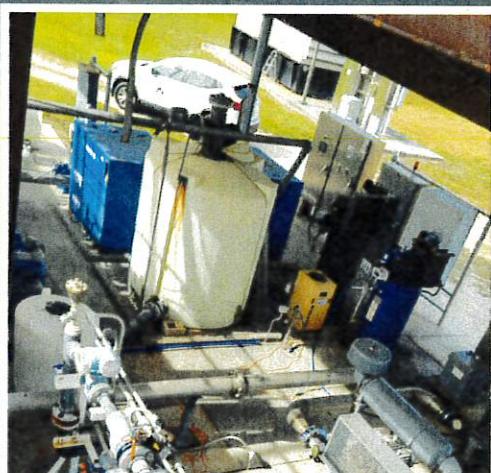


# Evaluation of Wastewater User Rates and Charges



## Evaluation of Wastewater User Rates and Charges

**To:** The Honorable City-County Public Works Authority Board

**From:** Craig A. Smith & Associates

**Date:** August 2025

### Executive Summary

Craig A. Smith & Associates was retained by the City-County Public Works Authority to evaluate the existing wastewater rate structure and assess the need for adjustments to ensure long-term financial sustainability, operational reliability, and equitable cost recovery across customer classes.

The current base facility charge of \$8.00 per month has not been revised since 2007 and is insufficient to cover fixed system costs, which are projected to reach \$537,528 by Fiscal Year (FY) 2027. Escalating operational costs due to inflation, labor, hauling, maintenance, utilities, and materials have caused consecutive fiscal years with declining net positions.

Our analysis recommends increasing the monthly base rate to \$20.65 per E

quivalent Residential Connection (ERC), applying demand factors based on service capacity to fairly allocate costs. Additionally, we recommend implementing an ordinance for automatic annual adjustments to the base rate aligned with actuarial increases to reduce future rate shocks.

Commodity charges, which recover variable system costs, will remain stable at \$6.25 per 1,000 gallons through FY 2027 due to controlled variable expenses and consistent consumption patterns.

These changes will ensure full recovery of both fixed and variable costs, fund ongoing maintenance, support capital renewal, and promote fairness in cost allocation, thereby safeguarding the Authority's financial health and service reliability.

### 1. Background and Authority Overview

The City-County Public Works Authority (the "Authority") was created through an interlocal agreement between Glades County and the City of Moore Haven pursuant to Florida law. As an Independent Special District, the Authority is charged with planning, designing, operating, and maintaining central water, sewer, and reclaimed water systems within the City and unincorporated County areas.

Governed by a 10-member Board representing the City Council and County Commission, the Authority holds operational responsibility, while capital assets remain titled to Glades County.



## 2. Existing Rate Structure

### 2.1 Base Facility Charges (Monthly)

Customer Class	Meter Size	Charge
Single Family (all meters)	5/8", 3/4", 1"	\$8.00
Multi-Family (per unit)	Master Metered	\$8.00
<b>Non-Residential</b>	Varies by meter size	See below

#### Non-Residential Meter Charges:

Meter Size	Charge	Meter Equivalent
5/8"	\$8.00	1.0
3/4"	\$12.00	1.5
1"	\$20.00	2.5
1 1/2"	\$40.00	5.0
2"	\$64.00	8.0
3"	\$128.00	16.0
4", 6", 8"	Per Agreement	—

### 2.2 Commodity Charge

- All customer classes: \$6.25 per 1,000 gallons
- Note: No tiered rates currently, though over 25% of 3/4" residential customers exceed 6,000 gallons monthly.

### 2.3 Other Charges

Charge Type	Amount/Description
ERU Design Flow	150 gallons/day
Capacity Charge	\$2,000.00 per ERU
Inspection Fee	\$25.00
Industrial/High-Strength	Charges per individual agreement

### 2.4 Deposits

Customer Class	Meter Size	Deposit	Meter Equivalent
Residential	5/8"	\$40.00	1.0
	3/4"	\$60.00	1.5
	1"	\$100.00	2.5
Non-Residential	5/8"	\$40.00	1.0
	3/4"	\$60.00	1.5
	1"	\$100.00	2.5
	1 1/2"	\$200.00	5.0
	2"	\$320.00	8.0
	3"	\$640.00	16.0
	4", 6", 8"	Per Agreement	—



## Financial Summary and Context

The Authority has not adjusted user rates in 18 years. Since that time, the system has endured several economic disruptions, including:

- The 2008 Recession
- The COVID-19 Pandemic (2020-2021)
- Ongoing inflation, labor shortages, and supply chain disruptions
- Anticipated tariff-related cost increases

These conditions have resulted in substantial increases in operational costs, including hauling, utilities, and repairs.



