

October 8, 2024

2024 WATER RATE STUDY:

# City of Watertown, WI

## Phase 1: Long-Range Cash Flow Analysis



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## 2024 Water Rate Study

### Section 1 — Historical Analysis

#### City of Watertown, WI

# Table 1

## Water Rate Performance

City of Watertown, WI

		Shown with no increase				Est	Budget
Revenue Requirement							
Component	Description	2020	2021	2022	2023	2024	2025
<b>Cash Basis</b>							
1	O&M and PILOT	\$2,601,384	\$2,928,980	\$2,930,493	\$2,852,645	\$3,579,894	\$3,649,805
2	Debt	\$1,331,794	\$1,328,941	\$1,330,123	\$868,016	\$874,420	\$878,183
3	Cash Funded Capital^	\$1,544,152	\$1,645,565	\$1,874,648	\$2,052,774	\$1,949,393	\$524,998
Less:							
	Other Revenue	\$164,204	\$211,209	\$207,029	\$228,103	\$182,500	\$182,500
	Interest Income	\$38,169	\$8,287	\$28,991	\$306,790	\$140,000	\$140,000
	Revenue Requirement (Costs less Other Income)	\$5,274,957	\$5,683,990	\$5,899,244	\$5,238,542	\$6,081,207	\$4,730,486
	User Rates Revenue	\$5,242,195	\$5,408,766	\$5,442,790	\$5,367,953	\$5,442,790	\$5,442,790
	Rate Adequacy	(\$32,762)	(\$275,224)	(\$456,454)	\$129,411	(\$638,417)	\$712,304
	Rate Adjustment Needed	0.62%	5.09%	8.39%	0.00%	11.73%	0.00%
<b>Utility Basis (PSC)</b>							
1	O&M and PILOT	\$2,601,384	\$2,928,980	\$2,930,493	\$2,852,645	\$3,579,894	\$3,649,805
2	Depreciation	\$1,034,416	\$1,070,670	\$1,070,083	\$989,522	\$1,009,317	\$1,063,944
	NIRB	\$30,473,640	\$30,311,734	\$30,123,906	\$30,764,399	\$31,503,420	\$32,077,468
	PSC Benchmark ROI %	4.90%	4.90%	4.90%	6.50%	6.30%	6.20%
3	PSC Calculated ROI	\$1,493,208	\$1,485,275	\$1,476,071	\$1,999,686	\$1,984,715	\$1,988,803
Less:							
	Other Revenue	\$164,204	\$211,209	\$207,029	\$228,103	\$182,500	\$182,500
	Revenue Requirement (Costs less Other Income)	\$4,964,804	\$5,273,716	\$5,269,618	\$5,613,750	\$6,391,427	\$6,520,051
	User Rates Revenue	\$5,242,195	\$5,408,766	\$5,442,790	\$5,367,953	\$5,442,790	\$5,442,790
	Rate Adequacy	\$277,391	\$135,050	\$173,172	(\$245,797)	(\$948,637)	(\$1,077,261)
	Rate Adjustment Needed	0.00%	0.00%	0.00%	4.58%	17.43%	19.79%

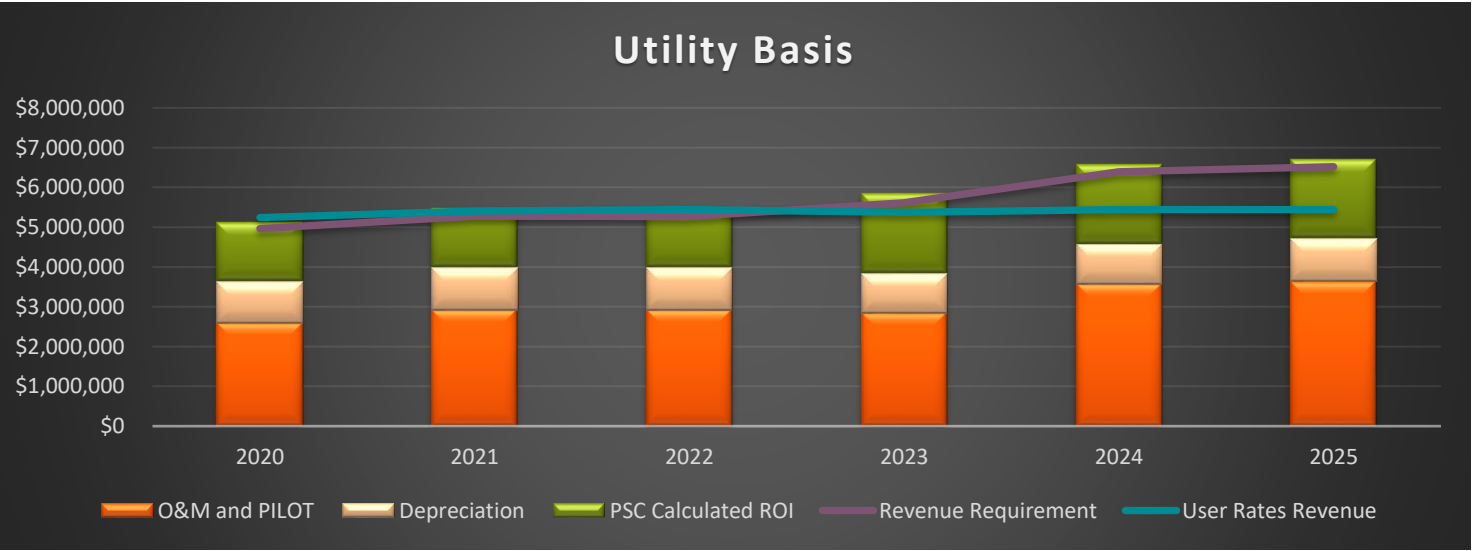
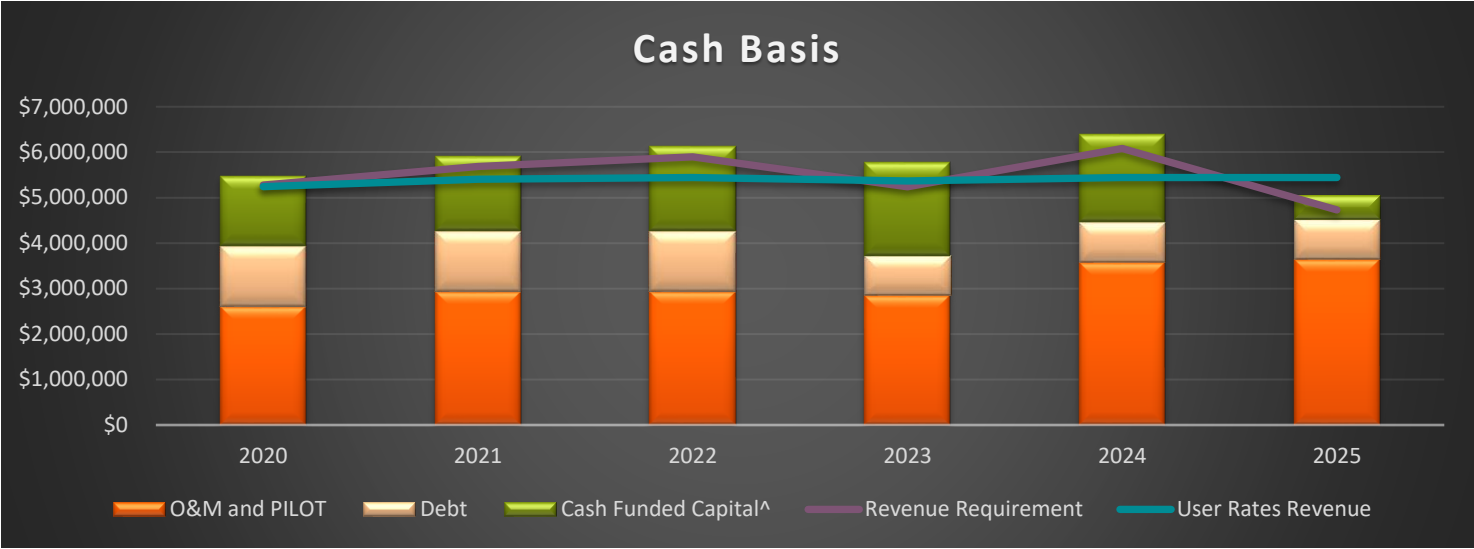
**Notes:**

