

Bigfork Water & Sewer District
Water and Sewer
Rate Study

DRAFT REPORT / MAY 7, 2025





May 7, 2025

Mr. Tyler Hantz
Assistant District Manager
Bigfork Water & Sewer District
108 Harbor Heights Blvd
Bigfork, MT 59911

Subject: Water and Sewer Financial Plan Study Report - DRAFT

Dear Mr. Hantz:

Raftelis is pleased to provide this Water and Sewer Financial Plan Study Report for the Bigfork Water & Sewer District (District) to address current financial challenges the District is facing with respect to sewer and to ensure the water enterprise maintains self-sufficiency as well as to establish water and sewer rates. This study also includes recommended updated Plant Investment Fees (PIF) for water and sewer.

The major objectives of the study include the following:

- Develop financial plans for the water and sewer enterprises to ensure financial sufficiency, meet operation and maintenance (O&M) costs, ensure sufficient funding for capital replacement and refurbishment (R&R) needs, and improve the financial health of the enterprises
- Develop sound and sufficient reserve fund targets
- Review current rate structures for the water and sewer enterprises
- Develop a 5-year schedule of rates for water and sewer
- Develop updated PIF for water and sewer

The report summarizes the key findings and recommendations related to the development of the financial plans for water and sewer utilities and the development of the updated water rates.

It has been a pleasure working with you, and we thank you and the District staff for the support provided during the course of this study.

Sincerely,

A handwritten signature in black ink that reads 'Todd Christiano'.

Todd Christiano
Vice President

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Appendices

- Appendix A: Water Enterprise Detail Operating Fund Cashflow
- Appendix B: Sewer Enterprise Detail Operating Fund Cashflow

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1. Executive Summary

1.1. Introduction

Bigfork Water & Sewer District (District) provides service to approximately 1,500 water and sewer customers. The District's enterprises are expected to be financially self-sufficient with funding from capital and operating requirements derived primarily from rate revenues and plant investment fees. The District authorized this study to ensure that an adequate level of income from water and sewer rates is maintained to finance daily operations, fund needed maintenance and improvement projects, meet debt coverage requirements, fund reserves, and ensure rates are fair and aligned with the District's goals and community values.

This study included the development of:

- Separate water and sewer financial plans for the 6-year study period, FY 2025 through FY 2030
- A fixed/variable revenue analysis to determine the allocation of test year costs to fixed vs volume charges
- A review water and sewer rate structures and an update to the water rate structure

Raftelis used industry standard methodologies supported by the American Water Works Association (AWWA) Principles of Water Rates, Fees, and Charges M1 manual and the Water Environment Federation Manual of Practice 27 (MOP27) for this rate study.

Appendix A contains the detailed water operating cashflow. Appendix B contains the detailed sewer operating cashflow.

1.2. Assumptions

This study is based on numerous assumptions. Changes in these assumptions could materially affect the study findings. Raftelis incorporated the following key assumptions into the study:

- The test year, or the year new rates will be in effect, is FY 2026.
- The study period forecast is for FY 2025 through FY 2030¹.
- Customer account growth is approximately 1.5% per year on 3/4" meters, which represent the largest customer group.
- Inflation factors used in the revenue and cost projections include:
 - Capital: 5%.
 - Operation and maintenance expense inflation:
 - Salary and Benefits: 6.0%/year
 - Utilities: 4.0%/year
 - Chemicals: 5%/year
 - General: 3.0%/year
- Proposed minimum reserve levels for each enterprise are as follows:
 - Operating fund: 25 percent of annual O&M
 - Capital reserve: 1-year depreciation expense phased in over 5 years

¹ The cash flow tables include FY 2025 as the base year, or the year in which the model was developed, and is based on a combination of budgetary information and estimated values. The study forecast is for FY 2026 through FY 2030.

- Debt service
 - Coverage requirement is 1.1 x debt service for the existing water loans and 1.25x debt service for the existing sewer loans as stated in the District's audit
 - Coverage requirement for new debt is 1.1x debt service per the District's engineer presuming State Revolving Loan funding
 - State Revolving Loan terms, 2.5% interest rate, 20-year term, July 1 issue date

1.3. Findings and Conclusions

1.3.1. Water Enterprise

Financial Plan

Revenue from rates should be sufficient to cover operating expenses, repair and replacement capital, debt service, and supplement growth-related capital when necessary. Equal annual revenue adjustments of 7% from FY 2026 through FY 2030 are needed to meet these requirements. Figure 1-1 shows the revenue and expenditures for the study period. Annual expenditures are shown by the columns. Red bars above the X-axis show the net cash to build up the reserves and red bars below the X-axis show withdrawals from reserves to fund costs. Current rates (teal line) are not sufficient to cover annual expenses. Therefore, revenue adjustments are required to generate sufficient revenue to cover annual expenses and to build reserves over the study period. The O&M expenses include a one time transfer of \$1,017,000 to the sewer fund that is then repaid over 5 years in equal installments.

Figure 1-1: Water Enterprise: Revenues and Expenditures

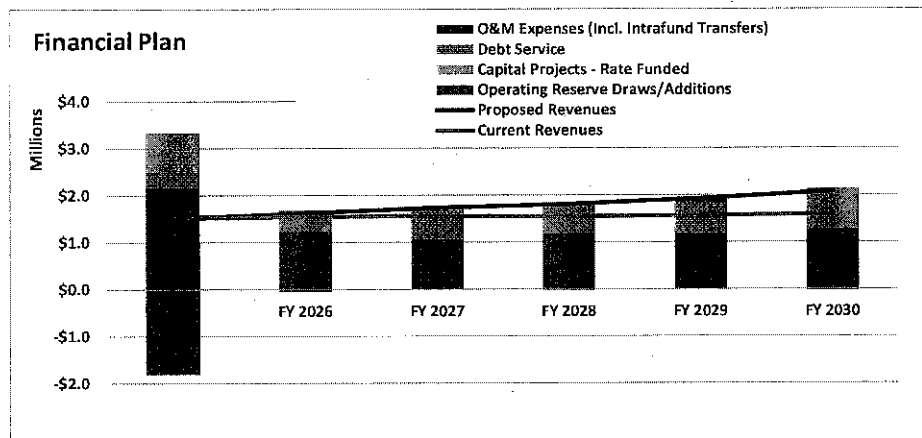


Figure 1-2 compares the ending fund balance to the target reserve requirement. The green bar shows the minimum suggested reserve of 25 percent of annual O&M. The teal bar shows a higher reserve target that also includes a capital reserve built up to 1 year's depreciation over 5 years. While the projected fund balance looks high in FY 2030, those funds are projected to be drawn down to the reserve target in the following five years to fund capital projects.

Figure 1-2: Water Enterprise: Ending Fund Balance and Target Reserves

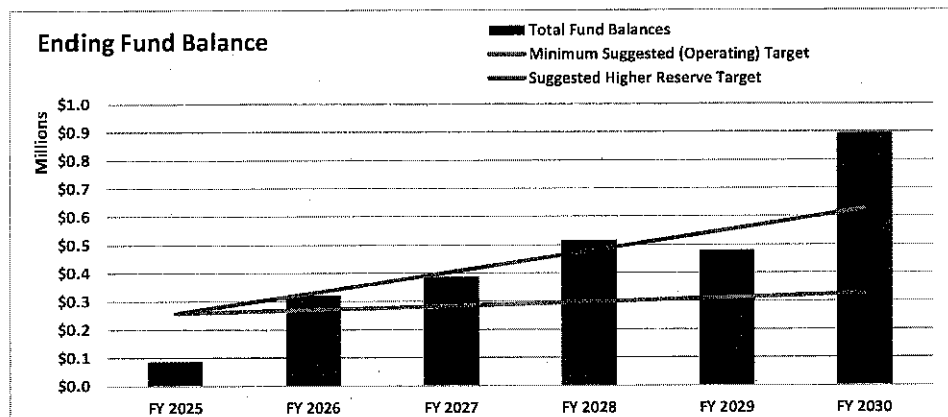
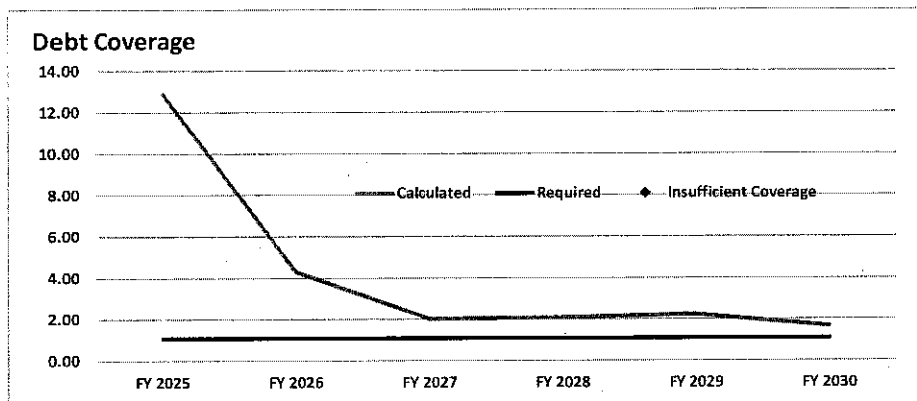


Figure 1-3 shows the projected debt service for the water enterprise. Approximately \$8 million of the planned capital program is anticipated to be debt funded. Coverage is expected to be sufficient given the proposed revenue adjustments.

Figure 1-3: Water Enterprise Projected Debt Service Coverage



Fixed vs Variable Revenue Analysis

To maintain revenue stability, Raftelis analyzed the current mix of fixed vs variable rate-based revenue to maintain a similar mix of revenue from proposed rates. Raftelis completed the analysis for FY 2026 using standard methods supported by the American Water Works Association (AWWA) in its M1 manual, *Principles of Water Rates, Fees, and Charges*.

Rate Design

In the development of schedules of water rates, a basic consideration is to establish equitable charges to customers commensurate with the cost of providing service while incorporating specific policy objectives of the District. The District identified three key objectives in the design of proposed rates: revenue stability, conservation, and equity between customer classes.

The existing rate structure consists of two components: 1) a monthly minimum charge by meter size that includes a volume allowance that increases as meter size increases and 2) a 3-tiered volume rate structure with the same tiers. This means that larger meters, with larger allowances, often only have usage charged within the top tier.

Raftelis developed a new water rate structure that removed the allowance and created different tier blocks for each meter size. This rate structure is better aligned with the demand patterns for customers with the same meter size. The base charge varies by meter size and the volume allowance has been removed. The base charge still recovers about 68 percent of rate-based revenue to maintain the District's current level of revenue stability. Table 1-1 shows a comparison of the current and proposed fixed charges.

