2021 UTILITIES LONG-RANGE CASH FLOW ANALYSIS:

City of Whitewater, WI



Prepared by:

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2021 Utilities Long-Range Cash Flow Analysis

Section 1 — Water Historical Rate Performance



Table 1 Water Rate Performance

Shown with no increase											
Reve	enue Requirement					Est	Budget				
Component	Description	2016	2017	2018	2019	2020	2021				
Cash Basis	·										
1	Operating and Maintenance	\$1,258,372	\$1,310,142	\$1,402,240	\$1,466,087	\$1,673,721	\$1,628,251				
2	Debt	\$257,055	\$195,480	\$839,190	\$328,432	\$1,183,246	\$485,157				
3	Cash Funded Capital	\$180,128	\$46,189	\$0	\$157,151	\$0	\$214,400				
	Less:										
	Other Revenue	\$12,516	\$13,423	\$60,999	\$50,420	\$60,419	\$45,000				
	Interest Income	\$1,562	\$2,926	\$28,429	\$23,722	\$3,751	\$1,500				
	Revenue Requirement	\$1,681,477	\$1,535,462	\$2,152,002	\$1,877,528	\$2,792,797	\$2,281,308				
	(Costs less Other Income)										
	User Rates Revenue	\$1,790,892	\$1,726,041	\$1,789,421	\$1,843,575	\$1,962,737	\$2,181,685				
	Rate Adequacy	\$109,415	\$190,579	(\$362,581)	(\$33,953)	(\$830,060)	(\$99,623				
Utility Basis											
	0 ': IM:	#4.050.070	M4 040 440	\$4.400.040	#4 400 007	# 4 070 704	#4.000.05				
1	Operating and Maintenance	\$1,258,372	\$1,310,142	\$1,402,240	\$1,466,087	\$1,673,721					
	Operating and Maintenance Depreciation	\$1,258,372 \$400,598	\$1,310,142 \$407,190	\$1,402,240 \$409,332	\$1,466,087 \$340,617	\$1,673,721 \$384,061					
1							\$420,550				
1	Depreciation	\$400,598	\$407,190	\$409,332	\$340,617	\$384,061	\$420,550 \$10,056,788				
1 2	Depreciation NIRB	\$400,598 \$7,097,691	\$407,190 \$7,339,746	\$409,332 \$7,189,355	\$340,617 \$8,010,061	\$384,061 \$9,425,302	\$420,550 \$10,056,788				
1 2	Depreciation NIRB Recommended ROI (4.9%)	\$400,598 \$7,097,691	\$407,190 \$7,339,746	\$409,332 \$7,189,355	\$340,617 \$8,010,061	\$384,061 \$9,425,302	\$420,550 \$10,056,788 \$492,783				
1 2	Depreciation NIRB Recommended ROI (4.9%) Less:	\$400,598 \$7,097,691 \$347,787	\$407,190 \$7,339,746 \$359,648	\$409,332 \$7,189,355 \$352,278	\$340,617 \$8,010,061 \$392,493	\$384,061 \$9,425,302 \$461,840	\$420,550 \$10,056,788 \$492,783 \$45,000				
1 2	Depreciation NIRB Recommended ROI (4.9%) Less: Other Revenue	\$400,598 \$7,097,691 \$347,787 \$12,516	\$407,190 \$7,339,746 \$359,648 \$13,423	\$409,332 \$7,189,355 \$352,278 \$60,999	\$340,617 \$8,010,061 \$392,493 \$50,420	\$384,061 \$9,425,302 \$461,840 \$60,419	\$420,550 \$10,056,788 \$492,783 \$45,000 \$1,500				
1 2	Depreciation NIRB Recommended ROI (4.9%) Less: Other Revenue Interest Income Revenue Requirement	\$400,598 \$7,097,691 \$347,787 \$12,516 \$1,562	\$407,190 \$7,339,746 \$359,648 \$13,423 \$2,926	\$409,332 \$7,189,355 \$352,278 \$60,999 \$28,429	\$340,617 \$8,010,061 \$392,493 \$50,420 \$23,722	\$384,061 \$9,425,302 \$461,840 \$60,419 \$3,751	\$1,628,251 \$420,550 \$10,056,788 \$492,783 \$45,000 \$1,500 \$2,495,083				



Table 2 Water Utility Rate Performance Charts



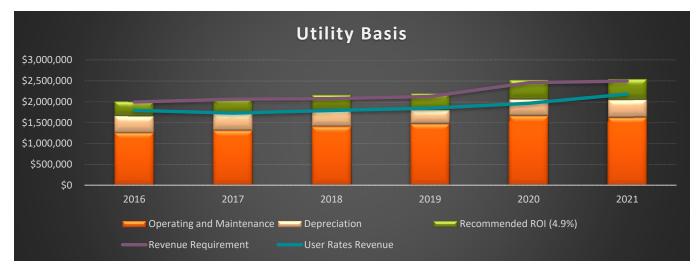




Table 3 Water Utility Cash Flow Analysis - Historical 2016-2020

			Actual		
	2016	2017	2018	2019	2020
Revenues					
Total Revenues from User Rates	\$1,790,892	\$1,726,041	\$1,789,421	\$1,843,575	\$1,962,737
Percent Increase to User Rates					
Total Other Revenues	\$14,185	\$70,856	\$92,751	\$108,953	\$143,653
Total Revenues	\$1,805,077	\$1,796,897	\$1,882,172	\$1,952,528	\$2,106,390
Expenses					
Operating and Maintenance	\$959,723	\$995,802	\$1,076,252	\$1,125,707	\$1,331,043
PILOT Payment	\$298,649	\$314,340	\$325,988	\$340,380	\$342,678
Net Before Debt Service and Capital Expenditures	\$546,705	\$486,755	\$479,932	\$486,441	\$432,669
Existing Debt P&I ¹	\$257,055	\$195,480	\$839,190	\$328,432	\$1,183,246
Transfer In (Out)/Cap. Contrib.	\$0	\$0	\$0	\$0	\$0
Capital Improvements	\$778,309	\$46,189	\$731,233	\$1,270,151	\$1,558,691
Bond Proceeds/Grants	\$598,181	\$0	\$1,850,000	\$1,113,000	\$1,730,000
Reconcile to Audit	(\$60,974)	\$132,179	\$108,991	\$198,414	(\$91,999)
Net Annual Cash Flow	\$48,548	\$377,265	\$868,500	\$199,272	(\$671,267)
Restricted and Unrestricted Cash Balance:					
Balance at first of year	\$1,253,935	\$1,302,483	\$1,679,748	\$2,548,248	\$2,747,520
Net Annual Cash Flow Addition/(subtraction)	\$48,548	\$377,265	\$868,500	\$199,272	(\$671,267)
Balance at end of year	\$1,302,483	\$1,679,748	\$2,548,248	\$2,747,520	\$2,076,253



Table 4 Water Utility Financial Benchmarking Analysis

City of Whitewater, WI

			Actual			Budget
	2016	2017	2018	2019	2020	2021
Target minimum cash balance						
Target minimum working capital - Ehlers ¹	875,641	1,540,686	1,071,224	1,916,408	1,342,709	1,047,765
Actual Days Cash Available - PSC ²	393	480	490	875	241	224
Actual Days Cash Available - Moody's ³	369	454	446	783	219	198
Actual Days Cash Available - S&P ⁴	495	616	864	891	569	556
Actual working capital-cash balance	1,302,483	1,679,748	2,548,248	2,747,520	2,076,253	1,984,616
Over (Under) Ehlers target	426,843	139,062	1,477,024	831,112	733,544	936,851
Over (Under) PSC target (90 days)	303	390	400	785	151	134
Over (Under) Moody's target (150 days)	219	304	296	633	69	48
Over (Under) S&P target (150 days)	345	466	714	741	419	406

Notes:

- 1) Target capital equals 6 mos of following 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	10,970,884	11,281,906	11,432,323	12,507,949	14,133,954	15,006,354
Plus: Materials and Supplies	12,356	12,356	17,428	22,500	22,500	22,500
Less: Utility Plant Accumulated Depreciation	3,503,112	3,623,070	3,979,941	4,290,924	4,352,742	4,773,292
Less: Regulatory Liability	382,437	331,446	280,455	229,464	178,473	127,482
Average Net Investment Rate Base (NIRB)	7,097,691	7,339,746	7,189,355	8,010,061	9,625,239	10,128,080
Net Operating Income	328,248	214,994	251,697	288,762	259,103	319,345
ROR	4.62%	2.93%	3.50%	3.60%	2.69%	3.15%
Benchmark	4.90%					
Cost Recovery						
Operating Revenues	1,803,408	1,739,464	1,850,420	1,893,995	2,023,156	2,226,685
Operating Expenses incl. Depr & Amortization	1,658,970	1,717,332	1,811,572	1,806,704	2,057,782	2,048,801
Operating Expenses w/o Depr & Amortization	1,258,372	1,310,142	1,402,240	1,466,087	1,673,721	1,628,251
Cost Recovery incl. Depr	1.09	1.01	1.02	1.05	0.98	1.09
Cost Recovery w/o Depr	1.32	1.31	1.29	1.23	1.23	1.26
Target	1.00	1.00	1.00	1.00	1.00	1.00

<u>Notes</u>

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	2,388,181	2,248,181	3,355,000	4,258,000	4,926,700	1,725,000
Total Net Assets	18,538,822	18,661,193	18,877,334	20,841,352	21,889,811	22,333,211
Debt-to Equity Ratio	0.13	0.12	0.18	0.20	0.23	0.08

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	6,595,970	7,021,967	7,629,469	7,953,793	7,830,951	8,251,501
Total Net Assets	18,538,822	18,661,193	18,877,334	20,841,352	21,889,811	22,333,211
Asset Depreciation	35.58%	37.63%	40.42%	38.16%	35.77%	36.95%

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).

