

Key Largo Wastewater Treatment District Board of Commissioners Meeting Agenda Item Summary

Meeting Date:
December 17, 2024

Agenda Item Number: G-2

Action Required:
No

Department:
General Manager

Sponsor:
Peter Rosasco

Subject:
2024 Wastewater Rate Study Results with revisions, presented by Raftelis

Summary of Discussion:

Raftelis will follow up on their October 15, 2024 presentation of the 2024 KLWTD Wastewater Rate Study.

Reviewed / Approved

Financial Impact

Attachments

Operations: _____
Administration: _____
Finance: _____
District Counsel: _____
District Clerk: _____
Engineering: _____

\$

Funding Source:

Budgeted:
N/A

1. Technical Memorandum from Raftelis
2. Memo from Raftelis re: Commissioner Questions
3. KLWTD 2024 Wastewater Rate Study Results (revised Dec. 2024)

Approved By: 
General Manager

Date: 12/11/2024



TECHNICAL MEMORANDUM

To: Connie Fazio
CC: Peter Rosasco
From: Thierry Boveri, Trevor McCarthy, and Tristen Townsend
Date: December 6, 2024
Subject: Fiscal Year 2024 Wastewater Rate Study

Dear Ms. Fazio:

Raftelis Financial Consultants, Inc. (Raftelis) has completed our review of the wastewater rates for the Key Largo Wastewater Treatment District (the "District") and have summarized our assumptions, conclusions, and recommendations in this technical memorandum. The purpose of this analysis is to update the financial forecast completed during the 2022 rate study, assess the District's current financial position, and determine the sufficiency of the existing wastewater rates. The primary objective of the analysis is to recommend rate adjustments that equitably recover the costs of operations while maintaining financial sustainability and a strong fiscal position. The financial forecast includes fiscal year 2025 through fiscal year 2034 (Forecast Period). While we believe the assumptions relied upon herein are reasonable for the purpose of this report, they are dependent upon future events and actual conditions may differ. The District should carefully monitor utility system revenues and financial operating results and make necessary adjustments as the situation may dictate. The results and recommendations outlined in this memorandum were presented to the District Board of Commissioners (the "Board") on October 15, 2024.

BACKGROUND

In 2022, Raftelis completed a wastewater rate study for the District. The purpose of this study was to prepare a financial forecast (2022 through 2032), identify the sufficiency of existing retail rates, and provide rate recommendations. During the study, Raftelis found that retail rates were producing a surplus. Based on input from staff and in order to provide a benefit to retail customers, rates that recover only operating expenses were recommended, with the assumption that grants would fully cover capital costs. Therefore, the Board adopted a 5% rate reduction in retail rates effective October 1, 2022, with rate indexing (assumed at 3.5% annually) required by fiscal year 2025 to keep pace with inflation in operating costs.

Compared to the 2022 study, several key changes in the financial forecast were recognized. Fiscal year 2025 projected retail rate revenues are approximately 2% lower than previously forecasted, while budgeted operating expenses were approximately 5% greater than the prior forecast. New regulatory requirements will also put increased pressure on operating expenses. Furthermore, the District's capital needs have nearly doubled since the prior study and greater reliance on *pay-as-you-go* funding is anticipated.

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REVENUES

1. Projected revenues from existing rates are based on the schedule of wastewater rates and charges reflected in the currently adopted rate resolution. The existing rates are applied to the fiscal year 2023 billing statistics to calculate the projected rate revenues for the Forecast Period, as shown in Table 1. Based on historical trends and discussions with District staff, an average annual growth rate in equivalent dwelling units (EDUs) of approximately 0.5% is assumed for the Forecast Period. Based on these growth assumptions, retail revenues at existing rates, prior to the application of the proposed rate adjustments, are estimated to increase from approximately \$7.6 million to \$7.7 million over the Forecast Period.

Like most Florida utilities, the District charges each wastewater customer a monthly base charge and a volumetric charge based upon the customer's metered water consumption. Approximately 64% of retail rate revenues are from monthly base charges. Due to the high seasonality in the region, a strong level of fixed cost recovery provides the District with more stable and predictable monthly revenues.

2. The District entered into an interlocal agreement with Islamorada, Village of Islands (Islamorada) for wastewater services in May 2012. Under this agreement, the District would provide wastewater treatment and disposal services to Islamorada at a fee of \$4.65 per thousand gallons. An analysis of the contract treatment rate was not performed during this study and the rate was assumed to remain unchanged during the Forecast Period. Based on historical and current billing statistics, total revenues from Islamorada are estimated at approximately \$1.35 million annually over the Forecast Period.
3. The District entered into an interlocal agreement with Monroe County in fiscal year 2016. The agreement stated certain State of Florida Department of Environmental Protection (FDEP) grant funds received by the District would be exchanged with Monroe County, with future grant funds received by the District also eligible. Monroe County would then pay these grant fund amounts back to the District over time. The first grant amount exchanged was \$17 million to be paid back to the District over ten years. The second grant amount exchanged was \$1.25 million to be paid back over twelve years. Based on discussions with District staff and the current repayment schedule, the payment amounts from Monroe County are assumed to be \$2.125 million annually through fiscal year 2025 and \$125,000 annually through fiscal year 2028.
4. The District anticipates receipt of grant funding from the Army Corp of Engineers (ACOE) Florida Keys Water Quality Improvement Program, Florida Department Environmental Protection (FDEP) Stewardship Program, and other entities. For the purposes of this analysis, a total of \$70 million in grant revenues from these sources is assumed during the Forecast Period. Grant funding represents approximately 73.8% of funding for capital projects during the Forecast Period.
5. Beginning in 2005, the District imposed a System Development Charge (assessment) on all parcels within its service area for access to the central wastewater system. Parcel owners could pay the assessment in full or pay installments over a 20-year period. Assessment revenues from annual installment payments are expected to cease in 2036, assuming no additional assessment programs take place. The assessment revenues are projected at approximately \$3.4 million in fiscal year 2025 and decline to approximately \$30,000 in the final year of the Forecast Period, as shown in Table 2. These revenues are assumed to be utilized for the District's annual debt service payments and toward the funding of capital improvement projects.
6. Other miscellaneous revenue (shown in Table 3) and interest income on cash balances (shown in Table 5) were also recognized and average approximately \$700,000 per year.

EXPENDITURES AND DEBT SERVICE REQUIREMENTS

7. The preliminary fiscal year 2025 operating budget served as the basis for the expenditure projections for the Forecast Period, as shown in Table 4. Projected operating and maintenance expenses are escalated by an annual average rate of approximately 4.0% per from fiscal year 2025 budgetary levels. The overall increases in projected operating expenses are based on the nature of the recurring expense including, but not limited to, the following:
 - a. Labor: 3.0% per year;
 - b. Health and General Insurance: 5.0% per year;
 - c. Power and Chemicals: 5.0% per year;
 - d. Repairs and Maintenance: 4.0% per year; and
 - e. General Inflation / Consumer Price Index: Average of approximately 2.5% per year based on data published by the Congressional Budget Office in May 2024.

Beginning in fiscal year 2026, the District will incur an estimated \$300,000 in additional annual expenditures associated with new regulatory requirements for the collection system action plan implementation.

8. The Capital Improvement Program (CIP) utilized in this analysis, shown in detail in Table 5, is based on the preliminary fiscal year 2025 budget and information from the District's consulting engineer. The CIP includes approximately \$95.7 million in total future capital investments. Major projects include the Collection System Sea Level Rise Elevation project, Effluent Filtration Upgrades, Vacuum System Monitoring, EQ Tank Headworks, and other improvements, renewals, and replacements. The financial forecast assumes the anticipated CIP will be funded through a combination of grant revenues and internal resources, such as existing cash reserves, R&R deposits, and rate revenues.
9. The District's only outstanding loan is the 2005 SRF Loan WW46401P which matures in fiscal year 2029. Annual installment payments from the assessment programs cover nearly all remaining annual debt service requirements with the exception of the final payment in fiscal year 2029 assumed to be partially funded from rates. No additional debt was assumed during the Forecast Period.

CASH RESERVES AND RENEWAL & REPLACEMENT TRANSFERS

10. Unrestricted cash balances as of September 30, 2024, were estimated at approximately \$25.7 million based on projected operating results provided by District staff. Based on discussions with District staff, a minimum cash reserve target of 120 days of operating expenses plus two years of depreciation was targeted for the purpose of this analysis. The projected balances for the Forecast Period are shown in Table 6. The District is anticipated to approximately meet this target by 2034 assuming the proposed rate increases are implemented.
11. Typically, an important revenue requirement to consider are the annual rate revenues available to fund capital investments, often referred to as *pay-as-you-go* funding. In the prior study, as the majority of the CIP was grant funded, rates were set to only recover operating expenses. However, with the overall capital needs of the District increasing and expectations of future grant proceeds becoming less available, an increased reliance on pay-as-you-go funding will be necessary. On average, the annual pay-as-you-go funding generated in the forecast is approximately \$828,000 per year or 8% of annual retail rate revenues assuming the proposed rate increases are implemented.

PROPOSED RATE SCENARIOS

During the study, District staff directed Raftelis to evaluate the effect on rates of removing the residential sewer billing cap, which is currently set at 12,000 gallons per month per residential unit. Sewer billing caps are often put in place to recognize that excess residential flows, beyond what is considered essential indoor use, are not entering the wastewater system (likely due to activities such as irrigation, car-washing, filling swimming pools etc.,) Therefore, a utility may put in place sewer cap which represents the estimated threshold where usage above that level is likely outdoor usage. However, customer attributes and usage patterns vary among communities so the establishment and level at which a billing cap is set is a community specific policy decision.

An analysis of customer data from fiscal year 2023 showed that removal of the residential sewer billing cap would generate approximately \$200,000 per year in additional revenues. To generate approximately the same revenues identified under the existing billing cap policy (the “Base Case”), the average monthly bill could be reduced by a cumulative \$1.25 per month by fiscal year 2029 if the sewer billing cap was removed as shown below and on Table 8.

Description	Existing	2025	2026	2027	2028	2029
Maintain Billing Cap (Base Case)						
Bill at 4,000 Gallons	\$44.17	\$47.67	\$51.17	\$54.67	\$58.17	\$61.67
Monthly Change (\$)	N/A	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50
Remove Billing Cap						
Bill at 4,000 Gallons	\$44.17	\$47.42	\$50.67	\$53.92	\$57.17	\$60.42
Monthly Change (\$)	N/A	\$3.25	\$3.25	\$3.25	\$3.25	\$3.25

The Base Case rate increases result in an average annual increase in revenues of 6.9% per year through fiscal year 2029. Removing the billing cap would result in an immediate increase of about \$200,000 per year in revenue, and therefore the average annual increase in revenues would be only 6.5% through fiscal year 2029. Under either scenario above, average annual increases of 3.1% per year are projected for fiscal years 2030 through 2034.

ALTERNATIVE RATE SCENARIOS

Following the October 15, 2025 board meeting, the District requested a second set of scenarios (the “Alternative Scenarios”) be developed assuming uniform bill increases over a ten-year period. The table below presents the alternative scenarios.

Description	Existing	2025	2026	2027	2028	2029
Maintain Billing Cap						
Bill at 4,000 Gallons	\$44.17	\$47.17	\$50.17	\$53.17	\$56.17	\$59.17
Monthly Change (\$)	N/A	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00
Remove Billing Cap						
Bill at 4,000 Gallons	\$44.17	\$46.92	\$49.67	\$52.42	\$55.17	\$57.92
Monthly Change (\$)	N/A	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75

The Alternative Scenarios result in lower average annual customer bills over the first five years compared with the proposed rate scenarios. However, the Alternative Scenarios result in higher rates by year ten

(2034). Additionally, the Alternative Scenarios result in lower cash balances throughout the forecast period and approximately \$2 million less cash in reserves by 2034. With the exception of fiscal year 2028, the alternative scenarios do maintain cash reserves of at least 365 days of operating expenses.

It should be noted that the tables and financial projections mentioned outside of this section of the report, including the appended tables, assume implementation of the proposed rate scenarios, not the Alternative Scenarios presented in this section.

CONCLUSIONS AND RECOMMENDATIONS

Based on the assumptions, considerations, and analyses as summarized herein, the District’s existing rates are not expected to recover the projected revenue requirements during the Forecast Period. The primary drivers of the recommended rate adjustments are due to increases in operating and maintenance expenses due to the effects of inflation and new regulatory requirements. Furthermore, an increased reliance on *pay-as-you-go* funding will be required to fully fund capital improvement plan as the availability of grant revenues diminishes while maintaining adequate levels of cash reserves for working capital and unforeseen expenditures.

Therefore, it is recommended that the District adopt one of the five-year rate plans as detailed below and review the revenue sufficiency forecast in three to five years, or as any significant changes occur.

Description	Existing	2025 [1]	2026	2027	2028	2029
Proposed Rate Scenarios:						
Maintain Billing Cap						
Monthly Base Rate per EDU	\$27.13	\$29.27	\$31.41	\$33.55	\$35.69	\$37.83
Usage Charge per 1,000 Gallons	\$4.26	\$4.60	\$4.94	\$5.28	\$5.62	\$5.96
Remove Billing Cap						
Monthly Base Rate per EDU	\$27.13	\$29.14	\$31.15	\$33.16	\$35.17	\$37.18
Usage Charge per 1,000 Gallons	\$4.26	\$4.57	\$4.88	\$5.19	\$5.50	\$5.81
Alternative Rate Scenarios:						
Maintain Billing Cap						
Monthly Base Rate per EDU	\$27.13	\$28.97	\$30.81	\$32.65	\$34.49	\$36.33
Usage Charge per 1,000 Gallons	\$4.26	\$4.55	\$4.84	\$5.13	\$5.42	\$5.71
Remove Billing Cap						
Monthly Base Rate per EDU	\$27.13	\$28.80	\$30.47	\$32.14	\$33.81	\$35.48
Usage Charge per 1,000 Gallons	\$4.26	\$4.53	\$4.80	\$5.07	\$5.34	\$5.61

[1] Fiscal year 2025 rates are anticipated to be effective January 1, 2025.

