

July 10, 2024

2024 WATER RATE STUDY:

City of West Allis, WI

Phase 2: Conventional Rate Case Application Filing & Long-Range Cash Flow Analysis



Prepared by:

Ehlers
N19W24400 Riverwood Drive,
Suite 100
Waukesha, WI 53188

Advisors:

Brian Roemer
Senior Municipal Advisor
Peter Curtin
Fiscal Consultant

BUILDING COMMUNITIES. IT'S WHAT WE DO.



2024 Water Rate Study: Phase 2

Section 1 — Historical Analysis

City of West Allis, WI

Table 1 Water Rate Performance

City of West Allis, WI

Revenue Requirement		Shown with no increase				Budget	Test Year
Component	Description	2020	2021	2022	2023	2024	2024
Cash Basis							
1	O&M and PILOT	\$7,211,133	\$6,801,902	\$6,911,743	\$6,453,241	\$7,659,341	\$7,289,878
2	Debt	\$2,762,516	\$1,645,156	\$3,774,069	\$1,426,029	\$1,300,254	\$1,300,254
3	Cash Funded Capital	\$1,105,006	\$658,062	\$1,803,941	\$3,804,339	\$520,102	\$520,102
Less:							
	Other Revenue	\$170,632	\$155,344	\$88,200	\$365,661	\$457,000	\$353,000
	Interest Income	\$0	\$0	\$15,421	\$0	\$0	\$0
	Revenue Requirement (Costs less Other Income)	\$10,908,023	\$8,949,776	\$12,386,132	\$11,317,948	\$9,022,696	\$8,757,233
	User Rates Revenue	\$8,331,638	\$8,433,304	\$8,749,226	\$8,323,457	\$8,804,000	\$8,361,309
	Rate Adequacy	(\$2,576,385)	(\$516,472)	(\$3,636,906)	(\$2,994,491)	(\$218,696)	(\$395,924)
	Rate Adjustment Needed	30.92%	6.12%	41.57%	35.98%	2.48%	4.74%
Utility Basis (PSC)							
1	O&M and PILOT	\$7,211,133	\$6,801,902	\$6,911,743	\$6,453,241	\$7,659,341	\$7,289,878
2	Depreciation	\$836,222	\$749,823	\$735,000	\$740,722	\$803,888	\$803,888
	NIRB	\$26,152,762	\$26,296,442	\$26,033,795	\$26,860,747	\$27,413,503	\$27,413,503
	PSC Benchmark ROI %	5.70%	4.90%	4.90%	6.50%	6.30%	6.30%
3	PSC Calculated ROI	\$1,490,707	\$1,288,526	\$1,275,656	\$1,745,949	\$1,727,051	\$1,727,051
Less:							
	Other Revenue	\$170,632	\$155,344	\$88,200	\$365,661	\$457,000	\$353,000
	Revenue Requirement (Costs less Other Income)	\$9,367,430	\$8,684,907	\$8,834,199	\$8,574,251	\$9,733,280	\$9,467,817
	User Rates Revenue	\$8,331,638	\$8,433,304	\$8,749,226	\$8,323,457	\$8,804,000	\$8,361,309
	Rate Adequacy	(\$1,035,792)	(\$251,603)	(\$84,973)	(\$250,794)	(\$929,280)	(\$1,106,508)
	Rate Adjustment Needed	12.43%	2.98%	0.97%	3.01%	10.56%	13.34%

Notes:

^Includes recommended debt coverage at 1.4x annual debt payment

Table 2 Water Utility Rate Performance Charts

City of West Allis, WI

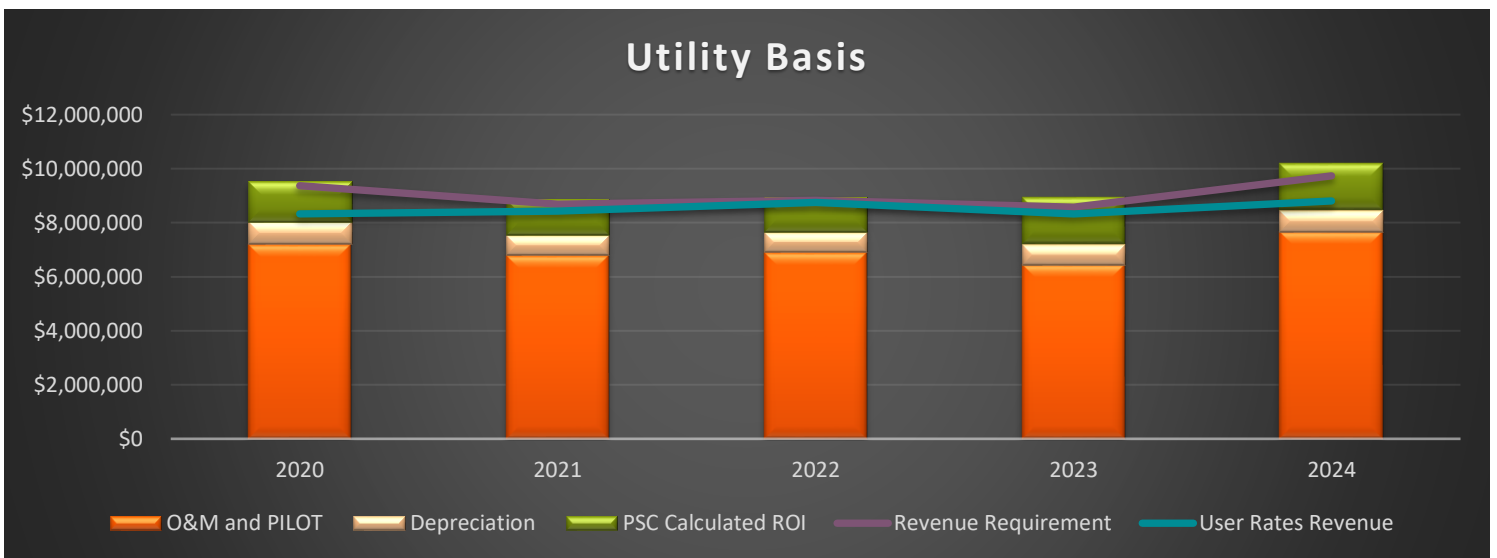
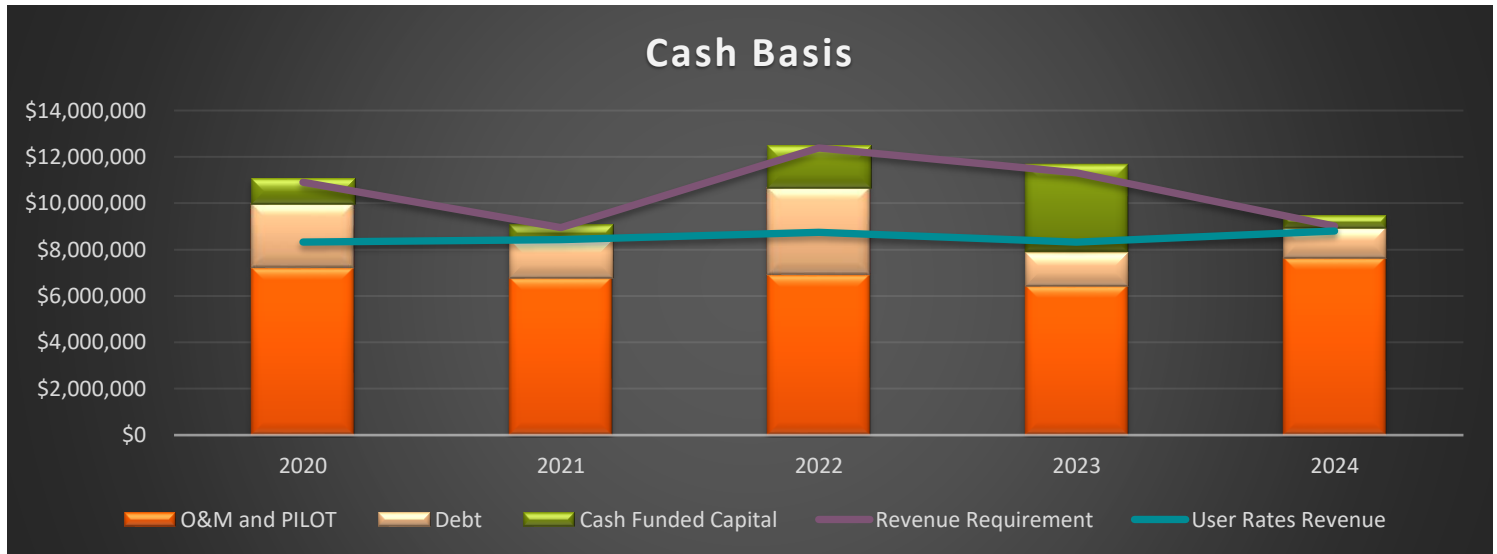