Table 1-1: Comparison of FY 2025 Existing and FY 2026 Proposed Rates, Monthly Charge - Water

Meter Size	FY 2025		FY 2026	
	Allowance (kgal)	\$/mo	Allowance (kgal)	\$/mo
3/4"	5	\$29.80	0	\$31.89
1"	13	\$74.75	0	\$79.98
1 1/2"	25	\$149.65	0	\$160.12
2"	40	\$239.60	0	\$256.37
3"	75	\$483.40	0	\$517.24
4"	125	\$749.15	0	\$801.59
6"	250	\$1,498.50	0	\$1,603.39

The proposed volume rate maintains a 4-tiered structure, but usage in the first tier is now charged. Additionally, the tier thresholds change based on meter size. Historical usage of customers within each meter size was used to determine the thresholds. The thresholds were established to ensure that each tier captured roughly the same percentage of total volume across meter sizes, as much as feasible. For larger meters—those greater than 1½ inches—which tend to have more varied usage patterns, Raftelis set the thresholds to approximate the percentage volumes in each tier while also accounting for the higher usage per customer. Table 1-2 compares the existing and proposed FY 2026 volume rates.

Table 1-2: Comparison of FY 2025 Existing and FY 2026 Proposed Rates, Volume Charge - Water

Volume	FY 2025		FY 2026	
	Threshold (kgal)	\$/kgal	Threshold (kgal)	\$/kgal
3/4"	5	\$0.00	5	\$1.25
	10	\$1.65	15	\$1.57
	30	\$2.35	35	\$2.35
	>30	\$3.30	>35	\$3.52
1"	5	\$0.00	15	\$1.25
	10	\$1.65	60	\$1.57
	30	\$2.35	170	\$2.35
	>30	\$3.30	>170	\$3.52
1.5"	5	\$0.00	25	\$1.25
	10	\$1.65	75	\$1.57
	30	\$2.35	200	\$2.35
	>30	\$3.30	>200	\$3.52
2"	5	\$0.00	40	\$1.25
	10	\$1.65	90	\$1.57
	30	\$2.35	240	\$2.35
	>30	\$3.30	>240	\$3.52
3"	5	\$0.00	50	\$1.25
	10	\$1.65	100	\$1.57
	30	\$2.35	250	\$2.35
	>30	\$3.30	>250	\$3.52
4"	5	\$0.00	80	\$1.25
	10	\$1.65	175	\$1.57
	30	\$2.35	440	\$2.35
	>30	\$3.30	>440	\$3.52

1.3.2. Sewer Enterprise

Financial Plan

Revenue from rates should be sufficient to cover operating expenses, repair and replacement capital, debt service, and supplement growth-related capital when necessary. Equal annual revenue adjustments of 16% from FY 2026 through FY 2030 are needed to meet these requirements. Figure 1-4 shows the revenue and expenditures for the study period. Annual expenditures are shown by the columns. Red bars above the X-axis show the net cash to build up the reserves and red bars below the X-axis show withdrawals from reserves to fund costs. Current rates (teal line) are not sufficient to cover annual expenses. Therefore, revenue adjustments are required to generate sufficient revenue to cover annual expenses and to build reserves over the study period. The O&M expenses include a one time transfer of \$1,077,000 into the sewer fund from the water fund that is then repaid over 6 years starting in FY 2027.

Figure 1-4: Sewer Enterprise Revenues and Expenditures

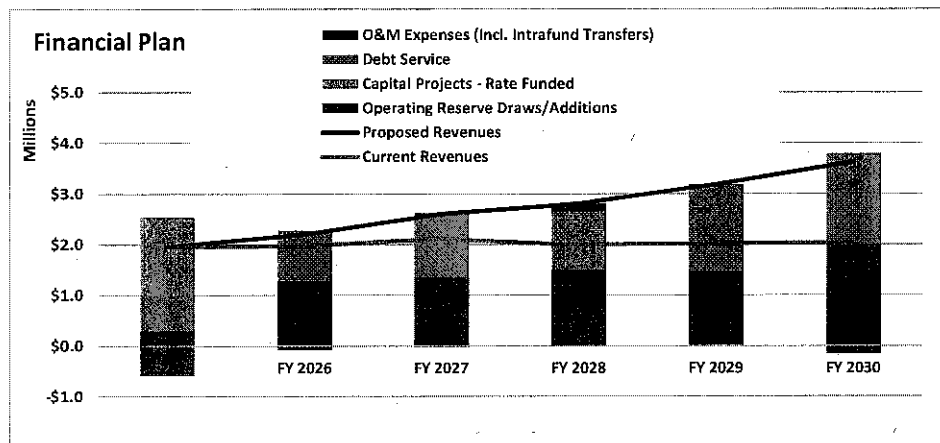


Figure 1-5 compares the ending fund balance to the target reserve requirement. The green bar shows the minimum suggested reserve of 25 percent of annual O&M. The teal bar shows a higher reserve target that also includes a capital reserve built up to 1 year's depreciation over 5 years. The total fund balance is projected to be at or above the suggested target. The reserves are available to fund capital beyond FY 2030.

Figure 1-5: Sewer Enterprise Ending Fund Balance and Target Reserves

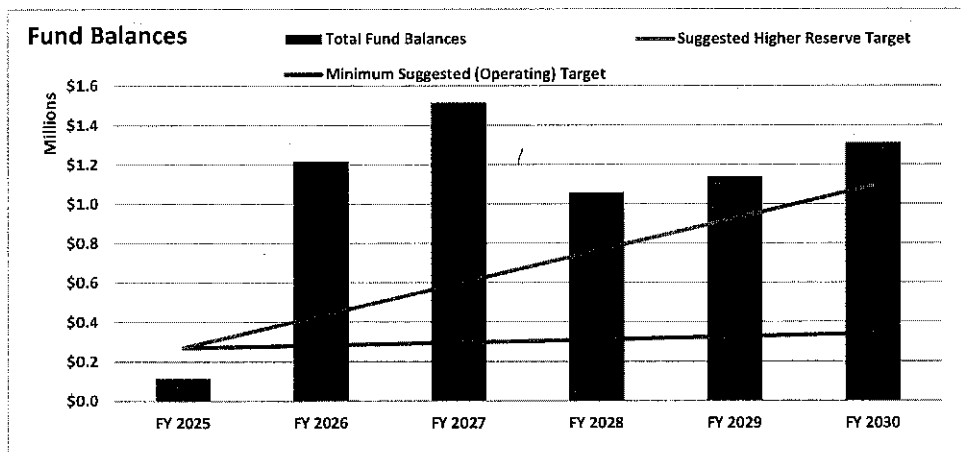
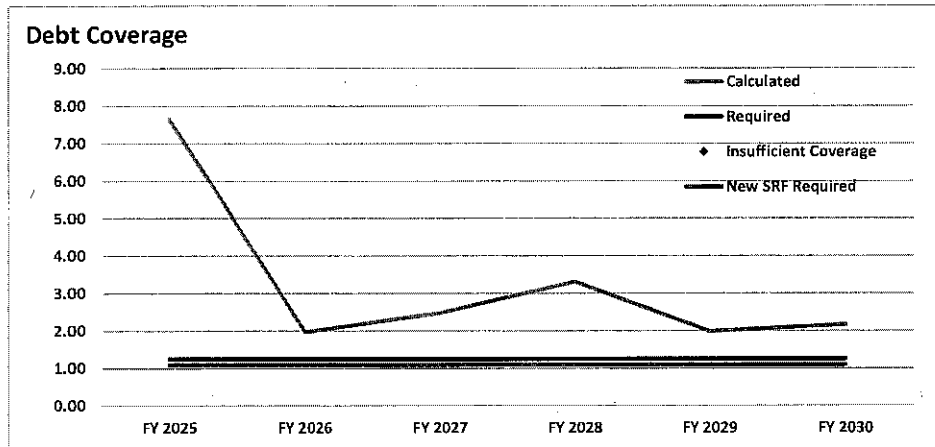


Figure 1-6 shows the projected debt coverage. Approximately \$18.5 million of capital is expected to be funded through debt. Under the proposed revenue adjustments, the sewer enterprise is expected to stay above coverage requirements.

Figure 1-6: Sewer Enterprise Projected Debt Coverage

**Rate Design**

Similar to the approach used to develop the proposed water rates, Raftelis developed the proposed sewer rates considering the District's rate structure pricing objectives; revenue stability and equity between customer classes. The existing rate structure includes a minimum charge that varies by meter size and includes the same allowances as the water rate structure. The structure also includes a flow charge for flow over the allowance at each meter size.

Based on discussions with District staff and Board direction, no changes are proposed to the sewer rate structure. Therefore, the proposed rates are the current rates multiplied by the overall revenue adjustment and rounded up to the nearest penny for revenue sufficiency.

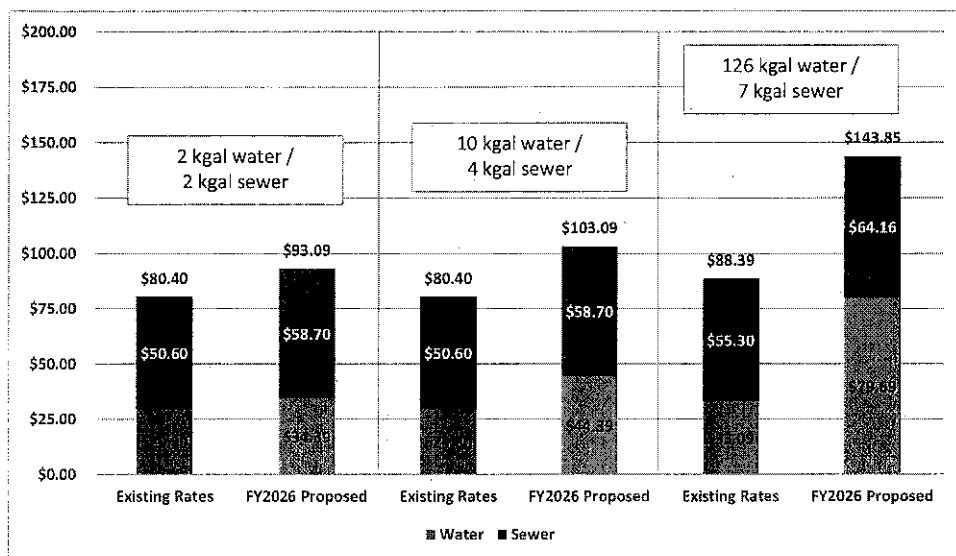
Table 1-3: Sewer Enterprise Comparison Between Existing Rates and Proposed FY2026 Rates

Meter Size	FY 2025		FY 2026	
	Allowance (kgal)	\$/mo	Allowance (kgal)	\$/mo
3/4"	5	\$50.60	5	\$58.70
1"	13	\$127.00	13	\$147.33
1 1/2"	25	\$254.25	25	\$294.95
2"	40	\$407.00	40	\$472.16
3"	75	\$763.35	75	\$885.55
4"	125	\$1,272.55	125	\$1,476.26
6"	250	\$2,545.25	250	\$2,952.70
Flathead Lake Lodge	75	\$763.35	75	\$885.55
Flat	0	\$50.60	0	\$58.70
Volume	\$/kgal		\$/kgal	
Usage > Allowance	\$2.35		\$2.73	

1.4. Typical Monthly Bill Comparison

Figure 1-7 compares typical monthly bills under existing and FY 2026 proposed water and sewer rates for a customer on a 1/4" meter at various usage levels. The usage levels represent a low, average, and high user and average winter consumption for sewer.