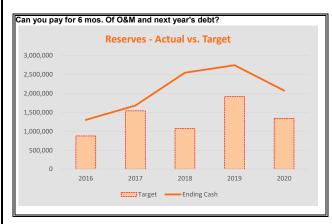
Asset Efficiency												
Total Assets	18,5	538,822	18,6	61,193	18,	877,334	20,8	341,352	21,	889,811	22,3	333,211
Revenue	1,7	790,892	1,7	726,041	1,	789,421	1,8	343,575	1,	962,737	2,1	181,685
Investment to produce \$1 Revenue	\$	10.35	\$	10.81	\$	10.55	\$	11.30	\$	11.15	\$	10.24

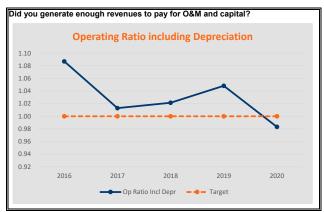
Notes:

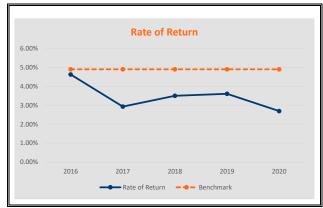
This indicator is a measure of how much investment (in \$) is necessary to produce \$1 of Sales Revenue Wisconsin 2017 Average = \$ 13.52

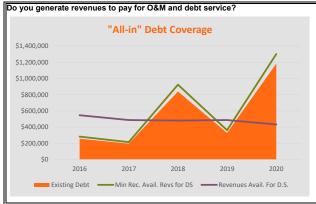


Table 5 Water Utility Financial Health Charts

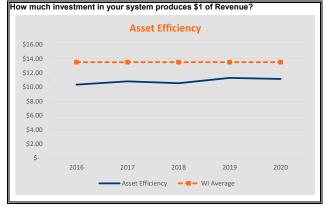
















2021 Utilities Long-Range Cash Flow Analysis

Section 2 — Water Long-Range Cash Flow Analysis

City of Whitewater, WI



Table 6 Water Utility Capital Improvement Plan

Projects	Funding	2021	2022	2023	2024	2025	2026	Totals
Fire Hydrant Replacement	Revenue Debt	90,000	0	0	0	0	0	90,000
Well #8 Back-up Generator	Revenue Debt	125,000						125,000
Yoder Lane Reconstruction	Revenue Debt	14,000						14,000
E. Main Street Reconstruction	Revenue Debt	81,700						81,700
Water Tower - New (Water)	Advance from Other Fund	0	851,866	0	0	0	0	851,866
Water Tower - New (TID 13)	Revenue Debt	0	648,750	0	0	0	0	648,750
Water Tower - New (TID 14)	Revenue Debt	0	648,750	0	0	0	0	648,750
Water Tower - New (TID 10)	Revenue Debt	0	215,250	0	0	0	0	215,250
Water Tower - New (TID 11)	Revenue Debt	0	215,250	0	0	0	0	215,250
Main Improvement - Well #9/RR (TID 13)	Revenue Debt	0	520,000	0	0	0	0	520,000
Main Improvement - Well #9/RR (Water)	Revenue Debt	0	55,000	0	0	0	0	55,000
E. Main Street Reconstruction	Revenue Debt	0	724,938	0	0	0	0	724,938
Yoder Lane Reconstruction	Revenue Debt	0	136,688	0	0	0	0	136,688
Biennial St Reconstruction	Revenue Debt	0	0	90,000	0	0	0	90,000
Biennial St Reconstruction	Revenue Debt	0	0	0	450,000	0	0	450,000
Biennial St Reconstruction	G.O. Debt	0	0	0	0	90.000	0	90,000
Biennial St Reconstruction	Revenue Debt	0	0	0	0	0	450,000	450,000
Fire Hydrant Replacement	Revenue Debt	0	100,000	0	0	0	0	100,000
Fire Hydrant Replacement	Revenue Debt	0	0	110.000	0	0	0	110,000
Fire Hydrant Replacement	Revenue Debt	0	0	0	110.000	0	0	110,000
Fire Hydrant Replacement	G.O. Debt	0	0	0	0	110.000	0	110.000
Fire Hydrant Replacement	Revenue Debt	0	0	0	0	0	110.000	110.000
Skid Steer Loader Purchase	Cash	0	55,000	0	0	0	0	55,000
Vehicle Garage / Material Storage	Revenue Debt	0	300,000	0	0	0	0	300,000
Water Tower - New	Grants/Aids	0	427,634	0	0	0	0	427,634
Water Line Removal	Cash	0	50,000	50.000	50,000	0	0	150,000
Service Vehicle	Cash	0	75,000	0	75,000	0	0	150,000
Well 6 Building Improvements	Cash	0	38,500	0	0	0	0	38,500
Cross Connection / Non-Residential	Cash	0	45,500	45.500	0	0	0	91,000
Residential Cross Connection - Meter Replaceme	r Cash	0	41,500	34.000	35.000	36,000	37.000	183,500
Lead Lateral Replacement	Cash	0	30,000	35.000	35,000	40,000	40,000	180,000
Tower Maintenance Contract	Cash	0	26,000	26,000	26,000	26,000	26,000	130,000
Large Meter Testing	Cash	0	11,500	12.000	12.000	12,000	12.000	59,500
Well 8 Door Replacement	Cash	0	11,000	0	0	0	0	11,000
Well 9 Holding Tank Maintenance	Cash	0	21,000	21.000	21.000	21.000	21.000	105,000
Well Rehabilitation	Cash	0	50,000	50.000	50,000	50,000	50,000	250,000
Filter Tank Media	Cash	0	70.000	0	70,000	0	70.000	210,000
Filter Tank Valve Repair / Replacement.	Cash	0	28,000	28,000	0	0	0	56,000
Well Motor/Pump Inventory	Cash	0	20.000	20,000	0	0	0	40.000
Actual CIP Costs		310,700	5,417,126	521,500	934,000	385,000	816,000	8,384,326
O								
Sources of Funding		0	0			200,000		200 000
G.O. Debt				0	0	200,000	500,000	200,000
Revenue Debt		310,700	3,564,626	200,000	560,000	0	560,000	5,195,326
Grants/Aids		0	427,634	0	0		0	427,634
Advance from Other Fund		0	851,866	0	0	0	0	851,866
User Fees		0	0	0	0	0	0	0
Tax Levy		0	0	0	0	0	0	0
Equipment Replacement Fund		0	0	0	0	0	0	0
0 1-		0	573,000	321,500	374,000	185,000	256,000	1,709,500
Cash Total		310.700	5.417.126	521.500	934.000	385.000	816.000	8.384.326



Table 7
Water Utility Projected Debt Service Payments (PROPOSED)
City of Whitewater, WI