^Includes recommended debt coverage at 1.4x annual debt payment

# Table 2

## Water Utility Rate Performance Charts

City of Watertown, WI



## Table 3

# Water Utility Cash Flow Analysis - Historical 2020-2024

City of Watertown, WI

	Actual				Estimated
	2020	2021	2022	2023	2024
<b>Revenues</b>					
Total Revenues from User Rates	\$5,242,195	\$5,408,766	\$5,442,790	\$5,367,953	\$5,442,790
<b>Percent Increase to User Rates</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>
Other Revenues					
Interest Income	\$38,169	\$8,287	\$28,991	\$306,790	\$140,000
Other Income	\$169,054	-\$40,330	\$218,718	\$161,107	\$182,500
Total Other Revenues	\$207,223	-\$32,043	\$247,709	\$467,897	\$322,500
Total Revenues	\$5,449,418	\$5,376,723	\$5,690,499	\$5,835,850	\$5,765,290
<b>Less: Expenses</b>					
Operating and Maintenance	\$1,639,893	\$1,952,546	\$2,104,648	\$2,120,902	\$2,729,894
PILOT Payment	\$961,491	\$976,434	\$825,845	\$731,743	\$850,000
Net Before Debt Service and Capital Expenditures	\$2,848,034	\$2,447,743	\$2,760,006	\$2,983,205	\$2,185,396
Existing Debt P&I	\$1,331,794	\$1,328,941	\$1,330,123	\$868,016	\$874,420
Transfer In (Out)/Cap. Contrib.	\$27,600	\$62,000	\$88,000	\$3,600	\$5,500
Less: Capital Improvements	\$1,011,434	\$1,113,989	\$508,206	\$2,532,062	\$1,599,625
Debt Proceeds/Grants	\$0	\$0	-\$834,393	\$826,494	\$0
Reconcile to Audit	\$86,914	\$328,475	\$621,411	-\$469,997	\$591,437
<b>Net Annual Cash Flow</b>	<b>\$619,320</b>	<b>\$395,288</b>	<b>\$796,695</b>	<b>(\$56,776)</b>	<b>\$308,288</b>
<b>Restricted and Unrestricted Cash Balance:</b>					
Balance at first of year	\$4,027,357	\$4,646,677	\$5,041,965	\$5,838,660	\$5,781,884
Net Annual Cash Flow Addition/(subtraction)	\$619,320	\$395,288	\$796,695	-\$56,776	\$308,288
Balance at end of year	\$4,646,677	\$5,041,965	\$5,838,660	\$5,781,884	\$6,090,172

Notes:

## Table 4

### Water Utility Financial Benchmarking Analysis

City of Watertown, WI

	Actual				Estimated	Budget
	2020	2021	2022	2023	2024	2025
<b>Target minimum cash balance</b>						
Target minimum working capital - Ehlers <sup>1</sup>	3,442,609	3,444,203	2,903,240	3,166,867	3,349,198	3,529,172
Actual Days Cash Available - PSC <sup>2</sup>	812	748	777	864	705	954
Actual Days Cash Available - Moody's <sup>3</sup>	951	844	857	945	753	1,012
Actual Days Cash Available - S&P <sup>4</sup>	1,034	844	857	945	753	1,012
<b>Actual working capital-cash balance</b>						
Over (Under) Ehlers target	4,646,677	5,041,965	5,838,660	5,781,884	6,090,172	8,153,856
Over (Under) PSC target (90 days)	1,204,068	1,597,763	2,935,420	2,615,017	2,740,974	4,624,684
Over (Under) Moody's target (150 days)	722	658	687	774	615	864
Over (Under) S&P target (150 days)	801	694	707	795	603	862
Over (Under) S&P target (150 days)	884	694	707	795	603	862

#### Notes:

- 1) Target capital equals 6 mos of next year's operating expenses, including depreciation, plus 100% of following year's debt.
- 2) PSC formula = O&M expense + taxes + interest on long term debt ÷ 365 to get expense per day. Then Unrestricted Cash ÷ expense per day
- 3) Moody's Formula = [(Unrestricted Cash + Liquid Investments) \* 365 days] ÷ Total O&M Expenses less Depreciation
- 4) S&P Formula = [(Unrestricted Cash + Liquid Investments) \* 365 days] ÷ Total O&M Expenses less Depreciation; include designated reserve funds: ERFs, RSFs, etc

#### Rate of Return

Average Utility Plant in Service	43,892,876	44,129,097	44,286,928	45,586,780	47,338,079	48,745,391
Plus: Materials and Supplies	115,334	113,299	126,481	146,172	125,322	125,322
Less: Avg. Utility Plant Accum. Depreciation	13,439,543	13,862,787	14,248,780	14,954,980	15,756,614	16,793,244
Less: Regulatory Liability	95,027	67,875	40,723	13,573	0	0
Average Net Investment Rate Base (NIRB)	30,473,640	30,311,734	30,123,906	30,764,399	31,706,786	32,077,468
Net Operating Income	1,762,242	1,542,041	1,687,224	1,729,257	1,036,079	1,988,803
ROR	5.78%	5.09%	5.60%	5.62%	3.27%	6.20%
Benchmark	4.90%	4.90%	4.90%	6.50%	6.30%	6.20%

#### Cost Recovery

Operating Revenues	5,406,399	5,619,975	5,649,819	5,596,056	5,625,290	6,702,551
Operating Expenses incl. Depr & Amortization	3,862,974	4,227,336	4,228,159	4,070,448	4,584,894	4,942,029
Operating Expenses w/o Depr & Amortization	2,601,384	2,928,980	2,930,493	2,852,645	3,579,894	3,649,805
Cost Recovery incl. Depr	1.40	1.33	1.34	1.37	1.23	1.36
Cost Recovery w/o Depr	1.48	1.44	1.44	1.43	1.28	1.35
Target	1.00	1.00	1.00	1.00	1.00	1.00

#### Notes:

This operating ratio indicates whether operating revenues (mostly charges to customers) were sufficient to cover operations and capital (in the form of depreciation) for the water and/or wastewater utility in the fiscal year. A ratio of less than 1 could be a sign of financial concern. In general, this ratio should be higher than 1 to accommodate future capital investments.

#### Leverage

Total Long-Term Debt	12,296,984	11,190,951	10,051,245	9,352,704	8,539,260	9,239,773
Total Net Assets	54,953,475	54,566,009	55,262,741	57,272,948	58,872,573	60,087,573
Debt-to Equity Ratio	0.22	0.21	0.18	0.16	0.15	0.15

**Notes:**

This indicator measures the existing level of leveraging of assets, and is used by funders and bond rating agencies to evaluate the risk of providing additional loans to the utility. The ratio indicates the amount of long-term debt that exists for every \$1 of assets (fund equity). A utility with a ratio greater than 1.0 has more long-term debt than equity in the system's assets. There are no natural benchmarks for this indicator, and funders and bond rating agencies will assess this ratio in various ways. In general, the higher this ratio, the more likely the utility will be considered to be over-leveraged and the more difficult it will be for the utility to obtain additional loans. For this ratio, Net Assets are equal to the Net Investment Rate Base of the utility.