Figure 1-7: Typical Bill Comparison



1.5. Reliance on District Provided Data

During this project, the District (and/or its representatives) provided Raftelis with a variety of technical information, including cost and revenue data. Raftelis did not independently assess or test the accuracy of such data – historic or projected. Raftelis has relied on this data in the formulation of our findings and subsequent recommendations, as well as in the preparation of this report.

There are often differences between actual and projected data. Some of the assumptions used for projections in this report will not be realized, and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the data or results projected in this report and actual results achieved, and those differences may be material. As a result, Raftelis takes no responsibility for the accuracy of data or projections provided by or prepared on behalf of the District, nor do we have any responsibility for updating this report for events occurring after the date of this report.

The results presented herein are drafted and under consideration by the District. Drawing conclusions from information in this report is premature and may lead to erroneous assessments as the document may be subject to revisions and refinement.

2. Water Enterprise

The water fund is a self-supporting enterprise fund with revenue from rates, fees, and other operating income to fund annual expenditures included operation and maintenance expense, capital projects, debt service, and reserves.

2.1. Accounts and Usage

Table 2-1 shows the historical FY 2024 accounts by meter size and the projected number through the study period based on the assumptions listed in Section 1.2. In addition to these meters, the District also has 17 private fireline connections, each 4" in size, and construction meters. The number of construction meters varies from month-to-month and year-to-year depending on the level of development in the District. Raftelis assumed growth primarily from 3/4" meters to be conservative.

Table 2-1: Projected Accounts

Meter Size	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
3/4"	1,302	1,322	1,341	1,361	1,382	1,403	1,424
1"	107	107	107	107	107	107	107
1 1/2"	46	46	46	46	46	46	46
2"	27	27	27	27	27	27	27
3"	4	4	4	4	4	4	4
4"	1	1	1	1	1	1	1
Total	1,487	1,507	1,526	1,546	1,567	1,588	1,609

Table 2-2 shows a summary of the historical and projected billed usage. This is usage above the allotment included at each meter size.

Table 2-2: Historical and Projected Billed Usage (kgal)

Meter Size	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Tier 1	20,664	20,974	21,289	21,608	21,932	22,261	22,595
Tier 2	45,330	46,010	46,700	47,401	48,112	48,833	49,566
Tier 3	64,271	65,235	66,214	67,207	68,215	69,238	70,277
Total Billed	130,265	132,219	134,203	136,216	138,259	140,333	142,438

Table 2-3 shows the historical and projected total water usage by meter size and tier. This includes usage that is not billed because of the current allotment included within the fixed charge.

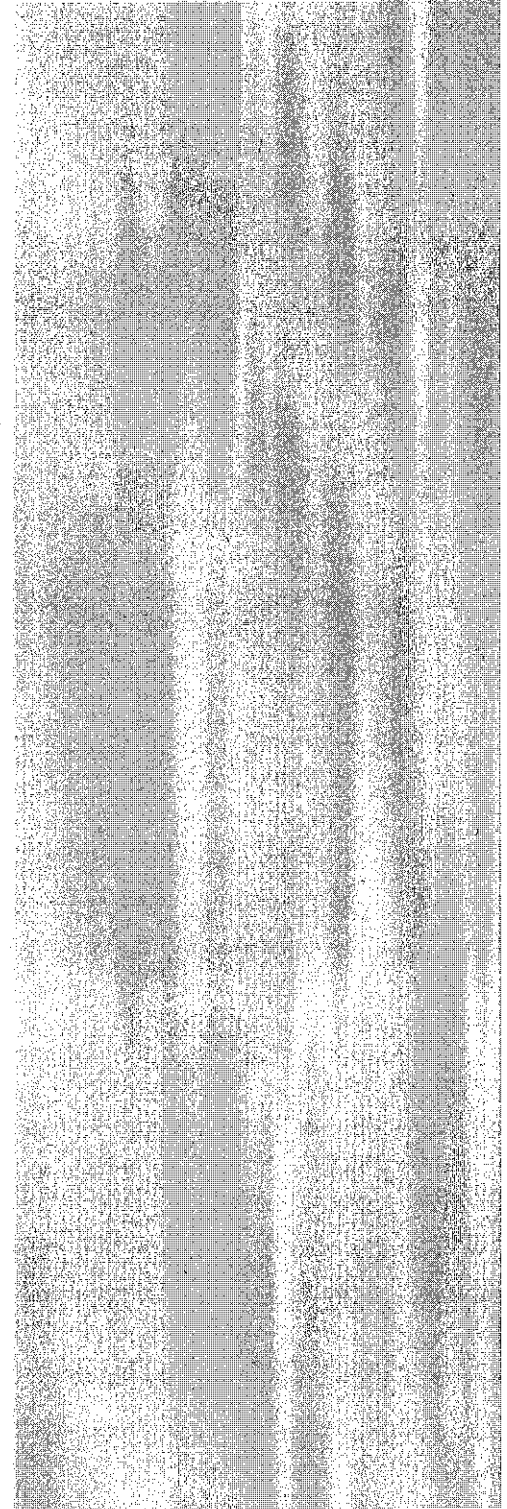


Table 2-3: Historical and Projected Total Usage (kgal)

Meter Size	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
3/4"							
Tier 0	45,137	45,814	46,501	47,198	47,906	48,625	49,354
Tier 1	20,664	20,974	21,289	21,608	21,932	22,261	22,595
Tier 2	39,140	39,727	40,323	40,928	41,542	42,165	42,797
Tier 3	27,993	28,413	28,839	29,272	29,711	30,157	30,609
1"							
Tier 0	4,287	4,287	4,287	4,287	4,287	4,287	4,287
Tier 1	2,792	2,792	2,792	2,792	2,792	2,792	2,792
Tier 2	6,418	6,418	6,418	6,418	6,418	6,418	6,418
Tier 3	17,787	17,787	17,787	17,787	17,787	17,787	17,787
1.5"							
Tier 0	2,351	2,351	2,351	2,351	2,351	2,351	2,351
Tier 1	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Tier 2	3,757	3,757	3,757	3,757	3,757	3,757	3,757
Tier 3	6,798	6,798	6,798	6,798	6,798	6,798	6,798
2"							
Tier 0	1,285	1,285	1,285	1,285	1,285	1,285	1,285
Tier 1	1,001	1,001	1,001	1,001	1,001	1,001	1,001
Tier 2	2,577	2,577	2,577	2,577	2,577	2,577	2,577
Tier 3	10,735	10,735	10,735	10,735	10,735	10,735	10,735
3"							
Tier 0	240	240	240	240	240	240	240
Tier 1	183	183	183	183	183	183	183
Tier 2	490	490	490	490	490	490	490
Tier 3	1,777	1,777	1,777	1,777	1,777	1,777	1,777
4"							
Tier 0	60	60	60	60	60	60	60
Tier 1	60	60	60	60	60	60	60
Tier 2	150	150	150	150	150	150	150
Tier 3	366	366	366	366	366	366	366
Total	197,850	199,844	201,867	203,922	206,007	208,123	210,271

2.2. Cashflow Analysis

2.2.1. Beginning Balance

The cash balance includes unrestricted carryover monies from previous years. The fund balance was \$1,894,203 at the beginning of FY 2025.

2.2.2. Sources of Revenue

Table 2-4 shows the projected revenues for the water enterprise operating fund. Additional rate revenue is calculated presuming a 7 percent per year increase to rate-based revenue. Additional revenues come from construction hydrants, private fire lines, other operating and non-operating revenues, property taxes from the tank project, and projected interest income on fund balances.

Table 2-4: Projected Water Operating Fund Enterprise Revenues

Line Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenue Under Existing Rates	\$1,105,960	\$1,131,226	\$1,143,868	\$1,156,700	\$1,169,724	\$1,182,944
Additional Rate Revenue	\$0	\$79,186	\$165,746	\$260,307	\$363,546	\$476,196
Construction Water & Fire	\$11,148	\$11,173	\$11,173	\$11,173	\$11,173	\$11,173
Other Operating Revenue	\$98,650	\$98,650	\$98,650	\$98,650	\$98,650	\$98,650
Other Revenue	\$4,575	\$4,575	\$4,575	\$4,575	\$4,575	\$4,575
Property Taxes for Tank Project	\$289,325	\$290,000	\$291,238	\$290,338	\$289,338	\$290,225
Interest Income	\$16,911	\$16,988	\$31,534	\$0	\$0	\$26,912
Total Revenue	\$1,526,569	\$1,631,798	\$1,746,784	\$1,821,743	\$1,937,006	\$2,090,675

2.2.3. Operating and Maintenance Costs

Table 2-5 shows the FY 2025 budget and projected operating and maintenance expenses. Budgeted expenses have been escalated using the factors shown in Section 1.2. Annual costs are expected to increase from \$1.1 million to \$1.4 million during the study period.

Table 2-5: Budget and Projected Operating & Maintenance Costs - Water

Line item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Salaries and Benefits	\$602,150	\$638,279	\$676,576	\$717,170	\$760,201	\$805,813
General	\$155,875	\$160,551	\$165,368	\$170,329	\$175,439	\$180,702
Chemicals & Utilities	\$60,000	\$63,070	\$66,300	\$69,699	\$73,277	\$77,042
Plant Maintenance & Contract Services	\$130,000	\$133,900	\$137,917	\$142,055	\$146,316	\$150,706
Hookup Expense	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020	\$46,371
Insurance	\$41,000	\$42,230	\$43,497	\$44,802	\$46,146	\$47,530
Capital Outlay	\$55,000	\$152,250	\$60,638	\$185,220	\$79,008	\$108,484
Total Expenses	\$1,084,025	\$1,231,480	\$1,192,731	\$1,372,984	\$1,325,406	\$1,416,648

2.2.4. Capital Improvement Program

Table 2-6 shows the projected capital improvement program through FY 2030. The New Office Building cost reflects the water enterprise's share of that project's cost. Two major projects of approximately \$4-\$5 million each are projected during the study period.

Table 2-6: Capital Improvement Program - Water

Project	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Harbor Heights Water Main	\$211,890	\$1,907,010	\$0	\$0	\$0	\$0
New Office Building	\$750,000	\$0	\$0	\$0	\$0	\$0
Bay Water Crossing, Upsize Ramsfield Generator, Chapman Hill PRV/Looping	\$0	\$485,100	\$4,365,900	\$0	\$0	\$0
Separate Ranch Water and Sewer District	\$0	\$0	\$0	\$0	\$382,884	\$3,445,960
Total	\$961,890	\$2,392,110	\$4,365,900	\$0	\$382,884	\$3,445,960

2.2.5. Debt Service

Table 2-7 shows existing and projected debt service. The terms for new debt service were discussed in Section 1.2. Approximately \$8.1 million of the proposed capital is to be debt funded.

