



City of St. Helena
Water and Wastewater Rate Study Advisory
Committee
Regular Meeting
Fire Department Training Room, 1500 Main
Street, St. Helena, CA 94574
Thursday, December 29, 2022 @ 10:00 AM

PLEASE NOTE: Any person who wishes to speak regarding an item on the agenda or make a comment under the "Oral Communication" portion of the agenda may do so, but please observe the time limit of four minutes.

Page

1. CALL TO ORDER
2. ROLL CALL
Chair: Mario Trinchero
Vice Chair: Walter Nirenberg
Committee Members: Arlene Corsetti, Garry Rose, Sean Maher, Mark Smithers and Peter McCrea.
Staff Liaison: Mandy Kellogg, Assistant Administrative Services Director

Vice Chair Walter Nirenberg will be teleconferencing from 1896 Pacific Ave., Apt 702, San Francisco, CA .

3. PUBLIC FORUM:
An opportunity for the public to directly address the Committee on items of interest to the public that are not listed on the agenda. Any person addressing the Committee should provide his or her name and address, and limit comments to four minutes. Because of restrictions imposed by the Brown Act, the Committee may not engage in substantive discussion, nor take action on matters not described on the agenda.

4. REPORTS BY STAFF AND BOARD
Reports by staff and/or Committee on items of general interest. Brief questions for clarification may be posed and answered, and Committee may request that items be placed on a future agenda. Except under certain circumstances, the Brown Act prohibits any other discussion or action by the Water and Wastewater Rate Study Advisory Committee.

5. STAFF BRIEFING

- 5.1. Committee request regarding historical water use data.
Prepared By: Mandy Kellogg, Administrative Services Director
Recommendation:
Receive and file.
[Committee Request - Water Use Comparison by Customer Class](#)

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6. OLD BUSINESS:

- 6.1. Review and provide input and feedback of the Water and Wastewater Rate Study Financial Plan scenarios and assumptions.

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Prepared By: Mandy Kellogg, Administrative Services Director
Recommendation:
Discuss and provide feedback.

[Water and Wastewater Rate Study Advisory Committee - 29 Dec 2022
- Raftelis Presentation](#)

7. NEW BUSINESS:

7.1. Review Proposition 218 compliance as it applies to tiered water rates.
Prepared By: Mandy Kellogg, Administrative Services Director
Recommendation:
Receive and file.

7.2. Discuss next steps in the rate study process and review the project timeline.
Prepared By: Mandy Kellogg, Administrative Services Director
Recommendation:
Receive and file.

8. ADJOURNMENT

The next regular Water and Wastewater Rate Study Advisory Committee meeting is scheduled for January 12, 2023 at 10:00 a.m.

This agenda was posted at City Hall, 1572 Railroad Avenue, and at Fire Department Training Room, 1500 Main St., St. Helena, California on December 22, 2022.

Cindy Tzafopoulos, City Clerk

In Compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call the City Clerk's Office (707) 968-2742. Notification 72 hours prior to the meeting as required by Section 202 of the Americans with Disabilities Act will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

Memo

To: Water and Wastewater Rate Study Advisory Committee

From: Mandy Kellogg, Administrative Services Director

Date: December 22, 2022

Re: Water Usage Comparison by Customer Class

On December 8, 2022, Raftelis presented an updated Water Demand Assumptions that utilized the Fiscal Year 2019 demand as a baseline. The assumptions project a 44% increase in water usage overall from FY 2022 to FY 2023 as follows:

Table 1

- Table shows combined historical demands and near-term projections based on prior slides

Customer Class	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
SFR	202,374	269,976	256,260	160,396	193,172	194,092
MFR	67,878	76,683	69,678	53,210	65,034	65,590
CG	216,846	117,451	98,283	99,214	206,004	206,004
Industrial	101,992	110,300	100,035	88,441	101,865	101,865
Fire	1,211	163	353	184	1,150	1,150
Landscape	11,901	17,177	14,824	9,264	11,306	11,306
Raw	20,247	26,098	15,756	4,411	19,235	19,235
Total Sales (HCF)	622,449	617,848	555,189	415,120	597,766	599,241
Total Sales (AFY)	1,429	1,418	1,275	953	1,372	1,376
Annual % Change	N/A	-1%	-10%	-25%	44%	0%

Table 2

The following table shows the projected percentage increase by customer class from FY 2022 to FY 2023 based on the water demand data presented by Raftelis:

User Class	FY 2022	FY 2023	Percent Increase
Residential	160,396	193,172	20.4%
Multi Family	53,210	65,034	22.2%
Commerical/Government	99,214	206,004	107.6%
Industrial	88,441	101,865	15.2%
Fire Service	184	1,150	525.0%
Landscape Meters	9,264	11,306	22.0%
Raw Water	4,411	19,235	336.1%
Total	415,120	597,766	44.0%

During the December 8th discussion, there concerns were expressed pertaining to the 107.6% increase projected for water use demand in the commercial/government category. An analysis of the year over year water use for each customer class was requested to assist with understanding a reasonable water demand assumption.

Table 3

The following table shows the last 10 fiscal years of water sales per customer class:

Water Usage Comparison by Class

User Class	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Residential	289,307	313,635	271,737	231,759	250,863	280,468	269,389	334,641	291,029	169,868
Multi Family	63,312	70,752	69,860	60,336	66,260	79,175	58,616	69,559	60,925	51,851
Commerical/Government	194,954	212,045	139,512	126,728	133,151	127,123	161,905	164,877	125,702	107,618
Industrial	59,614	87,171	109,797	93,666	106,304	104,882	80,124	88,694	81,329	69,375
Fire Service	101	56	33	228	168	491	3,996	4,464	4,288	3,714
Landscape Meters	11,360	10,855	8,165	6,704	7,361	9,149	23,253	21,913	19,161	19,302
Raw Water	27,102	26,828	18,698	20,345	18,561	22,918	20,084	25,546	15,354	4,379
Total	645,750	721,342	617,802	539,766	582,668	624,206	617,367	709,694	597,788	426,107