Table 3

Water Utility Cash Flow Analysis - Historical 2019-2023

City of West Allis, WI

	Actual				Estimated
	2019	2020	2021	2022	2023
Revenues					
Total Revenues from User Rates	\$8,321,364	\$8,331,638	\$8,433,304	\$8,749,226	\$8,323,457
Percent Increase to User Rates		3.89%			0.66%
Total Other Revenues	\$175,656	\$97,172	\$248,004	\$259,819	\$365,661
Total Revenues	\$8,497,020	\$8,428,810	\$8,681,308	\$9,009,045	\$8,689,118
Less: Expenses					
Operating and Maintenance	\$6,212,034	\$6,141,660	\$5,904,669	\$6,057,636	\$5,655,043
PILOT Payment	\$965,840	\$1,069,473	\$897,233	\$854,107	\$798,198
Net Before Debt Service and Capital Expenditures	\$1,319,146	\$1,217,677	\$1,879,406	\$2,097,302	\$2,235,877
Existing Debt P&I	\$1,584,636	\$2,762,516	\$1,645,156	\$3,774,069	\$1,426,029
Transfer In (Out)/Cap. Contrib.	\$265,641	\$214,257	\$1,537,409	\$250,729	\$3,233,927
Less: Capital Improvements	\$2,585,876	\$1,756,120	\$1,439,805	\$294,313	\$3,233,927
Debt Proceeds/Grants	\$2,721,265	\$1,757,494	\$2,348,052	\$0	\$0
Reconcile to Audit	\$800,324	\$177,918	\$93,932	-\$213,755	\$0
Net Annual Cash Flow	\$935,864	(\$1,151,290)	\$2,773,838	(\$1,934,106)	\$809,848
Restricted and Unrestricted Cash Balance:					
Balance at first of year	(\$2,282,879)	(\$1,347,014)	(\$2,498,304)	\$275,534	(\$1,658,572)
Net Annual Cash Flow Addition/(subtraction)	\$935,864	(\$1,151,290)	\$2,773,838	(\$1,934,106)	\$809,848
Balance at end of year	(\$1,347,014)	(\$2,498,304)	\$275,534	(\$1,658,572)	(\$848,724)

Notes:

Table 4 Water Utility Financial Benchmarking Analysis

City of West Allis, WI

	Actual				Estimated	Budget
	2019	2020	2021	2022	2023	2024
Target minimum cash balance						
Target minimum working capital - Ehlers ¹	5,497,958	4,162,398	6,322,983	3,906,879	4,204,192	4,591,981
Actual Days Cash Available - PSC ²	(76)	(142)	16	(97)	(59)	(36)
Actual Days Cash Available - Moody's ³	(79)	(148)	17	(100)	(61)	(37)
Actual Days Cash Available - S&P ⁴	(79)	(148)	17	(100)	(61)	(37)
Actual working capital-cash balance						
Over (Under) Ehlers target	(6,844,972)	(6,660,702)	(6,047,449)	(5,565,450)	(5,147,089)	(5,273,960)
Over (Under) PSC target (90 days)	(166)	(232)	(74)	(187)	(149)	(126)
Over (Under) Moody's target (150 days)	(229)	(298)	(133)	(250)	(211)	(187)
Over (Under) S&P target (150 days)	(229)	(298)	(133)	(250)	(211)	(187)

Notes:

- 1) Target capital equals 4 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

Total Utility Plant in service BOY	35,323,673	37,512,784	38,362,258	38,894,518	38,881,539	38,918,346
Total Utility Plant in service EOY	37,512,784	38,362,258	38,894,518	38,881,539	38,918,346	43,805,092
Average Total Plant in Service	36,418,229	37,937,521	38,628,388	38,888,029	38,899,943	41,361,719
Contributed Plant in Service BOY	10,828,210	10,748,021	10,866,474	12,345,626	14,041,018	17,249,121
Contributed Plant in Service EOY	10,748,021	10,866,474	12,345,626	14,041,018	17,249,121	17,249,121
Avg Contributed Plant in Service	10,788,116	10,807,248	11,606,050	13,193,322	15,645,070	17,249,121
Utility Plant Accumulated Depreciation BOY	10,873,956	11,170,493	11,791,470	12,506,803	13,080,058	13,771,849
Utility Plant Accumulated Depreciation EOY	11,170,493	11,791,470	12,506,803	13,080,058	13,771,849	14,425,001
Avg. Utility Plant Accumulated Depreciation	11,022,225	11,480,982	12,149,137	12,793,431	13,425,954	14,098,425
Average Utility Plant in Service	36,418,229	37,937,521	38,628,388	38,888,029	38,899,943	41,361,719
Plus: Materials and Supplies	261,554	217,099	183,995	151,930	146,968	150,209
Less: Avg. Utility Plant Accum. Depreciation	11,022,225	11,480,982	12,149,137	12,793,431	13,425,954	14,098,425
Less: Regulatory Liability	674,949	520,877	366,805	212,733	67,848	0
Average Net Investment Rate Base (NIRB)	24,982,609	26,152,762	26,296,442	26,033,795	25,553,109	27,413,503
Net Operating Income	587,651	579,327	1,322,594	1,519,973	1,408,281	797,771
ROR	2.35%	2.22%	5.03%	5.84%	5.51%	2.91%
Benchmark	5.70%	4.90%	4.90%	4.90%	6.50%	6.30%

Cost Recovery

Operating Revenues	8,468,275	8,502,270	8,588,648	8,837,426	8,689,118	9,261,000
Operating Expenses incl. Depr & Amortization	8,047,201	8,206,326	7,551,725	7,646,743	7,442,550	8,711,816
Operating Expenses w/o Depr & Amortization	7,177,874	7,211,133	6,801,902	6,911,743	6,453,241	7,659,341
Cost Recovery incl. Depr	1.05	1.04	1.14	1.16	1.17	1.06
Cost Recovery w/o Depr	1.12	1.14	1.11	1.11	1.15	1.14
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	14,442,443	15,023,392	13,266,669	11,231,859	10,135,298	12,565,000
Total Net Assets	48,260,805	49,228,732	51,240,144	52,922,557	56,167,467	61,054,213
Debt-to Equity Ratio	0.30	0.31	0.26	0.21	0.18	0.21

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:

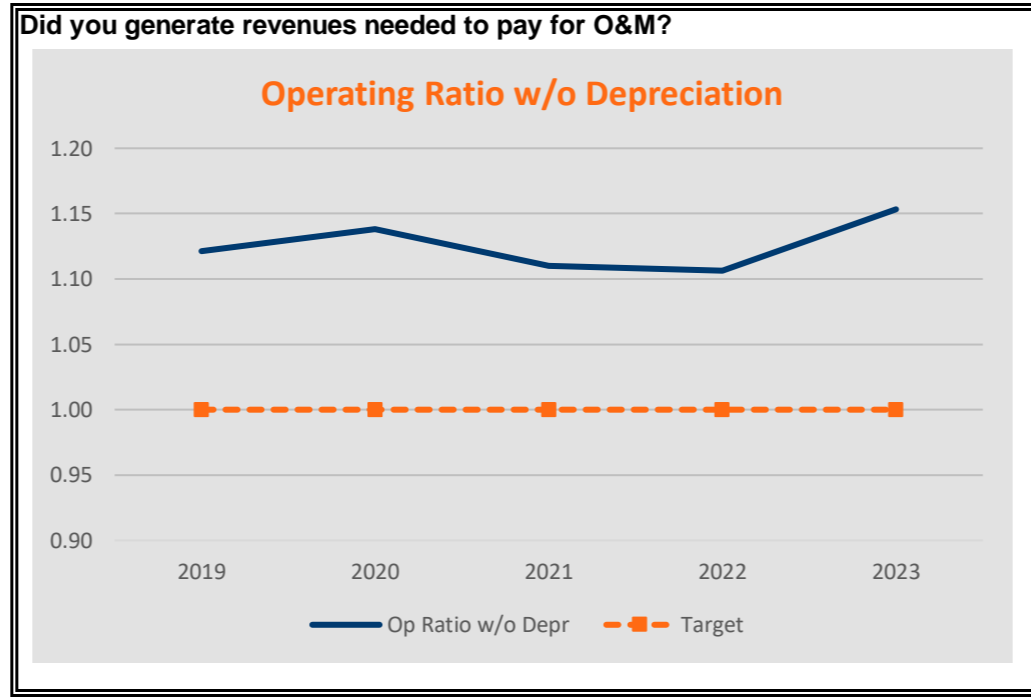
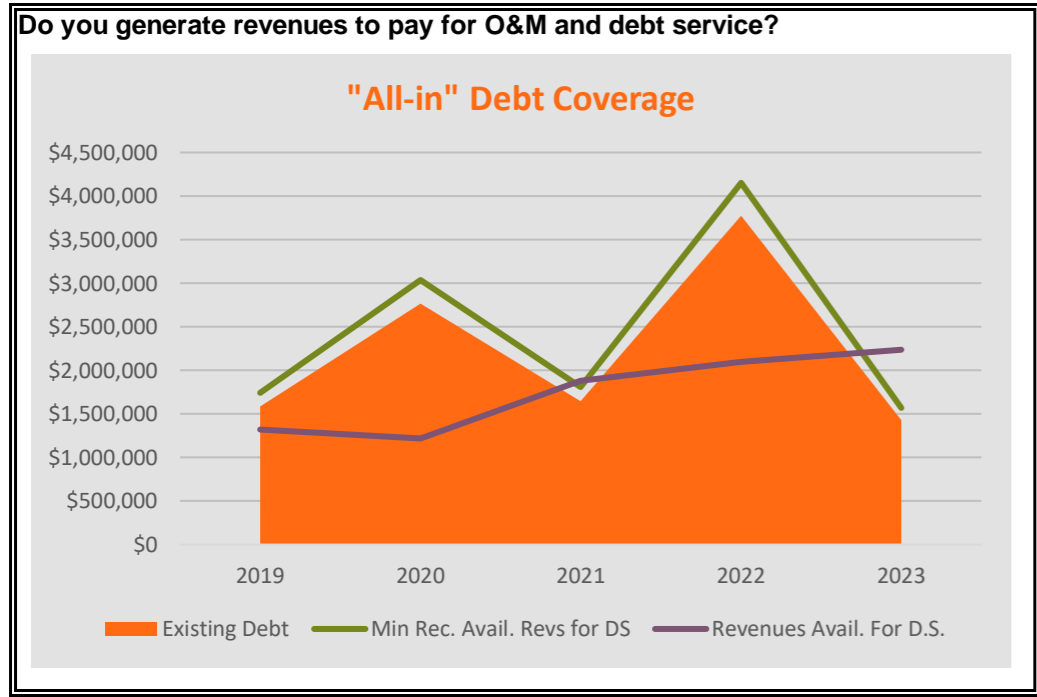
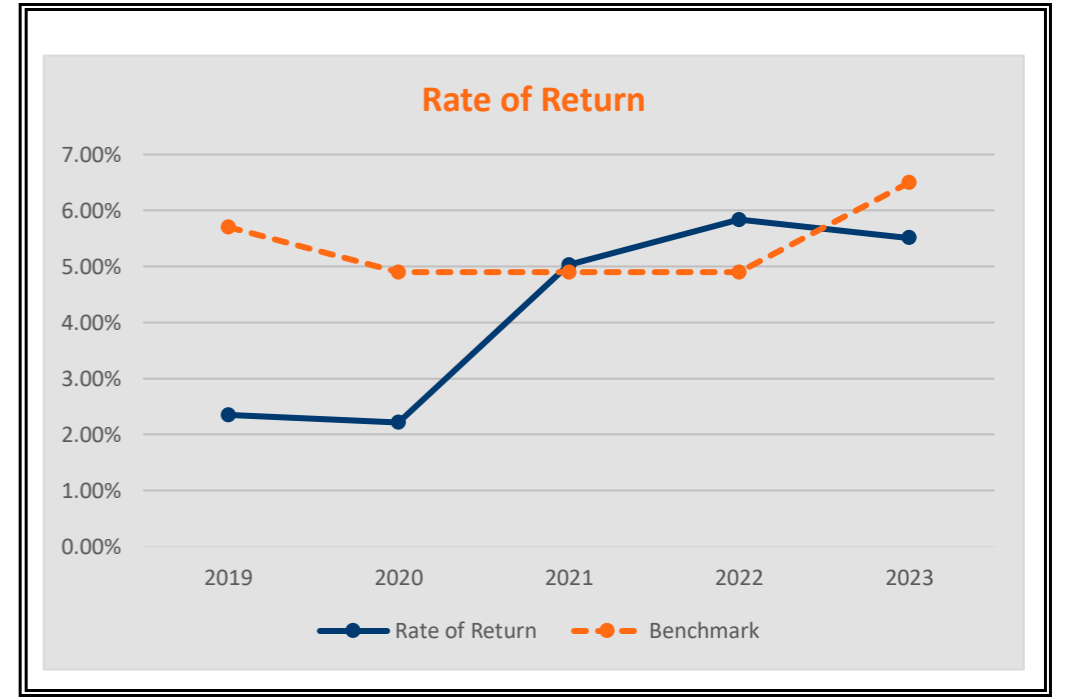
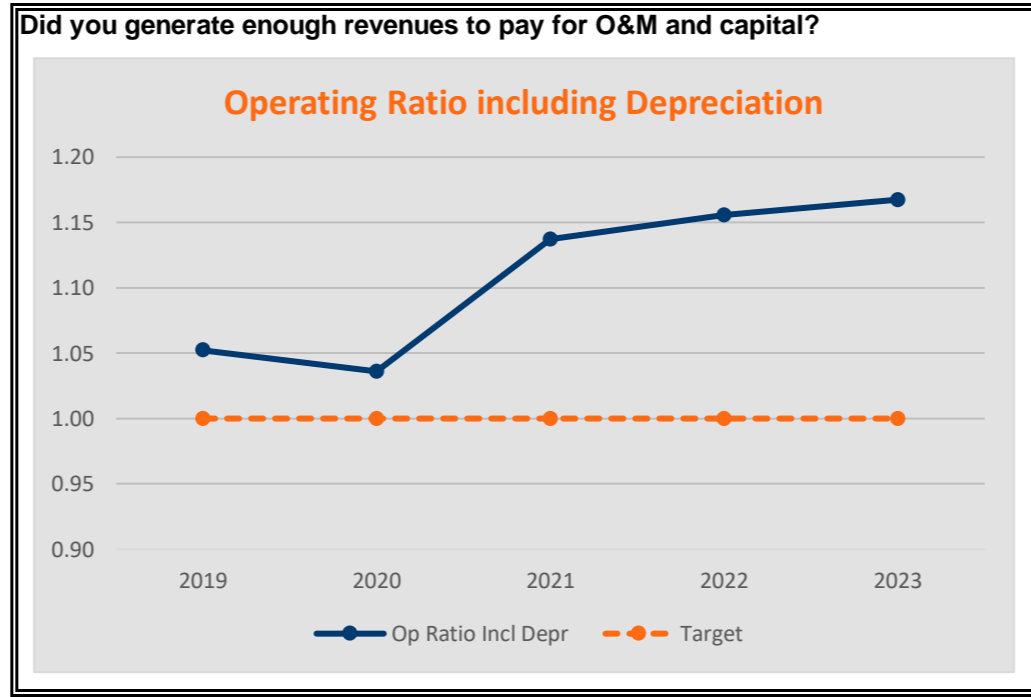
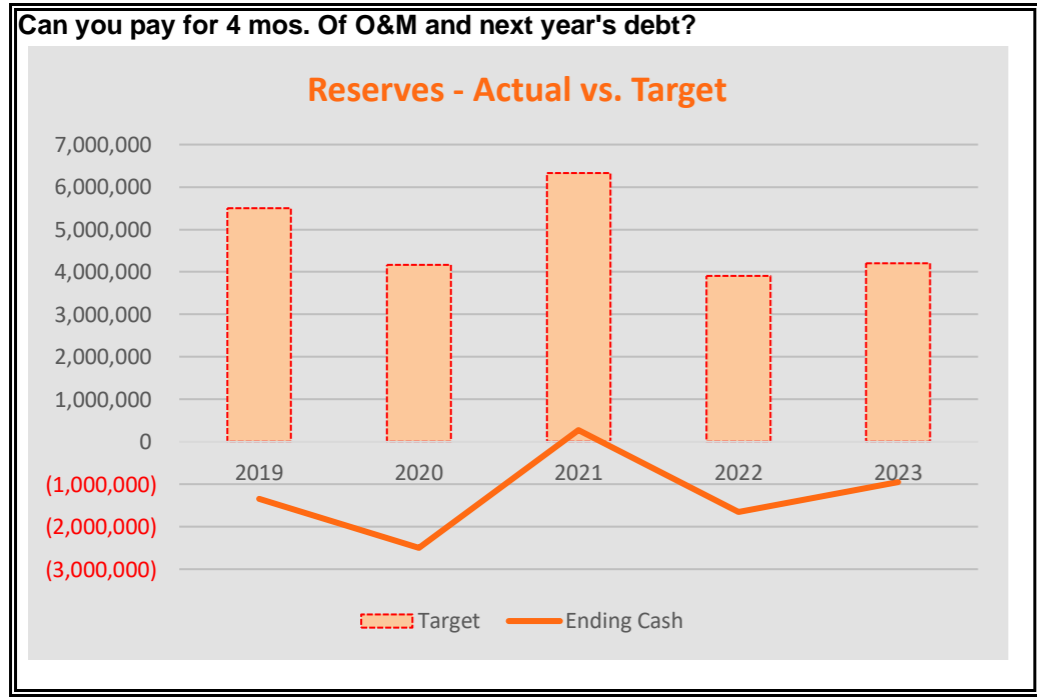
Accumulated Depreciation Expense	16,665,341	17,432,922	18,301,841	19,037,231	19,953,109	21,005,584
Total Net Assets	48,260,805	49,228,732	51,240,144	52,922,557	56,167,467	61,054,213
Asset Depreciation	34.53%	35.41%	35.72%	35.97%	35.52%	34.40%

