Transfer from Potable Water Fund	$289,515	$414,575	$417,166	$431,215	$417,741	$425,289
10	Debt Proceeds for CIP	$0	$0	$0	$0	$0	$0
11	**Total Source of Funds**	**$1,043,160**	**$1,070,466**	**$1,131,405**	**$1,144,662**	**$1,063,461**	**$1,089,369**
12							
13	**Use of Funds**						
14	O&M Expenses	$646,942	$637,916	$668,454	$700,649	$734,117	$786,711
15	Existing Debt Service	$254,955	$288,045	$286,791	$287,095	$286,976	$288,364
16	Proposed Debt Service	$0	$0	$0	$0	$0	$0
17	Debt Funded CIP	$0	$0	$0	$0	$0	$0
18	Pay-as-you-go CIP	$34,560	$126,530	$130,375	$144,120	$130,765	$136,925
19	**Total Use of Funds**	**$936,457**	**$1,052,490**	**$1,085,620**	**$1,131,864**	**$1,151,859**	**$1,212,000**
20							
21	**Ending Balance**	**$376,656**	**$394,632**	**$440,418**	**$453,216**	**$364,818**	**$242,188**
22	*Target Balance*[19]	*$738,968*	*$774,002*	*$783,032*	*$794,111*	*$791,915*	*$809,280*

[18] Interest earnings in Table 4-40 differ from what was previously shown in Table 4-32. This is because the depletion of reserves under the status quo results in lower interest earnings. Table 4-40 reflects interest earnings under the proposed financial plan scenario (presented in Table 4-43).

[19] The reserve target balance in Table 4-40 differs from what was previously shown in Table 4-39. This is because the Rate Stabilization Reserve target is lower under the status quo due to decreased Volumetric Rate revenue. Table 4-39 reflects the reserve target balance under the proposed financial plan scenario after the incorporation of additional Volumetric Rate revenue from revenue adjustments (presented in Table 4-43).

Figure 4-5: Recycled Water Fund Status Quo Financial Plan



4.3.8.RECYCLED WATER FUND PROPOSED FINANCIAL PLAN

Proposed transfers from the Potable Water Fund are designed to recover Recycled Water debt service and CIP expenditures. However, the Recycled Water Fund must increase its revenues from water rates over the study period to adequately fund its O&M expenses and maintain sufficient reserve levels. Raftelis worked closely with District staff to identify financial plan options for the District's Board of Directors to consider. After a water rate workshop led by Raftelis at a District Board meeting, the Board of Directors instructed District staff and Raftelis to proceed with the proposed recycled water revenue adjustments presented below (see Table 4-41).

Revenue adjustments are shown as annual percent increases in rate revenue and represent incremental increases in rate revenue collected as a result of proposed rate increases. The proposed Recycled Water Fund financial plan provides for 5 percent annual revenue adjustments in FY 2022 and FY 2023 and 10 percent annual revenue adjustments in the three subsequent years. All revenue adjustments are proposed to be implemented in January of each fiscal year (i.e., the midpoint of each fiscal year).

Table 4-41: Proposed Recycled Water Revenue Adjustment Schedule

Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Effective Date	Jan. 1, 2022	Jan. 1, 2023	Jan. 1, 2024	Jan. 1, 2025	Jan. 1, 2026
Revenue Adjustment	5.0%	5.0%	10.0%	10.0%	10.0%

Proposed revenue adjustments are higher for recycled water compared to potable water due to the need to build up recycled water revenue generation over time. Raftelis recommends that the District gradually increase recycled water revenues over time so that reliance on Potable Water Fund transfers can decrease. However, the District also would like to maintain recycled water rate affordability relative to potable water use in order to incentivize recycled water use and reduce the strain on scarce groundwater resources. The proposed Recycled Water Fund financial plan achieves recycled water affordability by ensuring that the Landscape Recycled Volumetric Rate is at least 20

percent lower than the Landscape Potable rate. The proposed revenue adjustments were selected in order to achieve balance between the competing goals of greater recycled water rate revenue generation and recycled water affordability.

The increases in annual rate revenue resulting from the proposed revenue adjustments are calculated based on revenue from current rates and the proposed revenue adjustment percentages (see Table 4-42). All revenue adjustment calculations account for the cumulative impact of annual revenue adjustments, and also take into account that rate increases will occur in January of each fiscal year (i.e., the midpoint of each fiscal year). Rate revenue collected from Spring Lakes Mobile Home Park is not subject to revenue adjustments, as these contract rates are out of the scope of this study.

The proposed Recycled Water Fund financial plan proforma (see Table 4-43 and Figure 4-6) shows the reserve balance projections after incorporation of revenue adjustments (from Table 4-42). Proposed financial plan proforma results are calculated in the same manner as the status quo financial plan proforma (from Table 4-40). Under the proposed financial plan, reserves are projected to gradually build up over the study period. By FY 2026, Raftelis projects that the Recycled Water Fund reserve balance will be slightly under the projected reserve target.

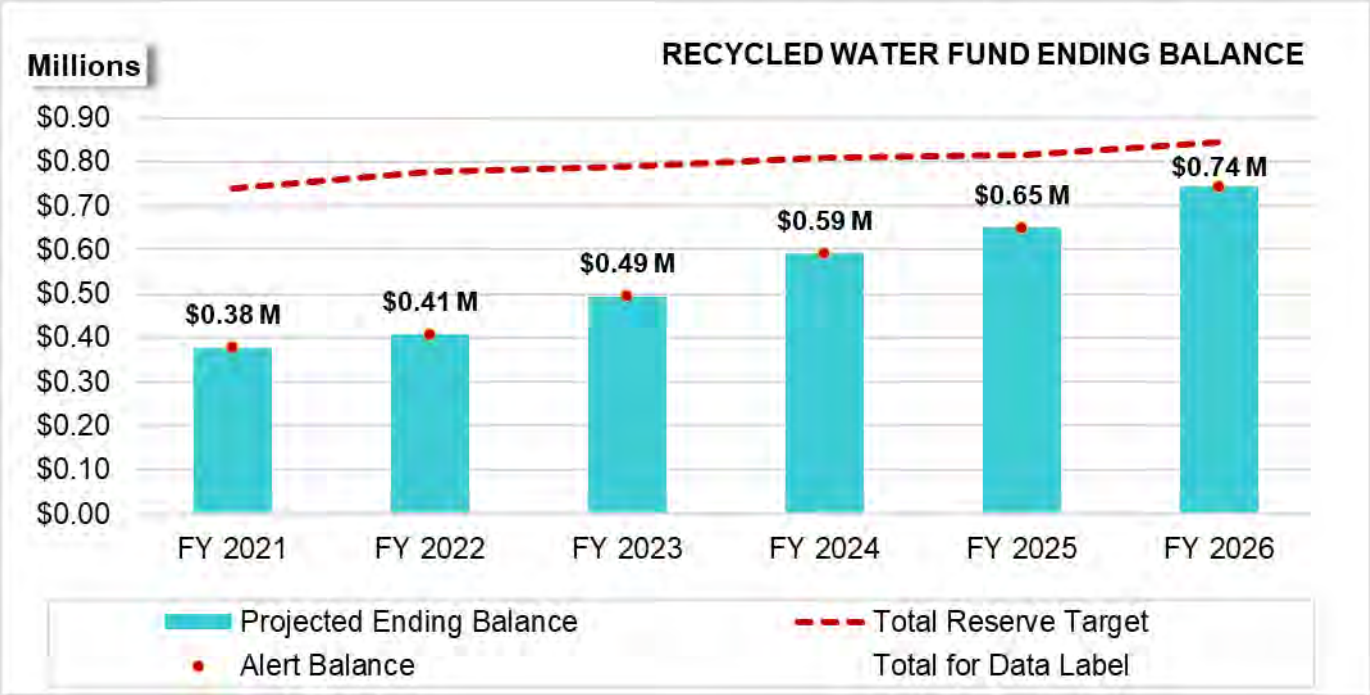
Table 4-42: Proposed Recycled Water Fund Revenue Adjustments

Line	Description		FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1	Rate Revenue from Existing Rates		$574,835	$593,066	$594,082	$594,823	$529,031	$529,772
2	Less Rate from Spring Lakes Mobile Home Park		($63,261)	($66,258)	($66,258)	($66,258)	$0	$0
3	**Rate Revenue subject to Revenue Adjustments**		**$511,574**	**$526,808**	**$527,824**	**$528,565**	**$529,031**	**$529,772**
4								
5	**Fiscal Year**	**Revenue Adjustment**						
6	FY 2022	5.0%	$0	$13,170	$26,391	$26,428	$26,452	$26,489
7	FY 2023	5.0%			$13,855	$27,750	$27,774	$27,813
8	FY 2024	10.0%				$29,137	$58,326	$58,407
9	FY 2025	10.0%					$32,079	$64,248
10	FY 2026	10.0%						$35,336
11			**$0**	**$13,170**	**$40,247**	**$83,315**	**$144,630**	**$212,294**

Table 4-43: Recycled Water Fund Proposed Financial Plan Proforma

Line	Recycled Water Fund	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1	**Beginning Balance**	**$269,953**	**$376,656**	**$407,868**	**$494,234**	**$591,302**	**$649,639**
2							
3	**Source of Funds**						
4	Revenue from Existing Rates	$574,835	$593,066	$594,082	$594,823	$529,031	$529,772
5	Revenue Adjustments	$0	$13,170	$40,247	$83,315	$144,630	$212,294
6	Reallocation of Property Tax from Potable Water Fund	$0	$50,938	$103,168	$104,436	$105,961	$107,399
7	Capacity Fees	$0	$9,542	$14,599	$11,582	$8,438	$25,714
8	Interest Earnings	$8,573	$1,587	$1,899	$2,736	$3,568	$4,279
9	Other Miscellaneous Revenue	$170,237	$825	$825	$825	$825	$825
10	Transfer from Potable Water Fund	$289,515	$414,575	$417,166	$431,215	$417,741	$425,289
11	Debt Proceeds for CIP	$0	$0	$0	$0	$0	$0
12	**Total Source of Funds**	**$1,043,160**	**$1,083,702**	**$1,171,986**	**$1,228,932**	**$1,210,196**	**$1,305,572**
13							
14	**Use of Funds**						
15	O&M Expenses	$646,942	$637,916	$668,454	$700,649	$734,117	$786,711
16	Existing Debt Service	$254,955	$288,045	$286,791	$287,095	$286,976	$288,364
17	Proposed Debt Service	$0	$0	$0	$0	$0	$0
18	Debt Funded CIP	$0	$0	$0	$0	$0	$0
19	Pay-as-you-go CIP	$34,560	$126,530	$130,375	$144,120	$130,765	$136,925
20	**Total Use of Funds**	**$936,457**	**$1,052,490**	**$1,085,620**	**$1,131,864**	**$1,151,859**	**$1,212,000**
21							
22	**Ending Balance**	**$376,656**	**$407,868**	**$494,234**	**$591,302**	**$649,639**	**$743,212**
23	*Target Balance*	*$738,968*	*$776,309*	*$790,070*	*$808,663*	*$816,695*	*$845,603*

Figure 4-6: Recycled Water Fund Proposed Financial Plan



4.4.District-Wide Financial Plan

Raftelis developed District-wide financial plan projections by combining Potable Water Fund financial plan results (from Section 4.2) and Recycled Water Fund financial plan results (from Section 4.3). In the absence of any revenue adjustments, reserves are projected to be fully depleted by the end of the study period (see Figure 4-7). With the inclusion of proposed revenue adjustments, reserves are projected to stabilize at approximately $5 million through the end of the study period (see Figure 4-8). Annual fluctuations in reserve balance are largely due to year-to-year changes in total CIP expenditures. The District-wide financial plan proforma also includes debt coverage projections in each year over the study period (see Table 4-44, Lines 25-27). Under the proposed financial plan, debt coverage is projected to significantly exceed to the required ratio of 1.20 in all years. This demonstrates that the District is expected to generate sufficient revenues to cover its existing and proposed debt service payments while maintaining additional debt capacity.

Figure 4-7: District-Wide Status Quo Financial Plan

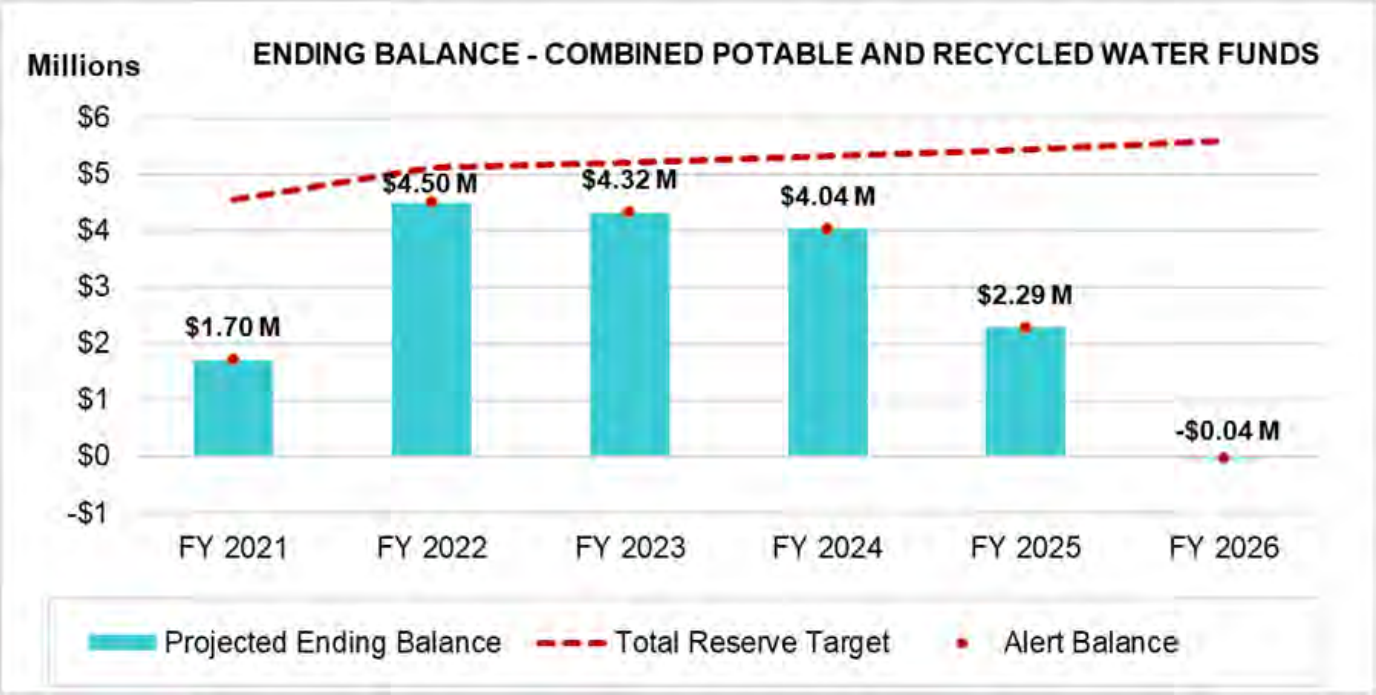


Figure 4-8: District-Wide Proposed Financial Plan

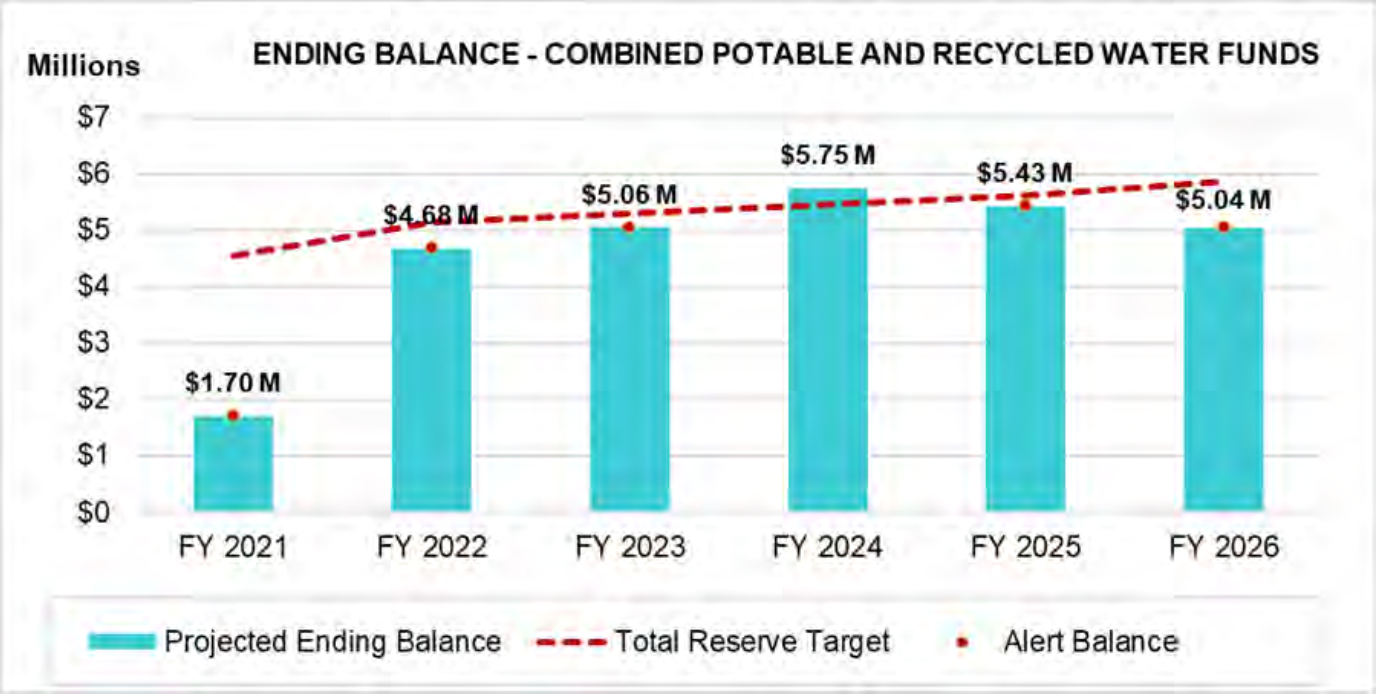


Table 4-44: District-Wide Proposed Financial Plan Proforma

Line	Potable & Recycled Water Funds	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
1	**Beginning Balance**	**$4,402,233**	**$1,704,689**	**$4,681,684**	**$5,055,669**	**$5,745,249**	**$5,432,844**
2							
3	**Source of Funds**						
4	Revenue from Existing Rates	$6,788,684	$7,238,906	$7,293,390	$7,350,447	$7,318,231	$7,366,787
5	Revenue Adjustments	$0	$179,316	$551,069	$961,968	$1,411,262	$1,893,474
6	Property Tax	$1,077,212	$1,098,756	$1,120,731	$1,143,146	$1,166,009	$1,189,329
7	Capacity Fees	$350,696	$517,563	$816,451	$688,286	$479,705	$372,833
8	Interest Earnings	$61,073	$29,457	$45,856	$51,071	$53,007	$49,470
9	Other Miscellaneous Revenue	$276,798	$107,386	$107,386	$107,386	$107,386	$107,386
10	Debt Proceeds for CIP	$0	$6,000,000	$0	$0	$0	$0
11	**Total Source of Funds**	**$8,554,462**	**$15,171,385**	**$9,934,883**	**$10,302,305**	**$10,535,599**	**$10,979,279**
12							
13	**Use of Funds**						
14	O&M Expenses	$6,034,267	$5,932,831	$6,220,998	$6,525,051	$6,843,632	$7,348,926
15	PERS UAL Additional Discretionary Payment	$0	$2,000,000	$0	$0	$0	$0
16	Existing Debt Service	$648,409	$732,564	$729,376	$730,150	$729,847	$733,377
17	Proposed Debt Service	$0	$411,525	$411,525	$411,525	$411,525	$411,525
18	Debt Funded CIP	$3,500,000	$2,500,000	$0	$0	$0	$0
19	Pay-as-you-go CIP	$1,069,331	$617,469	$2,199,000	$1,946,000	$2,863,000	$2,875,000
20	**Total Use of Funds**	**$11,252,007**	**$12,194,389**	**$9,560,898**	**$9,612,726**	**$10,848,004**	**$11,368,827**
21							
22	**Ending Balance**	**$1,704,689**	**$4,681,684**	**$5,055,669**	**$5,745,249**	**$5,432,844**	**$5,043,296**
23	*Target Balance*	*$4,546,593*	*$5,134,924*	*$5,289,739*	*$5,460,124*	*$5,622,613*	*$5,855,920*
24							
25	**Debt Coverage**						
26	Projected Debt Coverage[20]	3.89	2.83	3.26	3.31	3.23	3.17
27	*Required Debt Coverage*	*1.20*	*1.20*	*1.20*	*1.20*	*1.20*	*1.20*

[20] Projected Debt Coverage = [Sum of Lines 4-10] ÷ [Sum of Lines 16-17]

5. Rate Structure Modifications

5.1. Proposed Rate Structure Changes

Raftelis worked closely with District staff to evaluate potential changes to the existing potable and recycled water rate structure. All proposed water rates presented in subsequent sections incorporate the following recommended revisions to the existing rate structure.

5. **Adjust Potable Water Rates Schedule to Reflect Monthly Billing Basis**: The District plans to transition its potable water customers from billing on a bi-monthly basis to a monthly basis beginning in January 2022. Therefore, all proposed rates, charges, and residential tier allotments shown are on a monthly basis. Current recycled water rates are already on a monthly basis.
6. **Implement Volumetric Rates per 100 gallons:** All current Volumetric Rates are per 1,000 gallons (kGal). Raftelis recommends that the District implement Volumetric Rates per 100 gallons (cGal). This proposed change is intended to improve customer understanding, as 100 gallon units are easier for customers to visualize and comprehend compared to 1,000 gallon units.
7. **Implement Same Basic Meter Charges for Potable and Recycled Customers**: Potable and recycled water customers are currently subject to different Basic Meter Charges. Raftelis recommends that all customers be subject to the same Basic Meter Charges. This proposed change will simplify the District's rate structure, and reflects the fact that billing/customer service/meter-related costs (which are recovered by Basic Meter Charges) do not vary significantly between potable and recycled water customers.
8. **Eliminate the "Other" Potable Water Volumetric Rate:** Little to no potable water use has been charged at the Volumetric Rate for "Other" over the past few years. Raftelis therefore recommends that the "Other" customer class be eliminated from the proposed rate schedule to simplify the rate structure.
9. **Update Residential Tier Allotments:** Raftelis recommends that the methodology used to calculate the existing residential tier allotments be maintained. However, the tier allotment calculations used in the prior rate study must be refined to reflect updated data (see Section 5.2 for detailed calculations). Additionally, all proposed residential tier allotments are shown on a monthly basis due to the planned transition to monthly billing for potable water customers.

5.2. Proposed Changes to Residential Tier Allotments

All proposed residential tier allotment calculations presented below are consistent with the calculation methodology used in the prior rate study to develop the existing tier allotments. All changes are solely due to updated data. All proposed tier allotments are shown on a monthly basis.

5.2.1. PROPOSED TIER ALLOTMENT CALCULATIONS

Tier 1 Allotment – Efficient Water Indoor Water Use

Tier 1 represents the lowest cost water available to residential customers and is designed to provide an adequate allotment for average size household indoor use. The Tier 1 width is based on the average number of people in a

household, defined as three people for the District,[21] and water consumption of 32 gallons per capita day (GPCD).[22] Residential units with individual meters and multi-family units with master meters are subject to the same Tier 1 allotment per dwelling unit. The Tier 1 allotment is rounded up to 3,000 gallons per monthly billing period.

$$Tier\ 1\ allotment = average\ household\ size\ \times efficient\ indoor\ water\ use$$

$$= 3\ persons\ \times 32\ gallons\ per\ capita\ per\ day\ \times \frac{365\ days}{12\ billing\ periods\ per\ year} = 3{,}000\ gallons$$

Tier 2 Allotment – Efficient Outdoor Water Use

Tier 2 is designed to provide an adequate allotment for efficient outdoor use for the average residential dwelling unit. The Tier 2 allotment for residential units with individual meters is calculated based on outdoor water consumption for 1,800 square feet of landscape area. Since multi-family units with master meters generally have minimal outdoor landscape area, the Tier 2 allotment is based on 100 square feet per dwelling unit. The existing allotment was calculated based on average bi-monthly evapotranspiration of 7.24 inch[23] and an evapotranspiration adjustment factor of 70 percent.[24] Raftelis updated the Tier 2 allotment calculation based on updated 10-year evapotranspiration data (7.30 inches bi-monthly or 3.65 inches monthly). The Tier 2 allotment is rounded up to 3,000 gallons per monthly billing period for individual meters and 200 gallons for master meters.

$$Tier\ 2\ allotment = landscape\ area\ \times evapotranspiration \times evapotranspiration\ adjustment\ factor$$

Individual Meters:

$$= 1{,}800\ sq.ft.\ \times\ 3.65\ inches\ \times 70\% \times \frac{748\ gallons}{1{,}200\ cubic\ feet} = 3{,}000\ gallons$$

Master Meters:

$$= 100\ sq.ft.\ \times\ 3.65\ inches\ \times 70\% \times \frac{748\ gallons}{1{,}200\ cubic\ feet} = 200\ gallons$$

Tier 3 Breakpoint – Based on Groundwater Availability

The Tier 3 allotment is based on the District's estimated share of the Santa Margarita Groundwater Basin's safe yield. Tier 3 is designed to represent the amount of groundwater within the safe yield available to each residential dwelling unit if each unit is allotted an equal amount. District staff informed Raftelis that the District's share of the Basin's safe yield has not changed since the prior rate study was conducted (1,506 acre-feet per year). However, Raftelis updated the number of residential dwelling units to account residential development since the last rate study was conducted.[25] Note that while the Tier 1 and Tier 2 calculations established a monthly allotment, the Tier 3 calculation shown below establishes the monthly Tier 3 breakpoint (i.e., maximum) rather than monthly allotment (i.e., tier width). Residential units with individual meters and multi-family units with master meters are subject to

[21] Based on U.S Census Bureau estimates of household density for the City of Scotts Valley for 2015-2019. The estimate of 2.64 persons was rounded up to the nearest person.
[22] Based on the efficient household water budget per person per day from *Urban Water Conservation and Efficiency Potential in California* by the Pacific Institute.
[23] Equal to 10-year bi-monthly average evapotranspiration for California Irrigation Management Information System (CIMIS) Station 104.
[24] Per CA Code of Regulation, Title 23, Chapter 27.
[25] Based on the estimated number of residential dwelling units as of the beginning of FY 2021.

the same Tier 3 breakpoint. The Tier 3 allotment is breakpoint is rounded up to 7,000 gallons per monthly billing period.

$$Tier\ 3\ breakpoint = \left[District's\ share\ of\ basin\ safe\ yield\ \times \frac{Residential\ Water\ Use}{Total\ Water\ Use}\right] \div [\#\ of\ Dwelling\ Units]$$

$$= \left[1{,}506\ AF[26] \times 70\% \times \frac{435.6\ hcf}{1\ AF} \times \frac{748\ gallons}{12\ billing\ periods\ per\ year}\right] \div [4{,}232\ dwelling\ units] = 7{,}000\ gallons[27]$$

Tier 4 Allotment – Excessive Water Use

Tier 4 includes all residential water use in excess of the proposed Tier 3 breakpoint (7,000 gallons per month per dwelling unit). Tier 4 is designed to represent excessive water use for a typical residential customer.

5.2.2.CURRENT VERSUS PROPOSED TIER ALLOTMENTS

The proposed residential tier allotment calculations result in relatively minor adjustments to the current tier allotments (see Table 5-1). Although potable water customers are currently charged on a bi-monthly basis, all current tier allotments are shown on a monthly basis to provide a direct comparison to the proposed monthly allotments. Tier 1 and Tier 2 allotments do not change as a result of the updated tier allotment calculations. However, the updated calculations result in a reduction in the Tier 3 breakpoint from 8,000 gallons to 7,000 gallons per month. The reduction in the Tier 3 breakpoint is due to residential customer growth since the prior rate study, as the safe yield has remained the same while the number of residential dwelling units has increased. Each dwelling unit's equal share of the safe yield must therefore inevitably decrease. The proposed tier allotments effectively result in a reduction in Tier 3 water use and increase in Tier 4 water use (see Table 5-2). Projected water use by residential tier under the proposed tier allotments was estimated by Raftelis based on detailed analysis of account-level water use data for FY 2020.

Table 5-1: Proposed Changes to Residential Tier Allotments

Tier	Current Monthly Allotment (gallons)	Proposed Monthly Allotment (gallons)	Basis
Residential Units with Individual Meters			
Tier 1	0-3,000	0-3,000	Efficient indoor water use for average household size
Tier 2	3,001-6,000	3,001-6,000	Efficient outdoor water use for typical single family residential landscape area
Tier 3	6,001-8,000	6,001-7,000	Additional water use within groundwater basin safe yield
Tier 4	Over 8,000	Over 7,000	All use in excess of groundwater basin safe yield
Multi-Residential Units with Master Meters (per Dwelling Unit)			
Tier 1	0-3,000	0-3,000	Efficient indoor water use for average household size
Tier 2	3,001-3,200	3,001-3,200	Efficient outdoor water use for typical multi-family residential landscape area
Tier 3	3,201-8,000	3,201-7,000	Additional water use within groundwater basin safe yield
Tier 4	Over 8,000	Over 7,000	All use in excess of groundwater basin safe yield

[26] District's estimate of its share of the groundwater basin's annual safe yield.
[27] Rounded up to the nearest thousand.

Table 5-2: Projected FY 2021 Residential Water Use by Tier – Current versus Proposed

Description	Current Water Use by Tier (cGal)	Proposed Water Use by Tier (cGal)	Current Water Use by Tier (%)	Proposed Water Use by Tier (%)	% Change
Residential Tier 1	1,183,151	1,183,151	52.8%	52.8%	0.0%
Residential Tier 2	534,971	534,971	23.9%	23.9%	0.0%
Residential Tier 3	201,615	128,027	9.0%	5.7%	-36.5%
Residential Tier 4	321,152	394,740	14.3%	17.6%	22.9%
Total	**2,240,889**	**2,240,889**	**100.0%**	**100.0%**	**0.0%**

Projected FY 2021 water use by customer class and tier under the proposed rate structure changes is shown below (see Table 5-3). All water use is shown in hundreds of gallons rather than thousands of gallons, as proposed Volumetric Rates are to be assessed per hundred gallons. Residential tiered water use shown accounts for proposed changes to the residential tier allotments (from Table 5-2).

Table 5-3: Projected FY 2021 Water Use by Customer Class and Tier under Proposed Rate Structure

Customer Class and Tier	FY 2021 Water Use (cGal)
Potable Water Use	
Residential Tier 1	1,183,151
Residential Tier 2	534,971
Residential Tier 3	128,027
Residential Tier 4	394,740
CII	747,727
Landscape Potable	183,679
Qualifying Medical Needs (Residential)	2,332
Rate Assistance (Residential)	927
Subtotal	**3,175,554**
Recycled Water Use	
Landscape Recycled	327,000
Recycled Bulk	5,270
Spring Lakes Mobile Home Park	162,000
Recycled Exempt	120,000
Subtotal	**614,270**
Total	**3,789,824**

6. Cost of Service Analysis

Raftelis conducted a cost of service (COS) analysis for the District's Potable Water Fund for FY 2021. The COS analysis allocates the overall potable water rate revenue requirement to customer classes based on their proportion of use of and burden on the potable water system. This provides the basis for the development of proposed potable water rates through FY 2026. While the COS analysis presented herein is confined to the Potable Water Fund, specific COS results are incorporated into the proposed recycled water rate calculations (described in detail in Section 7).