Table 4

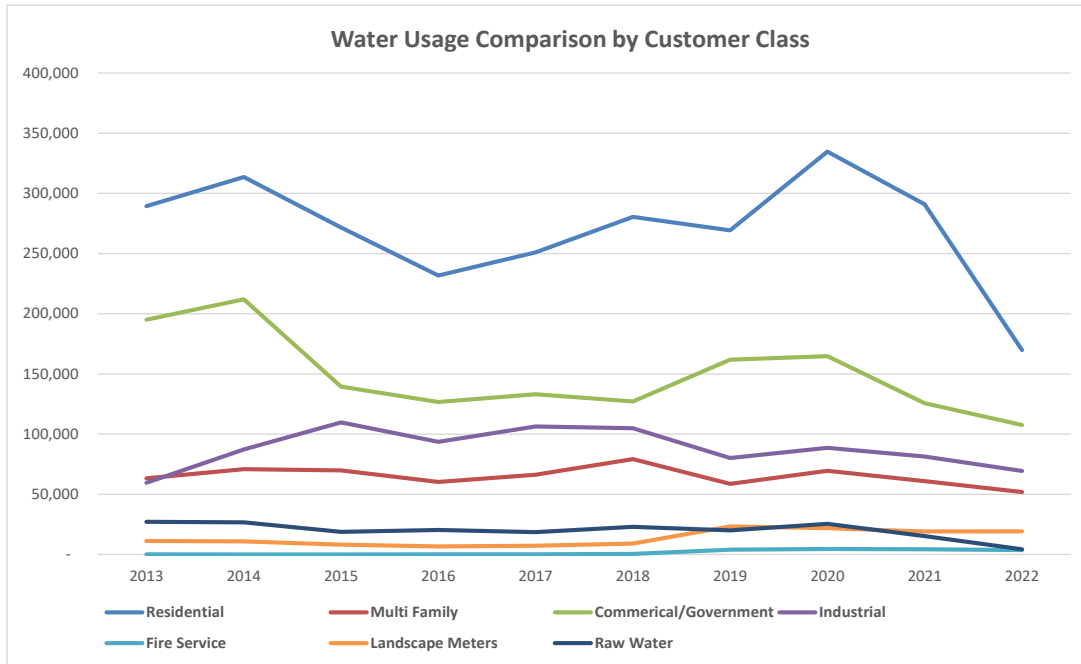
Table 4 shows the percentage increase by customer class year over year:

Year Over Year Comparison

User Class	2014	2015	2016	2017	2018	2019	2020	2021	2022
Residential	8%	-13%	-15%	8%	12%	-4%	24%	-13%	-42%
Multi Family	12%	-1%	-14%	10%	19%	-26%	19%	-12%	-15%
Commerical/Government	9%	-34%	-9%	5%	-5%	27%	2%	-24%	-14%
Industrial	46%	26%	-15%	13%	-1%	-24%	11%	-8%	-15%
Fire Service	-45%	-41%	591%	-26%	192%	714%	12%	-4%	-13%
Landscape Meters	-4%	-25%	-18%	10%	24%	154%	-6%	-13%	1%
Raw Water	-1%	-30%	9%	-9%	23%	-12%	27%	-40%	-71%
Total	12%	-14%	-13%	8%	7%	-1%	15%	-16%	-29%

Graph 1

The following graph shows the fluctuation of water use over the past 10 years between customer classes.



Based on the discussion at the December 8th meeting, Raftelis has reevaluated the water demand per customer classification. This will be discussed during the presentation of the at the December 29th meeting during the Model Inputs and Assumptions review of Item 5.1. Review and provide input and feedback of the Water and Wastewater Rate Study Financial Plan scenarios and assumptions.

City of St. Helena

Water and Wastewater Rate Study

Rate Study Advisory Committee Meeting – December 29, 2022



Agenda

- Financial Plans Updates
 - › Updated Key Assumptions
 - › Updated Financial Plan Scenarios
 - Water enterprise
 - Wastewater enterprise
- Water and Wastewater Rate Structures
 - › Cost of Service Results
 - › Rate Components

Model Inputs and Assumptions



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Growth Assumptions – Water and Wastewater

- Based on the General Plan EIR we are assuming 214 SFR Units and 169 MFR Units between 2018-2040
 - › This equates to an annual growth rate of 0.5% for SFR, and 0.9% for MFR
 - All other classes are assuming 0% growth

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Account Growth						
SFR	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
MFR	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Landscape	0%	0%	0%	0%	0%	0%
Raw	0%	0%	0%	0%	0%	0%
Fire	0%	0%	0%	0%	0%	0%

Growth Assumptions – Water and Wastewater

- Based on the General Plan EIR we are assuming 214 SFR Units and 169 MFR Units between 2018-2040
 - › This equates to 10 SFR Units and 8 MFR Units Annually

Customer Class	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
SFR	2,041	2,051	2,061	2,070	2,080	2,090	2,100	2,110	2,120	2,130
MFR (Dwelling Units)	908	915	923	931	939	947	955	963	972	972
Commercial	313	313	313	313	313	313	313	313	313	313
Industrial	27	27	27	27	27	27	27	27	27	27
Landscape	41	41	41	41	41	41	41	41	41	41
Raw	0	0	0	0	0	0	0	0	0	0
Fire	84	84	84	84	84	84	84	84	84	84
Total	2,670	2,681	2,692	2,704	2,715	2,726	2,738	2,749	2,761	2,772

Inflationary Assumptions – Water and Wastewater

- The model uses the adopted budgets in FY 2023
- Elevated inflationary pressures based on current conditions

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Revenue Inflation						
Miscellaneous Revenues	N/A	0%	0%	0%	0%	0%
Reserve Interest Rate	N/A	1%	1%	1%	1%	1%
Expense Inflation						
General	N/A	5.0%	4.2%	3.5%	2.8%	2.8%
Salary	N/A	7.0%	7.0%	5.0%	5.0%	5.0%
Benefits	N/A	6.0%	6.0%	6.0%	6.0%	6.0%
Supplies	N/A	5.0%	4.2%	3.5%	2.8%	2.8%
Utilities	N/A	5.0%	5.0%	5.0%	5.0%	5.0%
Supplemental Water	N/A	4.0%	4.0%	4.0%	4.0%	4.0%
Capital	N/A	5.0%	4.4%	3.8%	3.2%	3.2%

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Borrowing Assumptions – Water and Wastewater

- Assumes conventional revenue bonds and normal market conditions

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Revenue Bond Terms										
Interest	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Term (years)	30	30	30	30	30	30	30	30	30	30
Issuance Cost	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