Table 1

**Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study**

**Projection of Wastewater Rate Revenue Under Existing Rates and
Revenues/Contributions from the Islamorada Agreement**

Line No.	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
RETAIL WASTEWATER SERVICE											
<u>Revenue from Residential Base Rates</u>											
1	Average Monthly EDUs Available [1]	9,290	9,290	9,290	9,290	9,290	9,290	9,290	9,290	9,290	9,290
2	Monthly Base Rate per EDU	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13
3	Annual Base Rate Revenue	\$ 3,024,486	\$ 3,024,486	\$ 3,024,486	\$ 3,024,486	\$ 3,024,486	\$ 3,024,486	\$ 3,024,486	\$ 3,024,486	\$ 3,024,486	\$ 3,024,486
<u>Revenue from Residential Usage Charges</u>											
4	Annual Revenue-Gallons (000s) [1]	351,274	351,274	351,274	351,274	351,274	351,274	351,274	351,274	351,274	351,274
5	Usage Charge per 1,000 Gallons	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26
6	Annual Usage Charge Revenue (rounded)	\$ 1,496,429	\$ 1,496,429	\$ 1,496,429	\$ 1,496,429	\$ 1,496,429	\$ 1,496,429	\$ 1,496,429	\$ 1,496,429	\$ 1,496,429	\$ 1,496,429
<u>Revenue from Non-residential Base Rates</u>											
7	Average Monthly EDUs Available [1]	5,788	5,829	5,864	5,893	5,917	5,934	5,946	5,952	5,952	5,952
8	Monthly Base Rate per EDU	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13	\$ 27.13
9	Annual Base Rate Revenue (rounded)	\$ 1,884,392	\$ 1,897,583	\$ 1,908,969	\$ 1,918,513	\$ 1,926,187	\$ 1,931,966	\$ 1,935,830	\$ 1,937,766	\$ 1,937,766	\$ 1,937,766
<u>Revenue from Non-residential Usage Charges</u>											
10	Annual Revenue-Gallons (000s) [1]	290,188	292,219	293,973	295,442	296,624	297,514	298,109	298,407	298,407	298,407
11	Usage Charge per 1,000 Gallons	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26
12	Annual Usage Charge Revenue (rounded)	\$ 1,236,201	\$ 1,244,854	\$ 1,252,323	\$ 1,258,585	\$ 1,263,619	\$ 1,267,410	\$ 1,269,945	\$ 1,271,215	\$ 1,271,215	\$ 1,271,215
13	Annual Retail Revenue Under Existing Rates	\$ 7,641,508	\$ 7,663,352	\$ 7,682,207	\$ 7,698,013	\$ 7,710,721	\$ 7,720,291	\$ 7,726,690	\$ 7,729,896	\$ 7,729,896	\$ 7,729,896
ISLAMORADA AGREEMENT REVENUES [2]											
<u>Revenue from Islamorada Flow (Flow Charge)</u>											
14	Annual Treated Flow (000s Gallons) [1]	275,931	276,483	277,036	277,590	278,146	278,702	279,259	279,818	280,377	280,938
15	Flow Charge per 1,000 Gallons	\$ 4.30	\$ 4.30	\$ 4.30	\$ 4.30	\$ 4.30	\$ 4.30	\$ 4.30	\$ 4.30	\$ 4.30	\$ 4.30
16	Flow Charge Revenue (rounded)	\$ 1,186,505	\$ 1,188,878	\$ 1,191,256	\$ 1,193,638	\$ 1,196,026	\$ 1,198,418	\$ 1,200,815	\$ 1,203,216	\$ 1,205,623	\$ 1,208,034
<u>Revenue from Islamorada RTPRR Fund Contribution</u>											
17	Annual Treated Flow (000s Gallons) [1]	275,931	276,483	277,036	277,590	278,146	278,702	279,259	279,818	280,377	280,938
18	Rate per 1,000 Gallons	\$ 0.35	\$ 0.35	\$ 0.35	\$ 0.35	\$ 0.35	\$ 0.35	\$ 0.35	\$ 0.35	\$ 0.35	\$ 0.35
19	Annual RTPRR Fund Contribution (rounded)	\$ 96,600	\$ 96,800	\$ 97,000	\$ 97,200	\$ 97,400	\$ 97,500	\$ 97,700	\$ 97,900	\$ 98,100	\$ 98,300
<u>Revenue from Islamorada Insurance Surcharge</u>											
20	Property Insurance	\$ 216,616	\$ 227,447	\$ 238,819	\$ 250,760	\$ 263,298	\$ 276,463	\$ 290,286	\$ 304,800	\$ 320,040	\$ 336,043
21	Customer Capacity Allocation %	32.00%	32.00%	32.00%	32.00%	32.00%	32.00%	32.00%	32.00%	32.00%	32.00%
22	Annual Usage Charge Revenue (rounded)	\$ 69,300	\$ 72,800	\$ 76,400	\$ 80,200	\$ 84,300	\$ 88,500	\$ 92,900	\$ 97,500	\$ 102,400	\$ 107,500

Footnotes:

- [1] Projections based on historical customer billing information provided by KLWTD staff.
[2] Amounts calculated from information contained in the Islamorada Agreement.

Table 2
Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Summary of Annual Assessment Revenue by Program

Line No.	Fiscal Year	Annual Assessment Revenue by Assessment Program (Initial Calendar Year)										Gross Assessments	Statutory Discount	Net Assessments
		2005	2006	2007	2008	2009	2012	2013	2016					
1	2019	\$ 214,782	\$ 854,876	\$ 1,001,238	\$ 982,514	\$ 723,345	\$ 82,864	\$ 26,706	\$ 44,898	\$ 3,931,223	\$ (157,822)	\$ 3,773,401		
2	2020	209,659	834,622	982,754	1,004,725	715,198	79,607	26,376	44,449	3,897,391	(155,896)	3,741,495		
3	2021	204,605	814,977	960,155	982,140	699,475	77,966	25,843	43,602	3,808,763	(152,351)	3,656,413		
4	2022	195,007	777,297	921,858	939,158	666,147	75,708	25,310	41,021	3,641,507	(145,660)	3,495,847		
5	2023	190,069	758,098	899,637	917,052	650,829	74,080	24,777	40,208	3,554,751	(142,190)	3,412,561		
6	2024	194,019	750,948	881,570	892,029	648,075	74,119	24,494	38,690	3,503,945	(140,153)	3,363,792		
7	2025	189,249	732,901	860,878	871,582	633,546	72,561	23,990	37,939	3,422,646	(136,899)	3,285,747		
8	2026	0	714,847	840,183	851,109	619,032	71,006	23,486	37,188	3,156,850	(126,274)	3,030,577		
9	2027	0	0	819,508	830,659	604,488	69,448	22,982	36,438	2,383,523	(95,352)	2,288,171		
10	2028	0	0	0	810,200	589,972	67,891	22,479	35,687	1,526,229	(61,056)	1,465,173		
11	2029	0	0	0	0	575,443	66,335	21,975	34,936	698,689	(27,952)	670,736		
12	2030	0	0	0	0	0	64,778	21,471	34,185	120,434	(4,817)	115,617		
13	2031	0	0	0	0	0	63,221	20,967	33,435	117,622	(4,705)	112,918		
14	2032	0	0	0	0	0	61,665	20,463	32,684	114,811	(4,593)	110,219		
15	2033	0	0	0	0	0	0	19,959	31,933	51,892	(2,076)	49,816		
16	2034	0	0	0	0	0	0	0	31,183	31,183	(1,247)	29,935		
17	2035	0	0	0	0	0	0	0	30,432	30,432	(1,217)	29,215		
18	2036	0	0	0	0	0	0	0	29,681	29,681	(1,187)	28,494		
19	2037	0	0	0	0	0	0	0	0	0	0	0		
20	Total	\$ 1,397,390	\$ 6,238,565	\$ 8,167,781	\$ 9,081,170	\$ 7,125,550	\$ 1,001,249	\$ 351,278	\$ 658,591	\$ 34,021,573	\$ (1,361,448)	\$ 32,660,125		

Table 3
Key Largo Wastewater Treatment District, Florida
Wastewater System

2024 Revenue Sufficiency Study

Development of Other Operating Revenues - Miscellaneous

Line No.	Description	Escalation	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
1	Other Miscellaneous Revenue	Constant	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
2	Other Operating Revenues		<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>	<u>\$ 50,000</u>

Table 4
Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Projected Operating Expenses

Line No.	Description	Adjusted 2025	Escalation Reference	2026	2027	2028	2029	2030	2031	2032	2033	2034
Administration												
1	Payroll-Board Meeting Compensation	\$ 69,076	Labor	\$ 71,148	\$ 73,283	\$ 75,481	\$ 77,746	\$ 80,078	\$ 82,480	\$ 84,955	\$ 87,503	\$ 90,129
2	Payroll-Administration	558,243	Labor	574,990	592,240	610,007	628,307	647,157	666,571	686,568	707,166	728,380
3	Overtime	0	Labor	0	0	0	0	0	0	0	0	0
4	Compensated Absences Expense	0	Labor	0	0	0	0	0	0	0	0	0
5	Payroll Taxes	47,990	Labor	49,430	50,913	52,440	54,013	55,634	57,303	59,022	60,792	62,616
6	Retirement Contributions	37,639	Labor	38,768	39,931	41,129	42,363	43,634	44,943	46,291	47,680	49,110
7	Group Health Premiums	79,060	Insure - Health	83,013	87,164	91,522	96,098	100,903	105,948	111,245	116,808	122,648
8	Group Life Insurance	904	Insure - Gen	949	997	1,046	1,099	1,154	1,211	1,272	1,336	1,402
9	Employee Benefit Administration Fees	500	Labor	515	530	546	563	580	597	615	633	652
10	Workers Compensation Insurance	1,250	Insure - Health	1,313	1,378	1,447	1,519	1,595	1,675	1,759	1,847	1,939
11	Unemployment Compensation	10,000	Labor	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
12	Professional Services-Misc	17,000	Inflation	17,374	17,756	18,147	18,546	18,954	19,371	19,797	20,233	20,678
13	Professional Services Outsourced HR Consultant	0	Inflation	0	0	0	0	0	0	0	0	0
14	Professional Svs: Alarm & Fire Monitoring	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
15	Professional Svs: Fire Systems Maintenance Services	3,000	Inflation	3,066	3,133	3,202	3,273	3,345	3,418	3,494	3,570	3,649
16	Professional Svs: Computer Support	23,100	Inflation	23,608	24,128	24,658	25,201	25,755	26,322	26,901	27,493	28,098
17	Professional Svs: IT Security Services	42,500	Inflation	43,435	44,391	45,367	46,365	47,385	48,428	49,493	50,582	51,695
18	Professional Services: Safety Training	1,000	Labor	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
19	Professional Svs: Mobile Device Mgmt	4,100	Inflation	4,190	4,282	4,377	4,473	4,571	4,672	4,775	4,880	4,987
20	Professional Svs: CDM 457(b) Admin Fee	3,500	Inflation	3,577	3,656	3,736	3,818	3,902	3,988	4,076	4,166	4,257
21	Professional Svs:Database Computer Supp	0	Inflation	0	0	0	0	0	0	0	0	0
22	Professional Svs:FKAA Billing Services	315,000	EDUInf	322,781	330,656	338,592	346,583	354,624	362,709	370,834	378,992	387,330
23	Professional Svs: Tax Collector Fees	11,000	Constant	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000
24	Professional Svs: Tax Roll Svc	1,700	Inflation	1,737	1,776	1,815	1,855	1,895	1,937	1,980	2,023	2,068
25	Professional Svs: Engineering	10,000	Inflation	10,220	10,445	10,675	10,909	11,149	11,395	11,645	11,902	12,163
26	Professional Svs: Lobbyists	0	Inflation	0	0	0	0	0	0	0	0	0
27	Professional Svs: Lobbyists-Henderson	60,100	Inflation	61,422	62,773	64,155	65,566	67,008	68,483	69,989	71,529	73,103
28	Professional Svs: Lobbyists-Hicks	45,000	Inflation	45,990	47,002	48,036	49,093	50,176	51,276	52,405	53,557	54,736
29	Professional Svs: Legal-General Counsel	99,577	Inflation	101,768	104,007	106,295	108,633	111,023	113,466	115,962	118,513	121,120
30	Professional Svs: Legal-Outside Counsel	20,000	Inflation	20,440	20,890	21,349	21,819	22,299	22,790	23,291	23,803	24,327
31	Professional Svs: Legal - Outside Litigation	0	Inflation	0	0	0	0	0	0	0	0	0
32	Professional Svs: Accounting/Audit Svs	38,000	Inflation	38,836	39,690	40,564	41,456	42,368	43,300	44,253	45,226	46,221
33	Professional Svs: Finance Director	89,620	Inflation	91,592	93,607	95,666	97,771	99,922	102,120	104,367	106,663	109,009
34	Professional Svs: General Manager Svs.	157,111	Inflation	160,567	164,100	167,710	171,400	175,171	179,024	182,963	186,988	191,102
35	BSA Software	0	Inflation	0	0	0	0	0	0	0	0	0
36	ESRI	11,500	Inflation	11,753	12,012	12,276	12,546	12,822	13,104	13,392	13,687	13,988
37	Google Apps	16,000	Inflation	16,352	16,712	17,079	17,455	17,839	18,232	18,633	19,043	19,462
38	GPServ/Trimble	0	Inflation	0	0	0	0	0	0	0	0	0
39	Red Hat Server	0	Inflation	0	0	0	0	0	0	0	0	0
40	M-Files	3,000	Inflation	3,066	3,133	3,202	3,273	3,345	3,418	3,494	3,570	3,649
41	General Manager Travel & Training	12,000	Inflation	12,264	12,534	12,810	13,091	13,379	13,674	13,975	14,282	14,596
42	Clerk Travel & Training	2,500	Inflation	2,555	2,611	2,669	2,727	2,787	2,849	2,911	2,975	3,041
43	Other Travel & Training	20,000	Inflation	20,440	20,890	21,349	21,819	22,299	22,790	23,291	23,803	24,327
44	Advanced Cellular Svc / AT&T FirstNet	6,500	Inflation	6,643	6,789	6,939	7,091	7,247	7,407	7,570	7,736	7,906
45	Static Cellular Data Services	0	Inflation	0	0	0	0	0	0	0	0	0
46	Internet Services (Comcast and/or AT&T)	7,000	Inflation	7,154	7,311	7,472	7,637	7,805	7,976	8,152	8,331	8,514
47	Telephones (AT&T)	1,200	Inflation	1,226	1,253	1,281	1,309	1,338	1,367	1,397	1,428	1,460
48	VOIP	3,600	Inflation	3,679	3,760	3,843	3,927	4,014	4,102	4,192	4,285	4,379
49	GPS / Fleet Services	275	Inflation	281	287	294	300	307	313	320	327	334
50	IT:Hardware Repair-Parts&Maint Upgrades	7,000	Repair	7,280	7,571	7,874	8,189	8,517	8,857	9,212	9,580	9,963
51	IT: Software and Software Upgrades	36,720	Inflation	37,528	38,353	39,197	40,060	40,941	41,842	42,762	43,703	44,664
52	Business Continuity & IT Disaster Recovery & Backup	17,000	Inflation	17,374	17,756	18,147	18,546	18,954	19,371	19,797	20,233	20,678