6.1. Methodology

The framework and methodology utilized to develop the COS analysis and to apportion the revenue requirement to each customer class and tier is informed by the processes outlined in the AWWA's *Manual M1*. COS analyses are tailored to meet the specific needs of each water system. However, there is a specific process utilized in every COS analysis to recover costs from customers in an accurate, equitable, and defensible manner. The steps described below are consistent with the AWWA's *Manual M1* and are widely used in the water industry to perform COS analyses.

1. **Revenue Requirement Determination:** The first step in a COS analysis is to determine the revenue required from potable water rates. The total potable water revenue requirement in this COS analysis is based on the proposed Potable Water Fund financial plan (from Section 4.2).
2. **Cost Functionalization:** O&M expenses and capital assets are categorized by their function in the system. Sample functions may include water supply, treatment, distribution, transmission, customer service, etc.
3. **Cost Causation Component Allocation:** Functionalized costs are then allocated to cost causation components based on their burden on the system. The cost causation components include water supply, base delivery, peaking, meters, and customer, among others. The revenue requirement is allocated accordingly to the cost causation components and results in the total share of the revenue requirement attributable to each cost causation component.
4. **Revenue Requirement Distribution:** The portion of the overall revenue requirement attributed to each cost causation component is distributed to each customer class based on each customer class's units of service (i.e., burden on and/or use of the water system).

6.2. Rate Revenue Requirement

Table 6-1 shows the potable water rate revenue requirement for FY 2021 (also referred to as the test year). Each revenue requirement, revenue offset, and adjustment is attributed to the most closely associated category in Columns C-F: operating, capital, transfer to Recycled Water Fund, and revenue offsets. The revenue requirements (Lines 2-5) include Potable Water Fund O&M expenses, debt service, CIP expenditures, and transfers in FY 2021. The revenue offsets (Lines 9-12) include the Potable Water Fund's non-rate revenue in FY 2021. These non-rate revenues are applied as offsets to the final rate revenue requirement. The reserve transfer adjustment (Line 16) is equal to the projected drawdown in Potable Water Fund reserves in FY 2021 to cover CIP expenditures. The mid-year increase adjustment (Line 17) is necessary to annualize the final rate revenue requirement and represents the additional rate revenue that would have been generated had current FY 2021 rates been implemented at the beginning of FY 2021 rather than in December 2020. All values shown are based on the Potable Water Fund proposed financial plan proforma (from Table 4-23). The final potable water rate revenue requirement for FY 2021 (Line 20) is calculated as follows:

Rate revenue requirement (Line 20) = Revenue requirements (Line 6) - Revenue offsets (Line 13) - Adjustments (Line 18)

Table 6-1: FY 2021 Potable Water Rate Revenue Requirement

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Line	Description	Operating Revenue Requirement	Capital Revenue Requirement	Transfer to Recycled Water Fund	Revenue Offsets	Total
1	**Revenue Requirements**					
2	O&M Expenses	$5,387,325				$5,387,325
3	Debt Service		$393,454			$393,454
4	CIP		$4,534,771			$4,534,771
5	Transfer to Recycled Water Fund			$289,515		$289,515
6	**Total Revenue Requirement**	**$5,387,325**	**$4,928,225**	**$289,515**	**$0**	**$10,605,064**
7						
8	**Less Revenue Offsets**					
9	Property Tax				$975,176	$975,176
10	Capacity Fees		$350,696			$350,696
11	Interest Earnings		$52,500			$52,500
12	Other Miscellaneous Revenue	$106,561				$106,561
13	**Total Revenue Offsets**	**$106,561**	**$403,196**	**$0**	**$975,176**	**$1,484,932**
14						
15	**Less Adjustments**					
16	Transfer from (to) Reserves		$2,804,247			$2,804,247
17	Mid-Year Increase		($296,139)			($296,139)
18	**Total Adjustments**	**$0**	**$2,508,108**	**$0**	**$0**	**$2,508,108**
19						
20	**Potable Water Rate Revenue Requirement**	**$5,280,764**	**$2,016,921**	**$289,515**	**($975,176)**	**$6,612,024**

6.3.Potable Water System Peaking Factors

A significant portion of the costs of the potable water system are based on the peaking characteristics of the different customer classes. A water system is designed to meet different requirements, including extra-capacity / peaking costs. Peaking costs are divided into maximum day (Max Day) and maximum hour (Max Hour) demand. The Max Day demand is the maximum amount of water used in a single day over a full year. The Max Hour demand is the maximum use in an hour on the Max Day. For example, storage and treatment components of the water system are designed to handle Max Day requirements while the distribution system is designed for Max Hour demands.

Table 6-2 shows system-wide peaking factors for The District's potable water system, which are used to derive the cost causation component allocation bases for Base Delivery, Max Day, and Max Hour costs. Peaking demand (shown in Column C) is from the District's 2017 Water System Condition Assessment and Master Plan Final Report. Base Delivery use is considered average daily demand over one year, which has been normalized to a factor of 1.00 (Column D, Line 1). The Max Day peaking factor (Column D, Line 2) indicates that the Max Day demand is 1.60 times greater than the average daily demand. Similarly, the Max Hour peaking factor (Column D, Line 3) shows that the Max Hour demand is 3.75 times greater than average demand. The allocation bases (Columns E-G) are calculated using the equations outlined below. Columns are represented in these equations as letters, and lines are represented as numbers. For example, Column D, Line 2 is shown as D2.

The Max Day allocations are calculated as follows:

- Base Delivery: *D1 / D2 x 100% = E2*
- Max Day: *(D2 - D1) / D2 x 100% = F2*

The Max Hour allocations are calculated as follows:

- Base Delivery: D*1 / D3 x 100% = E3*
- Max Day: *(D2 -D1) / D3 x 100% = F3*
- Max Hour: *(D3 - D2) / D3 x 100% = G3*

Table 6-2: Potable Water System Peaking Factor Allocations

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
Line	Description	Demand (gpm)	Factor	Base	Max Day	Max Hour	Total
1	Base	850	1.00	100.0%	0.0%	0.0%	**100.0%**
2	Max Day	1,360	1.60	62.5%	37.5%	0.0%	**100.0%**
3	Max Hour	3,188	3.75	26.7%	16.0%	57.3%	**100.0%**
4	Average Max Day/Max Hour			44.6%	26.7%	28.7%	**100.0%**

6.4.Functionalization and Allocation of Expenses

After determining the revenue requirement and systemwide peaking allocation basis, the next step of the COS analysis is to allocate Potable Water Fund O&M expenses and capital assets to the following functional categories:

- **Customer Service**: costs of meter reading, billing, and other customer service functions
- **Meters**: costs of meter maintenance/repair
- **Private Fire Protection:** costs directly attributable to private fire protection (i.e., fire sprinkler systems)
- **Water Supply**: water supply costs relating to groundwater production
- **Storage**: costs related to water storage tanks and reservoirs
- **Treatment**: costs associated with treating water to drinking water standards
- **Transmission**: costs associated with transporting water across elevation gradients (pump stations, etc.)
- **Distribution**: costs related to delivering water to customers
- **SCADA**: costs associated specifically with supervisory control and data acquisition
- **Conservation:** costs associated with water conservation, outreach, and efficiency programs
- **General/Admin:** costs associated with general administration of the potable water system (i.e., indirect costs)
- **General Operating:** operating costs not directly attributable to the above functions are allocated based on the overall cost functionalization of the capital asset base (determined subsequently in Section 6.6)

The functionalization of costs allows for the allocation of costs to cost causation components. Some cost causation components correspond directly to a functional category listed above. The cost causation components include:

- **Customer Service**: directly associated with the Customer Service functional category
- **Meters**: directly associated with the Private Fire Protection functional category
- **Private Fire Protection**: costs associated with providing water for private fire protection (i.e., fire sprinkler systems)
- **Water Supply**: directly associated with the Water Supply functional category
- **Base Delivery**: costs associated with providing water under average water demand conditions

- **Peaking** (Max Day and Max Hour): extra-capacity costs associated with providing water during peak demand conditions
- **Conservation**: directly associated with the Water Use Efficiency functional category
- **General**: directly associated with the General/Admin functional category
- **Revenue Offsets**: property tax revenue applied as an offset to the rate revenue requirement

Table 6-3 shows the basis for allocating each functional category to the various cost causation components. This provides the basis for allocating O&M and capital revenue requirements to each cost causation component in the following subsections. Most functional categories are allocated entirely to the corresponding cost causation component. The allocation basis for functional categories not allocated entirely to a single cost causation component is as follows:

- **Functional categories allocated based on Max Day demand**: Storage, treatment, and transmission infrastructure is designed to accommodate maximum day water demand. Therefore, all Storage, Treatment, and Transmission costs are allocated to the Base Delivery and Max Day cost causation components based on the Max Day allocation (from Table 6-2, Line 2).
- **Functional categories allocated based on Max Hour demand**: Distribution infrastructure is designed to accommodate maximum hour water demand. Therefore, all Distribution costs are allocated to the Base Delivery, Max Day, and Max Hour cost causation components based on the Max Hour allocation (from Table 6-2, Line 3).
- **Functional categories allocated based on average Max Day/Max Hour demand**: SCADA is associated with various infrastructure designed to meet either Max Day or Max Hour demand. Therefore, all SCADA costs are allocated to the Base Delivery, Max Day, and Max Hour cost causation components based on the average Max Day/Max Hour allocation (from Table 6-2, Line 4).
- **General Operating:** General Operating costs are allocated based on the final capital allocation (calculated subsequently in Table 6-7, Line 14). The functional breakdown of the Potable Water Fund's capital assets is used here as a proxy to allocate O&M costs that cannot be directly attributed to a specific functional category.

Table 6-3: Allocation of Functional Categories to Cost Causation Components

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]
Line	Functional Category	Customer Service	Meters	Private Fire Protection	Water Supply	Base Delivery	Max Day	Max Hour	Conservation	General	Total
1	Customer Service	100.0%									**100.0%**
2	Meters		100.0%								**100.0%**
3	Private Fire Protection			100.0%							**100.0%**
4	Water Supply				100.0%						**100.0%**
5	Storage					62.5%	37.5%	0.0%			**100.0%**
6	Treatment					62.5%	37.5%	0.0%			**100.0%**
7	Transmission					62.5%	37.5%	0.0%			**100.0%**
8	Distribution					26.7%	16.0%	57.3%			**100.0%**
9	SCADA					44.6%	26.7%	28.7%			**100.0%**
10	Conservation								100.0%		**100.0%**
11	General/Admin									100.0%	**100.0%**
12	General Operating	0.5%	0.0%	0.1%	18.3%	32.6%	19.6%	15.8%	0.1%	13.1%	**100.0%**

6.5.O&M Expense Allocation

The next step of the COS analysis is to develop an allocation basis for the operating revenue requirement based on the functionalization of the Potable Water Fund's O&M expenses. Raftelis assigned Potable Water Fund O&M expenses, by line item, to the most closely associated functional category. Table 6-4 shows a summary of FY 2021 O&M expenses by functional category. This intermediate step is necessary to allocate total O&M expenses to individual cost causation components.

Table 6-4: Summary of Potable Water Fund O&M Expenses by Functional Category

[A]	[B]	[C]	[D]
Line	Functional Category	FY 2021 O&M Expenses	Percent of Total
1	Customer Service	$138,940	2.6%
2	Meters	$15,000	0.3%
3	Private Fire protection	$0	0.0%
4	Water Supply	$460,490	8.5%
5	Storage	$24,000	0.4%
6	Treatment	$300,000	5.6%
7	Transmission	$461,900	8.6%
8	Distribution	$78,700	1.5%
9	SCADA	$36,000	0.7%
10	Conservation	$55,500	1.0%
11	General/Admin	$1,848,558	34.3%
12	General Operating	$1,968,236	36.5%
13	**Total O&M Expenses**	**$5,387,325**	**100.0%**

Table 6-5 shows the allocation of FY 2021 O&M expenses by functional category to each cost causation component. The percentage allocation of each functional category (Columns C-K) to the various cost causation components was determined in Table 6-3. Total O&M expenses associated with each functional category (Column L) was determined in Table 6-4. The total dollar amount allocated to each cost causation component (Line 13) is determined by multiplying the total expense associated with each functional category by the corresponding percentage allocation and summing across all functional categories. The O&M allocation percentages (Line 15) represent the proportion of O&M expenses allocated to each cost causation component (in Line 13). The total operating revenue requirement (Column L, Line 17) equals the operating revenue requirement (previously calculated in Table 6-1, Column C, Line 20). The O&M allocation percentages (Line 15) are multiplied by the total operating revenue requirement (Column L, Line 17) to determine the operating revenue requirement allocation to each cost causation component (Columns C-K, Line 17).

Table 6-5: Allocation of Potable Water Fund O&M Expenses to Cost Causation Components

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]
Line	Functional Category	Customer Service	Meters	Private Fire Protection	Water Supply	Base Delivery	Max Day	Max Hour	Conservation	General	FY 2021 O&M
1	Customer Service	100.0%									$138,940
2	Meters		100.0%								$15,000
3	Private Fire Protection			100.0%							$0
4	Water Supply				100.0%						$460,490
5	Storage					62.5%	37.5%	0.0%			$24,000
6	Treatment					62.5%	37.5%	0.0%			$300,000
7	Transmission					62.5%	37.5%	0.0%			$461,900
8	Distribution					26.7%	16.0%	57.3%			$78,700
9	SCADA					44.6%	26.7%	28.7%			$36,000
10	Conservation								100.0%		$55,500
11	General/Admin									100.0%	$1,848,558
12	General Operating	0.5%	0.0%	0.1%	18.3%	32.6%	19.6%	15.8%	0.1%	13.1%	$1,968,236
13	**Total O&M**	**$147,841**	**$15,000**	**$1,230**	**$819,820**	**$1,169,936**	**$701,962**	**$366,240**	**$58,122**	**$2,107,175**	**$5,387,325**
14											
15	*O&M Allocation*	*2.7%*	*0.3%*	*0.0%*	*15.2%*	*21.7%*	*13.0%*	*6.8%*	*1.1%*	*39.1%*	***100.0%***
16											
17	**Operating Revenue Requirement**	**$144,916**	**$14,703**	**$1,205**	**$803,604**	**$1,146,795**	**$688,077**	**$358,996**	**$56,972**	**$2,065,495**	**$5,280,764**

6.6.Capital Allocation

Capital assets are utilized in COS analyses to allocate the capital revenue requirement to the various cost causation components. The distribution of short-term CIP project costs can be heavily weighted to specific cost causation components based on the type of CIP projects planned. Use of short-term CIP to allocate capital costs may cause rates to fluctuate and result in customer confusion. The overall capital asset base however is quite stable in the long-term, and therefore is more representative of long-term capital investment in the District's potable water system. Thus, functionalized Potable Water Fund capital assets are used to allocate capital costs.

District staff provided Raftelis with a detailed asset listing that included the original cost of each individual asset. As part of the capital asset analysis, Raftelis assigned each individual asset listing to the most closely associated functional category based on descriptions of each asset. Total water asset value by functional category is shown in Table 6-6. Percentages are rounded to the nearest one-tenth of one percent.

Table 6-6: Summary of Potable Water Fund Capital Assets by Functional Category

[A]	[B]	[C]	[D]
Line	Functional Category	Asset Value (Original Cost)	Percent of Total
1	Customer Service	$166,477	0.5%
2	Meters	$0	0.0%
3	Private Fire protection	$23,000	0.1%
4	Water Supply	$6,720,947	18.3%
5	Storage	$7,266,345	19.7%
6	Treatment	$5,521,876	15.0%
7	Transmission	$1,720,268	4.7%
8	Distribution	$9,766,889	26.5%
9	SCADA	$742,072	2.0%
10	Conservation	$49,033	0.1%
11	General/Admin	$4,837,199	13.1%
12	**Total**	**$36,814,107**	**100.0%**

Table 6-7 shows the allocation of capital assets by functional category to each cost causation component. The percentage allocation of each functional category (Columns C-K) to the various cost causation components was determined in Table 6-3. Total asset value associated with each functional category (Column L) was determined in Table 6-6. The total dollar amount allocated to each cost causation component (Line 12) is determined by multiplying the total asset value associated with each functional category by the corresponding percentage allocation and summing across all functional categories. This is consistent with the methodology used to determine the allocation of O&M expenses to cost causation components (shown previously in Section 6.5). The final capital allocation percentages (Line 14) represent the proportion of total capital assets allocated to each cost causation component (Line 12). The capital allocation percentages (Line 14) are used to allocate the total capital revenue requirement. The total capital revenue requirement (Column L, Line 16) equals the capital revenue requirement (calculated previously in Table 6-1, Column D, Line 20). This total is allocated to each cost causation component (Columns C-K, Line 16) based on the final capital allocation percentages (Columns C-K, Line 14).

Table 6-7: Allocation of Functionalized Potable Water Fund Capital Assets to Cost Causation Components

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]
Line	Functional Category	Customer Service	Meters	Private Fire Protection	Water Supply	Base Delivery	Max Day	Max Hour	Conservation	General	Asset Value
1	Customer Service	100.0%									$166,477
2	Meters		100.0%								$0
3	Private Fire Protection			100.0%							$23,000
4	Water Supply				100.0%						$6,720,947
5	Storage					62.5%	37.5%	0.0%			$7,266,345
6	Treatment					62.5%	37.5%	0.0%			$5,521,876
7	Transmission					62.5%	37.5%	0.0%			$1,720,268
8	Distribution					26.7%	16.0%	57.3%			$9,766,889
9	SCADA					44.6%	26.7%	28.7%			$742,072
10	Conservation								100.0%		$49,033
11	General/Admin									100.0%	$4,837,199
12	**Total Assets**	**$166,477**	**$0**	**$23,000**	**$6,720,947**	**$12,002,726**	**$7,201,635**	**$5,813,089**	**$49,033**	**$4,837,199**	**$36,814,107**
13											
14	*Capital Allocation*	*0.5%*	*0.0%*	*0.1%*	*18.3%*	*32.6%*	*19.6%*	*15.8%*	*0.1%*	*13.1%*	***100.0%***
15											
16	**Capital Revenue Requirement**	**$8,029**	**$241,377**	**$1,109**	**$324,151**	**$578,891**	**$347,335**	**$280,365**	**$2,365**	**$233,298**	**$2,016,921**

6.7.Preliminary Cost of Service Allocation

Table 6-8 shows the preliminary allocation of the total FY 2021 potable water rate revenue requirement to the various cost causation components. The preliminary COS allocations (Column H) are subject to further adjustments based on additional reallocations developed in the following subsections. The results shown in Table 6-8 are calculated as follows based on intermediate results developed in the preceding subsections:

1. **Operating Revenue Requirement** (Column C): The allocation of the total operating revenue requirement to each cost causation component was previously determined in Table 6-5, Columns C-K, Line 17.
2. **Capital Revenue Requirement** (Column D): The allocation of the total capital revenue requirement to each cost causation component was previously determined in Table 6-7, Columns C-K, Line 16).
3. **Transfer to Recycled Water Fund** (Column E): The Potable Water Fund transfer to the Recycled Water Fund (from Table 6-1, Column E, Line 20) is allocated fully to the Conservation cost causation factor (Column E, Line 8). Because the recycled water system reduces the strain on scarce groundwater resources needed to meet potable water demand, Raftelis determined that Conservation was the most closely associated cost causation component to attribute the Recycled Water Fund transfer to.
4. **Revenue Offsets** (Column F)**:** Total revenue offsets (from Table 6-1, Column F, Line 20) are allocated fully to a Revenue Offsets cost causation factor (Column F, Line 10). Note that the Revenue Offsets cost causation factor was not included within the operation or capital revenue requirement allocation, as it pertains exclusively to property tax revenues used to offset the total revenue required from rates.
5. **Reallocation of General Costs** (Column G): The portion of the operating and capital revenue requirements allocated to the General cost causation component (Columns C-D, Line 9) is fully reallocated to all other cost causation components (excluding Revenue Offsets) on a proportional basis (Column G, Lines 1-8). Because the General revenue requirement is associated with indirect costs, a proportional reallocation to other cost causation components is the most appropriate reallocation method. The Revenue Offsets cost causation component pertains solely to property tax revenue and is therefore omitted from the General cost reallocation. Note that the reallocation results in a shifting of costs between cost causation components but does not change the total rate revenue requirement.
6. **Preliminary Cost of Service Allocation** (Column H): The preliminary COS allocation to each cost causation component (Column H, Lines 1-10) equals the sum of Columns C-G. Note that the total COS allocation (Column H, Line 11) equals the total FY 2021 rate revenue requirement (from Table 6-1, Column G, Line 20).

Table 6-8: Preliminary Cost of Service Allocation (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
Line	Cost Causation Component	Operating Revenue Requirement	Capital Revenue Requirement	Transfer to Recycled Water Fund	Revenue Offsets	Reallocation of General Costs	Preliminary COS Allocation
1	Customer Service	$144,916	$8,029			$66,483	$219,429
2	Meters	$14,703	$241,377			$111,314	$367,395
3	Private Fire Protection	$1,205	$1,109			$1,006	$3,321
4	Water Supply	$803,604	$324,151			$490,219	$1,617,974
5	Base Delivery	$1,146,795	$578,891			$750,131	$2,475,817
6	Max Day	$688,077	$347,335			$450,078	$1,485,490
7	Max Hour	$358,996	$280,365			$277,921	$917,282
8	Conservation	$56,972	$2,365	$289,515		$151,641	$500,492
9	General	$2,065,495	$233,298			($2,298,794)	$0
10	Revenue Offsets				($975,176)		($975,176)
11	**Total**	**$5,280,764**	**$2,016,921**	**$289,515**	**($975,176)**	**$0**	**$6,612,024**

6.8. Adjusted Cost of Service

The preliminary COS allocations (from Section 6.7) must be adjusted in order to appropriately reallocate a portion of peaking-related costs associated with potable water system capacity needed for fire protection purposes. The following subsections show detailed calculations used to reallocate peaking costs for fire protection. The methodology used to reallocate fire-related peaking costs is consistent with guidance provided in the AWWA's *Manual M1*.

6.8.1. EQUIVALENT FIRE DEMAND

Water systems provide two types of fire protection: fire flows for fire protection from fire hydrants for firefighting; and fire flows from fire lines for private structures with fire suppression sprinkler systems. Raftelis performed a fire demand analysis to determine the share of system capacity attributable to fire hydrants versus private fire lines. The District provided Raftelis with a count of fire hydrants connected to its water system. The projected number of water meters associated with private fire protection in FY 2021 was previously shown in Table 4-5.

Table 6-9 shows the calculation of equivalent fire demand associated with fire hydrants and private fire lines. Each connection size has a fire flow demand factor similar to the hydraulic capacity factor of a water meter. The diameter of the connection (in inches) is raised to the power of 2.63 to determine the fire flow demand factor (Column C).[28] The fire flow demand factor (Column C) is multiplied by the number of connections (Column D) to calculate equivalent fire demand (Column E). Total equivalent fire demand is shown for fire hydrants and private fire lines in Lines 4 and 9 respectively. The proportional share of equivalent fire demand provides the basis for allocating fire-relating peaking costs in subsequent steps of the COS analysis.

[28] Per the Hazen-Williams equation and AWWA *Manual M1;* Note that meter size and connection size vary for private fire lines. All private fire lines are assumed to have a 2-inch connection regardless of meter size (per direction from District staff).

Table 6-9: Equivalent Fire Demand

[A]	[B]	[C]	[D]	[E]	[F]
Line	Connection Size	Fire Demand Factor	Unit Count	Equivalent Fire Demand	% of Equivalent Fire Demand
1	**Public Hydrants**				
2	4"	38.32	18	690	1.1%
3	6"	111.31	551	61,332	94.3%
4	**Subtotal**		**569**	**62,022**	**95.4%**
5					
6	**Private Fire Lines**				
7	5/8" Fire Service (Residential/Commercial)	6.19	461	2,854	4.4%
8	3/4" (Multi-Residential, incl Fire Service)	6.19	27	167	0.3%
9	**Subtotal**		**488**	**3,021**	**4.6%**
10					
11	**Total**		**1,057**	**65,043**	**100.0%**

6.8.2.PEAKING UNITS OF SERVICE

Peaking units of service are developed to attribute peaking costs (Max Day and Max Hour) to each customer class and to fire protection. Table 6-10 shows the calculation of peaking units of service for non-fire related potable water service. This provides a basis to attribute peaking costs to specific customer classes based on actual water use patterns. Raftelis estimated Max Day (Column C) and Max Hour (Column D) factors based on analysis of account-level FY 2020 water use data and systemwide peaking factors (from Table 6-2). Projected FY 2021 water use in Column E (from Table 5-3) is divided by 365 days to determine average daily water use (Column F). Average daily water use (Column F) is then multiplied by the Max Day factor (Column C) to determine Max Day demand (Column G). Max Day requirements (Column H) are determined by subtracting average daily water use (Column F) from Max Day demand (Column G). Max Hour requirements (Column J) are similarly calculated. Max Hour demand (Column H) equals average daily water use (Column F) multiplied by the Max Hour factor (Column D). Max Hour requirements (Column J) equal Max Hour demand (Column H) less Max Day demand (Column G).

Table 6-10: Peaking Units by Customer Class and Tier

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line	Customer Class	Max Day Factor	Max Hour Factor	Annual Water Use (cGal)	Average Day Demand (cGal/Day)	Max Day Demand (cGal/Day)	Max Hour Demand (cGal/Day)	Max Day Requirements (cGal/Day)	Max Hour Requirements (cGal/Day)
1	Residential Tier 1	1.02	2.38	1,184,078	3,244	3,296	7,727	52	4,431
2	Residential Tier 2	1.17	2.73	537,303	1,472	1,717	4,025	245	2,308
3	Residential Tier 3	1.32	3.10	128,027	351	463	1,086	113	623
4	Residential Tier 4	1.82	4.27	394,740	1,081	1,971	4,621	890	2,650
5	CII	1.34	3.15	747,727	2,049	2,751	6,449	702	3,698
6	Landscape Potable	1.47	3.45	183,679	503	742	1,739	238	997
7	**Total**			**3,175,554**	**8,700**	**10,941**	**25,646**	**2,240**	**14,705**

Table 6-11 shows the methodology used to calculate peaking units of service associated with fire protection based on assumptions provided by District staff regarding the duration and water flow rate in gallons per minute (gpm) associated with fighting a fire in the District's service area:

Max Day Requirements (cGal/day) = Duration of Fire (hrs.) × Water Use Rate (gpm) × 60 mins/hr ÷ 100 gallons/cGal

Max Hour Requirements (cGal /day) = [Water Use Rate (gpm) × 60 mins/hr × 24 hrs/day ÷ 100 gallons/ cGal] – Max Day Requirements (cGal /day)

Table 6-11: Peaking Units for Fire Protection

[A]	[B]	[C]
Line	Description	Value
1	Duration of Fire (Hours)	3
2	Water Use Rate (gallons per minute)	1,500
3	Max Day Requirements (cGal/Day)	2,700
4	Max Hour Requirements (cGal/Day)	18,900

Table 6-12 shows the distribution of fire-related Max Day and Max Hour requirements (from Table 6-11) to public hydrants versus private fire lines based on proportional equivalent fire demand (from Table 6-9).

Table 6-12: Allocation of Peaking Units to Public and Private Fire Protection

[A]	[B]	[C]
Line	Description	Value
1	**Max Day Requirements (cGal/Day)**	**2,700**
2	Allocation to Hydrant Fire Protection (95.4%)	2,575
3	Allocation to Private Fire Protection (4.6%)	125
4		
5	**Max Hour Requirements (cGal/Day)**	**18,900**
6	Allocation to Hydrant Fire Protection (95.4%)	18,022
7	Allocation to Private Fire Protection (4.6%)	878

Peaking units (from Table 6-10 and Table 6-12) are summarized below in Table 6-13. The percentage of Max Day and Max Hour Requirements attributed to each customer class is shown in Columns D and F respectively.

Table 6-13: Summary of Total Peaking Units

[A]	[B]	[C]	[D]	[E]	[F]
Line	Customer Class	Max Day Requirements (cGal/Day)	% of Max Day Requirements	Max Hour Requirements (cGal/Day)	% of Max Hour Requirements
1	Residential Tier 1	52	1.1%	4,431	13.2%
2	Residential Tier 2	245	5.0%	2,308	6.9%
3	Residential Tier 3	113	2.3%	623	1.9%
4	Residential Tier 4	890	18.0%	2,650	7.9%
5	CII	702	14.2%	3,698	11.0%
6	Landscape Potable	238	4.8%	997	3.0%
7	Fire Hydrants	2,575	52.1%	18,022	53.6%
8	Private Fire Lines	125	2.5%	878	2.6%
9	**Total**	**4,940**	**100.0%**	**33,605**	**100.0%**

6.8.3.ADJUSTED COST OF SERVICE ALLOCATION

Table 6-14 shows the final adjusted COS allocation. The adjusted COS allocation (Column G) incorporates adjustments to the preliminary COS allocations developed in Section 6.7, and ultimately provides the underlying basis for FY 2021 rate calculations shown subsequently in Section 7. The results shown in Table 6-14 are calculated as follows based on intermediate results developed in the preceding subsections:

1. **Preliminary Cost of Service Allocation** (Column C): The preliminary COS allocations were previously developed in Section 6.7 (see Table 6-8, Column H, Lines 1-11). The General cost causation component is excluded because all General costs were previously reallocated to other cost causation components.
2. **Reallocation of Fire Hydrant Costs** (Column D): Fire protection costs associated with fire flow for fire hydrants are reallocated to the Meters cost causation component to recover associated peaking costs from all metered connections. Preliminary Max Day (Column C, Line 6) and Max Hour costs (Column C, Line 7) associated with fire hydrants are reallocated from Max Day (Column D, Line 6) and Max Hour (Column D, Line 7) to Meters (Column D, Line 2) based on the percentage of peaking units associated with fire flow for fire hydrants (Table 6-13, Column D and F, Line 7). Note that the reallocation results in a shifting of costs between cost causation components but does not change the total rate revenue requirement.
3. **Reallocation of Private Fire Costs** (Column E): Preliminary peaking costs (Column C, Lines 6-7) associated with private fire protection are reallocated from Max Day (Column E, Line 6) and Max Hour (Column E, Line 7) to Private Fire Protection (Column E, Line 3) based on the percentage of peaking units associated with private fire lines (Table 6-13, Column D and F, Line 8). Note that the reallocation results in a shifting of costs between cost causation components but does not change the total rate revenue requirement.
4. **Reallocation of Base Delivery to Meters** (Column F): The District currently collects approximately 35 percent of its potable water rate revenues from fixed Basic Meter Charges. Without any additional cost reallocation, this updated COS analysis would reduce the proportion of revenues from fixed charges to approximately 29 percent. This would reduce revenue stability and increase the risk of revenue insufficiency resulting from decreases in potable water sales. To maintain the existing proportion of 35 percent fixed (from Basic Meter Charges) and 65 percent variable (from Volumetric Rates), Raftelis reallocated 15 percent of Base Delivery costs (Columns C, Line 5) to Meters (Column F, Line 2). This is appropriate because Base Delivery and Meter costs are uniformly allocated to all District customers (excluding private fire lines) in proportion to water use or meter capacity.
5. **Adjusted Cost of Service Allocation** (Column G): The final COS allocation (Column G) equals the sum of Columns C to F. This represents the final adjusted allocation of the total potable water revenue requirement (from Table 6-1, Column G, Line 20) to the various cost causation components.

