

Union County Water CIP Scenarios Briefing

Board of County Commissioners

April 1, 2024



UNIONCOUNTY
WATER

Briefing Purpose

- 💧 Build on the information provided at the CIP Workshop on December 14, 2023
- 💧 Provide different capital improvement plan scenarios and the associated rate impact
- 💧 Answer any questions from the Board regarding Union County Water's CIP projects or rate impact

Master Plan Developed Projects

- 💧 Capital projects are developed to address system deficiencies/weaknesses identified in the water and wastewater system
 - 💧 Ex – pressure, fire flow, conveyance capacity
- 💧 Master Plan Projects are:
 - 💧 High level (conceptual)
 - 💧 Wide range of cost
 - 💧 Not specific enough to execute as a project

Master Plan List of Projects (Brown & Caldwell)

Union County Master Plan Capital Improvements Plan Cost Estimate Summary			
Project Name	Project Description	System	Total Project Cost
Catawba River WTP Expansion	14 mgd expansion (UC's share only)	Water Treatment	\$ 168,504,000
Alternative 2 - Site B WRF	Site B WRF (Shut Down CCWRF, move Poplin to new WRF)	Wastewater Treatment	\$ 228,924,000
NE 853 West Pressure Zone Change	Move portion of 853 W into 853 E	Water Distribution	\$ 23,514,000
Providence Road BPS Supply Main	13,100 LF of 24" and 16" water main replacement	Water Distribution	\$ 13,376,000
853 South Transmission Main	40,000 LF of 12" water main parallel	Water Distribution	\$ 23,646,000
762 Transmission Main (south of Marshville)	86,600 LF of 12" water main parallel	Water Distribution	\$ 51,905,000
880 Transmission Main	9,700 LF of 12" water main parallel	Water Distribution	\$ 6,268,000
853 West EST (New Indian Trail Tank)	New 2.6 MG tank	Water Distribution	\$ 14,477,000
853 East EST	New 0.5 MG tank	Water Distribution	\$ 2,785,000
853 South EST	New 0.4 MG tank	Water Distribution	\$ 2,227,000
935 EST	New 0.4 MG tank	Water Distribution	\$ 5,383,000
Highway 75 BPS	2.1 mgd booster pump station replacement	Water Distribution	\$ 13,709,000
East Fork Interceptor Improvements	30,000 LF of 30" parallel sewer	Wastewater Collection	\$ 43,945,000
Price Mill Creek Sewer Improvements (Upper East Fork Sewer 1)	3,500 LF of 21" parallel sewer	Wastewater Collection	\$ 3,865,000
Upper East Fork Sewer Improvements (Upper East Fork 2)	5,700 LF of 18" parallel sewer	Wastewater Collection	\$ 5,082,000
Molly Branch Sewer Improvements (Upper East Fork 3)	7,400 LF of 15" parallel sewer	Wastewater Collection	\$ 5,962,000
South Fork Sewer Improvements	8,500 LF of 18" parallel sewer	Wastewater Collection	\$ 8,299,000
South Branch Poplin Basin Sewer Improvements	5,700 LF of 18" parallel sewer	Wastewater Collection	\$ 6,223,000
Fieldstone PS Improvements	1.1 mgd pump station replacement	Wastewater Collection	\$ 4,787,000
Hunley PS Improvements	3.3 mgd pump station replacement	Wastewater Collection	\$ 14,336,000
Forest Park PS Improvements	2.4 mgd pump station replacement	Wastewater Collection	\$ 4,838,000
TOTAL (Assumes Alt 2 Site B WRF)			\$ 652,055,000

Updated Master Plan Project (Staff Update)

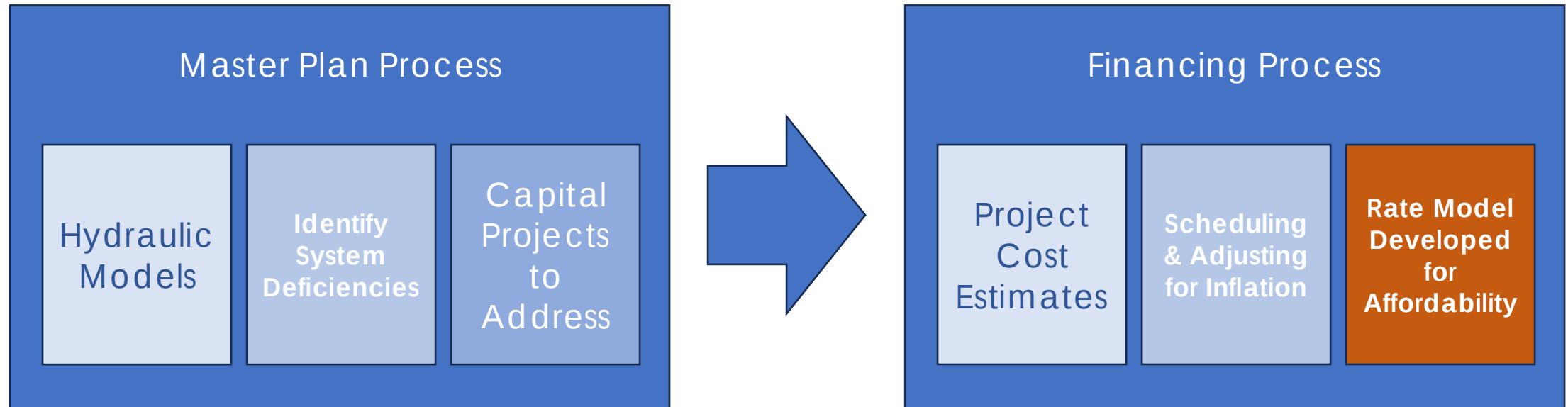
Cost Differences between Original and Final CIP Total Project Costs

Project	Project Description	Original CIP	Final CIP	Delta
Catawba River WTP Expansion	8 mgd expansion (UC's share only)	\$ 96,288,000	\$ 114,838,000	\$ 18,550,000
Site B (Rocky River Basin) WRF	Site B WRF (Shut Down CCWRF Move Poplin to new WRF)	\$ 388,026,870	\$ 547,785,000	\$ 159,758,130
Twelve Mile Creek WRF Expansion	3 MGD Expansion of 12-Mile Creek WRF	\$ 120,360,000	\$ 194,690,000	\$ 74,330,000
853 West Pressure Zone Change (Option 2)	Move portion of 853 W into 853 E	\$ -	\$ -	\$ -
Providence Road BPS Supply Main	13,100 LF of 24" and 16" water main replacement	\$ 13,376,000	\$ 15,857,000	\$ 2,481,000
853 South Transmission Main	40,000 LF of 12" water main parallel	\$ 23,646,000	\$ 35,045,000	\$ 11,399,000
762 Transmission Main (south of Marshville)	86,600 LF of 12" water main parallel	\$ 51,905,000	\$ 79,877,000	\$ 27,972,000
880 Transmission Main	9,700 LF of 12" water main parallel	\$ 6,268,000	\$ 7,430,000	\$ 1,162,000
853 West EST (New Indian Trail Tank)	New 2.6 MG tank	\$ 14,477,000	\$ 17,161,000	\$ 2,684,000
853 East EST	New 0.5 MG tank	\$ 2,785,000	\$ 3,302,000	\$ 517,000
853 South EST	New 0.4 MG tank	\$ 2,227,000	\$ 3,291,000	\$ 1,064,000
935 EST	New 0.4 MG tank	\$ 5,383,000	\$ 6,381,000	\$ 998,000
Highway 75 BPS	2.1 mgd booster pump station replacement	\$ 13,709,000	\$ 20,251,000	\$ 6,542,000
East Fork Interceptor Improvements	30,000 LF of 30" parallel sewer	\$ 47,378,000	\$ 53,952,000	\$ 6,574,000
Price Mill Creek Sewer Improvements	3,500 LF of 21" parallel sewer	\$ 4,167,000	\$ 5,398,000	\$ 1,231,000
Upper East Fork Sewer Improvements	5,700 LF of 18" parallel sewer	\$ 5,479,000	\$ 7,752,000	\$ 2,273,000
Molly Branch Sewer Improvements	7,400 LF of 15" parallel sewer	\$ 6,427,000	\$ 10,285,000	\$ 3,858,000
South Fork Sewer Improvements	8,500 LF of 18" parallel sewer	\$ 8,948,000	\$ 11,593,000	\$ 2,645,000
South Branch Poplin Basin Sewer Improvements	5,700 LF of 18" parallel sewer	\$ 6,709,000	\$ 9,464,000	\$ 2,755,000
Hunley PS Improvements	3.3 mgd pump station replacement	\$ 13,216,000	\$ 18,050,000	\$ 4,834,000
Forest Park PS Improvements	2.4 mgd pump station replacement	\$ 4,838,000	\$ 5,541,000	\$ 703,000
Operations Center Expansion	Facility Expansion required for Gov't Ctr Space Needs	\$ 14,500,000	\$ 15,153,000	\$ 653,000
Crooked Creek WRF R&R	Estimated R&R costs for the Crooked Creek WRF	\$ 30,000,000	\$ 34,301,000	\$ 4,301,000
R&R Program	Annual Renewal & Replacement Program Costs	\$ 96,081,067	\$ 128,600,000	\$ 32,518,933
Total		\$ 976,193,937	\$ 1,345,997,000	\$ 369,803,063

The 15 Year Capital Plan

Category	15-Year Investment (FY 2024-2038)	Treatment Capacity	Transmission / Conveyance
Water	\$303.4M	\$114.8M	\$188.6M
Wastewater	\$898.8M	\$742.5M	\$156.3M
Renewal & Replacement	\$128.6M		
Facilities	\$15.1M		
Total	\$1.346B	\$857.3M	\$344.9M

From Master Plan to Rate Model





FY2024 Approved Rate Plan



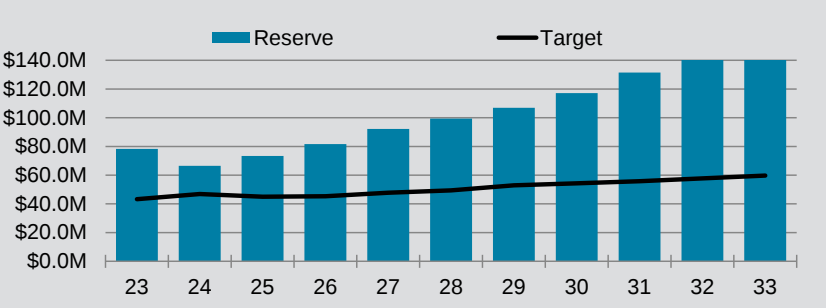
Union County Water & Sewer Fund



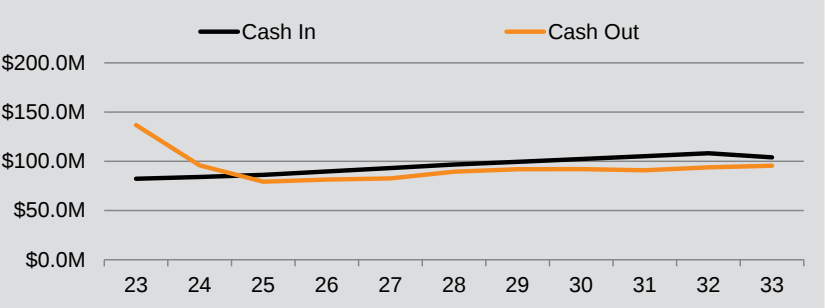
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Water Rate Plan	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
Wastewater Rate Plan	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
Senior Lien Covenant W/ SDF 1.20	1.85	1.37	1.49	1.60	1.64	1.71	1.68	1.73	1.79	1.82	1.60
Rate Covenant All W/ SDF Fees 1.00	1.54	1.14	1.24	1.34	1.37	1.43	1.40	1.44	1.49	1.52	1.34
Additional Bonds Test W/ SDF 1.00	N/A	1.17	N/A	N/A	1.38	N/A	N/A	1.45	N/A	N/A	1.57
Rate Revenue (\$M)	\$ 70.42	\$ 71.33	\$ 73.99	\$ 76.46	\$ 78.97	\$ 81.53	\$ 84.14	\$ 86.80	\$ 89.51	\$ 92.27	\$ 94.71
Average Bill (5.5 Kgal)	\$102.03	\$103.80	\$105.62	\$107.42	\$109.31	\$111.23	\$113.17	\$115.17	\$117.18	\$119.23	\$121.29