NAME	Rever	ue Bonds (Series 2		rtion)	Ad	vance from	Other Fu	nd	Reven	ue Bonds (Series 2		ortion)	GO	Notes (W Series		on)	Reven	ue Bonds Series		ortion)
AMT		\$4,820	,000			\$851,	866			\$625,	000			\$215,	,000			\$625	,000	
DATED		7/1/2	2022			7/1/2	2022			7/1/2	2024			7/1/2	2025		7/1/2026			
MATURE		5/:	1			5/	1			5/	1			6/	1			5/	1	
Year	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
2021																				
2022	0	0.00%	0		145,200	0.00%		145,200												
2023	140,000	0.55%	116,292	256,292	45,000	0.00%	0	45,000												1
2024	170,000	0.65%	86,185	256,185	44,000	0.00%	0	44,000												
2025	170,000	0.85%	84,910	254,910	7,000	0.00%	0	7,000	25,000	0.95%	16,721	41,721	20.000	4.050/		24.544				1
2026 2027	235,000	1.00% 1.15%	83,013	318,013	7,000	0.00%	0	7,000	25,000	0.95% 0.95%	12,274	37,274	20,000	1.05%	4,641	24,641	25.000	1.350/	17.077	42.077
_	190,000		80,745	270,745	12,000	0.00%	0	12,000	25,000		12,036	37,036	20,000	1.10%	3,030	23,030	25,000	1.25%	17,877	42,877
2028 2029	190,000	1.25% 1.35%	78,465 75,995	268,465	17,000	0.00%	0	17,000	25,000	0.95% 1.45%	11,799 11,499	36,799	20,000	1.20%	2,800	22,800	25,000	1.25%	13,056	38,056 37,744
2029	190,000 235,000	1.45%	73,009	265,995 308,009	17,000 37,000	0.00%	0	17,000 37,000	25,000 30,000	1.45%	11,499	36,499 41,100	20,000 20,000	1.35% 1.50%	2,545 2,260	22,545 22,260	25,000 25,000	1.25% 1.25%	12,744 12,431	37,744
2030	235,000	1.55%	69,484	304,484	37,000	0.00%	0	37,000	30,000	1.45%	10,665	40,665	20,000	1.60%	1,950	21,950	30,000	1.65%	12,431	42,028
2032	255,000	1.60%	65,623	320,623	52,000	0.00%	0	52,000	30,000	1.45%	10,230	40,230	20,000	1.70%	1,620	21,620	30,000	1.65%	11,533	41,533
2033	250,000	1.80%	61,333	311,333	54,500	0.00%	0	54,500	30,000	2.00%	9,713	39,713	25,000	1.80%	1,225	26,225	30,000	1.65%	11,038	41,038
2034	255,000	1.90%	56,660	311,660	54,500	0.00%	0	54,500	30,000	2.00%	9,113	39,113	25,000	2.00%	750	25,750	30,000	1.65%	10,543	40,543
2035	255,000	2.00%	51,688	306,688	54,500	0.00%	0	54,500	30,000	2.00%	8,513	38,513	25,000	2.00%	250	25,250	30,000	2.20%	9,965	39,965
2036	280,000	2.10%	46,198	326,198	54,500	0.00%	0	54,500	30,000	2.00%	7,913	37,913					30,000	2.20%	9,305	39,305
2037	285,000	2,20%	40,123	325,123	54,500	0.00%	0	54,500	30,000	2.45%	7,245	37,245					30,000	2.20%	8,645	38,645
2038	290,000	2.30%	33,653	323,653	54,500	0.00%	0	54,500	35,000	2.45%	6,449	41,449					50,000	2.20%	7,765	57,765
2039	295,000	2.40%	26,778	321,778	54,500	0.00%	0	54,500	35,000	2.45%	5,591	40,591					50,000	2.65%	6,553	56,553
2040	305,000	2.50%	19,425	324,425	50,166	0.00%	0	50,166	45,000	2.45%	4,611	49,611					50,000	2.65%	5,228	55,228
2041	310,000	2.60%	11,583	321,583	0	0.00%	0		45,000	2.80%	3,430	48,430					55,000	2.65%	3,836	58,836
2042	285,000	2.65%	3,776	288,776					50,000	2.80%	2,100	52,100					55,000	2.65%	2,379	57,379
2043									50,000	2.80%	700	50,700					55,000	3.00%	825	55,825
2044									0	2.80%	0						0	3.00%	0	
2045																	0	3.00%	0	
2046																	0	3.00%	0	
TOTALS	4,820,000		1.164.933	5,984,933	851.866		0	851.866	625.000		161.700	786.700	215.000		21.071	236.071	625.000		155.748	780,748

	PROP	OSED Wat	er Utility [Debt Service Sun	nmary
	Total Prin	Total Int	Total P&I	Prin Outstanding	Year
Ī	0	0	0		2021
	145,200	0	145,200	5,526,666	2022
	185,000	116,292	301,292	5,341,666	2023
	214,000	86,185	300,185	5,752,666	2024
	202,000	101,631	303,631	5,765,666	2025
	287,000	99,927	386,927	6,103,666	2026
	272,000	113,688	385,688	5,831,666	2027
	277,000	106,120	383,120	5,554,666	2028
	277,000	102,783	379,783	5,277,666	2029
	347,000	98,800	445,800	4,930,666	2030
	352,000	94,126	446,126	4,578,666	2031
	387,000	89,005	476,005	4,191,666	2032
	389,500	83,308	472,808	3,802,166	2033
	394,500	77,065	471,565	3,407,666	2034
	394,500	70,415	464,915	3,013,166	2035
	394,500	63,415	457,915	2,618,666	2036
	399,500	56,013	455,513	2,219,166	2037
	429,500	47,866	477,366	1,789,666	2038
	434,500	38,921	473,421	1,355,166	2039
	450,166	29,264	479,430	905,000	2040
	410,000	18,849	428,849	495,000	2041
	390,000	8,255	398,255	105,000	2042
	105,000	1,525	106,525	0	2043
	0	0	0	0	2044
	0	0	0	0	2045
	0	0	0	0	2046
	7,136,866	1,503,452	8,640,318		TOTALS



Table 8 Water Utility Cash Flow Analysis - Projected 2021-2030

	Budget _					Projected				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenues										
Total Revenues from User Rates ¹	\$2,181,685	\$2,214,410	\$2,657,056	\$2,657,056	\$2,657,056	\$2,736,767	\$2,736,767	\$2,818,870	\$2,818,870	\$2,903,437
Percent Increase to User Rates ²	0.00%	3.00%	18.24%	0.00%	0.00%	3.00%	0.00%	3.00%	0.00%	3.00%
Cumulative Percent Rate Increase	0.00%	3.00%	21.79%	21.79%	21.79%	25.44%	25.44%	29.21%	29.21%	33.08%
Dollar Amount Increase to Revenues		\$32,725	\$442,646	\$0	\$0	\$79,712	\$0	\$82,103	\$0	\$84,560
Other Revenues										
Interest Income	\$1,500	\$1,504	\$10,462	\$9,730	\$9,613	\$10,079	\$10,039	\$10,908	\$23,854	\$25,49
Other Income	\$52,986	\$45,450	\$45,905	\$46,364	\$46,827	\$47,295	\$47,768	\$48,246	\$49,211	\$50,19
Total Other Revenues	\$54,486	\$46,954	\$56,366	\$56,094	\$56,440	\$57,374	\$57,807	\$59,154	\$73,065	\$75,68
Total Revenues	\$2,236,171	\$2,261,364	\$2,713,422	\$2,713,150	\$2,713,496	\$2,794,142	\$2,794,575	\$2,878,024	\$2,891,935	\$2,979,124
Expenses										
Operating and Maintenance ³	\$1,435,951	\$1,479,030	\$1,523,400	\$1,569,102	\$1,616,176	\$1.664.661	\$1,714,601	\$1,766,039	\$1.819.020	\$1,873,590
PILOT Payment	\$325,000	\$328,250	\$331,533	\$334,848	\$338,196	\$341,578	\$344,994	\$348,444	\$351,928	\$355,448
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Net Before Debt Service and Capital Expenditures	\$475,220	\$454,084	\$858,489	\$809,199	\$759,124	\$787,903	\$734,980	\$763,542	\$720,987	\$750,086
Debt Service										
Existing Debt P&I	\$485,157	\$339,928	\$182,040	\$183,095	\$179,008	\$174,808	\$175,480	\$176,590	\$177,415	\$107,790
New (2021-2030) Debt Service P&I	\$0	\$145,200	\$301,292	\$300,185	\$303,631	\$386,927	\$385,688	\$383,120	\$379,783	\$445,800
Total Debt Service	\$485,157	\$485,128	\$483,332	\$483,280	\$482,639	\$561,735	\$561,168	\$559,710	\$557,198	\$553,590
Transfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Improvements	\$310,700	\$5.533.056	\$521.500	\$974.352	\$398,351	\$859.162	\$0	\$0	\$0	\$0
Bond Proceeds	\$229,000	\$5,671,866	\$0	\$625,000	\$215,000	\$625,000	\$0	\$0	\$0	\$0
Net Annual Cash Flow	(\$91,637)	\$107,767	(\$146,342)	(\$23,432)	\$93,135	(\$7,994)	\$173,812	\$203,832	\$163,790	\$196,496
Restricted and Unrestricted Cash Balance:										
Balance at first of year	\$2,076,253	\$1,984,616	\$2,092,383	\$1,946,041	\$1,922,609	\$2,015,743	\$2.007.749	\$2,181,561	\$2,385,392	\$2,549,182
Net Annual Cash Flow Addition/(subtraction)	(\$91,637)	\$107,767	(\$146,342)	(\$23,432)	\$93,135	(\$7,994)	\$173,812	\$203,832	\$163,790	\$196,496
Balance at end of year	\$1,984,616	\$2,092,383	\$1,946,041	\$1,922,609	\$2,015,743	\$2,007,749	\$2,181,561	\$2,385,392	\$2,549,182	\$2,745,678
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Notes:

1) Assumes no changes in customer count or usage beyond Test Year.