Table 2-7: Existing and Projected Debt Service - Water

Debt	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Existing						
Ramsfield	\$41,375	\$42,563	\$41,713	\$41,863	\$41,975	\$41,075
Tank Project	\$289,905	\$290,000	\$291,238	\$290,338	\$289,338	\$290,225
Total Existing	\$331,280	\$332,563	\$332,950	\$332,200	\$331,313	\$331,300
New Debt	\$0	\$119,859	\$336,125	\$336,125	\$336,125	\$517,587
Total Debt	\$331,280	\$452,421	\$669,075	\$668,325	\$667,437	\$848,887

2.2.6. Capital Sources and Uses

Table 2-8 summarizes the capital sources and uses of funds. Sources include rate-based revenue transferred from the operating fund, plant investment fees, grants, and debt. A suggested reserve target of 1 percent of annual depreciation expense, phased in over five years, is also shown in the table. The balance above the target in FY 2030 is available to help fund capital projects scheduled in FY 2031 – FY 2035.

Table 2-8: Capital Sources and Uses - Water

Line Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Beginning Balance	\$6,369	\$64	\$287,889	\$347,995	\$507,015	\$385,785
Sources						
Transfers from Operating	\$842,243	\$0	\$0	\$0	\$0	\$0
Grant Funded	\$62,500	\$662,500	\$900,000	\$0	\$100,000	\$900,000
Plant Investment Fee	\$50,778	\$146,055	\$148,246	\$150,470	\$152,727	\$155,018
Debt Funded	\$0	\$1,868,500	\$3,371,400	\$0	\$0	\$2,828,845
Interest	\$64	\$2,880	\$6,359	\$8,550	\$8,928	\$12,217
Total Sources	\$955,585	\$2,679,935	\$4,426,005	\$159,020	\$261,655	\$3,896,080
Uses						
Capital	\$961,890	\$2,392,110	\$4,365,900	\$0	\$382,884	\$3,445,960
Total Uses	\$961,890	\$2,392,110	\$4,365,900	\$0	\$382,884	\$3,445,960
Ending Balance	\$64	\$287,889	\$347,995	\$507,015	\$385,785	\$835,905
Reserve Target	\$0	\$60,000	\$120,000	\$180,000	\$240,000	\$300,000

2.2.7. Intrafund Transfers

Since the sewer fund, discussed in the next chapter, is struggling financially and has major capital improvements that must be funded, a one-time transfer from the water fund to the sewer fund is planned. This transfer is then repaid over 6 years starting in FY 2027 with varying repayment amounts each year, as shown in Table 2-9. The anticipated transfers into the water fund in FY 2031 and FY 2032 are \$243,500 each.

Table 2-9: Intrafund Transfer

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Transfer	-\$1,077,000	\$0	\$120,000	\$190,000	\$140,000	\$140,000

2.2.8. Reserves

The District does not have a formal reserve policy. However, Raftelis recommends the District consider adopting the following two reserve policies:

- Operating Reserve: Equal to 25 percent of annual operating and maintenance expense, excluding capital outlays, which can vary significantly from year-to-year.
- Capital Reserve: Equal to 1 year's depreciation expense, phased in over 5 years.

These reserves track and adjust based on changes in O&M and annual depreciation on capital assets. The primary goal of the operating reserve is to absorb cash flow fluctuations due to the variability in monthly expenditures and the inflow of revenues.

Combined, these reserves strengthen the enterprise's financial health and ability to weather unexpected operating costs or capital interruptions. Maintaining adequate funds also prevents the enterprise from reactively having to adjust rates in response to unforeseen events.

2.2.9. Indicated Revenue Adjustments

Projected water rate revenue under existing rates is insufficient to meet annual O&M, proposed debt issuance expenses, capital repair and replacement costs, and proposed target operating reserves. Equal annual adjustments of 7 percent from rate-based revenue are needed for FY 2026 – FY 2030 to meet these needs. Appendix A contains the detailed financial plan cash flow analysis table. Table 2-10 below summarizes the operating fund results.

Table 2-10: Water Operating Fund Cash Flow Summary

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Beginning Balance	\$1,894,203	\$86,225	\$34,122	\$39,100	\$9,535	\$93,697
Sources						
Rate Revenue + Adjustments	\$1,105,960	\$1,210,411	\$1,309,614	\$1,417,007	\$1,533,270	\$1,659,140
Construction Water & Fire	\$11,148	\$11,173	\$11,173	\$11,173	\$11,173	\$11,173
Other Operating Revenue	\$98,650	\$98,650	\$98,650	\$98,650	\$98,650	\$98,650
Other Revenue	\$4,575	\$4,575	\$4,575	\$4,575	\$4,575	\$4,575
Property Taxes for Tank Project	\$289,325	\$290,000	\$291,238	\$290,338	\$289,338	\$290,225
Transfer from Debt Reserve	\$0	\$0	\$0	\$0	\$0	\$0
Interest Income	\$16,911	\$16,988	\$31,534	\$0	\$0	\$26,912
Total - Sources of Funds	\$1,526,569	\$1,631,798	\$1,746,784	\$1,821,743	\$1,937,006	\$2,090,675
Uses of Funds						
O&M Expenses	\$1,084,025	\$1,231,480	\$1,192,731	\$1,372,984	\$1,325,406	\$1,416,648
Debt Service	\$331,280	\$452,421	\$669,075	\$668,325	\$667,437	\$848,887
Transfer to Capital Fund	\$842,243	\$0	\$0	\$0	\$0	\$0
Total - Uses of Funds	\$2,257,547	\$1,683,901	\$1,861,805	\$2,041,308	\$1,992,843	\$2,265,534
Transfers from(to) Sewer	-\$1,077,000	\$0	\$120,000	\$190,000	\$140,000	\$140,000
Operating Fund Ending Balance	\$86,225	\$34,122	\$39,100	\$9,535	\$93,697	\$58,837
Operating Reserve Target	\$257,256	\$269,807	\$283,023	\$296,941	\$311,600	\$327,041
Debt Service Coverage	12.88	4.30	2.02	2.07	2.23	1.67

2.3. Net Revenue Requirements

Table 2-11 shows the net revenue requirement from rates for FY 2026, the test year. The total is equal to the cost of service to be recovered through rates. Raftelis calculated the revenue requirement using FY 2026 expenses. The rate revenue requirement is adjusted for revenue offsets from other sources and for other adjustments. The total revenue requirement is the amount that fixed and commodity rates are designed to collect. The adjustment for cash balance equals the net cash change in FY 2026, which represents the amount by which reserves are increasing during the test year. The annualized increase is zero as the rates are anticipated to go into effect on July 1. To arrive at total revenue requirement, we add revenue offsets (shown as negative values in the table) and adjustments to the subtotal revenue requirement. This total is the amount that monthly meter service charges and volume charges are designed to collect.

Table 2-11: Net Revenue Requirements, Test Year (FY 2026)

Revenue Requirement - FY 2026	Total
Revenue Requirements	
O&M Expenses	\$1,231,480
Debt Service	\$452,421
Total - Revenue Requirements	\$1,683,901
Revenue Offsets	
Construction Water & Fire	-\$11,173
Other Operating Revenue	-\$98,650
Property Taxes for Tank Project	-\$290,000
Other Revenue	-\$4,575
Interest Income	-\$16,988
Total - Revenue Offsets	-\$421,387
Intrafund Transfers	\$0
Adjustments	
Adjustment for Cash Balance	-\$52,103
Adjustment to Annualize Rate Increase	\$0
Total - Adjustments	-\$52,103
Total Revenue to be Recovered from Rates	\$1,210,411

2.4. Rate Design

In the development of schedules of water rates, a basic consideration is to establish equitable charges to customers commensurate with the cost of providing service while incorporating specific policy objectives of the District. The District identified three key objectives in the design of proposed rates; ensuring that an adequate level of income from water rates is maintained to finance daily operations, funding needed maintenance and improvement projects, and ensuring rates are fair and aligned with the District's goals and community values.

The existing rate structure consists of two components – a monthly minimum charge with a volume allowance of that increases as meter size increases and a 3-tiered volume rate structure. Under the existing structure, the monthly fixed charges account for approximately 68 percent of annual rate-based revenue. To maintain that level of revenue stability, Raftelis proposes applying the overall revenue adjustment from the financial plan to the existing fixed monthly meter charges. This proposed schedule is shown in Table 2-12. The new schedule eliminates the allowance.

Table 2-12: Current and Proposed Fixed Charges (\$/mo) - Water

Meter Size	FY 2025		FY 2026		FY 2027	FY 2028	FY 2029	FY 2030
	Allowance (kgal)	\$/mo	Allowance (kgal)	\$/mo	\$/mo	\$/mo	\$/mo	\$/mo
3/4"	5	\$29.80	0	\$31.89	\$34.12	\$36.51	\$39.07	\$41.80
1"	13	\$74.75	0	\$79.98	\$85.58	\$91.57	\$97.98	\$104.84
1 1/2"	25	\$149.65	0	\$160.12	\$171.33	\$183.32	\$196.15	\$209.88
2"	40	\$239.60	0	\$256.37	\$274.32	\$293.52	\$314.07	\$336.05
3"	75	\$483.40	0	\$517.24	\$553.45	\$592.19	\$633.64	\$677.99
4"	125	\$749.15	0	\$801.59	\$857.70	\$917.74	\$981.98	\$1,050.72
6"	250	\$1,498.50	0	\$1,603.39	\$1,715.63	\$1,835.72	\$1,964.22	\$2,101.72

Raftelis further recommends that the private fireline and construction hydrant charges also increase with the proposed revenue adjustment. The proposed rates are shown in Table 2-13.

Table 2-13: Current Proposed Private Fireline and Construction Hydrant Charges

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Fireline						
3"	\$32.00	\$34.24	\$36.64	\$39.21	\$41.96	\$44.90
4"	\$35.25	\$37.72	\$40.37	\$43.20	\$46.23	\$49.47
6"	\$41.00	\$43.87	\$46.95	\$50.24	\$53.76	\$57.53
Construction Hydrant	\$35.00	\$37.45	\$40.08	\$42.89	\$45.90	\$49.12

The proposed volume rate maintains a 4-tiered structure, but usage in the first tier is now charged. Additionally, the tier thresholds change based on meter size. Historical usage of customers within each meter size was used to determine the thresholds. The thresholds were established to ensure that each tier captured roughly the same percentage of total volume across meter sizes, as much as feasible. For larger meters—those greater than 1 1/2 inches—which tend to have more varied usage patterns, Raftelis set the thresholds to approximate the percentage volumes in each tier while also accounting for the higher usage per customer.