CALC	SAVE	CTRL	LAST	OVR
FY 2028			FY 2033	
9.02%			18.88%	
9.01%			18.85%	
Master Plan Projects			No	
ERU Growth Sch			Only Twelve Mile 7.5-9	

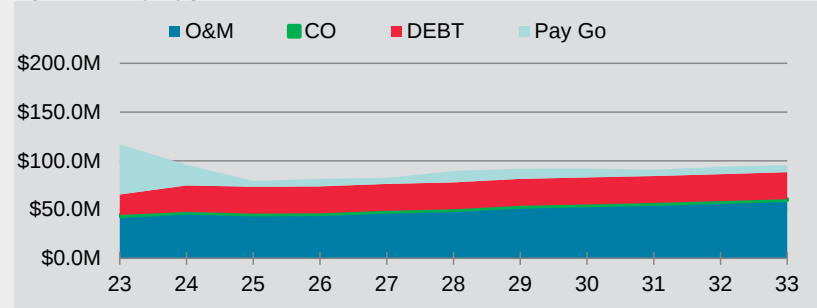
Operating Fund



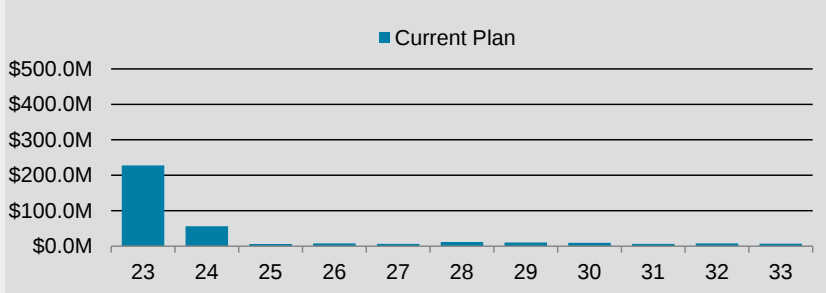
Revenues vs. Expenses



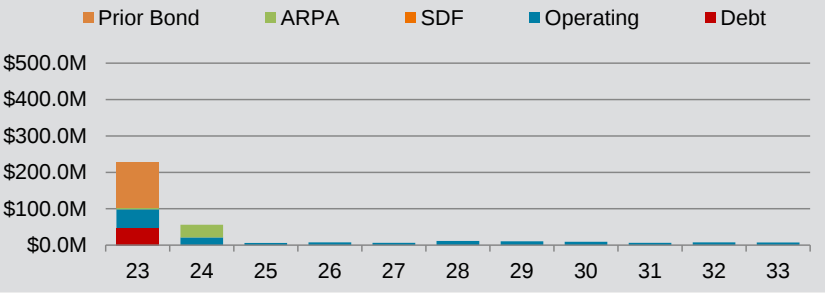
Expenses by Type



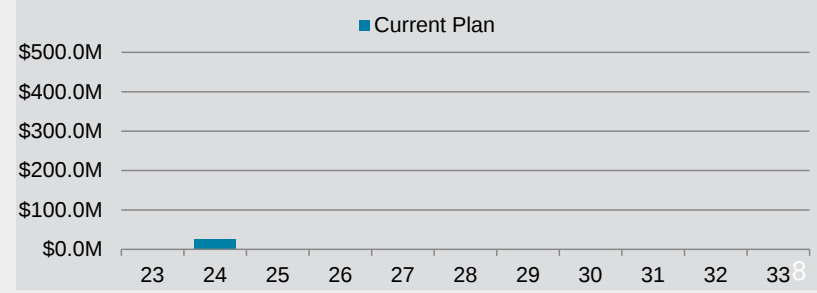
CIP Spending



CIP Funding



Borrowing



Changes Since FY2024 Approved Rate Plan

- 💧 Additional Funding from State with passing of State Budget in September 2023:

Item	Amount
Sewer Expansion	\$25.2 Million
Waxhaw Graywater System Improvements	\$1.45 Million

- 💧 Rate model must also support Union County Water annual operating expenses:

Item	Amount
Personnel	\$3.9 Million
Operating	\$2.8 Million

Rate Model Process for Scenarios

- 💧 Start with Approved Rate Model (Baseline)
- 💧 Add in FY25 Operating Budget Requests
- 💧 Add in Capital Needs Based on Master Plan (Scenarios)
- 💧 Adjust Rates to Minimum Level to Meet Financial Tests



Example: Without Additional Rate Increases



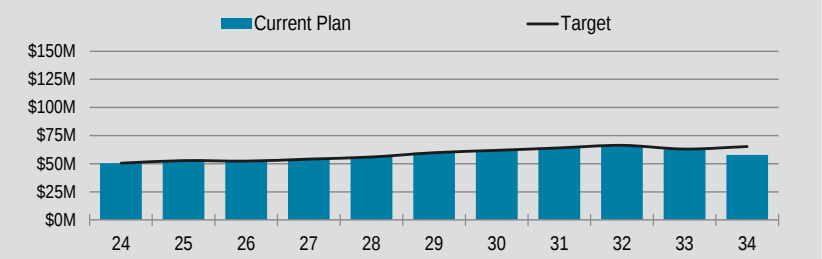
UNION COUNTY WATER & SEWER FUND



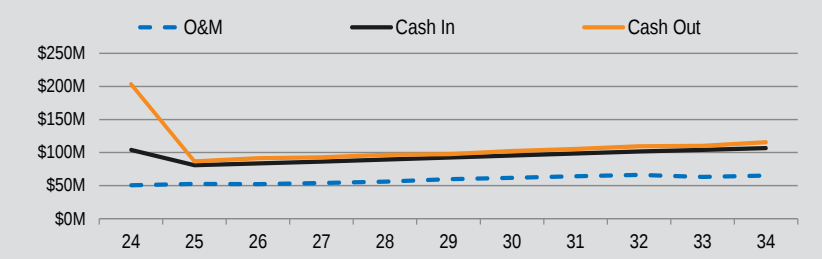
CALC SAVE CTRL LAST OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	109.09%	118.92%
Wastewater Rate Plan	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	108.99%	118.88%
Senior-Lien Covenant W/ SDF 1.20	1.36	1.28	1.40	1.48	1.28	1.17	1.20	1.08	1.05	1.06	0.91	Scenario Manager	
Rate Covenant All W/ SDF Fees 1.00	1.13	1.07	1.17	1.23	1.07	0.97	1.00	0.90	0.87	0.88	0.76	Master Plan Projects	Water & Sewer
Additional Bonds Test W/ SDF 1.00	N/A	1.06	N/A	N/A	0.91	N/A	N/A	0.80	N/A	N/A	0.70	Catawaba WTP (water)	No
												Site B Expansion (sewer)	No
												12 MGD Expansion (sewer)	No
Rate Revenue (\$M)	\$ 73.01	\$ 75.65	\$ 78.35	\$ 81.11	\$ 83.92	\$ 86.81	\$ 89.75	\$ 92.76	\$ 95.84	\$ 98.32	\$ 100.76	Ops Center Expansion	No
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 38.41	\$ 39.07	\$ 39.75	\$ 40.45	\$ 41.17	\$ 41.88	\$ 42.61	\$ 43.36	\$ 44.12	\$ 44.88	Crooked Creek (sewer)	Yes
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 67.21	\$ 68.35	\$ 69.56	\$ 70.78	\$ 72.00	\$ 73.29	\$ 74.57	\$ 75.87	\$ 77.17	\$ 78.53	ERU Growth Sch	Only Twelve Mile 7.5-9
Total Residential Bill	\$ 103.80	\$ 105.62	\$ 107.42	\$ 109.31	\$ 111.23	\$ 113.17	\$ 115.17	\$ 117.18	\$ 119.23	\$ 121.29	\$ 123.41		