Table 6-14: Adjusted Cost of Service Allocation (Test Year FY 2020-21)

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Line	Cost Causation Component	Preliminary COS Allocation	Reallocation of Fire Hydrant Costs	Reallocation of Private Fire Costs	Reallocation of Base Delivery to Meters	Adjusted COS Allocation
1	Customer Service	$219,429				$219,429
2	Meters	$367,395	$1,266,060		$371,373	$2,004,828
3	Private Fire Protection	$3,321		$61,665		$64,986
4	Water Supply	$1,617,974				$1,617,974
5	Base Delivery	$2,475,817			($371,373)	$2,104,444
6	Max Day	$1,485,490	($774,132)	($37,705)		$673,653
7	Max Hour	$917,282	($491,928)	($23,960)		$401,394
8	Conservation	$500,492				$500,492
9	Revenue Offsets	($975,176)				($975,176)
10	**Total**	**$6,612,024**	**$0**	**$0**	**$0**	**$6,612,024**

6.9. Allocation to Customer Classes

The final adjusted cost of service allocation determines how much revenue must be generated from The District's potable water rates in the test year (FY 2021). Each cost causation component is recovered by either Basic Meter Charges or Volumetric Rates (see Table 6-15). Basic Meter Charges are designed to recover the proportion of the potable water rate revenue requirement allocated to the Customer Service, Meters, and Private Fire Protection cost causation components (Lines 1-3). Volumetric Rates are designed to recover the proportion of the potable water rate revenue requirement allocated to all remaining cost causation components (Lines 4-9).

Table 6-15: Proposed Recovery of Cost Causation Components by Charge

[A]	[B]	[C]
Line	Cost Causation Component	Associated Charge
1	Customer Service	Potable Water Basic Meter Charges
2	Meters	Potable Water Basic Meter Charges
3	Private Fire Protection	Potable Water Basic Meter Charges
4	Water Supply	Potable Water Volumetric Rates
5	Base Delivery	Potable Water Volumetric Rates
6	Max Day	Potable Water Volumetric Rates
7	Max Hour	Potable Water Volumetric Rates
8	Conservation	Potable Water Volumetric Rates
9	Revenue Offsets	Potable Water Volumetric Rates

Table 6-16 shows estimated potable water rate revenues for FY 2021 based on current potable water rates (i.e., the current COS) and based on the updated COS allocations developed in Section 6.8 (i.e., the proposed COS). All proposed COS projections for FY 2021 are for illustrative purposes to demonstrate the impact of the updated COS allocations on each customer class. However, no changes to current rates will be implemented prior to FY 2022. Note that the results shown are based on detailed calculations that are dependent on rate design considerations addressed subsequently in Section 7. Table 6-16 demonstrates that the proposed COS will result in distributional

impacts, most notably to residential and CII customers. The primary cause of these distributional impacts is the proposed allocation of Revenue Offsets to each customer class (described in detail subsequently in Section 7.2.5).

Table 6-16: Cost to Serve by Potable Water Customer Class

[A]	[B]	[C]	[D]
Line	Charge/Customer Class	Current COS	Proposed COS
1	**Basic Fixed Charges**		
2	Basic Meter Charge (excluding 5/8" Fire Service)	33.9%	33.7%
3	Basic Meter Charge (5/8" Fire Service)	1.0%	0.9%
4	**Subtotal**	34.9%	34.6%
5			
6	**Volumetric Rates**		
7	Residential	40.6%	45.0%
9	CII	18.8%	14.5%
10	Landscape Potable	5.8%	5.9%
12	**Subtotal**	65.1%	65.4%
13			
14	**Total**	**100.0%**	**100.0%**

7.Proposed Rates

Raftelis developed an updated five-year schedule of water rates based on the results of the proposed financial plan and cost of service analyses. Detailed calculations of proposed water rates through FY 2026 are shown in this section. All proposed rates are first calculated directly from the results of the COS analysis (in Section 6) for FY 2021 (i.e., the "test year"). Note however that proposed rates will not be implemented until FY 2022. Therefore, all FY 2021 "COS" rates and charges shown represent intermediate results of the rate design process but will never actually be implemented. However, FY 2021 "COS" rates and charges must be calculated first to provide a basis for calculating proposed rates for FY 2022 through FY 2026.

7.1.Potable Water Basic Meter Charges (Test Year FY 2021)

Basic Meter Charges for the test year FY 2021 are designed to recover the portion of the potable water rate revenue requirement allocated to the Customer Service, Meters, and Private Fire Protection cost causation components. Monthly charges are first calculated individually for each aforementioned cost causation component in the following subsections. This provides a basis to calculate the revised Basic Meter Charges for the test year FY 2021.

7.1.1.CUSTOMER SERVICE UNIT CHARGE

Customer Service pertains to costs such as billing and customer support. Customer Service costs generally do not vary by meter size and are therefore applied equally to all water meters except for dedicated private fire connections. Water meters classified as 5/8" Fire Service (Residential/Commercial) are billed jointly with a non-fire related meter. To ensure that these customers are not doubly charged for billing costs, Customer Service costs are excluded from the 5/8" Fire Service (Residential/Commercial) Basic Meter Charge.

Customer Service unit charges are calculated per customer bill. To determine the total number of customer bills for the test year FY 2021, Raftelis multiplied the total number of potable water meters excluding 5/8" Fire Service meters (from Table 4-5) by twelve monthly billing periods per year (see Table 7-1). The Customer Service monthly unit charge (see Table 7-2) is then calculated by simply dividing the Customer Service revenue requirement (from Table 6-14) by total annual bills (from Table 7-1). The unit charge is then applied equally to all water meter sizes excluding 5/8" Fire Service meters (see Table 7-3).

Table 7-1: Annual Customer Bills (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E=C×D]
Line	Meter Size	Number of Meters	Customer Bills per Year	Annual Customer Bills
1	5/8"	3,561	12	42,732
2	5/8" Fire Service (Residential/Commercial)	461	0	0
3	3/4" (Multi-Residential, incl Fire Service)	27	12	324
4	3/4"	60	12	720
5	1"	117	12	1,404
6	1 1/2"	44	12	528
7	2"	32	12	384
8	3"	3	12	36
9	4"	1	12	12
10	6"	0	12	0
11	**Total**	**4,306**		**46,140**

Table 7-2: Customer Service Unit Charge Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Customer Service	FY 2021	Notes
1	Revenue Requirement	$219,429	*From Table 6-14*
2	Units of Service	46,140	*Annual customer bills from Table 7-1*
3	Monthly Unit Charge	$4.76	*= [Line 1] ÷ [Line 2]*

Table 7-3: Customer Service Monthly Charge by Meter Size (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Meter Size	Separate Bill Received	Monthly Charge
1	5/8"	Yes	$4.76
2	5/8" Fire Service (Residential/Commercial)	No	$0.00
3	3/4" (Multi-Residential, incl Fire Service)	Yes	$4.76
4	3/4"	Yes	$4.76
5	1"	Yes	$4.76
6	1 1/2"	Yes	$4.76
7	2"	Yes	$4.76
8	3"	Yes	$4.76
9	4"	Yes	$4.76
10	6"	Yes	$4.76

7.1.2.METERS UNIT CHARGE

The revenue requirement allocation to the Meters cost causation component includes costs associated with meter maintenance/replacement as well a portion of reallocated Base Delivery costs (i.e., costs associated with delivering water under average day demand conditions). Meter maintenance/replacement costs are to be recovered by meter size in proportion to meter replacement costs. All other costs allocated to the Meters cost causation component are to be recovered in proportion to meter capacity. The Meters revenue requirement is therefore separated out into two distinct sub-components shown below (see Table 7-4). The Meter Maintenance/Replacement sub-component includes budgeted meter maintenance costs and meter replacement CIP for FY 2021. The remainder of the Meters revenue requirement is attributed to the Meter Capacity sub-component

Table 7-4: Differentiation of Meters Revenue Requirement (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Description	FY 2021	Notes
1	**Meters Revenue Requirement**	**$2,004,828**	*From Table 6-14*
2			
3	Meter Maintenance/Replacement		
4	*Meter Maintenance Costs*	*$15,000*	*From FY 2021 Adopted Budget*
5	*Meter Replacement Costs*	*$241,377*	*Based on FY 2021 CIP expenditures*
6	Subtotal - Meter Maintenance/Replacement	$256,377	*=[Line 4] + [Line 5]*
7			
8	Subtotal - Meter Capacity	$1,748,450	*=[Line 1] – [Line 6]*

Meter Maintenance/Replacement unit charges are calculated per equivalent meter replacement unit. Larger meters are more costly to maintain and repair. Therefore, the most appropriate method of apportioning Meter Maintenance/Replacement costs to various meter sizes is in proportion to meter replacement costs. District staff provided Raftelis with current meter replacement costs for each meter size (see Table 7-5, Column C).[29] The meter replacement ratio (Column D) represents the cost ratio relative to a 5/8" meter. To determine the total number of annual equivalent meter replacement units for the test year FY 2021 (Column F), Raftelis multiplied the meter replacement ratio (Column D) by the number of potable water meters from Table 4-5 (Column E) and by twelve monthly billing periods per year.

The Meter Maintenance/Replacement monthly unit charge (see Table 7-6) is then calculated by dividing the Meter Maintenance/Replacement revenue requirement (from Table 7-4) by total annual equivalent meter replacement units (from Table 7-5). The unit charge is then applied differentially to each water meter size by multiplying the unit charge by the meter replacement ratio (see Table 7-7). Note that 5/8" Fire Service (Residential/Commercial) Basic Meter Charges are based on private fire protection costs only and are therefore not subject to the Meter Maintenance/Replacement unit charge. Additionally, 3/4" (Multi-Residential, incl Fire Service) are allocated Meter Maintenance/Replacement Costs based on a 5/8" meter replacement ratio, as these connections require upsizing from 5/8" to 3/4" solelyto provide fire protection needs.

Table 7-5: Equivalent Meter Replacement Units (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E]	[F=D×E×12]
Line	Meter Size	Meter Replacement Cost	Meter Replacement Ratio	Number of Meters	Annual Equivalent Meter Replacement Units
1	5/8"	$237	1.00	3,561	42,732
2	5/8" Fire Service (Residential/Commercial)	N/A	0.00	461	0
3	3/4" (Multi-Residential, incl Fire Service)	N/A	1.00	27	324
4	3/4"	$266	1.12	60	808
5	1"	$330	1.39	117	1,955
6	1 1/2"	$844	3.56	44	1,880
7	2"	$1,567	6.61	32	2,539
8	3"	$2,142	9.04	3	325
9	4"	$3,119	13.16	1	158
10	6"	$3,119	13.16	0	0
11	**Total**			**4,306**	**50,721**

Table 7-6: Meter Maintenance/Replacement Unit Charge Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Meter Maintenance/Replacement	FY 2021	Notes
1	Revenue Requirement	$256,377	*From Table 7-4*
2	Units of Service	50,721	*Annual Equivalent Meter Replacement Units from Table 7-5*
3	Bi-Monthly Unit Charge	$5.05	*= [Line 1] ÷ [Line 2]*

[29] District staff provided a range of costs for meters sized 1 ½" and larger. Raftelis took the average of the minimum and maximum cost for each of these meter sizes.

Table 7-7: Meter Maintenance/Replacement Monthly Charge by Meter Size (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E=C×D]
Line	Meter Size	Monthly Unit Charge	Meter Replacement Ratio	Monthly Unit Charge
1	5/8"	$5.05	1.00	$5.05
2	5/8" Fire Service (Residential/Commercial)	$5.05	0.00	$0.00
3	3/4" (Multi-Residential, incl Fire Service)	$5.05	1.00	$5.05
4	3/4"	$5.05	1.12	$5.67
5	1"	$5.05	1.39	$7.04
6	1 1/2"	$5.05	3.56	$18.00
7	2"	$5.05	6.61	$33.42
8	3"	$5.05	9.04	$45.67
9	4"	$5.05	13.16	$66.51
10	6"	$5.05	13.16	$66.51

Meter Capacity unit charges are calculated per equivalent meter unit. Meter Capacity costs include reallocated Base Delivery costs, which vary based on water use. Larger meters typically use more water, which is correlated with meter capacity. Therefore, the most appropriate method of apportioning Meter Capacity costs to various meter sizes is in proportion to meter capacity. Raftelis calculated meter capacity ratios (Table 7-8, Column D) based on safe operating capacity ratings by meter size from the AWWA *Manual M1* Table B-2 (Column C). Meter capacity ratios represent meter capacity normalized to a 5/8" water meter. To determine the total number of annual equivalent meter units for the test year FY 2021 (Column F), Raftelis multiplied the meter capacity ratio (Column D) by the number of potable water meters from Table 4-5 (Column E) and by twelve monthly billing periods per year.

The Meter Capacity monthly unit charge (see Table 7-9) is then calculated by dividing the Meter Capacity revenue requirement (from Table 7-4) by total annual equivalent meter units (from Table 7-8). The unit charge is then applied differentially to each water meter size by multiplying the unit charge by the meter capacity ratio (see Table 7-10). No Meter Capacity costs are allocated to 5/8" Fire Service (Residential/Commercial) water meters, as reallocated Base Delivery costs cannot be allocated dedicated private fire lines, which use no water under average water demand conditions. Additionally, 3/4" (Multi-Residential, incl Fire Service) are allocated Meter Capacity Costs based on a 5/8" meter capacity ratio, as these connections require upsizing from 5/8" to 3/4" solely due to provide fire protection needs.

Table 7-8: Equivalent Meter Units (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E]	[F=D×E×12]
Line	Meter Size	Meter Capacity (gpm)	Meter Capacity Ratio	Number of Meters	Annual Equivalent Meter Units
1	5/8"	20	1.00	3,561	42,732
2	5/8" Fire Service (Residential/Commercial)	N/A	0.00	461	0
3	3/4" (Multi-Residential, incl Fire Service)	20	1.00	27	324
4	3/4"	30	1.50	60	1,080
5	1"	50	2.50	117	3,510
6	1 1/2"	100	5.00	44	2,640
7	2"	160	8.00	32	3,072
8	3"	350	17.50	3	630
9	4"	630	31.50	1	378
10	6"	1,300	65.00	0	0
11	**Total**			**4,306**	**54,366**

Table 7-9: Meter Capacity Unit Charge Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Meter Capacity	FY 2021	Notes
1	Revenue Requirement	$1,748,450	*From Table 7-4*
2	Units of Service	54,366	*Annual Equivalent Meter Units from Table 7-8*
3	Monthly Unit Charge	$32.16	*= [Line 1] ÷ [Line 2]*

Table 7-10: Meter Capacity Monthly Charge by Meter Size (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E=C×D]
Line	Meter Size	Monthly Unit Charge	Meter Capacity Ratio	Monthly Charge
1	5/8"	$32.16	1.00	$32.16
2	5/8" Fire Service (Residential/Commercial)	$32.16	0.00	$0.00
3	3/4" (Multi-Residential, incl Fire Service)	$32.16	1.00	$32.16
4	3/4"	$32.16	1.12	$48.24
5	1"	$32.16	1.39	$80.40
6	1 1/2"	$32.16	3.56	$160.80
7	2"	$32.16	6.61	$257.29
8	3"	$32.16	9.04	$562.81
9	4"	$32.16	13.16	$1,013.06
10	6"	$32.16	13.16	$2,090.45

7.1.3.PRIVATE FIRE PROTECTION UNIT CHARGE

Private Fire Protection unit charges pertain to private fire lines only and are calculated per equivalent fire demand unit. Equivalent fire demand was previously calculated as part of the COS analysis in Section 6.8.1. To determine the total number of annual equivalent fire demand units for the test year FY 2021 (Table 7-11, Column E), Raftelis multiplied the fire demand factor from Table 6-9 (Column C) by the number of potable water meters from Table 4-5 (Column D) and by twelve monthly billing periods per year.

The Private Fire Protection monthly unit charge (see Table 7-12) is then calculated by dividing the Private Fire Protection revenue requirement (from Table 6-14) by total annual equivalent meter replacement units (from Table 7-11). The unit charge is then applied to each water meter size by multiplying the unit charge by the fire demand factor (see Table 7-13). Note that only 5/8" Fire Service (Residential/Commercial) and 3/4" (Multi-Residential, incl Fire Service) are subject to Private Fire Protection unit charges.

Table 7-11: Equivalent Fire Demand Units (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E=C×D×12]
Line	Meter Size	Fire Demand Factor	Number of Meters	Annual Equivalent Fire Demand Units
1	5/8"	N/A	3,561	0
2	5/8" Fire Service (Residential/Commercial)	6.19	461	34,245
3	3/4" (Multi-Residential, incl Fire Service)	6.19	27	2,006
4	3/4"	N/A	60	0
5	1"	N/A	117	0
6	1 1/2"	N/A	44	0
7	2"	N/A	32	0
8	3"	N/A	3	0
9	4"	N/A	1	0
10	6"	N/A	0	0
11	**Total**		**4,306**	**36,250**

Table 7-12: Private Fire Protection Unit Charge Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Private Fire Protection	FY 2021	Notes
1	Revenue Requirement	$64,986	*From Table 6-14*
2	Units of Service	36,250	*Annual Equivalent Fire Demand Units from Table 7-11*
3	Monthly Unit Charge	$1.79	*= [Line 1] ÷ [Line 2]*

Table 7-13: Private Fire Protection Monthly Charge by Meter Size (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E=C×D]
Line	Meter Size	Monthly Unit Charge	Fire Demand Factor	Monthly Charge
1	5/8"	$1.79	N/A	$0.00
2	5/8" Fire Service (Residential/Commercial)	$1.79	6.19	$11.10
3	3/4" (Multi-Residential, incl Fire Service)	$1.79	6.19	$11.10
4	3/4"	$1.79	N/A	$0.00
5	1"	$1.79	N/A	$0.00
6	1 1/2"	$1.79	N/A	$0.00
7	2"	$1.79	N/A	$0.00
8	3"	$1.79	N/A	$0.00
9	4"	$1.79	N/A	$0.00
10	6"	$1.79	N/A	$0.00

7.1.4.POTABLE WATER BASIC METER CHARGE CALCULATION

Monthly Basic Meter Charges for the test year FY 2021 are calculated in Table 7-14 by summing the Customer Service charge (from Table 7-3), Meter Maintenance/Replacement charge (from Table 7-7), Meter Capacity charge (from Table 7-10), and Private Fire Protection charge (from Table 7-13). Updated COS charges for FY 2021 are then compared to current Basic Meter Charges in Table 7-15. Note that COS Basic Meter Charges calculated below will never be implemented but are required to calculate proposed Basic Meter Charges through FY 2026 (shown subsequently in Section 7.3).

Table 7-14: Potable Water Basic Meter Charge Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E]	[F]	[G=C+D+E+F]
Line	Meter Size	Customer Service	Meter Maintenance/ Replacement	Meter Capacity	Private Fire Protection	Monthly Basic Meter Charge
1	5/8"	$4.76	$5.05	$32.16	$0.00	**$41.97**
2	5/8" Fire Service (Residential/Commercial)	$0.00	$0.00	$0.00	$11.10	**$11.10**
3	3/4" (Multi-Residential, incl Fire Service)	$4.76	$5.05	$32.16	$11.10	**$53.07**
4	3/4"	$4.76	$5.67	$48.24	$0.00	**$58.67**
5	1"	$4.76	$7.04	$80.40	$0.00	**$92.20**
6	1 1/2"	$4.76	$18.00	$160.80	$0.00	**$183.56**
7	2"	$4.76	$33.42	$257.29	$0.00	**$295.46**
8	3"	$4.76	$45.67	$562.81	$0.00	**$613.24**
9	4"	$4.76	$66.51	$1,013.06	$0.00	**$1,084.33**
10	6"	$4.76	$66.51	$2,090.45	$0.00	**$2,161.71**

Table 7-15: Comparison to Current Potable Water Basic Meter Charges

[A]	[B]	[C]	[D]	[E]	[F]
Line	Meter Size	COS Monthly Basic Meter Charge	Current Monthly Basic Meter Charge	Difference ($)	Difference (%)
1	5/8"	**$41.97**	$42.95	*($0.98)*	*-2.3%*
2	5/8" Fire Service (Residential/Commercial)	**$11.10**	$11.69	*($0.59)*	*-5.1%*
3	3/4" (Multi-Residential, incl Fire Service)	**$53.07**	$54.64	*($1.57)*	*-2.9%*
4	3/4"	**$58.67**	$67.58	*($8.91)*	*-13.2%*
5	1"	**$92.20**	$72.70	*$19.50*	*26.8%*
6	1 1/2"	**$183.56**	$170.84	*$12.72*	*7.4%*
7	2"	**$295.46**	$231.97	*$63.50*	*27.4%*
8	3"	**$613.24**	$413.56	*$199.69*	*48.3%*
9	4"	**$1,084.33**	$723.10	*$361.23*	*50.0%*
10	6"	**$2,161.71**	$1,544.64	*$617.07*	*39.9%*

7.2.Potable Water Volumetric Rates (Test Year FY 2021)

Volumetric Rates are designed to recover the portion of the rate revenue requirement allocated to the following cost causation components: Water Supply, Base Delivery, Peaking (Max Day and Max Hour), Conservation, and Revenue Offsets. Unit rates are calculated individually for each aforementioned cost causation component in the following subsections. This provides a basis to calculate the revised Volumetric Rates for the test year FY 2021. However, the costs associated with each cost causation component listed above are not uniformly applied to each customer class and tier. Customer classes are only subject to each unit cost if the service they receive contributes to the District's incurring of costs associated with that specific cost causation component. Table 7-16 shows which components (Columns C-G) each customer class and tier are subject to. The rationale behind differentiated cost allocations to each customer class and tier is provided in the following subsections.

Table 7-16: Allocation of Costs to Customer Classes

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Line	Customer Class/Tier	Water Supply	Base Delivery	Peaking	Conservation	Revenue Offset
1	Residential Tier 1	✓	✓	✓		✓
2	Residential Tier 2	✓	✓	✓		✓
3	Residential Tier 3	✓	✓	✓	✓	
4	Residential Tier 3	✓	✓	✓	✓	
5	CII	✓	✓	✓		✓
6	Landscape Potable	✓	✓	✓	✓	✓

7.2.1.WATER SUPPLY UNIT RATE

Water supply unit rates are applied uniformly to all customer classes and tiers, as these costs do not vary significantly based on water use patterns. The revenue requirement associated with the Water Supply cost causation component (from Table 6-14) is divided by total potable water use (from Table 5-3) to determine the Water Supply unit rate (see Table 7-17).

Table 7-17: Water Supply Unit Rate Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Water Supply	FY 2021	Notes
1	Revenue Requirement	$1,617,974	*From Table 6-14*
2	Units of Service	3,175,554 cGal	*Total Potable Water Use from Table 5-3*
3	Unit Rate	$0.510 /cGal	*= [Line 1] ÷ [Line 2]*

7.2.2.BASE DELIVERY UNIT RATE

Base Delivery unit rates are applied uniformly to all customer classes and tiers, as these are costs for providing water during average daily demand conditions. The revenue requirement associated with the Base Delivery cost causation component (from Table 6-14) is divided by total potable water use (from Table 5-3) to determine the Base Delivery unit rate (see Table 7-18).

Table 7-18: Base Delivery Unit Rate Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Base Delivery	FY 2021	Notes
1	Revenue Requirement	$2,104,444	*From Table 6-14*
2	Units of Service	3,175,554 cGal	*Total Potable Water Use from Table 5-3*
3	Unit Rate	$0.663 / cGal	*= [Line 1] ÷ [Line 2]*

7.2.3.PEAKING UNIT RATE

Peaking unit rates vary by customer class and tier based on peak water use characteristics. Before unit rates can be differentiated by customer class and tier, Table 7-19 shows the calculation of Max Day and Max Hour unit costs. The revenue requirement associated with the Max Day and Max Hour cost causation components (from Table 6-14) is divided by total Max Day and Max Hour requirements not associated with fire protection (from Table 6-10) to determine the Max Day and Max Hour unit costs .

Table 7-19: Peaking Unit Costs (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E]
Line	Base Delivery	Max Day	Max Hour	Notes
1	Revenue Requirement	$673,653	$401,394	*From Table 6-14*
2	Units of Service (cGal/day)	2,240	14,705	*Max Day/Hour Requirements from Table 6-10*
3	Unit Cost (per cGal/day)	$300.68	$27.30	*= [Line 1] ÷ [Line 2]*

Table 7-20 shows the development of Peaking unit rates for each customer class and tier. Total Max Day and Max Hour unit costs are allocated to each customer class and tier based on Max Day and Max Hour requirements, respectively. Max Day requirements in Column C (from Table 6-10**)** are multiplied by the Max Day unit cost (from Table 7-19) to determine allocated Max Day costs (Column F). Max Hour requirements in Column E (from Table 6-10) are multiplied by the Max Hour unit cost (from Table 7-19) to determine allocated Max Hour costs (Column G). Total peaking costs (Column H) equal the sum of Max Day costs (Column F) and Max Hour costs (Column G). The Peaking unit rate (Column I) is calculated by dividing total peaking costs (Column H) by FY 2021 water use in Column C (from Table 5-3).

Table 7-20: Peaking Unit Rate Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E]	[F=D×$300.68]	[G=E×$27.30]	[H=F+G]	[I=H÷C]
Line	Customer Class/Tier	Annual Water Use (cGal)	Max Day Requirements (cGal/Day)	Max Hour Requirements (cGal/Day)	Max Day Costs	Max Hour Costs	Total Peaking Costs	Peaking Unit Rate (per cGal)
1	Residential Tier 1[30]	1,184,078	52	4,431	$15,690	$120,934	$136,624	**$0.115**
2	Residential Tier 2[31]	537,303	245	2,308	$73,677	$62,998	$136,675	**$0.254**
3	Residential Tier 3	128,027	113	623	$33,844	$16,998	$50,843	**$0.397**
4	Residential Tier 4	394,740	890	2,650	$267,525	$72,321	$339,846	**$0.861**
5	CII	747,727	702	3,698	$211,213	$100,931	$312,144	**$0.417**
6	Landscape Potable	183,679	238	997	$71,703	$27,212	$98,915	**$0.539**
7	**Total**	**3,175,554**	**2,240**	**14,705**	**$673,653**	**$401,394**	**$1,075,047**	

[30] Includes Rate Assistance (Residential) water use, which is billed at the Tier 1 rate.
[31] Includes Qualifying Medical Needs Residential water use, which is billed at the Tier 2 rate.

7.2.4.CONSERVATION UNIT RATE

Conservation unit rates are applied equally to Tier 3, Tier 4, and Landscape Potable water use. The District's conservation-related efforts are focused primarily on outdoor water use. Because CII water use is heavily associated with indoor water use, no Conservation costs are allocated to CII customers. Tier 1 and Tier 2 residential water is also exempted from Conservation cost allocations because water use within these first two tiers represents efficient water use that it is not targeted for reduction by the District's conservation and efficiency efforts. To calculate the Conservation unit rate, the revenue requirement associated with the Conservation cost causation component (from Table 6-14) is divided by total Tier 3, Tier 4, and Landscape Potable water use (from Table 5-3). The application of Conservation unit rates to each customer class and tier is shown in Table 7-22.

Table 7-21: Conservation Unit Rate Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Conservation	FY 2021	Notes
1	Revenue Requirement	$500,492	*From Table 6-14*
2	Units of Service	706,446 cGal	*Tier 3, Tier 4, & Landscape Potable water use from Table 5-3*
3	Unit Rate	$0.708 / cGal	*= [Line 1] ÷ [Line 2]*

Table 7-22: Conservation Unit Rates by Customer Class and Tier (Test Year FY 2021)

[A]	[B]	[C]
Line	Customer Class/Tier	Conservation Unit Rate (per cGal)
1	Residential Tier 1	$0.000
2	Residential Tier 2	$0.000
3	Residential Tier 3	$0.708
4	Residential Tier 4	$0.708
5	CII	$0.708
6	Landscape Potable	$0.708

7.2.5.REVENUE OFFSET UNIT RATE

Revenue Offsets are allocated equally to all customer classes in proportion to water use. Residential Revenue Offsets are differentiated by tier, however. Table 7-23 shows the preliminary calculation of the Revenue Offset unit rate before differentiation by residential tier. The revenue requirement associated with Revenue Offsets (from Table 6-14) is divided by total water use (from Table 5-3) to determine the preliminary Revenue Offset unit rate.

Table 7-23: Revenue Offset Preliminary Unit Rate Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Revenue Offset	FY 2021	Notes
1	Revenue Requirement	($975,176)	*From Table 6-14*
2	Units of Service	3,175,554 cGal	*Total Potable Water Use from Table 5-3*
3	Unit Rate	($0.307) / cGal	*= [Line 1] ÷ [Line 2]*

Revenue Offsets are applied to all customer classes but are differentiated by residential tier. Raftelis recommends that Revenue Offsets be applied only to Tier 1 and Tier 2 rates to provide for affordability for efficient water use and to incentivize efficiency and conservation. Table 7-24 shows the calculation of Revenue Offset unit rates for

the residential tiers. Because Revenue Offsets are allocated to all customer classes proportionally, the residential customer class is apportioned Revenue Offsets based on total residential water use.

Total residential water use in Line 6 (from Table 5-3) is multiplied by the uniform Revenue Offset unit rate in Line 8 (from Table 7-23) to determine total Revenue Offsets allocated to residential customers (Line 9). Raftelis recommends that Revenue Offsets be applied more heavily to Tier 1 to ensure affordability for essential indoor water use, which is represented by the 300% Tier 1 weighting (Line 12) compared to the 100% Tier 2 weighting (Line 13). Weighted residential water use by tier is calculated by multiplying water use (Lines 2-5) by the weighting percentage (Lines 12-15) for each tier in Lines 18-21. The residential Revenue Offset Allocation (Line 9) is then divided by total weighted water use (Line 22) to determine the weighted residential Revenue Offset unit rate (Line 24). The weighted unit rate (Line 24) is then multiplied by the weighting percentages (Lines 12-15) to determine the Revenue Offset unit rate for each residential tier. The application of Revenue Offset unit rates to each customer class and tier is then shown in Table 7-25.

Table 7-24: Residential Revenue Offset Unit Rates by Tier (Test Year FY 2021)

[A]	[B]	[C]	[D]
Line	Description	FY 2021	Notes
1	**Residential Water Use**		
2	Tier 1	1,184,078 cGal	*Includes Rate Assistance (Residential)*
3	Tier 2	537,303 cGal	*Includes Qualifying Medical Needs Residential*
4	Tier 3	128,027 cGal	
5	Tier 4	394,740 cGal	
6	**Total Residential Water Use**	**2,244,148 cGal**	
7			
8	Preliminary Revenue Offset Unit Rate	($0.3.07) / cGal	*From Table 7-23*
9	Residential Revenue Offset Allocation	($689,152)	*= Line 6 × Line 8*
10			
11	**Revenue Offset Weighting by Tier**		
12	Tier 1	300%	
13	Tier 2	100%	
14	Tier 3	0%	
15	Tier 4	0%	
16			
17	**Weighted Residential Water Use**		
18	Tier 1	3,552,234	*= Line 2 × Line 12*
19	Tier 2	537,303	*= Line 3 × Line 13*
20	Tier 3	0	*= Line 4 × Line 14*
21	Tier 4	0	*= Line 5 × Line 15*
22	**Total Weighted Residential Water Use**	**4,089,536**	
23			
24	Weighted Revenue Offset Unit Rate	($0.169) / cGal	*= Line 9 ÷ Line 22*
25			
26	Tier 1 Unit Rate	($0.506) / cGal	*Line 12 × Line 24*
27	Tier 2 Unit Rate	($0.169) / cGal	*Line 13 × Line 24*
28	Tier 3 Unit Rate	$0.000 / cGal	*Line 14 × Line 24*
29	Tier 4 Unit Rate	$0.000 / cGal	*Line 15 × Line 24*

Table 7-25: Revenue Offset Unit Rates by Customer Class and Tier (Test Year FY 2021)

[A]	[B]	[C]
Line	Customer Class/Tier	Revenue Offset Unit Rate (per cGal)
1	Residential Tier 1	($0.506)
2	Residential Tier 2	($0.169)
3	Residential Tier 3	$0.000
4	Residential Tier 4	$0.000
5	CII	($0.307)
6	Landscape Potable	($0.307)

7.2.6.POTABLE WATER VOLUMETRIC RATE CALCULATION

Table 7-26 shows the calculation of potable water Volumetric Rates for the test year FY 2021. Unit rates are applied to each customer class in accordance with Table 7-16. Volumetric Rates for the test year FY 2021 (Column H) are calculated by summing the Water Supply unit rate (from Table 7-17), Base Delivery unit rate (from Table 7-18), Peaking unit rate (from Table 7-20), Conservation unit rate (from Table 7-22), and Revenue Offset unit rate (from Table 7-25). Note that COS rates calculated below will never be implemented but are required to calculate proposed Volumetric Rates through FY 2026 (shown subsequently in Section 7.3).

