

RESOLUTION NO. 2024-02

RESOLUTION OF THE BOARD OF DIRECTORS OF THE PLUMAS EUREKA COMMUNITY SERVICES DISTRICT APPROVING THE PLUMAS EUREKA COMMUNITY SERVICES DISTRICT WATER AND WASTEWATER RATE STUDY AND FIVE-YEAR FINANCING PLANS, FINAL REPORT AND DIRECTING STAFF TO PROCEED WITH THE PROPOSITION 218 PROCESS FOR RATE ADOPTION

**WHEREAS**, the Plumas Eureka Community Services District ("District") is responsible for delivering essential water and wastewater services to its customers within the District boundaries; and

**WHEREAS**, on January 23, 2024, during a special Board meeting, the District Board of Directors ("Board") deliberated on the infrastructure, operational, and maintenance requirements and reserve balances of the District's water system and wastewater system, while also exploring various funding options, including potential rate adjustments; and

**WHEREAS**, on February 20, 2024, the District held a community meeting present and gather public input on the preliminary five-year financing plans for the water and wastewater enterprises, reflecting the District's commitment to transparency and community involvement; and

**WHEREAS**, on March 25, 2024, the District received the Water and Wastewater Rate Study and Five-Year Financing Plans ("Rate Study"), Final Report, outlining two distinct water enterprise plan options, two wastewater enterprise options, and their respective rate structures; and

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE PLUMAS EUREKA COMMUNITY SERVICES DISTRICT** that the Water and Wastewater Rate Study and Five-Year Financing Plans, Final Draft, identifying proposed programs, projects, and a financial plan for improvements to the District's water and wastewater system is hereby approved and staff shall proceed with the Proposition 218 process for rate adoption of option 2 for the water enterprise and option 2 for the wastewater enterprise.

**PASSED AND ADOPTED AT A SPECIAL MEETING OF THE DISTRICT BOARD OF DIRECTORS THIS 25th DAY OF MARCH 2024 BY THE FOLLOWING VOTE:**

**AYES:** Don Fregulia, Todd Solomon, Rich Machado, Jeff Glick, Kim Train  
**NOES:** 0  
**ABSENT:** 0  
**ASTAIN:** 0  
**ATTEST:** Gina-Marie Morris

  
Don Fregulia, Board Chairperson

  
Gina-Marie Morris, Clerk of the Board



**PLUMAS-EUREKA COMMUNITY  
SERVICES DISTRICT**

**WATER AND WASTEWATER RATE STUDY  
AND FIVE-YEAR FINANCING PLANS**

MARCH 2024  
FINAL REPORT

PREPARED FOR:

**BOARD OF DIRECTORS  
PLUMAS-EUREKA COMMUNITY SERVICES DISTRICT**

PREPARED BY:

  
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**PLUMAS-EUREKA COMMUNITY SERVICES DISTRICT**

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**BOARD OF DIRECTORS**

Don Fregulla, Chairperson  
Todd Solomon, Vice Chairperson  
Rich Machado, Director  
Jeff Glick, Director  
Kim Train, Director

**GENERAL MANAGER**

Jamar Tate

**ADMINISTRATIVE MANAGER**

Gina-Marie Morris

**PROJECT MANAGER**

John Rowden

## **ACKNOWLEDGMENTS**

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This Water and Wastewater Rate Study and Five-Year Financing Plans were prepared by SCI Consulting Group ("SCI") under an agreement with the Plumas Eureka Community Services District ("District"). The work was accomplished under the general direction of Jamar Tate, General Manager.

We want to acknowledge the special efforts made by the following individuals and organizations for this project:

Gina-Marie Morris, Plumas Eureka Community Services District  
John Rowden, Plumas Eureka Community Services District  
Dowl Engineering  
De Nora Engineering

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## EXECUTIVE SUMMARY

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### INTRODUCTION

The Plumas Eureka Community Services District ("District") is tasked with delivering essential services to residents within its jurisdiction, located in Plumas County. Serving as the primary provider of water and wastewater services to the community, the District's responsibilities encompass a wide array of tasks including sourcing, treating, distributing clean water, and managing wastewater collection, treatment, and disposal. Ensuring access to safe drinking water and adhering to environmental compliance standards in wastewater management are key priorities for the District.

Financing for the operation and maintenance of the District's water and wastewater systems is facilitated through two separate enterprises, distinct from the General Fund. However, the increasing costs associated with system operation and maintenance, alongside the necessity for significant capital improvements, have highlighted a discrepancy between current revenues and the escalating demands of the systems. Without adjustments to fee structures, the District's water and wastewater enterprise fund will struggle to cover operational expenses and execute essential capital improvements and repairs.

To address these challenges, the District collects both water and wastewater fees to sustain crucial services for residents. These fees encompass various components, including operational and maintenance expenses, capital improvements, and debt service. Water fees cater to the costs associated with sourcing, treating, and distributing clean water, while wastewater fees support wastewater collection, treatment, and disposal efforts, ensuring compliance with environmental regulations and public health standards. Overall, the District aims to balance the financial sustainability of its utility services while delivering reliable and efficient water and wastewater management for the community and surrounding environment.

In compliance with the California Constitution Article XIII D, Section 6 ("Proposition 218"), and District ordinances and policies, the Water and Wastewater Rate Study and Five-Year Financing Plan were prepared. The purpose of this study is to update water and wastewater rates to ensure they sufficiently meet the District's financial and service obligations, including ongoing operation and maintenance and necessary capital improvements, while maintaining prudent reserves.

Revenues generated from fees will be allocated towards the operation and maintenance of the District's water and wastewater systems, adhering to state and federal regulations.



Proposed rates are designed to cover the proportional costs of operation and maintenance of the sewer system attributable to customers of both systems. Based on the cost of service and following generally accepted rate design criteria, the District believes that the proposed rates are fair and reasonable for its customers.

#### **PLAN ASSUMPTIONS**

In order to establish a robust and comprehensive plan, this study relies on several key assumptions to provide a solid foundation for decision-making.

**BASE YEAR.** Fiscal year 2023-24 serves as both the budget year and the base year for this plan. The term “base year” refers to the fiscal year’s expenses upon which the rates are established. The study period spans from FY 2024-25 through FY 2028-29.

**INFLATIONARY ASSUMPTION.** The plan incorporates a general cost inflation adjustment of 3.0 percent per fiscal year. This inflation assumptions have been carefully reviewed with District staff and are deemed reasonable for financial planning purposes.

**GROWTH ASSUMPTION.** The plan assumes no significant growth in customer base throughout the planning period.

**OPERATING RESERVE.** An operating reserve is essential for mitigating the risk of unexpected operation costs or declines in operating revenues. The plan establishes a goal of maintaining an operating reserve equivalent to 25 percent of operating costs over the five-year period, or at least achieving this goal by the plan’s conclusion. As the upgraded system gains reliability over time, it may be possible to reduce the operational reserve goal to a lower level.

**CAPITAL IMPROVEMENT RESERVE.** The capital improvement reserve is set at the level of the highest year of planned capital expenditures. This reserve enables the District to manage the fluctuations in annual capital improvement program expenditures and provides a buffer in the event of unforeseen circumstances such as natural disasters or infrastructure damage. This target aligns with industry standards and ensures prudent financial management.

**DEBT SERVICE RESERVE.** It is recommended that the District maintain a debt service reserve equal to 125 percent of one year’s debt payment. This reserve provides a cushion against potential financial challenges and ensures the District’s ability to meet its debt obligations in a timely manner.

**SUMMARY OF RECOMMENDATIONS**

These recommendations aim to guide the District in effectively managing its financial resources, ensuring compliance with legal requirements, and maintaining the long-term sustainability and reliability of its water and wastewater services.

1. **OPTION SELECTION.** The District Board should deliberate and choose one of the two options presented in the study, or make modifications as deemed necessary, with the selected option to take effect on July 1, 2024.
2. **ADOPTION PROCEDURE.** The proposed five-year water and wastewater fees should be formally adopted in accordance with the prescribed procedures outlined in Article XIII D of the California Constitution, ensuring compliance with regulatory requirements.
3. **FLEXIBILITY UNDER PROPOSITION 218.** Proposition 218 permits agencies to implement rates and charges that are lower than those initially approved through the Proposition 218 hearing process. Should actual annual cost increases be less than projected, the District has the flexibility to adjust rates and charges accordingly, even below the maximum rates specified in the Proposition 218 notice.
4. **RESERVE REQUIREMENTS.** Each enterprise fund should maintain specific reserve levels to ensure financial stability and readiness for contingencies. This includes an operational reserve equivalent to at least 25% of annual operating expenses, a capital improvement reserve amounting to approximately one-year of projected capital expenses, and a debt service reserve totaling 125% of one year's debt payment.
5. **FINANCIAL PLANNING AND REVIEW.** While the five-year financing plans and associated water and wastewater rates are based on reasonable assumptions and estimates at present, it's essential to acknowledge the dynamic nature of economic conditions and regulatory landscapes. Therefore, it is recommended that the District conducts an annual review of the financial condition of each enterprise as part of the budgeting process. Additionally, a comprehensive financial plan and fee updates should be conducted every five years, unless an earlier review is deemed necessary due to changing circumstances.