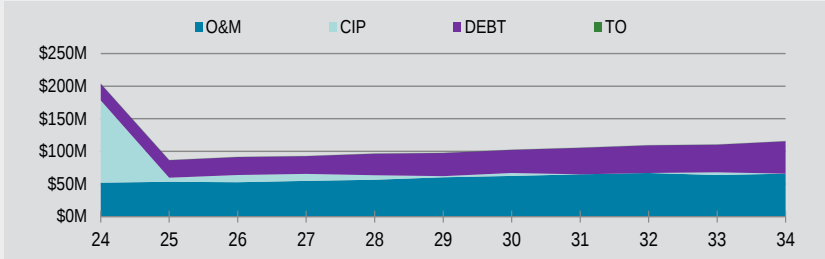
Operating Fund



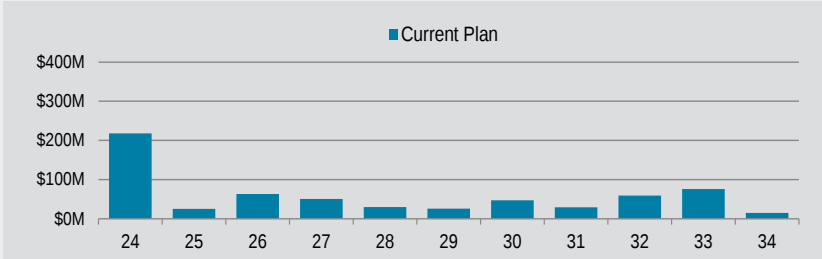
Revenues vs. Expenses



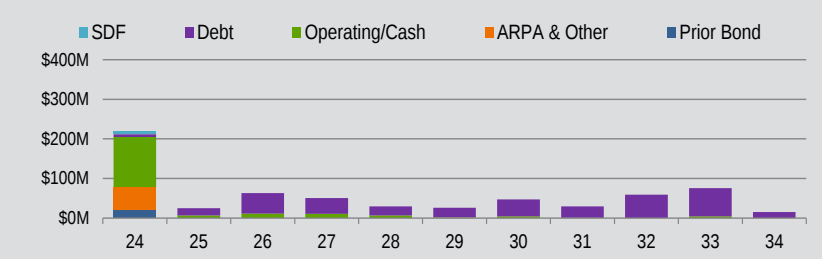
Expenses by Type



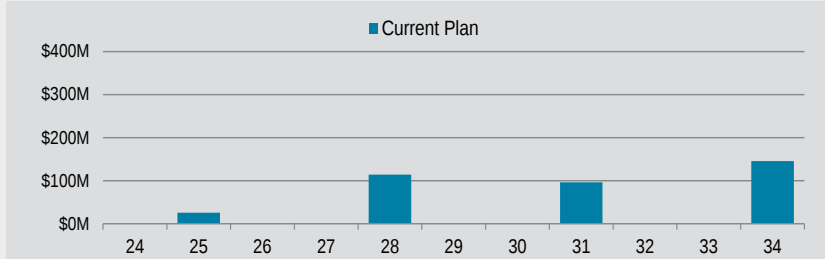
CIP Spending



CIP Funding



Borrowing



Example: With Rate Adjustment



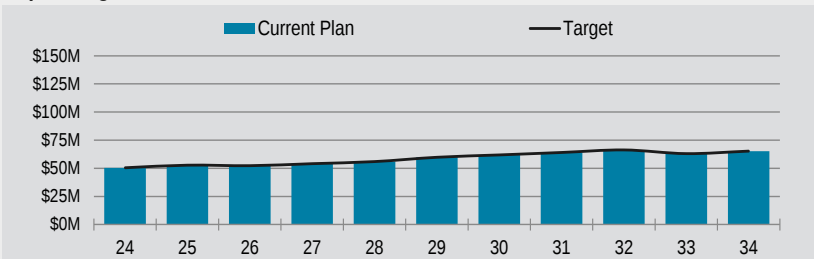
UNION COUNTY WATER & SEWER FUND



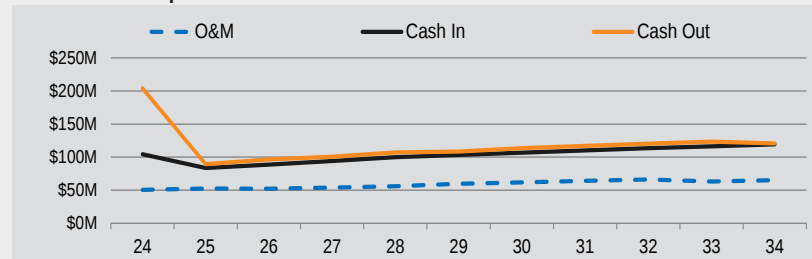
CALC SAVE CTRL LAST OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	4.25%	4.25%	4.25%	4.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	120.24%	131.16%
Wastewater Rate Plan	0.00%	5.50%	5.50%	5.50%	5.50%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	125.99%	137.47%
Senior-Lien Covenant W/ SDF 1.20	1.38	1.39	1.60	1.77	1.67	1.56	1.60	1.52	1.51	1.53	1.36	Scenario Manager Master Plan ProjectsWater & Sewer Catawaba WTP (water)No Site B Expansion (sewer)No 12 MGD Expansion (sewer)No Ops Center ExpansionNo Crooked Creek (sewer)Yes ERU Growth SchOnly Twelve Mile 7.5-9	
Rate Covenant All W/ SDF Fees 1.00	1.15	1.16	1.33	1.47	1.39	1.30	1.34	1.26	1.25	1.27	1.14		
Additional Bonds Test W/ SDF 1.00	N/A	1.12	N/A	N/A	1.14	N/A	N/A	1.15	N/A	N/A	1.07		
Rate Revenue (\$M)	\$ 73.46	\$ 78.27	\$ 83.35	\$ 88.73	\$ 94.41	\$ 97.65	\$ 100.95	\$ 104.34	\$ 107.79	\$ 110.57	\$ 113.30		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 39.35	\$ 41.04	\$ 42.78	\$ 44.61	\$ 45.38	\$ 46.15	\$ 46.96	\$ 47.80	\$ 48.64	\$ 49.50		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 69.70	\$ 73.51	\$ 77.54	\$ 81.80	\$ 83.23	\$ 84.68	\$ 86.19	\$ 87.71	\$ 89.23	\$ 90.81		
Total Residential Bill	\$ 103.80	\$ 109.05	\$ 114.55	\$ 120.32	\$ 126.41	\$ 128.61	\$ 130.83	\$ 133.15	\$ 135.51	\$ 137.87	\$ 140.31		

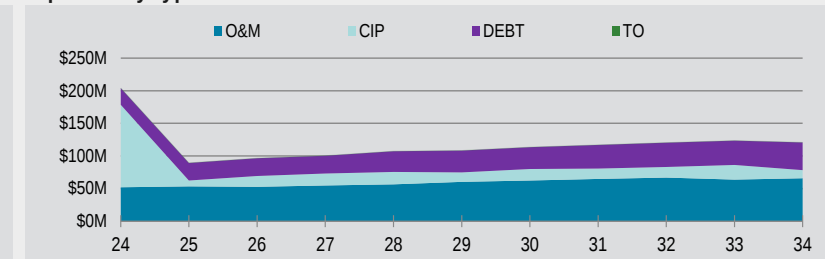
Operating Fund



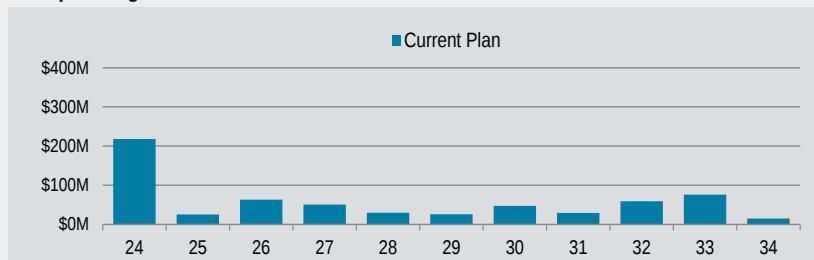
Revenues vs. Expenses



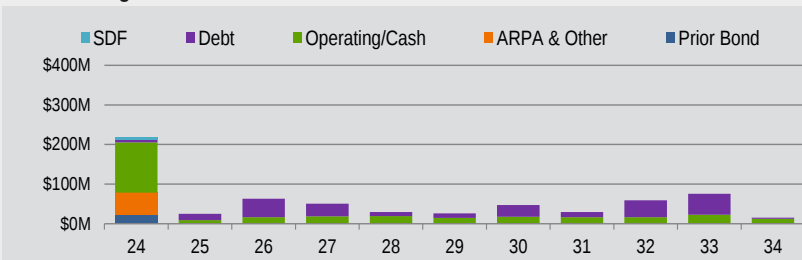
Expenses by Type



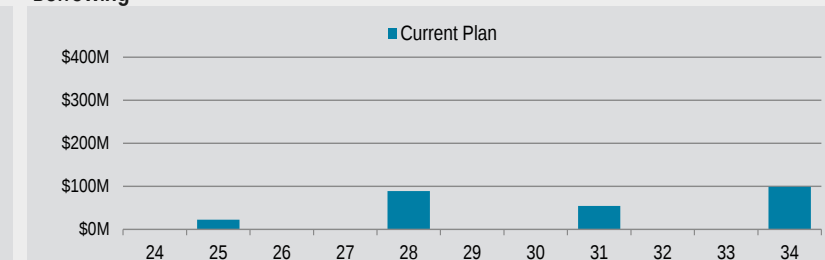
CIP Spending



CIP Funding



Borrowing





FY2025 Baseline Including Requested Operating Budget



Financial Analysis & Management System By Stantec

UNION COUNTY WATER & SEWER FUND



CALC

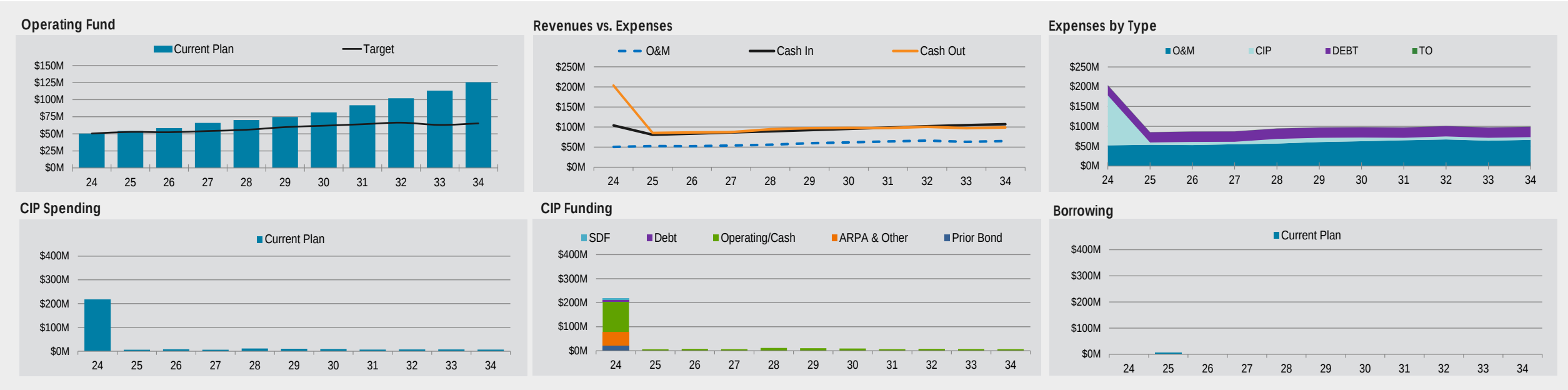
SAVE

CTRL

LAST

OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	109.09%	118.92%
Wastewater Rate Plan	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	108.99%	118.88%
Senior-Lien Covenant W/ SDF 1.20	1.36	1.33	1.48	1.55	1.63	1.60	1.63	1.67	1.71	1.73	1.75	Scenario Manager Master Plan Projects None Catawaba WTP (water) No Site B Expansion (sewer) No 12 MGD Expansion (sewer) No Ops Center Expansion No Crooked Creek (sewer) No ERU Growth Sch Only Twelve Mile 7.5-9	
Rate Covenant All W/ SDF Fees 1.00	1.13	1.11	1.23	1.29	1.36	1.33	1.36	1.39	1.42	1.44	1.46		
Additional Bonds Test W/ SDF 1.00	N/A	1.11	N/A	N/A	1.24	N/A	N/A	1.30	N/A	N/A	1.46		
Rate Revenue (\$M)	\$ 73.01	\$ 75.65	\$ 78.35	\$ 81.11	\$ 83.92	\$ 86.81	\$ 89.75	\$ 92.76	\$ 95.84	\$ 98.32	\$ 100.76		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 38.41	\$ 39.07	\$ 39.75	\$ 40.45	\$ 41.17	\$ 41.88	\$ 42.61	\$ 43.36	\$ 44.12	\$ 44.88		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 67.21	\$ 68.35	\$ 69.56	\$ 70.78	\$ 72.00	\$ 73.29	\$ 74.57	\$ 75.87	\$ 77.17	\$ 78.53		
Total Residential Bill	\$ 103.80	\$ 105.62	\$ 107.42	\$ 109.31	\$ 111.23	\$ 113.17	\$ 115.17	\$ 117.18	\$ 119.23	\$ 121.29	\$ 123.41		





FY2025 Baseline Including Requested Operating Budget & Ops Center



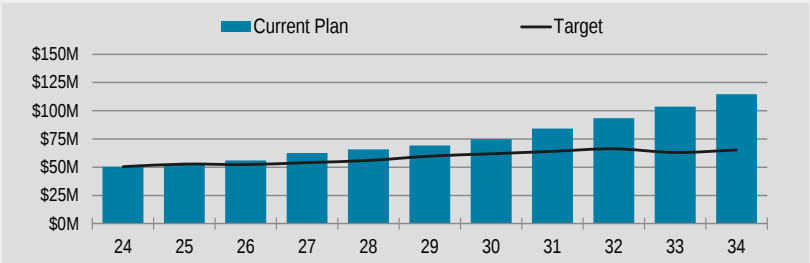
UNION COUNTY WATER & SEWER FUND



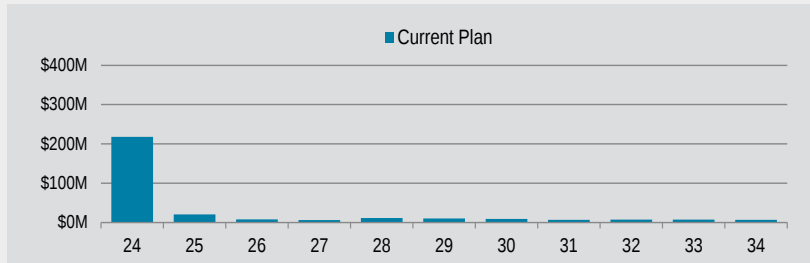
CALC SAVE CTRL LAST OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	109.09%	118.92%
Wastewater Rate Plan	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	108.99%	118.88%
Senior-Lien Covenant W/ SDF 1.20	1.36	1.29	1.42	1.50	1.57	1.54	1.57	1.61	1.64	1.67	1.68	Scenario Manager Master Plan ProjectsNone Catawaba WTP (water)No Site B Expansion (sewer)No 12 MGD Expansion (sewer)No Ops Center ExpansionYes Crooked Creek (sewer)No ERU Growth SchOnly Twelve Mile 7.5-9	
Rate Covenant All W/ SDF Fees 1.00	1.13	1.08	1.19	1.25	1.31	1.28	1.31	1.34	1.37	1.39	1.40		
Additional Bonds Test W/ SDF 1.00	N/A	1.07	N/A	N/A	1.19	N/A	N/A	1.25	N/A	N/A	1.40		
Rate Revenue (\$M)	\$ 73.01	\$ 75.65	\$ 78.35	\$ 81.11	\$ 83.92	\$ 86.81	\$ 89.75	\$ 92.76	\$ 95.84	\$ 98.32	\$ 100.76		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 38.41	\$ 39.07	\$ 39.75	\$ 40.45	\$ 41.17	\$ 41.88	\$ 42.61	\$ 43.36	\$ 44.12	\$ 44.88		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 67.21	\$ 68.35	\$ 69.56	\$ 70.78	\$ 72.00	\$ 73.29	\$ 74.57	\$ 75.87	\$ 77.17	\$ 78.53		
Total Residential Bill	\$ 103.80	\$ 105.62	\$ 107.42	\$ 109.31	\$ 111.23	\$ 113.17	\$ 115.17	\$ 117.18	\$ 119.23	\$ 121.29	\$ 123.41		