Table 7-26: Potable Water Volumetric Rate Calculation (Test Year FY 2021)

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
Line	Customer Class	Water Supply	Base Delivery	Peaking Unit Rate	Conservation	Revenue Offset	Volumetric Rate (per cGal)
1	Residential Tier 1	$0.510	$0.663	$0.115	$0.000	($0.506)	**$0.78**
2	Residential Tier 2	$0.510	$0.663	$0.254	$0.000	($0.169)	**$1.26**
3	Residential Tier 3	$0.510	$0.663	$0.397	$0.708	$0.000	**$2.28**
4	Residential Tier 4	$0.510	$0.663	$0.861	$0.708	$0.000	**$2.74**
5	CII	$0.510	$0.663	$0.417	$0.000	($0.307)	**$1.28**
6	Landscape Potable	$0.510	$0.663	$0.539	$0.708	($0.307)	**$2.11**

Updated COS rates for FY 2021 are then compared to current Volumetric Rates in Table 7-27 In the prior rate study, revenue offsets were applied to residential water use only. In the updated COS analysis, Raftelis allocated revenue offsets to all customer classes to improve customer equity. This particular change is the primary reason for distributional impacts shown below.

Table 7-27: Comparison to Current Potable Water Volumetric Rates

[A]	[B]	[H]	[J]	[K]	[L]
Line	Customer Class	COS Rate (per cGal)	Current Rate (per cGal)	Difference ($)	Difference (%)
1	Residential Tier 1	**$0.78**	$0.70	*$0.08*	*11.2%*
2	Residential Tier 2	**$1.26**	$1.22	*$0.04*	*3.1%*
3	Residential Tier 3	**$2.28**	$1.96	*$0.32*	*16.5%*
4	Residential Tier 4	**$2.74**	$2.36	*$0.38*	*16.0%*
5	CII	**$1.28**	$1.64	*($0.35)*	*-21.6%*
6	Landscape Potable	**$2.11**	$2.05	*$0.07*	*3.2%*

7.3.Proposed Five-Year Potable Water Rate Schedule

Table 7-28 shows the proposed five-year schedule of potable water rates for FY 2022 to FY 2026. Proposed FY 2022 water rates were calculated by increasing updated COS Basic Meter Charges (from Table 7-14) and Volumetric Rates (from Table 7-26) by the proposed FY 2022 revenue adjustment of 5 percent (from Table 4-21). All proposed rates in subsequent years are then increased by 5 percent per year based on the schedule of proposed revenue adjustments (from Table 4-21). Under the proposed rate schedule, residential customers with qualifying medical needs will continue to be charged at the Tier 2 rate, while residential customers who qualify for rate assistance will continue to be charged at the Tier 1 rate.

All proposed rates are rounded up to the nearest cent to ensure adequate revenue recovery. All rates and charges are shown on a monthly basis due to the planned transition to monthly billing for all potable water customers. Current FY 2021 Basic Meter Charges are also shown on a monthly basis to provide a direct comparison to the proposed charges. Proposed Volumetric Rates are shown per hundred gallons in accordance with proposed changes to the District's rate structure (described previously in Section 5). Current FY 2021 Volumetric Rates are also shown per hundred gallons to provide a direct comparison to the proposed rates. Volumetric Rates for the "Other" customer class are omitted from Table 7-28 due to the proposed elimination of this customer class.

Table 7-28: Proposed Five-Year Potable Water Rate Schedule (Monthly)

Monthly Potable Water Rates	Current FY 2021 (Dec. 2020)	COS FY 2021	Proposed FY 2022 (Jan. 2022)	Proposed FY 2023 (Jan. 2023)	Proposed FY 2024 (Jan. 2024)	Proposed FY 2025 (Jan. 2025)	Proposed FY 2026 (Jan. 2026)
Proposed Revenue Adjustment		**N/A**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**
Monthly Basic Meter Charge							
5/8"	$42.95	$41.98	$44.07	$46.28	$48.59	$51.02	$53.57
5/8" Fire Service (Residential/Commercial)	$11.69	$11.10	$11.66	$12.24	$12.85	$13.49	$14.17
3/4" (Multi-Residential, incl Fire Service)	$54.64	$53.07	$55.73	$58.51	$61.44	$64.51	$67.74
3/4"	$67.58	$58.67	$61.61	$64.69	$67.92	$71.32	$74.88
1"	$72.70	$92.20	$96.81	$101.65	$106.73	$112.07	$117.67
1 1/2"	$170.84	$183.56	$192.74	$202.38	$212.50	$223.12	$234.28
2"	$231.97	$295.47	$310.24	$325.75	$342.04	$359.14	$377.10
3"	$413.56	$613.25	$643.91	$676.10	$709.91	$745.40	$782.67
4"	$723.10	$1,084.33	$1,138.55	$1,195.48	$1,255.25	$1,318.01	$1,383.91
6"	$1,544.64	$2,161.72	$2,269.80	$2,383.29	$2,502.46	$2,627.58	$2,758.96
Volumetric Rates (per 100 gallons)							
Residential Units with Individual Meters							
Tier 1 *(0-3,000 gallons per monthly billing period)*	$0.70	$0.79	$0.83	$0.87	$0.91	$0.96	$1.00
Tier 2 *(3,001-6,000 gallons per monthly billing period)*	$1.22	$1.26	$1.33	$1.39	$1.46	$1.53	$1.61
Tier 3 *(6,001-7,000 gallons per monthly billing period)*	$1.96	$2.28	$2.40	$2.52	$2.64	$2.77	$2.91
Tier 4 (*Over 7,000 gallons per monthly billing period)*	$2.36	$2.75	$2.88	$3.03	$3.18	$3.34	$3.50
Multi-Residential Units with Master Meters *(Tier allotments are per dwelling unit)*							
Tier 1 *(0-3,000 gallons per monthly billing period)*	$0.70	$0.79	$0.83	$0.87	$0.91	$0.96	$1.00
Tier 2 *(3,001-3,200 gallons per monthly billing period)*	$1.22	$1.26	$1.33	$1.39	$1.46	$1.53	$1.61
Tier 3 *(3,201-7,000 gallons per monthly billing period)*	$1.96	$2.28	$2.40	$2.52	$2.64	$2.77	$2.91
Tier 4 *(Over 7,000 gallons per monthly billing period)*	$2.36	$2.75	$2.88	$3.03	$3.18	$3.34	$3.50
Uniform Rates							
Commercial, Industrial, Institutional (CII)	$1.64	$1.29	$1.35	$1.42	$1.49	$1.56	$1.64
Landscape Potable	$2.05	$2.12	$2.22	$2.33	$2.45	$2.57	$2.70
Qualifying Medical Needs (Residential)	$1.22	$1.26	$1.33	$1.39	$1.46	$1.53	$1.61
Rate Assistance (Residential)	$0.70	$0.79	$0.83	$0.87	$0.91	$0.96	$1.00

7.4.Recycled Water Basic Meter Charges

Table 7-29 shows the proposed five-year schedule of recycled water Basic Meter Charges for FY 2022 to FY 2026. Raftelis recommends that recycled water Basic Meter Charges be set equal to proposed potable water Basic Meter Charges beginning in January 2022. This will simplify the rate structure and reflects the fact that billing and customer services do not differ significantly for potable and recycled water service. Proposed recycled water Basic Meter Charges are therefore set equal to the proposed five-year schedule of potable water Basic Meter Charges developed previously in Table 7-28.

Table 7-29: Proposed Recycled Water Basic Meter Charges

Recycled Water Monthly Basic Meter Charge	Current FY 2021 (Dec. 2020)	Proposed FY 2022 (Jan. 2022)	Proposed FY 2023 (Jan. 2023)	Proposed FY 2024 (Jan. 2024)	Proposed FY 2025 (Jan. 2025)	Proposed FY 2026 (Jan. 2026)
5/8"	$45.88	$44.07	$46.28	$48.59	$51.02	$53.57
3/4"	$72.18	$61.61	$64.69	$67.92	$71.32	$74.88
1"	$77.64	$96.81	$101.65	$106.73	$112.07	$117.67
1 1/2"	$182.46	$192.74	$202.38	$212.50	$223.12	$234.28
2"	$247.74	$310.24	$325.75	$342.04	$359.14	$377.10
3"	$441.67	$643.91	$676.10	$709.91	$745.40	$782.67
4"	$772.25	$1,138.55	$1,195.48	$1,255.25	$1,318.01	$1,383.91
6”	$1,649.63	$2,269.80	$2,383.29	$2,502.46	$2,627.58	$2,758.96

7.5.Recycled Water Volumetric Rates

Spring Lakes Mobile Home Park is subject to a unique Volumetric rate for recycled water based on a contract with the District. This contract rate is out of the scope of this rate study. All other recycled water customers are subject to a single uniform Volumetric Rate, which is referred to as the Landscape Recycled Volumetric Rate. The Landscape Potable rate is designed to recover the recycled water rate revenue requirement in each year after subtracting out estimated recycled water Basic Meter Charge revenue (estimated in Table 7-30). Proposed recycled water Basic Meter Charges (from Table 7-29) are multiplied by the number of recycled water meters (from Table 4-26) and by twelve monthly billing periods per year to estimate annualized Basic Meter Charge revenues from recycled water customers under the proposed rate schedule.

Table 7-31 shows the calculation of the proposed Landscape Potable Volumetric Rate for FY 2022 through FY 2026. The recycled water rate revenue requirement includes recycled water rate revenue from existing rates (excluding Spring Lakes Mobile Home Park) from Table 4-33 (Line 1) plus proposed recycled water revenue adjustments from Table 4-42 (Line 2). A mid-year adjustment must be incorporated to annualize the total rate revenue requirement due to proposed rate implementation in January each year (i.e., the mid-point of the fiscal year). This adjustment (Line 3) is based on revenue adjustment calculations shown in Table 4-42. Estimated Basic Meter Charge revenue from Table 7-29 (Line 4) is also incorporated to determine the final recycled water Volumetric Rate revenue requirement (Line 5). The final revenue requirement (Line 5) is divided by total projected water use subject to the Landscape Recycled rate in each year from Table 5-3 (Line 7) to determine the proposed Landscape Recycled Volumetric Rate in each year (Line 9).

Table 7-30: Annualized Revenue from Proposed Recycled Water Basic Meter Charges

Description	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
Recycled Water Monthly Basic Meter Charge					
5/8"	$44.07	$46.28	$48.59	$51.02	$53.57
3/4"	$61.61	$64.69	$67.92	$71.32	$74.88
1"	$96.81	$101.65	$106.73	$112.07	$117.67
1 1/2"	$192.74	$202.38	$212.50	$223.12	$234.28
2"	$310.24	$325.75	$342.04	$359.14	$377.10
3"	$643.91	$676.10	$709.91	$745.40	$782.67
4"	$1,138.55	$1,195.48	$1,255.25	$1,318.01	$1,383.91
6”	$2,269.80	$2,383.29	$2,502.46	$2,627.58	$2,758.96
Number of Recycled Water Meters					
5/8"	23	24	24	24	25
3/4"	6	6	6	6	6
1"	17	18	18	19	19
1 1/2"	4	4	4	4	4
2"	7	7	7	7	7
3"	2	2	2	2	2
4"	0	0	0	0	0
6”	0	0	0	0	0
Total	**59**	**60**	**61**	**62**	**63**
Annualized Basic Meter Charge Revenue					
5/8"	$11,899	$13,051	$13,994	$14,694	$15,750
3/4"	$4,436	$4,658	$4,890	$5,135	$5,391
1"	$19,749	$21,347	$23,054	$24,880	$26,829
1 1/2"	$9,252	$9,714	$10,200	$10,710	$11,245
2"	$26,060	$27,363	$28,731	$30,168	$31,676
3"	$15,454	$16,226	$17,038	$17,890	$18,784
4"	$0	$0	$0	$0	$0
6”	$0	$0	$0	$0	$0
Total	**$86,850**	**$92,359**	**$97,907**	**$103,475**	**$109,676**

Table 7-31: Recycled Water Volumetric Rate Calculation

Line	Basic Meter Charge	Notes	Proposed FY 2022 (Jan. 2022)	Proposed FY 2023 (Jan. 2023)	Proposed FY 2024 (Jan. 2024)	Proposed FY 2025 (Jan. 2025)	Proposed FY 2026 (Jan. 2026)
1	Revenue from Existing Recycled Water Rates (excl. Spring Lakes Mobile Home Park)	*From Table 4-33*	$526,808	$527,824	$528,565	$529,031	$529,772
2	Revenue Adjustments	*From Table 4-42*	$13,170	$40,247	$83,315	$144,630	$212,294
3	Mid-Year Adjustment	*Based on Table 4-42*	$13,170	$13,855	$29,137	$32,079	$35,336
4	Less Annualized Recycled Water Base Meter Charge Revenue	*From Table 7-30*	($86,850)	($92,359)	($97,907)	($103,475)	($109,676)
5	**Recycled Water Volumetric Rate Revenue Requirement**		**$466,299**	**$489,567**	**$543,110**	**$602,265**	**$667,727**
6							
7	**Landscape Recycled & Bulk Recycled Water Use (cGal)**	*From Table 5-3*	**332,270**	**332,270**	**332,270**	**332,270**	**332,270**
8							
9	**Proposed Recycled Water Volumetric Rate ($/cGal)**	*=[Line 5] ÷ [Line 7]*	**$1.41**	**$1.48**	**$1.64**	**$1.82**	**$2.01**

7.6.Proposed Five-Year Recycled Water Rate Schedule

Table 7-32 shows the proposed five-year schedule of recycled water rates for FY 2022 to FY 2026. Proposed Basic Meter Charges (from Table 7-29) and Volumetric Rates (from Table 7-31) were developed in Section 7.4 and 7.5 respectively. All proposed rates are rounded up to the nearest cent to ensure adequate revenue recovery. The proposed Volumetric Rates are shown per hundred gallons in accordance with proposed changes to the District's rate structure (described previously in Section 5). The current FY 2021 Volumetric Rate is also shown per hundred gallons to provide a direct comparison to the proposed rates. Spring Lakes Mobile Home Park contract rates are not within the scope of this rate study and are therefore omitted from the proposed rate schedule shown below.

Table 7-32: Proposed Five-Year Recycled Water Rate Schedule (Monthly)

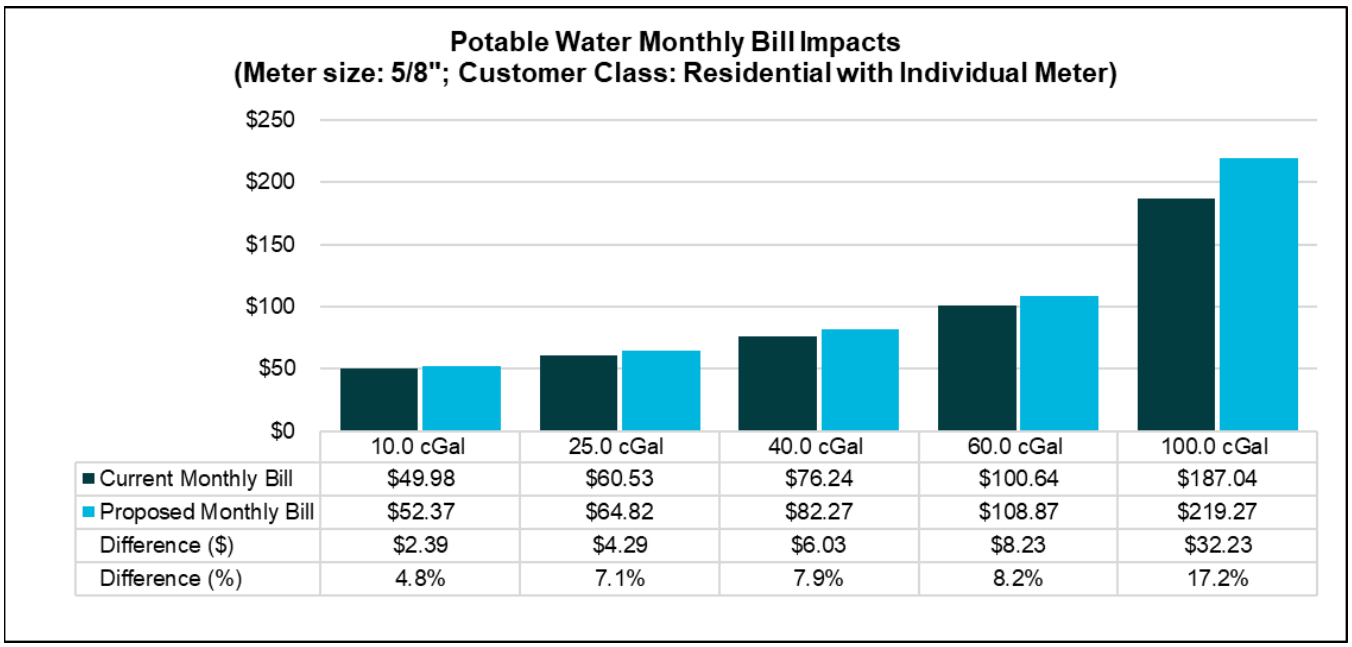
Monthly Recycled Water Rates	Current FY 2021 (Dec. 2020)	Proposed FY 2022 (Jan. 2022)	Proposed FY 2023 (Jan. 2023)	Proposed FY 2024 (Jan. 2024)	Proposed FY 2025 (Jan. 2025)	Proposed FY 2026 (Jan. 2026)
Proposed Revenue Adjustment		**5.0%**	**5.0%**	**10.0%**	**10.0%**	**10.0%**
Monthly Basic Meter Charge						
5/8"	$45.88	$44.07	$46.28	$48.59	$51.02	$53.57
3/4"	$72.18	$61.61	$64.69	$67.92	$71.32	$74.88
1"	$77.64	$96.81	$101.65	$106.73	$112.07	$117.67
1 1/2"	$182.46	$192.74	$202.38	$212.50	$223.12	$234.28
2"	$247.74	$310.24	$325.75	$342.04	$359.14	$377.10
3"	$441.67	$643.91	$676.10	$709.91	$745.40	$782.67
4"	$772.25	$1,138.55	$1,195.48	$1,255.25	$1,318.01	$1,383.91
6"	$1,649.63	$2,269.80	$2,383.29	$2,502.46	$2,627.58	$2,758.96
Volumetric Rates (per 100 gallons)						
Landscape Recycled	$1.36	$1.41	$1.48	$1.64	$1.82	$2.01

8. Customer Bill Impacts

8.1. FY 2022 Residential Bill Impacts

Figure 8-1 shows sample monthly water bills for residential customers with individual meters receiving potable water service from the District. Sample bills shown are for a customer with a 5/8-inch water meter at varying levels of water use under both current rates and proposed FY 2022 potable water rates. Note that over 97 percent of residential customers with individual meters have a 5/8-inch water meter. The five water use levels shown are defined in Table 8-1, and were calculated based on account-level potable water billing data for FY 2020.

Figure 8-1: Monthly Bill Impacts for Residential Units with Individual Meters (FY 2022)



	10.0 cGal	25.0 cGal	40.0 cGal	60.0 cGal	100.0 cGal
Current Monthly Bill	$49.98	$60.53	$76.24	$100.64	$187.04
Proposed Monthly Bill	$52.37	$64.82	$82.27	$108.87	$219.27
Difference ($)	$2.39	$4.29	$6.03	$8.23	$32.23
Difference (%)	4.8%	7.1%	7.9%	8.2%	17.2%

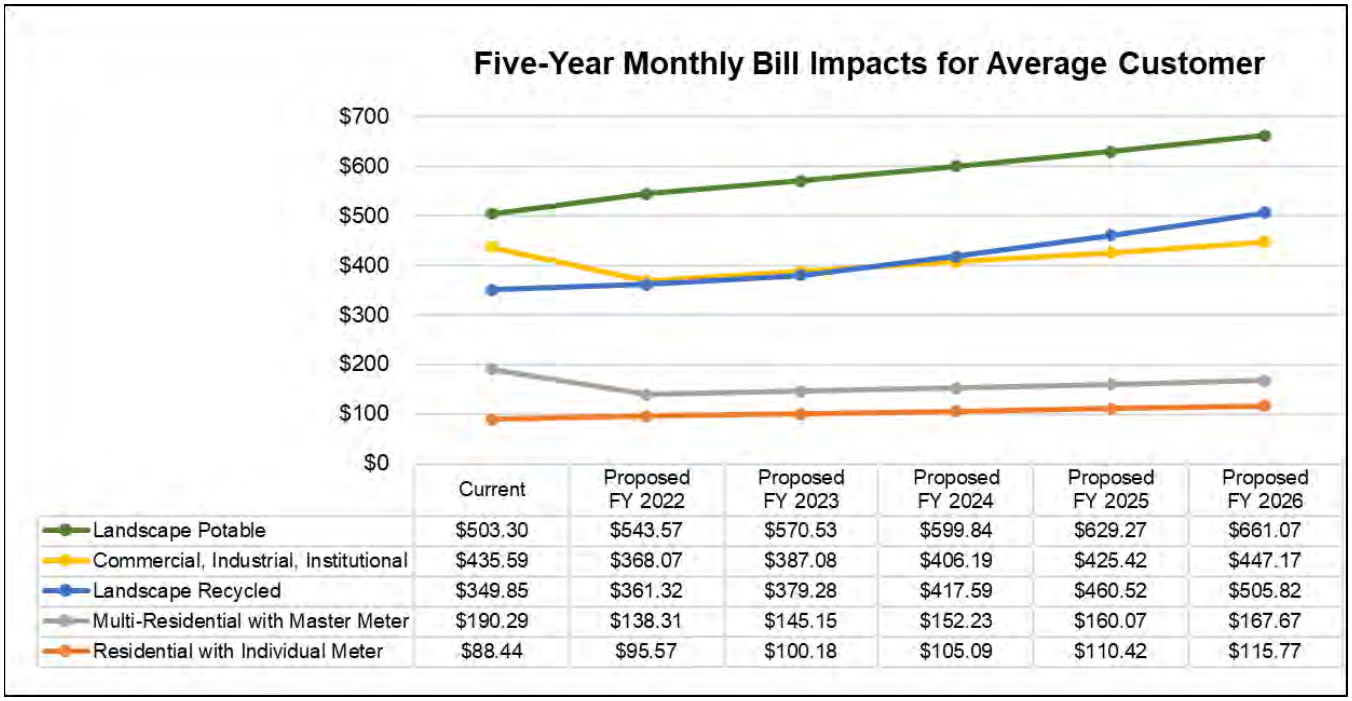
Table 8-1: FY 2020 Water Use for Residential Units with Individual Meters

Residential Units with Individual Meters	FY 2020 Monthly Water Use
10th Percentile	10 cGal
25th Percentile	25 cGal
Median	40 cGal
75th Percentile	60 cGal
90th Percentile	100 cGal

8.2.Five-Year Bill Impacts by Customer Class

Figure 8-2 shows sample monthly water bills based on current and proposed water rates over the next five years for an average customer within each customer class. Average customers are defined in Table 8-2 based on the most common meter size and average monthly water use in FY 2020. For multi-residential customers with master meters, the average number of dwelling units per water meter is estimated at 4 dwelling units. Monthly bill impacts in FY 2022 vary by customer class due to the distributional impacts of the cost of service analysis. Beyond FY 2022, all customer bills increases are equal to proposed revenue adjustments. Recycled water customers experience greater increases in the final three years of the study period because recycled water rates are subject 10 percent annual revenue adjustments in FY 2024 through FY 2026 (compared to 5 percent annual revenue adjustments for potable water rates).

Figure 8-2: Five-Year Monthly Bill Impacts for Average Customer by Customer Class



	Current	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
Landscape Potable	$503.30	$543.57	$570.53	$599.84	$629.27	$661.07
Commercial, Industrial, Institutional	$435.59	$368.07	$387.08	$406.19	$425.42	$447.17
Landscape Recycled	$349.85	$361.32	$379.28	$417.59	$460.52	$505.82
Multi-Residential with Master Meter	$190.29	$138.31	$145.15	$152.23	$160.07	$167.67
Residential with Individual Meter	$88.44	$95.57	$100.18	$105.09	$110.42	$115.77

Table 8-2: Definition of Average Customer by Customer Class

Customer Class	Most Common Meter Size	Average Monthly Water Use (FY 2020)	Average Number of Dwelling Units
Residential Units with Individual Meters	5/8"	50 cGal	N/A
Multi-Residential Units with Master Meters	1"	140 cGal	4
Commercial, Industrial, Institutional	5/8"	240 cGal	N/A
Landscape Potable/Recycled	5/8"	225 cGal	N/A

AGENDA REPORT

Scotts Valley Water District

Date: 08/12/21

To: Board of Directors

Item: Business 6.3

Subject: **Compensation Adjustment for Exempt Classifications**

Reason: Supports Strategic Goal No. 5 Organizational Vitality

SUMMARY

Recommendation: Approve the compensation adjustments for Finance and Customer Service Manager, Operations Manager and Assistant to General Manager classifications.

Fiscal Impact: The total annual salary adjustment is $15,662 that represents a 4.07% increase. The increase in FY 2022 salary expense is $16,281 and the funds are available in the FY 2022 budget.

Previous Related Action: On 08/13/20 Board meeting the Board approved compensation adjustments for the positions in exempt classifications.

On 07/28/21 the Finance and Personnel Committee received the report from the General Manager on accomplishments and proposed compensation adjustments for the three exempt classifications. The Committee concurred with the General Manager's recommendation for the compensation adjustment effective 08/10/21.

BACKGROUND

Operations Manager, Finance and Customer Service Manager and Assistant to General Manager are District's at-will classifications which employment terms and conditions are set by the employment agreement with each individual hired to fill these positions. Annually, the General Manager conducts performance reviews with the at-will employees and may recommend compensation adjustments.

To support the District's strategic goals and introduce greater level of accountability, effective FY 2015 the reviews for all exempt employees are conducted following the close of the District's fiscal year. This allows for alignment of the District's annual work plan with the objectives of the executive management team, creates a more cohesive allocation of the tasks and enables each individual to more directly contribute to the success of the organization. Reviewing the performance of the individuals in light of the collective accomplishments of the District provides for more transparent, objective and fair assessment.

DISCUSSION

The executive team that is made up of Operations Manager, Finance and Customer Service Manager, and Assistant to General Manager is the driving force behind carrying out the work plan and ensuring that the District is accomplishing tasks to meet the strategic goals set by the Board of Directors. They are the ones responsible for not only completing the noteworthy projects and implementing innovative ideas but also for making sure that the necessary routine tasks get done in a timely manner no matter what obstacles the District is facing.

The attached FY 2021 Work Plan Status presents a detailed overview of the last year's accomplishments by each Division.

The proposed compensation adjustments for the at-will employees are based on their individual contributions in support of the District's strategic goals, their management/leadership competencies and salary competitiveness for the respective classifications.

Based on the performance and market analysis, the new proposed salary for the Operations Manager is $164,530, Finance and Customer Service Manager $148,253, and Assistant to General Manager $87,971. The Operations Manager will also be awarded a one-time bonus of $2,426.

The at-will employees pay the full cost of the employee contribution of the PERS retirement benefit and are entitled to receive all other employee benefits as provided to the regular full-time District employees, but not including overtime or compensatory time off benefits.

If approved the compensation adjustments are in effect as of 08/10/21.

Submitted,

Piret Harmon
General Manager

Enclosed: FY 2021 Work Plan Status
Compensation Adjustment Matrix

SCOTTS VALLEY WATER DISTRICT STRATEGIC WORK PLAN FY 2021				
STRATEGIC GOALS MANAGEMENT OBJECTIVES	**FY 2021 TASKS**	**ADMINISTRATION ACCOMPLISHMENTS**	**FINANCE ACCOMPLISHMENTS**	**OPERATIONS ACCOMPLISHMENTS**
1. Water Resource Management: SVWD meets the water supply needs of its customers by developing new, sustainable sources and maximizing the use of existing sources.				
1.1 Pursue the potential of wastewater for beneficial uses	Develop a plan for reliable recycled water sypply for existing uses	Formed ad hoc City-District committee to negotiate mutually acceptable arrangements for the RW supply in case of TTP disruption. Proposed allocation is being reviewed by legal teams.		Developed a solid communication procedure for City-District staff to be used for TTP operational issues. The City is currently conducting an Options Study for WWTP and TTP that will provide better roadmap for future of the recycled water infrastructure in SV.
	Work with regional partners in developing a strategic direction for maximizing wastewater utilization in the region	Worked with the City of Santa Cruz to evaluate the regional projects that benefit Scotts Valley area.		
	Further evaluate conclusions from the Recycled Water Alternatives Study (Kennedy Jenks) and determine the course of action	Completed RW Alternatives Study (KJ) and determined the plan on how to proceed.		
	Assist the City with finding a mutually advantageous solution for wastewater operations.	Provided input in considering approaches for determining the future of RW in SV resulting in City choosing to conduct an Options Study that is expected to be completed in the Fall of 2021.		
	Plan and implement a strategy for RW Fill Station	Provided administrative support for reopening the RW Fill Station for the current irrigation season.		Due to the 2021 drought conditions, the Recycled Water Fill Station was reconditioned and opened in June. Provided materials and trained (Board) volunteers to run the station which makes it more economical to operate.
1.2 Identify and implement conjunctive use projects in the region	Develop a scope and initial budget for implementing a conjunctive use between SLVWD-SVWD	Conducted initial discussions with SLVWD District Manager on updating the Operations Agreement for Intertie 2.		On hold
1.3 Optimize the efficient use of water	Improve on 2018 Validated Water Loss Audit score of 60.			Production meter testing will be completed by end of CY 2021. 2019 Validated Water Loss Audit score remained at 60.
	Leverage WaterSmart Customer Engagement Portal to reduce inefficient use and water waste		Developed and implemented business process framework to respond to data triggers from WaterSmart.	
	Conduct a distribution system water pressure analysis with calibrated hydraulic model and use the data in the October 2021 Annual Water Audit (M36) Report			Uploaded updated system data into modeling software purchased earlier this year that enabled to run fire flow scenarios in house. Still need to work on developing a reliable, effective and practicable system pressure reduction plan.
	Review and revise customer account structure for alignment and compliance with CII and irrigation consumption targets (SB 606 and AB 1668).		Reviewed customer account structures as part of the rate study. Due to the staff turnover, did not complete revisions to align with consumption targets.	
	Prepare and adopt 2020 Urban Water Management Plan	Lead the consultant selection process for Consolidated UWMP for SVWD-SLVWD, spearheaded the preparation of the plan involving two agencies. Plan adopted and submitted to DWR. Provided adminstrative support related to final document, regulatory postings and website.		