## WATER RATE STUDY AND FIVE-YEAR FINANCING PLAN

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The District's water enterprise is presently functioning at an acceptable level. In general, water enterprise reserves are robust, and the water enterprise is currently debt-free. However, impending developments necessitate a proactive approach. In the near future, significant debt will be incurred to address a crucial issue: the construction of a new Water Treatment Plant ("WTP") aimed at removing arsenic from the raw water supply. This crucial project necessitates either the replacement or significant upgrading of the current infrastructure, as determined by evaluations conducted by Farr West Engineering, the District's engineering team. The estimated cost for this undertaking falls between \$5.85 million and \$7.15 million. For planning purposes, the bid of \$6.5 million will be adopted. Dowl Engineering also evaluated the project and secured a similar quote from Denora, which offers an approximate estimate of \$6.5 million as well.

To ensure the successful execution of this vital project, a sufficient revenue stream is imperative. This revenue stream must cover not only the increased operation and maintenance ("O&M") expenses associated with the new WTP but also facilitate capital improvement projects, debt service payments, and compliance with revenue coverage covenants and restricted bond reserve balances. These financial considerations are critical for the construction and operation of the new WTP, underlining the necessity for prudent financial planning and resource allocation within the District's water enterprise.

**FIGURE 1 – WATER RESERVE BALANCES (FY 2023-24)**

Fund	Beginning Balance July 1, 2023	Ending Balance June 30, 2024
<b>Water Enterprise</b>		
Operational Reserve	\$384,049	\$526,776
Capital Reserve	\$316,474	\$308,903
Debt Reserve	\$388,677	\$603,353
<b>Total Water Enterprise Reserves</b>	<b>\$1,089,200</b>	<b>\$1,439,032</b>

The District has presented two strategic options, each accompanied by corresponding rates, for careful consideration. Both options detail a comprehensive plan involving a \$6.5 million replacement or upgrade to WTP, set to begin in Fiscal Year 25-26, facilitated by an associated revenue bond resulting in a 20-year debt service payment of \$409,021 annually. Additionally, both options include an additional \$75,000 for operation and maintenance expenses anticipated with the WTP construction project

Option 1 prioritizes the recalibration of the operational reserve and proposes funding the WTP with a modest capital improvement reserve goal of \$500,000 annually. Conversely, Option 2 also leverages excess operational reserves but suggests a more substantial \$1.5 million annual capital reserve. In both scenarios, rates are maintained to effectively accumulate funds strategically aimed at pre-funding the replacement of WTP. These options reflect the District's commitment to prudent financial planning and proactive infrastructure investment, ensuring the long-term viability and sustainability of its water enterprise.

The following are concise summaries of each option. For comprehensive projections for each reserve fund and detailed calculations, please refer to the thorough analysis provided in Appendix A.

#### **WATER REVENUE REQUIREMENT (OPTION 1)**

Option 1 presents a somewhat conservative strategy for water system improvements over the next five years and plans for the WTP upgrade in FY 25-26. The approach begins with the water enterprise boasting high reserve balances. Following prudent financial practices, the reserve allocation strategy prioritizes maintaining an operational reserve balance equivalent to 25% of annual operation and maintenance ("O&M") expenses. Additionally, the plan sets a capital reserve goal of \$500,000 to cover projected capital expenses over the forthcoming five-year period. The strategy also includes ensuring a restricted bond reserve of at least 125% of a one-year debt service payment.

As depicted in the previous figure, the water operational reserve currently exceeds the established goal, indicating its robustness. Similarly, service fee revenue surpasses the required amount. However, the District anticipates approximately an additional \$75,000 in operational and maintenance expenses that have yet to be determined. Consequently, service fee revenue will be reduced by 20 percent to recalibrate the operational reserve fund. Simultaneously, capital fee revenue must increase by 3 percent annually to sustain the established capital reserve goal of \$500,000 during WTP construction. Additionally, debt reserve fee revenue will need to rise by 92 percent to cover the annual debt service payment and maintain the 125% debt reserve goal over the 20-year term of the revenue bond.

Based on the established assumptions, Figure 2, provided on the subsequent page, illustrates the conservative approach outlined in Option 1 for financing the District's wastewater enterprise over five fiscal years. This option yields a conservative yet effective outcome, resulting in an 11% increase in the overall fee revenue for Fiscal Year 24-25.

FIGURE 2 – WATER FIVE-YEAR FINANCING PLAN (OPTION 1)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Res. Balances</b>	<b>\$1,089,200</b>	<b>\$1,439,032</b>	<b>\$1,986,731</b>	<b>\$6,557,360</b>	<b>\$4,583,841</b>	<b>\$2,590,759</b>
<b>Source of Funds</b>						
Service Fee Revenue	\$477,834	\$384,000	\$395,520	\$407,386	\$419,607	\$432,195
Capital Fee Revenue	\$109,174	\$112,449	\$115,823	\$119,297	\$122,876	\$126,562
Debt Service Fee Revenue	\$189,623	\$363,623	\$363,623	\$363,623	\$363,623	\$363,623
Standby Charge Revenue	\$63,780	\$63,780	\$63,780	\$63,780	\$63,780	\$63,780
Bond Proceeds	\$0	\$0	\$6,500,000	\$0	\$0	\$0
Other Revenue	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$840,411</b>	<b>\$923,852</b>	<b>\$7,438,746</b>	<b>\$954,086</b>	<b>\$969,887</b>	<b>\$986,161</b>
<b>Total Use of Funds</b>	<b>\$490,579</b>	<b>\$376,154</b>	<b>\$2,868,116</b>	<b>\$2,927,605</b>	<b>\$2,962,969</b>	<b>\$1,478,716</b>
<b>Ending Res. Balances</b>	<b>\$1,439,032</b>	<b>\$1,986,731</b>	<b>\$6,557,360</b>	<b>\$4,583,841</b>	<b>\$2,590,759</b>	<b>\$2,098,205</b>
<b>Cumm. Reserve Goal</b>	<b>\$1,101,853</b>	<b>\$1,100,789</b>	<b>\$1,122,024</b>	<b>\$1,125,146</b>	<b>\$1,128,362</b>	<b>\$1,131,674</b>

**WATER REVENUE REQUIREMENT (OPTION 2)**

Option 2, in contrast to Option 1, proposes to transfer \$435,000 from excess operational reserve fund to the capital improvement reserve fund in anticipation of the WTP upgrade in FY 25-26. Additionally, Option 2 establishes a higher water capital reserve goal of \$1.5 million in anticipation of the WTP upgrade. The recalibration of the fund results in service fee revenue decreasing by 17% for FY 24-25, followed by modest subsequent annual increases of 3% to sustain the established operational reserve goal of 25% of annual O&M expenses.

Furthermore, it's important to note that debt service fee revenue is anticipated to be the same as in Option 1.

Figure 8, presented on the subsequent page, illustrates the pre-funding approach of Option 1 for financing the District's wastewater enterprise over five fiscal years. This option results in a cumulative 12% increase in overall water fee revenue for Fiscal Year 24-25.