Table 4
Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Projected Operating Expenses

Line No.	Description	Adjusted 2025	Escalation Reference	2026	2027	2028	2029	2030	2031	2032	2033	2034
53	Postage & Delivery Expense	2,700	Inflation	2,759	2,820	2,882	2,946	3,010	3,077	3,144	3,213	3,284
54	Water (Utility)-District Office	600	Inflation	613	627	640	655	669	684	699	714	730
55	Facility Cleaning	21,000	Inflation	21,462	21,934	22,417	22,910	23,414	23,929	24,455	24,993	25,543
56	Solid Waste	1,700	Inflation	1,737	1,776	1,815	1,855	1,895	1,937	1,980	2,023	2,068
57	Electricity	4,400	Power	4,620	4,851	5,094	5,348	5,616	5,896	6,191	6,501	6,826
58	Rents & Leases	1,000	Inflation	1,022	1,044	1,067	1,091	1,115	1,139	1,165	1,190	1,216
59	Insurance (excluding Workers Comp & Health)	433,232	Insure - Gen	454,894	477,638	501,520	526,596	552,926	580,572	609,601	640,081	672,085
60	Non-Professional Legal Fees	0	Inflation	0	0	0	0	0	0	0	0	0
61	Repairs & Maintenance: Grounds Keeping	5,000	Repair	5,200	5,408	5,624	5,849	6,083	6,327	6,580	6,843	7,117
62	Repairs & Maintenance: Vehicles	1,500	Repair	1,560	1,622	1,687	1,755	1,825	1,898	1,974	2,053	2,135
63	Repairs & Maintenance: Bldgs & Equip	30,000	Repair	31,200	32,448	33,746	35,096	36,500	37,960	39,478	41,057	42,699
64	Copier	7,260	Inflation	7,420	7,583	7,750	7,920	8,095	8,273	8,455	8,641	8,831
65	Advertisements	10,000	Inflation	10,220	10,445	10,675	10,909	11,149	11,395	11,645	11,902	12,163
66	Storm Supplies & Preparation	2,000	Inflation	2,044	2,089	2,135	2,182	2,230	2,279	2,329	2,380	2,433
67	Bank Fees	500	Inflation	511	522	534	545	557	570	582	595	608
68	Office Supplies	12,000	Inflation	12,264	12,534	12,810	13,091	13,379	13,674	13,975	14,282	14,596
69	Printings	3,000	Inflation	3,066	3,133	3,202	3,273	3,345	3,418	3,494	3,570	3,649
70	Office Furnishings	5,000	Inflation	5,110	5,222	5,337	5,455	5,575	5,697	5,823	5,951	6,082
71	Employee Clothing/Uniforms	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
72	Regulatory, Permit & Recording Fees	1,000	Inflation	1,022	1,044	1,067	1,091	1,115	1,139	1,165	1,190	1,216
73	Fuel: Vehicles	1,000	Commodity ¹	1,023	1,046	1,070	1,094	1,118	1,143	1,168	1,194	1,220
74	Board: Travel, Admin, Office Supplies	6,000	Inflation	6,132	6,267	6,405	6,546	6,690	6,837	6,987	7,141	7,298
75	Clerk Dues	350	Inflation	358	366	374	382	390	399	408	417	426
76	Other Dues and Subscriptions	11,000	Inflation	11,242	11,489	11,742	12,000	12,264	12,534	12,810	13,092	13,380
77	Professional Svcs: Utility Rate Consult	25,000	Inflation	25,550	26,112	26,687	27,274	27,874	28,487	29,114	29,754	30,409
78	Calcenteric	0	Inflation	0	0	0	0	0	0	0	0	0
79	Low Income Assistance	0	Inflation	0	0	0	0	0	0	0	0	0
80	Fuel: Generators	0	Commodity ¹	0	0	0	0	0	0	0	0	0
82	Capital Outlay: Physical Security/Access	0	Eliminate	0	0	0	0	0	0	0	0	0
83	Capital: Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
84	Capital Outlay - Furnishings	0	Eliminate	0	0	0	0	0	0	0	0	0
85	Capital Outlay: Computer Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
86	Capital Outlay: Vehicles	0	Eliminate	0	0	0	0	0	0	0	0	0
87	Capital Outlay - Parking Lot / Sidewalk Rehab	0	Eliminate	0	0	0	0	0	0	0	0	0
88	Capital Outlay: IT Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
89	Subtotal Administrative Expenses	\$ 2,478,507		\$ 2,554,750	\$ 2,633,525	\$ 2,714,895	\$ 2,798,955	\$ 2,885,803	\$ 2,975,546	\$ 3,068,290	\$ 3,164,151	\$ 3,263,397
90	Plant Payroll-Plant	\$ 499,307	Labor	\$ 514,286	\$ 529,715	\$ 545,606	\$ 561,974	\$ 578,834	\$ 596,199	\$ 614,085	\$ 632,507	\$ 651,482
91	Overtime	0	Labor	0	0	0	0	0	0	0	0	0
92	Compensated Absences Expense	0	Labor	0	0	0	0	0	0	0	0	0
93	Payroll Taxes	38,197	Labor	39,343	40,523	41,739	42,991	44,281	45,609	46,977	48,387	49,838
94	Retirement Contributions	28,539	Labor	29,395	30,277	31,185	32,121	33,085	34,077	35,099	36,152	37,237
95	Group Health Premiums	79,060	Insure - Health	83,013	87,164	91,522	96,098	100,903	105,948	111,245	116,808	122,648
96	Group Life Insurance	494	Insure - Gen	519	545	572	600	630	662	695	730	766
97	Workers Compensation Insurance	10,250	Insure - Health	10,763	11,301	11,866	12,459	13,082	13,736	14,423	15,144	15,901
98	Professional Svcs: Alarm & Fire Monitoring	1,600	Inflation	1,635	1,671	1,708	1,746	1,784	1,823	1,863	1,904	1,946
99	Professional Svcs: Fire Systems Maintenance	6,210	Inflation	6,347	6,486	6,629	6,775	6,924	7,076	7,232	7,391	7,554
100	Professional Services	0	Inflation	0	0	0	0	0	0	0	0	0
101	Professional Svcs: Managed IT Services	23,100	Inflation	23,608	24,128	24,658	25,201	25,755	26,322	26,901	27,493	28,098
102	Professional Services: Safety Training	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
103	Professional Services: Engineering	75,000	Inflation	76,650	78,336	80,060	81,821	83,621	85,461	87,341	89,262	91,226

Table 4

Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Projected Operating Expenses

Line No.	Description	Adjusted 2025	Escalation Reference	2026	2027	2028	2029	2030	2031	2032	2033	2034
104	Engineering: Islamorada Misc Engineering	20,000	Inflation	20,440	20,890	21,349	21,819	22,299	22,790	23,291	23,803	24,327
105	Training, Education & Travel	5,000	Inflation	5,110	5,222	5,337	5,455	5,575	5,697	5,823	5,951	6,082
106	Advanced Cellular Svc / AT&T FirstNet	1,000	Inflation	1,022	1,044	1,067	1,091	1,115	1,139	1,165	1,190	1,216
107	Internet Services (Comcast & AT&T)	6,300	Inflation	6,439	6,580	6,725	6,873	7,024	7,179	7,337	7,498	7,663
108	Telephones (AT&T)	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
109	GPS / Fleet Services	275	Inflation	281	287	294	300	307	313	320	327	334
110	Radios / P25 MCISO Agreement	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
111	Plant Gate Data Service	6,000	Inflation	6,132	6,267	6,405	6,546	6,690	6,837	6,987	7,141	7,298
112	IT: Hardware Repair Parts Maintenance & Upgrades	13,500	Inflation	13,797	14,101	14,411	14,728	15,052	15,383	15,721	16,067	16,421
113	Business Continuity & IT Disaster Recovery & Backup	28,000	Inflation	28,616	29,246	29,889	30,547	31,219	31,905	32,607	33,325	34,058
114	Postage & Delivery Expense	5,200	FlowInf	5,331	5,463	5,596	5,730	5,864	5,998	6,133	6,268	6,406
116	Facility Cleaning	4,500	Inflation	4,599	4,700	4,804	4,909	5,017	5,128	5,240	5,356	5,474
117	Solid Waste	12,000	Inflation	12,264	12,534	12,810	13,091	13,379	13,674	13,975	14,282	14,596
118	Electricity - Plant	450,000	FlowPower - IM	473,850	498,775	524,860	552,153	580,644	610,431	641,563	674,026	708,132
119	Rents & Leases	7,000	Inflation	7,154	7,311	7,472	7,637	7,805	7,976	8,152	8,331	8,514
120	Rents & Leases: Mobile Filter Rental	0	Inflation	0	0	0	0	0	0	0	0	0
121	Repairs & Maintenance	0	Repair	0	0	0	0	0	0	0	0	0
122	Repairs & Maintenance: Grounds Keeping	6,000	Repair	6,240	6,490	6,749	7,019	7,300	7,592	7,896	8,211	8,540
123	Repairs & Maintenance: Vehicles	1,000	Repair	1,040	1,082	1,125	1,170	1,217	1,265	1,316	1,369	1,423
124	Repairs & Maintenance: Equipment	300,000	Repair	312,000	324,480	337,459	350,958	364,996	379,596	394,780	410,571	426,994
125	Repairs & Maintenance: Buildings	40,000	Repair	41,600	43,264	44,995	46,794	48,666	50,613	52,637	54,743	56,932
126	Storm Supplies & Preparation	2,000	Inflation	2,044	2,089	2,135	2,182	2,230	2,279	2,329	2,380	2,433
127	Office Supplies	3,500	Inflation	3,577	3,656	3,736	3,818	3,902	3,988	4,076	4,166	4,257
128	Office Furnishings	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
129	Safety Supplies	3,500	Inflation	3,577	3,656	3,736	3,818	3,902	3,988	4,076	4,166	4,257
130	Employee Uniforms / Clothing	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
131	Lab Services (sample analysis)	50,000	Inflation	51,100	52,224	53,373	54,547	55,747	56,974	58,227	59,508	60,817
132	Sludge Handling	840,000	FlowSlud - IM	884,520	931,046	979,739	1,030,686	1,083,869	1,139,472	1,197,585	1,258,183	1,321,847
133	Chemicals	800,000	FlowChem - IM	842,400	886,710	933,085	981,606	1,032,256	1,085,211	1,140,557	1,198,269	1,258,902
134	Tools	0	Inflation	0	0	0	0	0	0	0	0	0
135	Lab Supplies	40,000	Inflation	40,880	41,779	42,699	43,638	44,598	45,579	46,582	47,607	48,654
136	Supplies & Tools (plant operations)	12,000	Inflation	12,264	12,534	12,810	13,091	13,379	13,674	13,975	14,282	14,596
137	Immunizations	1,200	Inflation	1,226	1,253	1,281	1,309	1,338	1,367	1,397	1,428	1,460
138	Regulatory/ Permit Fees	6,500	Inflation	6,643	6,789	6,939	7,091	7,247	7,407	7,570	7,736	7,906
139	Fuel: Equipment	1,000	Inflation	1,022	1,044	1,067	1,091	1,115	1,139	1,165	1,190	1,216
140	Fuel: Vehicles	1,000	Commodity1	1,023	1,046	1,070	1,094	1,118	1,143	1,168	1,194	1,220
141	Fuel: Generators	5,500	Commodity1	5,625	5,753	5,883	6,015	6,150	6,287	6,426	6,567	6,712
142	Dues & Subscriptions	400	Inflation	409	418	427	436	446	456	466	476	487
144	Capital Outlay: Plant Security System	0	Eliminate	0	0	0	0	0	0	0	0	0
145	Capital Outlay - Vehicles	0	Eliminate	0	0	0	0	0	0	0	0	0
146	Capital Outlay: Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
147	Mechanical Integrity Testing Project	0	Inflation	0	0	0	0	0	0	0	0	0
148	Capital Outlay: Buildings	0	Eliminate	0	0	0	0	0	0	0	0	0
149	Capital Outlay: IT Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
150	Capital Outlay: Computer Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
151	Subtotal Plant	\$ 3,442,382		\$ 3,596,215	\$ 3,756,495	\$ 3,923,678	\$ 4,098,028	\$ 4,279,563	\$ 4,468,794	\$ 4,666,009	\$ 4,871,208	\$ 5,085,906

Table 4
Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Projected Operating Expenses