SCOTTS VALLEY WATER DISTRICT STRATEGIC WORK PLAN FY 2021				
STRATEGIC GOALS MANAGEMENT OBJECTIVES	**FY 2021 TASKS**	**ADMINISTRATION ACCOMPLISHMENTS**	**FINANCE ACCOMPLISHMENTS**	**OPERATIONS ACCOMPLISHMENTS**
2. Infrastructure Integrity: SVWD provides continuous investment in its infrastructure and process improvements to ensure the efficiency of its operations.				
2.1 Maintain all assets within their useful life threshold	Complete meter change out program by replacing the remaining 875 meters			Completed meter change out program by replacing the remaining 875 meters.
	Replace 1,100 ft of potable main in 4 locations			Finalized project design work and currently waiting on a construction quote from Gordian. Construction to be completed by end of CY 2021.
	Continue work on Bethany Tank rehabilitation by commensing design and environmental reports in FY2021			Four temporary tanks were delivered, installed and connected to the system. Bethany Tank overflow and drain plumbing were located and repaired. Inspection work is now scheduled for FY 2022.
	Complete treatment plant upgrades at El Pueblo Water Treatment Plant			Equipment was purchased this year. Installation project scheduled for FY 2022.
	Complete treatment plant control system upgrade at Well 10			On hold to conduct investigation of new radio equipment (the manufacturer of the existing equipment is no longer in business).
	Implement facility upgrades to Santa Margarita Community Room	Completed structural repairs, removed board dias, procured new furniture and additional monitor.		Assisted with electrical AV work in SM Community Room.
	Develop a strategic capital asset replacement program	Presented Consolidated Capital Improvement Plan to the Board and use it to develop 5 year and 10 year capital asset replacement schedule.		
2.2 Utilize technology and innovative solutions for improving operational efficiencies	Complete the AMI installation Program by installing the remaining 875 AMI MXU's			Completed the i-Meter program by installing the remaining 875 AMI MXU's.
	Conduct an assessment and develop a master plan for SCADA improvements.	Coordinated with AT&T regarding future of and viability of analog communications for SCADA emergency notifications.		Ongoing. Due in part to the change in our Operations Supervisor position and shifting priorities, this project was moved into the FY 2022 work plan.
	Transition Crossconnection Control Program, Well Monitoring Program, Hydraulic Modeling into Engineering Section - evaluate and improve the processes			Transitioned Crossconnection Control Program, Well Monitoring Program, Hydraulic Modeling into Engineering Section. Performed evaluation of the programs and implemented process improvements.
	Implement viable technology solutions for HQ lobby area	Initial need assessment was done. Final recommendation and implementation of upgrades postponed to FY 2022.	This was put on hold due to COVID-19 and focus on touchless (paypad implementation).	
	Evaluate and recommend website platform that will support a modern digital experience	Completed an evaluation of website platform (CMS) with an emphasis on local government that support a modern digital experience that is effective, compliant and easily managed. Entered into an agreement with recommended vendor for FY 2022 implementation		
	Complete construction on Orchard Run Water Treatment Plant upgrades			Conducted a competitive process and hired a Construction Management firm. Provided oversight and coordination for the project, worked closely with Psomas and the project contractor, GSE. Project is about 90% completed.

SCOTTS VALLEY WATER DISTRICT STRATEGIC WORK PLAN FY 2021				
STRATEGIC GOALS MANAGEMENT OBJECTIVES	**FY 2021 TASKS**	**ADMINISTRATION ACCOMPLISHMENTS**	**FINANCE ACCOMPLISHMENTS**	**OPERATIONS ACCOMPLISHMENTS**
2.3 Optimize the redundancy and effectiveness of the system and facilities	Finalize the land acquisition; commense design and permitting process for New Lompico Formation Well and Treatment Plant	Based on GW Model, Manana Woods and Well 6 old well sites were both determined not to be a suitable locations. Work currently underway to evalute other potential location.		SMGWA Groundwater Model showed the Manana Woods site to be a poor location for new well. Project scope is now focused on a more promising area along east edge of north SV Drive. Evaluating several sites with the assistance from District's hydrogeology consultant.
	Complete Risk and Resilience Assessment and submit to EPA for certification	Completed Risk and Resilience Assessment and submitted to EPA for certification.		Completed Risk and Resilience Assessment and submit to EPA for certification by 6/30/21.
3. Finanical and Customer Service Stewardship: SVWD manages its financial resources in a manner that ensures the reliability of its operations and provides the greates value to its customers.				
3.1 Provide seamless customer experience	Convert all customer service forms into web format using WaterSmart platform	Created Start Service and Stop Service webforms with smart urls www.svwd.org/start www.svwd.org/stop	Implemented Water Saving Challenge form on WaterSmart. Start and Stop Service forms were developed but not live yet. Work is underway on leak adjustment and rebate forms.	
	Achieve 20-25% registration target on WaterSmart platform		Exceeded the goal: 35% registration rate.	
	Achieve 10% customer profile update target on WaterSmart platform		Achieved 10% target.	
3.2 Exploit integrated data management for maximum efficiency and transparency	Investigate and implement, if feasible, an improved utility billing solution		Researched available solutions and stayed informed on Springbrook product developments.	
	Investigate and implement, if feasible, an improved payment platform		Conducted evaluation and determined that an alternative payment platform is not feasible while with Springbrook.	
	Investigate and deploy, if feasible, AMI for bulk water sales		Not much progress was made.	Deployed 2 AMI units on hydrant meters. Upgrades will continue as hydrant meters get changed out.
	Improve the usability and usefulness of Leak Adjustment Program data		Utilized WaterSmart leak notifications (system and staff) to significantly reduce leak duration and leak adjustment metrics. Total gallons lost through leak adjustment programs reduced 27% from prior year.	
	Conduct comprehensive review and update of Utility Billing, Accounts Payable and Payroll procedure documents to ensure operational redundancy and support cross training	No tasks were identified for AGM or AOA	Accounting procedures were reviewed and updated.	
3.3 Design and manage balanced and fair revenue sources that are sufficient for meeting operating and capital needs while providing for adequate reserves	Conduct a Cost of Service and Rate Study. Adopt a rate schedule pursuant to the recommendations from the Rate Study.	Oversaw selection of the rate consultant and rate study process involving staff, Finance & Personnel Committee, Board, communications consultant and community groups.	Rate study is underway. Cost of service and rate development stages were completed. New rates schedule to be adopted Fall 2021.	
	Investigate alternative account ownership structures	Evaluated alternative account ownership structures, billing frequency and consumption unit designation resulting in proposed changes to the two latter elements.	Investigated alternative account structures with rate study consultant and legal counsel.	
	Evaluate and possibly implement monthly billing cycle once fully deployed with AMI		Monthly billing cycle evaluated. Preparations underway for transition, including revised rate structure	The transition to monthly meter reading cycle will be likely happening after the new rate schedule is adopted in Oct 2021.
	Continue the 3-year process to achieve a CAFR (FY 2020) that meets GFOA Excellence in Financial Reporting Award criteria by Dec 2020	Provided adminstrative support related to final document and website.	Application submitted.	
			Successfully coordinated a debt financing for capital projects achieving a 2.43% interest rate for a 20-year term.	

SCOTTS VALLEY WATER DISTRICT STRATEGIC WORK PLAN FY 2021				
STRATEGIC GOALS MANAGEMENT OBJECTIVES	**FY 2021 TASKS**	**ADMINISTRATION ACCOMPLISHMENTS**	**FINANCE ACCOMPLISHMENTS**	**OPERATIONS ACCOMPLISHMENTS**
4. Community Engagement: SVWD proactively creates opportunities for strategic alliances and mutually beneficial relationships with its customers and partners.				
4.1 Use creative approaches and technology for engaging the community	Maximize the value of the website as a platform for delivering messages that are informative, relevant, compelling and easy to access.	Made continuous improvements including: new pages added to water savings challenge, water rate study, UWMP, consolidation; new images added to landing page carousel.		
	Utilize SV Art Wine Beer Festival and Farmers Market for reaching the public where they are and making it easier to access the District	These activities were suspended due to Covid-19. Consider strategies for these events and potential others that bring higher ROI for District in FY 2022.		
	Conduct assessment of the Digital Access to Board Meetings and develop a plan for moving forward	Conducted an evaluation of current online meeting platforms and based on finding transitioned from GoToMeeting to Zoom Webinars. Developed an effective and streamlined process for conducting remote public meetings: SVWD and SMGWA.		
	Organize a series of Water System Field Trips for public	This activity was suspended due to Covid-19. Planning to organize the field trips and considering adding a virtual component in FY 2022.		Water System Field Trips for public were postponed to FY 2022 due to continued Covid-19 conditions and restrictions.
	Hold WaterSmart training sessions at various community locations	This activity did not take place and is planned for FY 2022.	This activity did not take place and is planned for FY 2022.	
	Design, produce and install interpretive signage at public-facing facilities	This activity did not take place and is planned for FY 2022.		Interpretive signage at public-facing facilities was postponed to FY 2022.
		Conducted customer survey focusing on District's digital footprint: received 350 responses that provided valuable insight.	Reviewed all survey responses; responded to inquiries, and gained insight in communication preferences.	
4.2 Increase youth involvement and education on water matters	Conduct assessment of Junior Associate Board Member Program and determine the future of this program	Conducted a review of the Junior Associate Board Member Program, updated program documents and website.		
	Partner with Scotts Valley High School in implementing their Career Exploration Program	These activities were suspended due to Covid-19.		
	Manage the Youth Outreach Program (internship) for Santa Margarita Groundwater Agency	Managed and oversaw the Youth Outreach Program for SMGWA.		
4.3 Identify, develop and strengthen strategic alliances, both private and public	Continue providing leadership and active participation in Santa Margarita Groundwater Agency (SMGWA) in working towards a development of the Groundwater Sustainability Plan by January 2022	Managed and coordinated the activities of the SMGWA. Provided oversight and mentoring to Administrative Office Assistant in his role as SMGWA Board Clerk.		
	Lead the Interagency Committee with a goal of enhancing its value to the agencies and public	Provided administrative support for the Interagency Committee.		
5. Organizational Vitality: SVWD recruites and retains the highest quality employees and board members by offering a work environment in which they can thrive and succeed.				
	Explore opportunities for assigning higher-level/out-of-scope tasks to employees in support of career development	Facilitated the transition of Administrative Office Assistant Working-Out-Of-Class as Water Use Efficiency Coordinator.		Offered three qualified Operators an opportunity for a 6-week Working-Out-Of-Class assignment as Operations Supervisor. All three performed well and it resulted in the promotion of Ryan Ritchie to the Operations Supervisor position.

SCOTTS VALLEY WATER DISTRICT STRATEGIC WORK PLAN FY 2021				
STRATEGIC GOALS MANAGEMENT OBJECTIVES	**FY 2021 TASKS**	**ADMINISTRATION ACCOMPLISHMENTS**	**FINANCE ACCOMPLISHMENTS**	**OPERATIONS ACCOMPLISHMENTS**
5.1 Provide meaningful and feasible career growth tools and opportunities	Develop a succession planning strategy for executive team	Conducted a review and rewrite of job descriptions in Operations Section to more accurately reflect current working environment. Completed a reclassification of Electrician /Instrumentation Technician position to alternately staffed Electrical Instrumentation Technician /Senior.	Due to a resignation in the Finance/Customer Service division, reorganized the work activities and deployed a temporary assignment. Currently evaluating the needs of the District to determine the optimal staffing structure.	Conducted initial discussions on the potential succession planning strategies for exempt positions. Also, updated the Electrician/ Instrumentation Technician job description changing it to an alternatively staffed position with updated entry and senior level requirements, and updated the physical requirement section of all Operations Section job descriptions.
	Develop a succession planning strategy for General Manager	Pursued the idea of exploring consolidation with SLVWD.		
5.2 Cultivate productive work conditions and positive workforce culture	Propose and coordinate regular meetings between City of Scotts Valley Wastewater and District staff			Due to a high volume of staff turnover at the WWTP this past year we did not held a Quarterly meeting. Communications between the District and WWTP staff has greatly improved over this past year and we plan to schedule staff meetings in FY 2022.
	Complete Safety Training schedule and have at least 50% of the training requirements completed for each employee (c/o from FY 2020)	Made some progress: Workplace Violence Prevention Plan (drafted). FY 2021 efforts were largely directed to meet the CalOSHA Emergency Orders including creation of a comphensive COVID-19 Prevention Plan and required training for all employees.	Focused on safety precautions in response to COVID-19.	Due in part to the change at the Operations Supervisor position we did not have band width to get this training completed. Working with ACWA/JPIA we plan to move this goal into FY 2022.
	Achieve 100% volunteerism by participating in various community events: SV Art Wine Beer Festival, Farmers Market, SV Touch-a-Truck	This activity did not take place and is planned for FY 2022.		
	Continue to carry out the records management action plan with a goal of 75% completion	Records Retention Schedule is in prepared in draft form, final version to be completed in FY 2022. Digital Administration Folder clean-up is 100% complete with additional tasks being identified. Some progress was made on downstairs file stogage, the progress was delayed due to COVID-19 protocols.	Organized and cleaned majority of subfolders in Customer Service and Accounting digital database.	Clean up efforts of the electronic filing system and records are underway and will continue.
5.3 Support continuous training and knowledge transfer	Identify relevant opportunities for each employee and Director to attend at minimum 1 training and/or professional event annually	Administrative Office Assistant completed T2 and T2 Exam Courses, 3 Cyber Security Webinars, WaterSmart Training. Assistant to GM attended CSDA Board Clerk conference; 13 COVID-19 webinars, 7 Safety webinars, 20 Human Resources webinars. GM attended ACWA and GRA virtual conferences.	USR-O attended WaterSmart CS training, Kaiser webinar and Springbrook webinar; Accounting Specialist attended 1099 Compliance webinar; WUE Coordinator attended irrigation audit training; Finance Mgr attended CSMFO virtual conference.	Several Operators attended online continuing education classes for operator certification renewals and Engineering Technician took online classes.
	Sponsor 1 employee and/or Director to participate in Leadership Santa Cruz County program and Water Eduction Foundation Water Tours	Suspended due to COVID-19.		
	Utilize volunteers and interns for appropriate tasks and activities that support District's operations	Using COVID-19 protocols utilized 56 SVHS community service hours performing "SO files" records management tasks		
	Develop a comprehensive matrix of regulatory reporting and compliance requirements	The comprehensive matrix is in final review draft with completion in FY 2022 with continuous updates.	Provided information about Finance regulatory reporting requirements for the comprehensive matrix.	Provided information about Operations regulatory reporting requirements for the matrix. Anticipate completion in FY 2022.

SCOTTS VALLEY WATER DISTRICT

Compensation Adjustment Matrix
At-Will Employees

Work Plan Tasks Completed	
Accomplishments Base (AB)	75% of Work Plan Tasks: Equal to MOU CPI-U +4% for 100%+ +2% for >80% -2% for <70% -4% for <50%
Accomplishments: +/-	
Accomplishments Total (AT)	
Competency Assessment	
Competencies Base (CB)	Proficient: Equal to MOU CPI-U
Competencies: +/-	+1% for each exceptional,+0.5% for each highly effective; -0.5% for each inconsistent, -1% for each unsatisfactory
Competencies Total (CT)	
Performance Total (PT)	**Average of AT and CT**
Market Median Delta - before Performance Adjustment	
Market Median Delta - after Performance Adjustment	
Market Base (MB)	None if < 5% Market Median after applying Performance Adjustment
Market Adjustment: Low Performer (MA)	0% of the gap to -5% if >5% below Market Median after applying Performance Adjustment
Market Adjustment: Proficient Performer (MA)	25% of the gap to -5% if >5% below Market Median after applying Performance Adjustment
Market Adjustment: High Performer (MA)	50% of the gap to -5% if >5% below Market Median after applying Performance Adjustment
Compensation Adjustment Total (PT+MA)	

AGENDA REPORT

Scotts Valley Water District

Date: 08/12/21

To: Board of Directors

Item: Business 6.4

Subject: **Association of California Water Agencies (ACWA) Region 5 Board Elections for the 2022-2023 Term**

Reason: Complies with ACWA Region 5 Rules and Regulations and ACWA Bylaws

SUMMARY

Recommendation: Direct the General Manager to submit the ballot for ACWA Region 5 Board Elections for the 2022-2023 term.

Fiscal Impact: None

Previous Related Action: On 08/08/19 the Board directed the General Manager to submit the Ballot for the ACWA Region 5 Board Elections for the 2020-2021 term.

BACKGROUND

ACWA's membership is organized into 10 hydrologic regions. The regional structure promotes grassroots activism by uniting members around geography and shared interests and challenges. Region 5 is comprised of the following ten counties: Alameda, Contra Costa, Monterey, San Benito, San Luis Obispo, San Francisco, San Mateo, Santa Barbara, Santa Clara and Santa Cruz. Approximately 45 water, flood control, services, utility, irrigation, reclamation and sanitation districts and cities are members of Region 5. This area is roughly 15,000 square miles and has a population of over 7 million.

DISCUSSION

Region 5 Board Members are elected to represent the issues, concerns and needs of the region. The Region 5 Chair and Vice-chair will serve on ACWA Board of Directors for the next two-year term beginning 01/01/22. Additionally, the newly elected chair and vice chair will make the Region 5 committee appointment recommendations to the ACWA president for the 2022-2023 term. Also, the chair or vice chair will hold a seat on the ACWA Finance Committee.

The Region 5 Nominating Committee has recommended a slate of candidates for the upcoming two-year term. Each member agency is entitled to cast one vote. The Board should direct the

General Manager to submit the ballot for the recommended slate or alternative candidates by the 09/30/21 deadline.

Submitted,

Piret Harmon
General Manager

Enclosed: ACWA Region 5 Board Ballot

OFFICIAL REGION 5 **Board Ballot**

2022-2023 TERM

ACWA
Association of California Water Agencies

Please return completed ballot by Sept. 30, 2021

E-mail: regionelections@acwa.com
Mail: ACWA
980 9th Street, Suite 1000
Sacramento, CA 95814

General Voting Instructions:

1. You may either vote for the slate recommended by the Region 5 Nominating Committee or vote for individual region board members. Please mark the appropriate box to indicate your decision.

2. Please complete your agency information. The authorized representative is determined by your agency in accordance with your agency's policies and procedures.

SAVE & SUBMIT

CLEAR FORM

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Nominating Committee's Recommended Slate

☐ I concur with the Region 5 Nominating Committee's recommended slate below.

CHAIR: John L. Varela, Director, Santa Clara Valley Water District

VICE CHAIR: Jack Burgett, Vice President, Board of Directors, North Coast County Water District

BOARD MEMBERS:

- **Ernesto A. Avila**, Board Vice President, Contra Costa Water District
- **Mary Bannister**, Director, Pajaro Valley Water Management Agency
- **Sarah Palmer**, Director, Zone 7 Water Agency
- **Katherine A. Stewart**, Director/Board President, Vandenberg Village Community Services District
- **Floyd Wicks**, Director, Montecito Water District

OR

Individual Board Candidate Nominations

☐ I do not concur with the Region 5 Nominating Committee's recommended slate. I will vote for individual candidates below as indicated.

CANDIDATES FOR CHAIR: (CHOOSE ONE)

- ☐ **Sarah Palmer**, Director, Zone 7 Water Agency
- ☐ **Katherine A. Stewart**, Director/Board President, Vandenberg Village Community SD
- ☐ **John H. Weed**, Director, Alameda County Water District
- ☐ **John L. Varela**, Director, Santa Clara Valley Water District

CANDIDATES FOR VICE CHAIR: (CHOOSE ONE)

- ☐ **Ernesto A. Avila**, Board Vice President, Contra Costa Water District
- ☐ **Mary Bannister**, Director, Pajaro Valley Water Management Agency
- ☐ **Jack Burgett**, Vice President, Board of Directors, North Coast County Water District
- ☐ **Katherine A. Stewart**, Director/Board President, Vandenberg Village Community SD
- ☐ **John H. Weed**, Director, Alameda County Water District

CANDIDATES FOR BOARD MEMBERS: (MAX OF 5 CHOICES)

- ☐ **Ernesto A. Avila**, Board Vice President, Contra Costa Water District
- ☐ **Mary Bannister**, Director, Pajaro Valley Water Management Agency
- ☐ **Jack Burgett**, Vice President, Board of Directors, North Coast County Water District
- ☐ **Sarah Palmer**, Director, Zone 7 Water Agency
- ☐ **Paul Seger**, Director/Board President, Diablo Water District
- ☐ **Katherine A. Stewart**, Director/Board President, Vandenberg Village Community SD
- ☐ **John H. Weed**, Director, Alameda County Water District
- ☐ **Floyd Wicks**, Director, Montecito Water District

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AGENCY NAME

AUTHORIZED REPRESENTATIVE DATE

STAFF REPORT - Finance

Scotts Valley Water District

Date: 08/12/21

To: Board of Directors

From: General Manager

Item: Staff Reports 7.3

Subject: **Preliminary Financial Reports 07/01/20 through 6/30/21**

Summary

Fiscal Year-to-Date (YTD) preliminary figures reflect the period of 07/01/20 through 6/30/21. YTD revenues total $9.0M and expenses total $9.6M.

Revenue

June is the final month of the fiscal year and the second month of the May-June potable water billing period. Preliminary YTD potable water sales revenue is $4.2M, water services revenue is $2.2M, new connections revenue is $704K, and property tax revenue is $1.05M. Total YTD revenue in the potable water fund is $8.2M, equal to 104% of the budget and 2% higher than the same period last year.

YTD recycled water sales revenue is $543K, water services revenue is $64K, and no revenue from new connections for the period. Total YTD revenue of $781K in the recycled water fund equals 103% of the budget, which is 4% higher than for the same period of last fiscal year.

Expenses

Preliminary combined operating expenses YTD are below budget, with expenses of $5.7M representing 94% of the budget. Project expenditures total $3.3M and the debt service principal payment of $567K was made.

Fund Balance

Cash reserves at the end of June were approximately $3.5M with another $1.8M booked in Accounts Receivable.

Enclosed

Quarterly Financial Report Q4 of FY 2021
Budget Status Balance 07/01/20 – 6/30/21
Budget Status Revenue 07/01/20 – 6/30/21
Budget Status Expense 07/01/20 – 6/30/21
Projects Expense 07/01/20 – 6/30/21
Balance Sheet 6/30/21
Check Register 6/01/21 – 6/30/21
Investment Summary 6/30/2021

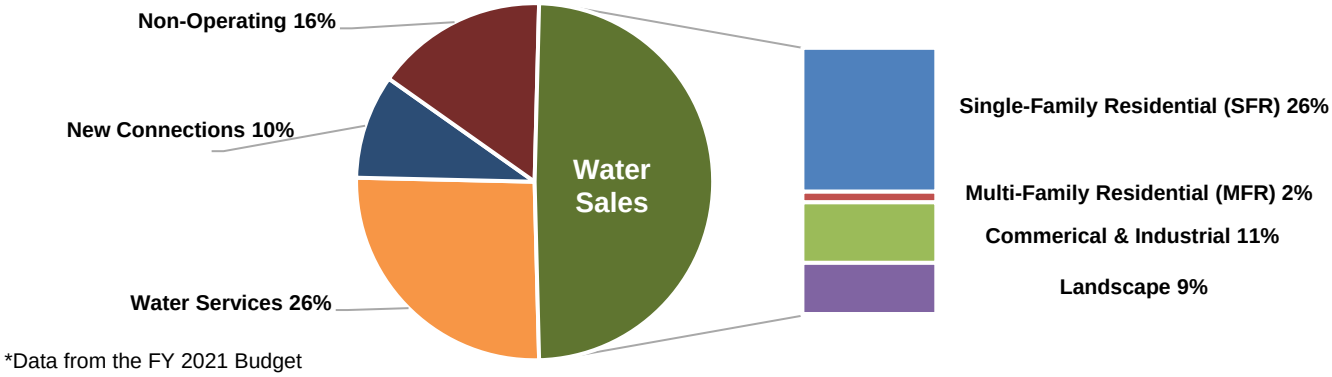
SCOTTS VALLEY WATER DISTRICT

FY 2021 – Q4 Financial Report

July 1, 2020 – June 30, 2021

Revenues

Scotts Valley Water District revenues come from four main sources: Water Sales, Water Services (Basic Service Charge), New Connections, and Non-Operating. *

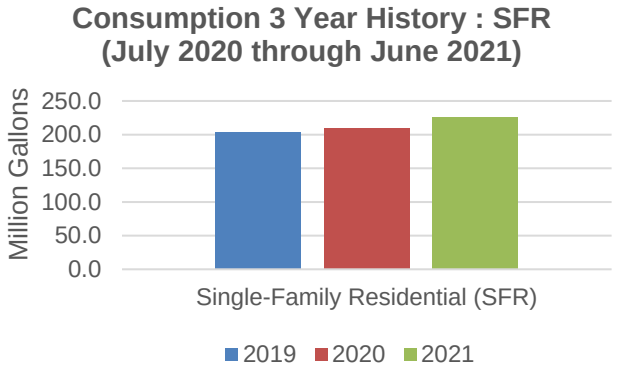


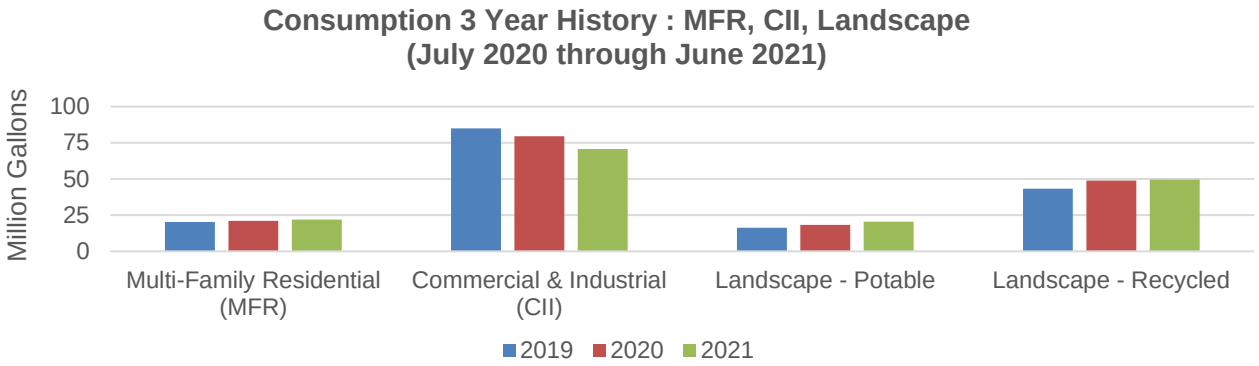
*Data from the FY 2021 Budget

The District's largest revenue category is Single Family Residential (SFR) Water Sales. Revenue from SFR Water Sales for the period of July 2020 through June 2021 is up 13.4% from the same period in the prior year. This increase has been partially offset by reduced revenue from Commercial & Industrial (CII) customers.

Consumption

Water consumption by SFR customers has increased 16 million gallons or 7.9% from the same period in FY 2020. CII consumption is down 8.9 million gallons, a decrease of 11.2% from FY 2020.





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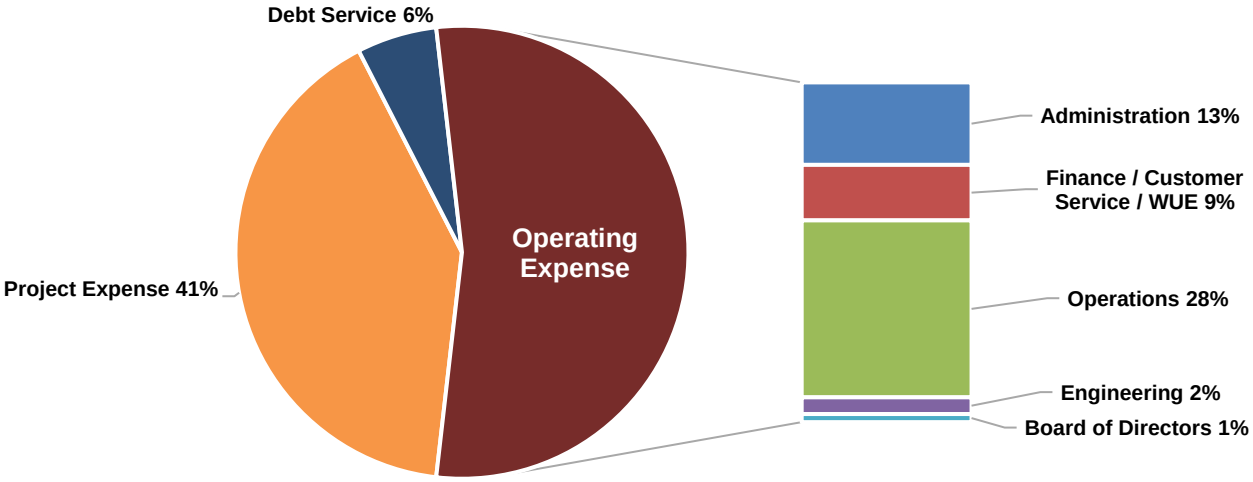
contact@svwd.org • www.svwd.org

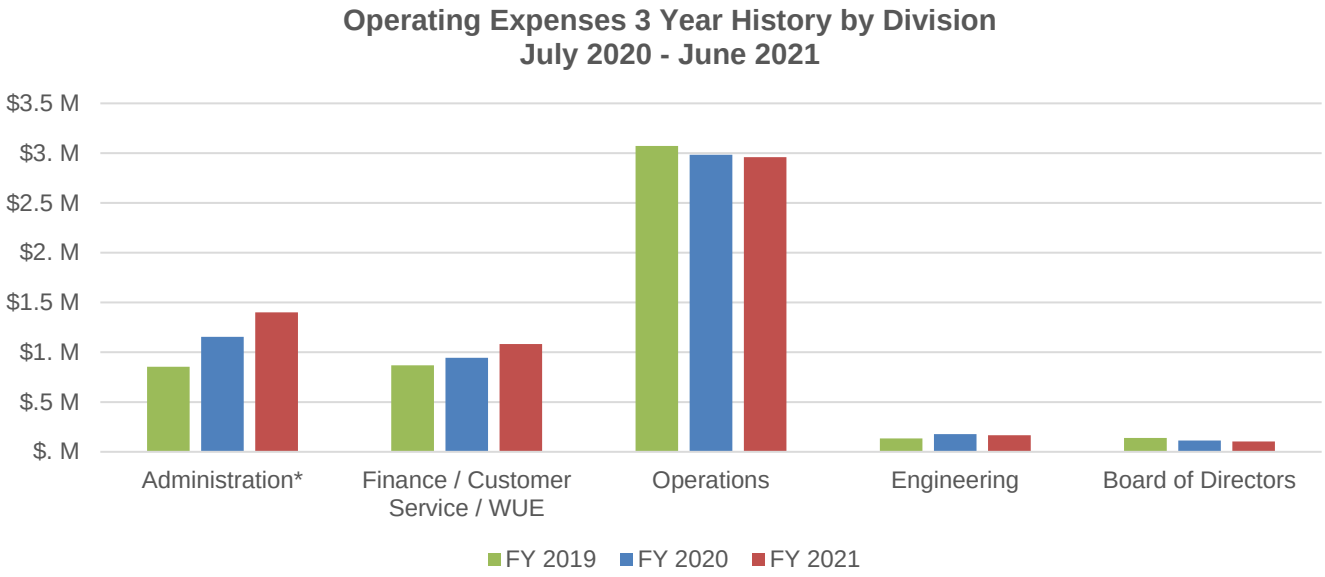
Expenses

District expenses are comprised of three major categories: Operating Expenses, Project Expenses, and Debt Service. The chart below presents the FY 2021 Budget by expense category, with Operating Expenses broken down by Division. *



*Data from the FY 2021 Budget

Operating expenses are the organization's largest expense category. Through Q4 of FY 2021, which accounts for activity from July 2020 through June 2021, operating expenses are below budget. Total operating expenses in FY 2021 exceed the FY 2020 total by 6.3%. The chart below provides a comparison by Division for each of the past three fiscal years.

