

Drinking Water Asset Management Program: Funding Structure and Rate Methodology

Prepared for

Village of St. Charles, Michigan

Submitted

May 2024

by **Municipal Analytics**



Insights and applications for better financial management

P.O. Box 3895
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May 20, 2024

Hartmann Aue
Village Manager
Village of St. Charles
110 W. Spruce Street
St Charles, MI 48655

Dear Manager Aue,

We have completed our study of the Village of St. Charles' Drinking Water Asset Management (DWAM) Program Funding Structure and Rate Methodology. The primary goal of this study has been to determine the rates required to produce revenues sufficient to fund the Village's water operations, maintenance and replacement (OM&R), capital improvements and debt service requirements. The recently completed drinking water asset management study by Spicer Group resulted in an Asset Management Plan (AMP) and Capital Improvement Plan (CIP) for the distribution and storage system. The financial recommendations of that study were incorporated into the funding structure and rate methodology developed by Municipal Analytics. The resulting recommendations for rates and financial management of the utility are summarized in this report.

We appreciate the opportunity to work with the Village and Spicer Group on this study.

If you should have any questions about this analysis, please do not hesitate to contact me at 734-623-8033.

Very truly yours,

A handwritten signature in black ink that reads "John Kaczor". The signature is written in a cursive style with a large initial "J".

John Kaczor
Principal

**VILLAGE OF ST. CHARLES
DRINKING WATER ASSET MANAGEMENT PROGRAM
FUNDING STRUCTURE AND RATE METHODDOLGY**

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EXECUTIVE SUMMARY

The Village of St. Charles owns and operates a municipal water distribution system serving approximately 951 customers. The Village purchases treated municipal water from the City of Saginaw and distributes the water through a network of distribution mains through the Village and into some sections of neighboring townships.

Current, approved monthly rates for water were adopted in January 2024. Appendix A includes the Village Council resolution adopting the rates. In summary, approved water rates include:

	<u>2024-2025</u>
Quarterly WATER RTS	
5/8 inch	\$ 71.33
3/4 inch	\$ 71.33
1 inch	\$ 106.99
1.25 inch	\$ 285.29
1.5 inch	\$ 356.62
2 inch	\$ 570.58
3 inch	\$1,031.85
4 inch	\$1,783.08
6 inch	\$3,566.16
8 inch	\$5,705.86
 Commodity Charge: WATER	
Minimum (5,000 gallons/quarter)	\$ 34.95
Rater per 1,000 gallons over 5,000	\$ 6.99

St. Charles will need to increase water rates significantly over the next several years, primarily to fund the new debt service associated with a 2023 Water System Improvement Bond. Rates will need to increase an average of 10% per year for the next four years, followed by gradually lower rate increases the following six years. While operating costs are estimated to increase about 4.5% per year, and smaller capital projects may average less than \$65,000 per year, debt service to pay for \$3.6 million in new water mains will substantially increase costs that need to be recovered through rates. The 10-year forecast for Water Fund expenditures is summarized in the following table:

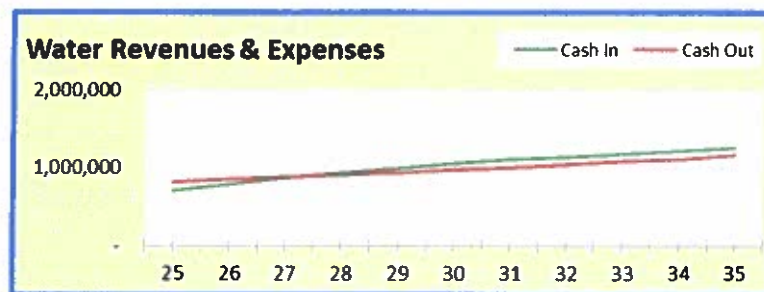
	<u>Budget</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
FYE 3/31:	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>
Operating Expenditures	541,964	533,418	557,804	582,655	605,178	630,990	658,661	687,340	717,172	749,041	782,645
Capital Outlay - Cash	305,000	44,492	45,615	61,498	65,401	70,501	75,754	80,789	85,611	90,664	95,704
Debt Service	-	281,850	283,100	264,200	268,800	268,000	272,000	270,600	274,000	272,000	279,800
Total Water Fund Expenditures	846,964	859,759	886,518	908,353	939,379	969,492	1,006,415	1,038,729	1,076,784	1,111,705	1,158,149