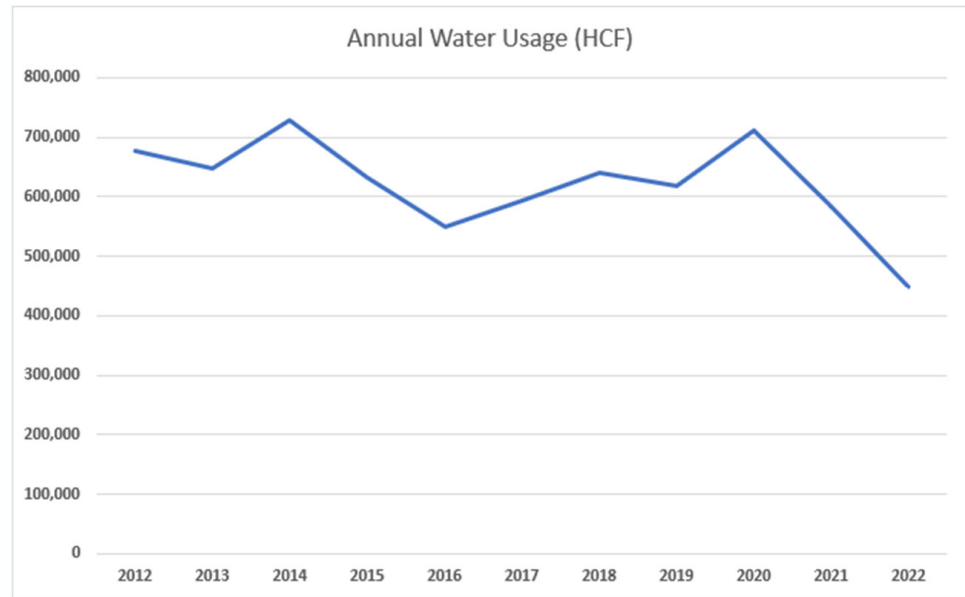
Water Enterprise



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Annual Water Usage

Fiscal Year	Annual Water Usage (HCF)	% Change
2012	676,094	
2013	647,409	-4.2%
2014	729,684	12.7%
2015	632,159	-13.4%
2016	549,639	-13.1%
2017	592,689	7.8%
2018	639,553	7.9%
2019	619,278	-3.2%
2020	711,795	14.9%
2021	584,222	-17.9%
2022	449,497	-23.1%



Historic Water Demand (HCF)

- Significant variation since prior study
- Changes in absolute water demand but also inter-class demands
- For FY 2023 and beyond, we use the four-year average of the class (FY 2019-2022 actuals) to determine the demand in each class
 - › This is an important assumption for the cost of service analysis (class cost allocations)

Customer Class	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
SFR	269,389	334,641	291,029	169,868	195,348	225,721
MFR	58,616	69,559	60,925	51,851	59,629	69,158
Commercial	161,905	164,877	125,702	107,618	123,761	142,325
Industrial	80,124	88,694	81,329	69,375	79,781	91,748
Fire	3,996	4,464	4,288	3,714	4,271	4,912
Landscape	23,253	21,913	19,161	19,302	22,197	25,527
Raw	20,084	25,546	15,354	4,379	5,036	5,791
Total Sales (HCF)	617,367	709,694	597,788	426,107	490,023	565,182
Total Sales (AFY)	1,417	1,629	1,372	978	1,125	1,297
Annual % Change	N/A	15%	-16%	-29%	15%	15%

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Water Demand Assumptions (HCF)

- FY 2023: expected water demands increase by 15% over FY 2022 actuals
- FY 2024: expected water demands increase by 15% over FY 2023 estimates
- Increases in total demands include per capita increases and new connection growth

Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Customer Class	Actuals	Projected	Projected	Projected	Projected	Projected
SFR	169,868	195,348	225,721	226,797	227,878	228,964
MFR	51,851	59,629	69,158	69,749	70,344	70,944
Commercial	107,618	123,761	142,325	142,325	142,325	142,325
Industrial	69,375	79,781	91,748	91,748	91,748	91,748
Fire	3,714	4,271	4,912	4,912	4,912	4,912
Landscape	19,302	22,197	25,527	25,527	25,527	25,527
Raw	4,379	5,036	5,791	5,791	5,791	5,791
Total Sales (HCF)	426,107	490,023	565,182	566,849	568,525	570,211
Total Sales (AFY)	978	1,125	1,297	1,301	1,305	1,309

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Projected Water Connections

Meter Size	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Actuals	Projected	Projected	Projected	Projected	Projected
5/8"	2,002	2,011	2,020	2,029	2,038	2,047
3/4"	296	297	299	300	302	303
1"	123	123	124	124	125	125
1 1/2"	70	70	71	71	71	71
2"	63	63	63	63	64	64
3"	8	8	8	8	8	8
4"	11	11	11	11	11	11
6"	13	13	13	13	13	13
8"	0	0	0	0	0	0
Total	2,586	2,597	2,608	2,620	2,631	2,642

Operating and Maintenance (O&M) Expenditures – Water

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
	Budget	Projected	Projected	Projected	Projected	Projected
Operating Expenses	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M
Non-Departmental	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M
Council	\$0.3 M	\$0.3 M	\$0.3 M	\$0.4 M	\$0.4 M	\$0.4 M
Administration	\$0.6 M	\$0.6 M	\$0.7 M	\$0.7 M	\$0.7 M	\$0.8 M
Finance	\$0.2 M	\$0.2 M	\$0.2 M	\$0.2 M	\$0.2 M	\$0.2 M
Attorney	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M
Public Works	\$4.3 M	\$5.2 M	\$5.4 M	\$5.7 M	\$5.9 M	\$6.2 M
Temporary	\$1.6 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M
Total	\$7.3 M	\$6.6 M	\$6.9 M	\$7.3 M	\$7.6 M	\$7.9 M
% Change	N/A	-9.6%	5.5%	4.7%	4.6%	4.6%

Existing Debt/Loan Service - Water

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
2012B Installment Agreement - Water	\$0.4 M	\$0.4 M	\$0.4 M	\$0.4 M	\$0.4 M
Loan Agreement (Direct Borrowing)	\$0.5 M	\$0.5 M	\$0.5 M	\$0.5 M	\$0.5 M
Total	\$1.0 M	\$1.0 M	\$1.0 M	\$1.0 M	\$0.9 M

Values in the table are rounded

Water Enterprise – Capital Improvement Program (CIP)

- Water CIP
 - › 10-year historical annual spend: \$1.1 M
 - › Forward-looking annual spend: \$6.0 M
- ***Only considers CIP funded through rate revenues (cash or future debt service)***
 - › *GO Bond proceed funded project(s) are omitted*

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Water	\$2.63 M	\$6.86 M	\$11.08 M	\$9.58 M	\$2.58 M	\$12.84 M	\$5.25 M	\$5.42 M	\$0.26 M	\$0.27 M
Recycled Water	\$0.00 M	\$1.66 M	\$1.05 M	\$0.60 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M
Total	\$2.63 M	\$8.52 M	\$12.13 M	\$10.18 M	\$2.58 M	\$12.84 M	\$5.25 M	\$5.42 M	\$0.26 M	\$0.27 M

Financial Policies & Cash Balance -Water

- Financial Policies:
 - › Reserve Target: 14 Months of Operating Expenses (O&M + Debt Service)
 - › Minimum Target: 10 Months of Operating Expenses (O&M + Debt Service)
 - › Minimum Debt Service Coverage Ratio: 1.20
- Beginning balance FY 2022-23 (July 1, 2022):
 - › \$3,295,365 Unrestricted Fund 561 + 763
 - › \$177,869 Restricted Cash (Fund 764)
 - › Total Beginning Balance: **\$3,473,235**

Financial Plan Scenarios



Financial Plan Scenarios

Scenario 1:

- “Recommended CIP”
- CIP start adjusted by one-year (FY 2023-24 start year)
- Full recycled water distribution costs
- 30% revenue adjustment in FY 2024, followed by 8% revenue adjustments in FY 2025 – FY 2028, and 5% for each remaining year
- Assumes proposed debt of \$20M in FY 24, \$15M in FY 26, and \$24M in FY 29