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 West Allis, WI





2024 Water Rate Study: Phase 2

Section 2 — Long-Range Cash Flow Analysis

City of West Allis, WI

Table 6 Water Utility Capital Improvement Plan

City of West Allis, WI

Projects	Funding	2024	2025	2026	2027	2028	2029	2030	2031	2032	Totals
Water Portion of Streets	G.O. Debt	3,240,000	4,941,200	5,191,400	3,852,300	4,739,000	6,000,000	6,000,000	6,000,000	6,000,000	45,963,900
Water Portion of Streets Other	G.O. Debt	165,000									165,000
Drill rig truck	G.O. Debt	250,000									250,000
Hydrants	G.O. Debt	100,000	110,000	121,000	133,100	146,410	161,051	177,156	194,872	214,359	1,357,948
Private lead service replacement	G.O. Debt	500,000									500,000
Van replacement	G.O. Debt	40,000									40,000
Water Main Relay	G.O. Debt	450,000	450,000	450,000	450,000	450,000	495,000	544,500	598,950	658,845	4,547,295
Water meters	G.O. Debt	200,000	220,000	242,000	266,200	292,820	322,102	354,312	389,743	428,718	2,715,895
Reservoir / Pump Station - Upgrade Electrical System	G.O. Debt		992,000								992,000
Reservoir / Pump Station - New backup generator	G.O. Debt		550,000								550,000
Reservoir / Pump Station - Replace Control Valve Pump #1	G.O. Debt	350,000									350,000
Reservoir / Pump Station - Rebuild Motor #1	G.O. Debt	12,000									12,000
Reservoir / Pump Station - Full Drain, Clean, & Inspect 4 MG Underground Tanks	G.O. Debt	112,400									112,400
84th St Pump Station - Replace Control Valve Pump #1	G.O. Debt	75,000									75,000
84th St Pump Station - Expand Drive-way/Parking	G.O. Debt	10,000									10,000
84th St Pump Station - Cross-connection control on back-up generator (back-flow preventer)	G.O. Debt	2,500									2,500
84th St Pump Station - Insulating / Weather proofing	G.O. Debt	11,000									11,000
84th St Pump Station - Humidity issues	G.O. Debt	5,000									5,000
84th St Pump Station - Flow Meter Vault Repairs	G.O. Debt	82,000									82,000
84th & Rogers Water Tower - Grounding rod replacement	G.O. Debt	25,000									25,000
Reservoir Bypass Pump - Access hatch concrete deteriorating	G.O. Debt	8,000									8,000
Reservoir Bypass Pump - Access hatch not DNR compliant	G.O. Debt	8,000									8,000
Reservoir / Pump Station - Replace Windows	G.O. Debt			25,000							25,000
Reservoir / Pump Station - Replace HVAC	G.O. Debt			77,000							77,000
Reservoir / Pump Station - Option 1 - Retrofit existing bldg with 3 mgd pumps and electric motors and variable frequency drives (VFD)	G.O. Debt	-	512,000								512,000
Maintenance & Storage Shed - demolish and replace	G.O. Debt		575,000								575,000
84th & Rogers Water Tower - Painting	G.O. Debt				516,400						516,400
116th & Rogers Water Tower - Painting	G.O. Debt				628,000						628,000
Reservoir / Pump Station - Replace Control Valve Pump #2	G.O. Debt					350,000					350,000
Reservoir / Pump Station - New Asphalt Driveway	G.O. Debt					25,000					25,000
84th St Pump Station - Replace Back-up Generator	G.O. Debt					550,000					550,000
84th St Pump Station - Electrical System Upgrade	G.O. Debt					992,000					992,000
84th St Pump Station - Replace and upgrade HVAC system	G.O. Debt					75,000					75,000
84th St Pump Station - Gas meter reconfigured	G.O. Debt					17,000					17,000
Reservoir Bypass Pump - Replace	G.O. Debt					264,000					264,000
Actual CIP Costs		5,645,900	8,350,200	6,106,400	5,846,000	7,901,230	6,978,153	7,075,968	7,183,565	7,301,922	62,389,338
Sources of Funding											
G.O. Debt		5,645,900	8,350,200	6,106,400	5,846,000	7,901,230	6,978,153	7,075,968	7,183,565	7,301,922	62,389,338
Revenue Debt		0	0	0	0	0	0	0	0	0	0
Grants/Aids		0	0	0	0	0	0	0	0	0	0
Special Assessment		0	0	0	0	0	0	0	0	0	0
Cash		0	0	0	0	0	0	0	0	0	0
Total		5,645,900	8,350,200	6,106,400	5,846,000	7,901,230	6,978,153	7,075,968	7,183,565	7,301,922	62,389,338