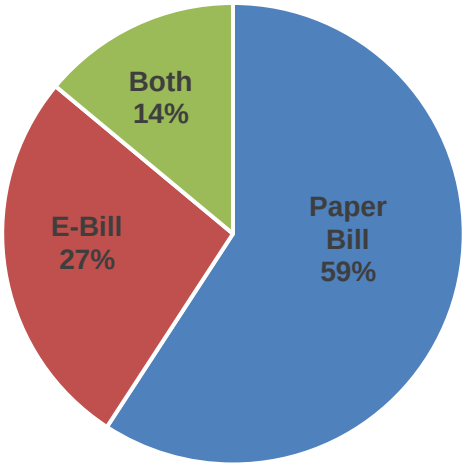


Customer Accounts

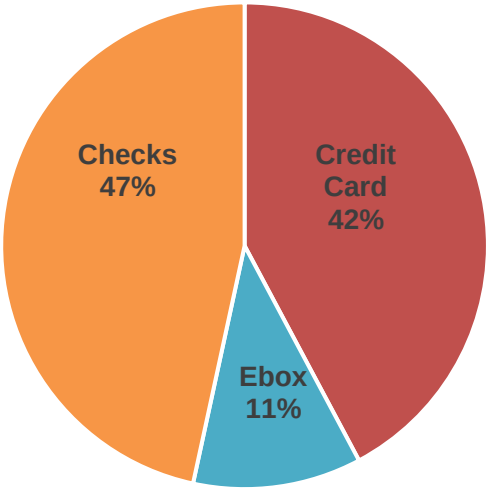
The charts below provide additional information on how customers interact with the District.

Total Accounts: 4,421

How do customers RECEIVE their bill?

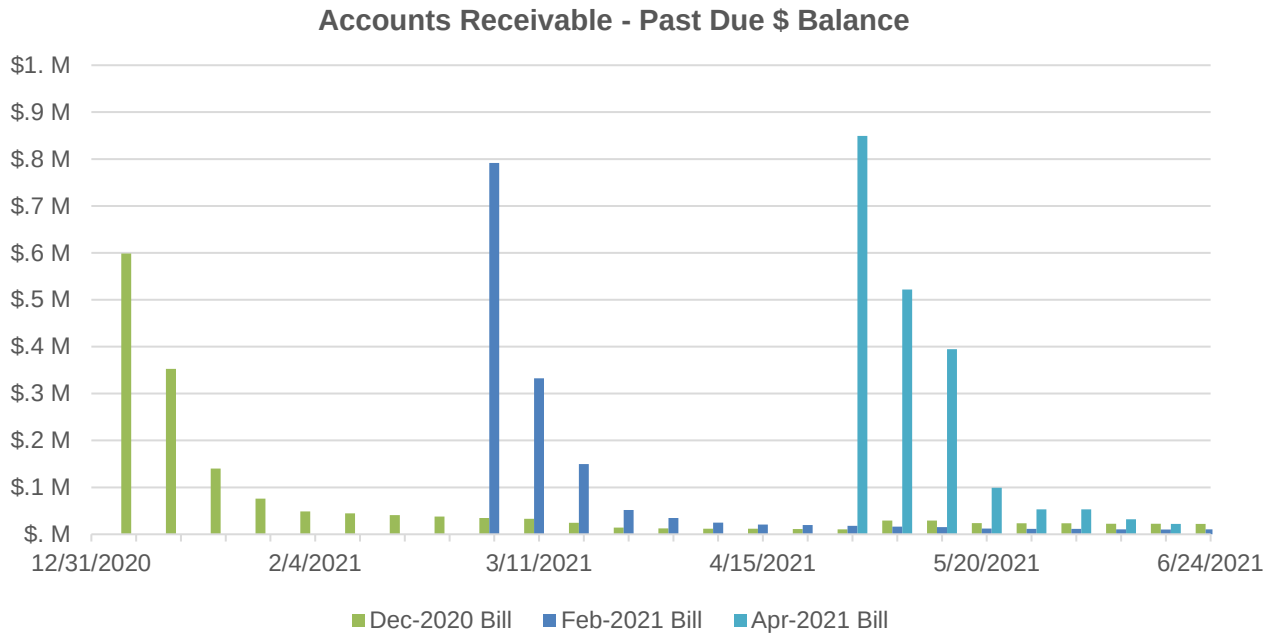


How do customers PAY their bill?



Are customers making timely payments?

	Aging Schedule			
	Balance as of 6/30/2021	Apr-2021 Billing	Feb-2021 Billing	Dec-2020 Billing (& Earlier)
Past Due Balance $	$ 53,040	$ 20,398	$ 10,447	$ 22,195
Accounts		91	45	29



Budget Status - Balance

Period: 07/01/20 - 06/30/21

FY Remain: 0%

	FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
Period: 07/01/20 - 06/30/21 (12 months)							
Potable Water - Fund 01							
Water Sales & Services (R10, R20)	$ 6,065,007	$ 6,364,864	$ 299,858	5%	$ 5,952,484	$ (412,380)	-7%
New Connections (R25)	$ 761,350	$ 715,775	$ (45,575)	-6%	$ 786,110	$ 70,335	9%
Other Revenue (R30, R40)	$ 1,207,315	$ 1,141,957	$ (65,358)	-5%	$ 1,175,391	$ 33,434	3%
Potable Water Total	**$ 8,033,672**	**$ 8,222,597**	**$ 188,925**	**2%**	**$ 7,913,985**	**$ (308,612)**	**-4%**
Recycled Water - Fund 02							
Water Sales & Services (R10, R20)	$ 552,650	$ 607,153	$ 54,503	10%	$ 547,998	$ (59,155)	-11%
New Connections (R25)	$ 45,104	$ -	$ (45,104)	-100%	$ 32,126	$ 32,126	100%
Other Revenue (R30, R40)	$ 8,209	$ 174,323	$ 166,113	2024%	$ 177,985	$ 3,662	2%
Recycled Water Total	**$ 605,964**	**$ 781,476**	**$ 175,512**	**29%**	**$ 758,109**	**$ (23,367)**	**-3%**
TOTAL REVENUE	**$ 8,639,635**	**$ 9,004,073**	**$ 364,438**	**4%**	**$ 8,672,094**	**$ (331,979)**	**-4%**
Expenses - Fund 01 and Fund 02 Combined							
Salaries & Benefits (E01)	$ 2,871,907	$ 2,860,434	$ (11,473)	0%	$ 3,050,085	$ 189,651	6%
Services & Supplies (E03-E80)	$ 2,502,542	$ 2,854,213	$ 351,672	14%	$ 3,074,046	$ 219,833	7%
Project Expenses	$ 1,430,892	$ 3,296,772	$ 1,865,880	130%	$ 4,573,007	$ 1,276,235	28%
Debt Service - Principal	$ 460,030	$ 567,298	$ 107,268	23%	$ 567,298	$ -	0%
TOTAL EXPENSES *	**$ 7,265,371**	**$ 9,578,717**	**$ 2,313,346**	**32%**	**$ 11,264,436**	**$ 1,685,719**	**15%**
NET REVENUE	**$ 1,374,265**	**$ (574,644)**	**$ (1,948,909)**		**$ (2,592,342)**	**$ (2,017,698)**	
Period: 07/01/20 - 06/30/21 (12 months)							
Total Revenue	**$ 8,639,635**	**$ 9,004,073**	**$ 364,438**	**4%**	**$ 8,672,094**	**$ (331,979)**	**-4%**
Total Expenses *	**$ 7,265,371**	**$ 9,578,717**	**$ 2,313,346**	**32%**	**$ 11,264,436**	**$ 1,685,719**	**15%**
Net Revenue	**$ 1,374,265**	**$ (574,644)**	**$ (1,948,909)**		**$ (2,592,342)**		
Period: 07/01/20 - 05/31/21 (11 months)							
Total Revenue	**$ 7,662,309**	**$ 7,891,703**	**$ 229,394**	**3%**	**$ 8,672,094**	**$ 780,392**	**9%**
Total Expenses *	**$ 6,175,358**	**$ 7,978,493**	**$ 1,803,135**	**29%**	**$ 11,264,436**	**$ 3,285,943**	**29%**
Net Revenue	**$ 1,486,951**	**$ (86,790)**	**$ (1,573,742)**		**$ (2,592,342)**		

* Expense totals do not include depreciation expense

Budget Status - Revenue

Period: 07/01/20 - 06/30/21 **FY Remain: 0%**

		FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
Fund 01	**Potable Water**							
R10	Operating Revenue - Water Sales							
01-000-41101	Residential Consumption - SF	$ 2,261,670	$ 2,481,051	$ 219,382	10%	$ 2,292,073	$ (188,978)	-8%
01-000-41102	Residential Consumption - MF	$ 180,248	$ 189,646	$ 9,398	5%	$ 169,499	$ (20,147)	-12%
01-000-41103	CII Consumption	$ 1,009,274	$ 1,011,697	$ 2,423	0%	$ 964,099	$ (47,598)	-5%
01-000-41106	CII Consumption - Other	$ 128,751	$ 82,236	$ (46,515)	-36%	$ -	$ (82,236)	
01-000-41105	Irrigation Consumption	$ 385,967	$ 402,919	$ 16,952	4%	$ 332,394	$ (70,525)	-21%
01-000-41200	Other - Bulk Water	$ 58,032	$ 16,351	$ (41,681)	-72%	$ 25,745	$ 9,394	36%
	R10 Sub Totals:	$ 4,023,942	$ 4,183,900	$ 159,958	4%	$ 3,783,810	$ (400,090)	-11%
R20	Operating Revenue - Water Services							
01-000-41300	Other - Late Penalty	$ 15,980	$ 14,227	$ (1,753)	-11%	$ 25,800	$ 11,573	45%
01-000-42100	Standby Basic Meter Charge	$ 1,958,322	$ 2,095,848	$ 137,526	7%	$ 2,074,649	$ (21,199)	-1%
01-000-42121	Standby FP Basic Meter Charge	$ 57,013	$ 62,064	$ 5,052	9%	$ 57,725	$ (4,339)	-8%
01-000-43300	Other Operating Revenue	$ 9,750	$ 8,825	$ (925)	-9%	$ 10,500	$ 1,675	16%
	R20 Sub Totals:	$ 2,041,065	$ 2,180,964	$ 139,899	7%	$ 2,168,674	$ (12,290)	-1%
R25	Operating Revenue - New Connections							
01-000-42101	Other Meter Fee	$ 10,839	$ 8,627	$ (2,212)	-20%	$ 12,891	$ 4,264	33%
01-000-42102	Other Capacity Fee	$ 739,305	$ 703,635	$ (35,670)	-5%	$ 761,528	$ 57,893	8%
01-000-42120	Other FP Meter Fee	$ 4,739	$ 472	$ (4,267)	-90%	$ 4,691	$ 4,219	90%
01-000-43100	Other Will Serve	$ 1,000	$ 875	$ (125)	-13%	$ 1,000	$ 125	13%
01-000-43200	Other Dev Proj Review	$ 5,467	$ 2,166	$ (3,301)	-60%	$ 6,000	$ 3,834	64%
	R25 Sub Totals:	$ 761,350	$ 715,775	$ (45,575)	-6%	$ 786,110	$ 70,335	9%
R30	Non-Operating Revenue - Other							
01-000-46000	Property Taxes	$ 1,030,321	$ 1,054,698	$ 24,377	2%	$ 1,077,212	$ 22,514	2%
01-000-47110	Interest & Dividend	$ 22	$ 1,417	$ 1,395	6357%	$ 21	$ (1,396)	-6646%
01-000-47120	Interest - LAIF	$ 42,787	$ 14,236	$ (28,551)	-67%	$ 52,500	$ 38,264	73%
01-000-47520	Misc. Non-Operating Revenue	$ 115,907	$ 30,473	$ (85,433)	-74%	$ 45,658	$ 15,185	33%
01-000-47550	Third-Party Reimbursements	$ 18,278	$ 30,623	$ 12,345	68%	$ -	$ (30,623)	
	R30 Sub Totals:	$ 1,207,315	$ 1,131,447	$ (88,213)	-6%	$ 1,175,391	$ 74,567	6%
R40	Non-Operating Revenue - Grants							
01-000-45260	Local Grant - ACWA JPIA	$ -	$ 10,510	$ 10,510		$ -	$ (10,510)	
	R40 Sub Totals:	$ -	$ 10,510	$ 10,510		$ -	$ (10,510)	
	Fund 01 Revenue:	**$ 8,033,672**	**$ 8,222,597**	**$ 176,580**	**2%**	**$ 7,913,985**	**$ (277,989)**	**-4%**
	Fund 01 Rev Excl Grants & Cap Contributions	$ 8,033,672	$ 8,212,087	$ 166,070	2%	$ 7,913,985	$ (267,479)	-3%

Assumed $330K negative adjustment due to COVID

Budget Status - Revenue

Period: 07/01/20 - 06/30/21 **FY Remain: 0%**

		FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
Fund 02	**Recycled Water**							
R10	Operating Revenue - Water Sales							
02-000-41105	Irrigation Consumption	$ 501,350	$ 509,452	$ 8,102	2%	$ 482,653	$ (26,799)	-6%
02-000-41200	Other - Bulk Water	$ 7,620	$ 33,882	$ 26,262	345%	$ -	$ (33,882)	
	R10 Sub Totals:	$ 508,970	$ 543,334	$ 34,364	7%	$ 482,653	$ (60,681)	-13%
R20	Operating Revenue - Water Services							
02-000-42100	Standby Basic Meter Charge	$ 43,606	$ 63,694	$ 20,089	46%	$ 65,345	$ 1,651	3%
02-000-43300	Other Operating Revenue	$ 75	$ 125	$ 50	67%	$ -	$ (125)	
	R20 Sub Totals:	$ 43,681	$ 63,819	$ 20,139	46%	$ 65,345	$ 1,526	2%
R25	Operating Revenue - New Connections							
02-000-42101	Other Meter Fee	$ 1,125	$ -	$ (1,125)	0%	$ 825	$ 825	100%
02-000-42102	Other Capacity Fee	$ 43,979	$ -	$ (43,979)	-100%	$ 31,301	$ 31,301	100%
	R25 Sub Totals:	$ 45,104	$ -	$ (45,104)	-100%	$ 32,126	$ 32,126	100%
R30	Non-Operating Revenue - Other							
02-000-47110	Interest & Dividend	$ 8,209	$ 4,491	$ (3,719)	-45%	$ 8,573	$ 4,082	48%
02-000-47520	Other Non-Operating Revenue	$ -	$ 420	$ 420		$ -	$ (420)	
02-000-47560	Reduction of RW Entitlement	$ -	$ 169,412	$ 169,412		$ 169,412	$ -	0%
	R30 Sub Totals:	$ 8,209	$ 174,323	$ 166,113	2024%	$ 177,985	$ 3,662	2%
	Fund 02 Revenue:	**$ 605,964**	**$ 781,476**	**$ 175,512**	**29%**	**$ 758,109**	**$ (23,367)**	**-3%**
	Fund 02 Rev Excl Grants & Cap Contributions	$ 605,964	$ 781,476	$ 175,512	**29%**	$ 758,109	$ (23,367)	-3%
Revenue Totals:		**$ 8,639,635**	**$ 9,004,073**	**$ 352,093**	**4%**	**$ 8,672,094**	**$ (301,356)**	**-3%**
Revenue Total Excl Grants & Cap Contributions		$ 8,639,635	$ 8,993,563	$ 341,583	4%	$ 8,672,094	$ (290,846)	-3%

Budget Status - Expense

Period: 07/01/20 - 06/30/21 **FY Remain: 0%**

Fund 01 and Fund 02 Combined

Dept		FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
Dept	**Administration**							
E01	Salaries & Benefits	$ 595,180	$ 621,483	$ 26,303	4%	$ 641,272	$ 19,789	3%
E03	General & Admin - Services	$ 299,532	$ 401,909	$ 102,377	34%	$ 470,819	$ 68,910	15%
E05	General & Admin - Supplies	$ 18,041	$ 8,680	$ (9,361)	-52%	$ 17,200	$ 8,520	50%
E10	Source of Supply	$ 241,410	$ 369,102	$ 127,691	53%	$ 330,490	$ (38,612)	-12%
E70	Other	$ 500	$ -	$ (500)	-100%	$ 5,000	$ 5,000	100%
	Dept 100 Sub Totals:	**$ 1,154,663**	**$ 1,401,173**	**$ 246,510**	**21%**	**$ 1,464,781**	**$ 63,608**	**4%**
Dept	**Finance/Customer Service**							
E01	Salaries & Benefits	$ 550,846	$ 566,603	$ 15,757	3%	$ 563,967	$ (2,636)	0%
E03	General & Admin - Services	$ 125,726	$ 162,171	$ 36,445	29%	$ 210,163	$ 47,992	23%
E05	General & Admin - Supplies	$ 2,259	$ 367	$ (1,893)	-84%	$ 4,000	$ 3,633	91%
E35	Customer Accounts	$ 178,667	$ 276,968	$ 98,301	55%	$ 207,113	$ (69,855)	-34%
E70	Other	$ 1,017	$ 1,029	$ 12	1%	$ 1,038	$ 9	1%
E80	Debt Service - Interest	$ 86,262	$ 75,834	$ (10,428)	-12%	$ 75,863	$ 29	0%
	Dept 200 Sub Totals:	**$ 944,777**	**$ 1,082,971**	**$ 138,194**	**15%**	**$ 1,062,144**	**$ (20,827)**	**-2%**
Dept	**Operations**							
E01	Salaries & Benefits	$ 1,527,531	$ 1,467,669	$ (59,862)	-4%	$ 1,619,059	$ 151,390	9%
E03	General & Admin - Services	$ 165,379	$ 186,174	$ 20,795	13%	$ 205,260	$ 19,086	9%
E05	General & Admin - Supplies	$ 37,012	$ 37,238	$ 226	1%	$ 17,000	$ (20,238)	-119%
E07	General Production	$ 106,488	$ 119,766	$ 13,278	12%	$ 97,000	$ (22,766)	-23%
E10	Source of Supply	$ 182,735	$ 111,362	$ (71,372)	-39%	$ 130,000	$ 18,638	14%
E15	Pumping	$ 478,512	$ 426,369	$ (52,143)	-11%	$ 513,400	$ 87,031	17%
E20	Water Treatment	$ 384,622	$ 366,296	$ (18,326)	-5%	$ 430,000	$ 63,704	15%
E25	Transmission & Distribution	$ 80,328	$ 121,648	$ 41,320	51%	$ 131,200	$ 9,552	7%
E70	Other	$ 21,619	$ 122,113	$ 100,494	465%	$ -	$ (122,113)	
	Dept 300 Sub Totals:	**$ 2,984,226**	**$ 2,959,788**	**$ (24,437)**	**-1%**	**$ 3,142,919**	**$ 183,131**	**6%**
Dept	**Engineering**							
E01	Salaries & Benefits	$ 91,331	$ 101,133	$ 9,803	11%	$ 105,710	$ 4,577	4%
E03	General & Admin - Services	$ 84,479	$ 65,344	$ (19,135)	-23%	$ 189,900	$ 124,556	66%
E05	General & Admin - Supplies	$ 1,357	$ 307	$ (1,050)	-77%	$ 1,000	$ 693	69%
	Dept 400 Sub Totals:	**$ 177,166**	**$ 166,784**	**$ (10,382)**	**-6%**	**$ 296,610**	**$ 129,826**	**44%**
Dept	**Board of Directors**							
E01	Salaries & Benefits	$ 107,019	$ 103,546	$ (3,474)	-3%	$ 120,077	$ 16,531	14%
E03	General & Admin - Services	$ 6,597	$ 385	$ (6,212)	-94%	$ 22,800	$ 22,415	98%
E05	General & Admin - Supplies	$ -	$ -	$ -		$ 800	$ 800	100%
	Dept 900 Sub Totals:	**$ 113,616**	**$ 103,931**	**$ (9,686)**	**-9%**	**$ 143,677**	**$ 39,746**	**28%**

Capacity Buy-Back
(1x 1" and 1 x 5/8")

Budget Status - Expense

Period: 07/01/20 - 06/30/21 **FY Remain: 0%**

		FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
Summary								
E01	Salaries & Benefits	$ 2,871,907	$ 2,860,434	$ (11,473)	0%	$ 3,050,085	$ 189,651	6%
E03	General & Admin - Services	$ 681,712	$ 815,982	$ 134,270	20%	$ 1,098,942	$ 282,960	26%
E05	General & Admin - Supplies	$ 58,670	$ 46,591	$ (12,079)	-21%	$ 40,000	$ (6,591)	-16%
E07	General Production	$ 106,488	$ 119,766	$ 13,278	12%	$ 97,000	$ (22,766)	-23%
E10	Source of Supply	$ 424,145	$ 480,464	$ 56,319	13%	$ 460,490	$ (19,974)	-4%
E15	Pumping	$ 478,512	$ 426,369	$ (52,143)	-11%	$ 513,400	$ 87,031	17%
E20	Water Treatment	$ 384,622	$ 366,296	$ (18,326)	-5%	$ 430,000	$ 63,704	15%
E25	Transmission & Distribution	$ 80,328	$ 121,648	$ 41,320	51%	$ 131,200	$ 9,552	7%
E35	Customer Accounts	$ 178,667	$ 276,968	$ 98,301	55%	$ 208,151	$ (69,846)	-34%
E70	Other	$ 23,136	$ 123,142	$ 100,006	432%	$ 5,000	$ (122,113)	-2442%
E80	Debt Service - Interest	$ 86,262	$ 75,834	$ (10,428)	-12%	$ 75,863	$ 29	0%
	Purchase Order Carryover					$ 14,000		
District Expense Total:		**$ 5,374,449**	**$ 5,714,647**	**$ 340,199**	**6%**	**$ 6,124,131**	**$ 390,484**	**6%**
Fund 01 and 02 Combined								
E01	Salaries & Benefits	$ 2,871,907	$ 2,860,434	$ (11,473)	0%	$ 3,050,085	$ 189,651	**6%**
E03-E80	Services & Supplies	$ 2,502,542	$ 2,854,213	$ 351,672	14%	$ 3,060,046	$ 205,833	**7%**
	Purchase Order Carryover					$ 14,000		
District Expense Total:		**$ 5,374,449**	**$ 5,714,647**	**$ 340,199**	**6%**	**$ 6,124,131**	**$ 395,484**	**6%**

Projects - Expense

Period: 07/01/20 - 06/30/21 **FY Remain: 0%**

Fund 01 and Fund 02 Combined

Project	Description	FY 2021 YTD Actual	FY 2021 Budget *	FY 2021 Remaining Balance	%
C15016	Utility Billing Software Improvements	$ -	$ 26,841	$ 26,841	100%
C15021	Purified Recycled Water Recharge	$ 9,159	$ 421,021	$ 411,863	98%
C16023	Orchard Run WTP Water Quality Improvements	$ 2,449,807	$ 2,113,507	$ (336,300)	-16%
C16024	Bethany Tank Rehabilitation	$ 105,014	$ 244,528	$ 139,514	57%
M17011	Meters with AMI	$ 67,358	$ 75,000	$ 7,642	10%
C17011	AMI Technology for Meters	$ 43,953	$ 170,053	$ 126,100	74%
C17018	Specialized Operations Vehicle	$ 154,181	$ 215,603	$ 61,422	28%
C18033	Polo Ranch Pump Station Improvements	$ 140,403	$ 75,000	$ (65,403)	-87%
C18035	Sequoia Tank Rehabilitation	$ 20,170	$ -	$ (20,170)	
C19020	El Pueblo WTP Improvements	$ 59,204	$ 56,050	$ (3,154)	-6%
C19030	Hacienda Pump Station Improvements	$ 163,693	$ 57,728	$ (105,965)	-184%
C19070	Vehicle Replacement Program	$ 45,387	$ 73,157	$ 27,770	38%
C20010	Main Replacement Program - PW	$ 21,822	$ 675,379	$ 653,557	97%
C20020	Treatment Facility for New Formation Well	$ -	$ 126,140	$ 126,140	100%
C20040	Administrative Building Improvements	$ 11,081	$ 30,000	$ 18,919	63%
TBD	Well 10 WTP Water Quality Improvements	$ -	$ 113,000	$ 113,000	100%
TBD	Lompico Formation Production Well (Well 9)	$ 5,540	$ 100,000	$ 94,460	94%
Projects Expense Totals:		**$ 3,296,772**	**$ 4,573,007**	**$ 1,276,235**	**28%**

* Budget amounts include carryover funds from the prior year

Balance Sheet

Fund 01 and Fund 02 Combined

	6/30/20	6/30/21
Assets		
Cash	$4,411,823	$3,511,132
Accrued Interest	$2,549	$6,676
A/R Customer-Water	$1,583,863	$1,829,573
Property Tax Receivable	$0	$48,045
A/R - Other	$202,505	$43,179
Interfund Loan Receivable	$888,040	$888,040
Inventory	$232,601	$271,380
Prepaid Expense	$66,281	$67,743
Note Receivable	$71,393	$65,000
JPA Investment	$332,010	$387,112
Land & Right-of-ways	$650,697	$650,697
Construction-in-progress	$1,858,804	$3,839,684
Water Rights / Intangible Assets	$5,267,833	$5,267,833
Plant & Equipment	$38,053,522	$39,131,437
Depreciation/Amortization	($22,757,538)	($23,827,288)
Deferred Pension Outflows	$680,989	$694,399
Unfunded OPEB Liability	$153,549	$142,970
	$31,698,921	**$33,017,612**
Liabilities		
A/P & Accrued Expenses	$403,685	$468,928
Accrued Salaries & Wages	$8,268	$18,172
Accrued Interest Payable	$43,179	$37,932
Customer Deposits	$57,210	$67,210
Interfund Loans	$888,040	$888,040
LT Liabilities Due in 1 Yr	$607,806	$703,830
Unearned Revenue	$56,411	$60,181
Long-term Liabilities	$9,011,708	$8,110,406
Deferred Pension Inflows	$212,281	$215,460
	$11,288,588	**$10,570,157**
Fund Balance		
Investment in Capital Assets	$16,974,413	$17,684,486
Unrestricted Net Position	$116,146	$1,642,955
	$17,090,559	**$19,327,441**
Total Liabilities and Fund Balance:	$28,379,147	$29,897,598
Total Retained Earnings:	$3,319,774	$3,120,014
Total Fund Balance and Retained Earnings:	$20,410,333	$22,447,455
Total Liabilities, Fund Balance, and Retained Earnings:	**$31,698,921**	**$33,017,612**

Scotts Valley Water District
AP Check Register
June 2021

Vendor Name	Check Date	Check No.	Check Amount	Description
ABACHERLI FENCE CO	6/24/2021	30009	$ 9,265.00	Fence & Gate Repair w/ Barbed Wire - El Pueblo Yard
ACWA/JPIA	6/10/2021	29951	$ 36,610.68	EE & Retiree Benefits - Jul 2021
AFSCME COUNCIL 57	6/24/2021	30010	$ 728.70	Union Dues - Jun 2021
ALVORD JEFF	6/10/2021	29952	$ 3,067.40	Customer Rebate - Special Lawn Replacement
BADGER METER	6/10/2021	29953	$ 2,388.08	Meter Register Purchases - Qty: 35
BADGER METER	6/10/2021	29953	$ 7,020.55	Meter Purchases - Qty: 9
BADGER METER	6/10/2021	29953	$ 63.19	Monthly Cell Charge for RW Meter Reads - May 2021
BADGER METER	6/10/2021	29953	$ 3,972.07	Monthly Cell Charge for PW Meter Reads - May 2021
BAINBRIDGE ALAN	6/24/2021	30011	$ 60.00	D2 Cert - Bainbridge
BALLINGER KATHY	6/24/2021	30012	$ 55.63	Mileage Reimb - Weekly Bank Trips - Ballinger
BATTERIES PLUS BULBS #314	6/10/2021	29954	$ 158.98	Vehicle Maint - Battery Replacement - Truck #9
BATTERIES PLUS BULBS #314	6/24/2021	30013	$ 218.25	RW Tank Battery
BATTERIES PLUS BULBS #314	6/24/2021	30013	$ 150.86	Vehicle Maint - Vacuum Trailer Battery
BAYSIDE EQUIPMENT COMPANY	6/10/2021	29955	$ 1,550.00	Generator Rental - Bethany PS - May 2021
BAYSIDE EQUIPMENT COMPANY	6/10/2021	29955	$ 2,393.00	Generator Rental - Well 11B - May 2021
BECKER ANDREAS	6/10/2021	29956	$ 100.00	Customer Rebate - Toilet
BIEDERMAN ANNE	6/10/2021	29957	$ 1,005.00	Customer Rebate - Special Lawn Replacement
BRENNTAG PACIFIC INC	6/24/2021	30014	$ 10,267.41	Water Treatment Chemicals
CITY OF SCOTTS VALLEY	6/10/2021	29959	$ 9,856.99	Bi-Monthly Treatment Disposal - Well 10
CITY OF SCOTTS VALLEY	6/10/2021	29959	$ 92.98	Bi-Monthly Sewer Service - 2 Civic Ctr
CITY OF SCOTTS VALLEY	6/10/2021	29959	$ 7,368.08	Bi-Monthly Treatment Disposal - El Pueblo WTP
CITY OF SCOTTS VALLEY	6/10/2021	29959	$ 92.98	Bi-Monthly Treatment Disposal - Orchard Run WTP
CITY OF SCOTTS VALLEY	6/24/2021	30015	$ 420.00	Bacti Samples - May 2021
CIVIL CONSULTANTS GROUP INC	6/24/2021	30016	$ 3,400.00	Well 10 WTP Improvements - Piping Plans - Jan 2021
CIVIL CONSULTANTS GROUP INC	6/24/2021	30016	$ 185.00	Well 10 WTP Improvements - Bid & Construction - Jan 2021
CIVIL CONSULTANTS GROUP INC	6/24/2021	30016	$ 840.00	Well 10 WTP Improvements - Specs - Jan 2021
CIVIL CONSULTANTS GROUP INC	6/24/2021	30016	$ 2,160.00	Well 10 WTP Improvements - Bag Filter Pad & Stairs - Jan 2021
CIVIL CONSULTANTS GROUP INC	6/10/2021	29960	$ 880.00	SA-170 Plan Review
CIVIL CONSULTANTS GROUP INC	6/10/2021	29960	$ 550.00	General Engineering Services - May 2021
CONTRACTOR COMPLIANCE & MONITORING	6/10/2021	29961	$ 2,254.80	Orchard Run WTP Improvements - Labor Compliance Monitoring
COUNTY OF SANTA CRUZ	6/10/2021	29962	$ 71.54	Landfill Waste - May 2021
DASSELS PETROLEUM	6/10/2021	29963	$ 1,487.08	Vehicle fuel - May 2021
DELUCIA CAROLYN	6/10/2021	29964	$ 50.00	Customer Rebate - Pressure Regulator
DYNAMIC PRESS INC	6/10/2021	29965	$ 90.00	RW Fill Station Program Cards
E & S TRUCKING	6/10/2021	29966	$ 4,935.00	Orchard Run Wastewater - Apr-May 2021
EXCEEDIO	6/10/2021	29967	$ 41.71	Office Supplies - Display Cables
FASTENAL COMPANY	6/24/2021	30017	$ 564.62	OPS Supplies - Misc
FELDMAN JUDY	6/10/2021	29968	$ 1,312.00	Customer Rebate - Special Lawn Replacement
FELDMAN JUDY	6/10/2021	29968	$ 50.00	Customer Rebate - Pressure Regulator
GARSIDE TOM	6/10/2021	29969	$ 50.00	Customer Rebate - Toilet
GRAINGER	6/24/2021	30018	$ 157.88	Small Tools - Battery Charger
GRAINGER	6/24/2021	30018	$ 170.73	OPS Supplies - Cell Phone Case & Grainger Membership
GRAINGER	6/24/2021	30018	$ 550.60	WTP Maint - Air Compressor Pump
GRAINGER	6/24/2021	30018	$ 413.07	WTP Maint - Chemical Transfer Pump
GRANITE ROCK COMPANY	6/24/2021	30019	$ 122.29	Main Maint - Utility Trench Sand
GREEN WASTE RECOVERY INC	6/10/2021	29971	$ 257.36	Trash Service - El Pueblo - May 2021
HACH COMPANY	6/10/2021	29972	$ 779.15	Chlorine Analyzer Repair
HAIGHT ROBERT	6/10/2021	29973	$ 598.02	Retiree Medical - Jun 2021
HARRINGTON INDUSTRIAL PLASTICS LLC	6/10/2021	29974	$ 179.42	WTP Maint - PVC Connectors
HEALTHEQUITY INC	6/24/2021	30020	$ 38.35	HSA Admin Fees - Jun 2021
HINES TOM	6/10/2021	29975	$ 2,839.60	Customer Rebate - Special Lawn Replacement
ICON CLOUD SOLUTIONS LLC	6/10/2021	29976	$ 343.22	Phone Service - Jun 2021
ICON CLOUD SOLUTIONS LLC	6/10/2021	29976	$ 121.21	Phone Service - OPS - Jun 2021
ICONIX WATERWORKS (US) INC	6/10/2021	29977	$ 1,215.68	OPS Supplies - Air Relief Valves
ICONIX WATERWORKS (US) INC	6/10/2021	29977	$ 33.65	Service Line Maint - Ball Valves
ICONIX WATERWORKS (US) INC	6/10/2021	29977	$ 1,462.43	Hydrant Maint - Hydrant Repair Supplies
ICONIX WATERWORKS (US) INC	6/24/2021	30021	$ 752.23	WTP Maint - Check Valve
INFOSEND	6/24/2021	30022	$ 227.80	UB Past Due Printing & Mailing - May 2021
JACK HENRY & ASSOCIATES INC	6/10/2021	29978	$ 2,264.40	Annual Software License - RemitPlus - FY2022
JACKSON LANDSCAPE	6/10/2021	29979	$ 292.50	Landscape Maint - 2 Civic Ctr - May 2021
KASSIS JANETTE	6/10/2021	29980	$ 333.80	Retiree Medical - Jun 2021
LAUCELLA CLAY	6/10/2021	29981	$ 22.05	UB Refund Check 013277-000
LAW OFFICE OF ROBERT E BOSSO	6/10/2021	29982	$ 3,000.00	Legal Counsel Services - May 2021
LEISHMAN WADE	6/10/2021	29983	$ 175.00	Director Medical - Jun 2021
LEWIS GREGORY	6/24/2021	30023	$ 187.50	SA-185 Irrigation Plan Review
MILLER MAXFIELD INC	6/10/2021	29984	$ 6,137.50	Communication / Public Outreach Services - May 2021
MISSION UNIFORM SERVICE	6/10/2021	29985	$ 398.64	Uniform Laundering & Rental Service - May 2021