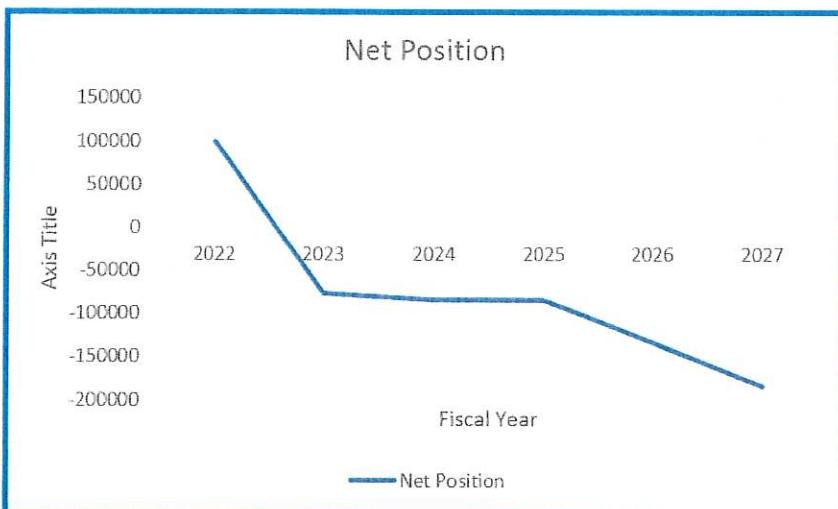
### 3.1 FY 2023 Financial Position

- Operating loss: (\$76,198)
- Net Position decreased from \$311,579 to \$237,570
- Cost of Sales & Services increased by 30.35%
- Key cost drivers: hauling, utilities, maintenance, and professional fees



### 3.2 FY 2024 Financial Position

- Operating loss: (\$84,684)
- Net Position further decreased to \$160,047
- Operating Revenues decreased by 4.12%
- Key cost drivers: hauling, plant and lift station maintenance



### 3.3 Capital Improvements and Debt Obligations

Craig A. Smith & Associates has identified approximately \$7.7 million in critical improvements needed at the Glades Wastewater Treatment Plant. In response, the Authority has secured a \$8.8 million State Appropriation for necessary capital improvements.

#### Outstanding Obligations include:

- Membrane Replacement (2020): \$233,728 (0% interest, 36 months)
- Aeration Panels (2023): \$184,800 (0% interest, 30 months)
- Lift Station Repairs (2024): \$150,000 (4% interest)
- Sewer Plant & Lift Station Upgrades (2025): \$300,000



### 3.4 Operating and Administrative Costs

- Payments to County & City for admin services: \$15,000 and \$30,000 respectively
- Personnel reimbursements to City: \$188,326
- Independent Contractor (WWTP Operator): \$42,328 annually (@ \$19/hr)

## 4. Summary

The Authority's wastewater system faces significant financial and operational pressure due to:

- Stagnant rates since 2007
- Escalating operational costs
- Critical infrastructure in need of replacement
- Declining net position over consecutive fiscal years