**Condition of Assets:**

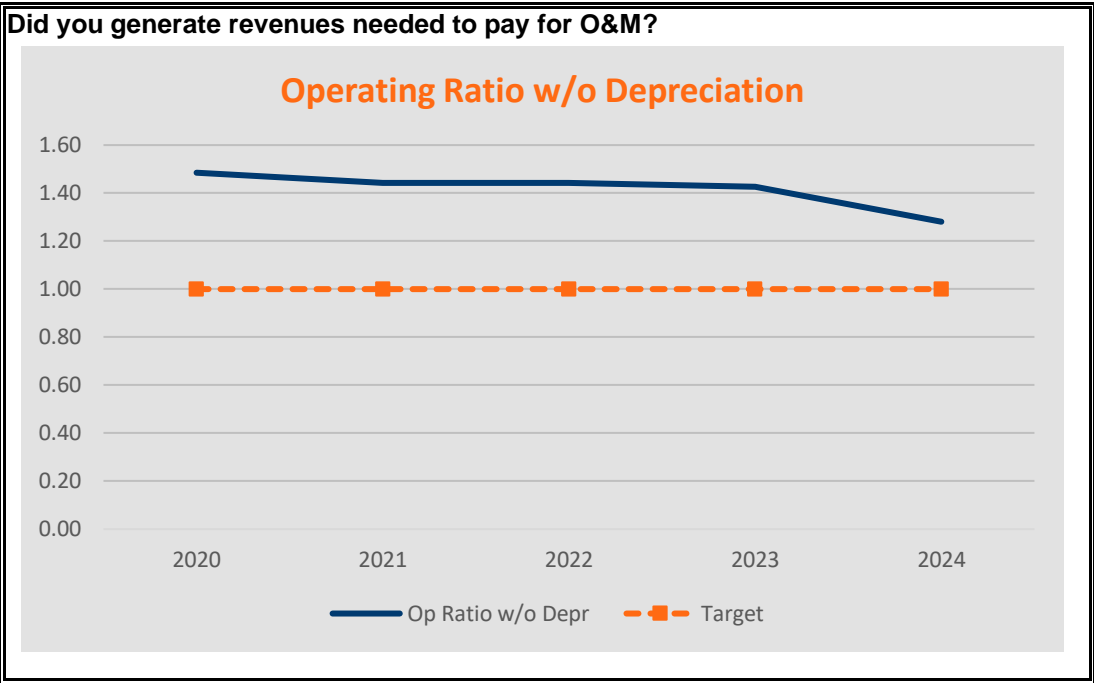
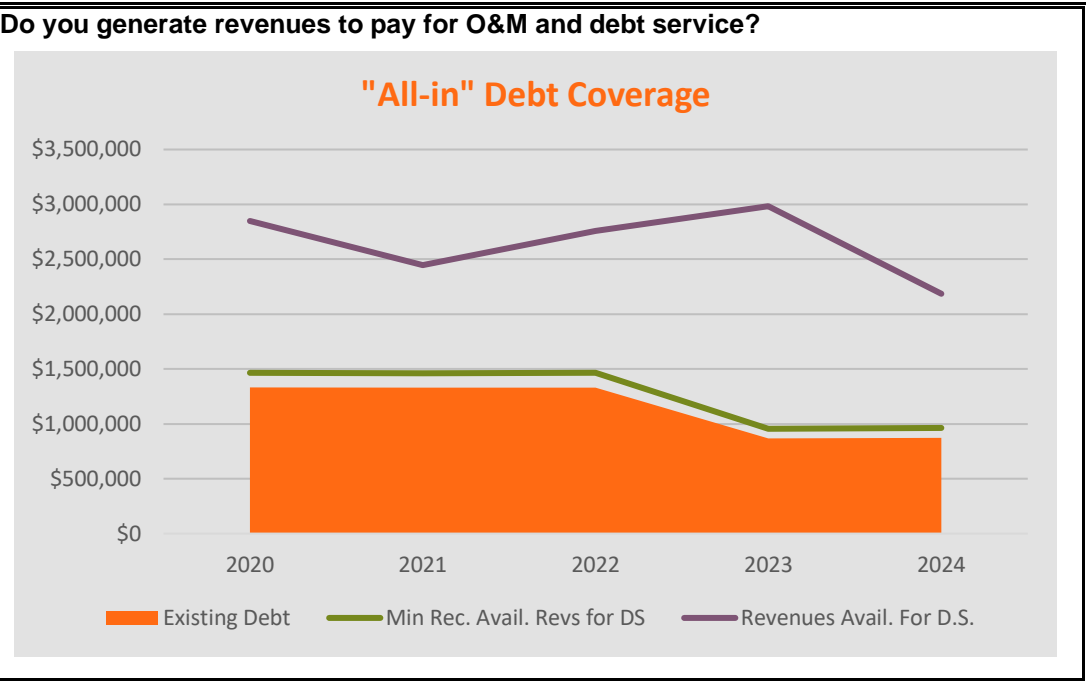
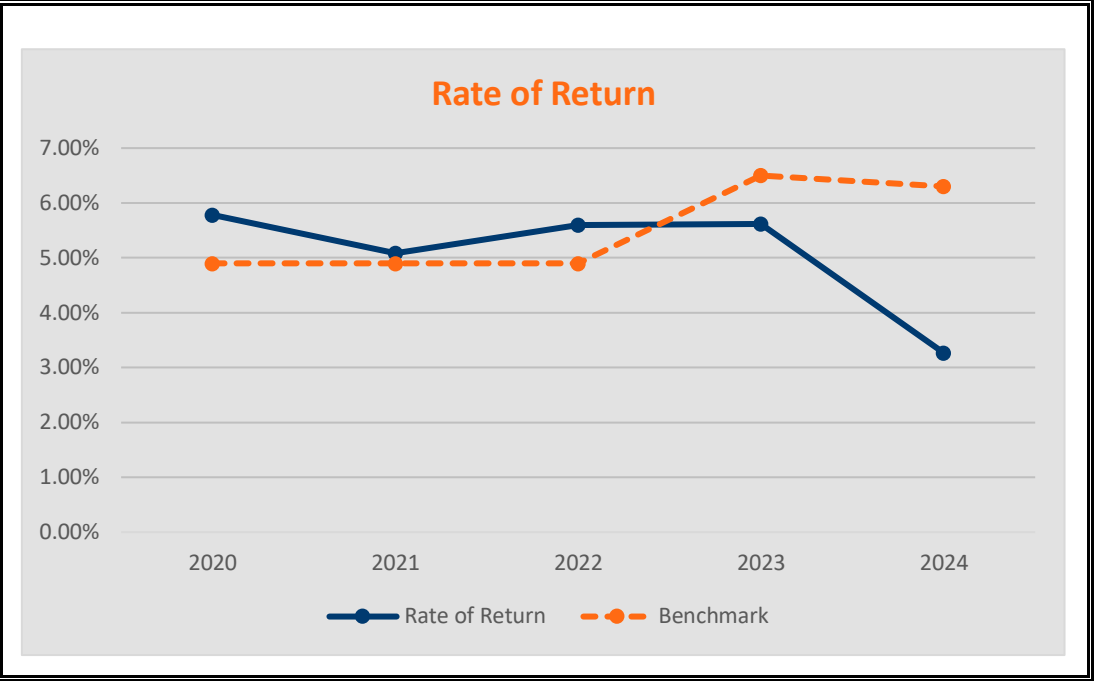
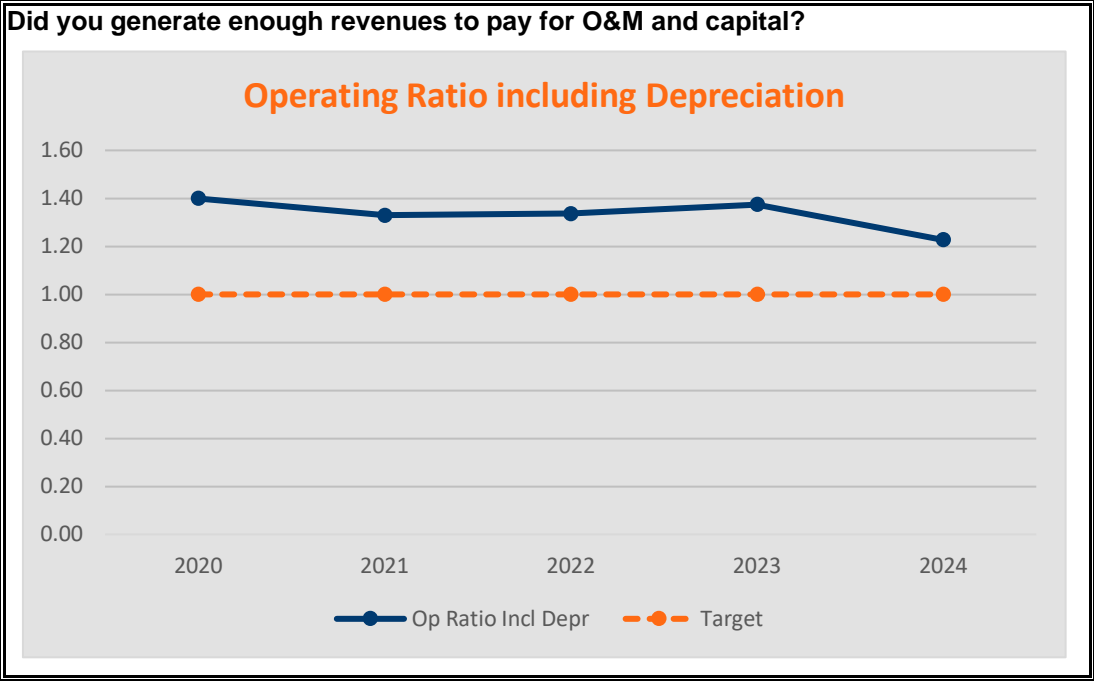
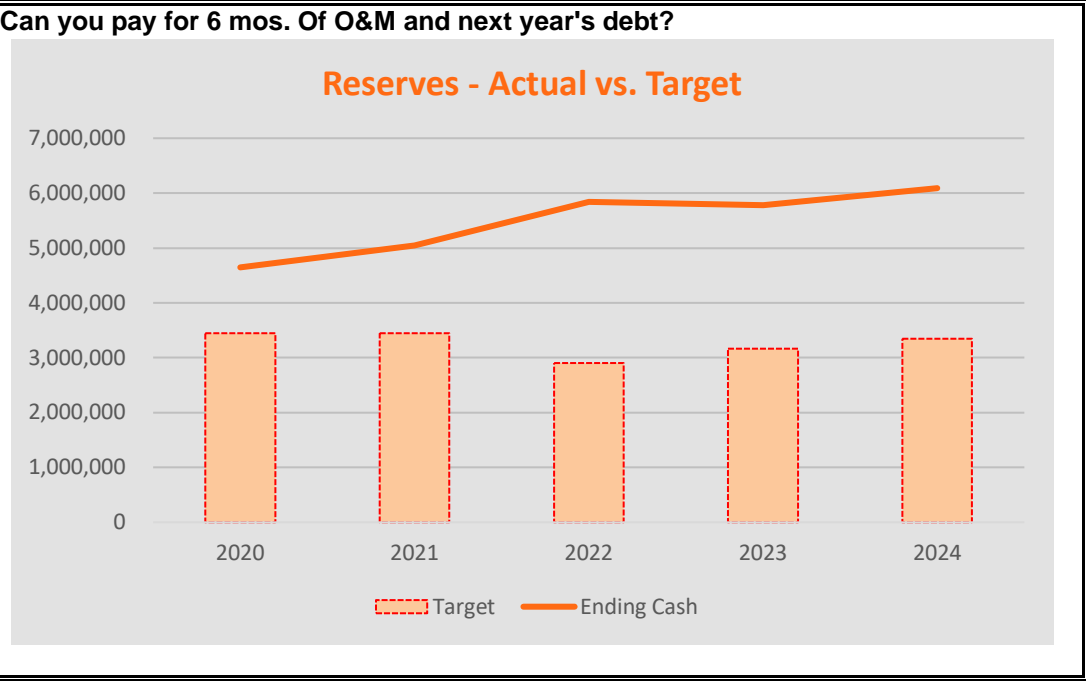
Accumulated Depreciation Expense	17,528,568	17,703,325	18,749,358	19,571,589	20,576,589	21,868,814
Total Net Assets	54,953,475	54,566,009	55,262,741	57,272,948	58,872,573	60,087,573
Asset Depreciation	31.90%	32.44%	33.93%	34.17%	34.95%	36.39%

**Notes:**

This indicator of infrastructure condition estimates the portion of the average expected life of the utility's physical assets that has already passed. As this ratio approaches 100%, the capital assets become fully depreciated, and infrastructure needs replacement or rehabilitation. The accuracy of this indicator relies heavily on the accuracy of the depreciation schedule, and historic pricing likely distorts this indicator (newer utilities may be slightly disadvantaged as a result).