Scotts Valley Water District
AP Check Register
June 2021

Vendor Name	Check Date	Check No.	Check Amount	Description
NAPA AUTO PARTS	6/10/2021	29986	$ 0.63	Finance Charge
NAPA AUTO PARTS	6/10/2021	29986	$ 14.88	Vehicle Maint - Taillight
NAPA AUTO PARTS	6/24/2021	30024	$ 24.86	WTP Maint - Pump Oil
NAPA AUTO PARTS	6/24/2021	30024	$ 125.21	OPS Supplies - Generator & Pressure Washer Hardware
NATIONWIDE RETIREMENT SOLUTIONS	6/10/2021	29987	$ 2,158.86	IRS 457 Plan - Payroll Date 6/4/2021
NATIONWIDE RETIREMENT SOLUTIONS	6/24/2021	30025	$ 2,408.86	IRS 457 Plan - Payroll Date 6/18/2021
NORTH BAY FORD	6/10/2021	29988	$ 1,211.82	Vehicle Maint - Turbo Line / Gasket Repair - Truck #13
NORTON PATRICIA	6/10/2021	29989	$ 33.72	Retiree Dental - Jun 2021
NORTON PATRICIA	6/10/2021	29989	$ 18.56	Retiree Vision - Jun 2021
NORTON PATRICIA	6/10/2021	29989	$ 456.19	Retiree Medical - Jun 2021
OLIVE SPRINGS QUARRY	6/24/2021	30026	$ 101.33	Service Line Maint - Asphalt
PACIFIC GAS & ELECTRIC	6/10/2021	29990	$ 66.36	Electricity - Skypark - May 2021
PACIFIC GAS & ELECTRIC	6/10/2021	29990	$ 442.83	Electricity - Santas Village Rd - May 2021
PACIFIC GAS & ELECTRIC	6/24/2021	30027	$ 38,007.86	Electricity - PW - May 2021
PACIFIC GAS & ELECTRIC	6/24/2021	30027	$ 1,140.23	Electricity - 2 Civic Ctr - May 2021
PACIFIC GAS & ELECTRIC	6/24/2021	30027	$ 216.70	Electricity - RW - May 2021
PALACE BUSINESS SOLUTIONS	6/24/2021	30028	$ 47.70	Office Supplies - Notebooks
PALACE BUSINESS SOLUTIONS	6/24/2021	30028	$ 86.65	OPS Office Supplies - Planners
PERRI CHRISTOPHER	6/10/2021	29991	$ 850.36	Director Medical - Jun 2021
PIED PIPER EXTERMINATORS	6/10/2021	29992	$ 260.00	Pest Control @ Pump Buildings - May 2021
PIED PIPER EXTERMINATORS	6/24/2021	30029	$ 260.00	Pest Control @ Pump Buildings - Jun 2021
PITNEY BOWES INC	6/24/2021	30030	$ 366.58	Postage Machine Ink & Sealant
PRICE AUDRA	6/24/2021	30031	$ 81.47	Re-Issue Stale UB Refund Check
PSOMAS	6/10/2021	29993	$ 51,583.50	ORWTP Improvements - Construction Mgmt & Inspection - Mar 2021
PSOMAS	6/10/2021	29993	$ 56,399.59	ORWTP Improvements - Construction Mgmt & Inspection - Apr 2021
RAFTELIS FINANCIAL CONSULTANTS INC	6/24/2021	30032	$ 3,166.25	Water Rate Study - Rate Development
RAFTELIS FINANCIAL CONSULTANTS INC	6/24/2021	30032	$ 3,656.25	Water Rate Study - Report Development
REBER DANIEL	6/10/2021	29994	$ 1,369.71	Director Medical - Jun 2021
RED WING BUSINESS ADVANTAGE ACCOUNT	6/24/2021	30033	$ 227.49	Work Boots - Bainbridge
REMI CO	6/24/2021	30034	$ 8.61	UB Refund Check 013295-000
RF MACDONALD CO	6/10/2021	29995	$ 2,425.93	Back-up Booster Pump Motor
RF MACDONALD CO	6/24/2021	30035	$ 5,424.95	Well 10 Booster Pump Replacement
RF MACDONALD CO	6/24/2021	30035	$ 3,897.82	Well 10 Booster Pump Motor Replacement
RICHARDS JUDY	6/1/2021	29949	$ 75.00	Customer Rebate - Toilet
SANTA CRUZ FIRE EQUIPMENT CO	6/24/2021	30036	$ 1,338.01	Annual Fire Extinguisher Maint
SANTOS MICHELLE	6/24/2021	30037	$ 158.82	UB Refund Check 010355-000
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 299.27	WTP Maint - Bio Scrubber & Compressor Hardware
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 247.82	Facility Maint - Lumber
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 70.22	Small Engine Fuel
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 85.94	OPS Supplies - Grip Tape, Lube, Soil, Misc
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 9.87	Safety Glasses
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 341.33	Small Tools - Sawblades, Toolbox, Transfer Pump, Level
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 71.19	Hydrant Maint - Concrete & Spraypaint
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 36.52	Office Supplies - Cables
SCARBOROUGH LUMBER & BUILDING SUPPLY	6/10/2021	29996	$ 192.72	Polo Ranch PS Upgrades - Electrical Hardware
SCHMETZ JANET	6/10/2021	29997	$ 86.61	UB Refund Check 010066-000
SCOTTS VALLEY SPRINKLER	6/24/2021	30038	$ 93.17	OPS Supplies - PVC & Gate Valve
SPRINGBROOK HOLDING COMPANY LLC	6/10/2021	29998	$ 2,147.00	CC Payment Transaction Fees - May 2021
STEVENSON LANDSCAPING	6/10/2021	29999	$ 250.00	Landscape Maint - Vine Removal @ El Pueblo Yard
STEVENSON LANDSCAPING	6/10/2021	29999	$ 960.00	Landscape Maint - RW Tank Cleanup & Hedge Removal
STILES RUTH	6/10/2021	30000	$ 792.63	Director Medical - Jun 2021
SWRCB-DWOCP	6/1/2021	29950	$ 105.00	D4 Cert Renewal - Ritchie
SWRCB-DWOCP	6/24/2021	30039	$ 90.00	T3 Cert Renewal - Rivera
SYCAL ENGINEERING INC	6/10/2021	30001	$ 1,395.00	Polo Ranch PS Upgrades - Panel Upgrades
SYCAL ENGINEERING INC	6/24/2021	30040	$ 8,351.71	Engineering Services for SCADA - May 2021
TOTAL COMPENSATION SYSTEMS INC	6/24/2021	30041	$ 675.00	GASB 75 Roll-Forward Valuation Services - 2nd Installment
TWO BROTHERS CATHODIC	6/10/2021	30002	$ 2,700.00	Cathodic Protection Service for Water Tanks
U.S. BANK EQUIPMENT FINANCE	6/24/2021	30042	$ 372.14	Copier Lease - Jun 2021
UNITED SITE SERVICES	6/10/2021	30003	$ 250.39	Portable Toilet Rental - Orchard Run WTP - Jun 2021
UNITED SITE SERVICES	6/10/2021	30003	$ 250.68	Portable Toilet Rental - 229 Mt Hermon - Jun 2021
UNITED SITE SERVICES	6/24/2021	30043	$ 314.27	Portable Toilet Rental - RW Fill Station - Jun 2021
UNITED SITE SERVICES	6/24/2021	30043	$ 243.68	Bethany 2nd Tank Addition - Temp Fence Rental
UNIVERSAL BUILDING SERVICES	6/10/2021	30004	$ 403.00	Janitorial Service - El Pueblo - May 2021
UNIVERSAL BUILDING SERVICES	6/10/2021	30004	$ 497.00	Janitorial Service - 2 Civic Ctr - May 2021
USABLUEBOOK	6/10/2021	30005	$ 327.39	Small Tools - Combo Key & Wrenches
USABLUEBOOK	6/24/2021	30044	$ 782.29	WTP Maint - Ball Valve, Colorimeter, Couplings
USABLUEBOOK	6/24/2021	30044	$ 59.88	Safety Pants

Scotts Valley Water District
AP Check Register
June 2021

Vendor Name	Check Date	Check No.	Check Amount	Description
VAN WAMBECK ALAN	6/10/2021	30006	$ 1,035.20	Customer Rebate - Special Lawn Replacement
WADATZ CHRISTOPHER	6/24/2021	30045	$ 5.42	UB Refund Check 011298-000
WANG RUOSHUI	6/10/2021	30007	$ 162.00	Customer Rebate - Lawn Replacement
WEBSOFT DEVELOPERS INC	6/24/2021	30046	$ 5,500.00	GIS Maint - ArcGIS Annual Subscription
WILLIS ERIC	6/10/2021	30008	$ 100.00	Customer Rebate - Smart Irrigation Controller
			$ 346,319.59	

Wire / ACH Payments
June 2021

Vendor Name	Trans Date	Check No.	Trans Amount	Description
ADP	6/11/2021	n/a	$ 182.90	ADP Workforce Now HR Fees - May 2021
ADP	6/11/2021	n/a	$ 185.30	ADP Time & Attendance Fees - May 2021
ADP	6/11/2021	n/a	$ 566.53	ADP PW18, PW20, PW22 Fees - May 2021
BlueFin	6/2/2021	n/a	$ 7,627.64	Bluefin CC Processing Fees - May 2021
BlueFin	6/2/2021	n/a	$ 90.27	Bluefin Civic PayPad Fees - May 2021
CalPERS	6/7/2021	n/a	$ 10,990.81	CalPERS Retirement - PW22 Ended 5/31/2021
CalPERS	6/17/2021	n/a	$ 11,344.52	CalPERS Retirement - PW24 Ended 6/14/2021
GSE Construction	6/3/2021	n/a	$ 529,427.87	Orchard Run WTP Improvements - Construction Pymt #5
GSE Construction	6/16/2021	n/a	$ 155,087.50	Orchard Run WTP Improvements - Construction Pymt #6
Wells Fargo CC	6/24/2021	n/a	$ 4,982.09	WFB CC Payment - Jun 2021
			$ 720,485.43	

Legend:

Abbreviation:	Meaning:
PW	Potable Water
RW	Recycled Water
WW	Waste Water
WTP	Water Treatment Plant
EE	Employee
ER	Employer
CO	Change Order
TO	Task Order
SA	Service Application
FY	Fiscal Year
OPS	Operations
Eng	Engineering
Adm	Administration
Fin	Finance
WUE	Water Use Efficiency
ENR	Engineering News Record
ACWA	Association of California Water Agencies
LID	Low Impact Development
UB	Utility Billing
AMI	Advanced Metering Infrastructure
PS	Pump Station

Scotts Valley Water District

Investment Summary

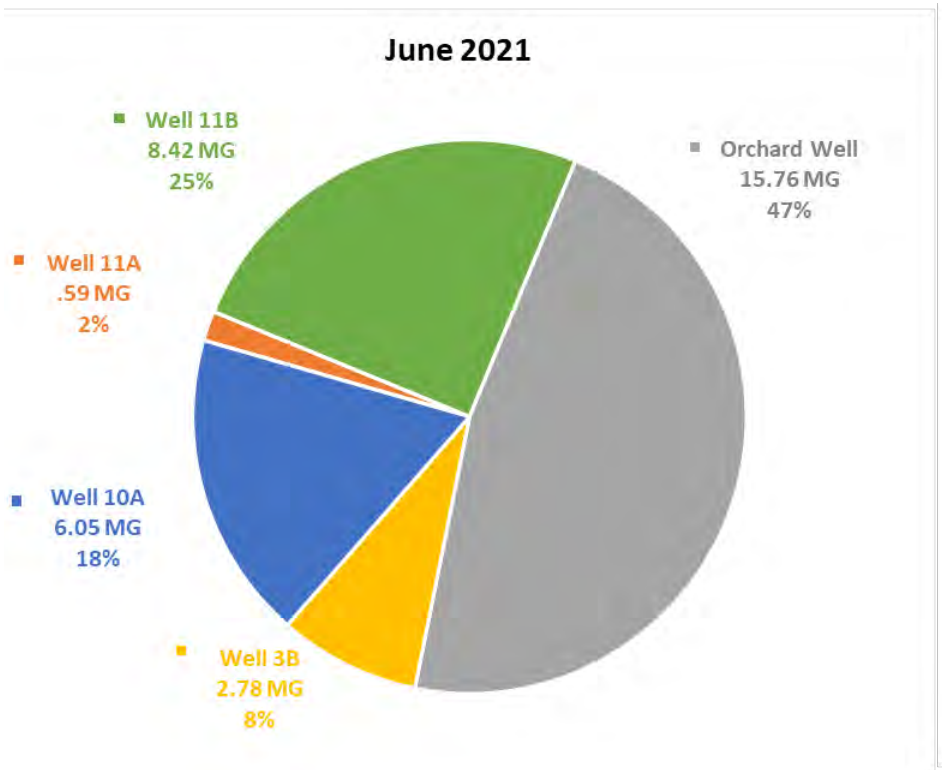
As of 6/30/2021

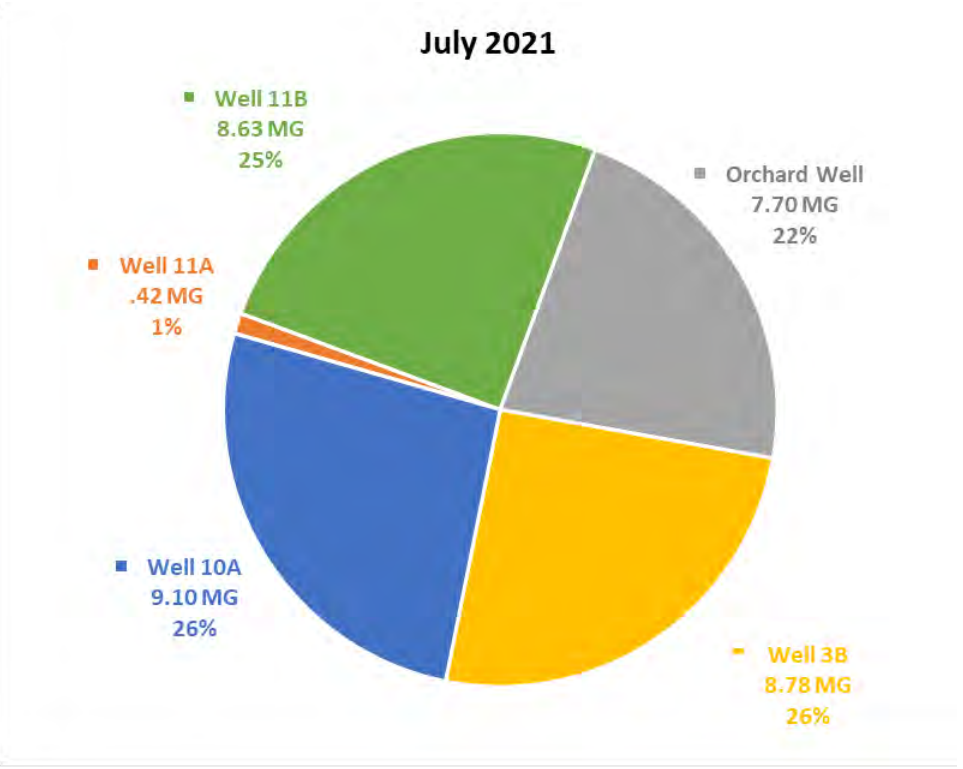
						Rate		Balance as of:		Market Value
Institution	Investment	CUSIP	Purchased	Maturity	Purchase $	3/31/2021	6/30/2021	3/31/2021	6/30/2021	6/30/2021
Unrestricted Funds:										
LAIF	Local Agency Investment Fund		various			0.44%	0.33%	$ 3,317,737	$ 2,021,113	$ 2,021,281
WFB	Checking - General		various			0.03%	0.03%	$ 10,748	$ 14,169	$ 14,169
WFB	Checking - Payroll		various			0.03%	0.03%	$ 8,008	$ 7,209	$ 7,209
WFB	Checking - Revenue		various			0.00%	0.00%	$ 1,052,572	$ 1,468,476	$ 1,468,476
	Subtotal for Unrestricted Funds:							**$ 4,159,096**	**$ 3,510,967**	**$ 3,511,135**
	Weighted Average Yield						0.19%			

The current investments comply with the requirements of the Investment Policy (P200-14-1)

Sufficient cash is available to meet expected expenditure requirements for the next six months.

Well Production



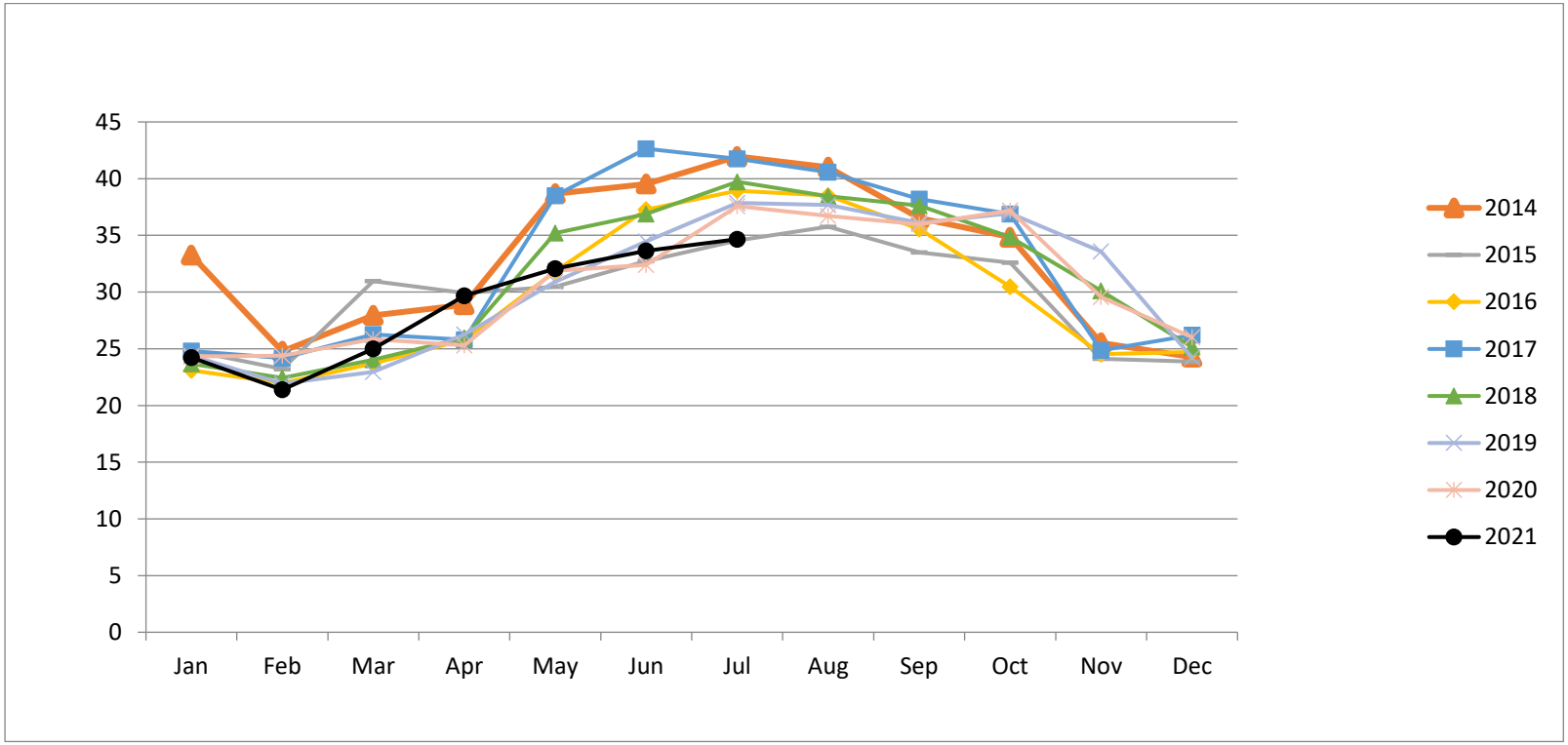


<u>Total Production (Million Gallons)</u>

June 2021	33.59 MG	4.87 % increase from May
July 2021	34.62 MG	3.07 % increase from June

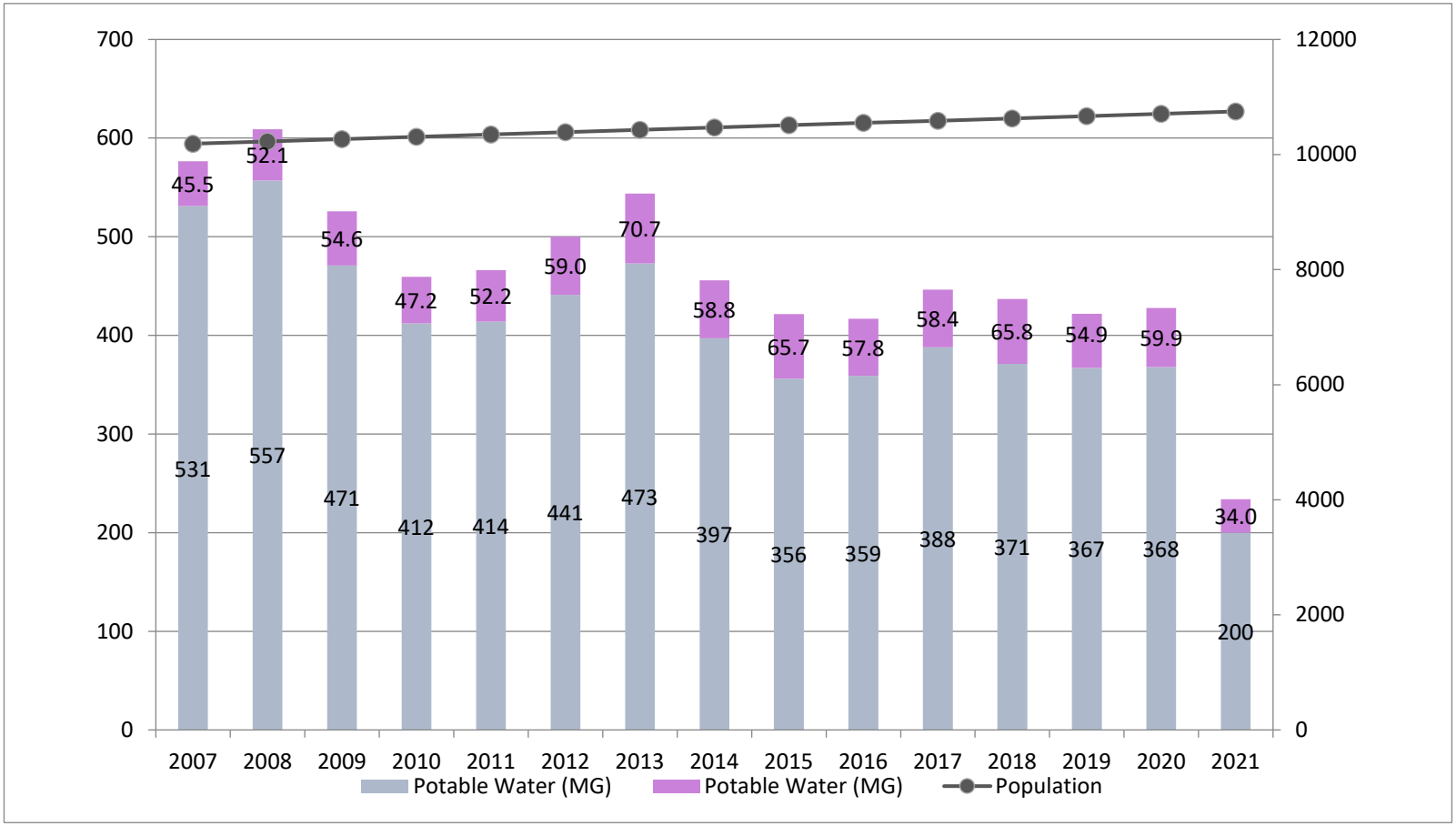
Production is Water Pumped +/- Water used for Well Maintenance Activities

Potable Water Demand



Demand is Production +/- Change in Storage

Potable and Recycled Water Demand vs. Population



Demand is Production +/- the Change in Storage

Potable and Recycled Water Demand

Potable

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average
Jan.	23,129,510	31,165,560	27,764,580	33,252,872	24,822,615	23,085,736	24,789,618	23,674,051	24,378,894	24,319,853	24,231,996	25,983,820
Feb.	25,004,280	26,813,840	26,124,132	24,779,862	23,217,640	21,968,896	23,490,314	22,427,754	21,923,206	24,323,667	21,387,258	23,865,470
March	26,079,310	29,752,014	31,559,240	27,946,154	30,953,420	23,910,892	25,837,232	24,042,754	22,954,225	25,855,924	24,995,557	26,901,462
April	30,993,238	29,234,622	35,621,370	28,875,831	29,909,260	28,400,861	25,477,561	25,992,670	26,027,391	25,297,107	29,671,141	28,583,694
May	40,456,736	43,581,989	49,525,756	38,675,936	30,478,823	31,995,591	38,043,826	33,751,004	30,912,986	31,885,131	32,077,872	36,590,864
June	38,237,371	46,553,850	47,432,970	39,525,236	32,726,825	36,842,416	42,310,983	36,786,677	34,451,155	32,393,746	33,647,606	39,021,090
July	46,417,190	48,634,940	49,192,762	41,957,386	34,544,613	38,892,200	41,757,891	39,648,922	37,857,926	38,411,455	34,662,207	41,800,222
Aug.	45,665,550	48,939,190	50,820,800	41,020,790	35,765,167	38,541,952	39,982,246	38,720,060	37,666,598	36,637,898		42,129,897
Sept.	43,700,350	42,936,210	45,489,360	36,533,116	33,498,030	35,653,167	38,190,535	35,202,216	36,106,611	35,968,389		39,096,275
Oct.	34,771,130	37,982,466	42,248,672	34,840,142	32,589,534	30,517,556	36,888,905	34,746,760	36,940,853	37,193,525		36,055,391
Nov.	28,853,908	28,714,236	34,868,300	25,524,197	24,110,286	24,388,656	24,864,436	30,389,575	33,566,905	29,565,349		27,586,433
Dec.	30,451,180	26,428,050	32,013,140	24,261,522	23,866,862	24,379,124	26,194,926	25,160,789	24,225,007	26,013,773		25,341,544
Total	413,759,753	440,736,967	472,661,082	397,193,044	356,483,075	358,577,047	387,828,472	370,543,233	367,011,756	367,865,818	200,673,637	394,962,796

Potable Water added through Intertie Two

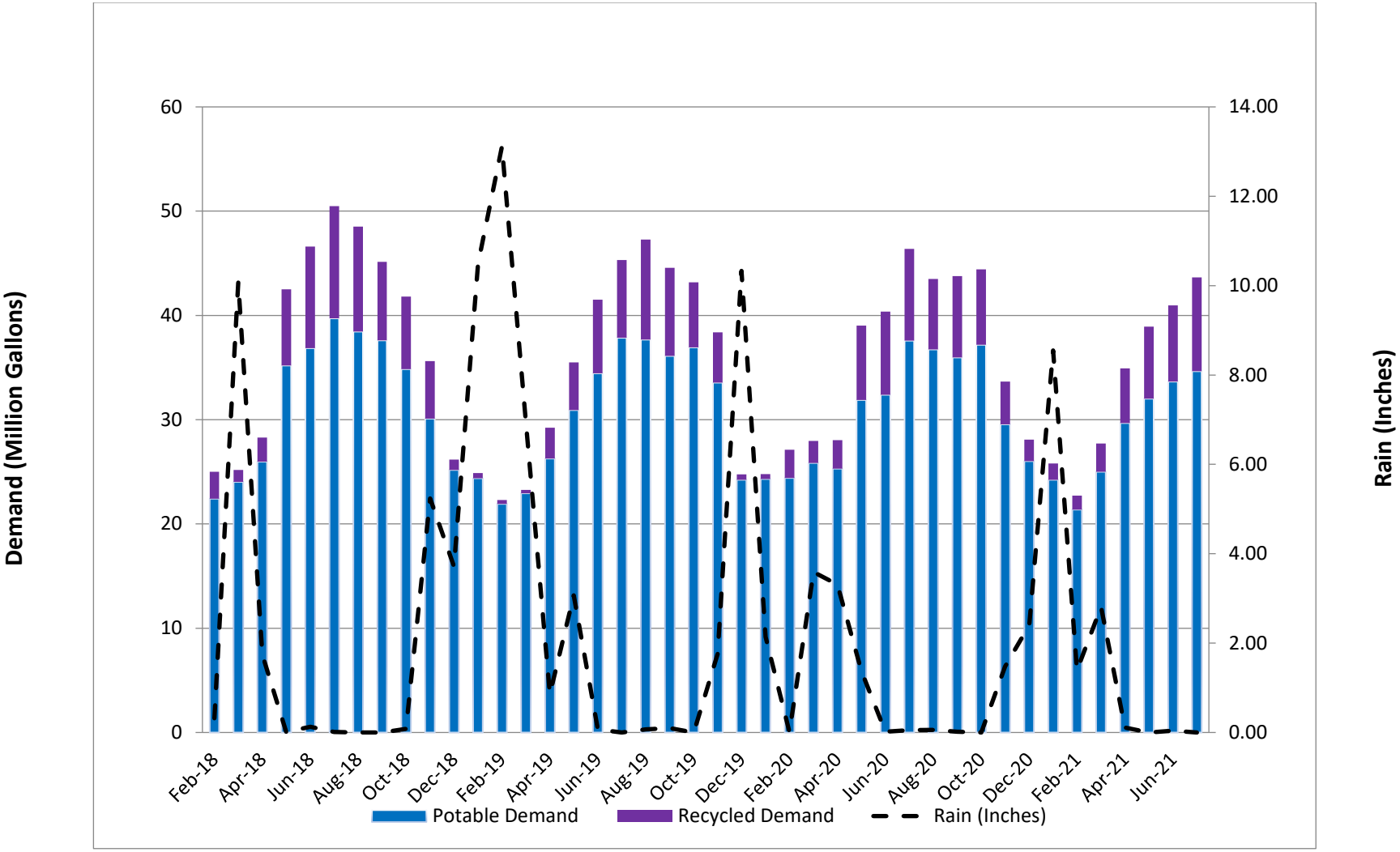
Month	*Gallons*
February	971,002
April	583,501
May	1,740,798
Total	3,295,301