2) 2022 rate adj. implemented 1/2 year. 2023 rate implemented full year. Recommended to start Rate Case 7/1/22.

3) Assumes 2.00% annual inflation beyond budget year.

Legend:

Simplified Rate Case (if eligible)

Conventional (Full) Rate Case



Table 9 Water Utility Financial Benchmarking Analysis Projected 2021 - 2030

City of Whitewater, WI

	Budget					Projected				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Target minimum cash balance										
Target minimum working capital - Ehlers ¹	1,412,644	1,464,357	1,547,878	1,579,662	1,693,421	1,724,564	1,755,822	1,777,780	1,799,439	1,823,051
Actual Days Cash Available - PSC ²	201	212	179	163	183	174	210	248	274	305
Actual Days Cash Available - Moody's ³	180	201	160	150	167	160	192	229	255	286
Actual Days Cash Available - S&P ⁴	180	201	160	150	167	160	192	229	255	286
Actual working capital-cash balance	1,984,616	2,092,383	1,946,041	1,922,609	2,015,743	2,007,749	2,181,561	2,385,392	2,549,182	2,745,678
Over (Under) Ehlers target	571,972	628,027	398,163	342,946	322,322	283,185	425,738	607,612	749,743	922,627
Over (Under) PSC target (90 days)	111	122	89	73	93	84	120	158	184	215
Over (Under) Moody's target (150 days)	30	51	10	0	17	10	42	79	105	136
Over (Under) S&P target (150 days)	30	51	10	0	17	10	42	79	105	136

- 1) Target capital equals 6 mos of following year's operating expenses, including depreciation, plus 100% of following year's debt.
- 2) PSC formula = 0&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 Whitewater Water Fund's reserves are debt related and therefore would not be included in S&P formula

Rate of Return										
Average Utility Plant in Service	15,197,295	18,061,208	21,030,521	21,758,271	22,417,771	23,018,271	23,426,271	23,426,271	23,426,271	23,426,271
Plus: Materials and Supplies	16,160	16,160	16,160	16,160	16,160	16,160	16,160	16,160	16,160	16,160
Less: Utility Plant Accumulated Depreciation	5,094,068	5,577,088	6,182,884	6,807,828	7,455,026	8,117,157	8,794,781	9,469,908	10,142,586	10,812,865
Less: Regulatory Liability	127,482	76,491	25,500	0	0	0	0	0	0	0
Average Net Investment Rate Base (NIRB)	9,991,905	12,423,789	14,838,297	14,966,603	14,978,905	14,917,274	14,647,650	13,972,523	13,299,845	12,629,566
Net Operating Income	188,112	108,202	378,111	307,697	232,832	243,612	172,687	200,380	144,879	172,340
ROR	1.88%	0.87%	2.55%	2.06%	1.55%	1.63%	1.18%	1.43%	1.09%	1.36%
Cost Recovery										
Operating Revenues	2,226,685	2,259,860	2,702,960	2,703,419	2,703,883	2,784,063	2,784,536	2,867,117	2,868,081	2,953,632
Operating Expenses incl. Depr & Amortization	1,855,034	1,962,050	2,129,196	2,194,047	2,263,374	2,326,792	2,392,225	2,441,165	2,491,698	2,543,869
Operating Expenses w/o Depr & Amortization	1,435,951	1,479,030	1,523,400	1,569,102	1,616,176	1,664,661	1,714,601	1,766,039	1,819,020	1,873,590
Cost Recovery incl. Depr	1.20	1.15	1.27	1.23	1.19	1.20	1.16	1.17	1.15	1.16
Cost Recovery w/o Depr	1.29	1.33	1.40	1.40	1.40	1.40	1.40	1.38	1.37	1.36
Target	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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. This ratio should be higher than 1 to accommodate future capital investments.

Leverage Total Long-Term Debt Total Net Assets	1,855,000	, -,	6,796,666 29,928,869	7,067,666	6,940,666 31 247 869	7,138,666 32,063,869	6,721,666 32,063,869		5,862,666 32.063,869	5,425,666
Debt-to Equity Ratio	0.08	0.24	0.23	0.23	0.22	0.22	0.21	0.20	0.18	0.17

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 > 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	5,094,068	5,577,088	6,182,884	6,807,828	7,455,026	8,117,157	8,794,781	9,469,908	10,142,586	10,812,865
Total Net Assets	22,710,743	29,407,369	29,928,869	30,862,869	31,247,869	32,063,869	32,063,869	32,063,869	32,063,869	32,063,869
Asset Depreciation	22.43%	18.96%	20.66%	22.06%	23.86%	25.32%	27.43%	29.53%	31.63%	33.72%

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).

Asset Efficiency										
Total Assets	22,710,743	29,407,369	29,928,869	30,862,869	31,247,869	32,063,869	32,063,869	32,063,869	32,063,869	32,063,869
Revenue	2,181,685	2,214,410	2,657,056	2,657,056	2,657,056	2,736,767	2,736,767	2,818,870	2,818,870	2,903,437
Investment to produce \$1 Pevenue	¢ 10.41	¢ 13.28	\$ 11.26	¢ 11.62	¢ 11.76	¢ 11.72	¢ 11.72	¢ 11.37	¢ 11.37	\$ 11 O/

This indicator is a measure of the Utility's asset efficiency or how much investment (in \$) is necessary to produce \$1 of Sales Revenue Wisconsin 2017 Average =

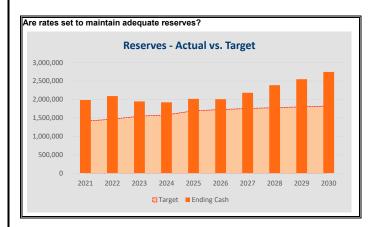


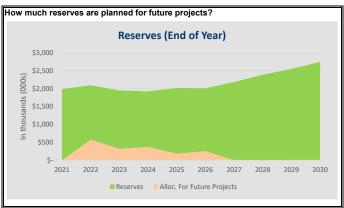
Table 10 Water Utility Statement of Projected Revenue Bond Coverage

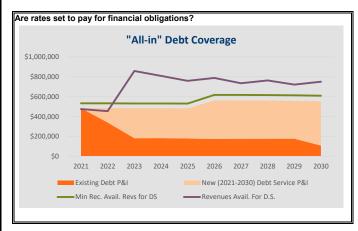
		Less:		Existing Rev Debt	Future Rev Debt (2021-2030)					
Year	Total Operating Revenues	Total O&M Expense	Amount Available for Debt Service	Total	Total	Total Water Debt Service	Coverage	Debt Service Capacity @ 1.25x	Max of Plan Debt Service	Coverage against Max of Plan
2021	2,228,185	(1,435,951)	792,234	154,063	-	154,063	5.14	479,725	477,366	1.65
2022	2,261,364	(1,479,030)	782,334	-	145,200	145,200	5.39	480,668	477,366	1.63
2023	2,713,422	(1,523,400)	1,190,022	-	301,292	301,292	3.95	650,726	477,366	2.49
2024	2,713,150	(1,569,102)	1,144,047	-	300,185	300,185	3.81	615,053	477,366	2.39
2025	2,713,496	(1,616,176)	1,097,321	-	303,631	303,631	3.61	574,225	477,366	2.29
2026	2,794,142	(1,664,661)		-	386,927	386,927	2.92	516,658	477,366	2.36
2027	2,794,575	(1,714,601)	, ,	-	385,688	385,688	2.80	478,291	477,366	2.26
2028	2,878,024	(1,766,039)		-	383,120	383,120	2.90	506,469	477,366	2.32
2029	2,891,935	(1,819,020)		-	379,783	379,783	2.83	478,550	477,366	2.24
2030	2,979,124	(1,873,590)		-	445,800	445,800	2.48	438,627	477,366	2.31
2031	2,982,093	(1,929,798)		-	446,126	446,126	2.36	395,709	477,366	2.20
2032	2,984,538	(1,987,692)		-	476,005	476,005	2.09	321,472	477,366	2.08
2033	2,986,443	(2,047,323)	,	-	472,808	472,808	1.99	278,489	477,366	1.96
2034	2,986,443	(2,108,742)		-	471,565	471,565	1.86	230,596	477,366	1.83
2035	2,986,443	(2,172,005)		-	464,915	464,915	1.75	186,636	477,366	1.70
2036	2,986,443	(2,237,165)		-	457,915	457,915	1.64	141,508	477,366	1.56
2037	2,986,443	(2,304,280)	· ·	-	455,513	455,513	1.50	90,218	477,366	1.42
2038	2,986,443	(2,373,408)	682,163	-	477,366	477,366	1.43	68,365	477,366	1.42