Line No.	Description	Adjusted 2025	Escalation Reference	2026	2027	2028	2029	2030	2031	2032	2033	2034
152	Field											
153	Payroll-Field	\$ 1,336,596	0	\$ 1,376,694	\$ 1,417,995	\$ 1,460,535	\$ 1,504,351	\$ 1,549,481	\$ 1,595,966	\$ 1,643,844	\$ 1,693,160	\$ 1,743,955
154	Overtime	0	0	0	0	0	0	0	0	0	0	0
155	Compensated Absences Expense	0	0	0	0	0	0	0	0	0	0	0
156	Payroll Taxes	102,250	0	105,318	108,477	111,731	115,083	118,536	122,092	125,755	129,527	133,413
157	Retirement Contributions	78,420	0	80,773	83,196	85,692	88,262	90,910	93,638	96,447	99,340	102,320
158	Group Health Premiums	224,002	0	235,202	246,962	259,310	272,276	285,890	300,184	315,193	330,953	347,501
159	Group Life Insurance	1,397	0	1,467	1,540	1,617	1,698	1,783	1,872	1,966	2,064	2,167
160	Workers Compensation Insurance	24,000	0	25,200	26,460	27,783	29,172	30,631	32,162	33,770	35,459	37,232
161	Prof. Svs: Alarm & Fire Monitoring	2,500	0	2,555	2,611	2,669	2,727	2,787	2,849	2,911	2,975	3,041
162	Professional Services	0	0	0	0	0	0	0	0	0	0	0
163	Professional Services: Fire Systems Maintenance Services	17,000	0	17,374	17,756	18,147	18,546	18,954	19,371	19,797	20,233	20,678
164	Professional Svs: Managed IT Services	23,100	0	23,608	24,128	24,658	25,201	25,755	26,322	26,901	27,493	28,098
165	Solar Maintenance Contract (new)	12,500	0	12,775	13,056	13,343	13,637	13,937	14,243	14,557	14,877	15,204
166	Professional Services: Safety Training	3,500	0	3,577	3,656	3,736	3,818	3,902	3,988	4,076	4,166	4,257
167	Professional Services: Engineering	75,000	0	76,650	78,336	80,060	81,821	83,621	85,461	87,341	89,262	91,226
168	Professional Services: GIS Upgrade	46,440	0	47,462	48,506	49,573	50,664	51,778	52,917	54,081	55,271	56,487
169	Sea Level Rise Engineering Fees	0	0	0	0	0	0	0	0	0	0	0
170	GPS/Trimble	4,100	0	4,190	4,282	4,377	4,473	4,571	4,672	4,775	4,880	4,987
171	Training, Education & Travel	11,000	0	11,242	11,489	11,742	12,000	12,264	12,534	12,810	13,092	13,380
172	Advanced Cellular Svc / AT&T FirstNet	7,000	0	7,154	7,311	7,472	7,637	7,805	7,976	8,152	8,331	8,514
173	Internet Services (Comcast & AT&T)	19,000	0	19,418	19,845	20,282	20,728	21,184	21,650	22,126	22,613	23,111
174	Telephones (AT&T)	7,800	0	7,972	8,147	8,326	8,509	8,697	8,888	9,083	9,282	9,488
175	GPS / Fleet Services	2,800	0	2,862	2,925	2,989	3,055	3,122	3,191	3,261	3,332	3,406
176	Radios / P25 MSCO Agreement	3,750	0	3,833	3,917	4,003	4,091	4,181	4,273	4,367	4,463	4,561
177	Water	0	0	0	0	0	0	0	0	0	0	0
178	IT: Hardware Repair-Parts Maintenance & Upgrades	6,000	0	6,132	6,267	6,405	6,546	6,690	6,837	6,987	7,141	7,298
179	Business Continuity & IT Disaster Recovery & Backup	17,000	0	17,374	17,756	18,147	18,546	18,954	19,371	19,797	20,233	20,678
180	Water- Vac Station A	450	0	460	470	480	491	502	513	524	536	547
181	Water- Vac Station D	450	0	460	470	480	491	502	513	524	536	547
182	Water- Vac Station F	450	0	460	470	480	491	502	513	524	536	547
183	Water- Vac Station G	450	0	460	470	480	491	502	513	524	536	547
184	Water- Vac Station I - house	450	0	460	470	480	491	502	513	524	536	547
185	Water- Vac Station I - office	800	0	818	836	854	873	892	912	932	952	973
186	Water- Vac Station JK	550	0	562	574	587	600	613	627	640	655	669
187	Water- Humpty Dumpty	300	0	307	313	320	327	334	342	349	357	365
188	Water- Harborage	300	0	307	313	320	327	334	342	349	357	365
189	Water- Peter Pan	300	0	307	313	320	327	334	342	349	357	365
190	Water- Coastal WW/Largo Pk Lift Sta	300	0	307	313	320	327	334	342	349	357	365
191	Facility Cleaning	11,000	0	11,242	11,489	11,742	12,000	12,264	12,534	12,810	13,092	13,380
192	Solid Waste	3,000	0	3,066	3,133	3,202	3,273	3,345	3,418	3,494	3,570	3,649
193	Electricity	0	0	0	0	0	0	0	0	0	0	0
194	Electricity- Vac Station A	75,000	0	78,750	82,688	86,822	91,163	95,721	100,507	105,533	110,809	116,350
195	Electricity- Vac Station D	75,000	0	78,750	82,688	86,822	91,163	95,721	100,507	105,533	110,809	116,350
196	Electricity- Vac Station E	50,000	0	52,500	55,125	57,881	60,775	63,814	67,005	70,355	73,873	77,566
197	Electricity- Vac Station F	2,500	0	2,625	2,756	2,894	3,039	3,191	3,350	3,518	3,694	3,878
198	Electricity- Vac Station G	35,000	0	36,750	38,588	40,517	42,543	44,670	46,903	49,249	51,711	54,296
199	Electricity- Vac Station I	15,000	0	15,750	16,538	17,360	18,233	19,144	20,101	21,107	22,162	23,270
200	Electricity- Vac Station I - house	2,000	0	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
201	Electricity- Vac Station I - office	2,000	0	2,100	2,205	2,315	2,431	2,553	2,680	2,814	2,955	3,103
202	Electricity- Vac Station JK	55,000	0	57,750	60,638	63,669	66,853	70,195	73,705	77,391	81,260	85,323
203	Electricity- Humpty Dumpty	1,000	0	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551
203	Electricity- Harborage	1,000	0	1,050	1,103	1,158	1,216	1,276	1,340	1,407	1,477	1,551

Table 4
Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Projected Operating Expenses

Line No.	Description	Adjusted 2025	Escalation Reference	2026	2027	2028	2029	2030	2031	2032	2033	2034
204	Electricity-Coastal WW/Largo Pk Lift Sta	1,200	Power	1,260	1,323	1,389	1,459	1,532	1,608	1,689	1,773	1,862
205	Electricity-Peter Pan/Tweedy Pie	800	Power	840	882	926	972	1,021	1,072	1,126	1,182	1,241
206	Rents & Leases	5,000	Inflation	5,110	5,222	5,337	5,455	5,575	5,697	5,823	5,951	6,082
207	Copier	1,980	Inflation	2,024	2,068	2,114	2,160	2,208	2,256	2,306	2,357	2,408
209	Repairs & Maintenance: Grounds Keeping	17,500	Repair	18,200	18,928	19,685	20,473	21,291	22,143	23,029	23,950	24,908
210	Repairs & Maintenance: Vehicles	25,000	Repair	26,000	27,040	28,122	29,246	30,416	31,633	32,898	34,214	35,583
211	Repairs & Maintenance: Equipment	220,000	Repair	228,800	237,952	247,470	257,369	267,664	278,370	289,505	301,085	313,129
212	Repairs & Maintenance: Buildings	25,000	Repair	26,000	27,040	28,122	29,246	30,416	31,633	32,898	34,214	35,583
213	Repairs & Maintenance: Vac System	100,000	Repair	104,000	108,160	112,486	116,986	121,665	126,532	131,593	136,857	142,331
214	Repairs & Maintenance: Vac System	2,000	Repair	2,080	2,163	2,250	2,340	2,433	2,531	2,632	2,737	2,847
215	Grinder Pump Monitoring	4,500	Inflation	4,599	4,700	4,804	4,909	5,017	5,128	5,240	5,356	5,474
216	Storm Supplies & Preparation	2,000	Inflation	2,044	2,089	2,135	2,182	2,230	2,279	2,329	2,380	2,433
217	Office Supplies	2,500	Inflation	2,555	2,611	2,669	2,727	2,787	2,849	2,911	2,975	3,041
218	Office Furnishings	3,000	Inflation	3,066	3,133	3,202	3,273	3,345	3,418	3,494	3,570	3,649
219	Safety Supplies	5,000	Inflation	5,110	5,222	5,337	5,455	5,575	5,697	5,823	5,951	6,082
220	Employee Uniforms / Clothing	3,200	Inflation	3,270	3,342	3,416	3,491	3,568	3,646	3,727	3,809	3,892
221	Supplies and Tools (field operations)	46,000	Inflation	47,012	48,046	49,103	50,184	51,288	52,416	53,569	54,748	55,952
222	Immunizations	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
223	Service Connection Adjustments	0	EDU	0	0	0	0	0	0	0	0	0
224	Fuel: Equipment	2,000	Commodity1	2,046	2,092	2,139	2,187	2,236	2,286	2,337	2,388	2,441
225	Fuel: Vehicles	40,000	Commodity1	40,912	41,841	42,786	43,749	44,729	45,722	46,732	47,761	48,811
226	Fuel: Generators	8,500	Commodity1	8,694	8,891	9,092	9,297	9,505	9,716	9,931	10,149	10,372
227	Dues & Subscriptions	100	Inflation	102	104	107	109	111	114	116	119	122
228	Tools	0	Inflation	0	0	0	0	0	0	0	0	0
229	Lateral Extensions	0	Eliminate	0	0	0	0	0	0	0	0	0
231	Capital Outlay: Security System	0	Eliminate	0	0	0	0	0	0	0	0	0
232	Cap Outlay - Generator Light Tower	0	Eliminate	0	0	0	0	0	0	0	0	0
233	Capital Outlay: Equipment & Machinery	0	Eliminate	0	0	0	0	0	0	0	0	0
234	Capital Outlay: Vehicles	0	Eliminate	0	0	0	0	0	0	0	0	0
235	Capital Outlay: Vacuum Pump Rebuild and Spares	0	Eliminate	0	0	0	0	0	0	0	0	0
236	Capital Outlay: Vactor	0	Eliminate	0	0	0	0	0	0	0	0	0
237	Capital Outlay: Sewage Pump replacement & Piping Modifications	0	Eliminate	0	0	0	0	0	0	0	0	0
238	Capital Outlay: IT Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
239	Capital Outlay: Spare Sewage Pumps VacSt	0	Eliminate	0	0	0	0	0	0	0	0	0
240	Capital Outlay: Sewer Letter System	0	Eliminate	0	0	0	0	0	0	0	0	0
241	Capital Outlay - Computer Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
242	Subtotal Field	\$ 2,874,235		\$ 2,972,475	\$ 3,074,307	\$ 3,179,873	\$ 3,289,317	\$ 3,402,794	\$ 3,520,455	\$ 3,642,472	\$ 3,769,017	\$ 3,900,276
243	Facilities											
244	Payroll-Facilities	\$ 598,289	Labor	\$ 616,238	\$ 634,725	\$ 653,767	\$ 673,380	\$ 693,581	\$ 714,388	\$ 735,820	\$ 757,895	\$ 780,631
245	Overtime	0	Labor	0	0	0	0	0	0	0	0	0
246	Compensated Absences Expense	0	Labor	0	0	0	0	0	0	0	0	0
247	Payroll Taxes	45,769	Labor	47,142	48,556	50,013	51,513	53,059	54,651	56,290	57,979	59,718
248	Retirement Contributions	35,897	Labor	36,974	38,083	39,226	40,402	41,614	42,863	44,149	45,473	46,837
249	Group Health Premiums	92,236	Insure - Health	96,848	101,690	106,775	112,113	117,719	123,605	129,785	136,275	143,088
250	Group Life Insurance	575	Insure - Gen	604	634	666	699	734	771	809	850	892
251	Workers Compensation Insurance	12,500	Insure - Health	13,125	13,781	14,470	15,194	15,954	16,751	17,589	18,468	19,392
252	Professional Svcs: Managed IT Services	23,100	Inflation	23,608	24,128	24,658	25,201	25,755	26,322	26,901	27,493	28,098
253	Professional Services: Safety Training	2,550	Inflation	2,606	2,663	2,722	2,782	2,843	2,906	2,970	3,035	3,102
254	Professional Services - Engineering	0	Inflation	0	0	0	0	0	0	0	0	0
255	Training, Education & Travel	10,000	Inflation	10,220	10,445	10,675	10,909	11,149	11,395	11,645	11,902	12,163
255	Advanced Cellular Service	0	Inflation	0	0	0	0	0	0	0	0	0

Table 4
Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Projected Operating Expenses