Notes:

Table 7
Capital Improvements Financing Plan
 City of West Allis, WI

	2024		2025		2026		2027		2028		2029		2030		2031		2032	
	G.O. Notes	Water Portion	G.O. Notes	Water Portion	G.O. Notes	Water Portion	G.O. Notes	Water Portion	G.O. Notes	Water Portion	G.O. Notes	Water Portion	G.O. Notes	Water Portion	G.O. Notes	Water Portion	G.O. Notes	Water Portion
CIP Projects¹																		
Sewer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water	5,645,900	5,645,900	8,350,200	8,350,200	6,106,400	6,106,400	5,846,000	5,846,000	7,901,230	7,901,230	6,978,153	6,978,153	7,075,968	7,075,968	7,183,565	7,183,565	7,301,922	7,301,922
Storm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal Project Costs	5,645,900	5,645,900	8,350,200	8,350,200	6,106,400	6,106,400	5,846,000	5,846,000	7,901,230	7,901,230	6,978,153	6,978,153	7,075,968	7,075,968	7,183,565	7,183,565	7,301,922	7,301,922
CIP Projects¹	5,645,900	5,645,900	8,350,200	8,350,200	6,106,400	6,106,400	5,846,000	5,846,000	7,901,230	7,901,230	6,978,153	6,978,153	7,075,968	7,075,968	7,183,565	7,183,565	7,301,922	7,301,922
Less Other Available Revenues																		
Cash Available	-	0	-	0	-	0	(460,000)	(460,000)	(890,000)	(890,000)	(780,000)	(780,000)	(400,000)	(400,000)	-	-	-	-
Net Borrowing Requirement	5,645,900	5,645,900	8,350,200	8,350,200	6,106,400	6,106,400	5,386,000	5,386,000	7,011,230	7,011,230	6,198,153	6,198,153	6,675,968	6,675,968	7,183,565	7,183,565	7,301,922	7,301,922
Estimated Issuance Expenses	149,588	149,588	191,650	191,650	156,900	156,900	146,975	146,975	173,013	173,013	160,525	160,525	167,025	167,025	173,763	173,763	175,563	175,563
TOTAL TO BE FINANCED	5,795,488	5,795,488	8,541,850	8,541,850	6,263,300	6,263,300	5,532,975	5,532,975	7,184,243	7,184,243	6,358,678	6,358,678	6,842,993	6,842,993	7,357,328	7,357,328	7,477,484	7,477,484
Estimated Interest Earnings	3.00%	(42,344)	3.00%	(62,627)	3.00%	(45,798)	3.00%	(43,845)	3.00%	(59,259)	3.00%	(52,336)	3.00%	(53,070)	3.00%	(53,877)	3.00%	(54,764)
Assumed spend down (months)	3.00	(42,344)	3.00	(62,627)	3.00	(45,798)	3.00	(43,845)	3.00	(59,259)	3.00	(52,336)	3.00	(53,070)	3.00	(53,877)	3.00	(54,764)
Rounding	1,857	1,857	777	777	2,498	2,498	870	870	17	17	3,658	3,658	76	76	1,549	1,549	2,280	2,280
NET BOND SIZE	5,755,000	5,755,000	8,480,000	8,480,000	6,220,000	6,220,000	5,490,000	5,490,000	7,125,000	7,125,000	6,310,000	6,310,000	6,790,000	6,790,000	7,305,000	7,305,000	7,425,000	7,425,000

Notes:
 1) Source of Project Totals

Table 8
Water Utility Projected Debt Service Payments (PROPOSED)
 City of West Allis, WI

NAME	General Obligation Prom Notes Series 2024				General Obligation Prom Notes Series 2025				General Obligation Prom Notes Series 2026				General Obligation Prom Notes Series 2027				General Obligation Prom Notes Series 2028				General Obligation Prom Notes Series 2029				General Obligation Prom Notes Series 2030				General Obligation Prom Notes Series 2031				General Obligation Prom Notes Series 2032				PROPOSED Water Utility Debt Service Summary					
	AMT	DATED	MATURE	RATE	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total	Total Prin	Total Int	Total P&I	Prin Outstanding	Year					
	\$5,755,000	10/1/2024	4/1	3.45-4.2%																																						
2024																																										
2025	50,000				3.750%	226,278	276,278																																			
2026	0				3.650%	225,340	225,340																																			
2027	100,000				3.500%	223,590	323,590																																			
2028	100,000				3.450%	220,115	320,115	215,000	3.600%	336,876	551,876																															
2029	100,000				3.450%	216,665	316,665	240,000	3.550%	328,746	568,746	120,000	3.700%	254,711	374,711																											
2030	100,000				3.450%	213,215	313,215	240,000	3.550%	320,226	560,226	140,000	3.650%	249,936	389,936																											
2031	100,000				3.470%	209,755	309,755	240,000	3.550%	311,706	551,706	155,000	3.650%	244,552	399,552	110,000	4.250%	223,763	333,763	100,000	4.250%	299,838	399,838																			
2032	100,000				3.500%	206,270	306,270	240,000	3.570%	303,162	543,162	170,000	3.650%	238,621	408,621	110,000	4.250%	219,088	329,088	100,000	4.250%	295,588	395,588	55,000	4.250%	267,006	322,006															
2033	100,000				3.550%	202,745	302,745	260,000	3.600%	294,198	554,198	190,000	3.670%	232,032	422,032	110,000	4.250%	214,413	324,413	100,000	4.250%	291,338	391,338	55,000	4.250%	264,669	319,669	65,000	4.250%	267,325	332,325											
2034	280,000				3.750%	195,860	475,860	385,000	3.650%	282,491	667,491	210,000	3.700%	224,660	434,660	110,000	4.250%	209,738	319,738	100,000	4.250%	287,088	387,088	55,000	4.250%	257,656	312,656	65,000	4.250%	250,750	315,750	70,000	4.250%	308,975	378,975							
2035	500,000				3.900%	181,375	681,375	530,000	3.750%	265,528	795,528	230,000	3.750%	216,463	446,463	110,000	4.250%	205,063	315,063	100,000	4.250%	282,838	382,838	55,000	4.250%	259,994	314,994	65,000	4.250%	233,431	298,431	70,000	4.250%	306,000	376,000	65,000	4.250%	314,181	379,181			
2036	790,000				3.900%	156,595	946,595	640,000	3.850%	243,270	883,270	290,000	3.850%	206,568	496,568	110,000	4.250%	200,388	310,388	100,000	4.250%	278,588	378,588	55,000	4.250%	257,656	312,656	65,000	4.250%	215,369	280,369	70,000	4.250%	303,025	373,025	65,000	4.250%	311,419	376,419			
2037	970,000				4.000%	121,790	1,091,790	760,000	4.000%	215,750	975,750	350,000	3.950%	194,073	544,073	110,000	4.250%	195,713	305,713	100,000	4.250%	274,338	374,338	55,000	4.250%	255,319	310,319	65,000	4.250%	196,563	261,563	70,000	4.250%	300,050	370,050	65,000	4.250%	308,656	373,656			
2038	1,140,000				4.100%	79,020	1,219,020	900,000	4.100%	182,100	1,082,100	415,000	4.100%	178,653	593,653	110,000	4.250%	191,038	301,038	100,000	4.250%	270,088	370,088	55,000	4.250%	252,981	307,981	65,000	4.250%	177,013	242,013	70,000	4.250%	297,075	367,075	65,000	4.250%	305,894	370,894			
2039	1,325,000				4.200%	27,825	1,352,825	1,040,000	4.200%	141,810	1,181,810	485,000	4.200%	159,960	644,960	110,000	4.250%	186,363	296,363	100,000	4.250%	265,838	365,838	55,000	4.250%	250,644	305,644	65,000	4.250%	156,613	221,613	70,000	4.250%	294,100	364,100	65,000	4.250%	303,131	368,131			
2040																																										
2041																																										
2042																																										
2043																																										
2044																																										
2045																																										
2046																																										
2047																																										
TOTALS	5,755,000				2,706,438	8,461,438	8,480,000	3,967,336	12,447,336	6,220,000	3,120,211	9,340,211	5,490,000	2,960,763	8,450,763	7,125,000	3,998,506	11,123,506	6,310,000	3,706,213	10,016,213	6,790,000	2,535,231	9,325,231	7,305,000	4,269,656	11,574,656	7,425,000	4,360,181	11,785,181	60,900,000	31,624,534	92,524,534		TOTALS							