Table 5  
Water Utility Financial Health Charts

City of Watertown, WI







## 2024 Water Rate Study

### Section 2 — Long-Range Cash Flow Analysis

City of Watertown, WI

Table 6  
Water Utility Capital Improvement Plan

City of Watertown, WI

Projects	Funding	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Totals
Annual well renovation and pump work (wells 6)	Cash	55,000										55,000
Annual hydrant painting	Cash	20,000										20,000
West Street Watertower paint job (phase 2 painting interior / exterior)	Revenue Debt	1,100,000										1,100,000
Water Leak Correlator	Cash	40,000										40,000
TID 9 Johnson Street (1715')	TID 9	368,725										368,725
Annual hydrant painting	Cash		20,000									20,000
Well VFD's	Cash		50,000									50,000
Annual well renovation and pump work (well 9)	Cash		75,000									75,000
Watermain loop projects (Highway 16 Bypass)	Cash		250,000									250,000
DEWEY AVENUE PROJECT	Cash		1,000,000									1,000,000
TID 9 - Hoffmann Drive (Hoffmann to Fairview 900')	TID 9		193,500									193,500
Market (S. Seventh to S Eighth 420')	Cash		90,300									90,300
S Eighth (Market to E. Main 300')	Cash		64,500									64,500
Annual well renovation and pump work (well 9)	Cash			100,000								100,000
Annual hydrant painting	Cash			20,000								20,000
Hospital Drive / interior paint job (pending ROV inspection)	Cash			500,000								500,000
Watermain loop projects (Highway 16 Bypass)	Cash			150,000								150,000
TID 9 Hoffmann Drive (Fairview to Termini H2O Johnson to Hoffmann easement)	TID 9			118,250								118,250
S Twelfth (Falcon Court to Wilma Ct. 2,650')	Cash			569,750								569,750
Wilma Ct (S Twelfth to termini 260')	Cash			55,900								55,900
Annual well renovation and pump work (1 or 2 pumps)	Cash				100,000							100,000
Annual hydrant painting	Cash				20,000							20,000
Airpark Drive exterior paint job	Cash				500,000							500,000
MAIN STREET PROJECT (2028 or 2029)	Revenue Debt				1,530,000							1,530,000
TID 9 Fairview Drive and Montgomery St (Hoffmann to Bernard )	TID 9				250,000							250,000
Annual well renovation and pump work (1 or 2 pumps)	Cash					100,000						100,000
Annual hydrant painting	Cash					20,000						20,000
Western Tower exterior paint job	Cash					500,000						500,000
Watermain loop projects (Concord - Humboldt)	Cash					125,000						125,000
Tank Mixers	Cash					50,000						50,000
TID 9 - Hart Street Project area (90% plans ready for water, includes Stimpson)	TID 9					1,250,000						1,250,000
TID 9 Depot, Baxter, Stimpson	TID 9					716,595						716,595
Annual hydrant painting	Cash						20,000					20,000
Well VFD's	Cash						50,000					50,000
Fiber connectivity to wells and treatment plants (add 6 splices for 9 wells, 5 storage structures, and 3 treatment plants)	Cash						75,000					75,000
Eighth St. - Main St. to Western Ave (1,950')	Cash						500,000					500,000
Annual well renovation and pump work (1 or 2 pumps)	Cash							100,000				100,000
Annual hydrant painting	Cash							20,000				20,000
O'Connell Tower exterior / interior paint job	Revenue Debt							1,500,000				1,500,000
4" Mains (24,500' - @ 4,500 feet a year = 5-year removal)	Cash							1,000,000				1,000,000
Western Ave - Third St. to Twelfth St.	Cash							150,000				150,000
S. Seventh St. - Western to Station St.	Cash							125,000				125,000
Annual well renovation and pump work (1 or 2 pumps)	Cash								100,000			100,000
Annual hydrant painting	Cash								20,000			20,000
W. Green Street (N. Warren to WernerSt) 740'	Cash								159,100			159,100
4" Mains (year 2)	Revenue Debt								1,000,000			1,000,000
Perry St. (Highland to Werner; 317') + Short St (Perry St. to Ann St.' 422')	Cash								158,885			158,885
Annual well renovation and pump work (1 or 2 pumps)	Cash									100,000		100,000
Annual hydrant painting	Cash									20,000		20,000
NE Tower exterior paint job	Cash									500,000		500,000
Kiewert & Werner Streets	Cash									750,000		750,000
4" Mains (year 3)	Revenue Debt									1,000,000		1,000,000
Annual well renovation and pump work (1 or 2 pumps)	Cash										100,000	100,000
Annual hydrant painting	Cash										20,000	20,000
Elm Street (1,426')	Cash										306,590	306,590
4" Mains (year 4)	Revenue Debt										1,000,000	1,000,000
Lisbon St (N Votech Dr. to Elba St + Lowell St. To Bonner St.; 1,320')	Cash										283,800	283,800
Actual CIP Costs		1,583,725	1,743,300	1,513,900	2,400,000	2,761,595	645,000	2,895,000	1,437,985	2,370,000	1,710,390	19,060,895
Sources of Funding		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
G.O. Debt		0	0	0	0	0	0	0	0	0	0	0
Revenue Debt		1,100,000	0	0	1,530,000	0	0	1,500,000	1,000,000	1,000,000	1,000,000	7,130,000
Grants/Aids		0	0	0	0	0	0	0	0	0	0	0
Special Assessment		0	0	0	0	0	0	0	0	0	0	0
User Fees		0	0	0	0	0	0	0	0	0	0	0
Tax Levy		0	0	0	0	0	0	0	0	0	0	0
Equipment Replacement Fund		0	0	0	0	0	0	0	0	0	0	0
Cash		115,000	1,549,800	1,395,650	620,000	795,000	645,000	1,395,000	437,985	1,370,000	710,390	9,033,825
BIL Funding		0	0	0	0	0	0	0	0	0	0	0
TID 9		368,725	193,500	118,250	250,000	1,966,595	0	0	0	0	0	2,897,070
Total		1,583,725	1,743,300	1,513,900	2,400,000	2,761,595	645,000	2,895,000	1,437,985	2,370,000	1,710,390	19,060,895

Notes:

Table 7  
Capital Improvements Financing Plan - Water

City of Watertown, WI

	2025			2027			2029		2031		2033	
	Revenue Bonds	Water Portion	TID 9 Portion	Revenue Bonds	Water Portion	TID 9 Portion	G.O. Notes	TID 9 Portion	Revenue Bonds	Water Portion	Revenue Bonds	Water Portion
CIP Projects <sup>1</sup>	2025 Water and Storm Projects			2027 Water and Storm Projects			2029 Storm Projects		2031 Water Projects		2033 Water Projects	
Sewer	-			-			-		-		-	
Water	1,100,000	1,100,000		1,530,000	1,530,000		-		2,500,000	2,500,000	2,000,000	2,000,000
TID 9	562,225		562,225	368,250		368,250	1,966,595	1,966,595	-		-	
Subtotal Project Costs	1,662,225	1,100,000	562,225	1,898,250	1,530,000	368,250	1,966,595	1,966,595	2,500,000	2,500,000	2,000,000	2,000,000
CIP Projects <sup>1</sup>	1,662,225	1,100,000	562,225	1,898,250	1,530,000	368,250	1,966,595	1,966,595	2,500,000	2,500,000	2,000,000	2,000,000
Less Other Available Revenues												
Cash Available	(100,000)	(100,000)	0	(250,000)	(250,000)	0	-	0	(500,000)	(500,000)	(500,000)	(500,000)
Net Borrowing Requirement	1,562,225	1,000,000	562,225	1,648,250	1,280,000	368,250	1,966,595	1,966,595	2,000,000	2,000,000	1,500,000	1,500,000
Debt Service Reserve												
Debt Service Reserve Funds On Hand	(453,078)	(453,078)	0	(850,022)	(800,022)	(50,000)	-	0	(782,088)	(782,088)	(697,762)	(697,762)
New Debt Service Reserve Requirement	850,022	800,022	50,000	782,088	722,088	60,000	-	0	697,762	697,762	#VALUE!	#VALUE!
Subtotal Reserve Fund Requirement	396,944	346,944	50,000	(67,933)	(77,933)	10,000	0	0	(84,326)	(84,326)	#VALUE!	#VALUE!
Estimated Issuance Expenses	112,175	77,155	35,020	109,063	82,861	26,201	114,838	114,838	116,475	116,475	107,963	107,963
Municipal Advisor (Ehlers)	35,700	24,555	11,145	37,400	28,415	8,985	38,300	38,300	40,500	40,500	38,300	38,300
Bond Counsel	20,000	13,756	6,244	20,000	15,195	4,805	20,000	20,000	20,000	20,000	20,000	20,000
Disclosure Counsel	14,000	9,629	4,371	14,000	10,637	3,363	14,000	14,000	14,000	14,000	14,000	14,000
Rating Fee	16,000	11,005	4,995	16,000	12,156	3,844	16,000	16,000	16,000	16,000	16,000	16,000
Maximum Underwriter's Discount	12.5025,625	17,625	8,000	12.5020,813	15,813	5,000	12.5025,688	25,688	12.5025,125	25,125	12.5018,813	18,813
Paying Agent	850	585	265	850	646	204	850	850	850	850	850	850
Subtotal Issuance Expenses	112,175	77,155	35,020	109,063	82,861	26,201	114,838	114,838	116,475	116,475	107,963	107,963
TOTAL TO BE FINANCED	2,071,344	1,424,098	647,245	1,689,379	1,284,928	404,451	2,081,433	2,081,433	2,032,149	2,032,149	#VALUE!	#VALUE!
Estimated Interest Earnings	3.00%(24,933)	(16,500)	(8,433)	3.00%(28,474)	(22,950)	(5,524)	3.00%(29,499)	(29,499)	3.00%(37,500)	(37,500)	3.00%(30,000)	(30,000)
Assumed spend down (months)	6.00			6.00			6.00		6.00		6.00	
Rounding	3,590	2,402	1,188	4,094	3,022	1,073	3,066	3,066	15,351	15,351	#VALUE!	#VALUE!
NET BOND SIZE	2,050,000	1,410,000	640,000	1,665,000	1,265,000	400,000	2,055,000	2,055,000	2,010,000	2,010,000	1,505,000	1,505,000

Notes:  
1) Source of Project Totals



Table 8  
Water Utility Projected Debt Service Payments (PROPOSED)

City of Watertown, WI

NAME	Water Revenue Bonds Series 2025A				Water Revenue Bonds Series 2027A				Water Revenue Bonds Series 2031A				Water Revenue Bonds Series 2033A				PROPOSED Water Utility Debt Service Summary				
AMT DATED MATURE	\$1,410,000 6/1/2025 5/1				\$1,265,000 6/1/2027 5/1				\$2,010,000 6/1/2031 5/1				\$1,505,000 6/1/2033 5/1								
Year	Principal	Est. Rate <sup>1</sup>	Interest	Total	Principal	Est. Rate <sup>1</sup>	Interest	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total	Total Prin	Total Int	Total P&I	Prin Outstanding	Year
2025																	0	0	0	1,410,000	2025
2026	0	5.00%	99,875	99,875													0	99,875	99,875	1,410,000	2026
2027	50,000	5.00%	69,250	119,250													50,000	69,250	119,250	2,625,000	2027
2028	65,000	5.00%	66,375	131,375	0	5.00%	89,604	89,604									65,000	155,979	220,979	2,560,000	2028
2029	65,000	5.00%	63,125	128,125	35,000	5.00%	62,375	97,375									100,000	125,500	225,500	2,460,000	2029
2030	65,000	5.00%	59,875	124,875	35,000	5.00%	60,625	95,625									100,000	120,500	220,500	2,360,000	2030
2031	65,000	5.00%	56,625	121,625	35,000	5.00%	58,875	93,875									100,000	115,500	215,500	4,270,000	2031
2032	65,000	5.00%	53,375	118,375	35,000	5.00%	57,125	92,125	0	5.00%	142,375	142,375					100,000	252,875	352,875	4,170,000	2032
2033	180,000	5.00%	47,250	227,250	35,000	5.00%	55,375	90,375	70,000	5.00%	98,750	168,750					285,000	201,375	486,375	5,390,000	2033
2034	60,000	5.00%	41,250	101,250	35,000	5.00%	53,625	88,625	50,000	5.00%	95,750	145,750	0	5.00%	106,604	106,604	145,000	297,229	442,229	5,245,000	2034
2035	60,000	5.00%	38,250	98,250	35,000	5.00%	51,875	86,875	50,000	5.00%	93,250	143,250	40,000	5.00%	74,250	114,250	185,000	257,625	442,625	5,060,000	2035
2036	60,000	5.00%	35,250	95,250	40,000	5.00%	50,000	90,000	55,000	5.00%	90,625	145,625	40,000	5.00%	72,250	112,250	195,000	248,125	443,125	4,865,000	2036
2037	60,000	5.00%	32,250	92,250	50,000	5.00%	47,750	97,750	55,000	5.00%	87,875	142,875	40,000	5.00%	70,250	110,250	205,000	238,125	443,125	4,660,000	2037
2038	120,000	5.00%	27,750	147,750	80,000	5.00%	44,500	124,500	115,000	5.00%	83,625	198,625	95,000	5.00%	66,875	161,875	410,000	222,750	632,750	4,250,000	2038
2039	120,000	5.00%	21,750	141,750	90,000	5.00%	40,250	130,250	125,000	5.00%	77,625	202,625	95,000	5.00%	62,125	157,125	430,000	201,750	631,750	3,820,000	2039
2040	120,000	5.00%	15,750	135,750	100,000	5.00%	35,500	135,500	125,000	5.00%	71,375	196,375	105,000	5.00%	57,125	162,125	450,000	179,750	629,750	3,370,000	2040
2041	120,000	5.00%	9,750	129,750	120,000	5.00%	30,000	150,000	125,000	5.00%	65,125	190,125	105,000	5.00%	51,875	156,875	470,000	156,750	626,750	2,900,000	2041
2042	135,000	5.00%	3,375	138,375	125,000	5.00%	23,875	148,875	125,000	5.00%	58,875	183,875	105,000	5.00%	46,625	151,625	490,000	132,750	622,750	2,410,000	2042
2043	0	5.00%	0		125,000	5.00%	17,625	142,625	125,000	5.00%	52,625	177,625	105,000	5.00%	41,375	146,375	355,000	111,625	466,625	2,055,000	2043
2044	0	5.00%	0		125,000	5.00%	11,375	136,375	130,000	5.00%	46,250	176,250	115,000	5.00%	35,875	150,875	370,000	93,500	463,500	1,685,000	2044
2045	0	5.00%	0		125,000	5.00%	5,125	130,125	135,000	5.00%	39,625	174,625	125,000	5.00%	29,875	154,875	385,000	74,625	459,625	1,300,000	2045
2046					40,000	5.00%	1,000	41,000	135,000	5.00%	32,875	167,875	125,000	5.00%	23,625	148,625	300,000	57,500	357,500	1,000,000	2046
2047					0	5.00%	0		135,000	5.00%	26,125	161,125	135,000	5.00%	17,125	152,125	270,000	43,250	313,250	730,000	2047
2048									135,000	5.00%	19,375	154,375	135,000	5.00%	10,375	145,375	270,000	29,750	299,750	460,000	2048
2049									135,000	5.00%	12,625	147,625	140,000	5.00%	3,500	143,500	275,000	16,125	291,125	185,000	2049
2050									185,000	5.00%	4,625	189,625	0	5.00%	0		185,000	4,625	189,625	0	2050
2051									0	5.00%	0		0	5.00%	0		0	0	0	0	2051
2052													0	5.00%	0		0	0	0	0	2052
2053													0	5.00%	0		0	0	0	0	2053
2054													0	5.00%	0		0	0	0	0	2054
TOTALS	1,410,000		741,125	2,151,125	1,265,000		796,479	2,061,479	2,010,000		1,199,375	3,209,375	1,505,000		769,729	2,274,729	6,190,000	3,506,708	9,696,708		TOTALS

Notes:

1) Rate assumes recent WI Rev sale plus 50 bps (or 0.50%).

Legend:

Maturities subject to optional redemption (callable) based on current call vs. non-call.