Line No.	Description	Adjusted 2025	Escalation Reference	2026	2027	2028	2029	2030	2031	2032	2033	2034
256	Advanced Cellular Svc / AT&T FirstNet	1,000	Inflation	1,022	1,044	1,067	1,091	1,115	1,139	1,165	1,190	1,216
257	GPS / Fleet Services	1,300	Inflation	1,329	1,358	1,388	1,418	1,449	1,481	1,514	1,547	1,581
258	Radios / P25 MCSO Agreement	1,875	Inflation	1,916	1,958	2,001	2,046	2,091	2,137	2,184	2,232	2,281
259	IT: Hardware Repair Parts Maintenance & Upgrades	3,000	Inflation	3,066	3,133	3,202	3,273	3,345	3,418	3,494	3,570	3,649
260	Bus. Cont. & IT Disaster Revry & Backup	8,600	Inflation	8,789	8,983	9,180	9,382	9,589	9,799	10,015	10,235	10,461
261	Facility Cleaning	4,500	Inflation	4,599	4,700	4,804	4,909	5,017	5,128	5,240	5,356	5,474
262	Repairs & Maintenance	0	Repair	0	0	0	0	0	0	0	0	0
263	Repairs & Maintenance: Vehicles	3,000	Repair	3,120	3,245	3,375	3,510	3,650	3,796	3,948	4,106	4,270
264	Repairs & Maintenance: Equipment	1,200	Repair	1,248	1,298	1,350	1,404	1,460	1,518	1,579	1,642	1,708
265	Office Supplies	1,000	Inflation	1,022	1,044	1,067	1,091	1,115	1,139	1,165	1,190	1,216
266	Office Furnishings	800	Inflation	818	836	854	873	892	912	932	952	973
267	Safety Supplies	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
268	Employee Uniforms / Clothing	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
269	Supplies & Tools	20,000	Inflation	20,440	20,890	21,349	21,819	22,299	22,790	23,291	23,803	24,327
270	Immunizations	1,500	Inflation	1,533	1,567	1,601	1,636	1,672	1,709	1,747	1,785	1,825
271	Fuel	0	Commodity1	0	0	0	0	0	0	0	0	0
272	Fuel: Vehicles	7,500	Commodity1	7,671	7,845	8,022	8,203	8,387	8,573	8,762	8,955	9,152
273	Tools	0	Inflation	0	0	0	0	0	0	0	0	0
275	Capital Outlay: Infrastructure	0	Eliminate	0	0	0	0	0	0	0	0	0
276	Capital Outlay - Vehicles	0	Eliminate	0	0	0	0	0	0	0	0	0
277	Capital Outlay - Software-CMMS	0	Eliminate	0	0	0	0	0	0	0	0	0
278	Capital Outlay - Computer Equipment	0	Eliminate	0	0	0	0	0	0	0	0	0
279	Subtotal Facilities	\$ 879,191		\$ 907,003	\$ 935,740	\$ 965,435	\$ 996,121	\$ 1,027,834	\$ 1,060,609	\$ 1,094,486	\$ 1,129,503	\$ 1,165,703
280	Non-Departmental											
281	Transfer to Repair & Replacement Fund	0	Eliminate	0	0	0	0	0	0	0	0	0
282	Transfer to Insurance Deductible Reserve	0	Eliminate	0	0	0	0	0	0	0	0	0
283	Transfer to Operational Reserve	0	Eliminate	0	0	0	0	0	0	0	0	0
284	Low Flow Program Assessment Credit	0	Eliminate	0	0	0	0	0	0	0	0	0
285	Insurance Reserves - Self Insurance	0	Eliminate	0	0	0	0	0	0	0	0	0
286	Other Post Employ Benefits (OPEB) exp	0	Eliminate	0	0	0	0	0	0	0	0	0
287	Debt Service	0	Eliminate	0	0	0	0	0	0	0	0	0
287	Subtotal Non-Departmental	\$ 0		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
288	Incremental Operating Costs											
289	Collection System Action Plan Implementation	0	Constant	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
290	WWTP permit renewal (included permit fees)	0	Eliminate	0	0	0	0	0	0	0	0	0
291	Deep Injection Well permit renewal (includes permit fees)	0	Constant	0	35,000	0	0	0	0	0	0	0
292	Deep Injection well MIT	0	Constant	0	150,000	0	0	0	0	0	150,000	0
293	PV System O&M Annual Contract WWTP + 25% for materials	0	Constant	0	0	0	0	0	0	0	0	0
294	PV System O&M Annual Contract Vac Stations + 25% for materials	0	Constant	0	0	0	0	0	0	0	0	0
295	PV System O&M Admin Bldg + 25% for materials	0	Constant	0	0	0	0	0	0	0	0	0
295	Subtotal Incremental Operating Costs	\$ 0		\$ 300,000	\$ 485,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 450,000	\$ 300,000
296	Total Operating Expenses	\$ 9,674,315		\$ 10,330,443	\$ 10,700,068	\$ 11,268,880	\$ 11,482,421	\$ 11,895,994	\$ 12,325,404	\$ 12,771,258	\$ 13,383,879	\$ 13,715,282

Footnotes:

- [1] Amounts for Fiscal Years 2025 are based on the KLWTD provided Fiscal Year 2025 Budget.
- [2] Amounts based on expenses as provided by KLWTD Consulting Engineer.

Table 5
Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Forecast of Estimated Capital Improvement Program and Funding Sources [1]

Line No.	Description	Funding Source	2025 CIP	Adjustments	Adjusted 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
CAPITAL PROJECT COSTS:															
Capital Outlay															
Adjusted From Operating Expenses															
1	Eng & Cap Outlay: VPS Piping/Mod	Grant 1	245,000	0	245,000	0	0	0	0	0	0	0	0	0	245,000
2	Eng & Cap Outlay: Odor Control at Vac Stns	Grant 1	1,197,500	0	1,197,500	0	0	0	0	0	0	0	0	0	1,197,500
3	Eng & Cap Outlay: Effluent Filtration Upgrade	Grant 1	587,000	0	587,000	0	0	0	0	0	0	0	0	0	587,000
4	Eng & Cap Outlay: Replace Lift Sta KL Tri Pk	Grant 1	1,287,000	0	1,287,000	0	0	0	0	0	0	0	0	0	1,287,000
5	Eng & Cap Outlay: Vac System Monitoring	Grant 1	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Eng & Cap Outlay: Sewage Pump Rpl/Piping Mod	Grant 1	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Eng & Cap Outlay: Power Conditioning & Elec Upgrades WWTP	Grant 1	2,007,150	0	2,007,150	1,928,850	0	0	0	0	0	0	0	0	3,936,000
8	Eng & Cap Outlay: EQ Tank Headworks/Screening Upgrade	Grant 2	2,096,250	0	2,096,250	2,028,750	0	0	0	0	0	0	0	0	4,125,000
9	Eng & Cap Outlay: Ventilation Upg @ Vac Stns	Grant 2	41,125	0	41,125	226,125	0	0	0	0	0	0	0	0	267,250
10	Eng & Cap Outlay: Grinder Pump Lateral Pit Upgrade	R&R	381,000	0	381,000	0	0	0	0	0	0	0	0	0	381,000
11	Eng & Cap Outlay: Ops Blower Room Mod	R&R	52,500	0	52,500	302,500	0	0	0	0	0	0	0	0	355,000
12	Eng & Cap Outlay: Isla Pinch Valve FM	Reserves	275,000	0	275,000	0	0	0	0	0	0	0	0	0	275,000
13	Eng & Cap Outlay: Service Connection Construction Revision	Reserves	220,000	0	220,000	0	0	0	0	0	0	0	0	0	220,000
14	Engineering: Capital Prelim Design & Bgt	Reserves	35,000	0	35,000	25,000	0	0	0	0	0	0	0	0	60,000
15	Direct Potable Reuse & Pharmaceuticals	Grant 1	62,073	0	62,073	686,724	1,903,021	0	0	0	0	0	0	0	2,651,818
16	Capital Outlay: Spare Inj Well Pump & VFD	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Capital Outlay: Effluent Inj Pump Repair	Reserves	45,000	0	45,000	0	0	0	0	0	0	0	0	0	45,000
18	Cap Outlay: SoftStart Upgr Vac Stn to VFD	R&R	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Capital Outlay: SBR Blower Spare Parts	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Capital Outlay: Vac Pump Rebuild & Spare	Reserves	75,000	0	75,000	0	0	0	0	0	0	0	0	0	75,000
21	Cap Outlay: Cabling Plant, Vac Stn, Admi	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Replacement of Vacuum Pit Collars	R&R	375,000	0	375,000	350,000	0	0	0	0	0	0	0	0	1,425,000
23	Vac Station Paint Interior	R&R	105,000	0	105,000	0	0	0	0	0	0	0	0	0	105,000
24	Cap Outlay: Digsiter Motive Pump Replace	R&R	238,118	0	238,118	0	0	0	0	0	0	0	0	0	238,118
25	Capital Outlay: Replace Hydroxide Pump	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Capital Outlay: Diffuser Sleeves	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Inj Well Check Pump Valves / Rebuilds	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Capital Outlay: Admin Bldg Hardening	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Capital Outlay: Forklift for Plant	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Capital Outlay: Admin/Board Vehicle	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Capital Outlay: Field Ops Truck	Reserves	140,000	0	140,000	0	0	0	0	0	0	0	0	0	140,000
32	Capital Outlay: Mini Excavator	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
33	Collection System Monitoring	Grant 1	0	0	0	0	0	0	0	0	0	0	0	0	0
34	Vac Station Electrical Upgrades, Power Cond & Lghtrning	Grant 1	61,275	0	61,275	1,164,225	0	0	0	0	0	0	0	0	1,225,500
35	Collection System SLR Elevation Phase 1 projects**	Grant 3	2,076,373	0	2,076,373	2,076,373	2,076,373	0	0	0	0	0	0	0	10,381,864
36	Vacuum Station Sewage Tanks Upgrades	Grant 1	124,328	0	124,328	2,682,392	2,682,392	0	0	0	0	0	0	0	8,171,504
37	Sludge Conditioning Upgrades (membrane thickening)	Grant 1	0	0	0	582,313	0	0	0	0	0	0	0	0	582,313
38	Fire Suppression/MJ Wood Dispute	Reserves	15,000	0	15,000	0	0	0	0	0	0	0	0	0	15,000
39	Capital Projects, Budgets & Grants	Reserves	500,000	0	500,000	250,000	0	0	0	0	0	0	0	0	750,000
40	KLWTD Collection System Action Plan	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Islamorada Collection System Action Plan**	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
42	General Future Capital Projects, dependent on grant funding.	Grant 1	0	0	0	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	20,000,000
43	General Future Capital Projects, dependent on grant funding.	Grant 2	0	0	0	2,000,000	2,000,000	2,000,000	2,000,000	1,990,000	1,990,000	1,990,000	1,990,000	1,990,000	15,950,000
44	Ductile Iron Piping	R&R	1,000,000	0	1,000,000	1,000,000	400,000	0	0	0	0	0	0	0	2,400,000
45	AQUA AEROBICS - SCADA UPGRADE SOFTWARE	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Cap Outlay: Camera-Plant, Admin, Field	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
47	Cap Outlay: Spare Flow Meters for Plant	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
48	Capital Outlay: SBR & DCU PLC Upgrades	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Engineering: Deep Inj Well Permitting	Reserves	5,000	0	5,000	0	0	0	0	0	0	0	0	0	5,000
50	Engineering: Tanks Coating	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
51	Engineering: Fire Suppression @ WWTP	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
52	Engineering: Two Driveways @ Vac 1	Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0
53	Spectrophotometer	Reserves	7,000	0	7,000	0	0	0	0	0	0	0	0	0	7,000
54	SBR Blower VFD	Reserves	60,000	0	60,000	0	0	0	0	0	0	0	0	0	60,000
55	Plant Perimeter Security Upgrades	Reserves	12,000	0	12,000	0	0	0	0	0	0	0	0	0	12,000
56	Field Dept Vactron New for Replacement	Reserves	110,000	0	110,000	0	0	0	0	0	0	0	0	0	110,000
57	New Salinity Probes for Vac Stations	Reserves	42,000	0	42,000	0	0	0	0	0	0	0	0	0	42,000
58	New Clear Vus & SS Piping @ Vac Stn A, D & E	Reserves	30,000	0	30,000	0	0	0	0	0	0	0	0	0	30,000

Table 5
Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Forecast of Estimated Capital Improvement Program and Funding Sources [1]

Line No.	Description	2025 CIP	Adjustments	Adjusted 2025	Projected Fiscal Year Ending September 30,							Total		
					2026	2027	2028	2029	2030	2031	2032		2033	2034
54	New Grinder Pumps (5)	17,500	0	17,500	0	0	0	0	0	0	0	0	0	17,500
52	Collection System Valves	32,000	0	32,000	0	0	0	0	0	0	0	0	0	32,000
53	Minks Vacuum Pump for Vac Sm F	16,500	0	16,500	0	0	0	0	0	0	0	0	0	16,500
54	Solar Upgrades & Repairs for Existing System	62,100	0	62,100	0	0	0	0	0	0	0	0	0	62,100
47	BSA Software Cloud Upgrade	59,345	0	59,345	0	0	0	0	0	0	0	0	0	59,345
46	FY25 Carryforwards (FY24 Appropriations)	(479,141)	0	(479,141)	0	0	0	0	0	0	0	0	0	(479,141)
59	Subtotal Capital Improvements	\$ 13,333,796	0	\$ 13,333,796	\$ 13,278,251	\$ 11,936,786	\$ 9,633,765	\$ 6,601,373	\$ 4,490,000	\$ 4,490,000	\$ 4,490,000	\$ 4,490,000	\$ 4,490,000	\$ 77,233,971
Renewal and Replacement Projects (From FY 25-29 CIP)														
60	R&R Estimates from KLWTD R&R schedule (WWTP & Field)	3,278,271	0	3,278,271	9,597,871	1,885,263	1,708,444	33,750	0	0	0	0	0	16,503,598
61	Subtotal Capital Project (R&R)	\$ 3,278,271	0	\$ 3,278,271	\$ 9,597,871	\$ 1,885,263	\$ 1,708,444	\$ 33,750	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 16,503,598
62	TOTAL CAPITAL PROJECT COSTS	\$ 16,636,067	0	\$ 16,636,067	\$ 23,091,122	\$ 14,037,049	\$ 11,557,209	\$ 6,850,123	\$ 4,705,000	\$ 4,705,000	\$ 4,705,000	\$ 4,705,000	\$ 4,705,000	\$ 95,696,569
FUNDING SOURCES:														
<u>Grant and Previously Issued Debt Funding:</u>														
63	State Stewardship Grants			\$ 5,571,326	\$ 7,044,503	\$ 7,085,413	\$ 5,182,392	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 50,856,557
64	ACOE Grants			2,137,375	2,254,875	2,000,000	2,000,000	2,000,000	1,990,000	1,990,000	1,990,000	1,990,000	1,990,000	20,418,366
65	Other State Grants			2,076,373	2,076,373	2,076,373	2,076,373	0	0	0	0	0	0	10,381,864
71	Unidentified Funding Sources [3]			0	0	0	0	0	0	0	0	0	0	0
72	Subtotal Contributed Funding			\$ 9,785,074	\$ 11,375,751	\$ 11,161,786	\$ 9,238,765	\$ 6,576,373	\$ 4,490,000	\$ 4,490,000	\$ 4,490,000	\$ 4,490,000	\$ 4,490,000	\$ 81,656,787
<u>Other Sources:</u>														
73	Monthly Utility Service Charges			\$ 24,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 1,970,975
74	Islamorada Agreement CIP Contributions			0	0	0	0	0	0	0	0	0	0	0
75	Operating Reserves			1,331,804	552,500	25,000	25,000	25,000	0	0	0	0	0	2,649,690
76	Renewal and Replacement Fund			5,495,189	10,947,871	2,635,263	2,058,444	33,750	0	0	0	0	0	21,284,238
81	Subtotal Other Sources			6,850,993	11,715,371	2,875,263	2,298,444	273,750	215,000	215,000	215,000	215,000	215,000	25,904,904
82	TOTAL FUNDING SOURCES	\$ 16,636,067	0	\$ 16,636,067	\$ 23,091,122	\$ 14,037,049	\$ 11,557,209	\$ 6,850,123	\$ 4,705,000	\$ 4,705,000	\$ 4,705,000	\$ 4,705,000	\$ 4,705,000	\$ 107,561,690

Footnotes:

[1] Amounts are based on the Fiscal Year 2025 - 2029 Capital Improvement Plan schedule provided by KLWTD.

[2] Fiscal Year 2025 carryforwards were determined based on fiscal year 2024 budgeted appropriations and preliminary actual capital expenditures.