FIGURE 3 – WATER FIVE-YEAR FINANCING PLAN (OPTION 2)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Reserve Balances</b>	<b>\$1,089,200</b>	<b>\$1,439,032</b>	<b>\$1,998,731</b>	<b>\$6,581,720</b>	<b>\$4,620,932</b>	<b>\$2,640,963</b>
<b>Source of Funds</b>						
Service Fee Revenue	\$477,834	\$396,000	\$407,880	\$420,116	\$432,720	\$445,701
Capital Fee Revenue	\$109,174	\$112,449	\$115,823	\$119,297	\$122,876	\$126,562
Debt Service Fee Revenue	\$189,623	\$363,623	\$363,623	\$363,623	\$363,623	\$363,623
Standby Charge Revenue	\$63,780	\$63,780	\$63,780	\$63,780	\$63,780	\$63,780
Bond Proceeds	\$0	\$0	\$6,500,000	\$0	\$0	\$0
Transfer Ops to Cap	\$435,000	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$1,275,411</b>	<b>\$935,852</b>	<b>\$7,451,106</b>	<b>\$966,817</b>	<b>\$982,999</b>	<b>\$999,667</b>
<b>Total Use of Funds</b>	<b>\$925,579</b>	<b>\$376,154</b>	<b>\$2,868,116</b>	<b>\$2,927,605</b>	<b>\$2,962,969</b>	<b>\$1,478,716</b>
<b>Ending Reserve Balances</b>	<b>\$1,439,032</b>	<b>\$1,998,731</b>	<b>\$6,581,720</b>	<b>\$4,620,932</b>	<b>\$2,640,963</b>	<b>\$2,161,914</b>
<b>Cumm. Reserve Goal</b>	<b>\$2,101,853</b>	<b>\$2,100,789</b>	<b>\$2,122,024</b>	<b>\$2,125,146</b>	<b>\$2,128,362</b>	<b>\$2,131,674</b>

#### WATER COST-OF-SERVICE ANALYSIS

A cost-of-service analysis is a systematic method employed to fairly distribute the revenue requirement among different customer classes of service, such as residential, commercial, and industrial. This analytical approach encompasses three fundamental steps: functionalization, allocation, and distribution, which collectively assess and assign costs across the service spectrum.

Functionalization involves categorizing the operating expenses of system assets according to their respective operational functions, such as wells, transmission mains, and treatment facilities. This step aids in understanding the nature of expenses incurred within each operational domain.

Allocation establishes a correlation between the expenses incurred and the specific needs met by these expenditures. For instance, it may consider customer-related costs like billing services, expenses associated with meeting peak seasonal demands, costs stemming from the over-sizing of distribution mains to provide fire protection, or expenses tied to the revenue generated by the District.

Finally, the allocated costs are distributed among the various customer groups based on the established relationships identified during the allocation process. This ensures that each customer class contributes its fair share towards covering the overall revenue requirement of the water system.

By employing the cost-of-service analysis methodology, water utilities can achieve equitable revenue allocation while considering the diverse needs and usage patterns of different customer groups within their service area. This approach promotes transparency and fairness in determining water rates and fosters efficient resource management within the utility.

The AWWA M-1 manual recommends two primary methods for distributing costs across customer classes within a water utility. The Base-Extra Capacity Method distributes costs to customer classes based on their proportionate use of water. It considers factors such as the base demand for water usage and any extra capacity required by specific customer classes. The Commodity-Demand Method allocates costs to customer classes based on their Peak Day demands. It accounts for variations in water consumption patterns and peak usage periods among different customer groups.

For the analysis conducted, the Commodity-Demand Method was utilized. While both methods typically yield similar results, it's important to note that they rely heavily on accurate water usage data. Since individual customer water use data was unavailable for this analysis, certain general assumptions were made when allocating commodity and demand-related costs to the various customer classes. These assumptions help ensure a reasonable distribution of costs across the customer base despite the absence of detailed usage information.

**FIGURE 4 – WATER CUSTOMER COUNTS AND EDUs**

<b>Operational Reserve</b>	<b>Customer Count</b>	<b>Weighting</b>	<b>EDUs</b>
Service Fee 3/4 inch	552	1.00	552
Service Fee 1 inch	3	1.40	4.2
Service Fee 2 inch	2	3.60	7.2
<b>Total, Operational Reserve</b>	<b>557</b>		<b>563.4</b>
<b>Capital Reserve</b>			
Capital Fee 3/4 inch	552	1.00	552
Capital Fee 1 inch	3	1.66	4.98
Capital Fee 2 inch	2	5.33	10.66
<b>Total, Capital Reserve</b>	<b>557</b>		<b>567.64</b>
<b>Debt Service Reserve</b>			
Debt Service 3/4 inch & Standby	552	1.00	552
Debt Service 1 inch	3	1.66	4.98
Debt Service 2 inch	2	5.33	10.66
<b>Total, Deb Service Reserve</b>	<b>557</b>		<b>567.64</b>

**WATER RATES (OPTION 1)**

The District's monthly current and proposed five-year operational, capital, and debt service water rates for Option 1 are illustrated in Figure 5 below.

**FIGURE 5 – WATER RATES (OPTION 1, MONTHLY)**

Customer Class	Customer		FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
	Count	Current					
Service Fee (3/4")	552	\$70.65	\$56.80	\$58.50	\$60.26	\$62.06	\$63.93
Service Fee (1")	3	\$99.76	\$79.52	\$81.90	\$84.36	\$86.89	\$89.50
Service Fee (2")	2	\$259.81	\$204.47	\$210.61	\$216.93	\$223.43	\$230.14
Capital Fee (3/4")	552	\$16.03	\$16.51	\$17.00	\$17.51	\$18.04	\$18.58
Capital Fee (1")	3	\$26.71	\$27.40	\$28.23	\$29.07	\$29.94	\$30.84
Capital Fee (2")	2	\$85.48	\$87.99	\$90.63	\$93.35	\$96.15	\$99.03
Debt Service Fee (3/4")	552	\$27.84	\$53.38	\$53.38	\$53.38	\$53.38	\$53.38
Debt Service Fee (1")	3	\$46.39	\$88.61	\$88.61	\$88.61	\$88.61	\$88.61
Debt Service Fee (2")	2	\$148.46	\$284.53	\$284.53	\$284.53	\$284.53	\$284.53
<b>Total Fee (3/4")</b>	<b>552</b>	<b>\$114.52</b>	<b>\$126.69</b>	<b>\$128.89</b>	<b>\$131.15</b>	<b>\$133.49</b>	<b>\$135.89</b>
<b>Total Fee (1")</b>	<b>3</b>	<b>\$172.86</b>	<b>\$195.54</b>	<b>\$198.74</b>	<b>\$202.05</b>	<b>\$205.45</b>	<b>\$208.96</b>
<b>Total Fee (2")</b>	<b>2</b>	<b>\$493.75</b>	<b>\$576.99</b>	<b>\$585.76</b>	<b>\$594.80</b>	<b>\$604.11</b>	<b>\$613.70</b>

**WATER RATES (OPTION 2)**

Figure 6 on the following page illustrates the proposed rate adjustments necessary to fulfill solely the operation and maintenance (O&M) requirements and debt service components, as outlined for Option 2. As previously mentioned, this rate structure, aimed at gathering revenues for capital enhancements or replacements, is strongly advocated as a sustainable long-term solution.



FIGURE 6 – WATER RATES (OPTION 2, MONTHLY)

Customer Class	Customer		FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
	Count	Current					
Service Fee (3/4")	552	\$70.65	\$58.57	\$60.33	\$62.14	\$64.00	\$65.92
Service Fee (1")	3	\$99.76	\$82.00	\$84.46	\$87.00	\$89.61	\$92.29
Service Fee (2")	2	\$259.81	\$210.86	\$217.19	\$223.70	\$230.42	\$237.33
Capital Fee (3/4")	552	\$16.03	\$16.51	\$17.00	\$17.51	\$18.04	\$18.58
Capital Fee (1")	3	\$26.71	\$27.40	\$28.23	\$29.07	\$29.94	\$30.84
Capital Fee (2")	2	\$85.48	\$87.99	\$90.63	\$93.35	\$96.15	\$99.03
Debt Service Fee (3/4")	552	\$27.84	\$53.38	\$53.38	\$53.38	\$53.38	\$53.38
Debt Service Fee (1")	3	\$46.39	\$88.61	\$88.61	\$88.61	\$88.61	\$88.61
Debt Service Fee (2")	2	\$148.46	\$284.53	\$284.53	\$284.53	\$284.53	\$284.53
<b>Total Fee (3/4")</b>	<b>552</b>	<b>\$114.52</b>	<b>\$128.46</b>	<b>\$130.72</b>	<b>\$133.04</b>	<b>\$135.43</b>	<b>\$137.89</b>
<b>Total Fee (1")</b>	<b>3</b>	<b>\$172.86</b>	<b>\$198.02</b>	<b>\$201.30</b>	<b>\$204.68</b>	<b>\$208.17</b>	<b>\$211.75</b>
<b>Total Fee (2")</b>	<b>2</b>	<b>\$493.75</b>	<b>\$583.38</b>	<b>\$592.35</b>	<b>\$601.58</b>	<b>\$611.09</b>	<b>\$620.89</b>

## WASTEWATER RATE STUDY AND FIVE-YEAR FINANCING PLAN

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The District's wastewater system is presently functioning at an acceptable level, albeit Wastewater Treatment Plant No. 6 (WWTP 6), which necessitates either replacement or substantial upgrades, as indicated by assessments conducted by the District's engineering team. The projected cost for this endeavor falls within the range of \$3.9 to \$4.9 million.