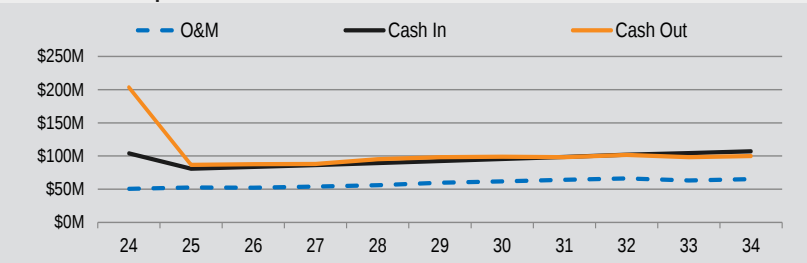
Operating Fund



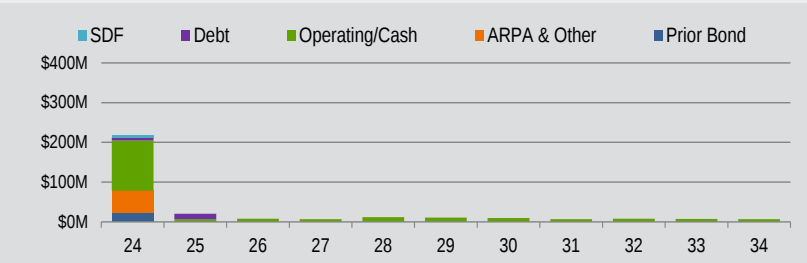
CIP Spending



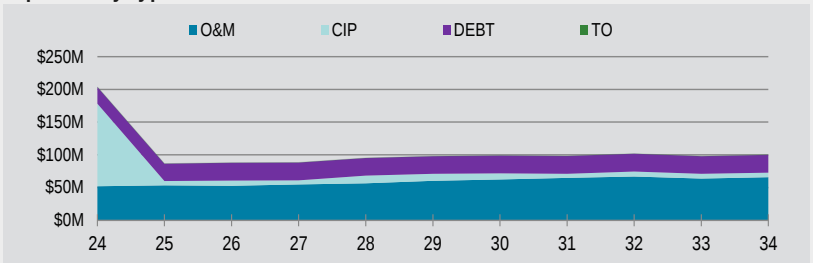
Revenues vs. Expenses



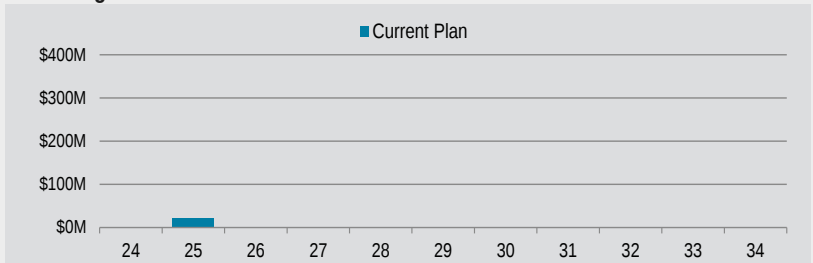
CIP Funding



Expenses by Type



Borrowing



CIP Scenarios

Scenario	Renewal & Replacement Projects	Previously Approved Water Projects	Previously Approved Wastewater Projects	Operations Center Expansion	Water Master Plan Projects	Catawba Water Plant Expansion	Sewer Master Plan Projects	Crooked Creek WRF Renewal	12 Mile Expansion to 12 MGD	Site B WRF
Baseline	X	X	X							
Baseline + Ops Ctr	X	X	X	X						
A	X	X	X	X	X			X		
B	X	X	X	X	X	X		X		
C	X	X	X	X	X		X	X		
D	X	X	X	X	X	X	X	X		
E	X	X	X	X	X	X	X	X	X	
F	X	X	X	X	X	X	X	X	X	X

NOTE: Short Waterline Projects not included in scenarios.

Scenario Rate Model By Year

Scenario	Rate	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034
Base	Water	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	Sewer	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
Base + Ops Ctr	Water	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	Sewer	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
A	Water	1.75%	4.25%	4.25%	4.25%	4.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	Sewer	1.75%	2.50%	2.50%	2.50%	2.50%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
B	Water	1.75%	7.25%	7.25%	7.25%	7.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	Sewer	1.75%	2.50%	2.50%	2.50%	2.50%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
C	Water	1.75%	4.25%	4.25%	4.25%	4.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	Sewer	1.75%	6.00%	6.00%	6.00%	6.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
D	Water	1.75%	7.25%	7.25%	7.25%	7.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	Sewer	1.75%	6.00%	6.00%	6.00%	6.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
E	Water	1.75%	7.25%	7.25%	7.25%	7.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	Sewer	1.75%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
F	Water	1.75%	7.25%	7.25%	7.25%	7.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	Sewer	1.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%

Scenario Rate Model Summary

Scenario	Rate	FY2024	FY2025-FY2028	FY2029-FY2034	NOTES
Base	Water	1.75%	1.75%	1.75%	
	Sewer	1.75%	1.75%	1.75%	
A	Water	1.75%	4.25%	1.75%	Water Master Plan Impact = 2.5% over 4 years
	Sewer	1.75%	2.50%	1.75%	Crooked Creek R&R Impact = 0.75% over 4 years
B	Water	1.75%	7.25%	1.75%	Catawba Expansion Impact = 3.00% over 4 years
	Sewer	1.75%	2.50%	1.75%	
C	Water	1.75%	4.25%	1.75%	
	Sewer	1.75%	6.00%	1.75%	Sewer Master Plan Impact = 3.50% over 4 years
D	Water	1.75%	7.25%	1.75%	
	Sewer	1.75%	6.00%	1.75%	
E	Water	1.75%	7.25%	1.75%	
	Sewer	1.75%	6.00%	6.00%	12M Expansion to 12 MGD Impact = 3.50% over 10 years
F	Water	1.75%	7.25%	1.75%	
	Sewer	1.75%	11.75%	11.75%	Site B impact = 5.75% over 10 years

Change in Monthly Bill Based on Average Residential Usage*

*Average Monthly Usage = 5,500 gallons

Scenario	Rate	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Base	Water	\$ 0.67	\$ 0.66	\$ 0.68	\$ 0.70	\$ 0.72	\$ 0.71	\$ 0.73	\$ 0.75	\$ 0.76	\$ 0.76
	Sewer	\$ 1.15	\$ 1.14	\$ 1.21	\$ 1.22	\$ 1.22	\$ 1.29	\$ 1.28	\$ 1.30	\$ 1.30	\$ 1.36
A	Water	\$ 1.61	\$ 1.69	\$ 1.74	\$ 1.83	\$ 0.77	\$ 0.77	\$ 0.81	\$ 0.84	\$ 0.84	\$ 0.86
	Sewer	\$ 1.67	\$ 1.68	\$ 1.75	\$ 1.75	\$ 1.29	\$ 1.29	\$ 1.30	\$ 1.36	\$ 1.37	\$ 1.37
B	Water	\$ 2.74	\$ 2.95	\$ 3.16	\$ 3.39	\$ 0.86	\$ 0.86	\$ 0.93	\$ 0.93	\$ 0.94	\$ 0.95
	Sewer	\$ 1.67	\$ 1.68	\$ 1.75	\$ 1.75	\$ 1.29	\$ 1.29	\$ 1.30	\$ 1.36	\$ 1.37	\$ 1.37
C	Water	\$ 1.61	\$ 1.69	\$ 1.74	\$ 1.83	\$ 0.77	\$ 0.77	\$ 0.81	\$ 0.84	\$ 0.84	\$ 0.86
	Sewer	\$ 3.95	\$ 4.19	\$ 4.47	\$ 4.71	\$ 1.45	\$ 1.51	\$ 1.52	\$ 1.52	\$ 1.58	\$ 1.60
D	Water	\$ 2.74	\$ 2.95	\$ 3.16	\$ 3.39	\$ 0.86	\$ 0.86	\$ 0.93	\$ 0.93	\$ 0.94	\$ 0.95
	Sewer	\$ 3.64	\$ 3.81	\$ 4.03	\$ 4.26	\$ 1.43	\$ 1.45	\$ 1.51	\$ 1.52	\$ 1.52	\$ 1.58
E	Water	\$ 2.74	\$ 2.95	\$ 3.16	\$ 3.39	\$ 0.86	\$ 0.86	\$ 0.93	\$ 0.93	\$ 0.94	\$ 0.95
	Sewer	\$ 3.64	\$ 3.81	\$ 4.03	\$ 4.26	\$ 4.48	\$ 4.72	\$ 5.01	\$ 5.31	\$ 5.56	\$ 5.85
F	Water	\$ 2.74	\$ 2.95	\$ 3.16	\$ 3.39	\$ 0.86	\$ 0.86	\$ 0.93	\$ 0.93	\$ 0.94	\$ 0.95
	Sewer	\$ 7.44	\$ 8.28	\$ 9.19	\$ 10.25	\$ 11.39	\$ 12.67	\$ 14.62	\$ 15.20	\$ 17.46	\$ 19.43

Site B (New Crooked Creek WRF)

- 💧 Reviewed three alternatives based on plant site/discharge location based on NC DEQ
- 💧 Included highest project costs of the three options
- 💧 Planned construction in 2033 and escalated costs for that timeframe

Observations

- 💧 Financial model is updated each year after the year end audit is complete
 - 💧 Capital costs become more in focus
 - 💧 Preparation for the upcoming budget year
- 💧 A long term rate plan smooth spikes of “just in time” planning
- 💧 Recommend a new SDF study if any water or sewer expansion projects are identified to move forward

An aerial photograph of a city, likely Union County, North Carolina, featuring a prominent clock tower in the center. The image is overlaid with a large, semi-transparent blue circle. The text "Thank you!" is centered within this circle.

Thank you!



UNIONCOUNTY
WATER

Appendix

- 💧 All Scenario Dashboards
- 💧 Change in Yearly Bill Based on Average Monthly Residential Usage
- 💧 Capital Improvement Program @ 12/31/2023*

*Pulled from Finance Department Quarterly Report



Scenario A:



UNION COUNTY WATER & SEWER FUND



CALC

SAVE

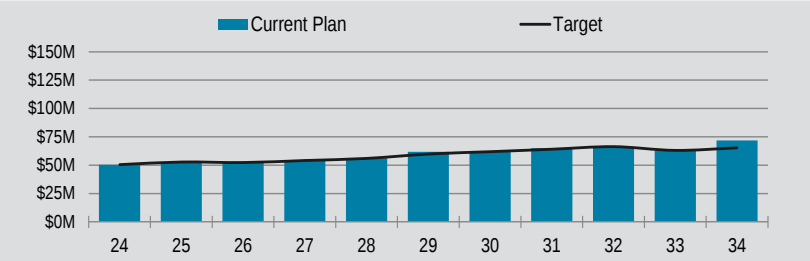
CTRL

LAST

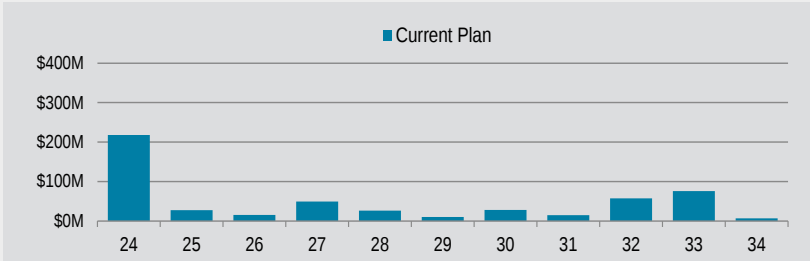
OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	4.25%	4.25%	4.25%	4.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	120.24%	131.16%
Wastewater Rate Plan	0.00%	2.50%	2.50%	2.50%	2.50%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	112.32%	122.45%
Senior-Lien Covenant W/ SDF 1.20	1.38	1.34	1.51	1.63	1.62	1.55	1.59	1.60	1.62	1.65	1.45	Scenario Manager Master Plan Projects Water Catawaba WTP (water) No Site B Expansion (sewer) No 12 MGD Expansion (sewer) No Ops Center Expansion Yes Crooked Creek (sewer) Yes ERU Growth Sch Only Twelve Mile 7.5-9	
Rate Covenant All W/ SDF Fees 1.00	1.15	1.12	1.26	1.36	1.35	1.29	1.32	1.33	1.35	1.37	1.21		
Additional Bonds Test W/ SDF 1.00	N/A	1.11	N/A	N/A	1.18	N/A	N/A	1.24	N/A	N/A	1.14		
Rate Revenue (\$M)	\$ 73.46	\$ 77.28	\$ 81.28	\$ 85.45	\$ 89.81	\$ 92.91	\$ 96.07	\$ 99.30	\$ 102.61	\$ 105.31	\$ 107.96		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 39.35	\$ 41.04	\$ 42.78	\$ 44.61	\$ 45.38	\$ 46.15	\$ 46.96	\$ 47.80	\$ 48.64	\$ 49.50		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 67.73	\$ 69.41	\$ 71.16	\$ 72.91	\$ 74.20	\$ 75.49	\$ 76.79	\$ 78.15	\$ 79.52	\$ 80.89		
Total Residential Bill	\$ 103.80	\$ 107.08	\$ 110.45	\$ 113.94	\$ 117.52	\$ 119.58	\$ 121.64	\$ 123.75	\$ 125.95	\$ 128.16	\$ 130.39		