Table 6

Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Development of Projected Fund Balances and Interest Earnings

Line No.	Description	Investment Reference [1]	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
ENDING FUND BALANCE SUMMARY												
1	KLWTD Operation and Maintenance Fund		\$ 10,038,799	\$ 9,358,287	\$ 9,310,251	\$ 9,287,175	\$ 10,530,644	\$ 10,905,351	\$ 11,251,896	\$ 11,548,633	\$ 11,619,335	\$ 11,741,825
2	Debt Service Sinking Fund		1,806,557	1,806,557	1,806,557	1,806,557	0	0	0	0	0	0
3	KLWTD Renewal and Replacement Fund		13,344,485	4,574,630	3,376,278	1,932,846	2,483,896	3,185,013	3,884,131	4,581,049	5,217,966	5,835,201
4	Self-Insurance/Deductible Reserve Fund		5,050,000	5,100,000	5,150,000	5,200,000	5,250,000	5,300,000	5,350,000	5,400,000	5,450,000	5,500,000
5	Total Ending Fund Balances		\$ 30,239,841	\$ 20,839,474	\$ 19,643,086	\$ 18,226,578	\$ 18,264,540	\$ 19,390,364	\$ 20,486,027	\$ 21,529,682	\$ 22,287,301	\$ 23,077,026
Operating Reserve Target												
6	Operating Reserve 120 Days O&M + 2 Years Depreciation		\$ 3,180,597	\$ 3,396,310	\$ 3,517,831	\$ 3,704,837	\$ 3,775,042	\$ 3,911,012	\$ 4,052,188	\$ 4,198,770	\$ 4,400,179	\$ 4,509,134
7	Amount Available for Capital		\$ 6,858,202	\$ 5,961,977	\$ 5,792,420	\$ 5,582,337	\$ 6,755,601	\$ 6,994,339	\$ 7,199,709	\$ 7,349,864	\$ 7,219,156	\$ 7,232,691
KLWTD Operation and Maintenance Fund												
8	Beginning Balance		\$ 11,978,171	\$ 10,038,799	\$ 9,358,287	\$ 9,310,251	\$ 9,287,175	\$ 10,530,644	\$ 10,905,351	\$ 11,251,896	\$ 11,548,633	\$ 11,619,335
Deposits to Fund:												
9	Transfer from Insurance Reserve		0	0	0	0	0	0	0	0	0	0
10	Transfers from Operations - Revenue Requirements Surplus		0	0	26,964	51,924	0	424,707	396,546	346,737	120,702	172,490
11	Transfers from Sinking Fund - After Debt Paid Off		0	0	0	0	1,481,774	0	0	0	0	0
Uses of Funds:												
12	Capital Improvements Funded From Reserves		\$ 1,331,804	\$ 552,500	\$ 25,000	\$ 25,000	\$ 25,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
13	Transfers to Plant Capacity Upgrades (CIP) Improvements Subaccount		0	0	0	0	0	0	0	0	0	0
14	Transfer to Insurance Reserve Fund		50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
15	Transfers to Operations - Revenue Requirements Deficiency		557,569	78,011	0	0	163,304	0	0	0	0	0
16	Ending Balance		\$ 10,038,799	\$ 9,358,287	\$ 9,310,251	\$ 9,287,175	\$ 10,530,644	\$ 10,905,351	\$ 11,251,896	\$ 11,548,633	\$ 11,619,335	\$ 11,741,825
17	Average Annual Interest Rate		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
18	Investment Earnings Recognized	(U)	\$ 330,300	\$ 291,000	\$ 280,000	\$ 279,000	\$ 275,000	\$ 321,500	\$ 332,400	\$ 342,000	\$ 347,500	\$ 350,400
Debt Service Sinking Fund												
19	Beginning Fund Balance		1,806,548	1,806,557	1,806,557	1,806,557	1,806,557	-	-	-	-	-
20	Annual Deposit to Sinking Fund		\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,234,177	\$ -	\$ -	\$ -	\$ -	\$ -
21	Cash Payment of Debt Service		\$ 1,558,952	\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ -	\$ -	\$ -	\$ -	\$ -
22	Transfer to Operations		\$ -	\$ -	\$ -	\$ -	\$ 1,481,774	\$ -	\$ -	\$ -	\$ -	\$ -
23	Ending Balance		1,806,557	1,806,557	1,806,557	1,806,557	-	-	-	-	-	-
24	Average Annual Interest Rate		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
25	Investment Earnings Recognized	(U)	\$ 54,000	\$ 54,000	\$ 54,000	\$ 54,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
KLWTD Renewal and Replacement Fund												
26	Beginning Balance		\$ 13,691,288	\$ 13,344,485	\$ 4,574,630	\$ 3,376,278	\$ 1,932,846	\$ 2,483,896	\$ 3,185,013	\$ 3,884,131	\$ 4,581,049	\$ 5,217,966
Deposits to Fund:												
27	Stewardship & Other Grants Direct Receipts		7,795,074	9,385,751	9,171,786	7,268,765	4,586,373	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
28	From Current Operations - R&R Fund Requirement		1,200,000	484,600	485,700	486,600	487,400	488,000	488,500	488,800	489,000	489,000
29	R&R Transfer from Assessment/ILA Payments/ACOE		5,841,786	3,586,616	2,844,211	2,021,212	1,990,000	2,105,617	2,102,918	2,100,219	2,039,816	2,019,935
30	RTPRR Fund Contribution		96,600	96,800	97,000	97,200	97,400	97,500	97,700	97,900	98,100	98,300
Uses of Funds:												
31	Capital Improvements		5,495,189	10,947,871	2,635,263	2,058,444	33,750	0	0	0	0	0
32	Grant Funded Capital		9,785,074	11,375,751	11,161,786	9,258,765	6,576,373	4,490,000	4,490,000	4,490,000	4,490,000	4,490,000
33	Ending Balance		\$ 13,344,485	\$ 4,574,630	\$ 3,376,278	\$ 1,932,846	\$ 2,483,896	\$ 3,185,013	\$ 3,884,131	\$ 4,581,049	\$ 5,217,966	\$ 5,835,201
34	Average Annual Interest Rate		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
35	Investment Earnings Recognized	(U)	\$ 405,500	\$ 268,800	\$ 119,300	\$ 79,600	\$ 66,300	\$ 85,000	\$ 106,000	\$ 127,000	\$ 147,000	\$ 165,800
Self-Insurance/Deductible Reserve Fund												
36	Beginning Balance		\$ 5,000,000	\$ 5,050,000	\$ 5,100,000	\$ 5,150,000	\$ 5,200,000	\$ 5,250,000	\$ 5,300,000	\$ 5,350,000	\$ 5,400,000	\$ 5,450,000
Deposits to Fund:												
37	Transfer from Operating Fund		\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Uses of Funds:												
38	Transfer to Operating Fund		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
39	Ending Balance		\$ 5,050,000	\$ 5,100,000	\$ 5,150,000	\$ 5,200,000	\$ 5,250,000	\$ 5,300,000	\$ 5,350,000	\$ 5,400,000	\$ 5,450,000	\$ 5,500,000
40	Average Annual Interest Rate		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
41	Investment Earnings Recognized	(U)	\$ 150,800	\$ 152,300	\$ 153,800	\$ 155,300	\$ 156,800	\$ 158,300	\$ 159,800	\$ 161,300	\$ 162,800	\$ 164,300
Islamorada Agreement Accounts (cont'd)												
Plant Capacity Upgrades (CIP) Improvements Subaccount												
42	Beginning Balance		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Deposits to Fund:												
43	Amounts Collected from Islamorada		0	0	0	0	0	0	0	0	0	0
Uses of Funds:												
44	Capital Improvements		0	0	0	0	0	0	0	0	0	0
45	Transfers to Operating Account		0	0	0	0	0	0	0	0	0	0
46	Ending Balance		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
47	Average Annual Interest Rate		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
48	Investment Earnings Recognized	(U)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total Investment Earnings												
49	Investment Earnings (Unrestricted)	(U)	\$ 940,600	\$ 766,100	\$ 607,100	\$ 567,900	\$ 498,100	\$ 564,800	\$ 598,200	\$ 630,300	\$ 657,300	\$ 680,500
50	Restricted Investment Earnings	(R)	-	-	-	-	-	-	-	-	-	-
51	Total Interest Income		\$ 940,600	\$ 766,100	\$ 607,100	\$ 567,900	\$ 498,100	\$ 564,800	\$ 598,200	\$ 630,300	\$ 657,300	\$ 680,500
52	Annual Debt Service Payments		\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,234,177	\$ -	\$ -	\$ -	\$ -	\$ -

Footnotes:

- [1] (U) = Investment Earnings unrestricted and assumed to be available to meet System expenditure requirements.
- (R) = Investment Earnings restricted and assumed to not be available to meet System expenditure requirements.

Table 7

Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Projected Ten Year Wastewater Net Revenue Requirements

Line No.	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Operating Expenses											
1	Administration Department	\$ 2,478,507	\$ 2,554,750	\$ 2,633,525	\$ 2,714,895	\$ 2,798,955	\$ 2,885,803	\$ 2,975,546	\$ 3,068,290	\$ 3,164,151	\$ 3,263,397
2	Treatment Plant Department	3,442,382	3,596,215	3,756,495	3,923,678	4,098,028	4,279,563	4,468,794	4,666,009	4,871,208	5,085,906
3	Field Department	2,874,235	2,972,475	3,074,307	3,179,873	3,289,317	3,402,794	3,520,455	3,642,472	3,769,017	3,900,276
4	Maintenance Department	879,191	907,003	935,740	965,435	996,121	1,027,834	1,060,609	1,094,486	1,129,503	1,165,703
5	Non-Departmental	-	-	-	-	-	-	-	-	-	-
6	Incremental	-	300,000	300,000	485,000	300,000	300,000	300,000	300,000	450,000	300,000
7	Total Operating Expenses	\$ 9,674,315	\$ 10,330,443	\$ 10,700,068	\$ 11,268,880	\$ 11,482,421	\$ 11,895,994	\$ 12,325,404	\$ 12,771,258	\$ 13,383,879	\$ 13,715,282
Other Revenue Requirements											
Annual Debt Service											
8	2005 SRF Loan WW46401P	\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,234,177	\$ -	\$ -	\$ -	\$ -	\$ -
9	Total Annual Debt Service	\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,558,961	\$ 1,234,177	\$ -	\$ -	\$ -	\$ -	\$ -
Less Use of Grants and Assessment for Payment of Debt:											
10	System Development Charges (Assessments)	(1,558,961)	(1,558,961)	(1,558,961)	(1,465,173)	(670,736)	-	-	-	-	-
11	Monroe County ILA Principal Payments	0	0	0	(93,788)	0	0	0	0	0	0
12	ACOF Grant Revenues	0	0	0	0	0	0	0	0	0	0
13	Net Annual Debt Service Funded from Rates	\$ -	\$ -	\$ -	\$ -	\$ 563,441	\$ -	\$ -	\$ -	\$ -	\$ -
Transfers and/or Other Payments From Rates											
Capital Expenditures Funded From Rates											
14	Total	\$ 24,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000
15	Renewal and Replacement (R&R) Fund Requirement	1,200,000	484,600	485,700	486,600	487,400	488,000	488,500	488,800	489,000	489,000
16	R&R Transfer from Assessment/ILA Payments/ACOE	5,841,786	3,586,616	2,844,211	2,021,212	1,990,000	2,105,617	2,102,918	2,100,219	2,039,816	2,019,935
17	R&R Deposit from Stewardship Grant Receipts	7,795,074	9,385,751	9,171,786	7,268,765	4,586,373	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
18	R&R Deposit from Islamorada RTPRR	96,600	96,800	97,000	97,200	97,400	97,500	97,700	97,900	98,100	98,300
19	Transfers to Operating Account	0	0	0	0	0	0	0	0	0	0
20	Total Other Revenue Requirements	\$ 14,957,460	\$ 13,768,767	\$ 12,813,697	\$ 10,088,777	\$ 7,376,173	\$ 5,406,117	\$ 5,404,118	\$ 5,401,919	\$ 5,341,916	\$ 5,322,235
21	Total Gross Revenue Requirements	\$ 24,631,775	\$ 24,099,210	\$ 23,513,765	\$ 21,357,657	\$ 19,422,034	\$ 17,302,111	\$ 17,729,521	\$ 18,173,176	\$ 18,725,795	\$ 19,037,518
Less Revenues from Other Sources											
22	Miscellaneous Revenues	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
23	Investment Earnings	940,600	766,100	607,100	567,900	498,100	564,800	598,200	630,300	657,300	680,500
24	Islamorada Flow Charge Revenue	1,188,505	1,188,878	1,191,256	1,193,638	1,196,026	1,198,418	1,200,815	1,203,216	1,205,623	1,208,034
25	Islamorada RTPRR Revenues	96,600	96,800	97,000	97,200	97,400	97,500	97,700	97,900	98,100	98,300
26	Islamorada Insurance Surcharge	69,300	72,800	76,400	80,200	84,300	88,500	92,900	97,500	102,400	107,500
27	Assessment Revenues After Payment of Debt	1,726,786	1,471,616	729,211	0	0	115,617	112,918	110,219	49,816	29,935
28	Monroe ILA Revenue After Payment of Debt	2,125,000	125,000	125,000	31,212	0	0	0	0	0	0
29	ACOF Grant Revenues After Payment of Debt	1,990,000	1,990,000	1,990,000	1,990,000	1,990,000	1,990,000	1,990,000	1,990,000	1,990,000	1,990,000
30	Stewardship Grant Receipts	7,795,074	9,385,751	9,171,786	7,268,765	4,586,373	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
31	Transfers From Operating Account (Rate Stabilization)	0	0	0	0	0	0	0	0	0	0
32	Net Revenue Requirements	\$ 8,651,910	\$ 8,952,265	\$ 9,476,012	\$ 10,078,742	\$ 10,919,836	\$ 10,697,276	\$ 11,086,989	\$ 11,494,041	\$ 12,072,556	\$ 12,373,248
Sales Revenues from Wastewater Rates											
33	Wastewater Rate Revenue at Existing Rates	\$ 7,641,508	\$ 7,663,352	\$ 7,682,207	\$ 7,698,013	\$ 7,710,721	\$ 7,720,291	\$ 7,726,690	\$ 7,729,896	\$ 7,729,896	\$ 7,729,896
34	Cumulative Prior Year Rate Adjustment %	0.00%	7.90%	15.80%	23.70%	31.60%	39.50%	44.06%	48.02%	53.18%	57.74%
35	Cumulative Prior Year Rate Adjustment Revenue	0	605,405	1,213,789	1,824,429	2,436,588	3,049,515	3,404,380	3,758,275	4,110,759	4,463,242