Table 2-14 Table 2-13 compares the existing and proposed FY 2026 volume rates.

Table 2-14: Comparison of Existing and FY 2026 Proposed Rates – Water

Volume	FY 2025		FY 2026	
	Threshold (kgal)	\$/kgal	Threshold (kgal)	\$/kgal
3/4"	5	\$0.00	5	\$1.25
	10	\$1.65	15	\$1.57
	30	\$2.35	35	\$2.35
	>30	\$3.30	>35	\$3.52
1"	5	\$0.00	15	\$1.25
	10	\$1.65	60	\$1.57
	30	\$2.35	170	\$2.35
	>30	\$3.30	>170	\$3.52
1.5"	5	\$0.00	25	\$1.25
	10	\$1.65	75	\$1.57
	30	\$2.35	200	\$2.35
	>30	\$3.30	>200	\$3.52
2"	5	\$0.00	40	\$1.25
	10	\$1.65	90	\$1.57
	30	\$2.35	240	\$2.35
	>30	\$3.30	>240	\$3.52
3"	5	\$0.00	50	\$1.25
	10	\$1.65	100	\$1.57
	30	\$2.35	250	\$2.35
	>30	\$3.30	>250	\$3.52
4"	5	\$0.00	80	\$1.25
	10	\$1.65	175	\$1.57
	30	\$2.35	440	\$2.35
	>30	\$3.30	>440	\$3.52

Table 2-15 Table 2-14 shows the proposed 5-year schedule of volumetric rates. The rates in each tier are applied to the thresholds for the corresponding meter size as shown in Table 2-14.

Table 2-15: Proposed Volumetric Rates – Water

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Tier 1	\$1.25	\$1.34	\$1.44	\$1.55	\$1.66
Tier 2	\$1.57	\$1.68	\$1.80	\$1.93	\$2.07
Tier 3	\$2.35	\$2.52	\$2.70	\$2.89	\$3.10
Tier 4	\$3.52	\$3.77	\$4.04	\$4.33	\$4.64

3. Sewer Enterprise

The sewer enterprise fund is a self-supporting enterprise fund with revenue from rates, fees, and other operating income to fund annual expenditures included operation and maintenance expense, capital projects, debt service, and reserves.

3.1. Accounts and Flow

Table 3-1 shows the historical FY 2024 accounts by meter size and the projected number through the study period based on the assumptions listed in Section 1.2.

Table 3-1: Projected Accounts

Meter Size	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Actual Flow							
3/4"	198	201	204	207	210	213	216
1"	107	107	107	107	107	107	107
1 1/2"	46	46	46	46	46	46	46
2"	27	27	27	27	27	27	27
3"	4	4	4	4	4	4	4
4"	1	1	1	1	1	1	1
Subtotal	383	386	389	392	395	398	401
Winter Averaged							
3/4"	1,122	1,139	1,156	1,173	1,191	1,209	1,227
1"	55	55	55	55	55	55	55
1 1/2"	15	15	15	15	15	15	15
2"	8	8	8	8	8	8	8
3"	0	0	0	0	0	0	0
4"	0	0	0	0	0	0	0
Subtotal	1,200	1,217	1,234	1,251	1,269	1,287	1,305
Total	1,583	1,603	1,623	1,643	1,664	1,685	1,706

Table 3-2 shows a summary of the historical and projected billed flow. This is flow above the allotment included at each meter size.

Table 3-2: Historical and Projected Billed Flow (kgal)

Meter Size	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Actual Flow							
3/4"	5,585	5,669	5,754	5,840	5,928	6,016	6,107
1"	8,406	8,406	8,406	8,406	8,406	8,406	8,406
1 1/2"	2,881	2,881	2,881	2,881	2,881	2,881	2,881
2"	4,040	4,040	4,040	4,040	4,040	4,040	4,040
3"	995	995	995	995	995	995	995
4"	227	227	227	227	227	227	227
Subtotal	22,134	22,218	22,303	22,389	22,477	22,566	22,656
Winter Averaged							
3/4"	9,355	9,495	9,637	9,782	9,929	10,077	10,229
1"	441	441	441	441	441	441	441
1 1/2"	719	719	719	719	719	719	719
2"	143	143	143	143	143	143	143
Subtotal	10,657	10,798	10,940	11,085	11,231	11,380	11,532
Flathead Lake Lodge	1,625	1,625	1,625	1,625	1,625	1,625	1,625
Flat	0	0	0	0	0	0	0
Total	34,416	34,640	34,868	35,099	35,333	35,571	35,812

Table 3-3 shows the historical and projected flow that is billed or is within the allotment by meter size. The winter average customer flow is based on the winter average (not on total water use). This includes usage that is not billed because of the current allotment included within the fixed charge.

Table 3-3: Historical and Projected Total Flow (kgal)

Meter Size	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Actual Flow							
3/4"	12,998	13,193	13,391	13,592	13,796	14,003	14,213
1"	13,437	13,437	13,437	13,437	13,437	13,437	13,437
1 1/2"	8,350	8,350	8,350	8,350	8,350	8,350	8,350
2"	9,513	9,513	9,513	9,513	9,513	9,513	9,513
3"	2,167	2,167	2,167	2,167	2,167	2,167	2,167
4"	636	636	636	636	636	636	636
Subtotal	47,102	47,297	47,495	47,696	47,900	48,106	48,316
Winter Averaged							
3/4"	49,624	50,368	51,123	51,890	52,669	53,459	54,260
1"	4,218	4,218	4,218	4,218	4,218	4,218	4,218
1 1/2"	2,676	2,676	2,676	2,676	2,676	2,676	2,676
2"	1,091	1,091	1,091	1,091	1,091	1,091	1,091
Subtotal	57,609	58,353	59,109	59,875	60,654	61,444	62,246
Flathead Lake Lodge	2,463	2,463	2,463	2,463	2,463	2,463	2,463
Flat	629	629	629	629	629	629	629
Total	107,803	108,742	109,695	110,663	111,645	112,642	113,654

3.2. Cashflow Analysis

3.2.1. Beginning Balance

The cash balance includes unrestricted carryover monies from previous years. The fund balance was \$706,375 at the beginning of FY 2025.

3.2.2. Sources of Revenue

Table 3-4 shows the projected revenues for the sewer enterprise operating fund. Additional rate revenue is calculated presuming a 16 percent per year increase to rate-based revenue. Additional revenues come from other operating and non-operating revenues, Fund 5313, a transfer out of the debt reserve to make the final payment on the WWTP Phase 1 debt, and projected interest income on fund balances.

Table 3-4: Projected Sewer Operating Fund Enterprise Revenues

Line Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenue Under Existing Rates	\$1,373,098	\$1,402,172	\$1,414,859	\$1,428,160	\$1,441,471	\$1,454,789
Additional Rate Revenue	\$0	\$224,348	\$488,975	\$801,049	\$1,168,513	\$1,600,765
Other Operating Revenue	\$97,875	\$97,875	\$97,875	\$97,875	\$97,875	\$97,875
Other Revenue	\$34,425	\$34,425	\$34,425	\$34,425	\$34,425	\$34,425
Fund 5313 - WWTP Phase 2A MBR Plant	\$438,240	\$438,840	\$437,800	\$437,430	\$437,730	\$438,655
Transfer from Debt Reserve	\$0	\$0	\$125,793	\$0	\$0	\$0
Interest Income	\$8,196	\$1,482	\$451	\$1,710	\$3,473	\$2,130
Total Revenue	\$1,951,834	\$2,199,142	\$2,600,178	\$2,800,650	\$3,183,487	\$3,628,639

3.2.3. Operating and Maintenance Costs

Table 3-5 shows the FY 2025 budget and projected operating and maintenance expenses. Budgeted expenses have been escalated using the factors shown in Section 1.2. Annual costs are expected to increase from \$1.4 million to \$1.9 million during the study period.

Table 3-5: Budget and Projected Operating & Maintenance Costs - Sewer

Line Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Salaries and Benefits	\$602,350	\$638,491	\$676,800	\$717,408	\$760,453	\$806,080
Chemicals & Utilities	\$167,000	\$174,068	\$181,501	\$189,317	\$197,536	\$206,180
Contract Services	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020	\$46,371
Other Expenses	\$268,975	\$277,044	\$285,356	\$293,916	\$302,734	\$311,816
Capital Outlay	\$286,250	\$149,625	\$39,966	\$63,669	\$24,918	\$504,131
Total Expenses	\$1,364,575	\$1,280,428	\$1,226,058	\$1,308,020	\$1,330,661	\$1,874,578

3.2.4. Capital Improvement Program

Table 3-6 shows the projected capital improvement program through FY 2030. The New Office Building cost reflects the sewer enterprise's share of that project's cost. The annual average capital expenditure is \$3.9 million/year.

Table 3-6: Capital Improvement Program - Sewer

Line Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
West Trunk Sewer (Original Scope) - Phase 1, Harbor Village #1 Generator, North Lift Station Generator, West Collection Basin Rehabilitation	\$499,485	\$4,495,365	\$0	\$0	\$0	\$0
Holt Drive Sewer	\$145,110	\$1,305,990	\$0	\$0	\$0	\$0
WWTP Lift Station*	\$374,220	\$3,367,980	\$0	\$0	\$0	\$0
New Office Building	\$750,000	\$0	\$0	\$0	\$0	\$0
WWTP Headworks Screen Maintenance	\$0	\$0	\$0	\$35,857	\$322,717	\$0
WWTP UV Maintenance	\$0	\$0	\$0	\$28,443	\$255,986	\$0
WWTP Train 1 Membrane Double Stack*	\$0	\$0	\$0	\$57,129	\$514,159	\$0
WWTP Headworks Screen and Grit Classifier*	\$0	\$0	\$0	\$330,496	\$2,974,465	\$0
WWTP 3rd UV Reactor*	\$0	\$0	\$0	\$41,327	\$371,945	\$0
WWTP Sludge Thickening*	\$0	\$0	\$0	\$219,885	\$1,978,966	\$0
WWTP Outfall Replacement*	\$0	\$0	\$0	\$364,652	\$3,281,867	\$0
West Trunk Sewer - Phase 2*	\$0	\$0	\$0	\$0	\$147,283	\$1,325,546
Total	\$1,768,815	\$9,169,335	\$0	\$1,077,789	\$9,847,387	\$1,325,546
*Growth-Related	\$374,220	\$3,367,980	\$0	\$1,013,489	\$9,268,685	\$1,325,546

3.2.5. Debt Service

Table 3-7 shows existing and projected debt service. The terms for new debt service were discussed in Section 1.2. Approximately \$18.5 million of the proposed capital is to be debt funded. The table also shows the debt subject to coverage requirements. This includes all proposed debt plus WWTP Phase 1. The WWTP Phase 1 debt is retired in FY 2027.