Scenario 2:

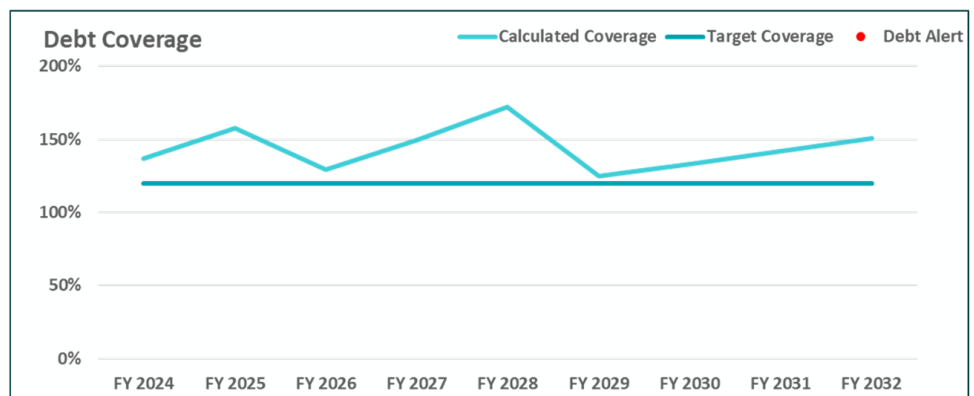
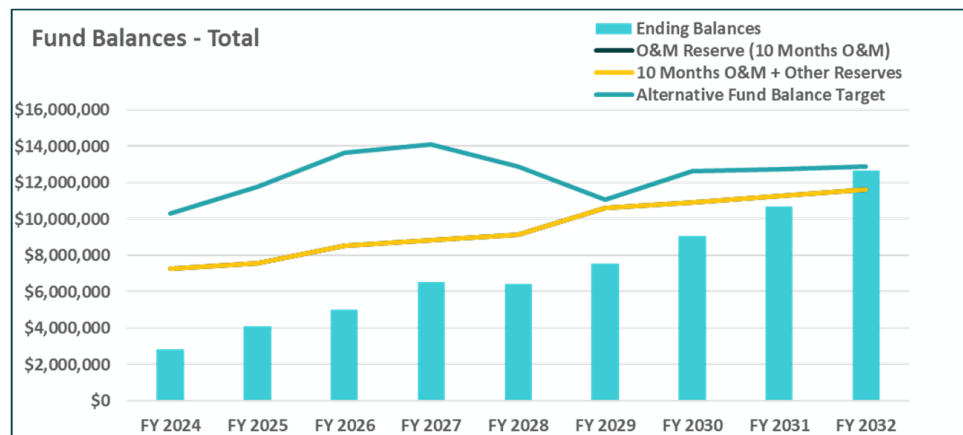
- “Modified CIP”
- CIP start adjusted by one-year (FY 2023-24 start year)
- Reduced recycled water CIP costs (\$250k total)
- 30% revenue adjustment in FY 2024, followed by 9% revenue adjustments in FY 2025 – FY 2027, and 6% for each remaining year
- Assumes proposed debt of \$12M in FY 24, \$35M in FY 27, and \$8M in FY 30

Scenario 3:

- “CIP Allowance”
- Maximum 10% revenue adjustment in each year (FY 2024 – FY 2032)
- Assumes proposed debt of \$8M in FY 25, \$16M in FY 27, and \$37.5M in FY 30
- Ramps up CIP spending over time to complete all projects by 2032

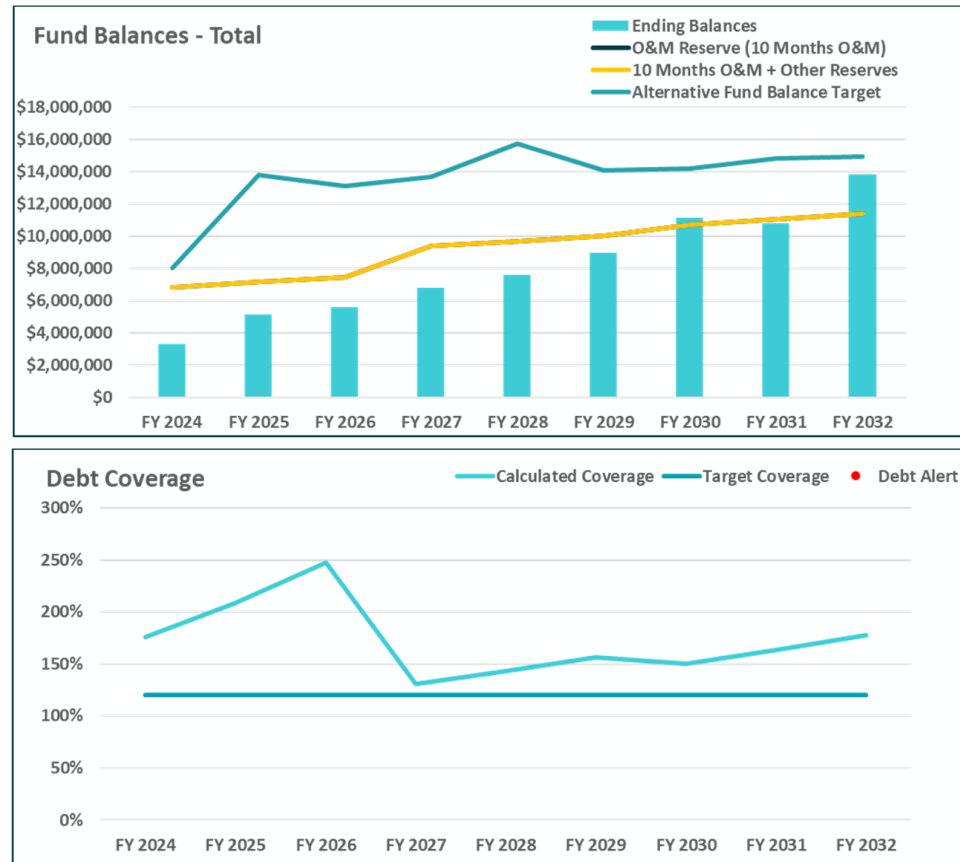
Scenario 1 (Recommended CIP)

Fiscal Year	Revenue Adjustment	Proposed Debt
FY 2024	30%	\$20,000,000
FY 2025	8%	\$0
FY 2026	8%	\$15,000,000
FY 2027	8%	\$0
FY 2028	8%	\$0
FY 2029	5%	\$24,000,000
FY 2030	5%	\$0
FY 2031	5%	\$0
FY 2032	5%	\$0



Scenario 2 (Modified CIP)

Fiscal Year	Revenue Adjustment	Proposed Debt
FY 2024	30%	\$12,000,000
FY 2025	9%	\$0
FY 2026	9%	\$0
FY 2027	9%	\$35,000,000
FY 2028	6%	\$0
FY 2029	6%	\$0
FY 2030	6%	\$8,000,000
FY 2031	6%	\$0
FY 2032	6%	\$0