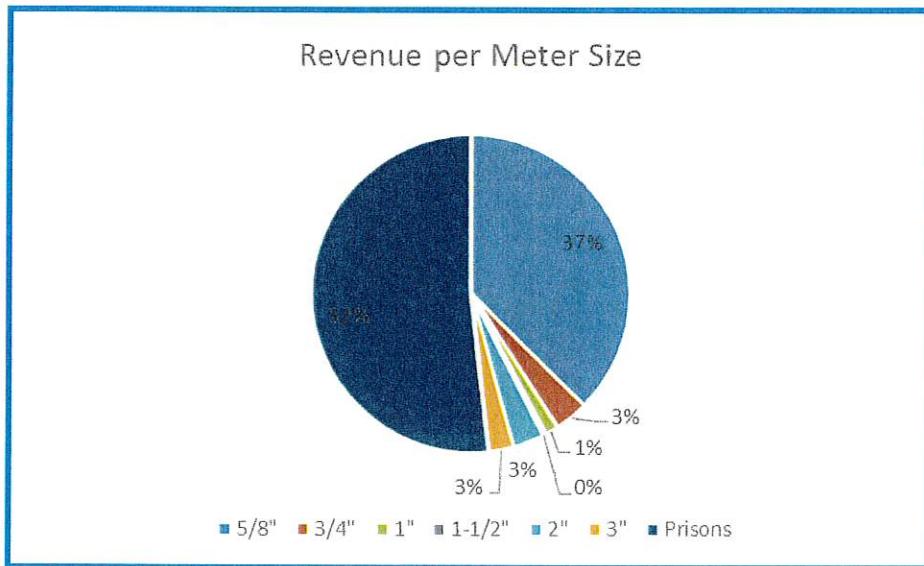
While grant funding will offset capital needs, it does not address:

- Day-to-day operations and maintenance
- Financial sustainability for long-term obligations
- Equitable cost recovery from high-usage customers

## 5. Project Approach

Our approach involves the development of a financial forecast to ensure the sustainability of the City County Public Works Authority. This includes a comprehensive review of system revenues, operating and capital expenditures and the formulation of a rate plan designed to fully fund operations debt service and capital renewal and replacement.

A key element of our recommendation is a rate structure that equitably distributes cost across customer classes and aligns with system demands. Rates and charges must be data driven and sensitive to customer impact. Refer to Table 1, Wastewater Meter Summary by Customer Class and Flow Contribution, for a profile of the utilities' customers.



**Note:** Major customers account for more than half of total revenue.

## 6. Customer Demand Profile

**Table 1: Wastewater Meter Summary by Customer Class and Flow Contribution (FY 24)**

Category	# Meters	Average Daily Flow (GPD)	Monthly Flow (GPD)	% of Monthly Flow
Inside City 3/4" Residential	739	142	3,147,723	38.4%
Outside City 3/4" Residential	19	167	95,474	1.2%
Inside City 3/4" Commercial	58	125	217,309	2.6%
Outside City 3/4" Commercial	3	78	6,979	0.1%
Inside City 1" Commercial	8	459	110,126	1.3%
Outside City 1" Commercial	1	884	26,527	0.3%
Inside City 1-1/2" Commercial	2	86	5,162	0.1%
Inside City 2" Commercial	8	819	196,597	2.4%
Outside City 2" Commercial	2	568	34,105	0.41%
Inside City 3" Commercial	1	2,675	80,238	1.0%
Outside City 3" Commercial	1	5,155	154,635	1.9%
Inside City Commercial Usage	1	876	26,277	0.3%
Outside City 4" Commercial (Geo Prison)	1	21,273	638,176	7.8%
Outside City 8" Commercial (Geo Prison)	1	109,015	3,270,458	39.9%
Sugar County Apartments	1	6,358	190,732	2.3%

## 7. Recommendations

1. Adjust base and gallonage rates to reflect increased costs and usage trends.
2. Future consideration of a tiered usage structure to better align rates with actual demand and promote conservation.

3. Establish reserve funds for capital replacement and emergency maintenance.
4. Revisit inspection, deposit, and capacity fees for full cost recovery.

## 8. Proposed Two-Component Rate Structure

### 8.1 Fixed Base Charge

- Monthly fixed fee based on meter size
- Covers fixed costs: staffing, admin overhead, debt service
- Includes intergovernmental transfers to support operations

### 8.2 Commodity Charge

- Volumetric charge based on 1,000 gallons of metered use
- Covers variable expenses such as power, chemicals, treatment, and maintenance