Notes:
 1) Rate assumes NR sale + .25
 2) Rate assumes NR sale + .35

Legend: Maturities subject to optional redemption (callable)

Table 9 Water Utility Cash Flow Analysis - Projected 2024-2033

City of West Allis, WI

	Budget	Projected								
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Revenues										
Total Revenues from User Rates ¹	\$8,804,000	\$9,978,411	\$9,978,411	\$10,377,547	\$10,792,649	\$13,234,334	\$13,234,334	\$13,763,708	\$14,314,256	\$14,314,256
Percent Increase to User Rates	0.00%	13.34%	0.00%	4.00%	4.00%	22.62%	0.00%	4.00%	4.00%	0.00%
Cumulative Percent Rate Increase	0.00%	13.34%	13.34%	17.87%	22.59%	50.32%	50.32%	56.33%	62.59%	62.59%
Dollar Amount Increase to Revenues		\$1,174,411	\$0	\$399,136	\$415,102	\$2,441,685	\$0	\$529,373	\$550,548	\$0
Other Revenues										
Interest Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Income	\$457,000	\$461,570	\$466,186	\$470,848	\$475,556	\$480,312	\$485,115	\$489,966	\$499,765	\$509,760
Total Other Revenues	\$457,000	\$461,570	\$466,186	\$470,848	\$475,556	\$480,312	\$485,115	\$489,966	\$499,765	\$509,760
Total Revenues	\$9,261,000	\$10,439,981	\$10,444,596	\$10,848,395	\$11,268,205	\$13,714,646	\$13,719,449	\$14,253,674	\$14,814,021	\$14,824,017
Less: Expenses										
Operating and Maintenance ²	\$6,805,143	\$7,009,297	\$7,219,576	\$7,436,163	\$7,659,248	\$7,889,026	\$8,125,697	\$8,369,468	\$8,620,552	\$8,879,168
PILOT Payment	\$854,198	\$913,992	\$932,272	\$950,917	\$998,463	\$1,018,432	\$1,038,801	\$1,059,577	\$1,080,769	\$1,102,384
Net Before Debt Service and Capital Expenditures	\$1,601,659	\$2,516,691	\$2,292,748	\$2,461,314	\$2,610,494	\$4,807,188	\$4,554,951	\$4,824,629	\$5,112,701	\$4,842,465
Debt Service										
Existing Debt P&I	\$1,300,254	\$1,226,554	\$1,207,354	\$1,101,410	\$888,848	\$719,738	\$624,948	\$518,037	\$442,858	\$324,568
New (2024-2033) Debt Service P&I	\$0	\$276,278	\$566,086	\$937,910	\$1,412,601	\$1,839,665	\$2,192,376	\$2,561,137	\$2,898,352	\$3,272,743
Total Debt Service	\$1,300,254	\$1,502,831	\$1,773,439	\$2,039,320	\$2,301,449	\$2,559,403	\$2,817,324	\$3,079,174	\$3,341,210	\$3,597,310
Transfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less: Capital Improvements	\$5,795,488	\$8,541,850	\$6,263,300	\$5,992,975	\$8,074,243	\$7,138,678	\$7,242,993	\$7,357,328	\$7,477,484	\$0
Debt Proceeds	\$5,755,000	\$8,480,000	\$6,220,000	\$5,490,000	\$7,125,000	\$6,310,000	\$6,790,000	\$7,305,000	\$7,425,000	\$0
Net Annual Cash Flow	\$260,918	\$952,010	\$476,009	(\$80,981)	(\$640,197)	\$1,419,107	\$1,284,635	\$1,693,127	\$1,719,007	\$1,245,154
Restricted and Unrestricted Cash Balance:										
Balance at first of year	(\$942,897)	(\$681,979)	\$270,031	\$746,040	\$665,059	\$24,862	\$1,443,969	\$2,728,603	\$4,421,731	\$6,140,738
Net Annual Cash Flow Addition/(subtraction)	\$260,918	\$952,010	\$476,009	(\$80,981)	(\$640,197)	\$1,419,107	\$1,284,635	\$1,693,127	\$1,719,007	\$1,245,154
Balance at end of year	(\$681,979)	\$270,031	\$746,040	\$665,059	\$24,862	\$1,443,969	\$2,728,603	\$4,421,731	\$6,140,738	\$7,385,892
"All-in" Debt Coverage	1.23	1.67	1.29	1.21	1.13	1.88	1.62	1.57	1.53	1.35
Over (Under) Ehlers target reserves	(5,273,960)	(4,781,638)	(4,739,311)	(5,269,617)	(6,363,782)	(5,392,385)	(4,563,394)	(3,330,323)	(2,033,116)	(1,063,306)

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 2024 - 2033

City of West Allis, WI

	Budget	Projected								
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Target minimum cash balance										
Target minimum working capital - Ehlers ¹	4,591,981	5,051,668	5,485,351	5,934,676	6,388,644	6,836,354	7,291,998	7,752,054	8,173,854	8,449,198
Actual Days Cash Available - PSC ²	(36)	13	34	29	1	57	102	157	208	239
Actual Days Cash Available - Moody's ³	(37)	14	38	33	1	67	123	193	260	304
Actual Days Cash Available - S&P ⁴	(37)	14	38	33	1	67	123	193	260	304
Actual working capital-cash balance	(681,979)	270,031	746,040	665,059	24,862	1,443,969	2,728,603	4,421,731	6,140,738	7,385,892
Over (Under) Ehlers target	(5,273,960)	(4,781,638)	(4,739,311)	(5,269,617)	(6,363,782)	(5,392,385)	(4,563,394)	(3,330,323)	(2,033,116)	(1,063,306)
Over (Under) PSC target (90 days)	(126)	(77)	(56)	(61)	(89)	(33)	12	67	118	149
Over (Under) Moody's target (150 days)	(187)	(136)	(112)	(117)	(149)	(83)	(27)	43	110	154
Over (Under) S&P target (150 days)	(187)	(136)	(112)	(117)	(149)	(83)	(27)	43	110	154

Notes:

- 1) Target capital equals 4 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	41,361,719	47,980,192	55,208,492	61,184,692	68,058,307	75,497,999	82,525,059	89,654,826	96,897,569	100,548,530
Plus: Materials and Supplies	150,209	150,209	150,209	150,209	150,209	150,209	150,209	150,209	150,209	150,209
Less: Avg. Utility Plant Accum. Depreciation	14,098,425	14,555,277	15,097,359	16,068,078	17,228,622	18,647,185	20,432,321	22,521,767	24,919,224	27,945,186
Less: Regulatory Liability	0	0	0	0	0	0	0	0	0	0
Average Net Investment Rate Base (NIRB)	27,413,503	33,575,124	40,261,342	45,266,823	50,979,894	57,001,023	62,242,948	67,283,268	72,128,554	72,753,553
Net Operating Income	797,771	1,421,120	858,496	758,888	617,108	2,475,510	1,910,945	1,863,790	1,830,077	1,342,973
ROR	2.91%	4.23%	2.13%	1.68%	1.21%	4.34%	3.07%	2.77%	2.54%	1.85%
PSC Projected Benchmark	6.30%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Rate Adj. to benchmark	10.56%	5.9%	15.6%	18.9%	22.6%	7.1%	13.8%	15.8%	17.4%	21.1%

Cost Recovery										
Operating Revenues	9,261,000	10,439,981	10,444,596	10,848,395	11,268,205	13,714,646	13,719,449	14,253,674	14,814,021	14,824,017
Operating Expenses incl. Depr & Amortization	7,857,618	8,353,456	8,902,416	9,387,176	9,901,221	10,469,290	11,018,290	11,578,893	12,151,763	12,627,246
Operating Expenses w/o Depr & Amortization	6,805,143	7,009,297	7,219,576	7,436,163	7,659,248	7,889,026	8,125,697	8,369,468	8,620,552	8,879,168
Cost Recovery incl. Depr	1.18	1.25	1.17	1.16	1.14	1.31	1.25	1.23	1.22	1.17
Cost Recovery w/o Depr	1.15	1.19	1.23	1.26	1.29	1.33	1.36	1.38	1.41	1.42
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.