Scenario 3 (10% Increases)

Fiscal Year	Revenue Adjustment	Proposed Debt
FY 2024	10%	\$0
FY 2025	10%	\$8,000,000
FY 2026	10%	\$0
FY 2027	10%	\$16,00,000
FY 2028	10%	\$0
FY 2029	10%	\$0
FY 2030	10%	\$37,500,000
FY 2031	10%	\$0
FY 2032	10%	\$0



Financial Plan Discussion

- Significantly reduced water demands equal significantly reduced rate revenues
 - › Currently, 50-55% of rate revenues are from water sales
- Inflationary pressure on operating costs and unanticipated temporary/contracted operating expenses quickly reduce fund balance and debt capacity
- Recommended CIP quickly increases from a historical spend of approx. \$1.1 M to \$6.0 M annually

Wastewater Enterprise



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Wastewater Flow Assumptions

- Residential based on average winter consumption (AWC) calculation
- Non-Residential based on actual period water use

Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Actuals	Projected	Projected	Projected	Projected	Projected
Residential (Average Winter Consumption)						
Single Family	77,832	77,832	77,832	77,832	77,832	77,832
Multi Unit	29,124	29,124	KKO 29,124	29,124	29,124	29,124
Mobile Home	13,164	13,164	13,164	13,164	13,164	13,164
Non-Residential (Water Use)						
Car Wash	504	504	504	504	504	504
Religious Places/Community Centers	1,535	1,535	1,535	1,535	1,535	1,535
Commercial	16,333	16,333	16,333	16,333	16,333	16,333
Groceries and Mortuaries	990	990	990	990	990	990
Laundry	4,066	4,066	4,066	4,066	4,066	4,066
Mixed Retail	2,075	2,075	2,075	2,075	2,075	2,075
Lodging with Food	10,437	10,437	10,437	10,437	10,437	10,437
Lodging without Food	7,668	7,668	7,668	7,668	7,668	7,668
Restaurant	7,518	7,518	7,518	7,518	7,518	7,518
Napa Valley College	510	510	510	510	510	510
Service Station	511	511	511	511	511	511
Winery Pre-Treated	1,555	1,555	1,555	1,555	1,555	1,555
Winery Non-Treated	929	929	929	929	929	929
Schools	6,505	6,505	6,505	6,505	6,505	6,505
²⁴ Total - Usage (ccf)	181,256	181,256	181,256	181,256	181,256	181,256

Slide 24

KK0

Mandy, We are adjusting these future AWC estimates in the model to reflect the minimal new connection growth. It is not reflected here, but is also not a material change to the financial plan.

Kevin Kostiuk, 2022-12-22T18:43:50.860

Projected Wastewater Connections

Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Actuals	Projected	Projected	Projected	Projected	Projected
Residential Sewer Accounts						
Dwelling Units						
SFR	1,526	1,533	1,541	1,548	1,555	1,563
MFR	673	679	685	690	696	702
Mobile Home	212	214	216	217	219	221
Total Residential Dwelling Units	2,411	2,426	2,441	2,456	2,471	2,486
Accounts						
SFR	1,506	1,513	1,520	1,528	1,535	1,542
MFR	100	101	102	103	103	104
Mobile Home	2	2	2	2	2	2
Total Residential Accounts	1,608	1,616	1,624	1,632	1,640	1,649
Non-Residential Meters						
5/8"	117	117	117	117	117	117
1"	43	43	43	43	43	43
1.5"	20	20	20	20	20	20
2"	20	20	20	20	20	20
3"	2	2	2	2	2	2
4"	4	4	4	4	4	4
6"	1	1	1	1	1	1
Total Meters	207	207	207	207	207	207

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Operating and Maintenance (O&M) Expenditures – Wastewater

- Summary by department

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
	Budget	Projected	Projected	Projected	Projected	Projected
Non-Departmental	\$0.2 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M
Council	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M
Administration	\$0.2 M	\$0.2 M	\$0.2 M	\$0.2 M	\$0.2 M	\$0.3 M
Finance	\$0.5 M	\$0.5 M	\$0.5 M	\$0.5 M	\$0.5 M	\$0.6 M
Attorney	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M
Public Works	\$2.2 M	\$2.6 M	\$2.7 M	\$2.8 M	\$2.9 M	\$3.1 M
Temp/Part Time (WWTP Temporary Operators)	\$0.7 M	\$0.6 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M
Total	\$3.9 M	\$4.2 M	\$3.8 M	\$3.9 M	\$4.1 M	\$4.3 M
% Change	N/A	8.6%	-10.3%	4.4%	4.2%	4.2%

Existing Debt/Loan Service - Wastewater

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
2005B Installment Agreement	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.0 M
2012B Installment Agreement - Wastewater	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M	\$0.1 M
Total	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.3 M	\$0.1 M

- Estimated USDA Loan Service – \$14.3M Issue, Principal + Interest @ 2% and 30 years
 - › Raftelis calculated an estimated annual loan service as none was provided to us

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
USDA Loan	\$0.6 M	\$0.6 M	\$0.6 M	\$0.6 M	\$0.6 M	\$0.6 M	\$0.6 M	\$0.6 M	\$0.6 M	\$0.6 M

Wastewater Enterprise – Capital Improvement Program (CIP)

- Sewer CIP
 - › 10-year historical annual spend (rate funded): \$0.9 M
 - › Forward-looking annual spend (rate funded): \$1.9 M
- **Only considers CIP funded through rate revenues (cash or future debt service)**
 - › *GO Bond proceed funded project(s) are omitted*
 - › Totals are net of USDA Loan proceeds

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Sewer	\$6.45 M	\$2.19 M	\$0.86 M	\$1.39 M	\$1.37 M	\$0.83 M	\$0.86 M	\$0.46 M	\$0.48 M	\$0.49 M
Recycled Water	\$0.00 M	\$1.66 M	\$1.05 M	\$0.60 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M	\$0.00 M
Total	\$6.45 M	\$3.85 M	\$1.91 M	\$1.99 M	\$1.37 M	\$0.83 M	\$0.86 M	\$0.46 M	\$0.48 M	\$0.49 M

Financial Policies & Cash Balance - Wastewater

- Financial Policies:
 - › Reserve Target: 8 Months of Operating Expenses (O&M + Debt Service)
 - › Minimum Target: 6 Months of Operating Expenses (O&M + Debt Service)
 - › Minimum Debt Service Coverage Ratio: 1.20
- Beginning balance FY 2022-23 (July 1, 2022):
 - › \$5,413,832 Unrestricted (Fund 571 + 773)
 - › \$605,841 Restricted Cash (Fund 774) currently excluded from beginning balance
 - › Total Beginning Balance: **\$6,019,674**

Financial Plan Scenarios



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Financial Plan Scenarios

Scenario 1:

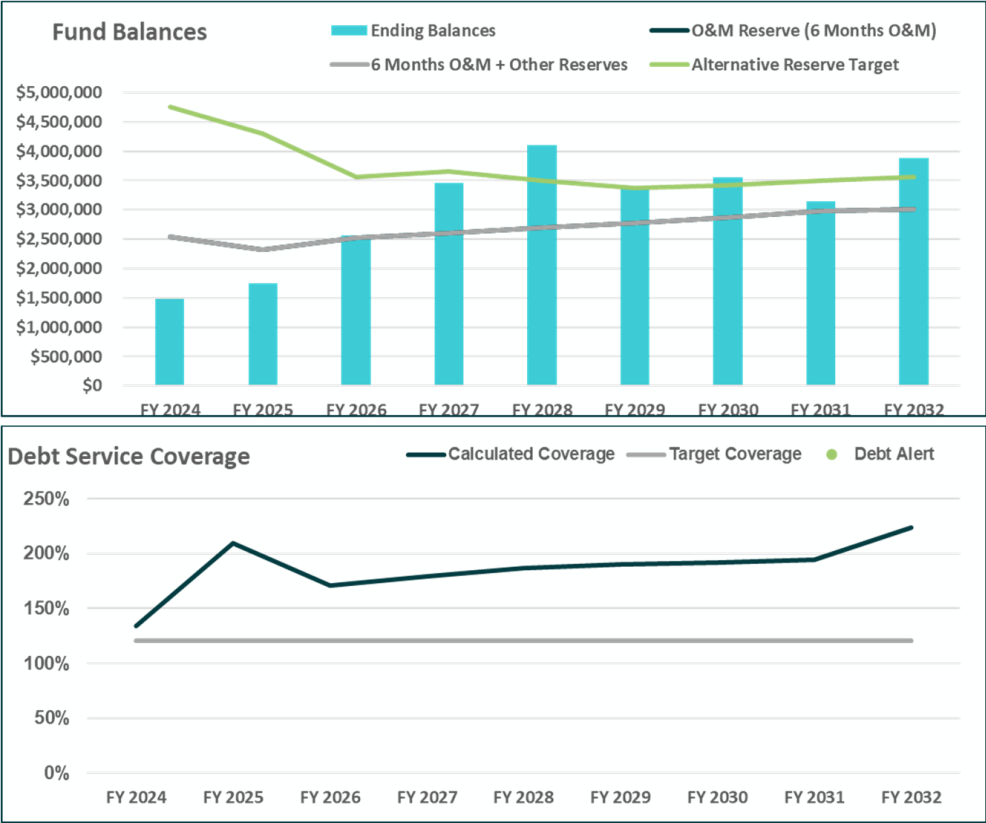
- “Recommended CIP”
- CIP start adjusted by one-year (FY 2023-24 start year)
- Full recycled water distribution costs
- 55% Revenue adjustment in FY 2024, followed by 4% in FY 2025 – FY 2028, and 3% for each remaining year
- Assumes internal fund loans in FY 2023 of \$873,610, and \$1,000,000 in FY 2024
- Assumes proposed debt of \$5M in FY 2024, and \$4M in FY 2026

Scenario 2:

- “Modified CIP”
- CIP start adjusted by one year (FY 2023-24 start year)
- Reduced recycled water CIP costs (\$250k total)
- 55% revenue adjustment in FY 2024, followed by 3% in FY 2025 – FY 2026, and 2% for each remaining year
- Assumes internal fund loans in FY 2023 of \$873,610, and \$1,000,000 in FY 2024
- Assumes proposed debt of \$4M in FY 2024, and \$3M in FY 2027

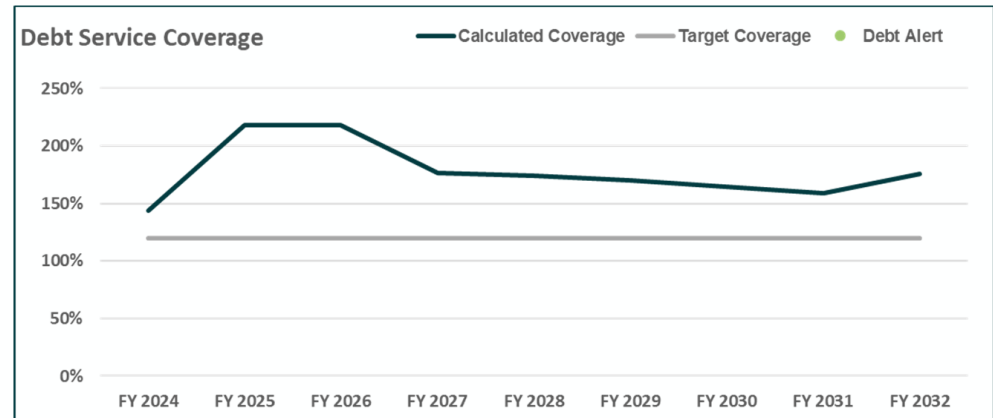
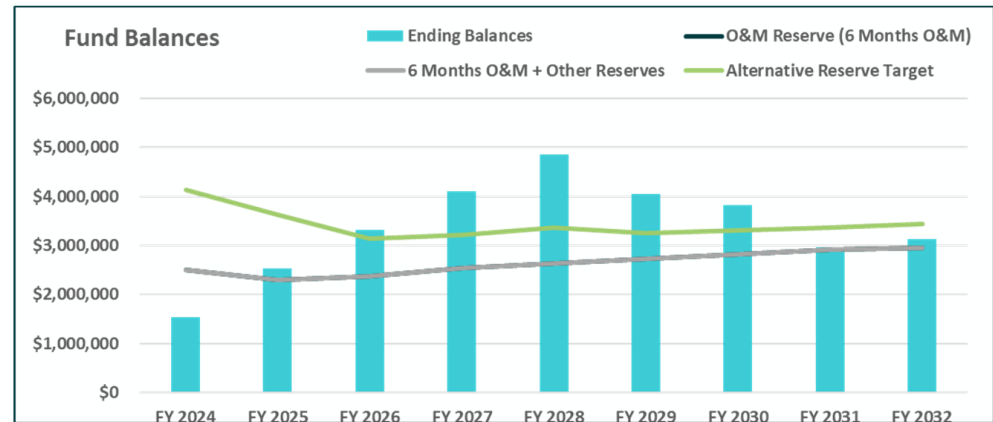
Scenario 1 (Recommended CIP)

Fiscal Year	Revenue Adjustment	Proposed Debt	Proposed General Fund Loan
FY 2023	0%	\$0	\$873,610
FY 2024	55%	\$5,000,000	\$1,000,000
FY 2025	4%	\$0	\$0
FY 2026	4%	\$4,000,000	\$0
FY 2027	4%	\$0	\$0
FY 2028	4%	\$0	\$0
FY 2029	3%	\$0	-\$873,610
FY 2030	3%	\$0	\$0
FY 2031	3%	\$0	-\$1,000,000
FY 2032	3%	\$0	\$0