Revenue requirements to satisfy the rising costs of the Water Fund will result in higher rates. The estimated rates rate trajectory required to meet revenue requirements is seen here:

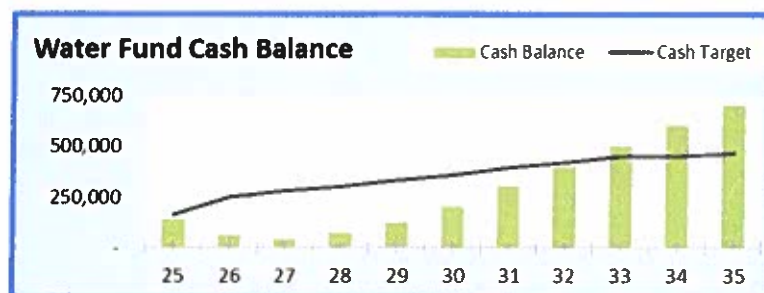
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Quarterly WATER RTS											
5/8 inch	\$ 71.33	\$ 80.42	\$ 89.48	\$ 99.57	\$ 107.87	\$ 116.55	\$ 123.32	\$ 125.97	\$ 129.71	\$ 132.56	\$ 137.61
3/4 inch	\$ 71.33	\$ 80.42	\$ 89.48	\$ 99.57	\$ 107.87	\$ 116.55	\$ 123.32	\$ 125.97	\$ 129.71	\$ 132.56	\$ 137.61
1 inch	\$ 106.99	\$ 120.63	\$ 134.22	\$ 149.35	\$ 161.80	\$ 174.82	\$ 184.99	\$ 188.96	\$ 194.56	\$ 198.84	\$ 206.42
1.25 inch	\$ 285.29	\$ 321.69	\$ 357.93	\$ 398.27	\$ 431.46	\$ 466.18	\$ 493.30	\$ 503.88	\$ 518.82	\$ 530.23	\$ 550.45
1.5 inch	\$ 356.62	\$ 402.11	\$ 447.41	\$ 497.84	\$ 539.33	\$ 582.73	\$ 616.62	\$ 629.85	\$ 648.53	\$ 662.79	\$ 688.06
2 inch	\$ 570.58	\$ 643.38	\$ 715.86	\$ 796.54	\$ 862.93	\$ 932.36	\$ 986.59	\$ 1,007.76	\$ 1,037.64	\$ 1,060.47	\$ 1,100.90
3 inch	\$1,031.85	\$1,206.33	\$1,342.24	\$1,493.51	\$1,617.99	\$1,748.18	\$1,849.86	\$1,889.56	\$1,945.58	\$1,988.38	\$2,064.19
4 inch	\$1,783.08	\$2,010.56	\$2,237.07	\$2,489.18	\$2,696.65	\$2,913.63	\$3,083.10	\$3,149.26	\$3,242.64	\$3,313.96	\$3,440.32
6 inch	\$3,566.16	\$4,021.11	\$4,474.14	\$4,978.37	\$5,393.31	\$5,827.27	\$6,166.19	\$6,298.53	\$6,485.27	\$6,627.93	\$6,880.64
8 inch	\$5,705.86	\$6,433.78	\$7,158.62	\$7,965.39	\$8,629.29	\$9,323.63	\$9,865.91	\$10,077.64	\$10,376.44	\$10,604.69	\$11,009.02
Commodity Charge: WATER											
Minimum (5,000 gallons/quarter)	\$ 34.95	\$ 39.20	\$ 43.60	\$ 46.05	\$ 47.15	\$ 48.95	\$ 51.40	\$ 53.40	\$ 55.45	\$ 57.60	\$ 59.85
Rate per 1,000 gallons over 5,000	\$ 6.99	\$ 7.84	\$ 8.72	\$ 9.21	\$ 9.43	\$ 9.79	\$ 10.28	\$ 10.68	\$ 11.09	\$ 11.52	\$ 11.97

The rates developed are expected to be sufficient to cover estimated costs for operations & maintenance, capital and debt, as well as maintain an adequate cash reserve in the fund. The charts below summarize each fund's key financial measures. As described above, Water Fund expenditures are expected to increase steadily over the next ten years.