Moreover, it's imperative to note that the District faces challenges regarding its reserves, with two out of three currently below adequate levels. Compounding this issue is that operational costs surpass operational fee revenue by approximately \$37,000. This financial discrepancy underscores the necessity for cautious financial management and prudent decision-making to ensure the sustained functionality and efficiency of our wastewater system while also safeguarding the financial interests of our stakeholders.

**FIGURE 7 – WASTEWATER RESERVE BALANCES (FY 2023-24)**

Fund	Beginning Balance July 1, 2023	Ending Balance June 30, 2024
<b>Wastewater Enterprise</b>		
Operational Reserve	\$102,234	\$65,158
Capital Reserve	\$155,617	\$50,081
Debt Reserve	\$237,423	\$274,728
<b>Total Wastewater Reserves</b>	<b>\$495,274</b>	<b>\$389,967</b>

The District is presenting two strategic options and their corresponding rates for consideration. Option 1 is designed to address the operational deficit while also aiming to replenish the reserves to the level approved by the Board. Option 2 encompasses the objectives of Option 1 but goes further by proposing a comprehensive \$4.9 million replacement or upgrade to WWTP 6, slated to commence around Fiscal Year 2028-2029. An estimated annual debt service of approximately \$308,000 is projected based on certain assumptions. Both options entail maintaining rates to proactively accumulate funds aimed at pre-funding the replacement of WWTP 6.

The subsequent sections provide concise summaries of each option. For a more detailed analysis of the wastewater system rate projections, including comprehensive calculations, please refer to Appendix B.

**WASTEWATER FIVE-YEAR FINANCING PLAN (OPTION 1)**

Option 1 outlines a conservative approach to wastewater system improvements over the upcoming five years. It is assumed that the WWTP 6 upgrade will not occur until FY 29-30 or later. Adhering to prudent financial practices, the reserve allocation strategy involved maintaining a restricted bond reserve, ensuring it's at least equivalent to 125% of one year's debt service. Additionally, the plan aimed to uphold an operational reserve balance of 25% of annual operation and maintenance ("O&M") expenses while establishing a capital reserve goal of \$177,000, representing the highest projected capital expenses for the forthcoming five-year period.

To address the insufficiency of the operational reserve, a strategic transfer of \$196,000 from the debt reserve to the operational reserve is slated for Fiscal Year 2023-24. This allocation strategy enables a modest 3% annual increase in service fee revenue. Similarly, capital fee revenue will need to experience a 12% increase for Fiscal Year 2024-25, followed by subsequent annual increases of 3% to maintain the established capital reserve goal.

Furthermore, with the full repayment of a privately funded loan in March 2022, the District's debt service fee revenue is poised for a reduction of approximately 37%, given that the debt reserve goal is set at \$78,750. The wastewater system currently services the debt on two outstanding loans semiannually. These two loans are revenue bonds issued by the United States Department of Agriculture ("USDA"), which carry 40-year terms. Loan-specific revenue coverage covenants and restricted reserve balances are currently unknown; this study assumes that the existing rate structure and reserve balances meet those requirements. Notably, no new debt is anticipated to be incurred during the planning period of Option 1, ensuring a stable financial trajectory for the wastewater enterprise.

Figure 8, presented on the subsequent page, illustrates the conservative approach outlined in Option 1 for financing the District's wastewater enterprise over five fiscal years based on the established assumptions. This option yields a conservative yet effective outcome, culminating in a modest 2% reduction in overall fee revenue requirement for Fiscal Year 2024-25.

FIGURE 8 – WASTEWATER FIVE-YEAR FINANCING PLAN (OPTION 1)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Fund Balances</b>	<b>\$495,274</b>	<b>\$389,967</b>	<b>\$325,992</b>	<b>\$365,302</b>	<b>\$357,880</b>	<b>\$328,711</b>
<b>Source of Funds</b>	<b>Budget</b>	<b>Projection</b>	<b>Projection</b>	<b>Projection</b>	<b>Projection</b>	<b>Projection</b>
Service Fee Revenue	\$336,832	\$346,937	\$357,345	\$368,065	\$379,107	\$390,481
Capital Fee Revenue	\$123,995	\$138,874	\$143,041	\$147,332	\$151,752	\$156,304
Debt Service Fee Revenue	\$100,123	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000
Contribution from Reserves	\$196,000	\$0	\$0	\$0	\$0	\$0
Other Revenue	\$500	\$500	\$500	\$500	\$500	\$500
<b>Total Source of Funds</b>	<b>\$757,450</b>	<b>\$549,311</b>	<b>\$563,886</b>	<b>\$578,897</b>	<b>\$594,359</b>	<b>\$610,285</b>
<b>Total Use of Funds</b>	<b>\$862,757</b>	<b>\$613,286</b>	<b>\$524,576</b>	<b>\$586,319</b>	<b>\$623,528</b>	<b>\$561,248</b>
<b>Surplus (Deficit)</b>	<b>(\$105,307)</b>	<b>(\$63,975)</b>	<b>\$39,310</b>	<b>(\$7,421)</b>	<b>(\$29,169)</b>	<b>\$49,037</b>
<b>Ending Fund Balances</b>	<b>\$389,967</b>	<b>\$325,992</b>	<b>\$365,302</b>	<b>\$357,880</b>	<b>\$328,711</b>	<b>\$377,749</b>

#### WASTEWATER REVENUE REQUIREMENT (OPTION 2)

Option 2, in comparison to Option 1, plans for the replacement or upgrade of WWTP 6 in FY 2028-29, with an estimated cost of \$4.9 million to be financed through a revenue bond. Anticipating a 20-year term, an interest rate of 4.5%, and 2.5% in issuance costs, the resulting debt service is estimated at \$308,339 annually.

To rectify the operational reserve's inadequacy without resorting to a transfer from the debt service reserve as outlined in Option 1, service fee revenue would need to rise by 13.4% for Fiscal Year 2024-25, followed by subsequent annual increases of 3% to maintain the established capital reserve target of 25% of annual O&M expenses. Similarly, capital fee revenue will need to experience a 7% increase for Fiscal Year 2024-25, followed by subsequent annual increases of 3% to maintain the established capital reserve goal.

Additionally, with the full repayment of a privately funded loan in March 2022, the District's debt service fee revenue is expected to decrease by approximately 37%, aligning with the debt reserve goal of \$78,750 annually. It's anticipated that the new debt will be incurred in Fiscal Year 28-29, necessitating a new debt reserve of \$465,000. To attain this reserve goal, the debt service fee revenue must increase by 54% to achieve the desired level by Fiscal Year 2028-2029. This strategic approach ensures a stable financial trajectory for the wastewater enterprise while facilitating the pre-funding of debt service obligations.

Furthermore, it is important to note that it is anticipated that debt service fee revenue will need to increase again by approximately 154% for Fiscal Year 29-30, coinciding with the next wastewater rate study, assuming the remainder of the plan materializes as anticipated.

Figure 9 below presents the revenue requirements necessary to initiate the WWTP 6 project in Fiscal Year 28-29 while concurrently maintaining the requisite reserves. This option results in a substantial increase in fee revenue of 19.2% for Fiscal Year 24-25.

**FIGURE 9 – WASTEWATER FIVE-YEAR FINANCING PLAN (OPTION 2)**

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Fund Balances</b>	<b>\$495,274</b>	<b>\$389,967</b>	<b>\$446,045</b>	<b>\$610,899</b>	<b>\$734,678</b>	<b>\$842,535</b>
<b>Source of Funds</b>	<b>Budget</b>	<b>Projection</b>	<b>Projection</b>	<b>Projection</b>	<b>Projection</b>	<b>Projection</b>
Service Fee Revenue	\$336,832	\$382,000	\$393,460	\$405,264	\$417,422	\$429,944
Capital Fee Revenue	\$123,995	\$132,675	\$136,655	\$140,755	\$144,977	\$149,326
Debt Service Fee Revenue	\$100,123	\$154,189	\$158,815	\$163,580	\$168,487	\$173,542
Bond Proceeds	\$0	\$0	\$0	\$0	\$0	\$4,900,000
Contribution from Reserves	\$0	\$0	\$0	\$0	\$0	\$0
Other Revenue	\$500	\$500	\$500	\$500	\$500	\$500
<b>Total Source of Funds</b>	<b>\$561,450</b>	<b>\$669,364</b>	<b>\$689,430</b>	<b>\$710,098</b>	<b>\$731,386</b>	<b>\$5,653,312</b>
<b>Total Use of Funds</b>	<b>\$666,757</b>	<b>\$613,286</b>	<b>\$524,576</b>	<b>\$586,319</b>	<b>\$623,528</b>	<b>\$5,739,587</b>
<b>Surplus (Deficit)</b>	<b>(\$105,307)</b>	<b>\$56,078</b>	<b>\$164,854</b>	<b>\$123,779</b>	<b>\$107,857</b>	<b>(\$86,274)</b>
<b>Ending Fund Balances</b>	<b>\$389,967</b>	<b>\$446,045</b>	<b>\$610,899</b>	<b>\$734,678</b>	<b>\$842,535</b>	<b>\$756,261</b>

#### WASTEWATER COST-OF-SERVICE ANALYSIS

Based on the FY 2023 base year expenses and customer counts provided by the District, the District will incur combined expenses of \$373,908, for collection, sewage treatment, and disposal operations. Allocating these expenses across the wastewater customer accounts that contribute to these costs yields approximate charges for service fees, capital fees, and debt service fees.