Scenario 2 (Modified CIP)

Fiscal Year	Revenue Adjustment	Proposed Debt	Proposed General Fund Loan
FY 2023	0%	\$0	\$873,610
FY 2024	55%	\$4,000,000	\$1,000,000
FY 2025	3%	\$0	\$0
FY 2026	3%	\$0	\$0
FY 2027	2%	\$3,000,000	\$0
FY 2028	2%	\$0	\$0
FY 2029	2%	\$0	-\$873,610
FY 2030	2%	\$0	\$0
FY 2031	2%	\$0	-\$1,000,000
FY 2032	2%	\$0	\$0



Financial Plan Discussion

- Treatment Plant Upgrades project is approximately \$3M over original estimate
- Inflationary pressure on operating costs
- Significant, unanticipated temporary contracted operating expenses reduce fund balance and debt service coverage
- CIP spend from a historical spend of \$0.9 M per year to \$1.4 M adds pressure to fund balance
- Ultimately, the significant year-one revenue increase is required due to operating cost pressure and the Treatment Plant Upgrades project, not the future capital program

Backup Slides – CIP Detail



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Recommended Capital Improvement Program (CIP) WATER

- › Assumes no CIP spend in FY 2023
- › Full Recycled Water Project Costs

Recommended Scenario	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
W-109 Bell Canyon Intake Tower Replacement	\$0	\$0	\$329,323	\$2,963,904	\$0	\$0	\$0	\$0	\$0	\$0
W-80 Dwyer Road Booster Pump Station	\$0	\$0	\$900,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
W18-113 SCADA Improvements - Offsite Communications	\$0	\$0	\$160,000	\$320,000	\$320,000	\$0	\$0	\$0	\$0	\$0
W-86 Spring Mountain Pressure Zone Improvements (Holmes Tank Upgrade) (Breeze - Inactive)	\$0	\$0	\$0	\$304,494	\$1,370,221	\$1,370,221	\$0	\$0	\$0	\$0
PWTM-1 Napa Intertie Pipeline Replacement (Breeze Inactive)	\$0	\$0	\$1,143,000	\$2,286,000	\$2,286,000	\$0	\$0	\$0	\$0	\$0
Smart Water Meters	\$0	\$0	\$394,000	\$788,000	\$788,000	\$0	\$0	\$0	\$0	\$0
W21-01 Kearney & Andrea Water Main Replacement (Breeze - Inactive)	\$0	\$875,705	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
W-101 Rehabilitate Tank 2 at Lower Reservoir (Breeze - Inactive)	\$0	\$940,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
W18-111 WTP Condition Assessment (Breeze - Inactive)	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Napa Intertie Pump Station Replacement (Construction)	\$0	\$0	\$0	\$200,000	\$100,000	\$500,000	\$10,000,000	\$0	\$0	\$0
Napa Intertie Pump Station Replacement (DESIGN)	\$0	\$400,000	\$1,900,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Treatment Plant (Water Treatment Plant Rehabilitation)	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000	\$4,000,000	\$4,000,000	\$0
PWTM-2 Water Treatment Plant Transmission Main Replacement	\$0	\$0	\$1,590,800	\$3,181,600	\$3,181,600	\$0	\$0	\$0	\$0	\$0
W18-118 Water Main Annual Replacement Program Allowance (Breeze - Inactive)	\$0	\$288,000	\$288,000	\$288,000	\$288,000	\$288,000	\$0	\$0	\$0	\$0
PWRR-1 Yr 6-10 - Water Main Annual Replacement Program allowance	\$0	\$0	\$0	\$0	\$0	\$0	\$197,350	\$197,350	\$197,350	\$197,350
PWRR-1 Future Allowance for Pipeline R/R (Years 11-15)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PFAS Sampling Project	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Disinfection By Products Project	\$0	\$50,000	\$0	\$0	\$323,000	\$323,000	\$0	\$0	\$0	\$0
Risk and Resilience Assessment Report dated January 2022 - Additional Items	\$0	\$75,000	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cyber-Security Implementation	\$0	\$25,000	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Management Program Development	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
Asset Management Software Assessment & Optimization planning	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0
CMMS Purchase & Setup	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0
ArCommercialIS Purchase & Setup	\$0	\$35,000	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated RW CIP	\$0	\$1,582,567	\$955,067	\$530,067	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$4,496,272	\$7,775,189	\$10,927,064	\$8,706,821	\$2,481,221	\$10,597,350	\$4,197,350	\$4,197,350	\$197,350

Modified CIP WATER

- › Assumes no CIP spend in FY 2023
- › Reduced Recycled Water Project Costs

Modified Scenario	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
W-109 Bell Canyon Intake Tower Replacement	\$0	\$0	\$0	\$0	\$660,000	\$2,633,227	\$0	\$0	\$0	\$0
W-80 Dwyer Road Booster Pump Station	\$0	\$900,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
W18-113 SCADA Improvements - Offsite Communications	\$0	\$0	\$160,000	\$320,000	\$320,000	\$0	\$0	\$0	\$0	\$0
W-86 Spring Mountain Pressure Zone Improvements (Holmes Tank Upgrade) (Breeze - Inactive)	\$0	\$0	\$0	\$0	\$500,000	\$2,544,935	\$0	\$0	\$0	\$0
PWTM-1 Napa Intertie Pipeline Replacement (Breeze Inactive)	\$0	\$0	\$300,000	\$2,707,500	\$2,707,500	\$0	\$0	\$0	\$0	\$0
Smart Water Meters	\$0	\$770,000	\$500,000	\$250,000	\$250,000	\$200,000	\$0	\$0	\$0	\$0
W21-01 Kearney & Andrea Water Main Replacement (Breeze - Inactive)	\$0	\$875,705	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
W-101 Rehabilitate Tank 2 at Lower Reservoir (Breeze - Inactive)	\$0	\$940,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
W18-111 WTP Condition Assessment (Breeze - Inactive)	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Napa Intertie Pump Station Replacement (Construction)	\$0	\$0	\$0	\$0	\$800,000	\$10,000,000	\$0	\$0	\$0	\$0
Napa Intertie Pump Station Replacement (DESIGN)	\$0	\$0	\$1,000,000	\$1,300,000	\$0	\$0	\$0	\$0	\$0	\$0
Water Treatment Plant (Water Treatment Plant Rehabilitation)	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000	\$4,000,000	\$4,000,000	\$0
PWTM-2 Water Treatment Plant Transmission Main Replacement	\$0	\$0	\$500,000	\$500,000	\$2,000,000	\$5,954,000	\$0	\$0	\$0	\$0
W18-118 Water Main Annual Replacement Program Allowance (Breeze - Inactive)	\$0	\$288,000	\$288,000	\$288,000	\$288,000	\$288,000	\$0	\$0	\$0	\$0
PWRR-1 Yr 6-10 - Water Main Annual Replacement Program	\$0	\$0	\$0	\$0	\$0	\$0	\$197,350	\$197,350	\$197,350	\$197,350
PWRR-1 Future Allowance for Pipeline R/R (Years11-15)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PFAS Sampling Project	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Disinfection By Products Project	\$0	\$50,000	\$0	\$0	\$323,000	\$323,000	\$0	\$0	\$0	\$0
Risk and Resilience Assessment Report dated January 2022 - Additional recommended items	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cyber-Security Implementation	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Management Program Development	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Management Software Assessment & Optimization planning	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CMMS Purchase & Setup	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ArCommercialIS Purchase & Setup	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated RW CIP	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$4,613,705	\$2,798,000	\$5,365,500	\$7,848,500	\$21,943,162	\$597,350	\$4,197,350	\$4,197,350	\$197,350