Leverage										
Total Long-Term Debt	12,565,000	19,920,000	25,055,000	29,425,000	35,370,000	40,510,000	46,105,000	52,215,000	58,440,000	57,245,000
Total Net Assets	61,054,213	69,404,413	75,510,813	81,356,813	89,258,043	96,236,196	103,312,164	110,495,729	117,797,651	117,797,651
Debt-to Equity Ratio	0.21	0.29	0.33	0.36	0.40	0.42	0.45	0.47	0.50	0.49

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.

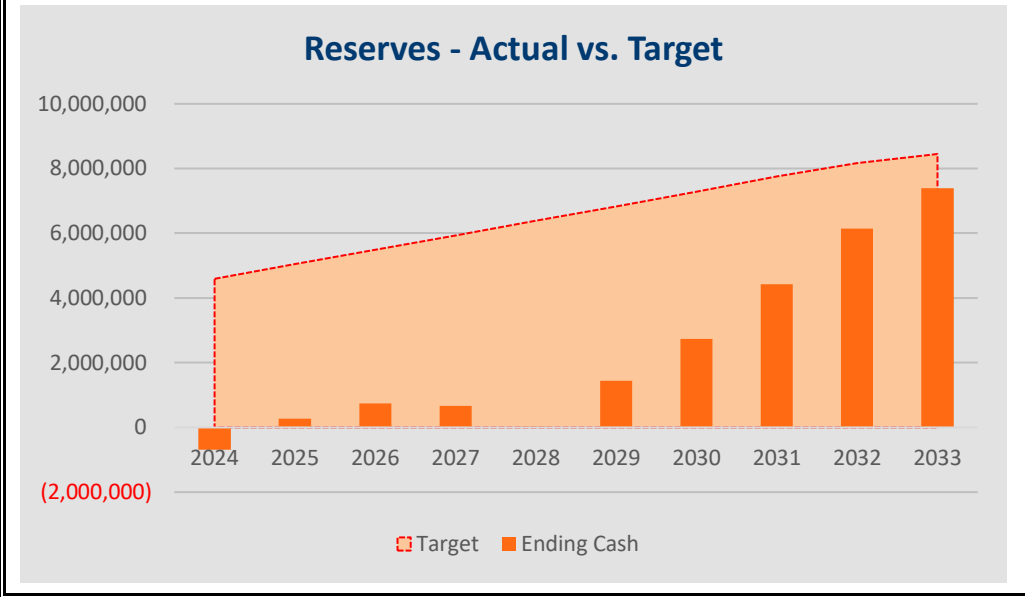
Condition of Assets:										
Accumulated Depreciation Expense	14,098,425	14,555,277	15,097,359	16,068,078	17,228,622	18,647,185	20,432,321	22,521,767	24,919,224	27,945,186
Total Net Assets	61,054,213	69,404,413	75,510,813	81,356,813	89,258,043	96,236,196	103,312,164	110,495,729	117,797,651	117,797,651
Asset Depreciation	23.09%	20.97%	19.99%	19.75%	19.30%	19.38%	19.78%	20.38%	21.15%	23.72%

Notes:

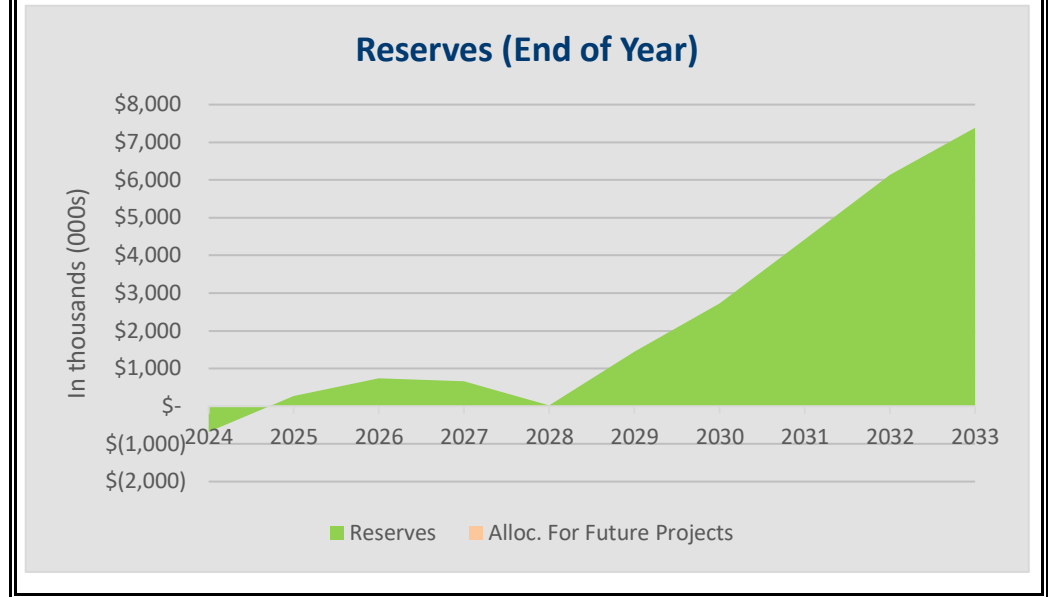
This indicator of infrastructure condition estimates the portion of the average expected life of the utility's physical assets that has already passed. As this ratio approaches 100%, the capital assets become fully depreciated, and infrastructure needs replacement or rehabilitation. The accuracy of this 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 Long-Range Planning Analysis City of West Allis, WI

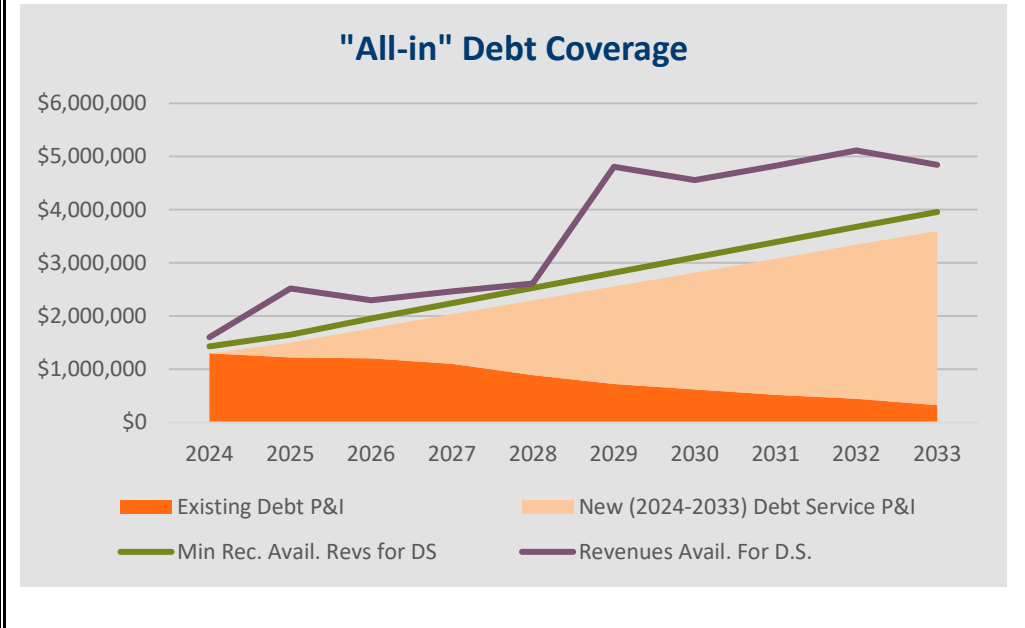
Are rates set to maintain adequate reserves?