It's important to note that all wastewater customers, except those in the Village at Plumas Pines subdivision, are billed equally, with rates determined based on the collective expenses incurred for wastewater operations.

The standby charge, which is separately updated by another process, is also factored into the overall billing structure. This ensures that all customers contribute proportionately to the costs associated with wastewater collection, treatment, and disposal, thereby maintaining fairness and equity across the customer base.

**WASTEWATER RATES (OPTION 1)**

The five-year operational, capital, and debt service wastewater rates for Option 1 are shown in Figure 10 below.

**FIGURE 10 – WASTEWATER RATES (OPTION 1, MONTHLY)**

Customer Class	Customer		FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
	Count	Current					
Service PEE (Dev)	290	\$86.64	\$89.23	\$91.91	\$94.67	\$97.51	\$100.43
Service ESS (Dev/BO)	3	\$67.52	\$89.23	\$91.91	\$94.67	\$97.51	\$100.43
Service ESS (Dev/NBO)	29	\$86.64	\$89.23	\$91.91	\$94.67	\$97.51	\$100.43
Service VAPP (Dev(NBO))	2	\$95.16	\$89.23	\$91.91	\$94.67	\$97.51	\$100.43
Capital PEE	307	\$24.53	\$31.45	\$32.39	\$33.36	\$34.36	\$35.40
Capital ESS	47	\$40.36	\$31.45	\$32.39	\$33.36	\$34.36	\$35.40
Capital VAPP	14	\$31.84	\$31.45	\$32.39	\$33.36	\$34.36	\$35.40
Debt Service PEE	307	\$18.69	\$16.06	\$16.06	\$16.06	\$16.06	\$16.06
Debt Service ESS	3	\$11.38	\$16.06	\$16.06	\$16.06	\$16.06	\$16.06
Debt Service VAPP (NBO)	17	\$53.86	\$40.46	\$40.46	\$40.46	\$40.46	\$40.46
Madora LF Service Fee	9	\$4.25	\$4.25	\$4.25	\$4.25	\$4.25	\$4.25
<b>Total PEE (Dev)</b>		<b>\$129.86</b>	<b>\$136.74</b>	<b>\$140.36</b>	<b>\$144.09</b>	<b>\$147.93</b>	<b>\$151.88</b>
<b>Total ESS (Dev/BO)</b>		<b>\$119.27</b>	<b>\$136.74</b>	<b>\$140.36</b>	<b>\$144.09</b>	<b>\$147.93</b>	<b>\$151.88</b>
<b>Total ESS (Dev/NBO)</b>		<b>\$138.38</b>	<b>\$136.74</b>	<b>\$140.36</b>	<b>\$144.09</b>	<b>\$147.93</b>	<b>\$151.88</b>
<b>Total VAPP</b>		<b>\$180.86</b>	<b>\$161.14</b>	<b>\$164.76</b>	<b>\$168.49</b>	<b>\$172.33</b>	<b>\$176.28</b>

**WASTEWATER RATES (OPTION 2)**

On the subsequent page, Figure 11 illustrates the proposed rate adjustments necessary to fulfill solely the operation and maintenance (O&M) requirements and debt service components, as outlined in the earlier presentation. As previously mentioned, this rate structure, aimed at gathering revenues for capital enhancements or replacements, is strongly advocated as a sustainable long-term solution.

FIGURE 11 – WASTEWATER FEES (OPTION 2, MONTHLY)

Customer Class	Customer		FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
	Count	Current					
Service PEE (Dev)	290	\$86.64	\$98.25	\$101.20	\$104.23	\$107.36	\$110.58
Service ESS (Dev/BO)	3	\$67.52	\$98.25	\$101.20	\$104.23	\$107.36	\$110.58
Service ESS (Dev/NBO)	29	\$86.64	\$98.25	\$101.20	\$104.23	\$107.36	\$110.58
Service VAPP (Dev(NBO))	2	\$95.16	\$98.25	\$101.20	\$104.23	\$107.36	\$110.58
Capital PEE	307	\$24.53	\$30.04	\$30.95	\$31.87	\$32.83	\$33.81
Capital ESS	47	\$40.36	\$30.04	\$30.95	\$31.87	\$32.83	\$33.81
Capital VAPP	14	\$31.84	\$30.04	\$30.95	\$31.87	\$32.83	\$33.81
Debt Service PEE	307	\$18.69	\$39.29	\$39.29	\$39.29	\$39.29	\$39.29
Debt Service ESS	3	\$11.38	\$39.29	\$39.29	\$39.29	\$39.29	\$39.29
Debt Service VAPP (NBO)	17	\$53.86	\$63.69	\$63.69	\$63.69	\$63.69	\$63.69
Madora LF Service Fee	9	\$4.25	\$4.25	\$4.25	\$4.25	\$4.25	\$4.25
<b>Total PEE (Dev)</b>		<b>\$129.86</b>	<b>\$167.59</b>	<b>\$171.44</b>	<b>\$175.40</b>	<b>\$179.49</b>	<b>\$183.69</b>
<b>Total ESS (Dev/BO)</b>		<b>\$119.27</b>	<b>\$167.59</b>	<b>\$171.44</b>	<b>\$175.40</b>	<b>\$179.49</b>	<b>\$183.69</b>
<b>Total ESS (Dev/NBO)</b>		<b>\$138.38</b>	<b>\$167.59</b>	<b>\$171.44</b>	<b>\$175.40</b>	<b>\$179.49</b>	<b>\$183.69</b>
<b>Total VAPP</b>		<b>\$180.86</b>	<b>\$191.99</b>	<b>\$195.84</b>	<b>\$199.80</b>	<b>\$203.89</b>	<b>\$208.09</b>

## **IMPLEMENTATION**

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### **PROCEDURAL REQUIREMENTS FOR FEE ADOPTION**

To enact the proposed five-year water and wastewater rates, the District must adhere to the procedural stipulations outlined in Article XIII D of the California Constitution, commonly known as "Proposition 218." These requirements entail sending a notice of public hearing to all affected property owners and customers at least 45 days before the scheduled public hearing. By adhering to these procedural requirements, the District can uphold transparency, accountability, and public participation in its rate-setting procedures.

### **ANNUAL REVIEW OF REVENUE AND RATES**

When a public agency implements new utility rates, it is crucial to closely monitor them in subsequent years to ensure that the generated revenue adequately meets the annual revenue requirements. This ongoing review is essential due to evolving economic conditions, changes in capital improvement plans, and adjustments to debt services. Additionally, potential and unforeseen changes in revenue requirements, particularly those resulting from evolving environmental regulations, can significantly impact capital improvement projects, repair and replacement costs, and overall financial stability. Therefore, continuous monitoring and assessment of utility rates are essential to ensure financial sustainability and responsiveness to dynamic external factors. By regularly reviewing and adjusting utility rates as necessary, public agencies can effectively manage their financial resources and maintain the quality and reliability of utility services for their constituents.