Table 7

Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study

Projected Ten Year Wastewater Net Revenue Requirements

Line No.	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Current Year Rate Adjustment										
36	Current Year Rate Adjustment Effective Month	7.90%	7.32%	6.82%	6.39%	6.00%	3.27%	3.17%	3.07%	2.98%	2.89%
37	% of Current Year Effective	75.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
38	Total Revenue from Current Year Adjustments	\$ 452,833	\$ 605,496	\$ 606,980	\$ 608,223	\$ 609,223	\$ 352,177	\$ 352,465	\$ 352,607	\$ 352,604	\$ 352,600
39	Total Rate Revenue After All Adjustments	\$ 0.47	\$ 1.18	\$ 0.24	\$ 10,130,665	\$ 10,756,532	\$ 11,121,983	\$ 11,483,535	\$ 11,840,778	\$ 12,193,259	\$ 12,545,738
40	Net Revenue Surplus/Deficiency	\$ (557,569)	\$ (78,011)	\$ 26,964	\$ 51,924	\$ (163,304)	\$ 424,707	\$ 396,546	\$ 346,737	\$ 120,702	\$ 172,490

Table 8

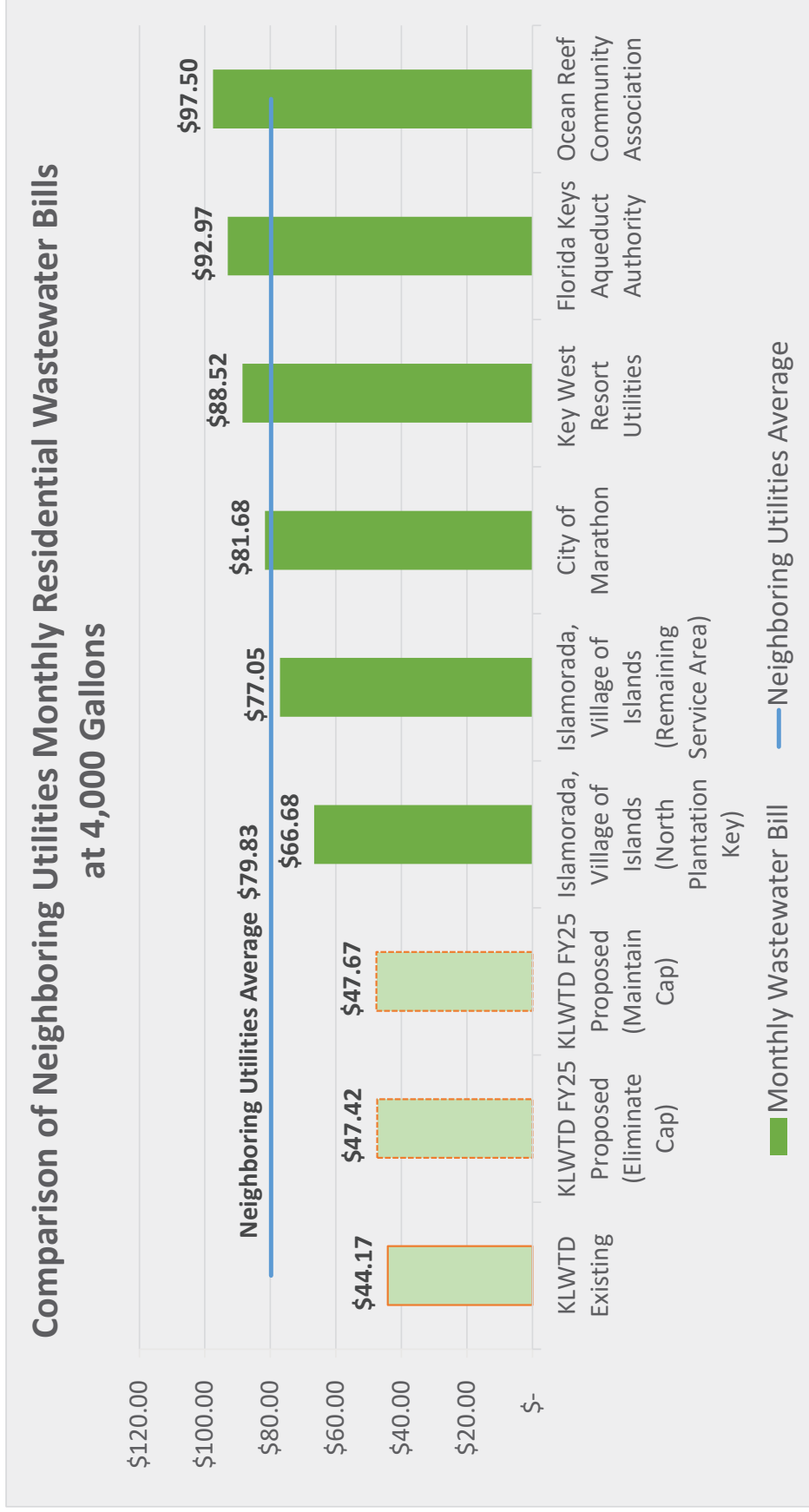
**Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study**

Schedule of Proposed Rates

Line No.	Description	Fiscal Year Ending September 30,					
		2024	2025	2026	2027	2028	2029
<u>Maintain Billing Cap</u>							
1	Monthly Base Rate per EDU	\$ 27.13	\$ 29.27	\$ 31.41	\$ 33.55	\$ 35.69	\$ 37.83
2	Usage Charge per 1,000 Gallons	\$ 4.26	\$ 4.60	\$ 4.94	\$ 5.28	\$ 5.62	\$ 5.96
<u>Remove Billing Cap</u>							
3	Monthly Base Rate per EDU	\$ 27.13	\$ 29.14	\$ 31.15	\$ 33.16	\$ 35.17	\$ 37.18
4	Usage Charge per 1,000 Gallons	\$ 4.26	\$ 4.57	\$ 4.88	\$ 5.19	\$ 5.50	\$ 5.81

Table 9

Key Largo Wastewater Treatment District, Florida
2024 Revenue Sufficiency Study



MEMO

To: Ms. Connie Fazio, Finance Director
Key Largo Wastewater Treatment District

From: Mr. Trevor McCarthy, Senior Consultant
Raftelis Financial Consultants, Inc.

Date: December 6, 2024

Re: Commissioner Questions from Raftelis Presentation on October, 15 2024

FIXED VERSUS VARIABLE COST RECOVERY

Total retail base charge revenues were \$4,752,133 for calendar year 2023 compared with \$2,100,690 in volumetric charges. Base charge revenue makes up 63.8% of total retail revenues; this ratio is known as *fixed cost recovery*. The greater a utility's fixed cost recovery, the more stable and predictable are monthly revenues. Where seasonality, rain fall, and changes in customer habits affect potable water use, which in turn effects billed wastewater flows, the number of customers served by a utility typically changes in a gradual, more predictable manner. Another factor in the use of a base charge is equitability among rate payers. Base charges are often referred to as *readiness to serve charges*. The concept of readiness to serve recognizes that even if a customer returned no wastewater to the system for a period of time, there is a fixed cost associated with maintaining that customers capacity. In other words, the utility must be ready to serve that customer whenever they choose to initiate use of the system.

BILLED VERSUS TREATED FLOWS

In fiscal year 2023, the District's wastewater plant treated approximately 729,085,000 gallons of water, or an average of 1.997 million gallons per day. As with most utilities, District customers are billed for wastewater based upon their metered water consumption in addition to a monthly base charge. For residential customers, volumetric charges are capped at a maximum of 12,000 gallons per equivalent residential connection. Total revenue gallons for which volumetric charges were applied in fiscal year 2023 were approximately 911,116,000 gallons which is nearly 25% greater that the District's treated flows.

A variance between billed and treated flows is expected, since metered water flows only represent a proxy for wastewater returned to the system. All else equal, if the District could bill only for treated wastewater flows, the rate charged for each 1,000 gallons would need to be approximately 25% greater to recover the cost of operations.

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WASTEWATER TREATMENT COST PER 1,000 GALLONS

Determining the average cost to treat 1,000 gallons of wastewater requires the functionalization of operating costs. Based on discussions with staff, an estimate of treatment related operating expenses was identified based on each budgetary department's relation to wastewater treatment.

Description	Allocation	Amount
Administration	50%	\$1,239,254
Plant	100%	\$3,442,382
Field	0%	\$---
Facilities	50%	\$439,596
Total		\$5,121,232
Treated Flows (000s of gallons)		729,085
Cost per 1,000 Gallons		\$7.02

The costs associated with operating a wastewater utility are generally 75% to 85% fixed, which in turn means that incremental changes in treated flows have a minimal effect on the overall cost of providing service.

Key Largo

Wastewater Treatment District

2024 Wastewater Rate Study

Presented on December 17, 2024



Recap

- Raftelis performed a rate study in 2019 and 2022
 - > 2019 Study resulted in adoption of a 15% reduction
 - > 2022 Study resulted in an of an additional 5% reduction
 - Need for increases by FY25 identified
- 3 primary changes since last update:
 - > Projected retail rate revenues approximately 2% lower
 - > Projected FY25 operating expenses are 5% higher plus District staff indicate the need for \$300,000/yr in additional O&M cost beginning in FY26 for Collection System Action Plan
 - > Capital improvement plan has increased while the availability of future grant funding may decline



Recap (continued)

- Rate increases identified in order to:
 - > Keep pace with inflation in operating expenses
 - FY25 budgeted O&M of \$9.7 million while retail/wholesale rate revenues projected at \$8.9 million (9% deficiency)
 - O&M estimated to increase 4% annually
 - > Maintain cash adequate cash reserves
 - Minimum cash reserve target of 120 days of O&M plus 2 years of depreciation (≈\$13m in FY25)
 - > Provide pay-as-you-go funding for capital projects
 - > Maintain compliance with the rate covenant related to the outstanding SRF loan



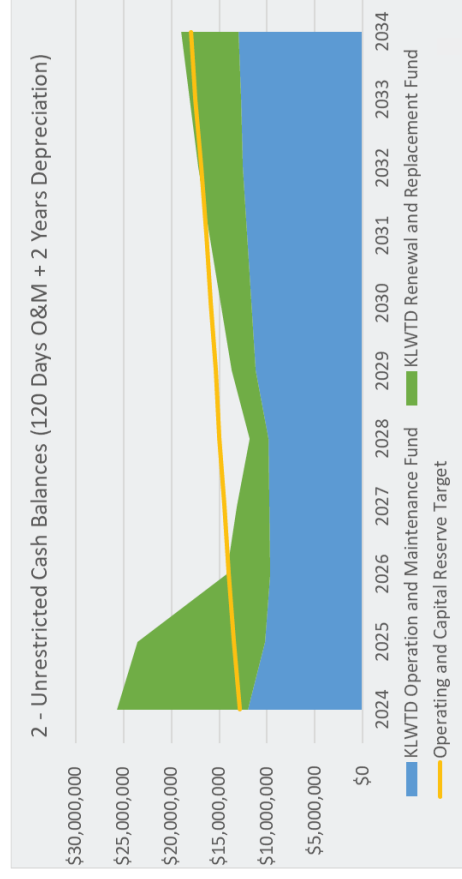
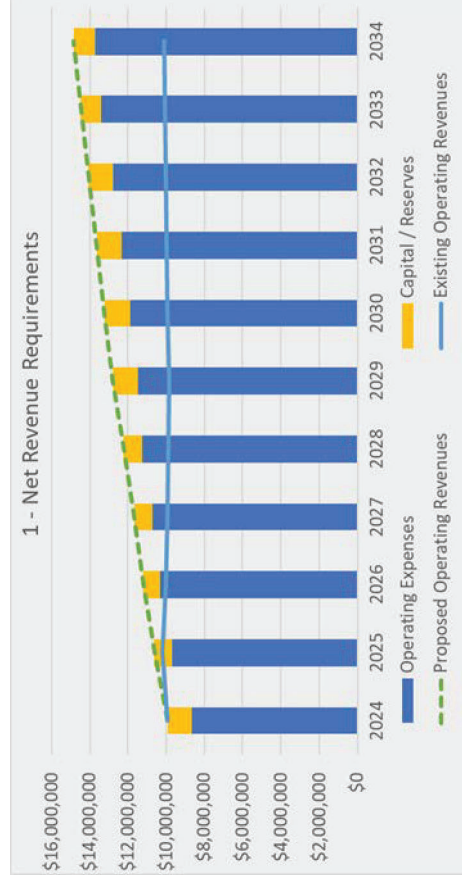
Proposed Rate Adjustments