## 9. Financial Analysis

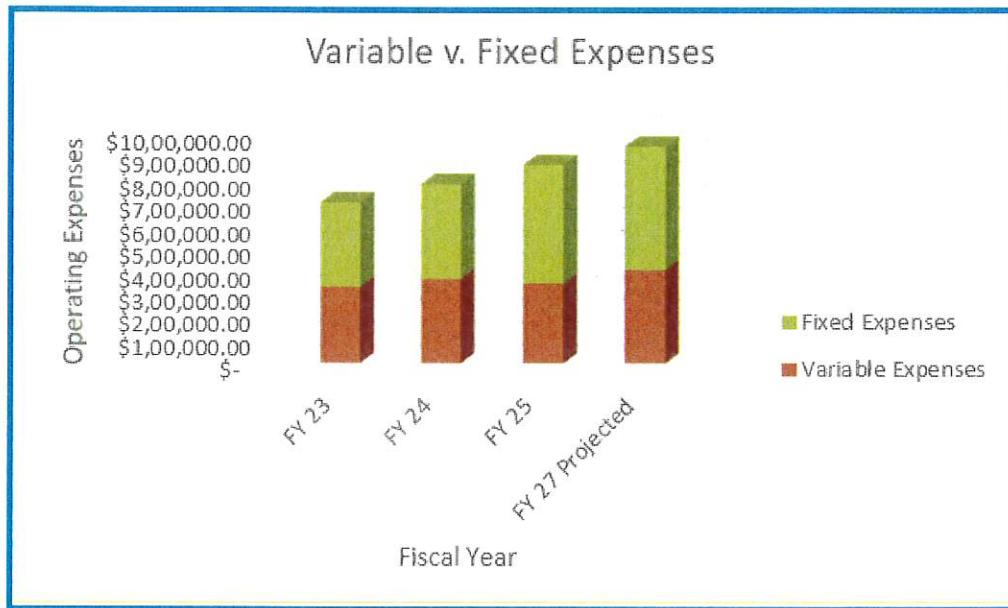
Total expenditures are projected to rise from \$745,200 (FY 23) to \$851,980 (FY 27), with fixed costs increasing from \$369,372 to \$537,528. Refer to Table 2 Fixed Cost Budget Summary.

Period	Total Budget Increase	Fixed Cost Increase
FY 23 → FY 24	5%	12%
FY 24 → FY 25	8.5%	25%
FY 25 → FY 27	—	4% (actuarial)

**Table 2: Fixed Cost Budget Summary**

Fund/Account	Description	FY 23	FY 24	FY 25	Projected FY 27	% Increase FY 25-27
450.280.531002	Lab Services	\$11,000	\$12,000	\$12,000	\$12,583	5%
450.280.531003	Legal Services (Ramunni)	\$12,000	\$13,200	\$13,200	\$14,734	12%
450.280.549008	City Administration	\$30,000	\$30,000	\$30,000	\$30,000	0%
450.280.549002	County Administration	\$15,000	\$15,000	\$15,000	\$15,000	0%
450.280.532000	Audit Services (LarsonAllen)	\$19,000	\$32,000	\$25,000	\$27,905	12%
450.280.534000	Other Contracts - Misc.	\$2,000	\$82,000	\$86,684	\$163,124	88%
(Membrane Pay-back)		\$77,916	—	—	—	—
450.280.549003	City Reimbursements (Payroll)	\$182,572	\$219,280	\$214,856	\$229,050	7%
450.280.549004	Operator Labor (Al Brown)	\$17,800	\$42,336	\$42,336	\$45,132	7%
<b>Total Fixed Costs</b>		<b>\$369,372</b>	<b>\$412,578</b>	<b>\$515,516</b>	<b>\$537,528</b>	<b>4%</b>

**Note:** Fixed costs increasingly dominate the budget, driven by contract and labor adjustments.



In calculating fair and proportional base charges, each customer's base charge is determined by applying the appropriate demand factor, ensuring a fair allocation of fixed system costs based on service capacity. The Authority's fixed costs are projected to be \$537,528 in FY 27. Current charges, based on the existing rate structure, are insufficient to cover these anticipated fixed costs, *see Table 3: Total Annual Base Charges*.



It is recommended that the base rate be increased to \$20.65, with the demand factor applied to this base rate according to service capacity. This adjustment will ensure that base charges cover the projected FY 27 fixed expenses. Furthermore, it is recommended that an ordinance be enacted to automatically adjust this base rate to follow actuarial increases, maintaining revenue stability without requiring frequent manual revisions.