# Table 9

## Water Utility Cash Flow Analysis - Projected 2025-2034

City of Watertown, WI

	Budget 2025	2026	2027	2028	2029	Projected 2030	2031	2032	2033	2034
<b>Revenues</b>										
Total Revenues from User Rates <sup>1</sup>	\$6,520,051	\$6,520,051	\$6,520,051	\$6,520,051	\$6,520,051	\$6,520,051	\$6,520,051	\$6,520,051	\$6,520,051	\$6,520,051
Percent Increase to User Rates	19.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cumulative Percent Rate Increase	19.79%	19.79%	19.79%	19.79%	19.79%	19.79%	19.79%	19.79%	19.79%	19.79%
Dollar Amount Increase to Revenues	\$1,077,261	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Other Revenues	\$322,500	\$347,402	\$228,857	\$238,452	\$237,183	\$233,467	\$239,711	\$243,581	\$290,247	\$292,759
Total Revenues	\$6,842,551	\$6,867,453	\$6,748,908	\$6,758,503	\$6,757,235	\$6,753,518	\$6,759,762	\$6,763,632	\$6,810,298	\$6,812,810
<b>Less: Expenses</b>										
Operating and Maintenance <sup>2</sup>	\$2,774,305	\$2,857,534	\$2,943,260	\$3,031,557	\$3,122,504	\$3,216,179	\$3,312,665	\$3,412,045	\$3,514,406	\$3,619,838
PILOT Payment	\$875,500	\$906,143	\$937,857	\$970,682	\$1,004,656	\$1,039,819	\$1,076,213	\$1,113,880	\$1,152,866	\$1,193,217
Net Before Debt Service and Capital Expenditures	\$3,192,747	\$3,103,777	\$2,867,791	\$2,756,263	\$2,630,074	\$2,497,519	\$2,370,884	\$2,237,707	\$2,143,026	\$1,999,756
<b>Debt Service</b>										
Existing Debt P&I	\$878,183	\$876,721	\$870,182	\$764,998	\$766,087	\$766,855	\$767,297	\$767,562	\$630,100	\$629,999
New (2025-2034) Debt Service P&I	\$0	\$99,875	\$119,250	\$220,979	\$225,500	\$220,500	\$215,500	\$352,875	\$486,375	\$442,229
Total Debt Service	\$878,183	\$976,596	\$989,432	\$985,977	\$991,587	\$987,355	\$982,797	\$1,120,437	\$1,116,475	\$1,072,228
Transfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less: Capital Improvements & COI	\$1,660,880	\$1,743,300	\$1,596,761	\$2,400,000	\$2,761,595	\$645,000	\$3,011,475	\$1,437,985	\$2,477,963	\$1,710,390
Debt Proceeds	\$1,410,000	\$0	\$1,265,000	\$0	\$0	\$0	\$2,010,000	\$0	\$1,505,000	\$0
<b>Net Annual Cash Flow</b>	<b>\$2,063,684</b>	<b>\$383,881</b>	<b>\$1,546,598</b>	<b>(\$629,714)</b>	<b>(\$1,123,108)</b>	<b>\$865,164</b>	<b>\$386,612</b>	<b>(\$320,714)</b>	<b>\$53,589</b>	<b>(\$782,862)</b>
<b>Restricted and Unrestricted Cash Balance:</b>										
Balance at first of year	\$6,090,172	\$8,153,856	\$8,537,737	\$10,084,334	\$9,454,620	\$8,331,513	\$9,196,677	\$9,583,289	\$9,262,575	\$9,316,164
Net Annual Cash Flow Addition/(subtraction)	\$2,063,684	\$383,881	\$1,546,598	-\$629,714	-\$1,123,108	\$865,164	\$386,612	-\$320,714	\$53,589	-\$782,862
Balance at end of year	\$8,153,856	\$8,537,737	\$10,084,334	\$9,454,620	\$8,331,513	\$9,196,677	\$9,583,289	\$9,262,575	\$9,316,164	\$8,533,302
"All-in" Debt Coverage	3.64	3.18	2.90	2.80	2.65	2.53	2.41	2.00	1.92	1.87
PSC Days Cash on Hand	864	912	1,079	953	816	888	907	817	813	697

### Notes:

- 1) Assumes no changes in customer count or usage beyond Test Year.  
2) Assumes 3.00% annual inflation beyond budget year.

### Legend:

- Simplified Rate Case (projected eligibility)  
 Conventional (Full) Rate Case



**Table 10**  
**Water Utility Financial Benchmarking Analysis Projected 2025 - 2034**  
*City of Watertown, WI*

	Budget 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
<b>Target minimum cash balance</b>										
Target minimum working capital - Ehlers <sup>1</sup>	3,529,172	3,628,542	3,716,223	3,815,818	3,889,835	3,977,611	4,228,498	4,327,669	4,396,225	4,492,862
Actual Days Cash Available - PSC <sup>2</sup>	954	1,002	1,169	1,043	906	978	997	907	903	787
Actual Days Cash Available - Moody's <sup>3</sup>	1,012	1,091	1,251	1,138	974	1,044	1,056	991	968	860
Actual Days Cash Available - S&P <sup>4</sup>	1,012	1,091	1,251	1,138	974	1,044	1,056	991	968	860
<b>Actual working capital-cash balance</b>										
Over (Under) Ehlers target	4,624,684	4,909,194	6,368,111	5,638,802	4,441,678	5,219,066	5,354,792	4,934,906	4,919,939	4,040,439
Over (Under) PSC target (90 days)	864	912	1,079	953	816	888	907	817	813	697
Over (Under) Moody's target (150 days)	862	941	1,101	988	824	894	906	841	818	710
Over (Under) S&P target (150 days)	862	941	1,101	988	824	894	906	841	818	710

**Notes:**  
1) Target capital equals 6 mos of next year's operating expenses, including depreciation, plus 100% of following year's debt.  
2) PSC formula = O&M expense + taxes + interest on long term debt ÷ 365 to get expense per day. Then Unrestricted Cash ÷ expense per day  
3) Moody's Formula = [(Unrestricted Cash + Liquid Investments) \* 365 days] ÷ Total O&M Expenses less Depreciation  
4) S&P Formula = [(Unrestricted Cash + Liquid Investments) \* 365 days] ÷ Total O&M Expenses less Depreciation; include designated reserve funds: ERFs, RSFs, etc

<b>Rate of Return</b>										
Average Utility Plant in Service	48,745,391	50,127,791	51,600,516	53,373,341	54,845,841	55,565,841	57,335,841	59,502,334	61,406,326	63,446,521
Plus: Materials and Supplies	125,322	125,322	125,322	125,322	125,322	125,322	125,322	125,322	125,322	125,322
Less: Avg. Utility Plant Accum. Depreciation	16,793,244	17,688,088	18,460,915	19,217,105	20,110,477	21,237,327	22,141,402	23,016,971	24,035,348	25,092,045
Less: Regulatory Liability	0	0	0	0	0	0	0	0	0	0
Average Net Investment Rate Base (NIRB)	32,077,468	32,565,025	33,264,923	34,281,557	34,860,686	34,453,835	35,319,761	36,610,684	37,496,300	38,479,797
Net Operating Income	1,988,803	1,827,506	1,656,280	1,475,870	1,289,779	1,135,182	952,432	727,875	523,566	299,936
ROR	6.20%	5.61%	4.98%	4.31%	3.70%	3.29%	2.70%	1.99%	1.40%	0.78%
PSC Projected Benchmark	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%
Rate Adj. to Benchmark	0.00%	2.94%	6.23%	9.96%	13.37%	15.35%	18.98%	23.65%	27.63%	31.99%

<b>Cost Recovery</b>										
Operating Revenues	6,702,551	6,704,376	6,706,219	6,708,081	6,709,961	6,711,861	6,713,779	6,715,716	6,717,673	6,719,649
Operating Expenses incl. Depr & Amortization	4,066,529	4,199,008	4,340,363	4,489,809	4,643,807	4,765,140	4,913,415	5,102,241	5,269,521	5,454,777
Operating Expenses w/o Depr & Amortization	2,774,305	2,857,534	2,943,260	3,031,557	3,122,504	3,216,179	3,312,665	3,412,045	3,514,406	3,619,838
Cost Recovery incl. Depr	1.65	1.60	1.55	1.49	1.44	1.41	1.37	1.32	1.27	1.23
Cost Recovery w/o Depr	1.47	1.47	1.47	1.48	1.49	1.48	1.48	1.50	1.50	1.51
Target	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Notes:**  
This operating ratio indicates whether operating revenues (mostly charges to customers) were sufficient to cover operations and capital (in the form of depreciation) for the water and/or wastewater utility in the fiscal year. A ratio of < 1 could be a sign of financial concern. In general, this ratio should be > 1 to accommodate future capital investments.

<b>Leverage</b>										
Total Long-Term Debt	9,239,773	8,515,945	8,997,602	8,289,566	7,531,656	6,758,687	7,980,470	7,176,815	7,817,527	7,082,405
Total Net Assets	60,087,573	61,637,373	63,033,023	65,183,023	65,978,023	66,623,023	69,518,023	70,956,008	73,326,008	75,036,398
Debt-to Equity Ratio	0.15	0.14	0.14	0.13	0.11	0.10	0.11	0.10	0.11	0.09

**Notes:**  
This indicator measures the existing level of leveraging of assets, and is used by funders and rating agencies to evaluate the risk of providing additional loans to the utility. The ratio indicates the amount of long-term debt that exists for every \$1 of assets (fund equity). A utility with a ratio > 1 has more long-term debt than equity in the system's assets. There are no natural benchmarks for this indicator, and funders and rating agencies will assess this ratio in various ways. In general, the higher this ratio, the more likely the utility will be considered to be over-leveraged and the more difficult it will be for the utility to obtain additional loans. Net Assets are equal to the Net Investment Rate Base of the utility.