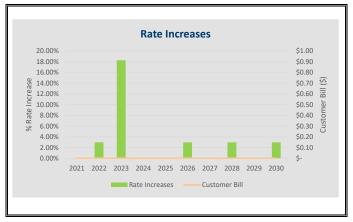


Table 11
Water Utility Long-Range Planning Analysis













2021 Utilities Long-Range Cash Flow Analysis
Section 3 — Sewer Historical Rate Performance



Table 12 Sewer Rate Performance

Rove	nue Requirement					Est	Budget
		2016	2017	2018	2019	2020	2021
Component	Description	2016	2017	2010	2019	2020	2021
Cash Basis							
1	Operating and Maintenance	\$1,455,538	\$1,449,396	\$1,470,386	\$1,572,872	\$1,578,429	\$1,416,66
2	Debt	\$795,900	\$650,671	\$1,363,881	\$1,866,149	\$2,820,644	\$2,057,28
3	Cash Funded Capital	\$0	\$659,035	\$0	\$448,538	\$0	\$931,20
	Less:						
	Other Revenue	\$53,770	\$68,736	\$77,404	\$93,514	\$87,688	\$74,77
	Interest Income	\$2,881	\$7,638	\$54,202	\$69,476	\$14,749	\$40,00
	Revenue Requirement	\$2,194,787	\$2,682,728	\$2,702,661	\$3,724,569	\$4,296,636	\$4,290,38
	(Costs less Other Income)						
	User Rates Revenue	\$3,336,395	\$3,247,457	\$3,192,089	\$3,579,007	\$3,675,651	\$3,958,70
	Rate Adequacy	\$1,141,608	\$564,729	\$489,428	(\$145,562)	(\$620,985)	(\$331,67
Utility Basis	On anating and Maintage	Φ4 455 500	¢4.440.200	Φ4 470 20C	¢4 570 070	Φ4 F70 400	\$4.44C.CC
1	Operating and Maintenance	\$1,455,538	\$1,449,396	\$1,470,386	\$1,572,872	\$1,578,429	\$1,416,66
2	Depreciation	\$1,188,039	\$1,198,606	\$1,167,922	\$1,010,163	\$1,289,501	\$1,317,59
	NIRB	\$21,186,727	\$30,057,813	\$36,936,134	\$38,707,778	\$36,576,139	\$36,179,73
3	Recommended ROI (2.5%)	\$529,668	\$751,445	\$923,403	\$967,694	\$914,403	\$904,49
	Less:						
	Other Revenue	\$53,770	\$68,736	\$77,404	\$93,514	\$87,688	\$74,77
	Interest Income	\$2,881	\$7,638	\$54,202	\$69,476	\$14,749	\$40,00
	Revenue Requirement (Costs less Other Income)	\$3,116,594	\$3,323,073	\$3,430,105	\$3,387,739	\$3,679,896	\$3,523,98
	User Rates Revenue	\$3,336,395	\$3,247,457	\$3,192,089	\$3,579,007	\$3,675,651	\$3,958,70



Table 13 Sewer Utility Rate Performance Charts



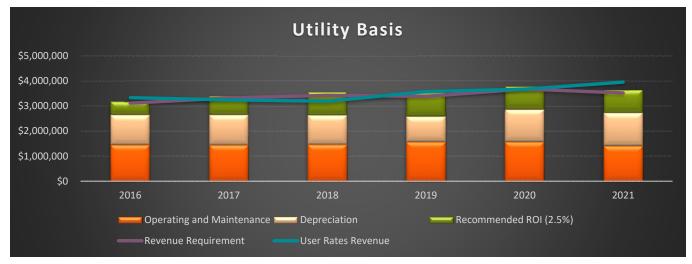




Table 14
Sewer Utility Cash Flow Analysis - Historical 2016-2020

			Actual		
	2016	2017	2018	2019	2020
Revenues	_				
Total Revenues from User Rates	\$3,336,395	\$3,247,457	\$3,192,089	\$3,579,007	\$3,675,65
Percent Increase to User Rates					
Other Revenues					
Interest Income	\$2,881	\$7,638	\$54,202	\$69,476	\$14,74
Other Income	\$53,770	\$68,736	\$90,260	\$114,339	\$87,68
Total Other Revenues	\$56,651	\$76,374	\$144,462	\$183,815	\$102,43
Total Revenues	\$3,393,046	\$3,323,831	\$3,336,551	\$3,762,822	\$3,778,088
Expenses					
Operating and Maintenance	\$1,455,538	\$1,449,396	\$1,470,386	\$1,572,872	\$1,578,42
PILOT Payment	\$0	\$0	\$0	\$0	\$
Net Before Debt Service and Capital Expenditures	\$1,937,508	\$1,874,435	\$1,866,165	\$2,189,950	\$2,199,65
Existing Debt P&I ¹	\$795,900	\$650,671	\$1,363,881	\$1,866,149	\$2,820,64
Transfer In (Out)/Cap. Contrib.	\$773,416	\$135,888	\$67,510	\$295,476	(\$7,11
Capital Improvements	\$9,030,547	\$9,743,442	\$3,451,418	\$1,765,260	\$669,46
Bonds Issued/Grants/Aid	\$9,377,616	\$9,084,407	\$3,937,673	\$1,316,722	\$1,802,57
Reconcile to Audit	(\$93,314)	(\$143,760)	(\$1,139,452)	(\$19,515)	(\$25,31
Net Annual Cash Flow	\$2,168,779	\$556,857	(\$83,403)	\$151,224	\$479,692
Restricted and Unrestricted Cash Balance:					
Balance at first of year	\$2,234,350	\$4,403,129	\$4,959,986	\$4,876,583	\$5,027,80
Net Annual Cash Flow Addition/(subtraction)	\$2,168,779	\$556,857	(\$83,403)	\$151,224	\$479,69
Balance at end of year	\$4,403,129	\$4,959,986	\$4.876.583	\$5,027,807	\$5,507,49



Table 15 **Sewer Utility Financial Benchmarking Analysis**

City of Whitewater, WI

		Act	ual			Budget
	2016	2017	2018	2019	2020	2021
Target minimum cash balance						
Target minimum working capital - Ehlers ¹	1,375,369	2,099,074	2,652,585	3,609,859	2,765,618	2,635,764
Actual Days Cash Available - PSC ²	1,259	1,697	1,910	1,829	1,947	2,197
Actual Days Cash Available - Moody's ³	143	295	302	290	235	178
Target minimum working capital - S&P ⁴	143	295	302	290	235	178
Actual working capital-cash balance	4,403,129	4,959,986	4,876,583	5,027,807	5,507,499	5,184,858
Over (Under) Ehlers target	3,027,760	2,860,912	2,223,998	1,417,949	2,741,882	2,549,094
Over (Under) PSC target (90 days)	1,169	1,607	1,820	1,739	1,857	2,107
Over (Under) Moody's target (150 days)	(7)	145	152	140	85	28
Over (Under) S&P target (150 days)	(7)	145	152	140	85	28
Over (Origer) Sur larger (150 days)	(1)	145	102	140	65	

- 1) Target capital equals 6 mos of next year's operating expenses, including depreciation, plus 100% of debt.
- 2) PSC formula = 0&M expense + taxes + interest on long term debt ÷ 365 to get expense per day. Then Unrestricted Cash
- 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 Plant in service beginning of year	41,607,422	52,038,699	61,646,253	61,590,544	58,995,089	59,906,268
Total Plant in service end of year	52,038,699	61,646,253	61,590,544	58,995,089	59,906,268	60,837,468
Average Total Plant in Service	46,823,061	56,842,476	61,618,399	60,292,817	59,450,679	60,371,868
Average Utility Plant in Service	46,823,061	56,842,476	61,618,399	60,292,817	59,450,679	60,371,868
Less: Utility Plant Accumulated Depreciation	25,636,334	26,784,663	24,682,265	21,585,039	22,874,540	24,192,134
Average Net Investment Rate Base (NIRB)	21,186,727	30,057,813	36,936,134	38,707,778	36,576,139	36,179,734
Net Operating Income	746,588	668,191	631,185	1,089,486	895,409	1,299,214
ROR	3.52%	2.22%	1.71%	2.81%	2.45%	3.59%
Typical	2.50%					
Cost Recovery						
Operating Revenues	3,390,165	3,316,193	3,269,493	3,672,521	3,763,339	4,033,475
Operating Expenses incl. Depr & Amortization	2,643,577	2,648,002	2,638,308	2,583,035	2,867,930	2,734,261
Cost Recovery	1.28	1.25	1.24	1.42	1.31	1.48
Cost Recovery w/o Depr.	2.33	2.29	2.22	2.33	2.38	2.85

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.