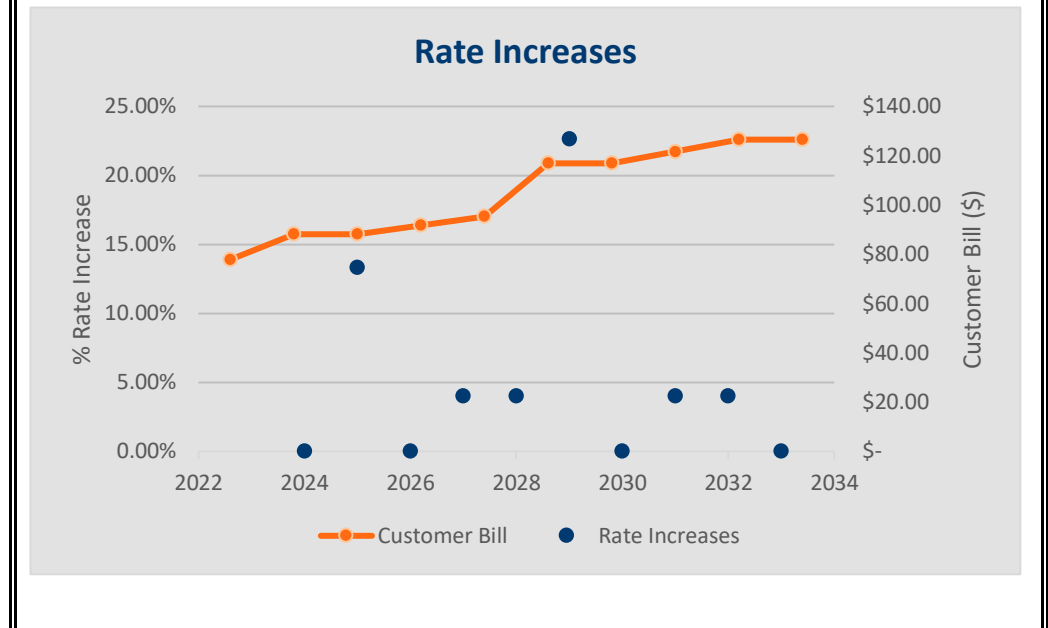
How much reserves are planned for future projects?



Are rates set to pay for financial obligations?



Rate Increases





2024 Water Rate Study: Phase 2

Section 3 — Rate Impact Analysis

City of West Allis, WI

Table 12

Projected Impact of CIP on Typical Residential Utility Bill

City of West Allis, WI

Year	Water					Utility Bill (Annual)	Change Over Prior Year	% of MHI (72,458)	Year
	Increase	Water Vol. Charge ¹	Water User Charge ²	Utility Bill (Quarterly)	Change Over Prior Year				
		Tiered	Serv. + PFP						
2023		2.67	36.28	\$ 77.83		\$ 311.30		0.43%	2023
2024	0.00%	2.67	36.28	\$ 77.83	\$ -	\$ 311.30	\$ -	0.43%	2024
2025	13.34%	3.03	41.12	\$ 88.21	\$ 10.38	\$ 352.83	\$ 41.53	0.49%	2025
2026	0.00%	3.03	41.12	\$ 88.21	\$ -	\$ 352.83	\$ -	0.49%	2026
2027	4.00%	3.15	42.76	\$ 91.73	\$ 3.53	\$ 366.94	\$ 14.11	0.51%	2027
2028	4.00%	3.27	44.47	\$ 95.40	\$ 3.67	\$ 381.62	\$ 14.68	0.53%	2028
2029	22.62%	4.01	54.54	\$ 116.99	\$ 21.58	\$ 467.95	\$ 86.34	0.65%	2029
2030	0.00%	4.01	54.54	\$ 116.99	\$ -	\$ 467.95	\$ -	0.65%	2030
2031	4.00%	4.17	56.72	\$ 121.67	\$ 4.68	\$ 486.67	\$ 18.72	0.67%	2031
2032	4.00%	4.34	58.99	\$ 126.53	\$ 4.87	\$ 506.14	\$ 19.47	0.70%	2032
2033	0.00%	4.34	58.99	\$ 126.53	\$ -	\$ 506.14	\$ -	0.70%	2033
Total Change over planning period					\$ 48.71	\$ 194.84			

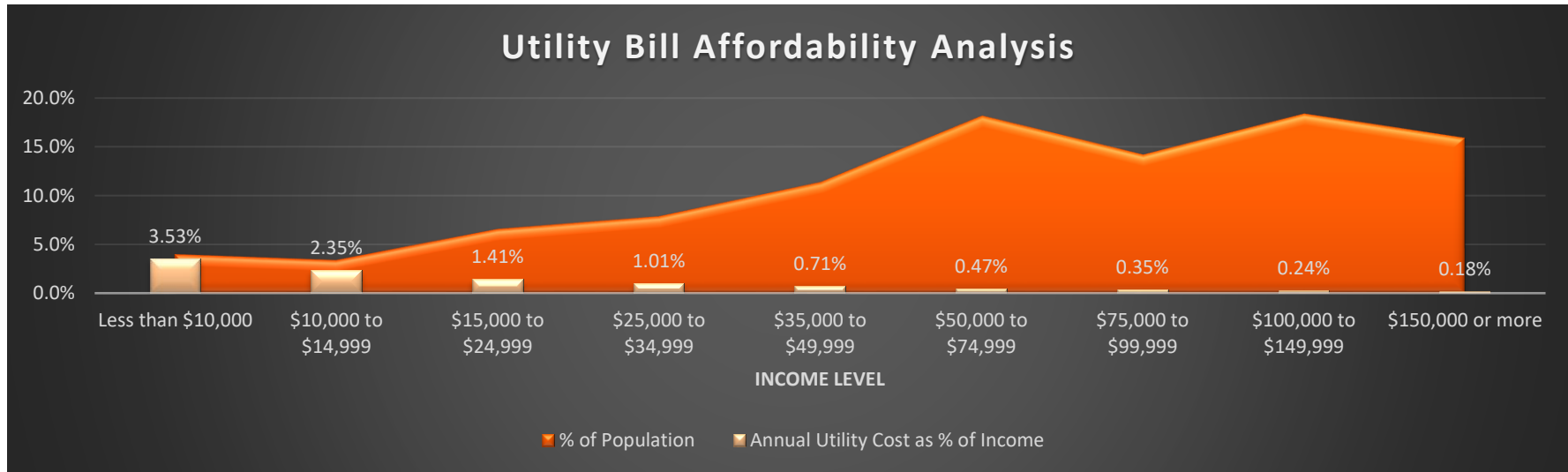
Notes:

1. Current water volumetric rate is \$2.67 per 100 cubic feet for the first 10,000 cubic feet.
2. The water user charges include a quarterly service charge of \$21.01 plus a public fire protection charge of \$15.27 for a 5/8 inch meter.
3. The current Sewer volumetric rate is \$21.50 for the first 0-10 CCF and \$2.15 per CCF for anything over 10 CCF for 5/8 inch meter.
4. The usage is assumed to be 1,556 CF per quarter.

Table 13

Projected Impact of CIP on Typical Residential Utility Bill - Affordability

City of West Allis, WI



Notes:

- 1) Utility Cost taken as a 5-year average of water bills for an average (5/8 in meter; 1556 CCF/mo.) Residential User.
- 2) City Income Level from U.S. Census Bureau's American Community Survey.
- 3) 14.% of residential customers are estimated to have less than \$25,000 of income. These households will have spent more than 2.43% of their income under the 4-year average for this plan.