<b>Condition of Assets:</b>										
Accumulated Depreciation Expense	16,793,244	17,688,088	18,460,915	19,217,105	20,110,477	21,237,327	22,141,402	23,016,971	24,035,348	25,092,045
Total Net Assets	60,087,573	61,637,373	63,033,023	65,183,023	65,978,023	66,623,023	69,518,023	70,956,008	73,326,008	75,036,398
Asset Depreciation	27.95%	28.70%	29.29%	29.48%	30.48%	31.88%	31.85%	32.44%	32.78%	33.44%

**Notes:**  
This indicator of infrastructure condition estimates the portion of the average expected life of the utility's physical assets that has already passed. As this ratio approaches 100%, the capital assets become fully depreciated, and infrastructure needs replacement or rehabilitation. The accuracy of this indicator relies heavily on the accuracy of the depreciation schedule, and historic pricing likely distorts this indicator (newer utilities may be slightly disadvantaged as a result).

## Table 11

### Water Utility Statement of Projected Revenue Bond Coverage

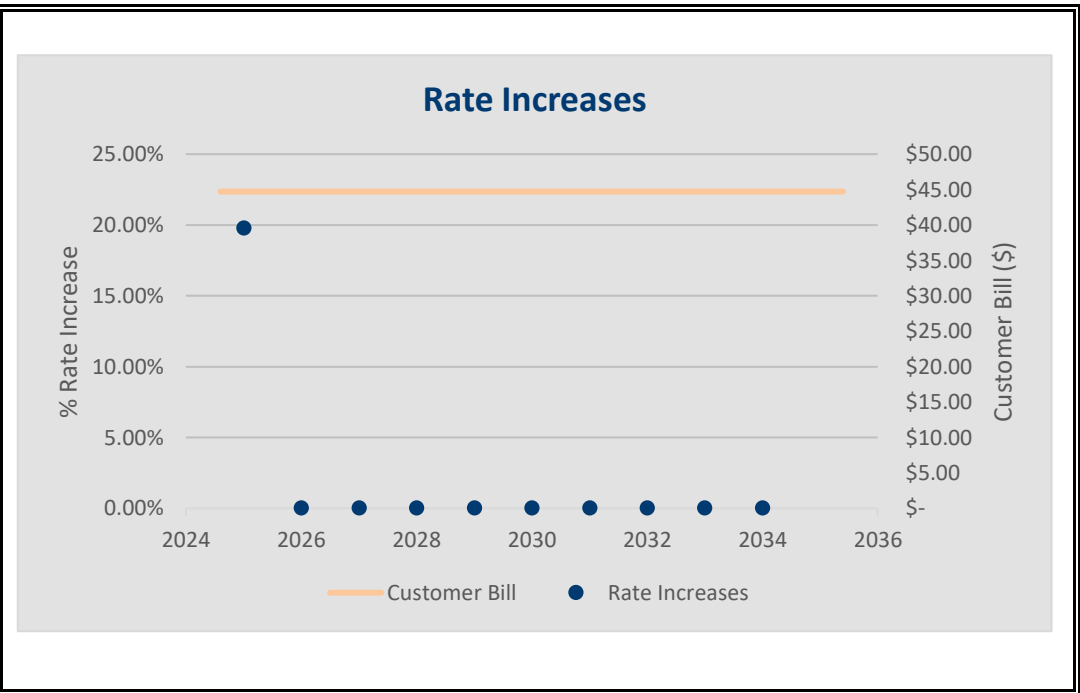
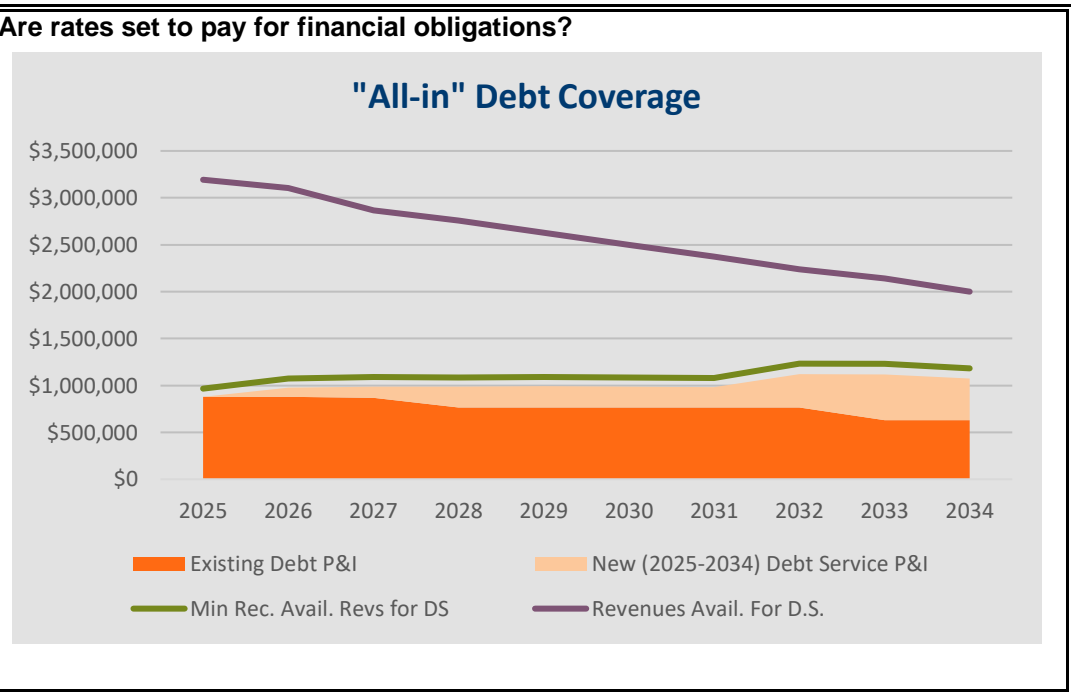
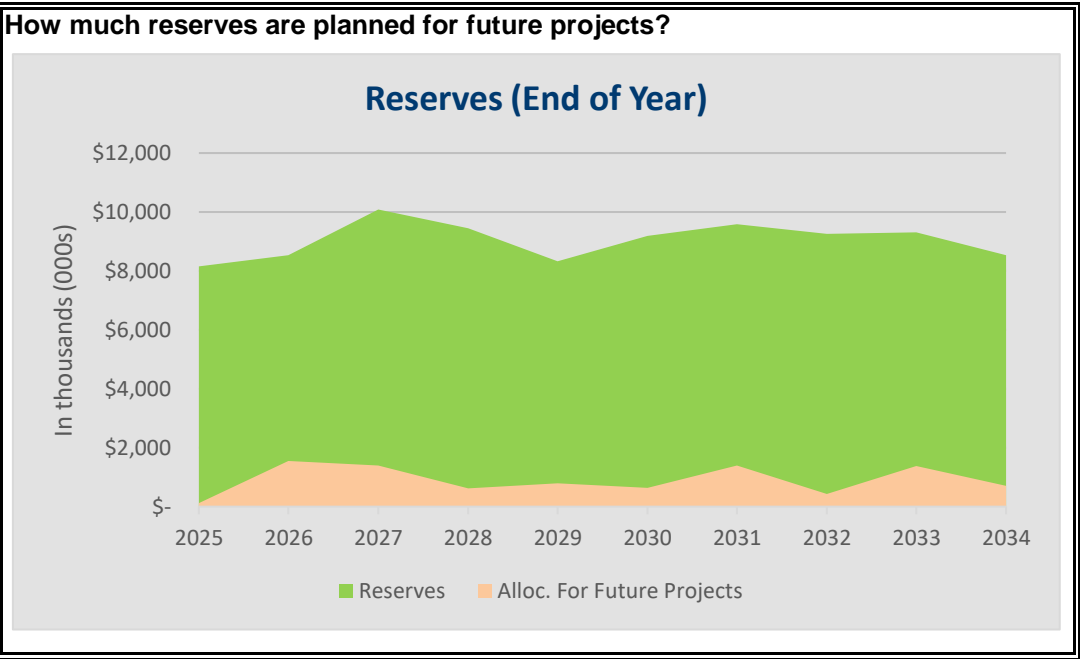
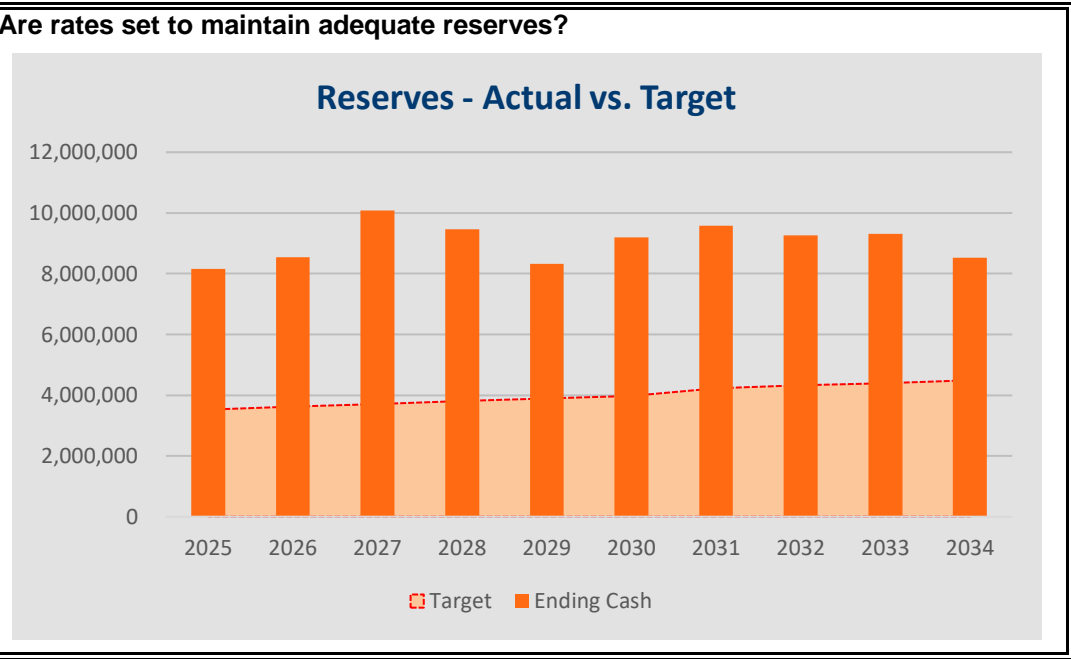
City of Watertown, WI