CIP Allowance WATER (w/10% revenue increases)

Allowance Scenario	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Total CIP Allowance	\$0	\$1,800,000	\$2,400,000	\$3,000,000	\$3,600,000	\$5,100,000	\$6,600,000	\$8,100,000	\$9,600,000	\$11,100,000
Total	\$0	\$1,800,000	\$2,400,000	\$3,000,000	\$3,600,000	\$5,100,000	\$6,600,000	\$8,100,000	\$9,600,000	\$11,100,000

CIP Comparison - Water

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Recommended	\$0.00 M	\$4.50 M	\$7.78 M	\$10.93 M	\$8.71 M	\$2.48 M	\$10.60 M	\$4.20 M	\$4.20 M	\$0.20 M
Modified	\$0.00 M	\$4.61 M	\$2.80 M	\$5.37 M	\$7.85 M	\$21.94 M	\$0.60 M	\$4.20 M	\$4.20 M	\$0.20 M
Allowance	\$0.00 M	\$1.80 M	\$2.40 M	\$3.00 M	\$3.60 M	\$5.10 M	\$6.60 M	\$8.10 M	\$9.60 M	\$11.10 M

Recommended Capital Improvement Program (CIP) WASTEWATER

- › Assumes no CIP spend in FY 2023
- › Full Recycled Water Project Costs

Recommended Scenario	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
S-52 WWTP Phase I Upgrades	\$12,061,800	\$1,340,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S23-01 Recycled Water - Deliver Recycled Water to Crane Park's Irrigation (Design only)	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWTP Pond Cleaning, Decommissioning, and Repurpose	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0	\$0
S18-70 Sewer Replacement Program	\$0	\$248,000	\$248,000	\$248,000	\$248,000	\$248,000	\$0	\$0	\$0	\$0
S18-71 Crinella Lift Station Improvements	\$0	\$0	\$570,000	\$570,000	\$0	\$0	\$0	\$0	\$0	\$0
WWGM-6 Del Campo Curt	\$0	\$0	\$608,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWRR-1CCTV Inspection Program, Phase 1	\$0	\$222,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWRR-2 Flow Monitoring Program	\$0	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWRR-3 High Priority Pipeline Replacement	\$0	\$669,600	\$669,600	\$669,600	\$669,600	\$669,600	\$0	\$0	\$0	\$0
WWRR-4 Model Update and System Analysis	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
WWRR-5 CCTV Inspection Phase 2	\$0	\$0	\$0	\$0	\$0	\$0	\$328,500	\$328,500	\$0	\$0
WWRR-6 Address R/R needs from Phase 1 CCTV Program Years 6-10 & 11-20	\$0	\$0	\$0	\$0	\$0	\$0	\$357,350	\$357,350	\$357,350	\$357,350
Asset Management Program Development	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
Asset Management Software Assessment & Optimization planning	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0
CMMS Purchase & Setup	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0
ArcGIS Purchase & Setup	\$0	\$35,000	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S21-01 WWTP Recycled Pipeline and Pump Station (design only)	\$0	\$1,582,567	\$955,067	\$530,067	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$12,061,800	\$4,147,367	\$3,125,667	\$2,132,667	\$1,467,600	\$1,417,600	\$685,850	\$685,850	\$357,350	\$357,350

Modified Capital Improvement Program (CIP)

WASTEWATER

- › Assumes no CIP spend in FY 2023
- › Reduced Recycled Water Project Costs

Modified Scenario	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
S-52 WWTP Phase I Upgrades	\$12,061,800	\$1,340,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S23-01 Recycled Water - Deliver Recycled Water to Crane Park's Irrigation (Design)	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWTP Pond Cleaning, Decommissioning, and Repurpose	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0	\$0
S18-70 Sewer Replacement Program	\$0	\$248,000	\$248,000	\$248,000	\$248,000	\$248,000	\$0	\$0	\$0	\$0
S18-71 Crinella Lift Station Improvements	\$0	\$0	\$570,000	\$570,000	\$0	\$0	\$0	\$0	\$0	\$0
WWGM-6 Del Campo Curt	\$0	\$0	\$608,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWRR-1CCTV Inspection Program, Phase 1	\$0	\$222,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWRR-2 Flow Monitoring Program	\$0	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WWRR-3 High Priority Pipeline Replacement	\$0	\$669,600	\$669,600	\$669,600	\$669,600	\$669,600	\$0	\$0	\$0	\$0
WWRR-4 Model Update and System Analysis	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
WWRR-5 CCTV Inspection Phase 2	\$0	\$0	\$0	\$0	\$0	\$0	\$328,500	\$328,500	\$0	\$0
WWRR-6 Address R/R needs from Phase 1 CCTV Program Years 6-10 & 11-20	\$0	\$0	\$0	\$0	\$0	\$0	\$357,350	\$357,350	\$357,350	\$357,350
Asset Management Program Development	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Management Software Assessment & Optimization planning	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CMMS Purchase & Setup	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ArcGIS Purchase & Setup	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S21-01 WWTP Recycled Pipeline and Pump Station (design only)	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$12,061,800	\$2,944,800	\$2,155,600	\$1,537,600	\$1,417,600	\$1,417,600	\$685,850	\$685,850	\$357,350	\$357,350

CIP Comparison - Wastewater

Description	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Recommended	\$12.06 M	\$4.15 M	\$3.13 M	\$2.13 M	\$1.47 M	\$1.42 M	\$0.69 M	\$0.69 M	\$0.36 M	\$0.36 M
Modified	\$12.06 M	\$2.94 M	\$2.16 M	\$1.54 M	\$1.42 M	\$1.42 M	\$0.69 M	\$0.69 M	\$0.36 M	\$0.36 M

Next Steps

- January 12th Rate Study Advisory Committee Meeting
 - › Preliminary Base Rates, Water and Wastewater
- January 24th City Council Meeting
 - › Financial Plan Options
 - › Preliminary Base Rates, Water and Wastewater
- February and Beyond
 - › Preliminary Drought Rates and Elevation Surcharges
 - › Final Base Rates, Water and Wastewater



Thank you

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