Table 3-7: Existing and Projected Debt Service - Sewer

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Existing						
Coal Tax	\$49,023	\$49,023	\$49,023	\$49,023	\$49,023	\$49,023
WWTP Ph2A Loan B	\$54,710	\$55,375	\$54,995	\$54,570	\$55,115	\$55,600
WWTP Ph2A Loan C	\$378,940	\$379,565	\$378,905	\$378,960	\$378,715	\$379,155
WWTP Phase 1	\$125,069	\$125,459	\$125,793	\$0	\$0	\$0
Bay Sewer Loan B (SRF)	\$105,763	\$105,013	\$105,225	\$104,388	\$104,525	\$105,613
Total Existing Debt	\$713,504	\$714,434	\$713,940	\$586,940	\$587,378	\$589,390
New Debt	\$0	\$282,509	\$565,018	\$565,018	\$1,099,741	\$1,184,771
Total	\$713,504	\$996,943	\$1,278,958	\$1,151,958	\$1,687,119	\$1,774,161
Debt Subject to Coverage	\$125,069	\$407,968	\$690,810	\$565,018	\$1,099,741	\$1,184,771

3.2.6. Capital Sources and Uses

Table 3-8 summarizes the capital sources and uses of funds. Sources include rate-based revenue transferred from the operating fund, plant investment fees, grants, and debt. A suggested reserve target of 1 percent of annual depreciation expense, phased in over five years, is also shown in the table. The balance above the target in FY 2030 is available to help fund capital projects scheduled in FY 2031 - FY 2035.

Table 3-8: Capital Sources and Uses - Sewer

Line Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Beginning Balance	\$0	\$2,025	\$2,026	\$2,027	\$2,028	\$2,029
Sources						
Transfers from Operating	\$1,543,915	\$0	\$0	\$0	\$0	\$0
Plant Investment Fee	\$87,400	\$294,580	\$294,580	\$309,309	\$309,309	\$309,309
Grant	\$137,500	\$1,237,500	\$0	\$137,500	\$1,237,500	\$0
Debt Funded	\$0	\$8,808,150	\$0	\$0	\$8,335,886	\$1,325,546
Interest	\$0	\$11,827	\$26,869	\$24,014	\$18,482	\$22,336
Total Sources	\$1,768,815	\$10,352,057	\$321,449	\$470,823	\$9,901,177	\$1,657,191
Uses						
Capital	\$1,768,815	\$9,169,335	\$0	\$1,077,789	\$9,847,387	\$1,325,546
Total Uses	\$1,768,815	\$9,169,335	\$0	\$1,077,789	\$9,847,387	\$1,325,546
Ending Balance	\$0	\$1,182,722	\$1,504,171	\$897,205	\$950,994	\$1,282,639
Reserve Target	\$0	\$150,000	\$300,000	\$450,000	\$600,000	\$750,000

3.2.7. Intrafund Transfers

Since the sewer fund is struggling financially and has major capital improvements that must be funded, a one-time transfer from the water fund to the sewer fund is planned. This transfer is then repaid over 6 years starting in FY 2027 with varying repayment amounts each year, as shown in Table 3-9. The anticipated transfers into the water fund in FY 2031 and FY 2032 are \$243,500 each.

Table 3-9: Intrafund Transfer

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Transfer	\$1,077,000	\$0	-\$120,000	-\$190,000	-\$140,000	-\$140,000

3.2.8. Reserves

The District does not have a formal reserve policy. However, Raftelis recommends the District consider adopting the following two reserve policies:

- Operating Reserve: Equal to 25 percent of annual operating and maintenance expense, excluding capital outlays, which can vary significantly from year-to-year.
- Capital Reserve: Equal to 1 year's depreciation expense, phased in over 5 years.

These reserves track and adjust based on changes in O&M and annual depreciation on capital assets. The primary goal of the operating reserve is to absorb cash flow fluctuations due to the variability in monthly expenditures and the inflow of revenues.

Combined, these reserves strengthen the enterprise's financial health and ability to weather unexpected operating costs or capital interruptions. Maintaining adequate funds also prevents the enterprise from reactively having to adjust rates in response to unforeseen events.

3.2.9. Indicated Revenue Adjustments

Projected sewer rate revenue under existing rates is insufficient to meet annual O&M, proposed debt issuance expenses, capital repair and replacement costs, and proposed target operating reserves. Equal annual

adjustments of 16 percent from rate-based revenue are needed for FY 2026 – FY 2030 to meet these needs. Appendix B contains the detailed financial plan cash flow analysis table. Table 3-10 below summarizes the operating fund results.

Table 3-10: Sewer Operating Fund Cash Flow Summary

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Beginning Balance	\$706,375	\$113,215	\$34,985	\$10,146	\$160,818	\$186,525
Sources						
Rate Revenue + Adjustments	\$1,373,098	\$1,626,520	\$1,903,834	\$2,229,210	\$2,609,983	\$3,055,554
Other Operating Revenue	\$97,875	\$97,875	\$97,875	\$97,875	\$97,875	\$97,875
Other Revenue	\$34,425	\$34,425	\$34,425	\$34,425	\$34,425	\$34,425
Fund 5313 - WWTP Phase 2A MBR Plant	\$438,240	\$438,840	\$437,800	\$437,430	\$437,730	\$438,655
Transfer from Debt Reserve	\$0	\$0	\$125,793	\$0	\$0	\$0
Interest Income	\$8,196	\$1,482	\$451	\$1,710	\$3,473	\$2,130
Total - Sources of Funds	\$1,951,834	\$2,199,142	\$2,600,178	\$2,800,650	\$3,183,487	\$3,628,639
Uses of Funds						
O&M Expenses	\$1,364,575	\$1,280,428	\$1,226,058	\$1,308,020	\$1,330,661	\$1,874,578
Debt Service	\$713,504	\$996,943	\$1,278,958	\$1,151,958	\$1,687,119	\$1,774,161
Transfers to Capital	\$1,543,915	\$0	\$0	\$0	\$0	\$0
Total - Uses of Funds	\$3,621,994	\$2,277,371	\$2,505,016	\$2,459,978	\$3,017,780	\$3,648,740
Transfers from(to) Water	\$1,077,000	\$0	-\$120,000	-\$190,000	-\$140,000	-\$140,000
Operating Fund Ending Balance	\$113,215	\$34,985	\$10,146	\$160,818	\$186,525	\$26,425
Operating - Suggested Minimum	\$269,581	\$282,701	\$296,523	\$311,088	\$326,436	\$342,612
Debt Service Coverage	7.64	1.97	2.47	3.30	1.99	2.17

3.3. Net Revenue Requirements

Table 3-11 shows the net revenue requirement from rates for FY 2026, the test year. The total is equal to the cost of service to be recovered through rates. Rafelis calculated the revenue requirement using FY 2026 expenses. The rate revenue requirement is adjusted for revenue offsets from other sources and for other adjustments. The total revenue requirement is the amount that fixed and commodity rates are designed to collect. The adjustment for cash balance equals the net cash change in FY 2026, which represents the amount by which reserves are increasing during the test year. The annualized increase is zero as the rates are anticipated to go into effect on July 1. To arrive at total revenue requirement, we add revenue offsets (shown as negative values in the table) and adjustments to the subtotal revenue requirement. This total is the amount that monthly meter service charges and volume charges are designed to collect.

Table 3-11: Net Revenue Requirements, Test Year (FY 2026)

Revenue Requirement - FY 2026	Total
Revenue Requirements	
O&M Expenses	\$1,280,428
Debt Service	\$996,943
Total - Revenue Requirements	\$2,277,371
Revenue Offsets	
Other Operating Revenue	-\$97,875
Other Revenue	-\$34,425
Fund 5313 - WWTP Phase 2A MBR Plant	-\$438,840
Interest Income	-\$1,482
Total - Revenue Offsets	-\$572,622
Intrafund Transfers	\$0
Adjustments	
Adjustment for Cash Balance	-\$78,230
Adjustment to Annualize Rate Increase	\$0
Total - Adjustments	-\$78,230
Total Revenue to be Recovered from Rates	\$1,626,520

3.4. Rate Design

In the development of schedules of sewer rates, a basic consideration is to establish equitable charges to customers commensurate with the cost of providing service while incorporating specific policy objectives of the District. The District identified three key objectives in the design of proposed rates; ensuring that an adequate level of income from sewer rates is maintained to finance daily operations, funding needed maintenance and improvement projects, and ensuring rates are fair and aligned with the District's goals and community values.

The existing rate structure consists of two components – a monthly minimum charge with a volume allowance of that increases as meter size increases and a uniform volume rate for usage over the allowance. Under the existing structure, the monthly fixed charges account for approximately 94 percent of annual rate-based revenue. To maintain that level of revenue stability, and based on discussions with District staff and Board direction, Raftelis proposes maintaining the current sewer rate structure and applying across-the-board adjustments to the existing rates. This proposed schedule is shown in Table 3-12.

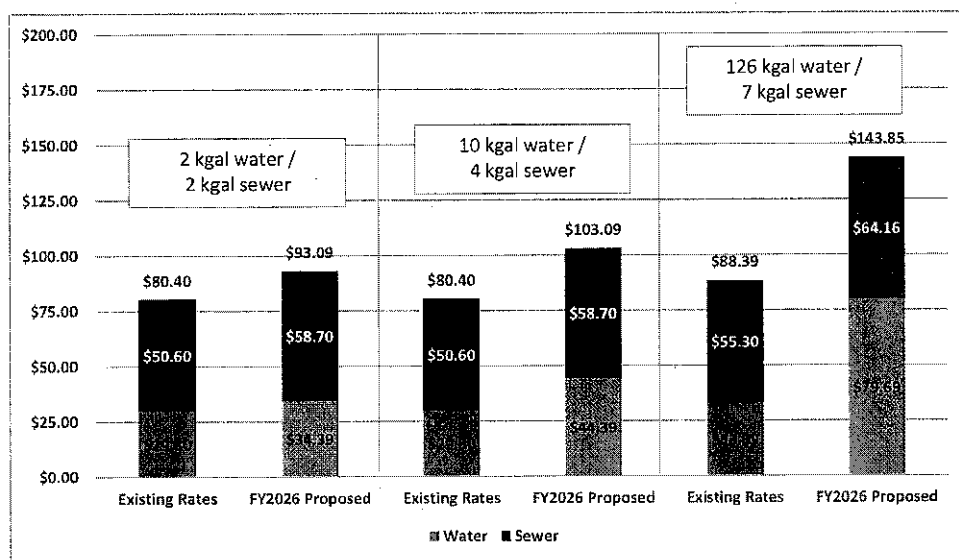
Table 3-12: Current and Proposed Sewer Rates and Charges

		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Effective Date		Current	1-Jul-25	1-Jul-26	1-Jul-27	1-Jul-28	1-Jul-29
Meter Size	Allowance (kgal)	\$/mo	\$/mo	\$/mo	\$/mo	\$/mo	\$/mo
3/4"	5	\$50.60	\$58.70	\$68.10	\$79.00	\$91.64	\$106.31
1"	13	\$127.00	\$147.33	\$170.91	\$198.26	\$229.99	\$266.79
1 1/2"	25	\$254.25	\$294.95	\$342.15	\$396.90	\$460.41	\$534.08
2"	40	\$407.00	\$472.16	\$547.71	\$635.35	\$737.01	\$854.94
3"	75	\$763.35	\$885.55	\$1,027.24	\$1,191.60	\$1,382.26	\$1,603.43
4"	125	\$1,272.55	\$1,476.26	\$1,712.47	\$1,986.47	\$2,304.31	\$2,673.00
6"	250	\$2,545.25	\$2,952.70	\$3,425.14	\$3,973.17	\$4,608.88	\$5,346.31
Flathead Lake L	75	\$763.35	\$885.55	\$1,027.24	\$1,191.60	\$1,382.26	\$1,603.43
Flat	0	\$50.60	\$58.70	\$68.10	\$79.00	\$91.64	\$106.31
Volume		\$/kgal	\$/kgal	\$/kgal	\$/kgal	\$/kgal	\$/kgal
Usage > Allowance		\$2.35	\$2.73	\$3.17	\$3.68	\$4.27	\$4.96

4. Typical Bill

Figure 4-1 compares typical monthly bills under existing and FY 2026 proposed water and sewer rates for a customer on a 3/4" meter at various usage levels. The water usage levels represent a low, average, and high user and average winter consumption for sewer.