Proposed Increases – Maintain Residential Sewer Cap

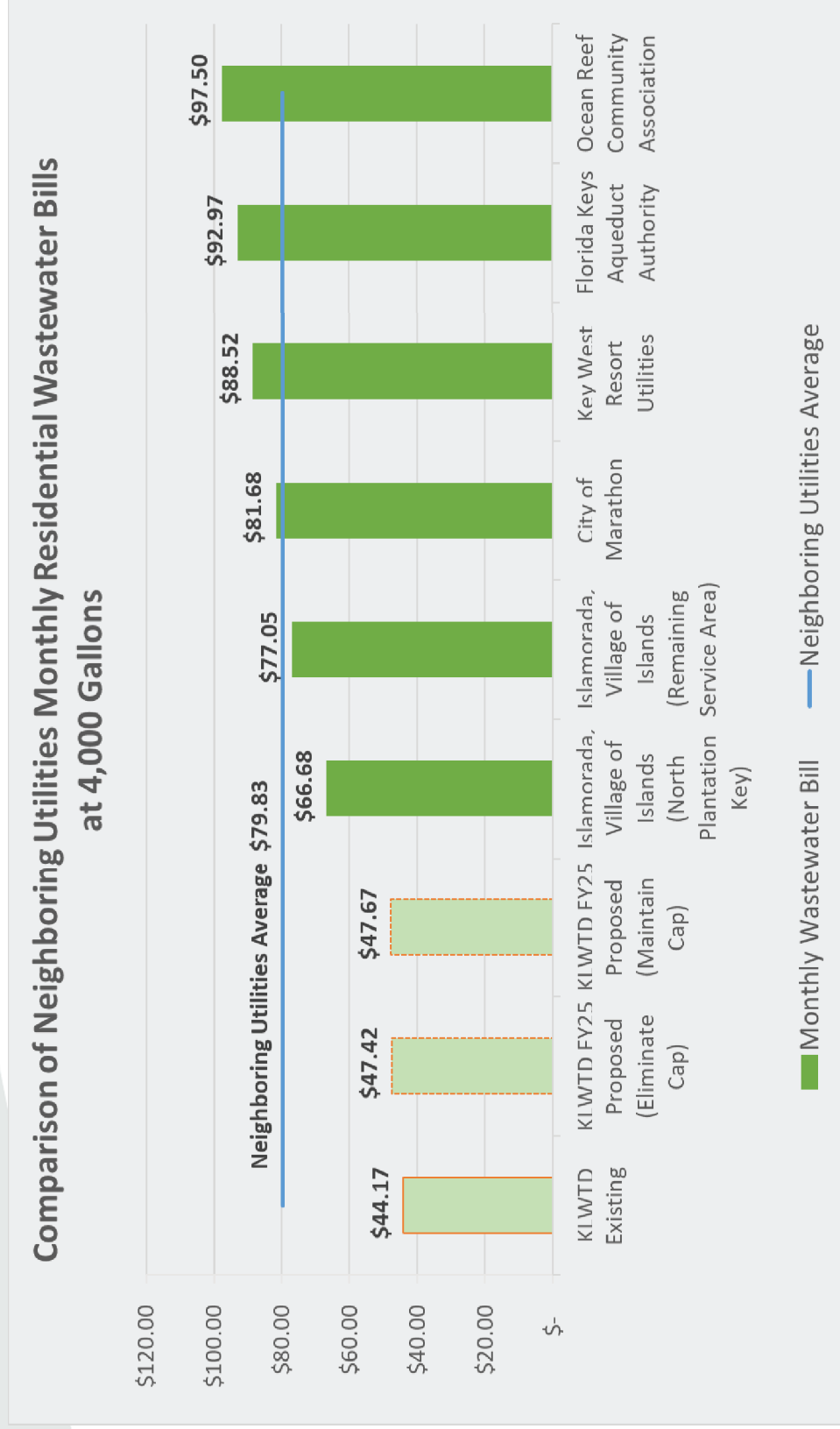
	Exist.	FY25	FY26	FY27*	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Bill at 4,000 gallons	\$44.17	\$47.67	\$51.17	\$54.67	\$58.17	\$61.67	\$63.67	\$65.67	\$67.67	\$69.67	\$71.67
\$ Change	N/A	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00

Proposed Increases – Remove Residential Sewer Cap

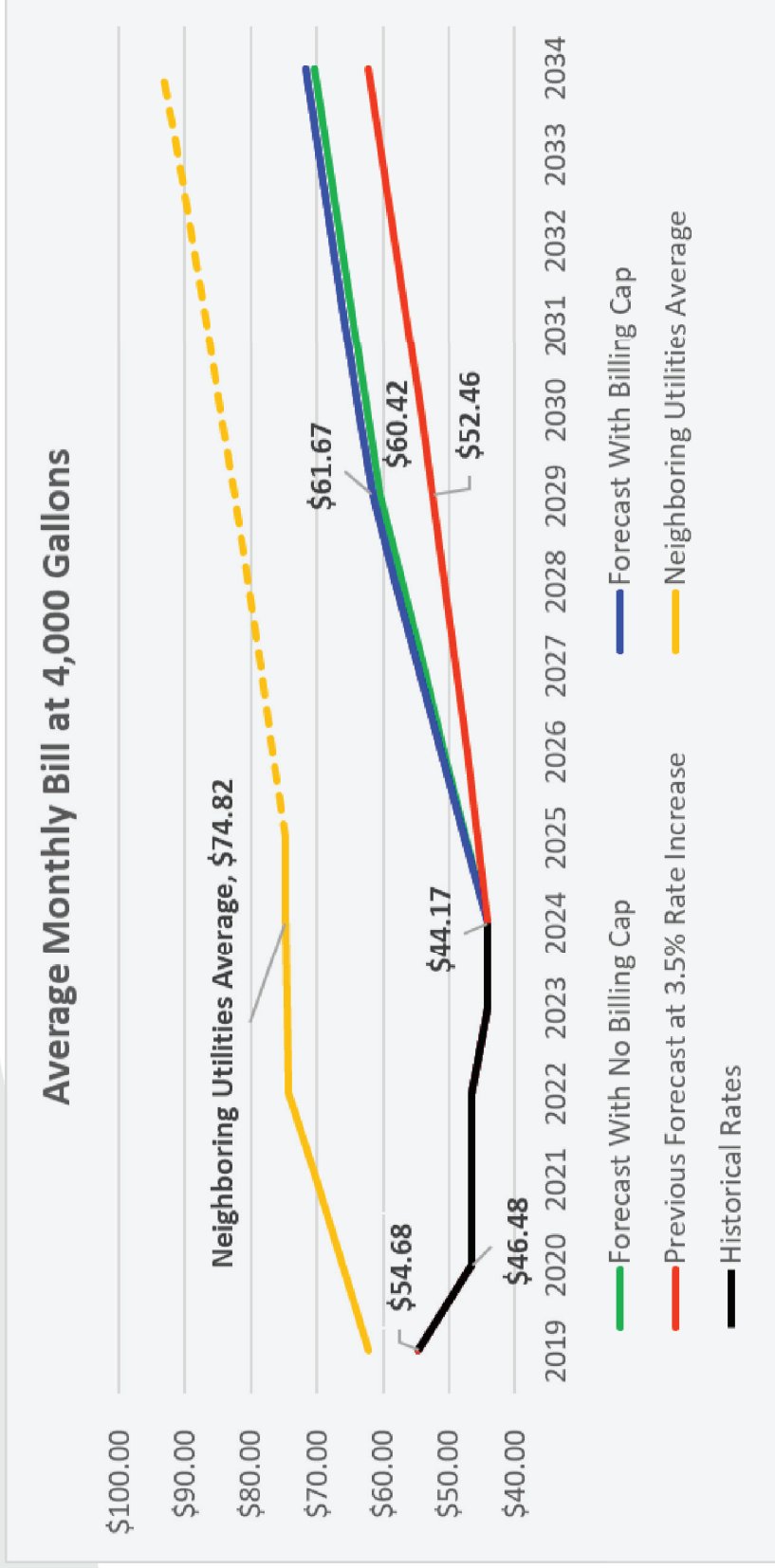
No Cap	Exist.	FY25	FY26	FY27*	FY28	FY29	FY30	FY31	FY32	FY33	FY34
Bill at 4,000 gallons	\$44.17	\$47.42	\$50.67	\$53.92	\$57.17	\$60.42	\$62.42	\$64.42	\$66.42	\$68.42	\$70.42
\$ Change	N/A	\$3.25	\$3.25	\$3.25	\$3.25	\$3.25	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00



Rate Comparison



Comparison of Current and Prior Rate Recommendations



- Neighboring utility average assumed to increase by 2.5% per year.



Alternative Rate Adjustments

Alternative Rate Increases – Maintain Residential Sewer Cap

	Exist.	FY25	FY26	FY27	FY28*	FY29	FY30	FY31	FY32	FY33	FY34
Bill at 4,000 gallons	\$44.17	\$47.17	\$50.17	\$53.17	\$56.17	\$59.17	\$62.17	\$65.17	\$68.17	\$71.17	\$74.17
\$ Change	N/A	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00

Alternative Rate Increases – Remove Residential Sewer Cap

No Cap	Exist.	FY25	FY26	FY27	FY28*	FY29	FY30	FY31	FY32	FY33	FY34
Bill at 4,000 gallons	\$44.17	\$46.92	\$49.67	\$52.42	\$55.17	\$57.92	\$60.67	\$63.42	\$66.17	\$68.92	\$71.67
\$ Change	N/A	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75

Pros

- Lower rate increases in first 5 years compared with initial proposed rate path
- Rates not back to pre-rate decrease level until FY28

Cons

- Results in higher bill by the end of 10-yr forecast
- 30 days short of 120 days of O&M target at end of forecast
- Higher risk in short term



Summary of Rate Path Options

- The Proposed Rate Adjustments result in:
 - › Higher increases in the near-term (first 5 years)
 - › Lower average annual bill by year 10
 - › Higher cash reserve balances
 - › Less Risk
- The Alternate Rate Adjustments result in:
 - › Lower increases in the near-term
 - › Higher average annual bill by year 10
 - › Lower cash reserves but still above 365 days of O&M (except in FY28)
- Keep or eliminate 10,000 gallon cap on residential volumetric charge





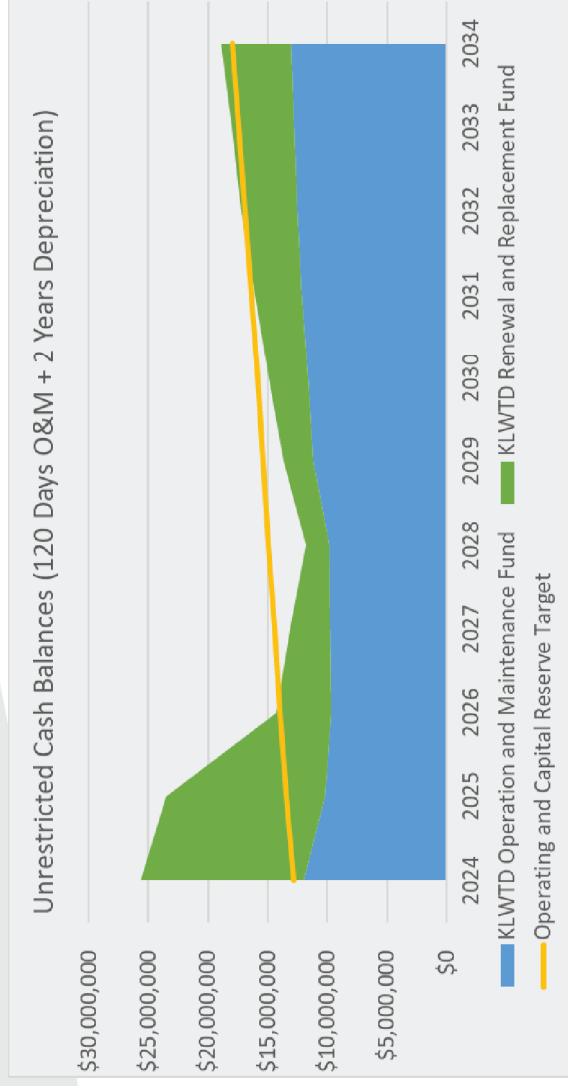
FAQS



Comparison of Projected Cash Balances

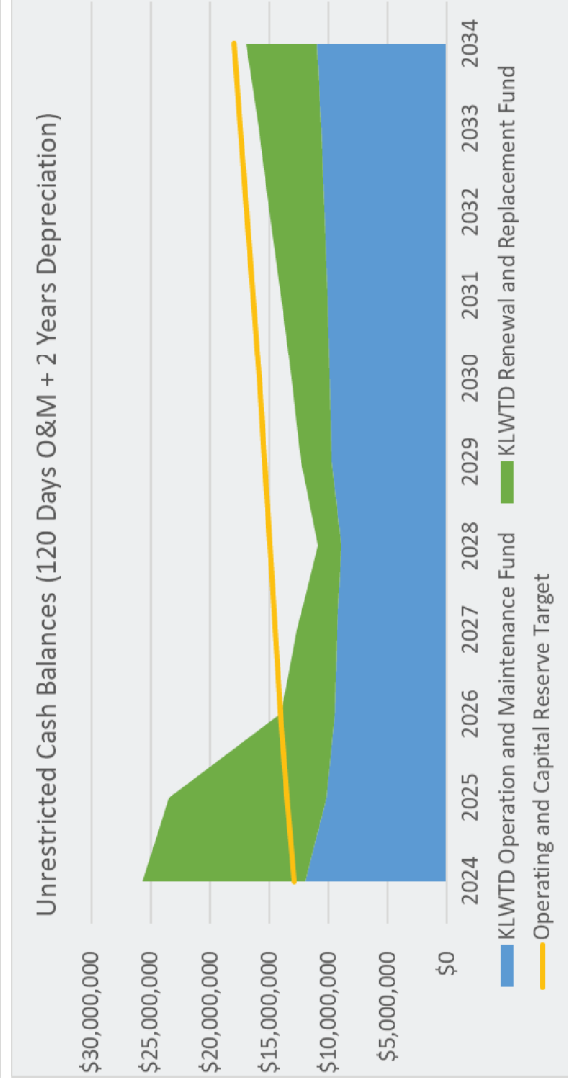
Proposed Rate Options

- Projected balance of \$18.9 million by FY34



Alternative Rate Options

- Projected balance of \$16.9 million by FY34



Proposed and Alternative Rates

Maintain Residential Sewer Cap

Description	FY25	FY26	FY27	FY28	FY29
Base Charge (per EDU)	\$29.27	\$31.41	\$33.55	\$35.69	\$37.83
Usage Charge (per kgal)	\$4.60	\$4.94	\$5.28	\$5.62	\$5.96

Proposed

Description	FY25	FY26	FY27	FY28	FY29
Base Charge (per EDU)	\$28.97	\$30.81	\$32.65	\$34.49	\$36.33
Usage Charge (per kgal)	\$4.55	\$4.84	\$5.13	\$5.42	\$5.71

Alternative

Remove Residential Sewer Cap

Description	FY25	FY26	FY27	FY28	FY29
Base Charge (per EDU)	\$29.14	\$31.15	\$33.16	\$35.17	\$37.18
Usage Charge (per kgal)	\$4.57	\$4.88	\$5.19	\$5.50	\$5.81

Proposed

Description	FY25	FY26	FY27	FY28	FY29
Base Charge (per EDU)	\$28.80	\$30.47	\$32.14	\$33.81	\$35.48
Usage Charge (per kgal)	\$4.53	\$4.80	\$5.07	\$5.34	\$5.61

Alternative