**APPENDICES**

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Appendix A – Water Five-Year Financing Plan Options

Appendix B – Wastewater Five-Year Financing Plan Options

## APPENDIX A – WATER FIVE-YEAR FINANCING PLAN OPTIONS

### WATER FIVE-YEAR FINANCING PLAN (OPTION 1)

#### Water System Operational Reserve Five-Year Plan (Option 1)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Operational Reserve Balance</b>	<b>\$384,049</b>	<b>\$526,776</b>	<b>\$579,925</b>	<b>\$559,653</b>	<b>\$538,758</b>	<b>\$517,220</b>
<b>Source of Funds</b>						
Service Fee Revenue	\$477,834	\$384,000	\$395,520	\$407,386	\$419,607	\$432,195
Standby Charge Revenue	\$24,303	\$24,303	\$24,303	\$24,303	\$24,303	\$24,303
Other Revenue	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$502,137</b>	<b>\$408,303</b>	<b>\$419,823</b>	<b>\$431,689</b>	<b>\$443,910</b>	<b>\$456,498</b>
<b>Use of Funds</b>						
Operations and Maintenance Expense	\$359,410	\$355,154	\$365,095	\$375,334	\$385,880	\$396,740
Additional O&M Expense (Treatment Plant)	\$0	\$0	\$75,000	\$77,250	\$79,568	\$81,955
Contribution to Debt Reserve	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Use of Funds</b>	<b>\$359,410</b>	<b>\$355,154</b>	<b>\$440,095</b>	<b>\$452,584</b>	<b>\$465,448</b>	<b>\$478,695</b>
<b>Surplus (Deficit)</b>	<b>\$142,727</b>	<b>\$53,149</b>	<b>(\$20,272)</b>	<b>(\$20,895)</b>	<b>(\$21,537)</b>	<b>(\$22,196)</b>
<b>Ending Operational Reserve Balance</b>	<b>\$526,776</b>	<b>\$579,925</b>	<b>\$559,653</b>	<b>\$538,758</b>	<b>\$517,220</b>	<b>\$495,024</b>
<b>Operational Reserve Goal (25%)</b>	<b>\$89,853</b>	<b>\$88,789</b>	<b>\$110,024</b>	<b>\$113,146</b>	<b>\$116,362</b>	<b>\$119,674</b>

**Water System Five-Year Capital Improvement Plan (Option 1)**

<b>Item</b>	<b>Budget FY 23-24</b>	<b>Projection FY 24-25</b>	<b>Projection FY 25-26</b>	<b>Projection FY 26-27</b>	<b>Projection FY 27-28</b>	<b>Projection FY 28-29</b>
<b>Beginning Capital Reserve Balance</b>	<b>\$316,474</b>	<b>\$308,903</b>	<b>\$414,776</b>	<b>\$5,026,022</b>	<b>\$3,093,744</b>	<b>\$1,142,544</b>
<b>Sources of Funds</b>						
Capital Fee Revenue	\$109,174	\$112,449	\$115,823	\$119,297	\$122,876	\$126,562
Standby Charge Revenue	\$14,424	\$14,424	\$14,424	\$14,424	\$14,424	\$14,424
Bond Proceeds	\$0	\$0	\$6,500,000	\$0	\$0	\$0
<b>Total Sources of Funds</b>	<b>\$123,598</b>	<b>\$126,873</b>	<b>\$6,630,247</b>	<b>\$133,721</b>	<b>\$137,300</b>	<b>\$140,986</b>
<b>Uses of Funds</b>						
Well 3-Replacement Well		\$0	\$0	\$0	\$0	\$50,000
Water Treatment Plant Design/Debt Service	\$30,000	\$0	\$2,000,000	\$2,000,000	\$2,000,000	\$470,000
Irrigation Alternatives		\$0	\$0	\$15,000	\$15,000	\$0
Storage Tank Maintenance		\$2,000	\$0	\$0	\$2,500	\$0
Hydrant Replacement		\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Storage Tank Replacement		\$0	\$0	\$30,000	\$50,000	\$50,000
Miscellaneous Equipment		\$10,000	\$10,000	\$12,000	\$12,000	\$12,000
<b>Total Use of Funds</b>	<b>\$131,169</b>	<b>\$21,000</b>	<b>\$2,019,000</b>	<b>\$2,066,000</b>	<b>\$2,088,500</b>	<b>\$591,000</b>
<b>Surplus (Deficit)</b>	<b>(\$7,571)</b>	<b>\$105,873</b>	<b>\$4,611,247</b>	<b>(\$1,932,279)</b>	<b>(\$1,951,200)</b>	<b>(\$450,014)</b>
<b>Ending Capital Reserve Fund Balance</b>	<b>\$308,903</b>	<b>\$414,776</b>	<b>\$5,026,022</b>	<b>\$3,093,744</b>	<b>\$1,142,544</b>	<b>\$692,530</b>
<b>Water Capital Reserve Goal</b>	<b>\$500,000</b>	<b>\$500,000</b>	<b>\$500,000</b>	<b>\$500,000</b>	<b>\$500,000</b>	<b>\$500,000</b>

## Water System Debt Service Reserve Five-Year Plan (Option 1)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Debt Service Reserve Balance</b>	\$388,677	\$603,353	\$992,030	\$971,685	\$951,340	\$930,995
<b>Source of Funds</b>						
Debt Service Fee Revenue	\$189,623	\$363,623	\$363,623	\$363,623	\$363,623	\$363,623
Standby Charge Revenue	\$25,053	\$25,053	\$25,053	\$25,053	\$25,053	\$25,053
Contribution from Operational Reserve	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$214,676</b>	<b>\$388,676</b>	<b>\$388,676</b>	<b>\$388,676</b>	<b>\$388,676</b>	<b>\$388,676</b>
<b>Use of Funds</b>						
Water Treatment New Debt Service	\$0	\$0	\$409,021	\$409,021	\$409,021	\$409,021
Contribution to Reserves	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Use of Funds</b>	<b>\$0</b>	<b>\$0</b>	<b>\$409,021</b>	<b>\$409,021</b>	<b>\$409,021</b>	<b>\$409,021</b>
<b>Surplus (Deficit)</b>	<b>\$214,676</b>	<b>\$388,676</b>	<b>(\$20,345)</b>	<b>(\$20,345)</b>	<b>(\$20,345)</b>	<b>(\$20,345)</b>
<b>Ending Debt Service Reserve Balance</b>	<b>\$603,353</b>	<b>\$992,030</b>	<b>\$971,685</b>	<b>\$951,340</b>	<b>\$930,995</b>	<b>\$910,651</b>
<b>Water Debt Service Reserve Goal (125%)</b>	<b>\$512,000</b>	<b>\$512,000</b>	<b>\$512,000</b>	<b>\$512,000</b>	<b>\$512,000</b>	<b>\$512,000</b>

**WATER FIVE-YEAR FINANCING PLAN (OPTION 2)**

**Water System Operational Reserve Five-Year Plan (Option 2)**

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Operational Reserve Balance</b>	\$384,049	\$91,776	\$156,925	\$149,013	\$140,848	\$132,424
<b>Source of Funds</b>						
Service Fee Revenue	\$477,834	\$396,000	\$407,880	\$420,116	\$432,720	\$445,701
Standby Charge Revenue	\$24,303	\$24,303	\$24,303	\$24,303	\$24,303	\$24,303
Other Revenue	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$502,137</b>	<b>\$420,303</b>	<b>\$432,183</b>	<b>\$444,419</b>	<b>\$457,023</b>	<b>\$470,004</b>
<b>Use of Funds</b>						
Operations and Maintenance Expense	\$359,410	\$355,154	\$365,095	\$375,334	\$385,880	\$396,740
Additional O&M Expense (Treatment Plant)	\$0	\$0	\$75,000	\$77,250	\$79,568	\$81,955
Contribution to Capital Reserve	\$435,000	\$0	\$0	\$0	\$0	\$0
<b>Total Use of Funds</b>	<b>\$794,410</b>	<b>\$355,154</b>	<b>\$440,095</b>	<b>\$452,584</b>	<b>\$465,448</b>	<b>\$478,695</b>
<b>Surplus (Deficit)</b>	<b>(\$292,273)</b>	<b>\$65,149</b>	<b>(\$7,912)</b>	<b>(\$8,165)</b>	<b>(\$8,425)</b>	<b>(\$8,690)</b>
<b>Ending Operational Reserve Balance</b>	<b>\$91,776</b>	<b>\$156,925</b>	<b>\$149,013</b>	<b>\$140,848</b>	<b>\$132,424</b>	<b>\$123,734</b>
<b>Operational Reserve Goal (25%)</b>	<b>\$89,853</b>	<b>\$88,789</b>	<b>\$110,024</b>	<b>\$113,146</b>	<b>\$116,362</b>	<b>\$119,674</b>