The forecast of revenues and expenditures demonstrates proposed rates should be sufficient to avoid any gap in funding for St. Charles' water utility funds.



The rate model includes a target cash reserve comprised of operating reserves, debt service reserves and capital reserves. Operating reserves for the Water Fund are set at 30 days of O&M expenses. Debt service reserve is set at 20% of annual debt service in FY 24-25 and increases 10% each year, reaching 100% in FY 32-33. Capital reserves are set at 5% of Water Fund asset value. This minimum level of cash should ensure the Village's ability to fund its debt service, meet cash flow needs and provide some "cushion" for revenue variability due to weather and changes to customer usage. As seen below, the forecasted cash balance for the next 5-7 years is quite low relative to the target level.



The Village is strongly encouraged to annually update and revise the rate model to reflect actual revenues and expenditures, updated capital costs, potential grant funding, and changes to customer base and usage. As these inputs change each year, rates should also be adjusted to reflect current revenue requirements.

Failing to increase rates sufficiently will result in a deficit position in the Water Fund.

Additional details regarding the funding structure and rate methodology are provided in the following sections.

SECTION 1. INTRODUCTION

Municipal Analytics was engaged by Spicer Group to develop the funding structure and rate methodology requirements of the DWAM grant received by the Village of St. Charles. This report summarizes the findings and recommendations resulting from the combined efforts of the Village, Spicer Group and Municipal Analytics to provide St. Charles with an operations and maintenance budget, capital investment strategy and financial plan to ensure adequate funds are available to sustain the Water Fund for the subsequent 5-10 years.

SECTION 2. STUDY APPROACH

To complete this study, we began with collecting historical and current financial information from the Village, including audits, budget detail, debt service schedules and capital plans. Additional information gathered included existing rates, ordinances, customer billing data, and cash reserve targets.

All financial, billing and rate information was loaded into a custom Excel model developed specifically for St. Charles. The model was expanded to include a ten-year financial forecast, rate calculation worksheets, cash flow summaries, dashboard, and other tools. Assumptions regarding future operating costs were discussed with the Village before being applied in the model.

Spicer engineers provided a capital improvement plan based on their evaluation of the Village's water infrastructure and the developed drinking water asset management plan. The CIP was incorporated into the rate model, and analysis was performed to determine the revenue required to fund all costs of the Village's water utility operations. Revenue requirements were then factored into the rate design to calculate rates required to fund the operations, maintenance, capital and debt service of the water enterprise fund in St. Charles.

Further meetings and conversations with the Village and Spicer resulted in an agreed-upon rate design and rate trajectory. Our analysis, findings and recommendations are presented in more detail below.

SECTION 3. FINANCIAL ANALYSIS

The financial analysis required to complete a rate study involves first understanding the current and future costs of the utility. The budgeted and forecasted expenditures for the Water Fund are presented in this section.

Water Fund Operating Costs

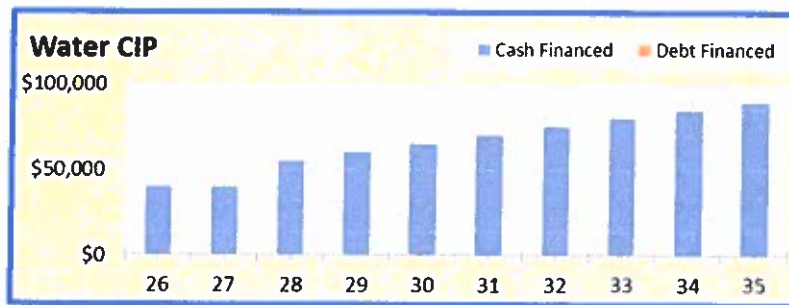
Operations and maintenance (O&M) costs were forecasted for a 10-year period, based on the 2025 adopted budget. Key assumptions used to forecast costs are summarized in the table below:

FYE 3/31:	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
General inflation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Wages & Salaries	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Medical & Dental Ins	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Fringes	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Wholesale Water	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Retirement	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Utilities	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Administration	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Outside Surcharge (Water)	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%
Bond interest rate	3.50%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Bond issuance cost (% of funds)	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

Water Fund Capital Improvements

The Water Asset Management Plan identified the need for significant improvements in the Village’s water infrastructure in the immediate term and less need over the next ten years. The Village began a major water main replacement program in 2023, with the issuance of \$3.6 million of water system improvement bonds. Approximately \$1.4 million of additional projects will be funded with grants and other Village resources, which significantly reduces the financial burden on water customers.

The chart below illustrates the 10-year anticipated capital outlays in the Water Fund, beginning with FY 25-26. The gradual increase in water system assets total \$660,000 over the next ten years. St. Charles anticipates funding these improvements with cash and revenue from rates.



Water Fund Debt Service

To pay for the significant investments required to replace water mains, the Village borrowed \$3.6 million in 2023. Annual debt service will be a significant portion of Water Fund expenditures for the foreseeable future, accounting for nearly 33% of fund expenditures in FY 25-26. The increase in water-related costs will require rate adjustments to fund these costs.

Water Fund Budget Forecast

The detailed Water Fund operating budget forecast is shown below. Over the ten years in the forecast, O&M costs are estimated to increase an average of 4% per year. Cash-funded capital is expected to be about \$65,000 per year, and debt service will be around \$275,000 per year.