<u>Leverage</u>						
Total Long-Term Debt	13,033,478	34,370,411	25,230,059	25,250,237	24,778,008	22,275,055
Total Net Assets	52,038,699	61,646,253	61,590,544	58,995,089	59,906,268	60,837,468
Debt-to Equity Ratio	0.25	0.56	0.41	0.43	0.41	0.37

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	25,636,334	26,784,663	24,682,265	21,585,039	22,874,540	24,192,134
Average Total Plant in Service	46,823,061	56,842,476	61,618,399	60,292,817	59,450,679	60,371,868
Asset Depreciation	35.38%	32.03%	28.60%	26.36%	27.79%	28.61%

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).

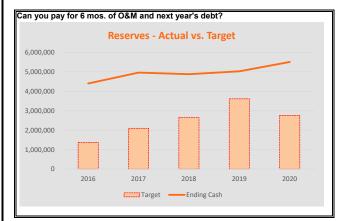
Asset Efficiency:						
Total Assets	52,038,699	61,646,253	61,590,544	58,995,089	59,906,268	60,837,468
Revenue	3,336,395	3,247,457	3,192,089	3,579,007	3,675,651	3,958,705
Investment to produce \$1 Revenue	\$ 15.60	\$ 18.98	\$ 19.29	\$ 16.48	\$ 16.30	\$ 15.37

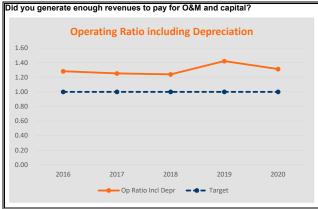
Notes:

This indicator can vary from utility to utility based on several factors. These factors include but are not limited to Utility assets (WWTF, connection to existing system, etc.), types of customers (high strength, dairy, etc.), and size of system

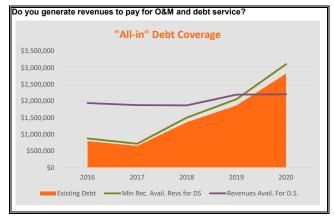


Table 16 Sewer Utility Financial Health Charts

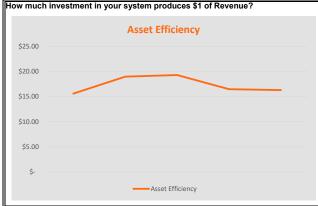
















2021 Utilities Long-Range Cash Flow AnalysisSection 4 — Sewer Long-Range Cash Flow AnalysisCity of Whitewater, WI



Table 17 Sewer Utility Capital Improvement Plan

City of Whitewater, WI

Projects	Funding	2021	2022	2023	2024	2025	2026	Totals
Vanderlip Lift Station Replacement	Revenue Debt		0	394,496	0	0	0	394,496
Vanderlip Lift Station Replacement	Revenue Debt		1,400,000	0	0	0	0	1,400,000
E. Main Street Reconstruction	Revenue Debt		764,313	0	0	0	0	764,313
Yoder Lane Reconstruction	Revenue Debt		121,575	0	0	0	0	121,57
Biennial St Reconstruction	Revenue Debt		0	90,000	0	0	0	90,000
Biennial St Reconstruction	Revenue Debt		0	0	450,000	0	0	450,000
Biennial St Reconstruction	G.O. Debt		0	0	0	90,000	0	90,00
Biennial St Reconstruction	Revenue Debt		0	0	0	0	450,000	450,00
Wetwell Coating	Revenue Debt		235,000	0	0	0	0	235,00
Wetwell Coating	Cash		40,000	0	0	0	0	40,00
Roof Replacement Program - Wastewater Utility	Cash		57,000	30,000	75,000	65,000	78,500	305,50
GIS Software Development	Cash		8,000	6,000	0	0	0	14,000
Repurpose Fraternity LS genset	Cash		0	15,000	0	0	0	15,00
Structure 429 - Mixer Installation	Cash		0	5,000	0	0	0	5,00
Replacement Solids Loadout Pump	Cash		0	65,000	0	0	0	65,00
Milwaukee St. LS access road	Cash		0	17,000	0	0	0	17,00
CAT Switchgear PLC replacement	Cash		0	0	8,000	0	0	8,00
Secondary Scum Waste Piping	Cash		0	0	0	14,800	0	14,80
Centrifuge Cake Pump Rebuild	Cash		16,000	0	0	0	0	16,00
Influent Pump Rebuild	Cash		14,800	15,000	15,200	15,400	0	60,40
Sec. Clarifier 502- Rotary Plane	Cash		9,200	0	0	0	0	9,200
Lift Station pump rebuild	Cash		3,800	3,800	3,800	3,800	3,800	19,00
Bldg. 320 - Conduit repairs	Cash		2,700	0	0	0	0	2,70
Milwaukee St. lift station control upgrade	Cash		0	0	11,000	0	0	11,00
Facility Planning Addendum - Solids Handling	Cash		0	0	28,500	0	0	28,50
Wetwell Rehabilitation	Revenue Debt	100,000						100,00
Yoder Lane Reconstruction	Revenue Debt	14,000						14,00
Combination Jetter Truck	Revenue Debt	540,000						540,00
E. Main Street Reconstruction	Revenue Debt	81,700						81,70
Actual CIP Costs		735,700	2,672,388	641,296	591,500	189,000	532,300	5,362,18
		,	, ,	,	•	,	· · · · · ·	, ,
Sources of Funding								
G.O. Debt		0	0	0	0	90,000	0	90,00
Revenue Debt		735,700	2,520,888	484,496	450,000	0	450,000	4,641,08
Grants/Aids		0	0	0	0	0	0	
Special Assessment		0	0	0	0	0	0	
User Fees		0	0	0	0	0	0	
Tax Levy		0	0	0	0	0	0	
Equipment Replacement Fund		0	0	0	0	0	0	
Cash		0	151,500	156,800	141,500	99,000	82,300	631,10
Total		735,700	2,672,388	641,296	591,500	189,000	532,300	5,362,18



Table 18

Sewer Utility Projected Debt Service Payments (PROPOSED)