Figure 4-1: Typical Bill Comparison



5. Plant Investment Fees

5.1. Montana Impact Fee Statute

The Montana Code Annotated 2023, Title 7, Chapter 6, Part 16 outlines the requirements for calculating and implementing a plant investment fee (or impact fee). However, Title XXX, Part YYY says that ZZZ.

Commented [T11]: Tyler - wasn't sure which code section says District's don't have to follow the other stuff. I was looking at 17-Ch13-Pt22.

5.2. Overview of Plant Investment Fee Calculation

The general steps in calculating plant investment fees are as follows:

- Evaluate amount of existing available capacity and/or future capacity needs
- Determine the value of infrastructure facilities (existing and/or future)
- Estimate the capacity of the system
- Calculate the unit cost of capacity
- Apply unit cost of capacity to demand of a single family equivalent

Table 5-1 Table 4-4 summarizes the generally accepted methodologies for calculating plant investment fees. Each method is designed to recover the cost of capacity to serve new development. The selection of a methodology should consider the capacity required, the value of the capacity, and enterprise's goals and objectives for recovering capacity-related capital costs. The three methodologies include buy-in, incremental, and hybrid. The table below lists the basic parameters a enterprise may consider when selecting a methodology that best meets its needs.

Table 5-1: Industry-Accepted Fee Methodologies

Description	Buy-in	Incremental	Hybrid	Capacity Basis (gpd) [1]	Valuation Basis (\$)
Available existing capacity sufficient to accommodate new growth	X			Existing Available Capacity	Existing Asset Value [2]
No existing capacity with significant future capacity requirements		X		Future Capacity	Current Cost of Future Facilities
Some existing capacity available with future capacity requirements needed to accommodate new growth		X	X	Available Capacity + Future Capacity	Existing Asset Value + Current Cost of Future Facilities
[1] The basis of capacity used to calculate the unit cost is often based on the largest facilities that govern system capacity. [2] Assets may be valued at original cost less depreciation in current dollars using a cost index like the Consumer Price Index (CPI) or a construction cost index like Handy-Whitman.					

The plant investment fee for water is calculated using the buy-in approach since the growth-related CIP projects are outside the study period. The plant investment fee for sewer is calculated using the hybrid approach because the system has some capacity available but future demands require additional capacity. The equations below summarize the plant investment fee calculation, in general.

$$\frac{\text{Value of Infrastructure (\$)}}{\text{System Capacity (gpd)}} = \text{Unit Cost of Capacity (\$ per gpd)}$$

$$\text{Unit Cost of Capacity (\$ per gpd)} * \text{New Connection Demand Requirement (gpd)} = \text{Plant Investment Fee}$$

5.3. Water Plant Investment Fee

The District's water plant investment fee was calculated using the buy-in approach as the system has capacity to meet new customer demands.

5.3.1. Buy-In System Valuation

The cost basis for determining the Buy-In capacity fee is replacement cost less depreciation (RCLD), which estimates the replacement cost reflecting the remaining depreciable life of the facility. Backbone system assets data is current as of June 30, 2024 (end of FY 2024). The RCLD is based on the original asset cost adjusted to current costs based on a ratio of the Handy-Whitman Index for the Plateau region, 2024 to the cost index for the construction year. This replacement cost is then adjusted to account for accumulated depreciation through FY 2024. The RCLD of all the District's water assets is \$140.0 million. The total backbone system RCLD is estimated to be \$33.8 million.

The RCLD backbone system value is adjusted to reflect the equity or debt-free investment position of the current customers. Since new customers, through payment of the general water service rates, would be covering the capital carrying costs of the existing plant in service, the outstanding principal on debt is subtracted from the RCLD. The outstanding principal balance is \$383,000 at the end of FY 2024.

The adjusted backbone system value is \$33.4 million, as shown in Table 5-2~~Table 4-2~~.

Table 5-2: Water Plant Investment Fee, 3/4" Meter

	RCLD
Total Backbone System Value	\$33,780,602
Less Debt Principal	\$383,000
Adjusted System Value & Unit Cost	\$33,397,602

5.3.2. Existing Capacity Available for Growth

The District's water system has an existing operating capacity of 3,308 gpm or 4,763,520 gpd². The peak day system usage is estimated at 1,632,084 gpd based on FY 2024 monthly billing data. The 2024 Water PER indicates a max day use in 2023 of 2,111,000 gpd. This leaves 55.7 percent of the firm capacity available for system growth. The max day per capita demand from the 2024 Water PER is 442 gpd. The persons per household per the 2024 Water PER is 2.38. This results in a maximum day demand per account of 1,051 gpd. This is shown in Table 5-3 Table 4-3.

Table 5-3: Existing System Information

Existing System	Existing Capacity (gpd)	Peak Day System Usage (gpd) (1)	Available Unused Capacity (gpd)	Percent for Growth	Usage (gpd/meter)
System Capacity	3,589,920	2,110,000	2,653,520	55.7%	
Max Day Per Capita Demand (1)					442
Persons Per Household (1)					2.38
Max Day Demand Per Account					1,051

(1) 2024 Water PER.

5.3.3. Resulting Buy-In Water Plant Investment Fee

Table 5-4 Table 4-4 shows the resulting water system plant investment fee for the 3/4" meter. The backbone RCLD is multiplied by the percent of capacity available for growth to determine the value of the system that is available for growth. The value of available capacity is \$18,604,142. Backbone assets exclude machinery and equipment and any asset with an asset class life of 5 years or less. This value is divided by the available unused capacity (2,653,520 gpd) to determine the unit cost of \$7.01/gpd. This unit cost is multiplied by the estimated peak use to determine the plant investment fee.

Table 5-4: Water Plant Investment Fee, 3/4" Meter

	RCLD	RCLD Growth	Unit Cost (\$/gpd)	Cost Per 3/4" Meter
Total Backbone System Value	\$33,780,602			
Less Debt Principal	\$383,000			
Adjusted System Value & Unit Cost	\$33,397,602	\$18,604,142	\$7.01	\$7,368

Table 5-5 Table 4-5 shows the plant investment fee for larger meter sizes. The 3/4" fee is multiplied by the surface area ratio between the larger meters and the 3/4" meter to determine the fees for larger meters.

² Operational capacity provided by District engineer on 12/30/2024.

Table 5-5: Current and Proposed Water Plant Investment Fees by Meter Size

Meter Size	Ratio	Current	Proposed
3/4"	1.00	\$2,600	\$7,368
1"	1.79	\$4,856	\$13,189
1.5"	4.00	\$10,400	\$29,472
2"	7.14	\$18,564	\$52,608
3"	16.00	\$41,600	\$117,888
4"	28.57	\$74,282	\$210,504
5"	44.64	\$116,064	\$328,908
6"	64.29	\$167,154	\$473,689
7"	87.11	\$226,486	\$641,826
8"	133.78	\$295,828	\$885,691
9"	144.00	\$374,400	\$1,080,992
10"	177.78	\$462,228	\$1,309,883

5.4. Sewer

The sewer plant investment fee uses the hybrid approach, which combines the buy-in approach used for water plus an incremental component to capture growth-related capital projects planned for the next 10 years.

5.4.1. Sewer Existing Capacity Available for Growth

Table 5-6 summarizes the amount of existing capacity available for growth. The WWTP Final Capacity Analysis indicates that the existing average day sewer treatment capacity is 460,000 gpd. FY 2024 plant influent flow information, provided by the District, shows an average day influent of 238,035 gpd. This results in 221,965 gpd, or 48.3 percent, of existing treatment capacity being available for growth.

Table 5-6: Sewer Plant Existing Capacity Available for Growth

Existing System	Existing Treatment Capacity (gpd)	Average Day Influent (gpd)	Available Unused Capacity (gpd)	Percent for Growth
1 System Capacity	460,000	238,035	221,965	48.3%

5.4.2. Value of Assets Available to Serve Growth

The adjusted RCLD of the backbone sewer system as of June 30, 2024 is \$36.4 million, as shown in Table 5-7. Backbone assets exclude machinery and equipment, any asset with an asset class life of 5 years or less, County assets (North Highway 35 and Mayport Harbor), and developer contributed assets. Subtracting out remaining debt principal results in an adjusted backbone sewer system value of \$36.4 million. The backbone RCLD is multiplied by the percent of capacity available for growth to determine the value of the system that is available for growth.

Table 5-7: Sewer Plant Backbone Asset Value for Growth

	RCLD-Total	RCLD-Growth
1 Total Backbone System Value	\$ 38,953,060	
2 Less Outstanding Debt Principal	\$ 2,507,914	
3 Adjusted System Value	\$ 36,445,146	\$17,585,961

5.4.3. Sewer Incremental Component

The incremental component captures the unit cost of planning capital expansion projects to accommodate anticipated growth over the next 10 years. The estimated capital cost of growth-related sewer projects is \$15,349,920 as identified in Table 3-6. According to the District's engineer, these projects will add 230,000 gpd of treatment capacity.

5.4.4. Sewer Plant Investment Fee

The resulting sewer plant investment fee is the weighted average of the buy-in and incremental components. The RCLD related to growth is the sum of the adjusted system value plus the capital cost of the growth-related projects, \$32.9 million. This amount is divided by the capacity available for growth, or 451,986 gpd to get the unit cost of \$72.87/gpd. Information from the 2022 Sewer PER was used to put this on a per equivalent dwelling unit (EDU) basis. The average flow per household times by the persons per household results in an average flow per account. This is multiplied by the unit cost, in \$/gpd, to determine the \$/EDU unit cost of \$14,729, as shown in Table 5-8Table 4-8.