	Budget	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Assumption
FYE 3/31:	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035		
Administration													
WAGES-ADMIN	52,650	53,703	54,777	55,873	56,990	58,130	59,292	60,478	61,688	62,922	64,180	Wages & Salaries	
METER READING	-	-	-	-	-	-	-	-	-	-	-	Wages & Salaries	
SALARY-WATER BOARD REP	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	Wages & Salaries	
FICA	4,028	4,109	4,191	4,275	4,360	4,447	4,536	4,627	4,719	4,814	4,910	Wages & Salaries	
Health Insurance	34,273	35,987	37,786	39,675	41,659	43,742	45,929	48,226	50,637	53,169	55,827	Medical & Dental Ir	
Life/Dental/Disability Insurance	1,263	1,326	1,392	1,462	1,535	1,612	1,693	1,777	1,866	1,959	2,057	Medical & Dental Ir	
OPEB	-	-	-	-	-	-	-	-	-	-	-	Zero out	
RETIREMENT	-	-	-	-	-	-	-	-	-	-	-	Retirement	
Worker's Comp Insurance	343	350	357	364	371	379	386	394	402	410	418	Wages & Salaries	
SUPPLIES-O	-	-	-	-	-	-	-	-	-	-	-	General inflation	
POSTAGE	-	-	-	-	-	-	-	-	-	-	-	General inflation	
PENSION PLAN EXPENDITURES	-	-	-	-	-	-	-	-	-	-	-	General inflation	
OTHER POST EMPLOYMENT BENE	-	-	-	-	-	-	-	-	-	-	-	General inflation	
AUDIT	1,100	1,122	1,144	1,167	1,191	1,214	1,239	1,264	1,289	1,315	1,341	General inflation	
CONTR SERVICES	12,000	12,240	12,485	12,734	12,989	13,249	13,514	13,784	14,060	14,341	14,628	General inflation	
MEMBERSHIPS & DUES	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	24,380	General inflation	
CONFERENCES & WORKSHOPS	500	510	520	531	541	552	563	574	586	598	609	General inflation	
TELEPHONE	1,200	1,224	1,248	1,273	1,299	1,325	1,351	1,378	1,406	1,434	1,463	General inflation	
COMP EQUIP RENTAL	-	-	-	-	-	-	-	-	-	-	-	General inflation	
BUILDING RENTAL	-	-	-	-	-	-	-	-	-	-	-	Administration	
MISC	100	50	63	78	73	66	70	72	70	69	70	Avg 4 prior yrs	
Subtotal	128,457	132,040	135,812	139,718	143,739	147,902	152,223	156,696	161,327	166,127	171,103		
Operations & Maintenance													
WAGES	29,005	29,585	30,177	30,780	31,396	32,024	32,664	33,318	33,984	34,664	35,357	Wages & Salaries	
METER READING	3,820	3,896	3,974	4,054	4,135	4,218	4,302	4,388	4,476	4,565	4,657	Wages & Salaries	
OVERTIME WAGES	3,100	3,162	3,225	3,290	3,356	3,423	3,491	3,561	3,632	3,705	3,779	Wages & Salaries	
FICA	2,219	2,263	2,309	2,355	2,402	2,450	2,499	2,549	2,600	2,652	2,705	Wages & Salaries	
BCBS	15,347	16,114	16,920	17,766	18,654	19,587	20,566	21,595	22,675	23,808	24,999	Medical & Dental Ir	
LIFE/DENTAL/DISABILITY INS	748	785	825	866	909	955	1,002	1,053	1,105	1,160	1,218	Medical & Dental Ir	
WORKER'S COMP	2,147	2,190	2,234	2,278	2,324	2,370	2,418	2,466	2,516	2,566	2,617	Wages & Salaries	
PENSION PLAN EXPENDITURES	-	-	-	-	-	-	-	-	-	-	-	General Inflation	
OTHER POST EMPLOYMENT BENE	-	-	-	-	-	-	-	-	-	-	-	General inflation	
OPERATING SUPP	3,600	3,672	3,745	3,820	3,897	3,975	4,054	4,135	4,218	4,302	4,388	General inflation	
CONTR SERVICES	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	12,190	General inflation	
INSURANCE	3,000	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,515	3,585	3,657	General inflation	
UTILITIES	1,500	1,560	1,622	1,687	1,755	1,825	1,898	1,974	2,053	2,135	2,220	Utilities	
PURCHASED WATER	235,000	249,100	264,046	279,889	296,682	314,483	333,352	353,353	374,554	397,028	420,849	Wholesale Water	
REPAIRS & MTCE	27,684	27,240	28,282	32,013	28,805	29,085	29,546	29,862	29,324	29,454	29,547	Avg 4 prior yrs	
EQUIPMENT RENTAL	28,506	27,249	28,510	26,366	27,658	27,446	27,495	27,241	27,460	27,411	27,402	Avg 4 prior yrs	
MISC	200	100	125	156	145	132	140	143	140	139	140	Avg 4 prior yrs	
CAPITAL OUTLAY	300,000	-	-	-	-	-	-	-	-	-	-	Zero out	
CAPITAL FROM AMP/CIP	-	40,000	40,000	55,000	60,000	65,000	70,000	75,000	80,000	85,000	90,000	Custom	
CAPITAL OUTLAY - METERS	5,000	4,492	5,615	6,498	5,401	5,501	5,754	5,789	5,611	5,664	5,704	Avg 4 prior yrs	
Subtotal	670,876	424,669	445,134	480,615	501,590	526,826	553,822	581,359	609,579	639,789	671,430		
Depreciation & Debt Service													
BOND PMTS-PRINCIPAL	-	145,000	150,000	135,000	145,000	150,000	160,000	165,000	175,000	180,000	195,000	Custom	
BOND PAYMENT INTEREST	-	136,850	133,100	129,200	123,800	118,000	112,000	105,600	99,000	92,000	84,800	Custom	
PAYING AGENT FEES	-	-	-	-	-	-	-	-	-	-	-	No change	
Subtotal	-	281,850	283,100	264,200	268,800	268,000	272,000	270,600	274,000	272,000	279,800		
Contrib to Other Funds													
TRANS TO RETIREMENT FUND	20,000	21,200	22,472	23,820	25,250	26,765	28,370	30,073	31,877	33,790	35,817	Retirement	
TRANSFER TO FUND EQUITY	27,631	-	-	-	-	-	-	-	-	-	-	Zero out	
TRANSFER TO OPEB FUND	-	-	-	-	-	-	-	-	-	-	-	Medical & Dental Ir	
Subtotal	47,631	21,200	22,472	23,820	25,250	26,765	28,370	30,073	31,877	33,790	35,817		
TOTAL WATER EXPENDITURES	846,964	859,759	886,518	908,353	939,379	969,492	1,006,415	1,038,729	1,076,784	1,111,705	1,158,149		