**Table 3: Total Annual Base Charges**

Customer Class	Demand Factor	# Accounts	Equivalent Accounts	FY 23 Base Rate	Annual Base Charge	FY 27 Base Rate	Projected FY 27 Base Charge
<b>Residential</b>							
5/8"	1.0	758	758.0	\$8.00	\$72,768.00	\$20.65	\$187,832.40
<b>Residential Total</b>		758			\$72,768.00		\$187,832.40
<b>Commercial</b>							
3/4"	1.5	61	91.5	\$12.00	\$8,784.00	\$30.98	\$22,673.70
1"	2.5	9	22.5	\$20.00	\$2,160.00	\$51.63	\$5,575.50
1-1/2"	5.0	2	10.0	\$40.00	\$960.00	\$103.25	\$2,478.00
2"	8.0	10	80.0	\$64.00	\$7,680.00	\$165.20	\$19,824.00
3"	16.0	3	48.0	\$128.00	\$4,608.00	\$330.40	\$11,894.40
4"-8"	Contract	3	1,160.0	Contract	\$112,224.00	Contract	\$287,448.00
<b>Commercial Total</b>		88	2,170.0		\$136,416.00		\$349,893.60
<b>TOTAL</b>		846	2,928.0		\$209,184.00		\$537,726.00

An additional consideration is the potential engagement of an external contractor to manage and operate the Wastewater Treatment Plant. US Waters has submitted a proposal for this service in the amount of \$200,000 annually. If the Authority elects to proceed, projected fixed expenses would increase from \$537,528 to \$737,528. To recover this additional cost, the base rate would need to increase from the proposed \$20.64 to \$28.32, with the demand factor still applied.



## 10. Commodity Charge

The Commodity Charge is a volumetric charge based on per 1000 gallons of metered use. Variable expenses such as power, chemicals, treatment and maintenance are directly tied to system usage. Variable expenses are projected to increase from \$332,622 in FY 23 to \$407,154 in FY 27, reflecting a net growth of approximately 22% over the period. The largest cost drivers include sludge/effluent hauling, repair and maintenance of lift stations, and professional/engineering services. Notable year-over-year changes include an 11% increase from FY 23 to FY 24 due primarily to higher utility costs and capital outlay for a standby pump, followed by a 5% decrease in FY 25 due to reductions in engineering and hauling costs. By FY 27, expenses are projected to rise 17% from FY 25 levels, largely driven by increased hauling, lift station maintenance, and professional services. These projections incorporate modest inflationary adjustments to recurring costs and account for anticipated operational needs to maintain service reliability.

**Table 4: Variable Cost Budget Summary**

Account Code	Description	FY 23	FY 24	FY 25	FY 27 Projected
450.280.549000	Uniforms	\$1,200.00	\$1,200.00	\$1,200.00	\$1,260.00
450.280.531000	Professional Service (CASGOV)	\$25,000.00	\$25,000.00	\$25,000.00	\$28,000.00
450.280.531001	Engineering (CAS, Mittauer)	\$25,000.00	\$25,000.00	\$15,000.00	\$16,740.00
450.280.549001	Mowing Wetlands	\$3,120.00	\$3,120.00	\$2,000.00	\$3,500.00
450.280.549005	Sludge/Effluent Hauling (Karle)	\$70,000.00	\$70,000.00	\$50,000.00	\$78,100.00
450.280.549006	South Central Florida Express	\$1,200.00	\$1,200.00	\$1,200.00	\$1,400.00
450.280.541000	Communications (Telephones)	\$3,700.00	\$3,900.00	\$3,900.00	\$4,000.00
450.280.543000	Utilities	\$90,000.00	\$105,000.00	\$85,000.00	\$94,380.00
450.280.540000	Per Diem	\$1,500.00	\$1,500.00	\$1,500.00	\$1,572.00
450.280.546000	Repair & Maintenance Equipment	\$1,000.00	\$1,000.00	\$1,000.00	\$1,050.00
450.280.546001	Repair & Maintenance (Plant)	\$45,000.00	\$45,000.00	\$45,000.00	\$47,000.00
450.280.546002	Repair & Maintenance (Lift Stations)	\$25,000.00	\$30,000.00	\$70,000.00	\$73,400.00
450.280.549007	Other Current Charges	\$1,500.00	\$1,800.00	\$1,800.00	\$1,887.00
450.280.551000	Office Supplies	\$600.00	\$1,000.00	\$1,000.00	\$1,050.00
450.280.552004	Operating Supplies (Fuel)	\$4,500.00	\$5,000.00	\$3,500.00	\$5,250.00
450.280.552001	Operating Supplies (Chemicals)	\$18,000.00	\$20,000.00	\$20,000.00	\$21,000.00
450.280.552000	Operating Supplies	\$3,500.00	\$5,000.00	\$-	\$5,200.00
450.280.554000	Books & Publications	\$500.00	\$500.00	\$500.00	\$525.00
450.280.555000	Training	\$800.00	\$800.00	\$700.00	\$840.00
450.280.599001	Capital Outlay - Standby Pump	\$4,500.00	\$22,516.00	\$20,000.00	\$21,000.00
—	Aids to Government Agencies	\$-			
—	Contingency	\$7,002.00			
<b>TOTAL</b>	<b>Annual Total</b>	<b>\$332,622.00</b>	<b>\$368,536.00</b>	<b>\$348,300.00</b>	<b>\$407,154.00</b>