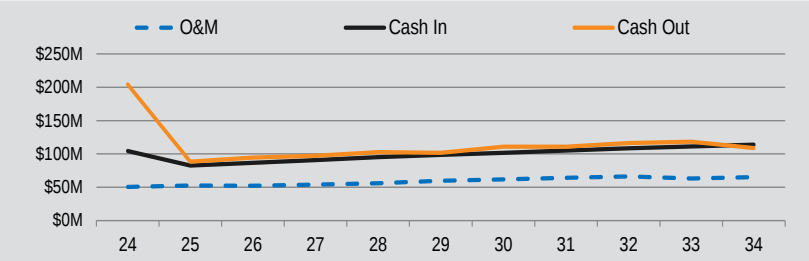
Operating Fund



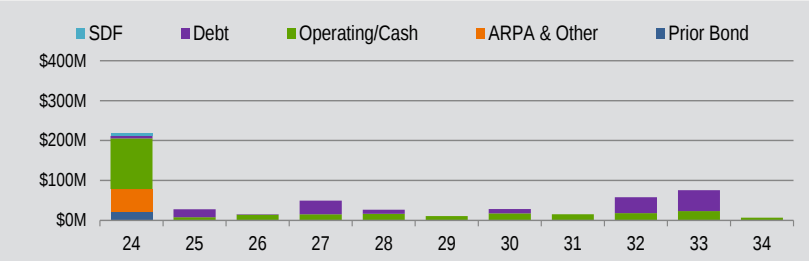
CIP Spending



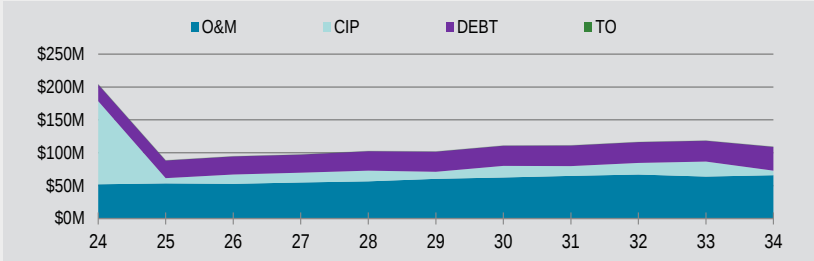
Revenues vs. Expenses



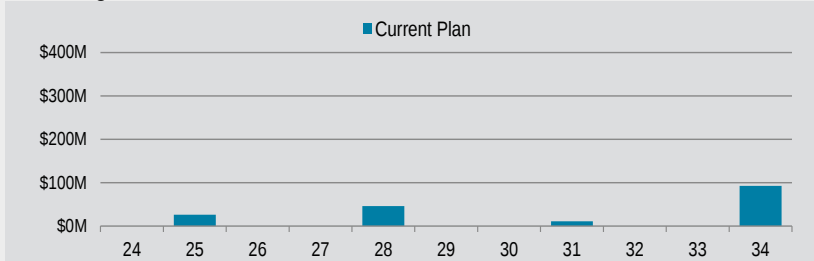
CIP Funding



Expenses by Type



Borrowing





Scenario B:



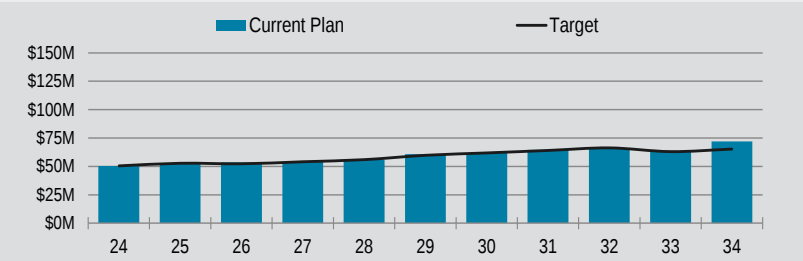
UNION COUNTY WATER & SEWER FUND



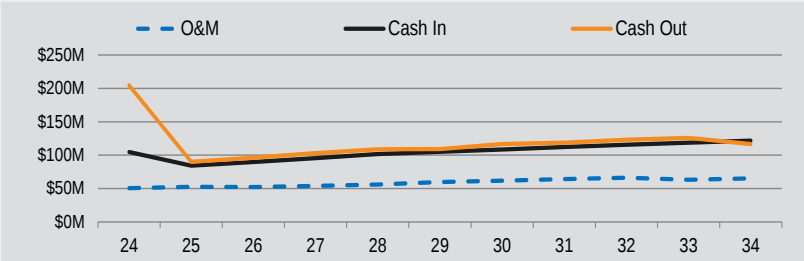
CALC SAVE CTRL LAST OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	7.25%	7.25%	7.25%	7.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	134.71%	146.93%
Wastewater Rate Plan	0.00%	2.50%	2.50%	2.50%	2.50%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	112.32%	122.45%
Senior-Lien Covenant W/ SDF 1.20	1.40	1.38	1.59	1.76	1.55	1.42	1.46	1.47	1.49	1.52	1.38	Scenario Manager Master Plan ProjectsWater Catawaba WTP (water)Yes Site B Expansion (sewer)No 12 MGD Expansion (sewer)No Ops Center ExpansionYes Crooked Creek (sewer)Yes ERU Growth SchOnly Twelve Mile 7.5-9	
Rate Covenant All W/ SDF Fees 1.00	1.16	1.15	1.33	1.47	1.29	1.18	1.21	1.22	1.25	1.27	1.15		
Additional Bonds Test W/ SDF 1.00	N/A	1.15	N/A	N/A	1.08	N/A	N/A	1.14	N/A	N/A	1.08		
Rate Revenue (\$M)	\$ 73.99	\$ 78.97	\$ 84.29	\$ 89.99	\$ 96.08	\$ 99.41	\$ 102.81	\$ 106.29	\$ 109.85	\$ 112.80	\$ 115.70		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 40.48	\$ 43.43	\$ 46.59	\$ 49.98	\$ 50.84	\$ 51.70	\$ 52.63	\$ 53.56	\$ 54.50	\$ 55.45		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 67.73	\$ 69.41	\$ 71.16	\$ 72.91	\$ 74.20	\$ 75.49	\$ 76.79	\$ 78.15	\$ 79.52	\$ 80.89		
Total Residential Bill	\$ 103.80	\$ 108.21	\$ 112.84	\$ 117.75	\$ 122.89	\$ 125.04	\$ 127.19	\$ 129.42	\$ 131.71	\$ 134.02	\$ 136.34		

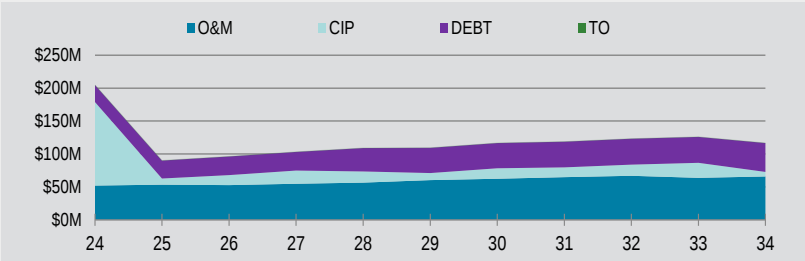
Operating Fund



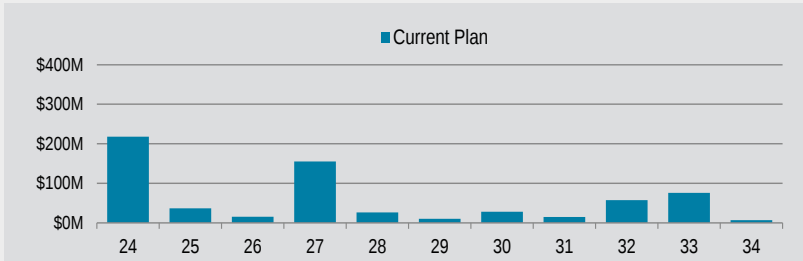
Revenues vs. Expenses



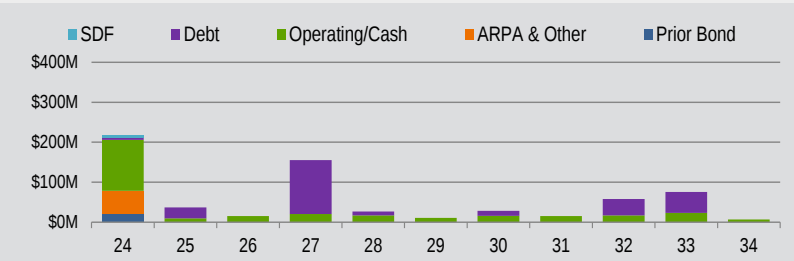
Expenses by Type



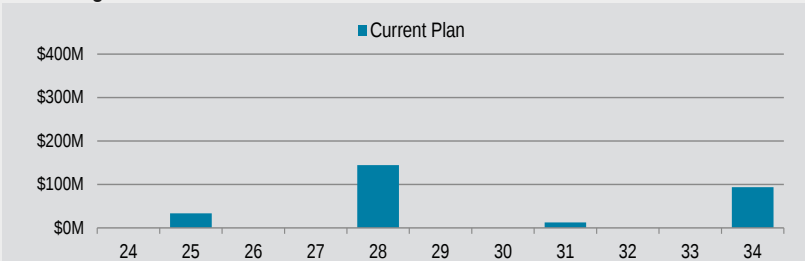
CIP Spending



CIP Funding



Borrowing





Scenario C



UNION COUNTY WATER & SEWER FUND



CALC

SAVE

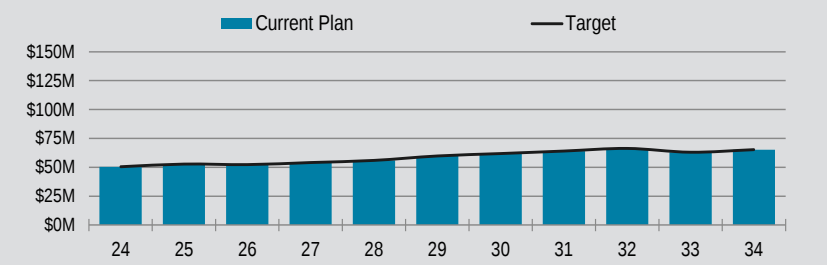
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LAST