SECTION 4. RATE ANALYSIS

Having developed estimates of future costs, the project effort shifted to developing rates to meet the revenue requirements of the Water Fund. First, annual revenue from sources other than rates

was estimated and subtracted from annual expenditures. The remaining net expenditures determined the revenue needed from rates.

Customer billing information was then analyzed to determine the number of Village customers by meter size, metered water volumes, and outside Village customer profiles.

We then combined the revenue requirements and the customer data to begin estimating rate requirements under the existing rate structure. Several alternative rate structures were tested; in the end, the Village opted to maintain the existing rate structure.

The rate structure includes three primary elements:

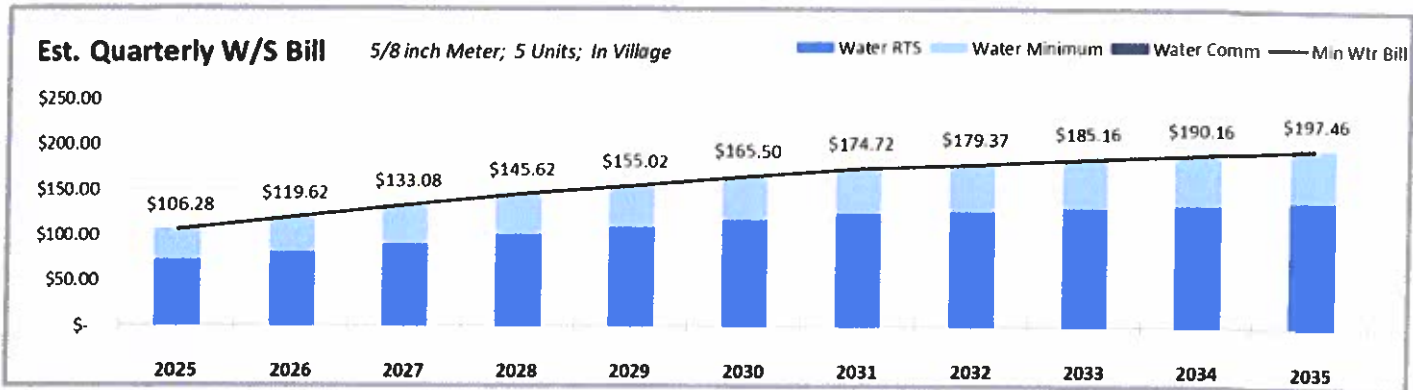
1. A quarterly readiness-to-serve charge, based on meter size.
2. A minimum usage charge based on 5,000 gallons of usage per quarter.
3. A commodity rate applied to each 1,000 gallons over the minimum metered each quarter.

Rates and charges for customers outside of the Village limits are twice the Village rates.

Forecasted rates are summarized in the table below:

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Quarterly WATER RTS											
5/8 inch	\$ 71.33	\$ 80.42	\$ 89.48	\$ 99.57	\$ 107.87	\$ 116.55	\$ 123.32	\$ 125.97	\$ 129.71	\$ 132.56	\$ 137.61
3/4 inch	\$ 71.33	\$ 80.42	\$ 89.48	\$ 99.57	\$ 107.87	\$ 116.55	\$ 123.32	\$ 125.97	\$ 129.71	\$ 132.56	\$ 137.61
1 inch	\$ 106.99	\$ 120.63	\$ 134.22	\$ 149.35	\$ 161.80	\$ 174.82	\$ 184.99	\$ 188.96	\$ 194.56	\$ 198.84	\$ 206.42
1.25 inch	\$ 285.29	\$ 321.69	\$ 357.93	\$ 398.27	\$ 431.46	\$ 466.18	\$ 493.30	\$ 503.88	\$ 518.82	\$ 530.23	\$ 550.45
1.5 inch	\$ 356.62	\$ 402.11	\$ 447.41	\$ 497.84	\$ 539.33	\$ 582.73	\$ 616.62	\$ 629.85	\$ 648.53	\$ 662.79	\$ 688.06
2 inch	\$ 570.58	\$ 643.38	\$ 715.86	\$ 796.54	\$ 862.93	\$ 932.36	\$ 986.59	\$ 1,007.76	\$ 1,037.64	\$ 1,060.47	\$ 1,100.90
3 inch	\$ 1,031.85	\$ 1,206.33	\$ 1,342.24	\$ 1,493.51	\$ 1,617.99	\$ 1,748.18	\$ 1,849.86	\$ 1,889.56	\$ 1,945.58	\$ 1,988.38	\$ 2,064.19
4 inch	\$ 1,783.08	\$ 2,010.56	\$ 2,237.07	\$ 2,489.18	\$ 2,696.65	\$ 2,913.63	\$ 3,083.10	\$ 3,149.26	\$ 3,242.64	\$ 3,313.96	\$ 3,440.32
6 inch	\$ 3,566.16	\$ 4,021.11	\$ 4,474.14	\$ 4,978.37	\$ 5,393.31	\$ 5,827.27	\$ 6,166.19	\$ 6,298.53	\$ 6,485.27	\$ 6,627.93	\$ 6,880.64
8 inch	\$ 5,705.86	\$ 6,433.78	\$ 7,158.62	\$ 7,965.39	\$ 8,629.29	\$ 9,323.63	\$ 9,865.91	\$ 10,077.64	\$ 10,376.44	\$ 10,604.69	\$ 11,009.02
Commodity Charge: WATER											
Minimum (5,000 gallons/quarter)	\$ 34.95	\$ 39.20	\$ 43.60	\$ 46.05	\$ 47.15	\$ 48.95	\$ 51.40	\$ 53.40	\$ 55.45	\$ 57.60	\$ 59.85
Rate per 1,000 gallons over 5,000	\$ 6.99	\$ 7.84	\$ 8.72	\$ 9.21	\$ 9.43	\$ 9.79	\$ 10.28	\$ 10.68	\$ 11.09	\$ 11.52	\$ 11.97

The estimated minimum quarterly water bill over the next ten years is illustrated in this chart:

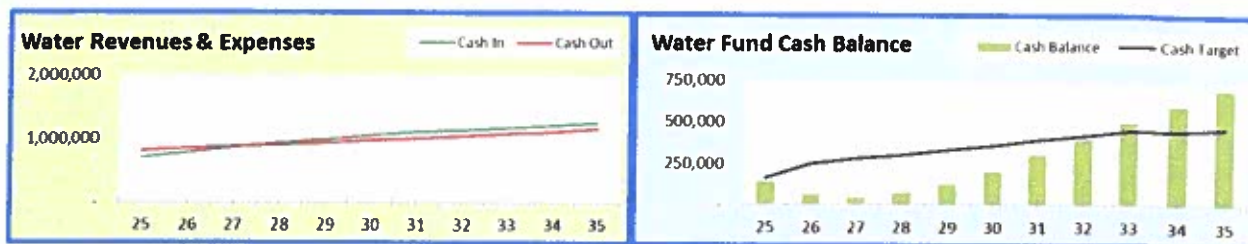


SECTION 5. SUFFICIENCY ANALYSIS

An important component of any rate study is to determine the sufficiency of developed rates to meet the revenue requirements of the utility. Our approach to rate setting considers the following key factors:

- **Cash balance:** Will the rates result in cash reserve balances within the target range?
- **Cash flow:** Are rates expected to produce enough revenue to meet annual cash requirements?
- **Timing of new and retiring debt service:** Are there opportunities to blend new debt with expiring debt to keep costs relatively smooth?
- **Rate smoothing:** Are there opportunities to adjust capital outlays to avoid large rate fluctuations? Can cash be used to smooth rate increases, rather than adopt significant rate changes year-to-year?
- **Customer impacts:** Will rates result in equitable cost sharing among customers? Can rates be set at a level that is minimally impactful on customer bills?