The current commodity charge of \$6.25 per 1,000 gallons is sufficient to cover the anticipated variable expenses of \$407,154 for FY 27. *See Table 5: Total Annual Commodity Charges below.*

Table 3: Total Annual Base Charges					
Customer Classes	Average Consumption (kgal)	FY24 Commodity Charge (\$/kgal)	Total Annual Commodity Charges (FY24)	Projected FY27 Commodity Charge (\$/kgal)	Projected FY27 Commodity Charge (Total)
<b>Residential</b>					
5/8"	3,243	6.25	\$243,239.78	6.25	\$243,239.78
<b>Residential Total</b>	<b>3,243</b>		<b>\$243,239.78</b>		<b>\$243,239.78</b>
<b>Commercial</b>					
3/4"	224	6.25	\$16,821.60	6.25	\$16,821.60
1"	137	6.25	\$10,248.98	6.25	\$10,248.98
1-1/2"	5	6.25	\$387.15	6.25	\$387.15
2"	231	6.25	\$17,302.65	6.25	\$17,302.65
3"	235	6.25	\$17,615.48	6.25	\$17,615.48
Prisons	4,099	6.25	\$307,452.45	6.25	\$307,452.45
<b>Commercial Total</b>	<b>5,131</b>		<b>\$369,828.31</b>		<b>\$369,828.31</b>
<b>Total Consumption</b>	<b>8,374</b>		<b>\$613,068.08</b>		<b>\$613,068.08</b>

Commodity charges, which recover the system's variable costs based on consumption, will remain at \$6.25 per 1,000 gallons through FY 27. At this rate, projected annual commodity revenues are estimated at \$613,068, based on current consumption patterns. Maintaining the existing commodity charge is feasible due to stable operating efficiency and the fact that upcoming cost increases are concentrated in fixed rather than variable components of the budget.

## 11. Summary and Next Steps

This evaluation demonstrates the necessity of updating the wastewater rate structure to reflect current and projected financial realities. The recommended base rate increase to \$20.65 and maintaining the commodity charge at \$6.25 per 1,000 gallons aligns revenues with expenses, preserves system sustainability, and ensures equitable cost recovery.



**Next Steps:**

- **Base Rate Adjustment:** Increase the base rate to \$20.65, applying the demand factor to ensure proportionality by service capacity.
- **Automatic Adjustment Ordinance:** Implement a policy to automatically increase the base rate in accordance with actuarial cost increases to maintain financial stability.
- **Operational Contract Contingency:** If the Authority elects to contract US Waters at \$200,000 annually to operate the Wastewater Treatment Plant, fixed expenses will increase to \$737,528, necessitating a base rate of \$28.32 to fully recover costs.
- **Commodity Charges:** Maintain the \$6.25 per 1,000 gallons rate for FY 27 projections, as current revenue levels adequately cover variable costs.