## Water System Five-Year Capital Improvement Plan (Option 2)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Capital Reserve Balance</b>	<b>\$316,474</b>	<b>\$743,903</b>	<b>\$849,776</b>	<b>\$5,461,022</b>	<b>\$3,528,744</b>	<b>\$1,577,544</b>
<b>Sources of Funds</b>						
Capital Fee Revenue	\$109,174	\$112,449	\$115,823	\$119,297	\$122,876	\$126,562
Standby Charge Revenue	\$14,424	\$14,424	\$14,424	\$14,424	\$14,424	\$14,424
Bond Proceeds	\$0	\$0	\$6,500,000	\$0	\$0	\$0
Contribution from Operational Reserve	\$435,000	\$0	\$0	\$0	\$0	\$0
<b>Total Sources of Funds</b>	<b>\$558,598</b>	<b>\$126,873</b>	<b>\$6,630,247</b>	<b>\$133,721</b>	<b>\$137,300</b>	<b>\$140,986</b>
<b>Uses of Funds</b>						
Well 3-Replacement Well		\$0	\$0	\$0	\$0	\$50,000
Water Treatment Plant Design/Debt Service	\$30,000	\$0	\$2,000,000	\$2,000,000	\$2,000,000	\$470,000
Irrigation Alternatives		\$0	\$0	\$15,000	\$15,000	\$0
Storage Tank Maintenance		\$2,000	\$0	\$0	\$2,500	\$0
Hydrant Replacement		\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Storage Tank Replacement		\$0	\$0	\$30,000	\$50,000	\$50,000
Miscellaneous Equipment		\$10,000	\$10,000	\$12,000	\$12,000	\$12,000
<b>Total Use of Funds</b>	<b>\$131,169</b>	<b>\$21,000</b>	<b>\$2,019,000</b>	<b>\$2,066,000</b>	<b>\$2,088,500</b>	<b>\$591,000</b>
<b>Surplus (Deficit)</b>	<b>\$427,429</b>	<b>\$105,873</b>	<b>\$4,611,247</b>	<b>(\$1,932,279)</b>	<b>(\$1,951,200)</b>	<b>(\$450,014)</b>
<b>Ending Capital Reserve Fund Balance</b>	<b>\$743,903</b>	<b>\$849,776</b>	<b>\$5,461,022</b>	<b>\$3,528,744</b>	<b>\$1,577,544</b>	<b>\$1,127,530</b>
<b>Water Capital Reserve Goal</b>	<b>\$1,500,000</b>	<b>\$1,500,000</b>	<b>\$1,500,000</b>	<b>\$1,500,000</b>	<b>\$1,500,000</b>	<b>\$1,500,000</b>

Water System Debt Service Reserve Five-Year Plan (Option 2)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Debt Service Reserve Balance</b>	\$388,677	\$603,353	\$992,030	\$971,685	\$951,340	\$930,995
<b>Source of Funds</b>						
Debt Service Fee Revenue	\$189,623	\$363,623	\$363,623	\$363,623	\$363,623	\$363,623
Standby Charge Revenue	\$25,053	\$25,053	\$25,053	\$25,053	\$25,053	\$25,053
Contribution from Operational Reserve	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$214,676</b>	<b>\$388,676</b>	<b>\$388,676</b>	<b>\$388,676</b>	<b>\$388,676</b>	<b>\$388,676</b>
<b>Use of Funds</b>						
Water Treatment New Debt Service	\$0	\$0	\$409,021	\$409,021	\$409,021	\$409,021
Contribution to Reserves	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Use of Funds</b>	<b>\$0</b>	<b>\$0</b>	<b>\$409,021</b>	<b>\$409,021</b>	<b>\$409,021</b>	<b>\$409,021</b>
<b>Surplus (Deficit)</b>	<b>\$214,676</b>	<b>\$388,676</b>	<b>(\$20,345)</b>	<b>(\$20,345)</b>	<b>(\$20,345)</b>	<b>(\$20,345)</b>
<b>Ending Debt Service Reserve Balance</b>	<b>\$603,353</b>	<b>\$992,030</b>	<b>\$971,685</b>	<b>\$951,340</b>	<b>\$930,995</b>	<b>\$910,651</b>
<b>Water Debt Service Reserve Goal (125%)</b>	<b>\$512,000</b>	<b>\$512,000</b>	<b>\$512,000</b>	<b>\$512,000</b>	<b>\$512,000</b>	<b>\$512,000</b>

**APPENDIX B – WASTEWATER FIVE-YEAR FINANCING PLAN OPTIONS**

**WASTEWATER FIVE-YEAR FINANCING PLAN (OPTION 1 – NO NEW DEBT)**

**Wastewater System Operational Reserve Fund (Option 1 - No New Debt)**

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Operational Reserve Balance</b>	<b>\$102,234</b>	<b>\$261,158</b>	<b>\$234,634</b>	<b>\$207,221</b>	<b>\$178,784</b>	<b>\$149,172</b>
<b>Source of Funds</b>						
Service Fee Revenue	\$336,832	\$346,937	\$357,345	\$368,065	\$379,107	\$390,481
Contribution from Debt Reserve	\$196,000	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$532,832</b>	<b>\$346,937</b>	<b>\$357,345</b>	<b>\$368,065</b>	<b>\$379,107</b>	<b>\$390,481</b>
<b>Use of Funds</b>						
Collection	\$14,957	\$14,939	\$15,391	\$15,861	\$16,349	\$16,858
Sewage Treatment	\$178,728	\$178,514	\$183,914	\$189,528	\$195,368	\$201,446
Disposal	\$29,539	\$29,504	\$30,396	\$31,324	\$32,289	\$33,294
Administratiron and General	\$150,684	\$150,504	\$155,057	\$159,789	\$164,713	\$169,838
<b>Total Use of Funds</b>	<b>\$373,908</b>	<b>\$373,461</b>	<b>\$384,758</b>	<b>\$396,502</b>	<b>\$408,720</b>	<b>\$421,436</b>
<b>Surplus (Deficit)</b>	<b>\$158,924</b>	<b>(\$26,524)</b>	<b>(\$27,413)</b>	<b>(\$28,437)</b>	<b>(\$29,613)</b>	<b>(\$30,955)</b>
<b>Ending Operational Reserve Balance</b>	<b>\$261,158</b>	<b>\$234,634</b>	<b>\$207,221</b>	<b>\$178,784</b>	<b>\$149,172</b>	<b>\$118,216</b>
<b>Operational Reserve Goal (25%)</b>	<b>\$93,477</b>	<b>\$93,365</b>	<b>\$96,190</b>	<b>\$99,126</b>	<b>\$102,180</b>	<b>\$105,359</b>



Wastewater System Capital Improvement Plan (Option 1 - No New Debt)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Capital Reserve Balance</b>	\$155,617	\$50,081	\$12,455	\$78,996	\$99,828	\$100,080
<b>Source of Funds</b>						
Capital Fee Revenue	\$123,995	\$138,874	\$143,041	\$147,332	\$151,752	\$156,304
Connection Fees	\$500	\$500	\$500	\$500	\$500	\$500
Contribution from Debt Service Reserve	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$124,495</b>	<b>\$139,374</b>	<b>\$143,541</b>	<b>\$147,832</b>	<b>\$152,252</b>	<b>\$156,804</b>
<b>Use of Funds</b>						
Collection System / Manhole Inspection	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
Collection System / Manhole Repair and Imprv.	\$20,000	\$100,000	\$0	\$0	\$0	\$0
WWTP 6 Upgrade or Replacement	\$0	\$0	\$0	\$0	\$30,000	\$0
Dynamite Hill Leach Field Impr. or Replace	\$0	\$0	\$0	\$50,000	\$0	\$0
Wastewater recycling	\$0	\$0	\$0	\$0	\$45,000	\$0
Miscellaneous Improvements	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Miscellaneous Equipment	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
<b>Total Use of Funds</b>	<b>\$230,031</b>	<b>\$177,000</b>	<b>\$77,000</b>	<b>\$127,000</b>	<b>\$152,000</b>	<b>\$77,000</b>
<b>Surplus (Deficit)</b>	<b>(\$105,536)</b>	<b>(\$37,626)</b>	<b>\$66,541</b>	<b>\$20,832</b>	<b>\$252</b>	<b>\$79,804</b>
<b>Ending Capital Reserve Balance</b>	<b>\$50,081</b>	<b>\$12,455</b>	<b>\$78,996</b>	<b>\$99,828</b>	<b>\$100,080</b>	<b>\$179,884</b>
<b>Wastewater Capital Reserve Goal</b>	<b>\$177,000</b>	<b>\$177,000</b>	<b>\$177,000</b>	<b>\$177,000</b>	<b>\$177,000</b>	<b>\$177,000</b>