Recycled

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average
Jan.	496,000	2,139,000	620,000	3,019,613	635,420	862,984	156,267	838,172	493,100	450,147	1,560,234	944,411
Feb.	1,120,000	2,352,000	2,268,000	1,248,862	1,545,957	1,813,868	94,521	2,589,717	366,055	2,714,767	1,331,033	1,453,732
March	620,000	1,054,000	2,723,665	1,579,882	4,231,231	972,360	544,666	1,141,831	322,464	2,109,739	2,709,295	1,447,258
April	3,450,000	1,470,000	5,436,705	4,163,175	4,720,887	4,381,911	713,802	2,333,176	2,969,672	2,737,245	5,249,782	2,995,143
May	6,448,000	7,843,000	9,248,455	8,409,175	6,686,359	6,909,436	7,908,386	7,306,666	4,584,239	7,142,605	6,914,742	7,071,575
June	6,150,000	9,420,000	9,801,903	9,135,056	7,488,534	9,639,221	8,940,094	9,739,276	7,067,867	7,971,453	7,319,935	8,410,278
July	4,936,000	9,610,000	9,394,766	9,911,697	9,935,422	10,841,389	10,981,309	10,744,706	9,461,005	8,810,329	8,995,659	9,469,607
Aug.	9,207,000	10,199,000	9,875,446	8,542,111	10,471,389	8,767,020	9,618,897	10,078,073	9,594,307	6,760,659		9,253,991
Sept.	8,610,000	7,680,000	8,288,391	6,176,224	9,092,727	8,287,511	7,957,562	7,522,571	8,451,961	7,814,358		7,995,573
Oct.	4,185,000	4,960,000	6,537,840	5,282,253	7,233,408	3,956,097	7,557,695	6,967,548	6,228,883	7,236,784		5,893,319
Nov.	1,740,000	1,920,000	4,029,769	1,131,988	2,817,778	1,053,779	2,234,592	5,514,338	4,805,871	4,087,453		2,718,688
Dec.	2,201,000	341,000	2,453,395	236,228	1,119,017	529,158	1,670,966	994,336	544,650	2,075,116		1,142,533
Total	47,220,000	49,163,000	58,988,000	70,678,335	58,836,264	65,978,129	58,014,734	58,378,757	65,770,410	59,910,655	34,080,679	58,597,571

Demand is Production +/- the Change in Storage

Potable and Recycled Water Demand vs. Rainfall



Demand is Production +/- the Change in Storage

Rainfall

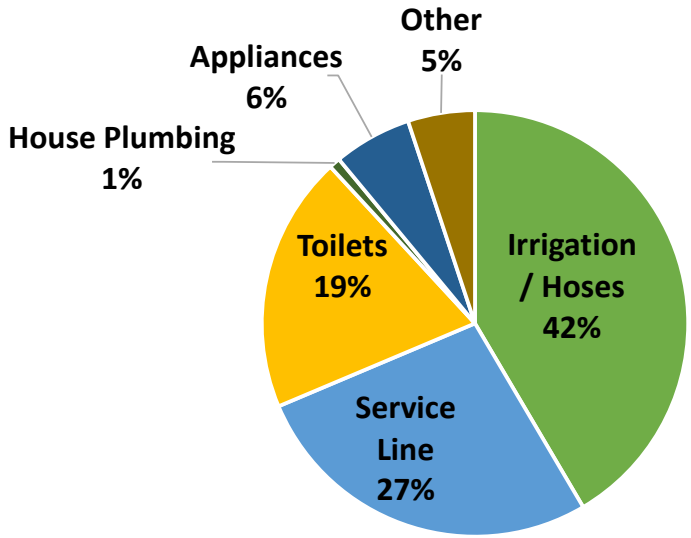
El Pueblo Weather Station

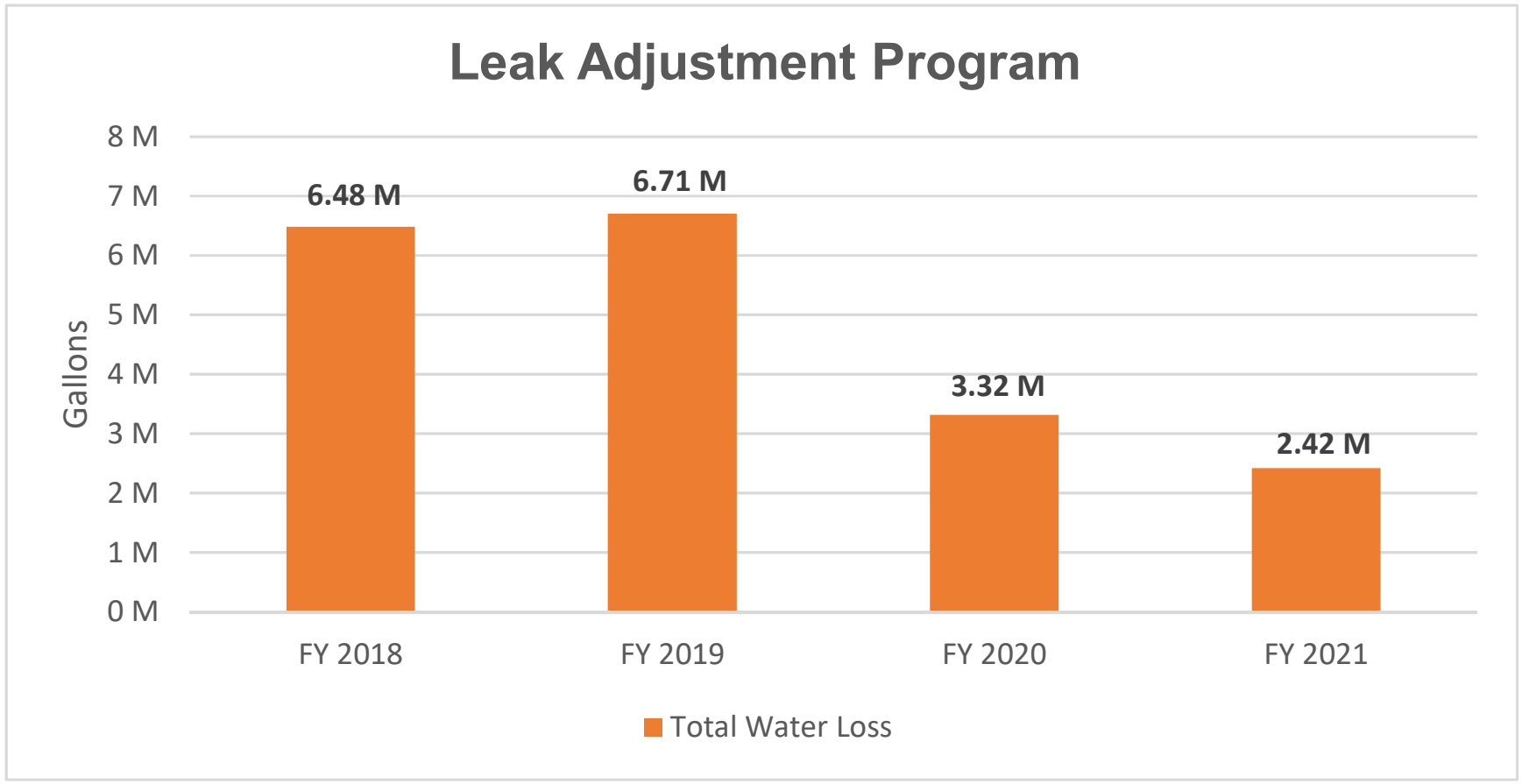
WATER YEAR		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	*TOTAL*	*% of Avg.*
	1981-82	0.14	11.20	5.90	28.80	6.88	8.26	8.40	0.03	0.00	0.00	0.04	1.28	70.93	168%
High Year	**1982-83**	**5.35**	**10.50**	**7.74**	**13.90**	**18.00**	**19.90**	**7.80**	**0.98**	**0.00**	**0.00**	**0.17**	**1.91**	**86.25**	**205%**
	1983-84	1.70	12.70	12.90	0.54	2.49	2.62	1.13	0.02	0.18	0.01	0.00	0.25	34.54	82%
	1984-85	2.80	13.80	2.95	1.72	4.20	7.92	0.73	0.11	0.15	0.09	0.02	0.54	35.03	83%
	1985-86	1.12	7.14	2.62	7.38	22.40	15.00	0.48	0.83	0.00	0.00	0.00	1.30	58.27	138%
	1986-87	0.03	0.05	2.47	4.51	9.06	6.31	0.70	0.00	0.02	0.00	0.00	0.00	23.15	55%
	1987-88	1.19	2.30	10.70	4.58	0.68	0.00	3.13	1.07	0.16	0.00	0.00	0.00	23.81	56%
	1988-89	0.19	5.90	8.89	2.06	1.39	10.60	0.67	0.08	0.03	0.00	0.03	0.83	30.67	73%
	1989-90	3.53	1.58	0.01	3.42	3.69	2.13	0.16	5.79	0.00	0.00	0.12	0.15	20.58	49%
	1990-91	0.50	0.24	1.65	0.61	5.39	17.19	0.51	0.06	0.40	0.00	0.02	0.07	26.64	63%
	1991-92	2.37	1.46	5.42	3.03	15.30	4.65	0.45	0.00	0.82	0.00	0.05	0.00	33.55	80%
	1992-93	3.41	0.20	11.54	18.51	10.22	3.17	1.37	0.96	0.68	0.00	0.00	0.00	50.06	119%
	1993-94	0.73	2.74	5.52	3.51	9.72	0.68	2.75	2.10	0.01	0.00	0.00	0.05	27.81	66%
	1994-95	1.79	8.29	4.78	23.88	0.65	13.62	3.79	0.89	1.04	0.01	0.00	0.00	58.74	139%
	1995-96	0.00	0.32	10.03	13.52	11.35	5.14	2.38	4.31	0.03	0.00	0.00	0.00	47.08	112%
	1996-97	2.89	6.95	22.43	12.33	0.17	1.50	0.58	0.16	0.12	0.00	0.54	0.00	47.67	113%
	1997-98	0.68	10.12	4.06	14.21	21.81	6.17	2.85	3.65	0.01	0.00	0.01	0.17	63.74	151%
	1998-99	1.02	9.11	1.85	9.25	11.08	5.22	2.58	0.03	0.36	0.00	0.02	0.14	40.66	96%
	1999-00	0.35	5.69	0.53	18.02	17.57	2.77	2.69	1.01	0.18	0.00	0.20	0.40	49.41	117%
	2000-01	5.14	1.38	0.94	8.68	10.65	4.05	2.67	0.00	0.07	0.00	0.00	0.16	33.74	80%
	2001-02	1.13	9.93	16.45	4.97	2.69	4.66	0.52	0.90	0.00	0.00	0.05	0.00	41.30	98%
	2002-03	0.00	5.80	21.40	2.77	2.95	2.54	5.75	1.09	0.16	0.00	0.00	0.00	42.46	101%
	2003-04	0.19	3.93	17.55	4.44	9.69	1.19	0.65	0.07	0.00	0.06	0.00	0.11	37.88	90%
	2004-05	7.24	3.25	14.39	8.30	7.20	10.01	3.79	2.13	0.94	0.02	0.00	0.08	57.35	136%
	2005-06	0.19	2.84	21.73	6.55	5.26	15.29	10.44	1.01	0.01	0.00	0.01	0.00	63.33	150%
	2006-07	0.25	3.30	5.67	0.89	9.24	0.30	2.17	0.46	0.00	0.10	0.01	0.33	22.72	54%
	2007-08	1.93	0.52	5.50	17.59	6.96	0.36	0.35	0.00	0.00	0.01	0.00	0.04	33.26	79%
	2008-09	1.59	4.80	4.38	1.80	15.28	3.47	0.52	1.42	0.01	0.00	0.00	0.26	33.53	80%
	2009-10	9.70	0.33	5.21	11.37	8.66	4.35	5.41	1.17	0.00	0.01	0.07	0.00	46.28	110%
	2010-11	3.92	5.13	15.36	1.97	10.59	13.40	0.75	3.42	3.40	0.00	0.04	0.02	58.00	138%
	2011-12	2.93	3.41	0.15	6.80	2.75	11.97	4.09	0.02	0.20	0.02	0.00	0.02	32.36	77%
	2012-13	1.61	11.32	13.25	1.31	0.47	2.66	0.43	0.01	0.11	0.00	0.00	0.70	31.87	76%
Low Year	**2013-14**	**0.01**	**0.87**	**0.78**	**0.05**	**11.52**	**4.02**	**2.02**	**0.01**	**0.02**	**0.09**	**0.01**	**0.92**	**20.32**	**48%**
	2014-15	0.44	4.36	16.52	0.00	4.69	0.47	2.13	0.19	0.04	0.00	0.03	0.02	28.89	69%
	2015-16	0.07	2.54	6.67	16.20	1.16	14.26	1.18	0.35	0.00	0.00	0.00	0.22	42.65	101%
	2016-17	8.66	3.29	10.77	26.13	19.56	7.09	4.47	0.06	0.07	0.00	0.00	0.04	80.14	190%
	2017-18	0.10	4.02	0.08	6.43	0.56	10.07	2.85	0.01	0.13	0.01	0.00	0.00	24.26	57%
	2018-19	0.08	5.24	3.72	10.49	13.11	6.91	0.86	3.07	0.07	0.00	0.07	0.10	43.72	104%
	2019-20	0.00	1.76	8.57	2.14	0.01	3.59	3.31	1.37	0.02	0.05	0.06	0.02	20.90	50%
	2020-21	0.00	1.48	2.40	8.55	1.39	2.81	0.11	0.00	0.04	0.00	-	-	16.78	40.92%
Cumulative 2020-2021		**0.00**	**1.48**	**3.88**	**12.43**	**13.82**	**16.63**	**16.74**	**16.74**	**16.78**	**16.78**	**-**	**-**		
Monthly Average 1981-2020		*1.87*	*4.74*	*7.84*	*8.28*	*7.91*	*6.41*	*2.44*	*0.97*	*0.24*	*0.01*	*0.04*	*0.26*	*41.63*	
Cumulative Ave 1981-2020		*1.87*	*6.62*	*14.46*	*22.74*	*30.65*	*37.06*	*39.50*	*40.47*	*40.70*	*40.72*	*40.76*	*41.02*	*41.02*	

Leak Adjustment Program Report
FY 2021

	RES Requests	CII Requests	Approved	Denied	Appeals	Reason Denied	Total Adjust Credit	Total Excess Use (gallons)
JUL	8	0	8	0	0		$1,806	148,425
AUG	9	0	8	1	0	Consumption did not exceed PY	$4,338	301,542
SEPT	9	0	7	2	0	< 5 yrs (1), prior billing period (1)	$1,996	129,498
OCT	16	0	12	4	0	< 5 yrs (2), cons. < PY (2)	$4,457	304,641
NOV	18	2	20	0	0		$6,210	494,504
DEC	14	0	13	1	0	< 5 yrs (1)	$3,307	278,601
JAN	8	0	8	0	0		$2,644	181,979
FEB	14	2	14	2	0		$3,802	270,930
MAR	5	0	4	1	0	consumption < PY	$1,444	94,257
APR	7	0	4	3	0	cons<PY(1), waste(1), past due(1)	$878	82,892
MAY	1	1	1	1	0	< 5 yrs (1)	$396	27,300
JUN	4	1	4	1	1	< 5 yrs (1)	$1,195	104,184
Total	**113**	**6**	**103**	**16**	**1**		**$32,473**	**2,418,753**
Prior Year	119	10	114	12	5		$46,906	3,319,930

Sources of Leaks




Leak Adjustment Program
8 M
7 M
6 M
5 M
4 M
3 M
2 M
1 M
0 M
Gallons
6.48 M
6.71 M
3.32 M
2.42 M
FY 2018
FY 2019
FY 2020
FY 2021
Total Water Loss

Development Projects Status Report

Active Service Applications as of July 2021

35 Active Service Applications
171 New Service Connections
5.02 M in Capacity Fee Revenue - Does not include conceptual projects (Aviza, SV Annex, Town Center)

Service Type	Service Size (Inches)	No of Connections	Annual Demand (Gal)	Percent of Existing Demand
Potable				
Single Family Residential	5/8"	17	1,160,000	0.29%
Single Family Residential	3/4"	58	3,970,000	1.01%
Single Family Residential	1"	1	70,000	0.02%
High-Density Single Family Residential*	5/8"	74	3,040,000	0.77%
High-Density Single Family Residential**	3/4"	4	270,000	0.07%
Commercial, Industrial, Institutional (CII)	Varies	10	7,190,000	1.82%
Total	-	171	15,700,000	3.97%
Recycled				
Landscape Irrigation	Varies	7	4,050,000	6.86%

*5/8" meter for indoor use only, installed for individual units in a high-density development that uses recycled water for irrigation.

**3/4" meter for indoor use only, installed for individual units in a high-density development that uses recycled water for irrigation.

Development Activity

Recent 5 year period / 2017-2021

Service Type	No of Connections	Annual Demand (Gal)	Percent of Existing Demand
Potable			
Residential	132	7,230,000	1.83%
Commercial, Industrial, Institutional (CII)	12	8,620,000	2.18%
Landscape Irrigation	0	0	0.00%
Fire Services	55	N/A	N/A
Temporary	6	Varies	-
Total	214	15,850,000	4.01%
Recycled			
Landscape Irrigation	9	5,210,000	8.83%

TO: ACWA Region 5 Water District Members, General Managers and Board Presidents

FROM: Jack Burgett, ACWA Region 5 Board Member, Region 5 Outreach Captain and NCCWD Board of Directors Vice President

SUBJECT: Alerts Affecting Region 5 General Managers and Board of Directors

RE: ACWA Region Map

Hello, my name is Jack Burgett. Currently, I am the Vice President of the North Coast County Water District in Pacifica. Concurrently, I am also on the Region 5 Board of Directors.

Recently I was appointed Outreach Captain for Region 5. This is my first attempt to reach out with important alerts and news that affect all of us in Region 5. Hope- fully the information I send to you will be helpful to you and your constituents.

Also, as a member of the ACWA Membership Committee, if there are any non- member agencies that you know of in our region who might want to be under the ACWA umbrella, please contact any of the following people at ACWA: Jennifer Rotz, Katie Dahl or Tiffany Giammona.

IMPORTANT ALERTS AND NEWS ITEMS

- Drought issues dominate in Capitol. April 29 Senate approved $3.41 billion drought relief package
- New research on atmospheric rivers is ongoing
- Relief for Californians re: water and wastewater resilience funding
- Relief for Californians re: water and wastewater bills and payment plans
- Continued advocacy for water resilience funding
- Possible fall conference and exhibition as an in person/virtual hybrid approach in Pasadena
- Senate Bill SB223 is inactive and will no longer move forward re: debt forgiveness
- SB223 also affects SB998 which is detrimental for water agencies
- Be sure to update your cyber security to protect against ransomware
- Much work and thought going into headwaters and forest management on both State and Federal levels

- Be sure to keep abreast of “water for disadvantaged communities” as this isa major concern and project for Region 5 Board of Directors
- Recycling should be an important part of your thinking as t is expanding nation-wide and globally. More information is available through the WateReuse Association – please contact Patricia Sinicropi.
- Many districts and regions are exploring Voluntary Agreements and collaboration in order to complete needed services and projects
- June 4th ACWA News: Governor Newsom’s Executive Order M-10-19 directing three State agencies to prepare water resilience portfolio. ACWA provided extensive input towards water management and ecosystem protections. Some topics included safe drinking water and sustainable groundwater management.
- $5.1 billion invested over 4 years in three categories:
    - $1.3 billion for drinking water/wastewater infrastructure, especially for small and disadvantaged communities
    - $150 million for ground water clean-up and water recycling (drought Support)
    - Nature based solutions
- Forest Restoration (Federal $250 million for wildfire, watershed alliance (CAFWA) SB456
- ACWA 5-year strategic plan: Safe drinking water for all; prioritizing improvements and supply of quality drinking water for all (DAC); disadvantaged communities (SB200 Manning)

REGION **MAP**

www.acwa.com

ACWA
Association of California Water Agencies

Rev. 6/2/20

Santa Cruz Sentinel

Water agencies are prepared for drought challenges

By the Water Managers of Santa Cruz County – Santa Cruz Sentinel 7/7/21

In response to current drought conditions and the renewed need for reduced water use, the community has shown interest in what local water agencies are doing to generate alternatives to water supply challenges. We are glad to report that we – local water agencies – are prepared.

All the water used in Santa Cruz County begins as local rainfall. The lack of rain we are now experiencing is not an anomaly – it is climate change, and it will most likely continue to bring more extreme weather events in the future. Mindful and efficient use of water is our first line of defense against drought, and our community excels at it. Despite modest growth, the county has seen a 30% reduction in water use since peak use in the late 1990s. However, conservation is not enough to ensure the resiliency that our community needs.

The solution is investing in supplemental supply projects, which will be most successful when done collaboratively. Over the past five years, county water purveyors have made significant progress toward generating sustainable water supply alternatives, as well as protecting the precious supplies we have.

Regional agencies banded together with community members to develop the first-ever plans in the state to sustainably manage local groundwater basins, which serve as the primary water source for most county residents, other than those served by the City of Santa Cruz. The plan for the Pajaro Valley Groundwater Basin was approved in 2019. The plan for the Mid-County groundwater basin was recently approved by the state to address critical overdraft and meet the state mandate of basin sustainability by 2040. A plan for the Santa Margarita basin is about to be released in draft form for public comment. A unified, regional approach to protecting groundwater is an important improvement to the way the resource has been managed in the past.

In Soquel Creek Water District's service area, the Community Water Plan was created in 2015, following a year-long process of public meetings and gathering customer input. Over the last six years, the district has moved forward with a multi-pronged approach of a pilot test water exchange, stormwater capture and developing Pure Water Soquel (a purified recycled water project). The goal of Pure Water Soquel is to replenish the groundwater basin and create a seawater intrusion barrier to prevent contamination from moving further inland. The project is anticipated to be online in 2023 and has received state and federal funding assistance.

The City of Santa Cruz has spent the past five years studying and piloting water supply alternatives recommended by the citizen-led Water Supply Advisory Committee, including water exchanges, banking excess water (when available) in groundwater basins, and development of advanced treated wastewater as a supply alternative, and will bring results and final recommendations for supply augmentation to the City Council within the next 12 months.

In Scotts Valley and the San Lorenzo Valley, water agencies have been evaluating options for using existing water sources more efficiently. Recycled water has been an invaluable water source for irrigation in Scotts Valley for close to 20 years and three stormwater recharge basins have been installed in the last 10 years. During winter, excess surface water can be used instead of groundwater allowing the basin to rest. When surface flows decline, groundwater can be used, leaving water in the streams for wildlife in a process called Conjunctive Use.

The City of Watsonville and the Pajaro Valley Water Management Agency continue their successful collaboration and operation of the Watsonville recycled water facility. PV Water is working on two water supply projects – College Lake Integrated Resources Management and Watsonville Slough System Managed Aquifer Recharge and Recovery, to supplement its recycled water supply. Water from these projects will decrease groundwater pumping while helping to maintain the valley's agricultural economy.

While we do have challenges, we have also, collectively and collaboratively, developed a set of initiatives that will help ensure that the people of Santa Cruz County have sufficient water supplies, both now and into the future. If you want to know more about what your water agency is doing, contact us, attend our meetings, take advantage of our conservation programs, and read our reports.

When it comes to water, we are all in this together. *Signatories to this letter include Sierra Ryan, Interim Water Resources Manager, County of Santa Cruz; Piret Harmon, General Manager, Scotts Valley Water District; Rosemary Menard, Water Director, City of Santa Cruz; Beau Kayser, Water Division, City of Watsonville; Ron Duncan, General Manager, Soquel Creek Water District; Brian Lockwood, General Manager, Pajaro Valley Water Management Agency; Rick Rogers, District Manager, San Lorenzo Valley Water District; and Ralph Bracamonte, District Manager, Central Water District.*

Santa Cruz Sentinel

Santa Margarita Groundwater Agency to host sustainability event Saturday

By **HANNAH HAGEMANN**
| hhagemann@santacruzsentinel.com |

PUBLISHED: July 29, 2021 at 4:32 p.m. |

Residents encouraged to attend to learn about how drought has impacted basin, which supplies bulk of drinking water to San Lorenzo Valley and beyond

Scotts Valley Water District General Manager Piret Harmon shares information about the Santa about the Santa Margarita Groundwater Agency at the Santa Cruz Mountain Classic Car Show last weekend.

SCOTTS VALLEY — The Santa Margarita Groundwater Basin — an underground reservoir — supplies the bulk of tap water to residents in the San Lorenzo Valley and beyond.

The Santa Margarita Groundwater Agency is set to host a community event at 10 a.m. Saturday to discuss sustainability actions impacting the basin.

The agency is working to revitalize the stressed-out-basin, which overtime has had more water pulled out of it than replenished.

At the event, the agency will have information on its Groundwater Sustainability Plan, which is a part of the state Department of Water Resource's mandate to bring the basin out of overdraft.

The Santa Margarita Groundwater Basin is one of 21 critically overdrafted basins throughout California. In Santa Cruz County, the Mid-County Groundwater Basin is also under mandate by the state.

That basin, which is the sole drinking water supply for the mid-county region, already went through the sustainability plan submittal and approval. That plan was the one of the first to be approved in the state.

The plans must lay out how the water sources will meet sustainability, and reach a state of hydrologic balance. Later this month, the plan for the Santa Margarita Groundwater Basin will be released for public review.

At Saturday's Santa Margarita Groundwater Agency event, community members from across the county are invited to attend, as residents from Scotts Valley to the City of Santa Cruz get tap water from the basin.

Different booths will be set up to learn about the agency's work, and attendees can earn stamps in a "passport." If the passport is completed, participants will be entered into a prize drawing. The event will also host activities for kids.

At the event, community members can expect to learn about how the Santa Margarita Groundwater Agency is armoring the basin against drought and climate change impacts.

Preregistration for the event is encouraged. For information, visit bit.ly/smgwaevent.

If you go

What: “Drought: Global Challenge, Local Solutions” hosted by the Santa Margarita Groundwater Agency.

When: 10 a.m. to noon, Saturday.

Where: Skypark, 361 Kings Village Road, Scotts Valley.

SCOTTS VALLEY WATER DISTRICT
svwd.org svwater

JULY 2021

Take the Water Saving Challenge and win!

We have a Water Saving Challenge winner for the month of June! 🏆 Congrats to Alain Dumesny, who achieved a 30% demand reduction for the month of June and won the raffle for a $100 water bill credit. Alain told District Manager Piret Harmon (pictured) he reduced his water use by installing a pool cover and tracked down leaks to his irrigation system and pool, all of which will help Alain continue to be water efficient. 💦

There are more chances to win this summer! Customers can enter for a chance to win prizes — including water bill credit — by lowering their water use! Take part in the Water Saving Challenge in July, August and September. The program encourages District customers to aim for a 15% (or more) water reduction from the same period the prior year.

- Monthly raffle prize: either a $100 water bill credit or a choice of a gift certificate from a Scotts Valley business
- Grand prize: either a $500 water bill credit or a choice of a gift certificate from a Scotts Valley business

Submit the raffle entry by the 7th of the following month

- August, September and October for customers on i-Meters at least for a year
- August and October for customers on i-Meters for less than a year

Complete this form to submit your monthly entries. (Pro tip: bookmark it now!)

Questions? Email us!

All District potable water account holders, who have had water service at least for a year and achieve at least 15% reduction in water use in comparison with the same period prior year, are eligible to enter the Water Saving Challenge. To be eligible for the grand prize, the customers have to achieve 15% savings and submit entries in all four months or two bi-monthly cycles.

Drought declared for Santa Cruz County

The state expanded its drought emergency declaration to include Santa Cruz County earlier this month.

How can you be more water-efficient?

- Use our free WaterSmart platform to track water use and check for leaks.
- Utilize our rebates to reduce your water use and save money!
- Pick up free recycled water for irrigation from 9 a.m. to 1 p.m. Saturdays at the Recycled Water Fill Station in Skypark.

Scotts Valley has received about 40% of its normal rainfall this year and being mindful of water use is important during hot summer days.

Plant of the Month: African Daisy

The African Daisy is so hardy, it re-seeds itself if you allow the flowers to dry out at the end of the season! This clump-forming perennial loves full sunlight, is great for ground cover and will prevent weeds from forming.

Photo credit: @therosehousepaonia

Family-friendly event on July 31 focuses on drought, groundwater sustainability

The Santa Margarita Groundwater Agency (SMGWA) will be hosting a community event on Saturday, July 31, from 10 a.m. to noon, to share the agency's work on groundwater sustainability, an effort that is increasingly important as the region suffers from another drought. Register here for the event.

The SMGWA is focused on creating and maintaining a resilient and reliable water future in the San Lorenzo Valley and Scotts Valley through the development of its Groundwater Sustainability Plan (GSP). The Scotts Valley Water District is a member of the SGMWA.

"Drought: Global Challenge, Local Solutions" will be an open house-style event at Skypark, 361 Kings Village Road in Scotts Valley. Attendees are invited to several booths to learn about various aspects of SMGWA's work and get stamps in a "passport." Completing the passport gives participants the opportunity to enter a

drawing for a prize. A short presentation will be offered at 11 a.m. Staff and SMGWA board members will be available for questions throughout the event. The agency is also offering free activities for kids.

The draft GSP document will be released later this month for public review. The final GSP is expected to be adopted by the end of 2021. It will guide long-term management of the groundwater basin — a resource shared by the San Lorenzo Valley Water District, the Scotts Valley Water District, the Mount Hermon Association and other private pumpers — to ensure a reliable water supply for community needs and the natural environment of the region.

The Santa Margarita Groundwater Basin is the major water source for communities in the San Lorenzo Valley, Scotts Valley, the City of Santa Cruz and unincorporated areas of the County of Santa Cruz. Community members who rely on the water supply from the Santa Margarita Groundwater Basin are encouraged to attend this event to learn more about the GSP and provide input on the plan. Register for this free event.