Year	Total Operating Revenues	Transfers In (Out)	Less: Total O&M Expense	Amount Available for Debt Service	Existing Rev Debt	Future Rev Debt (2025-2034)	Total Water Debt Service	Coverage	Debt Service Capacity @ 1.25x
					Total	Total			
2025	6,842,551	0	(2,774,305)	4,068,247	878,183	-	878,183	4.63	2,376,414
2026	6,867,453	0	(2,857,534)	4,009,920	876,721	99,875	976,596	4.11	2,231,340
2027	6,748,908	0	(2,943,260)	3,805,649	870,182	119,250	989,432	3.85	2,055,087
2028	6,758,503	0	(3,031,557)	3,726,945	764,998	220,979	985,977	3.78	1,995,579
2029	6,757,235	0	(3,122,504)	3,634,730	766,087	225,500	991,587	3.67	1,916,198
2030	6,753,518	0	(3,216,179)	3,537,339	766,855	220,500	987,355	3.58	1,842,516
2031	6,759,762	0	(3,312,665)	3,447,097	767,297	215,500	982,797	3.51	1,774,881
2032	6,763,632	0	(3,412,045)	3,351,588	767,562	352,875	1,120,437	2.99	1,560,833
2033	6,810,298	0	(3,514,406)	3,295,892	630,100	486,375	1,116,475	2.95	1,520,239
2034	6,812,810	0	(3,619,838)	3,192,972	629,999	442,229	1,072,228	2.98	1,482,150
2035	6,806,978	0	(3,728,433)	3,078,545	629,895	442,625	1,072,520	2.87	1,390,315
2036	6,816,704	0	(3,840,286)	2,976,418	629,790	443,125	1,072,915	2.77	1,308,219
2037	6,824,993	0	(3,955,495)	2,869,498	629,683	443,125	1,072,808	2.67	1,222,791
2038	6,824,993	0	(4,074,160)	2,750,834	-	632,750	632,750	4.35	1,567,917
2039	6,824,993	0	(4,196,384)	2,628,609	-	631,750	631,750	4.16	1,471,137
2040	6,824,993	0	(4,322,276)	2,502,717	-	629,750	629,750	3.97	1,372,424
2041	6,824,993	0	(4,451,944)	2,373,049	-	626,750	626,750	3.79	1,271,689
2042	6,824,993	0	(4,585,503)	2,373,049	-	622,750	622,750	3.81	1,275,689

**Notes:**

1) Revenue Coverage determined from 2012 Revenue Bonds.

**Table 12**  
**Water Utility Long-Range Planning Analysis**  
*City of Watertown, WI*







## 2024 Water Rate Study

### Section 3 — Rate Impact Analysis

City of Watertown, WI

**Table 13**  
**Projected Impact of CIP on Typical Residential Utility Bill**

*City of Watertown, WI*

Year	Water					Sewer					Stormwater				Utility Bill (Annual)	Change Over Prior Year	% of MHI (67,189)	Year
	Increase	Water Vol. Charge <sup>1</sup>	Water User Charge <sup>2</sup>	Utility Bill (Monthly)	Change Over Prior Year	Increase	Sewer Vol. Charge <sup>3</sup>	Sewer User Charge <sup>3</sup>	Utility Bill (Monthly)	Change Over Prior Year	Increase	Storm User Charge <sup>5</sup>	Utility Bill (Monthly)	Change Over Prior Year				
		<u>Tiered</u>	<u>Serv. + PFP</u>				<u>100CF</u>	<u>Gen Service</u>				<u>Per ERU</u>						
2024		3.80	17.00	\$ 37.33			3.51	21.78	\$ 40.56			10.39	\$ 10.39		\$ 1,059.34		1.58%	2024
2025	19.79%	4.55	20.36	\$ 44.72	\$ 7.39	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ 88.66	1.71%	2025
2026	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2026
2027	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2027
2028	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2028
2029	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2029
2030	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2030
2031	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2031
2032	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2032
2033	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2033
2034	0.00%	4.55	20.36	\$ 44.72	\$ -	0.00%	3.51	21.78	\$ 40.56	\$ -	0.00%	10.39	\$ 10.39	\$ -	\$ 1,148.00	\$ -	1.71%	2034
Total Change over planning period					\$ 7.39													

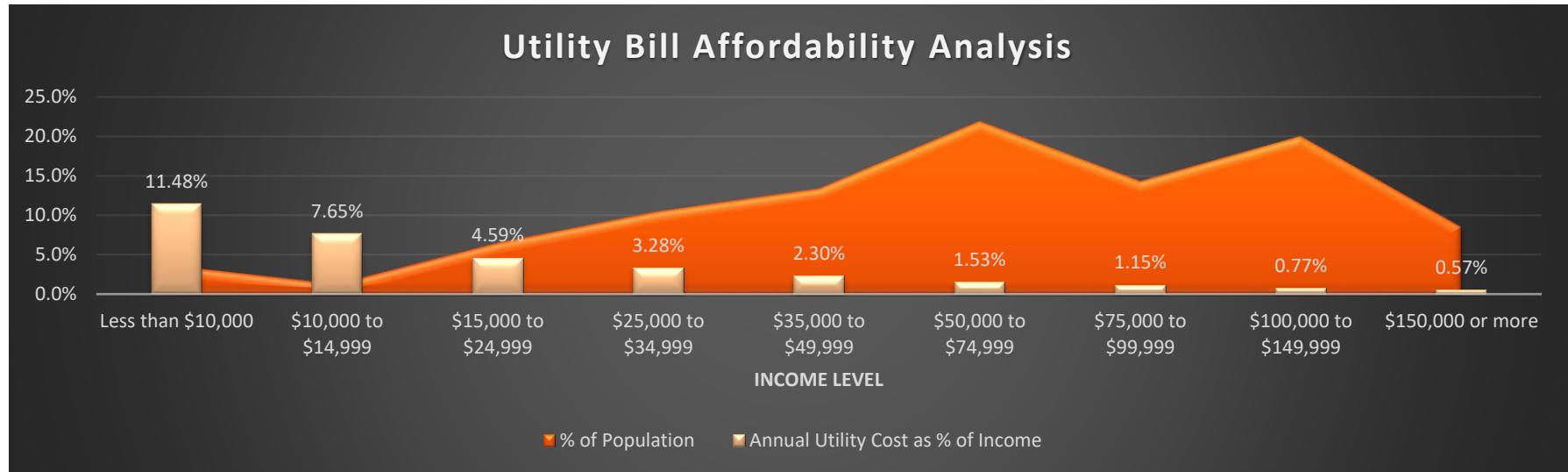
**Notes:**

1. Current water volumetric rate is \$3.80 per 100 cubic feet for the first 1600 cubic feet monthly
2. The water user charges include a monthly service charge of \$8.40 plus a public fire protection charge of \$8.60 for a 5/8 inch meter.
3. The current Sewer volumetric rate is \$3.51 per 100 cubic feet and a service charge of \$21.78 for 5/8 inch meter.
4. The usage is assumed to be 535 CF per month.
5. The current stormwater rate is \$10.39 per ERU for a Single Family user (plus \$2.13 admin fee per customer)
6. No Sewer or Stormwater Analysis completed to date. Sewer Analysis planned for 2025.

**Table 14**

**Projected Impact of CIP on Typical Residential Utility Bill - Affordability**

*City of Watertown, WI*



**Notes:**

- 1) **Utility Cost** taken as a 5-year average of water, wastewater, electric and stormwater bills for an average (5/8"; 3,250 gal./mo.) Residential User.
- 2) City Income Level from U.S. Census Bureau's American Community Survey.
- 3) 11.4% of residential customers are estimated to have less than \$25,000 of income. These households will have spent more than 7.91% of their income under the 5-year average for this plan.