City of Whitewater, WI

	NAME Revenue Bonds (Sewer Portion) Series 2022B AMT \$4,480,000				neve.	Series 2	Sewer Po 2024B	rtionj) GO Bonds (Sewer Portion) Series 2025A \$95,000				Revenue Bonds (Sewer Portion) Series 2026B \$465,000			rtion	PROP	PROPOSED Sewer Utility Debt Service Summa			
AMT						\$490,															
DATED		7/1/2	2022			7/1/2	2024			7/1/2	2025			7/1/2							
MATURE		5/	1			5/	1			6/	1			5/:	1						
Year	Principal	Est. Rate ¹	Interest	Total	Principal	Est. Rate ²	Interest	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total	Total Prin	Total Int	Total P&I	Prin Outstanding	Year
2021																	0	0	0		2021
2022	0	0.00%	0														0	0	0	4,480,000	2022
2023	200,000	1.65%	102,513	302,513													200,000	102,513	302,513	4,280,000	2023
2024	230,000	1.95%	75,450	305,450	0	0.00%	0										230,000	75,450	305,450	4,540,000	2024
2025	200,000	2.55%	73,853	273,853	20,000	0.95%	10,352	30,352									220,000	84,204	304,204	4,415,000	2025
2026	190,000	3.00%	72,053	262,053	20,000	0.95%	7,550	27,550	5,000	1.05%	2,067		15 000	1 250/	11 276	26.276	215,000	81,669	296,669	4,665,000	2026 2027
2027 2028	160,000 125,000	3.45% 2.50%	70,183 68,481	230,183 193,481	20,000 50,000	0.95% 0.95%	7,360 7,028	27,360 57,028	10,000	1.10% 1.20%	1,370 1,255	11,370 11,255	15,000 25,000	1.25% 1.25%	11,376 8,259	26,376 33,259	205,000 210,000	90,289 85,023	295,289 295,023	4,460,000 4,250,000	2027
2028	130,000	2.50%	66,823	193,481	45,000	1.45%	6,464	51,464	10,000 10,000	1.35%	1,255	11,255	25,000	1.25%	8,259 7,946	33,259	210,000	82,360	295,023	4,040,000	2028
2029	260,000	2.70%	64,060	324,060	45,000	1.45%	5,811	50,811	10,000	1.50%	985	10,985	45,000	1.25%	7,546	52,509	360,000	78,365	438,365	3,680,000	2029
2031	260,000	3.10%	60,160	320,160	45,000	1.45%	5,159	50,159	10,000	1.60%	830	10,830	40,000	1.65%	6,898	46,898	355,000	73,046	428,046	3,325,000	2031
2032	265,000	3.20%	56,025	321,025	45,000	1.45%	4,506	49,506	10,000	1.70%	665	10,665	40,000	1.65%	6,238	46,238	360,000	67,434	427,434	2,965,000	2032
2033	270,000	3.60%	51,475	321,475	40,000	2.00%	3,780	43,780	10,000	1.80%	490	10,490	40,000	1.65%	5,578	45,578	360,000	61,323	421,323	2,605,000	2033
2034	280,000	3.80%	46,385	326,385	40,000	2.00%	2,980	42,980	10,000	2.00%	300	10,300	35,000	1.65%	4,959	39,959	365,000	54,624	419,624	2,240,000	2034
2035	285,000	4.00%	40,875	325,875	40,000	2.00%	2,180	42,180	10,000	2.00%	100	10,100	35,000	2.20%	4,285	39,285	370,000	47,440	417,440	1,870,000	2035
2036	285,000	4.20%	35,033	320,033	40,000	2.00%	1,380	41,380	0	0.00%	0	,	35,000	2.20%	3,515	38,515	360,000	39,928	399,928	1,510,000	2036
2037	285,000	4.40%	28,905	313,905	40,000	2.45%	490	40,490					35,000	2.20%	2,745	37,745	360,000	32,140	392,140	1,150,000	2037
2038	285,000	4.60%	22,493	307,493	0	2.45%	0						35,000	2.20%	1,975	36,975	320,000	24,468	344,468	830,000	2038
2039	285,000	4.80%	15,795	300,795	0	2.45%	0						35,000	2.65%	1,126	36,126	320,000	16,921	336,921	510,000	2039
2040	285,000	5.00%	8,813	293,813	0	2.45%	0						25,000	2.65%	331	25,331	310,000	9,144	319,144	200,000	2040
2041	100,000	5.20%	3,950	103,950	0	2.80%	0						0	2.65%	0		100,000	3,950	103,950	100,000	2041
2042	100,000	5.30%	1,325	101,325	0	2.80%	0						0	2.65%	0		100,000	1,325	101,325	0	2042
2043					0	2.80%	0						0	3.00%	0		0	0	0	0	2043
2044					0	2.80%	0						0	3.00%	0		0	0	0	0	2044
2045													0	3.00%	0		0	0	0	0	2045
TOTALS	4,480,000		964.647	5,444,647	490.000		65,039	555,039	95,000		9.189	104,189	465,000		72,739	537,739	5.530.000	1.111.614	6,641,614		TOTAL

Notes:

1) Rate assumes

2) Rate assumes



Table 19
Sewer Utility Cash Flow Analysis - Projected 2021-2030

	Budget					Projected				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenues	-									
Total Revenues from User Rates	\$3,958,705	\$3,958,705	\$3,958,705	\$4,156,640	\$4,156,640	\$4,156,640	\$4,281,339	\$4,281,339	\$4,281,339	\$4,409,7
Percent Increase to User Rates	0.00%	0.00%	0.00%	5.00%	0.00%	0.00%	3.00%	0.00%	0.00%	3.00
Cumulative Percent Rate Increase	0.00%	0.00%	0.00%	5.00%	5.00%	5.00%	8.15%	8.15%	8.15%	11.39
Dollar Amount Increase to Revenues		\$0	\$0	\$197,935	\$0	\$0	\$124,699	\$0	\$0	\$128,4
Other Revenues										
Interest Income	\$40,000	\$40,100	\$17,713	\$16,863	\$17,674	\$18,464	\$19,149	\$20,283	\$21,295	\$22,18
Other Income	\$83,805	\$75,518	\$76,273	\$77,036	\$77,806	\$78,584	\$79,370	\$80,164	\$80,965	\$81,77
Total Other Revenues	\$123,805	\$115,618	\$93,986	\$93,899	\$95,479	\$97,048	\$98,519	\$100,446	\$102,260	\$103,96
Total Revenues	\$4,082,510	\$4,074,323	\$4,052,691	\$4,250,539	\$4,252,120	\$4,253,689	\$4,379,859	\$4,381,786	\$4,383,599	\$4,513,74
Expenses										
Operating and Maintenance	\$1.416.667	\$1,459,167	\$1.502.942	\$1.548.030	\$1,594,471	\$1.642.305	\$1,691,574	\$1.742.322	\$1,794,591	\$1,848,4
PILOT Payment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	ψ1,040,4
.2011 aj	~	Ψ"	Ψ°	Ψ"	Ψ.	Ψ.	Ψ"	~	•	
Net Before Debt Service and Capital Expenditures	\$2,665,843	\$2,615,156	\$2,549,749	\$2,702,509	\$2,657,649	\$2,611,383	\$2,688,284	\$2,639,464	\$2,589,008	\$2,665,3
Debt Service										
Existing Debt P&I ¹	\$2.057.284	\$2.606.327	\$1.945.696	\$1.939.843	\$1.937.215	\$1.941.254	\$1.939.764	\$1.939.544	\$1.939.240	\$1,708,3
New (2021-2030) Debt Service P&I	\$0	\$0	\$302,513	\$305,450	\$304,204	\$296,669	\$295,289	\$295,023	\$292,360	\$438,30
Fotal Debt Service	\$2,057,284	\$2,606,327	\$2,248,209	\$2,245,293	\$2,241,419	\$2,237,924	\$2,235,052	\$2,234,567	\$2,231,600	\$2,146,67
Гransfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	9
Capital Improvements	\$735,700	\$2.784.099	\$641,296	\$623,136	\$194,899	\$564.413	\$0	\$0	\$0	Ş
Bonds Issued/Grants/Aid	\$0	\$4,480,000	\$0	\$490,000	\$95,000	\$465,000	\$0	\$0	\$0	
Net Annual Cash Flow	(\$127,141)	\$1,704,730	(\$339,757)	\$324,080	\$316,330	\$274,047	\$453,232	\$404,897	\$357,408	\$518,63
Postriotod and Unrestricted Cook Polenes										
Restricted and Unrestricted Cash Balance: Balance at first of year	\$5.507.499	\$5.380.358	\$7,085,088	\$6,745,332	\$7.069.412	\$7.385.742	\$7,659,789	\$8.113.021	\$8.517.918	\$8,875,3
Net Annual Cash Flow Addition/(subtraction)	(\$127,141)	\$1,704,730	(\$339,757)	\$324,080	\$316.330	\$274.047	\$453.232	\$404,897	\$357.408	\$518.6
Net Alliuai Gasii Flow Addition/(Subtraction)	V /	φ1,704,730	(4008,101)	φ324,000	φυ 10,000	φ214,041	φ400,202	φ404,097	φυυ1,400	φυ10,0
Balance at end of year	\$5,380,358	\$7,085,088	\$6,745,332	\$7,069,412	\$7,385,742	\$7.659.789	\$8,113,021	\$8,517,918	\$8,875,326	\$9,393,9

Notes:

1) Assumes no changes in customer count or usage beyond Test Year.

2) Assumes 3.00% annual inflation beyond budget year.

Legend:

Increase depicted to maintain with assumed O&M inflation Increase needed above inflationary adjustment



Table 20 Sewer Utility Financial Benchmarking Analysis Projected 2021 - 2030

City of Whitewater, WI

	Budget					Projected				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Target minimum cash balance										
Target minimum working capital - Ehlers ¹	3,335,910	2,999,680	3,019,308	3,038,655	3,059,076	3,080,840	3,105,727	3,128,896	3,070,893	3,093,553
Actual Days Cash Available - PSC ²	2,280	2,715	2,612	2,458	2,401	2,311	2,300	2,252	2,199	2,188
Actual Days Cash Available - Moody's ³	229	527	547	607	662	704	781	843	891	968
Actual Days Cash Available - S&P ⁴	839	1,120	1,123	1,166	1,205	1,231	1,293	1,340	1,373	1,436
Actual working capital-cash balance	5,380,358	7,085,088	6,745,332	7,069,412	7,385,742	7,659,789	8,113,021	8,517,918	8,875,326	9,393,961
Over (Under) Ehlers target	2,044,448	4,085,408	3,726,023	4,030,757	4,326,665	4,578,949	5,007,293	5,389,022	5,804,433	6,300,408
Over (Under) PSC target (90 days)	2,190	2,625	2,522	2,368	2,311	2,221	2,210	2,162	2,109	2,098
Over (Under) Moody's target (150 days)	79	377	397	457	512	554	631	693	741	818
Over (Under) S&P target (150 days)	689	970	973	1,016	1,055	1,081	1,143	1,190	1,223	1,286