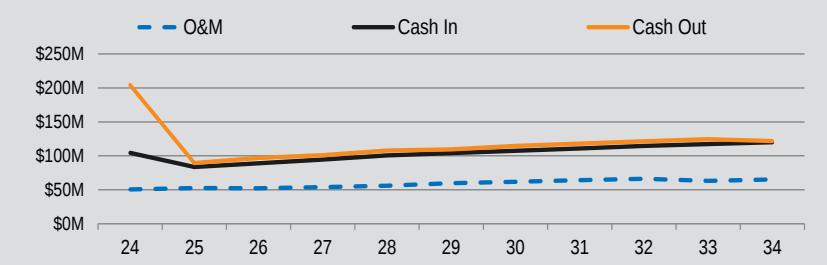
OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	4.25%	4.25%	4.25%	4.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	120.24%	131.16%
Wastewater Rate Plan	0.00%	6.00%	6.00%	6.00%	6.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	128.41%	140.12%
Senior-Lien Covenant W/ SDF 1.20	1.38	1.35	1.55	1.72	1.64	1.53	1.57	1.49	1.48	1.50	1.34	Scenario Manager Master Plan Projects Water & Sewer Catawaba WTP (water)No Site B Expansion (sewer)No 12 MGD Expansion (sewer)No Ops Center ExpansionYes Crooked Creek (sewer)Yes ERU Growth SchOnly Twelve Mile 7.5-9	
Rate Covenant All W/ SDF Fees 1.00	1.15	1.13	1.29	1.43	1.36	1.28	1.31	1.24	1.23	1.25	1.12		
Additional Bonds Test W/ SDF 1.00	N/A	1.08	N/A	N/A	1.11	N/A	N/A	1.13	N/A	N/A	1.06		
Rate Revenue (\$M)	\$ 73.46	\$ 78.43	\$ 83.70	\$ 89.29	\$ 95.21	\$ 98.47	\$ 101.81	\$ 105.21	\$ 108.70	\$ 111.49	\$ 114.23		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 39.35	\$ 41.04	\$ 42.78	\$ 44.61	\$ 45.38	\$ 46.15	\$ 46.96	\$ 47.80	\$ 48.64	\$ 49.50		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 70.01	\$ 74.20	\$ 78.67	\$ 83.38	\$ 84.83	\$ 86.34	\$ 87.86	\$ 89.38	\$ 90.96	\$ 92.56		
Total Residential Bill	\$ 103.80	\$ 109.36	\$ 115.24	\$ 121.45	\$ 127.99	\$ 130.21	\$ 132.49	\$ 134.82	\$ 137.18	\$ 139.60	\$ 142.06		

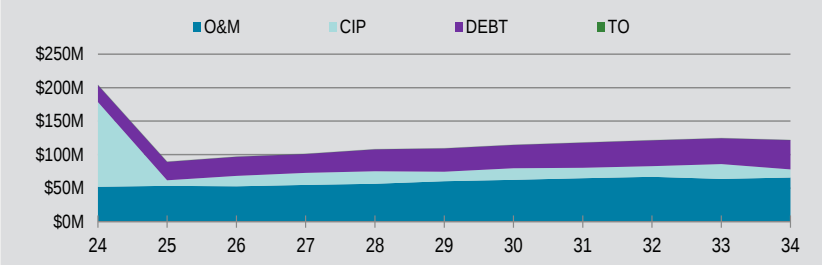
Operating Fund



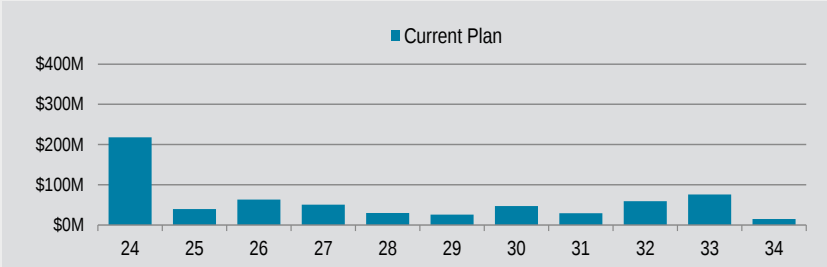
Revenues vs. Expenses



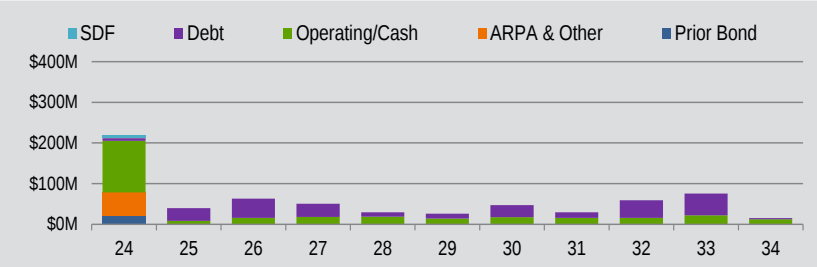
Expenses by Type



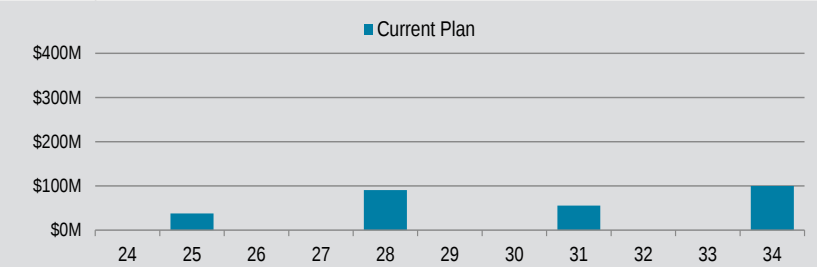
CIP Spending



CIP Funding



Borrowing





Scenario D:



UNION COUNTY WATER & SEWER FUND



CALC

SAVE

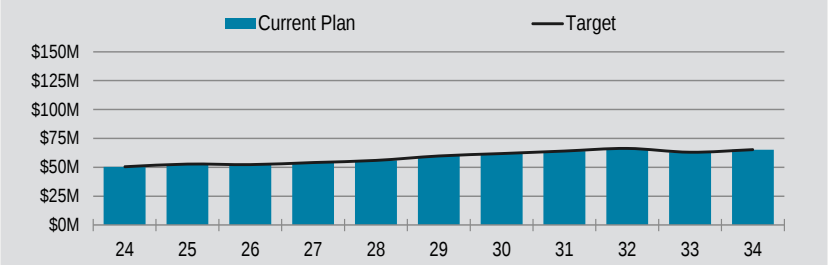
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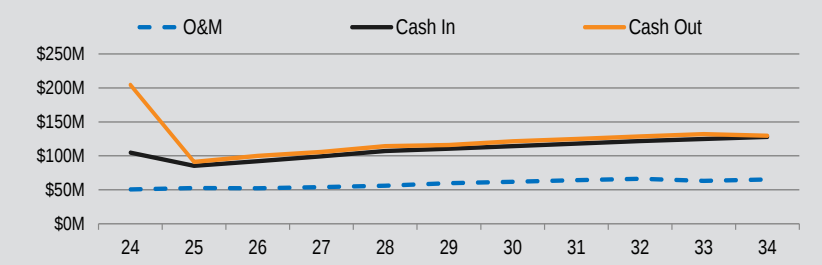
OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	7.25%	7.25%	7.25%	7.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	134.71%	146.93%
Wastewater Rate Plan	0.00%	6.00%	6.00%	6.00%	6.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	128.41%	140.12%
Senior-Lien Covenant W/ SDF 1.20	1.40	1.40	1.63	1.85	1.57	1.42	1.46	1.40	1.39	1.42	1.30	Scenario Manager Master Plan Projects Water & Sewer Catawaba WTP (water)Yes Site B Expansion (sewer)No 12 MGD Expansion (sewer)No Ops Center ExpansionYes Crooked Creek (sewer)Yes ERU Growth SchOnly Twelve Mile 7.5-9	
Rate Covenant All W/ SDF Fees 1.00	1.16	1.16	1.36	1.54	1.31	1.18	1.21	1.16	1.16	1.18	1.08		
Additional Bonds Test W/ SDF 1.00	N/A	1.12	N/A	N/A	1.03	N/A	N/A	1.07	N/A	N/A	1.02		
Rate Revenue (\$M)	\$ 73.99	\$ 80.12	\$ 86.72	\$ 93.83	\$ 101.48	\$ 104.98	\$ 108.55	\$ 112.21	\$ 115.94	\$ 118.99	\$ 121.98		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 40.48	\$ 43.43	\$ 46.59	\$ 49.98	\$ 50.84	\$ 51.70	\$ 52.63	\$ 53.56	\$ 54.50	\$ 55.45		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 70.01	\$ 74.20	\$ 78.67	\$ 83.38	\$ 84.83	\$ 86.34	\$ 87.86	\$ 89.38	\$ 90.96	\$ 92.56		
Total Residential Bill	\$ 103.80	\$ 110.49	\$ 117.63	\$ 125.26	\$ 133.36	\$ 135.67	\$ 138.04	\$ 140.49	\$ 142.94	\$ 145.46	\$ 148.01		

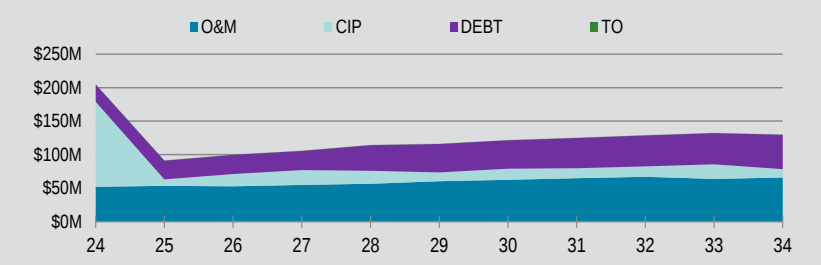
Operating Fund



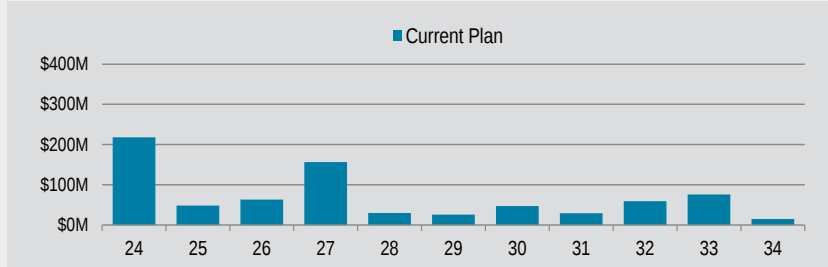
Revenues vs. Expenses



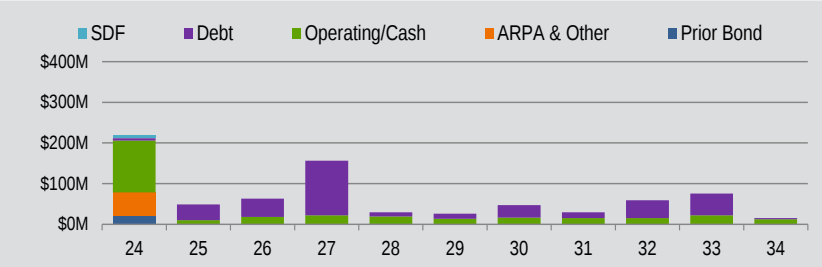
Expenses by Type



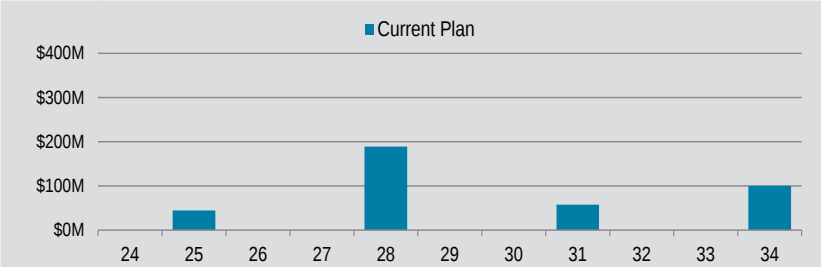
CIP Spending



CIP Funding



Borrowing

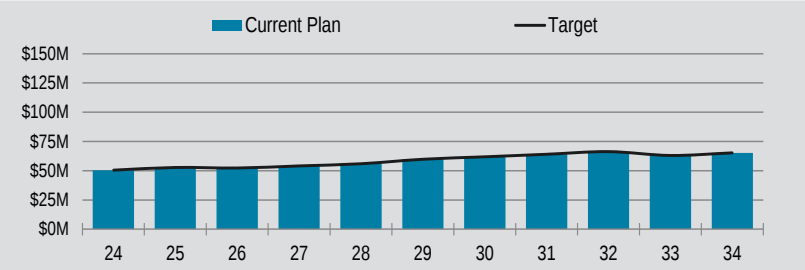




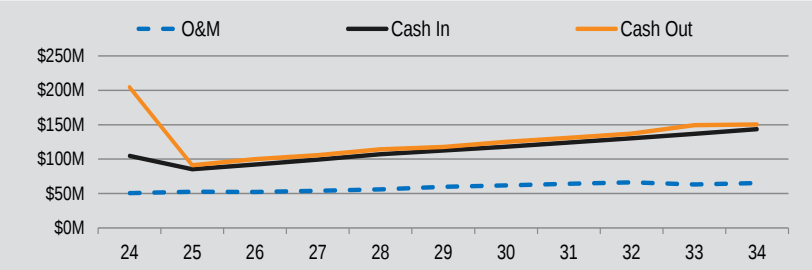
Scenario E:

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	7.25%	7.25%	7.25%	7.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	134.71%	146.93%
Wastewater Rate Plan	0.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	133.80%	179.00%
Senior-Lien Covenant W/ SDF 1.20	1.40	1.40	1.63	1.85	1.57	1.46	1.55	1.53	1.57	1.78	1.49	Scenario Manager Master Plan Projects Water & Sewer Catawaba WTP (water) Yes Site B Expansion (sewer) No 12 MGD Expansion (sewer) Yes Ops Center Expansion Yes Crooked Creek (sewer) Yes ERU Growth Sch Both Twelve Mile	
Rate Covenant All W/ SDF Fees 1.00	1.16	1.16	1.36	1.54	1.31	1.22	1.29	1.27	1.31	1.48	1.24		
Additional Bonds Test W/ SDF 1.00	N/A	1.12	N/A	N/A	1.03	N/A	N/A	1.10	N/A	N/A	1.04		
Rate Revenue (\$M)	\$ 73.99	\$ 80.12	\$ 86.72	\$ 93.83	\$ 101.48	\$ 106.82	\$ 112.42	\$ 118.30	\$ 124.47	\$ 130.96	\$ 137.65		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 40.48	\$ 43.43	\$ 46.59	\$ 49.98	\$ 50.84	\$ 51.70	\$ 52.63	\$ 53.56	\$ 54.50	\$ 55.45		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 70.01	\$ 74.20	\$ 78.67	\$ 83.38	\$ 88.39	\$ 93.70	\$ 99.32	\$ 105.25	\$ 111.56	\$ 118.25		
Total Residential Bill	\$ 103.80	\$ 110.49	\$ 117.63	\$ 125.26	\$ 133.36	\$ 139.23	\$ 145.40	\$ 151.95	\$ 158.81	\$ 166.06	\$ 173.70		

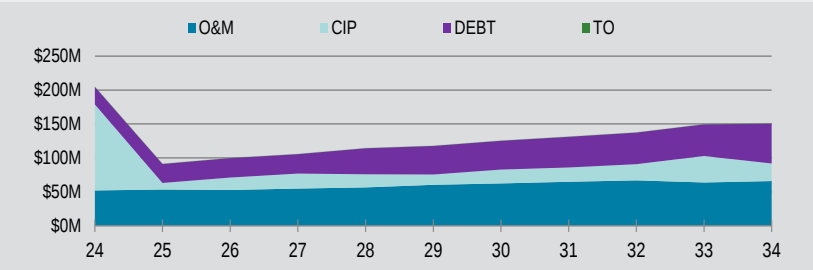
Operating Fund



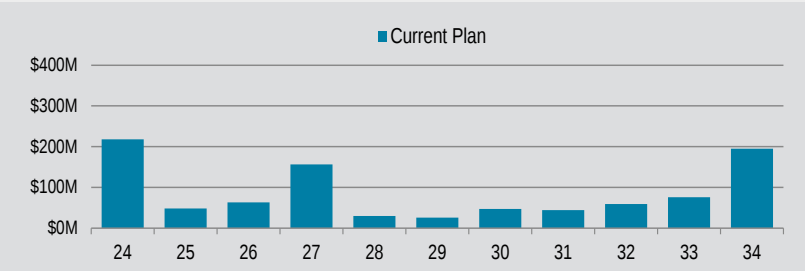
Revenues vs. Expenses



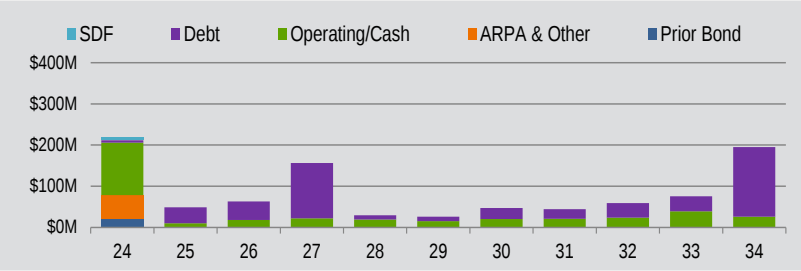
Expenses by Type



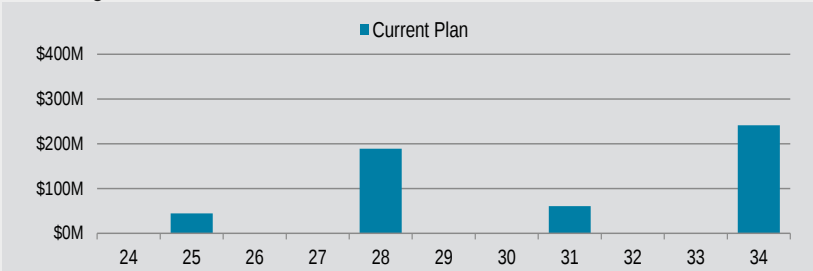
CIP Spending



CIP Funding



Borrowing





Scenario F:



UNION COUNTY WATER & SEWER FUND



CALC

SAVE

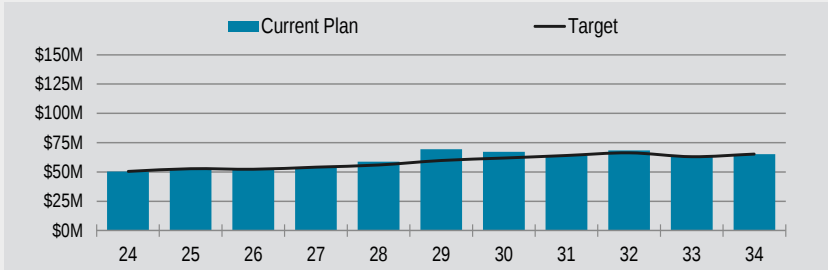
CTRL

LAST

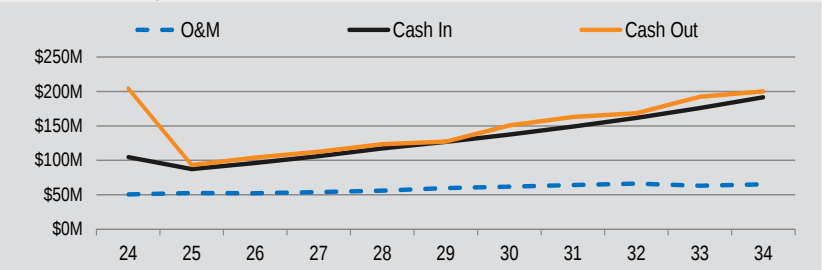
OVR

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2029	FY 2034
Water Rate Plan	0.00%	7.25%	7.25%	7.25%	7.25%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	134.71%	146.93%
Wastewater Rate Plan	0.00%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	11.75%	174.27%	303.72%
Senior-Lien Covenant W/ SDF 1.20	1.40	1.47	1.78	2.10	1.94	1.91	2.11	2.29	2.51	2.92	1.82	Scenario Manager Master Plan Projects Water & Sewer Catawaba WTP (water)Yes Site B Expansion (sewer)Yes 12 MGD Expansion (sewer)Yes Ops Center ExpansionYes Crooked Creek (sewer)Yes ERU Growth SchBoth Twelve Mile, Site B	
Rate Covenant All W/ SDF Fees 1.00	1.16	1.23	1.49	1.75	1.61	1.59	1.76	1.90	2.09	2.44	1.51		
Additional Bonds Test W/ SDF 1.00	N/A	1.13	N/A	N/A	1.15	N/A	N/A	1.53	N/A	N/A	1.06		
Rate Revenue (\$M)	\$ 73.99	\$ 82.00	\$ 90.87	\$ 100.67	\$ 111.81	\$ 121.25	\$ 131.66	\$ 143.18	\$ 155.92	\$ 170.03	\$ 185.55		
Water Average Bill (5.5 Kgal)	\$ 37.74	\$ 40.48	\$ 43.43	\$ 46.59	\$ 49.98	\$ 50.84	\$ 51.70	\$ 52.63	\$ 53.56	\$ 54.50	\$ 55.45		
Wastewater Average Bill (5.5 Kgal)	\$ 66.06	\$ 73.81	\$ 82.47	\$ 92.18	\$ 103.04	\$ 115.12	\$ 128.64	\$ 143.76	\$ 160.63	\$ 179.53	\$ 200.64		
Total Residential Bill	\$ 103.80	\$ 114.29	\$ 125.90	\$ 138.77	\$ 153.02	\$ 165.96	\$ 180.34	\$ 196.39	\$ 214.19	\$ 234.03	\$ 256.09		