**Wastewater System Debt Service Reserve (Option 1 - No New Debt)**

<b>Item</b>	<b>Budget FY 23-24</b>	<b>Projection FY 24-25</b>	<b>Projection FY 25-26</b>	<b>Projection FY 26-27</b>	<b>Projection FY 27-28</b>	<b>Projection FY 28-29</b>
<b>Beginning Bond Reserve Balance</b>	\$237,423	\$78,728	\$78,903	\$79,085	\$79,268	\$79,460
<b>Source of Funds</b>						
Debt Service Fee Revenue	\$100,123	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000
Contribution from Reserves	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$100,123</b>	<b>\$63,000</b>	<b>\$63,000</b>	<b>\$63,000</b>	<b>\$63,000</b>	<b>\$63,000</b>
<b>Use of Funds</b>						
Sewer Revenue Bonds, Series 2006 A	\$36,462	\$36,461	\$36,455	\$36,453	\$36,454	\$36,457
Sewer Revenue Bonds, Series 2006 B	\$26,357	\$26,364	\$26,363	\$26,364	\$26,354	\$26,355
Contribution to Operational Reserve	\$196,000	\$0	\$0	\$0	\$0	\$0
<b>Total Use of Funds</b>	<b>\$258,818</b>	<b>\$62,825</b>	<b>\$62,818</b>	<b>\$62,817</b>	<b>\$62,808</b>	<b>\$62,812</b>
<b>Surplus (Deficit)</b>	<b>(\$158,695)</b>	<b>\$175</b>	<b>\$182</b>	<b>\$183</b>	<b>\$192</b>	<b>\$188</b>
<b>Ending Bond Reserve Balance</b>	<b>\$78,728</b>	<b>\$78,903</b>	<b>\$79,085</b>	<b>\$79,268</b>	<b>\$79,460</b>	<b>\$79,648</b>
<b>Wastewater Debt Service Reserve Goal (125%)</b>	<b>\$78,750</b>	<b>\$78,750</b>	<b>\$78,750</b>	<b>\$78,750</b>	<b>\$78,750</b>	<b>\$78,750</b>

**WASTEWATER FIVE-YEAR FINANCING PLAN (OPTION 2)**

**Wastewater Operational Reserve Plan (Option 2)**

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Operational Reserve Balance</b>	\$102,234	\$65,158	\$73,697	\$82,399	\$91,161	\$99,863
<b>Source of Funds</b>						
Service Rate Revenue	\$336,832	\$382,000	\$393,460	\$405,264	\$417,422	\$429,944
Contribution from Debt Reserve	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$336,832</b>	<b>\$382,000</b>	<b>\$393,460</b>	<b>\$405,264</b>	<b>\$417,422</b>	<b>\$429,944</b>
<b>Use of Funds</b>						
Collection	\$14,957	\$14,939	\$15,391	\$15,861	\$16,349	\$16,858
Sewage Treatment	\$178,728	\$178,514	\$183,914	\$189,528	\$195,368	\$201,446
Disposal	\$29,539	\$29,504	\$30,396	\$31,324	\$32,289	\$33,294
Administraiton and General	\$150,684	\$150,504	\$155,057	\$159,789	\$164,713	\$169,838
<b>Total Use of Funds</b>	<b>\$373,908</b>	<b>\$373,461</b>	<b>\$384,758</b>	<b>\$396,502</b>	<b>\$408,720</b>	<b>\$421,436</b>
<b>Surplus (Deficit)</b>	<b>(\$37,076)</b>	<b>\$8,539</b>	<b>\$8,702</b>	<b>\$8,762</b>	<b>\$8,702</b>	<b>\$8,508</b>
<b>Ending Operational Reserve Balance</b>	<b>\$65,158</b>	<b>\$73,697</b>	<b>\$82,399</b>	<b>\$91,161</b>	<b>\$99,863</b>	<b>\$108,371</b>
<b>Operational Reserve Goal (25%)</b>	<b>\$93,477</b>	<b>\$93,365</b>	<b>\$96,190</b>	<b>\$99,126</b>	<b>\$102,180</b>	<b>\$105,359</b>

## Wastewater System Capital Improvement Plan (Option 2)

Item	Budget FY 23-24	Projection FY 24-25	Projection FY 25-26	Projection FY 26-27	Projection FY 27-28	Projection FY 28-29
<b>Beginning Capital Reserve Balance</b>	\$155,617	\$50,081	\$6,256	\$66,411	\$80,665	\$74,142
<b>Source of Funds</b>						
Capital Fee Revenue	\$123,995	\$132,675	\$136,655	\$140,755	\$144,977	\$149,326
Connection Fees	\$500	\$500	\$500	\$500	\$500	\$500
Bond Proceeds	\$0	\$0	\$0	\$0	\$0	\$4,900,000
<b>Total Source of Funds</b>	<b>\$124,495</b>	<b>\$133,175</b>	<b>\$137,155</b>	<b>\$141,255</b>	<b>\$145,477</b>	<b>\$5,049,826</b>
<b>Use of Funds</b>						
Collection System / Manhole Inspection		\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
Collection System / Manhole Repair and Imprv.		\$100,000	\$0	\$0	\$0	\$0
WWTP 6 Upgrade or Replacement		\$0	\$0	\$0	\$30,000	\$4,870,000
Dynamite Hill Leach Field Impr. or Replace		\$0	\$0	\$50,000	\$0	\$0
Wastewater recycling		\$0	\$0	\$0	\$45,000	\$0
Miscellaneous Improvements		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Miscellaneous Equipment		\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
<b>Total Use of Funds</b>	<b>\$230,031</b>	<b>\$177,000</b>	<b>\$77,000</b>	<b>\$127,000</b>	<b>\$152,000</b>	<b>\$4,947,000</b>
<b>Surplus (Deficit)</b>	<b>(\$105,536)</b>	<b>(\$43,825)</b>	<b>\$60,155</b>	<b>\$14,255</b>	<b>(\$6,523)</b>	<b>\$102,826</b>
<b>Ending Capital Reserve Balance</b>	<b>\$50,081</b>	<b>\$6,256</b>	<b>\$66,411</b>	<b>\$80,665</b>	<b>\$74,142</b>	<b>\$176,969</b>
<b>Wastewater Capital Reserve Goal</b>	<b>\$177,000</b>	<b>\$177,000</b>	<b>\$177,000</b>	<b>\$177,000</b>	<b>\$177,000</b>	<b>\$177,000</b>

**Wastewater System Debt Service (Option 2)**

<b>Item</b>	<b>Budget FY 23-24</b>	<b>Projection FY 24-25</b>	<b>Projection FY 25-26</b>	<b>Projection FY 26-27</b>	<b>Projection FY 27-28</b>	<b>Projection FY 28-29</b>
<b>Beginning Bond Reserve Balance</b>	<b>\$237,423</b>	<b>\$274,728</b>	<b>\$366,092</b>	<b>\$462,089</b>	<b>\$562,852</b>	<b>\$668,531</b>
<b>Source of Funds</b>						
Debt Service Fee Revenue	\$100,123	\$154,189	\$158,815	\$163,580	\$168,487	\$173,542
Contribution from Reserves	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Source of Funds</b>	<b>\$100,123</b>	<b>\$154,189</b>	<b>\$158,815</b>	<b>\$163,580</b>	<b>\$168,487</b>	<b>\$173,542</b>
<b>Use of Funds</b>						
Sewer Revenue Bonds, Series 2006 A	\$36,462	\$36,461	\$36,455	\$36,453	\$36,454	\$36,457
Sewer Revenue Bonds, Series 2006 B	\$26,357	\$26,364	\$26,363	\$26,364	\$26,354	\$26,355
WWTP Improvement Bond	\$0	\$0	\$0	\$0	\$0	\$308,339
<b>Total Use of Funds</b>	<b>\$62,818</b>	<b>\$62,825</b>	<b>\$62,818</b>	<b>\$62,817</b>	<b>\$62,808</b>	<b>\$371,151</b>
<b>Surplus (Deficit)</b>	<b>\$37,305</b>	<b>\$91,365</b>	<b>\$95,997</b>	<b>\$100,763</b>	<b>\$105,679</b>	<b>(\$197,609)</b>
<b>Ending Bond Reserve Balance</b>	<b>\$274,728</b>	<b>\$366,092</b>	<b>\$462,089</b>	<b>\$562,852</b>	<b>\$668,531</b>	<b>\$470,922</b>
<b>Wastewater Debt Service Reserve Goal (125%)</b>	<b>\$78,750</b>	<b>\$78,750</b>	<b>\$78,750</b>	<b>\$78,750</b>	<b>\$78,750</b>	<b>\$465,000</b>

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