Table 5-8: Sewer Plant Investment Fee, Buy-In Component

Combined Growth	RCLD-Growth	Capacity (gpd)	Unit cost, \$/gpd
1 Adjusted System Value	\$ 17,585,961	221,965	
2 Incremental	\$ 15,349,920	230,000	
3 Total Connection Charge, \$/gpd	\$ 32,935,881	451,965	\$ 72.87
4 Average Flow, gpcd (1)		85	
5 Persons per Household (1)		2.38	
6 Average Flow per Account		202	
7 Total Connection Charge, \$/EDU			\$ 14,729

(1) 2022 Sewer PER

5.4.5. Sewer Plant Investment Fees by Meter Size

Table 5-9Table 4-9 shows the fee at the base meter size and larger meter sizes using the same ratios as for water. The table also shows the existing sewer plant investment fees for reference.

Table 5-9: Comparison of Existing and Calculated Sewer Plant Investment Fees by Meter Size

Meter Size	Ratio	Current	Proposed
3/4"	1.00	\$4,370.00	\$14,729
1"	1.79	\$7,822.30	\$26,365
1.5"	4.00	\$17,480.00	\$58,916
2"	7.14	\$31,201.80	\$105,165
3"	16.00	\$69,920.00	\$235,664
4"	28.57	\$124,850.90	\$420,808
5"	44.64	\$195,076.80	\$657,503
6"	64.29	\$280,947.30	\$946,927
7"	87.11	\$380,670.70	\$1,283,043
8"	133.78	\$497,218.60	\$1,970,446
9"	144.00	\$629,280.00	\$2,120,976
10"	177.78	\$776,898.60	\$2,618,522

APPENDIX A:

**Water Enterprise Detailed
Operating Fund Cashflow**

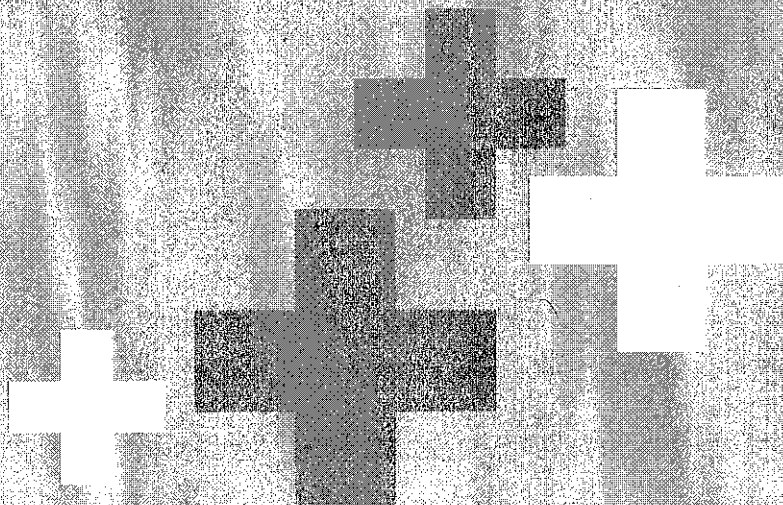


Table A-1: Detailed Water Operating Fund Cashflow

Line Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Beginning Operating Balance	\$1,894,203	\$86,225	\$34,122	\$39,100	\$9,535	\$93,697
Revenues						
Under Existing Rates	\$1,105,960	\$1,131,226	\$1,143,868	\$1,156,700	\$1,169,724	\$1,182,944
Proposed Revenue Adjustments	\$0	\$79,186	\$165,746	\$260,307	\$363,546	\$476,196
Construction Water & Fire	\$11,148	\$11,173	\$11,173	\$11,173	\$11,173	\$11,173
Other Operating Revenue	\$98,650	\$98,650	\$98,650	\$98,650	\$98,650	\$98,650
Other Revenue	\$4,575	\$4,575	\$4,575	\$4,575	\$4,575	\$4,575
Property Taxes for Tank Project	\$289,325	\$290,000	\$291,238	\$290,338	\$289,338	\$290,225
Transfer from Debt Reserve	\$0	\$0	\$0	\$0	\$0	\$0
Interest Income	\$16,911	\$16,988	\$31,534	\$0	\$0	\$26,912
Total Revenue	\$1,526,569	\$1,631,798	\$1,746,784	\$1,821,743	\$1,937,006	\$2,090,675
Operating Expenses						
Salaries and Benefits	\$602,150	\$638,279	\$676,576	\$717,170	\$760,201	\$805,813
General	\$155,875	\$160,551	\$165,368	\$170,329	\$175,439	\$180,702
Chemicals & Utilities	\$60,000	\$63,070	\$66,300	\$69,699	\$73,277	\$77,042
Plant Maintenance & Contract Services	\$130,000	\$133,900	\$137,917	\$142,055	\$146,316	\$150,706
Hookup Expense	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020	\$46,371
Insurance	\$41,000	\$42,230	\$43,497	\$44,802	\$46,146	\$47,530
Capital Outlay	\$55,000	\$152,250	\$60,638	\$185,220	\$79,008	\$108,484
Total Operating	\$1,084,025	\$1,231,480	\$1,192,731	\$1,372,984	\$1,325,406	\$1,416,648
Net Revenues	\$442,544	\$400,318	\$554,053	\$448,759	\$611,599	\$674,027
Debt Service						
Existing	\$331,280	\$332,563	\$332,950	\$332,200	\$331,313	\$331,300
Proposed	\$0	\$119,859	\$336,125	\$336,125	\$336,125	\$517,587
Total Debt Service	\$331,280	\$452,421	\$669,075	\$668,325	\$667,437	\$848,887
Transfers to Capital	\$842,243	\$0	\$0	\$0	\$0	\$0
Transfers from(to) Sewer	-\$1,077,000	\$0	\$120,000	\$190,000	\$140,000	\$140,000
Annual Surplus (Deficit)	-\$1,807,978	-\$52,103	\$4,979	-\$29,566	\$84,162	-\$34,860
Ending Operating Balance	\$86,225	\$34,122	\$39,100	\$9,535	\$93,697	\$58,837
<i>Minimum Operating Reserve Target</i>	<i>\$257,256</i>	<i>\$269,807</i>	<i>\$283,023</i>	<i>\$296,941</i>	<i>\$311,600</i>	<i>\$327,041</i>
Debt Coverage	12.88	4.30	2.02	2.07	2.23	1.67

APPENDIX B:

**Sewer Enterprise Detailed
Operating Fund Cashflow**

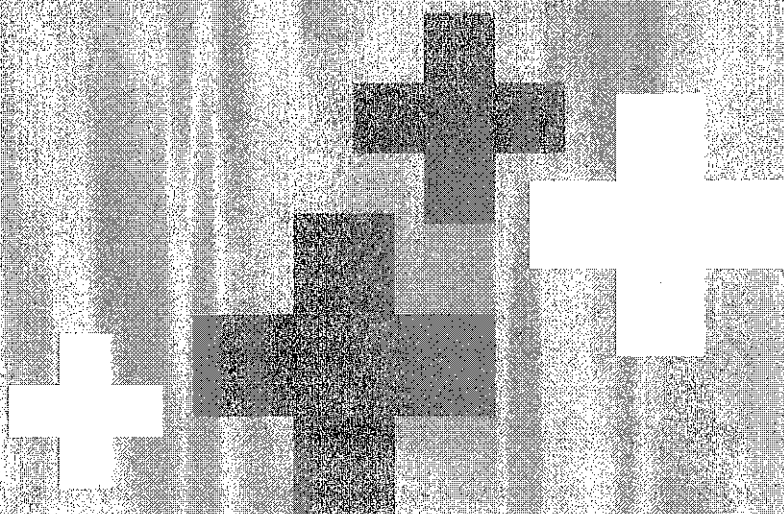


Table B-1: Detailed Sewer Operating Fund Cashflow

Line Item	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Beginning Operating Balance	\$706,375	\$113,215	\$34,985	\$10,146	\$160,818	\$186,525
Revenues						
Under Existing Rates	\$1,373,098	\$1,402,172	\$1,414,859	\$1,428,160	\$1,441,471	\$1,454,789
Proposed Revenue Adjustments	\$0	\$224,348	\$488,975	\$801,049	\$1,168,513	\$1,600,765
Other Operating Revenue	\$97,875	\$97,875	\$97,875	\$97,875	\$97,875	\$97,875
Other Revenue	\$34,425	\$34,425	\$34,425	\$34,425	\$34,425	\$34,425
Fund 5313 - WWTP Phase 2A MBR Plant	\$438,240	\$438,840	\$437,800	\$437,430	\$437,730	\$438,655
Transfer from Debt Reserve	\$0	\$0	\$125,793	\$0	\$0	\$0
Interest Income	\$8,196	\$1,482	\$451	\$1,710	\$3,473	\$2,130
Total Revenue	\$1,951,834	\$2,199,142	\$2,600,178	\$2,800,650	\$3,183,487	\$3,628,639
Operating Expenses						
Salaries and Benefits	\$602,350	\$638,491	\$676,800	\$717,408	\$760,453	\$806,080
Chemicals & Utilities	\$167,000	\$174,068	\$181,501	\$189,317	\$197,536	\$206,180
Contract Services	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020	\$46,371
Other Expenses	\$268,975	\$277,044	\$285,356	\$293,916	\$302,734	\$311,816
Capital Outlay	\$286,250	\$149,625	\$39,966	\$63,669	\$24,918	\$504,131
Total Operating	\$1,364,575	\$1,280,428	\$1,226,058	\$1,308,020	\$1,330,661	\$1,874,578
Net Revenues	\$587,259	\$918,713	\$1,374,119	\$1,492,630	\$1,852,826	\$1,754,060
Debt Service						
Existing	\$713,504	\$714,434	\$713,940	\$586,940	\$587,378	\$589,390
Proposed	\$0	\$282,509	\$565,018	\$565,018	\$1,099,741	\$1,184,771
Total Debt Service	\$713,504	\$996,943	\$1,278,958	\$1,151,958	\$1,687,119	\$1,774,161
Transfer to Capital Fund	\$1,543,915	\$0	\$0	\$0	\$0	\$0
Transfer from/(to) Water	\$1,077,000	\$0	-\$120,000	-\$190,000	-\$140,000	-\$140,000
Annual Surplus (Deficit)	-\$593,161	-\$78,230	-\$24,839	\$150,672	\$25,707	-\$160,101
Ending Operating Balance	\$113,215	\$34,985	\$10,146	\$160,818	\$186,525	\$26,425
Minimum Operating Reserve Target	\$269,581	\$282,701	\$296,523	\$311,088	\$326,436	\$342,612
Debt Coverage	7.64	1.97	2.47	3.30	1.99	2.17

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