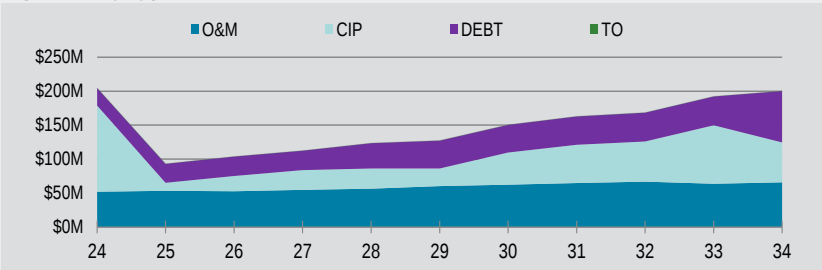
Operating Fund



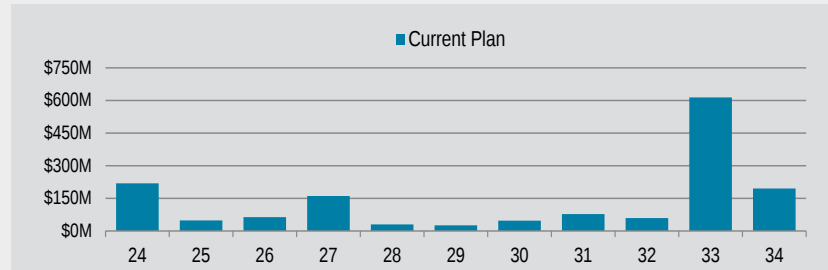
Revenues vs. Expenses



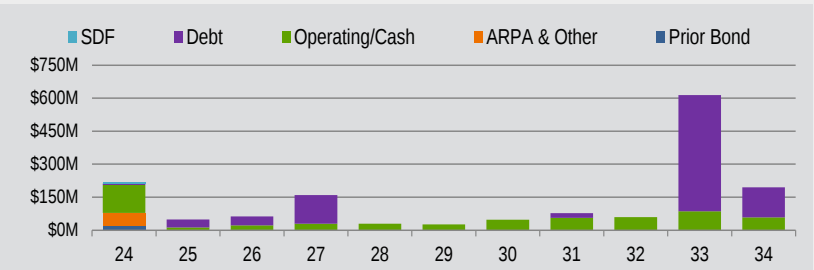
Expenses by Type



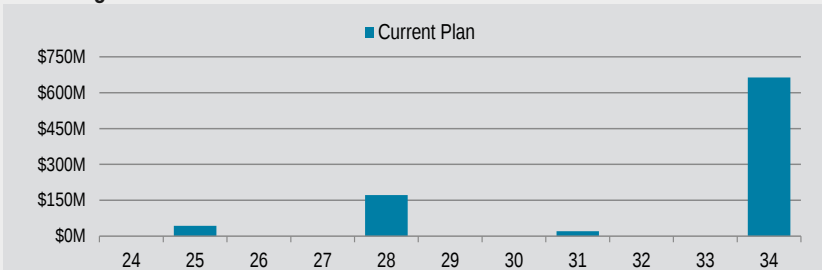
CIP Spending



CIP Funding



Borrowing



Change in Yearly Bill Based on Average Monthly Residential Usage*

*Average Monthly Usage = 5,500 gallons

Scenario	Rate	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Base	Water	\$ 8.04	\$ 7.92	\$ 8.16	\$ 8.40	\$ 8.64	\$ 8.52	\$ 8.76	\$ 9.00	\$ 9.12	\$ 9.12
	Sewer	\$ 13.80	\$ 13.68	\$ 14.52	\$ 14.64	\$ 14.64	\$ 15.48	\$ 15.36	\$ 15.60	\$ 15.60	\$ 16.32
A	Water	\$ 19.32	\$ 20.28	\$ 20.88	\$ 21.96	\$ 9.24	\$ 9.24	\$ 9.72	\$ 10.08	\$ 10.08	\$ 10.32
	Sewer	\$ 20.04	\$ 20.16	\$ 21.00	\$ 21.00	\$ 15.48	\$ 15.48	\$ 15.60	\$ 16.32	\$ 16.44	\$ 16.44
B	Water	\$ 32.88	\$ 35.40	\$ 37.92	\$ 40.68	\$ 10.32	\$ 10.32	\$ 11.16	\$ 11.16	\$ 11.28	\$ 11.40
	Sewer	\$ 20.04	\$ 20.16	\$ 21.00	\$ 21.00	\$ 15.48	\$ 15.48	\$ 15.60	\$ 16.32	\$ 16.44	\$ 16.44
C	Water	\$ 19.32	\$ 20.28	\$ 20.88	\$ 21.96	\$ 9.24	\$ 9.24	\$ 9.72	\$ 10.08	\$ 10.08	\$ 10.32
	Sewer	\$ 47.40	\$ 50.28	\$ 53.64	\$ 56.52	\$ 17.40	\$ 18.12	\$ 18.24	\$ 18.24	\$ 18.96	\$ 19.20
D	Water	\$ 32.88	\$ 35.40	\$ 37.92	\$ 40.68	\$ 10.32	\$ 10.32	\$ 11.16	\$ 11.16	\$ 11.28	\$ 11.40
	Sewer	\$ 47.40	\$ 50.28	\$ 53.64	\$ 56.52	\$ 17.40	\$ 18.12	\$ 18.24	\$ 18.24	\$ 18.96	\$ 19.20
E	Water	\$ 32.88	\$ 35.40	\$ 37.92	\$ 40.68	\$ 10.32	\$ 10.32	\$ 11.16	\$ 11.16	\$ 11.28	\$ 11.40
	Sewer	\$ 47.40	\$ 50.28	\$ 53.64	\$ 56.52	\$ 60.12	\$ 63.72	\$ 67.44	\$ 71.16	\$ 75.72	\$ 80.28
F	Water	\$ 32.88	\$ 35.40	\$ 37.92	\$ 40.68	\$ 10.32	\$ 10.32	\$ 11.16	\$ 11.16	\$ 11.28	\$ 11.40
	Sewer	\$ 93.00	\$ 103.92	\$ 116.52	\$ 130.32	\$ 144.96	\$ 162.24	\$ 181.44	\$ 202.44	\$ 226.80	\$ 253.32

Project Summary For UC Water CIP Fund

Union County, NC FY 2024 CIP Quarterly Financial Report

As of December 31, 2023

UNION COUNTY WATER CAPITAL PROJECT FUND

Fund 601

Project Number	Project Name	Revised Budget	Expended to Date	Encumbrances	Available Budget
84014	762 Zone Transmission Main (Bypass)	\$ 969,051	\$ 969,051	\$ -	\$ -
84015	Water R&R Program	3,000,000	-	-	3,000,000
84024	SCADA Master Plan - Water	9,200,000	2,673,449	5,128,632	1,397,919
84080	Marshville Water Tank Rehab	1,205,406	1,023,206	182,200	-
84084	762 Zone Elevated Tank	3,250,373	3,223,364	27,509	(500)
84085	Indian Trail Additional Tank # 1 & Watkins BPS Improvements	8,900,000	-	-	8,900,000
84086	853 West Transmission Main Improvements	24,058,971	22,682,566	1,294,750	81,655
84089	YRWSP Distribution System Improvements	37,500,000	2,599,183	187,042	34,713,775
84090	YRWSP Raw Water Intake, Pump Station & Transmission Main	160,240,720	156,460,675	1,700,200	2,079,845
84091	YRWSP WTP & Finished Water Infrastructure	120,655,044	115,960,947	2,934,901	1,759,196
84097	Storage Tank Rehab FY18 - Fwd	500,000	-	-	500,000
84098	Galvanized Replacements FY18 - FY2033	905,794	836,685	65,213	3,896
84106	853 West Zone Transmission Main Phase 2	4,114,187	1,937,150	213,828	1,963,210
84108	Advanced Metering Infrastructure	17,600,000	9,477,602	7,738,691	383,706
84112	Yadkin Stanly Settlement	1,038,440	1,022,985	15,455	-
84114	Yadkin Montgomery Settlement	784,943	778,318	6,626	-
84116	Stallings Road Waterline	341,558	329,076	-	12,482
84117	CRWTP Fencing	429,721	418,127	-	11,594

Project Summary For UC Water CIP Fund

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UNION COUNTY WATER CAPITAL PROJECT FUND

Fund 601

Project Number	Project Name	Revised Budget	Expended to Date	Encumbrances	Available Budget
84119	Worwood Acres Waterline Replacement	983,931	865,859	-	118,072
84120	Shortline Water Extensions FY 2020	9,505,801	4,140,544	313,860	5,051,397
84121	880 Pressure Zone Charlotte Water Interconnect	1,801,163	1,531,828	-	269,336
84123	Galvanized Line Replacement	765,454	740,908	-	24,546
84124	Northwest Tank Refurbishment	771,314	753,418	12,493	5,403
84127	Emerald Woods Water Line	800,000	57,712	72,162	670,126
84128	Short Line Extensions FY 2022	5,000,000	96,809	1,045,237	3,857,954
84129	Short Line Extensions FY 2023	5,000,000	3,535	-	4,996,465
84130	Waxhaw Water Improvements	430,600	417,295	-	13,305
84502	CRWTP Reservoir Expansion	29,202,540	28,885,099	-	317,441
84504	Yadkin Water Supply	4,691,510	4,166,279	163,815	361,416
84507	YRWSP Program Management	17,045,420	15,987,854	1,057,737	(171)
84508	Chestnut Lane Connector Water	765,000	-	758,300	6,700
84510	Stack Road Water Line	793,488	760,402	22,194	10,892
84512	SCADA	1,714,852	116,190	285,019	1,313,643
84515	Presson Road Waterline	498,431	428,998	-	69,433
84516	Catawba River Water Pump Upgrade	900,795	174,660	726,135	-
84517	FY22 Water Main Replacement	702,462	-	-	702,462

Project Summary For UC Water CIP Fund

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UNION COUNTY WATER CAPITAL PROJECT FUND

Fund 601

Project Number	Project Name	Revised Budget	Expended to Date	Encumbrances	Available Budget
84518	Indian Trail Rd Streetscape	1,100,000	15,200	44,578	1,040,222
84519	Lawyers/Rocky River Rd Roundabout	400,000	-	400,000	-
84520	CRWTP Mitigation	35,866	-	35,866	-
85006	Wastewater R&R Program	2,036,068	80,376	55,692	1,900,001
85009	SCADA Master Plan - Wastewater	9,200,000	2,673,458	5,474,784	1,051,759
85036	Stallings - Collection System	388,200	106,200	240,000	42,000
85040	CC Interceptor Improvements Phase 1	810,129	557,241	52,889	199,999
85045	Collection System SSES & Rehab	598,919	375,598	205,431	17,890
85047	West Fork 12 Mile Interceptor Improvements	13,959,295	12,643,403	236,994	1,078,898
85050	Poplin Road Pump Station Interim Improvements	17,140,281	16,004,662	1,082,206	53,413
85051	Suburban Estates PS & Force Main	172,085	158,164	13,921	-
85055	WWTP R&R	3,300,181	179,310	-	3,120,871
85056	Waxhaw Interceptor	6,215,000	5,922,726	335,364	(43,090)
85057	Crooked Creek Interceptor Improvements Phase 2	16,995,400	1,606,368	91,912	15,297,121
85061	12 Mile Creek I&I Abatement	1,232,981	408,974	24,007	800,000
85063	WRF Process Evaluation	541,380	465,664	13,755	61,961
85064	Septic Tank Assessment	6,004,302	1,737,436	109,799	4,157,067

Project Summary For UC Water CIP Fund

Union County, NC FY 2024 CIP Quarterly Financial Report

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UNION COUNTY WATER CAPITAL PROJECT FUND

Fund 601

Project Number	Project Name	Revised Budget	Expended to Date	Encumbrances	Available Budget
85065	EDC Industrial Park Pump Station	3,700,000	620,075	172,157	2,907,769
85068	Waxhaw Clay Lining WW R&R	310,000	104,489	-	205,511
85070	Deese PS Decommission	662,576	622,854	3,480	36,242
85072	CCWRF Electrical Improvements	3,908,962	3,848,239	3,261	57,462
85073	CCWRF Process Improvements	4,290,000	4,129,769	69,976	90,255
85074	Olde Sycamore WRF Process Improvements	1,616,000	1,557,814	-	58,186
85076	WW Pump Station Improvements	2,127,314	-	-	2,127,314
85077	2020 MP WW Flow Monitoring	214,050	198,750	-	15,300
85079	FY22 Union County Pump Station	1,000,000	134,280	26,170	839,550
85083	Crooked Creek UV Equipment	398,710	146,187	252,523	-
85084	Helmsville Force Main Replcmt	800,000	27,820	1,430	770,750
85520	Lower Crooked Creek WRF	203,396	203,396	-	-
85521	Tarkhill Force Main R&R	1,700,580	1,663,612	36,968	-
85522	STEG Assessment Waxhaw	4,120,000	179,641	60,718	3,879,641
85523	Potter-Pleasant Plains WW Intersection	2,300,000	-	2,263,280	36,721
85524	SPCC Extension	660,000	-	-	660,000
85525	Grassy Branch WRF Expansion	5,700,000	422,506	364,909	4,912,585
85526	853 West Zone Transmission Main Phase 3	1,095,700	545,491	550,209	-

Project Summary For UC Water CIP Fund

Union County, NC FY 2024 CIP Quarterly Financial Report

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UNION COUNTY WATER CAPITAL PROJECT FUND

Fund 601

Project Number	Project Name	Revised Budget	Expended to Date	Encumbrances	Available Budget
85527	853 West Zone Trans. Phase 4	13,200,000	-	-	13,200,000
85530	Crooked Creek Site B	23,425,755	4,783,412	45,806	18,596,537
85531	12 Mile Creek Exp 7.5 - 9 MGD	47,000,000	2,199,702	116,763	44,683,535
85532	Poplin Force Main Relocation	600,000	15,372	24,628	560,000
85534	6 Mile Service Area Assessment	64,500	62,558	1,942	-
86007	Master Plan Update (old)	1,360,834	1,212,671	146,167	1,996
86019	Op Center Expansion and Renovations	43,060	42,920	140	-
86021	CC WRF Administration Building	1,325,000	122,300	25,350	1,177,350
86022	12 Mile WRF Administration Building	1,583,512	1,530,841	55,447	(2,776)
86024	Water Treatment PFAS Study	103,000	73,950	29,050	-
TOTAL TO DATE		\$679,710,005	\$446,903,198	\$ 36,619,570	\$196,187,237