- 1) Target capital equals 6 mos of next year's operating expenses, including depreciation, plus 100% of 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	60,032,405	61,736,449	63,393,291	64,009,689	64,399,939	64,760,589	65,026,739	65,026,739	65,026,739	65,026,739
Less: Utility Plant Accumulated Depreciation	24,189,715	25,556,169	26,996,700	28,460,424	29,941,126	31,433,093	32,938,234	34,443,375	35,948,517	37,453,658
Average Net Investment Rate Base (NIRB)	35,842,690	36,180,280	36,396,591	35,549,265	34,458,813	33,327,496	32,088,505	30,583,364	29,078,222	27,573,081
Net Operating Income	1,301,633	1,208,602	1,091,504	1,221,922	1,159,273	1,100,952	1,163,993	1,114,040	1,062,572	1,137,984
ROR	3.63%	3.34%	3.00%	3.44%	3.36%	3.30%	3.63%	3.64%	3.65%	4.13%
Typical	2.50%									



Cost Recovery										
Operating Revenues	4,033,475	4,034,223	4,034,978	4,233,676	4,234,446	4,235,224	4,360,709	4,361,503	4,362,305	4,491,554
Operating Expenses incl. Depr & Amortization	2,731,842	2,825,621	2,943,474	3,011,754	3,075,173	3,134,272	3,196,716	3,247,463	3,299,733	3,353,570
Cost Recovery	1.48	1.43	1.37	1.41	1.38	1.35	1.36	1.34	1.32	1.34
Cost Recovery w/o Depr.	2.85	2.76	2.68	2.73	2.66	2.58	2.58	2.50	2.43	2.43

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.

5	22,731,085 18,709,289	, , , , , , , , , , , , , , , , , , ,	-,,	22,711,428 20,597,474	<i>'</i>			15,992,203 23,503,555	,,	12,216,883 25,144,635
Debt-to Equity Ratio	1.21	1.33	1.21	1.10	0.99	0.90	0.79	0.68	0.58	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	24,189,715	25,556,169	26,996,700	28,460,424	29,941,126	31,433,093	32,938,234	34,443,375	35,948,517	37,453,658
Average Total Plant in Service	60,032,405	61,736,449	63,393,291	64,009,689	64,399,939	64,760,589	65,026,739	65,026,739	65,026,739	65,026,739
Asset Depreciation	28.72%	29.28%	29.87%	30.78%	31.74%	32.68%	33.62%	34.63%	35.60%	36.55%

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).

Asset Efficiency:										
Total Assets	60,400,255	63,072,643	63,713,939	64,305,439	64,494,439	65,026,739	65,026,739	65,026,739	65,026,739	65,026,739
Revenue	3,958,705	3,958,705	3,958,705	4,156,640	4,156,640	4,156,640	4,281,339	4,281,339	4,281,339	4,409,780
Investment to produce \$1 Revenue	\$ 15.26	\$ 15.93	\$ 16.09	\$ 15.47	\$ 15.52	\$ 15.64	\$ 15.19	\$ 15.19	\$ 15.19	\$ 14.75

Notes:

This indicator can vary from utility to utility based on several factors. These factors include but are not limited to Utility assets (WWTF, connection to existing system, etc.), types of customers (high strength, dairy, etc.), and size of system.

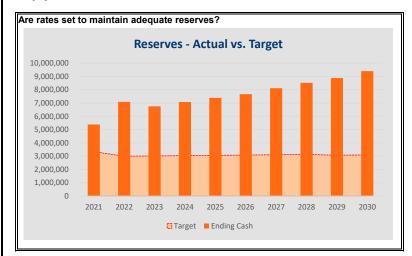


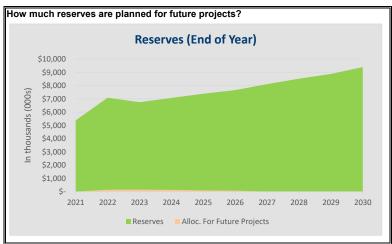
Table 21 Sewer Utility Statement of Projected Revenue Bond Coverage

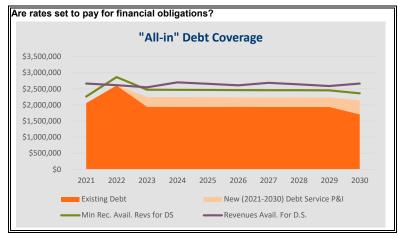
		Less:		Existing Rev Debt	Future Rev Debt (2021-2030)			
Year	Total Operating Revenues	Total O&M Expense	Amount Available for Debt Service	Total	Total	Total Sewer Debt Service	Coverage	Debt Service Capacity @ 1.25x
2021	4,073,475	(1,416,667)	2,656,808	1,863,527	-	1,863,527	1.43	261,919.17
2022	4,074,323	(1,459,167)	2,615,156	1,805,795	<u>-</u>	1,805,795	1.45	286,329.95
2023	4,052,691	(1,502,942)	2,549,749	1,690,417	302,513	1,992,931	1.28	46,868.10
2024	4,250,539	(1,548,030)	2,702,509	1,690,093	305,450	1,995,543	1.35	166,464.10
2025	4,252,120	(1,594,471)	2,657,649	1,689,761	304,204	1,993,965	1.33	132,153.44
2026	4,253,689	(1,642,305)	2,611,383	1,689,422	296,669	1,986,091	1.31	103,015.39
2027	4,379,859	(1,691,574)	2,688,284	1,689,075	295,289	1,984,364	1.35	166,263.91
2028	4,381,786	(1,742,322)	2,639,464	1,688,720	295,023	1,983,742	1.33	127,828.78
2029	4,383,599	(1,794,591)	2,589,008	1,688,357	292,360	1,980,717	1.31	90,489.80
2030	4,513,743	(1,848,429)	2,665,314	1,495,040	438,365	1,933,405	1.38	198,845.48



Table 22 Sewer Utility Long-Range Planning Analysis







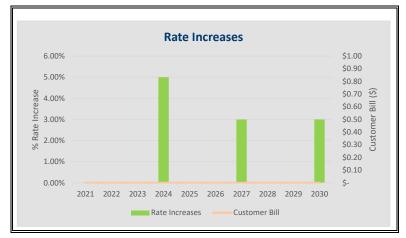




Table 23
Combined Utility Statement of Projected Revenue Bond Coverage
City of Whitewater, WI

		Less:		Existing Rev Debt	Future Rev Debt (2021-2030)					
Year	Total Operating Revenues	Total O&M Expense	Amount Available for Debt Service	Total	Total	Total Debt Service	Coverage	Debt Service Capacity @ 1.5x	Max of Plan Debt Service	Coverage against Max of Plan
2021	6,301,660	(2,852,618)	3,449,042	-	-	-	N/A	2,299,361	903,439	3.81
2022	6,335,687	(2,938,197)	3,397,490	-	145,200	145,200	23.40	2,119,793	903,439	3.76
2023	6,766,113	(3,026,342)	3,739,770	-	603,805	603,805	6.19	1,889,375	903,439	4.13
2024	6,963,689	(3,117,133)	3,846,556	-	605,635	605,635	6.35	1,958,736	903,439	4.25
2025	7,045,327	(3,210,647)	3,834,681	-	607,835	607,835	6.31	1,948,618	903,439	4.24
2026	7,048,229	(3,306,966)	3,741,263	-	683,596	683,596	5.47	1,810,579	903,439	4.14
2027	7,256,937	(3,406,175)	3,850,762	-	680,977	680,977	5.65	1,886,198	903,439	4.26
2028	7,260,623	(3,508,360)	3,752,263	-	678,143	678,143	5.53	1,823,366	903,439	4.15
2029	7,361,735	(3,613,611)	3,748,124	-	672,143	672,143	5.58	1,826,607	903,439	4.14
2030	7,495,363	(3,722,019)	3,773,343	-	884,165	884,165	4.27	1,631,397	903,439	4.17
2031	7,500,471	(3,833,680)	3,666,791	-	874,173	874,173	4.19	1,570,355	903,439	4.05
2032	7,504,944	(3,948,690)	3,556,253	-	903,439	903,439	3.94	1,467,397	903,439	3.93
2033	7,508,848	(4,067,151)	3,441,697	-	894,130	894,130	3.85	1,400,334	903,439	3.80
2034	7,508,848	(4,189,166)	3,319,682	-	891,189	891,189	3.73	1,321,933	903,439	3.67
2035	7,508,848	(4,314,841)	3,194,007	-	882,355	882,355	3.62	1,246,983	903,439	3.53
2036	7,508,848	(4,444,286)	3,064,562	-	857,843	857,843	3.57	1,185,199	903,439	3.39
2037	7,508,848	(4,577,614)	2,931,233	-	847,653	847,653	3.46	1,106,503	903,439	3.24
2038	7,508,848	(4,714,943)	2,931,233	-	821,834	821,834	3.57	1,132,322	903,439	3.24