It is important to ensure developed rates can generate sufficient revenues to meet cash flow and cash reserve requirements. The Revenues & Expenses chart below illustrates the forecasted cash expenditures of the Water Fund (red line), and the estimated cash inflow (green line), primarily from rates.



The accumulated difference in net cash is shown in the Water Fund Cash Balance chart (green bars). Targeted cash reserves are shown to decrease for several years, due primarily to increased debt service and a strategy to keep rate increases as low as possible each year. **Rates will need to increase** to generate sufficient cash to meet operating, debt service and small capital needs, as well as to ensure reserve funds are available for emergencies and working capital.

The forecasted rates and charges are likely the minimum needed to fund forecasted expenditures in the Water Fund.

SECTION 6. IMPLEMENTATION

It will be imperative for the Village to implement higher rates beginning in FY 25-26, to ensure sufficient revenue will be available to fund all water utility costs. The Village Council is strongly encouraged to adopt the rates calculated for FY 25-26. Prior to annual rate adoption, the Village should update the rate model and determine rate requirements based on the most recent financial and customer billing data available. The rates presented in this report are initial estimates only. Actual rate requirements will vary based on several factors, including inflation, timing of capital

projects, interest rates, potential grant revenues, etc. Rate adjustments are a dynamic process, and regular reviews and updates are necessary to avoid rates that are deficient or excessive.

Subsequent rate adjustments must be made annually to avoid depleting cash, which would result in even higher rates in later years.

APPENDIX A

**2024 ORDINANCE AMENDMENT ESTABLISHING
WATER RATES FOR FY 24-25**

**RESOLUTION #24-1
To Amend Water Rates**

WHEREAS, the Village Council of the Village of St. Charles has been informed that the City of Saginaw is increasing the amount charged to the Swan Creek, James, St. Charles Water Authority for water purchased from the City of Saginaw,

WHEREAS, the Village Council of the Village of St. Charles has had a water rate study conducted for the Capital Improvement Plan to update and replace the aging infrastructure in the Village of St. Charles,

BE IT THEREFORE RESOLVED, that the Council of the Village of St. Charles sets the following water rates to cover the above-mentioned increase:

READY-TO-SERVE CHARGE PER QUARTER

5/8 x 3/4" meter	\$ 71.33
3/4" meter	71.33
1" meter	106.99
1 1/4" meter	285.29
1 1/2" meter	356.62
2" meter	570.58
3" meter	1,031.85
4" meter	1,783.08
6" meter	3,566.16
8" meter	5,705.86

The ready-to-serve charge as listed above is for residents within the Village limits. Customers outside the Village limits will be charged double the above rates.

Consumption Charge: Minimum charge to customers within the Village limits per quarter is the ready-to-serve charge plus \$34.95 for the use of water up to 5,000 gallons per quarter. Charges to customers within the Village limits for all water metered over the minimum shall be billed at the rate of \$6.99 per 1,000 gallons.

Minimum charge for customers outside the Village limits per quarter is double the ready-to-serve charge plus \$69.90 for the use of water up to 5,000 gallons per quarter. Charges to customers outside the Village limits for all water metered over the minimum shall be billed at the rate of \$13.98 per 1,000 gallons.

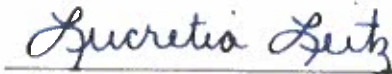
BE IT FURTHER RESOLVED, that all charges shall be effective for the May 2024 billing cycle that covers water usage from February 2024 to May 2024. Rates to be reviewed yearly.

BE IT SO RESOLVED, this 10th day of January, 2024.

APPROVED:


Edgar Tithof, Village President

ATTEST:


Lucretia Leitz, Village Clerk