

MICHIGAN RURAL WATER ASSOCIATION RATE EVALUATION PROGRAM

Village of Lake Orion Water system				
CURRENT RATE CHARGES & NUMBER OF CUSTOMERS				
Customers Are Invoiced QUARTERLY PER				
CURRENT CHARGES RATE CLASS 1				
Village of Lake Orion Water system				
TYPE OF UNITS INVOICED	100 CUFT	NOTES		
COST PER 100 CUBIC FT.	\$7.30			
INVOICES PER YEAR	4			
METER SIZE IN INCHES	CURRENT "BASE RATE" CHARGE \$	NUMBER OF METERS / REU'S	INVOICES PER YEAR	ANNUAL INCOME
3/4	\$97.66	1188	4	\$464,080
1	\$122.08	283	4	\$138,191
1 1/2	\$341.78	31	4	\$42,381
2	\$654.28	17	4	\$44,491
3	\$1,464.89	3	4	\$17,579
4			4	\$0
6			4	\$0
8			4	\$0
10			4	\$0
12			4	\$0
TOTALS		1522		\$706,722

METER EQUIVALENTS BY SIZE AND COST RATIO

100%

2026 YEAR 1	CURRENT CHARGES RATE CLASS 1					
	Village of Lake Orion Water system					
METER SIZE IN INCHES	NUMBER OF METERS / REU'S	INVOICE FREQUENCY	TOTAL CUSTOMERS ALL ENTITIES	SELECTED METER EQUIVALENT	CALCULATED METER EQUIVALENT USED	ANNUAL METER EQUIVALENTS
3/4	1188	4	1188	1.00	1.00	4,752
1	283	4	283	1.78	1.78	2,012
1 1/2	31	4	31	4.00	4.00	496
2	17	4	17	7.11	7.11	484
3	3	4	3	16.00	16.00	192
4	0	4	0	0.00	0.00	
6	0	4	0	0.00	0.00	
8	0	4	0	0.00	0.00	
10	0	4	0	0.00	0.00	
12	0	4	0	0.00	0.00	
TOTAL	1522		1522			

A 3/4 inch meter or pipe has an area of .442 square inches.

If the 3/4 inch meter is considered the standard meter for a residential customer then it becomes 1 Meter Equivalent.

A 3/4 inch meter / pipe is equivalent to .442 inches. Larger meter / pipe diameters are converted to square inches and divided by .442 to determine the number of Meter Equivalent units.

For instance a 1 inch meter is .785 square inches.

When you divide .785 square inches by .442 square inches you get 1.78. Thus a 1 inch meter when compared to a 3/4 inch meter has an Meter Equivalent

RATE CALCULATION **7,936**

BALANCES WERE OBTAINED ON DATE OF

Jun-26

GENERAL RESERVE ACCOUNTS

INCLUDING RRI, INTEREST & REDEMPTION - ETC

Name of Account / Description		Balance
investment/lcip county inv	592-000-010-000	\$2,118,522
cash savings- water sewer	592-000-002-001	\$6,526
cash-payroll savings	592-000-011-000	\$67,468
	Total Balance	\$2,192,516

MICHIGAN RURAL WATER ASSOCIATION RATE EVALUATION PROGRAM

PRIOR YEAR ACTUALS EXPENSES (COMPARISON PURPOSES ONLY)		ACCT #	Village of Lake Orion Water system	PROPOSED BUDGET FOR FISCAL YEAR	YEAR 2	YEAR 3	YEAR 4	YEAR 5
					PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET
2024/2024 ACTUAL	2025/2026 Amended		ANNUAL PERCENT INCREASE	3.00%	3.00%	3.00%	3.00%	
			OPERATING EXPENSES	2026	2027	2028	2029	2030
\$3,523	\$7,000	592-260-805-000	Audit Fees	\$3,605	\$3,713	\$3,825	\$3,939	\$4,057
\$0	\$2,000	592-260-852-000	Miss Dig	\$2,060	\$2,122	\$2,185	\$2,251	\$2,319
\$127,436	\$133,808	592-260-959-000	Financial Administration	\$68,911	\$70,978	\$73,108	\$75,301	\$77,560
\$19,143	\$66,266	592-556-701-000	Wages	\$68,254	\$70,302	\$72,411	\$74,583	\$76,820
\$297	\$4,000	592-556-701-013	Overtime	\$4,120	\$4,244	\$4,371	\$4,502	\$4,637
\$5,709	\$5,289	592-556-715-000	Social Security	\$5,448	\$5,611	\$5,780	\$5,953	\$6,132
\$11,677	\$13,860	592-556-716-000	Health Insurance- Medical	\$14,276	\$14,704	\$15,145	\$15,600	\$16,068
\$1,021	\$1,111	592-556-717-000	Life - Disability Insurance	\$1,145	\$1,179	\$1,215	\$1,251	\$1,289
\$1,589	\$1,596	592-556-718-000	Dental Insurance	\$1,644	\$1,693	\$1,744	\$1,796	\$1,850
\$93,226	\$92,281	592-556-719-000	Pension	\$95,049	\$97,900	\$100,837	\$103,863	\$106,978
\$273	\$274	592-556-721-000	Vision Care	\$282	\$290	\$299	\$308	\$317
\$1,337	\$2,600	592-556-722-000	Worker's Comp. Insurance	\$2,678	\$2,758	\$2,841	\$2,926	\$3,014
\$6,355	\$4,181	592-556-726-000	Supplies	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502
\$145	\$1,500	592-556-741-000	Small Tools	\$1,500	\$1,545	\$1,591	\$1,639	\$1,688
\$561,040	\$534,618	592-556-745-000	Water Purchase -Orion Township		\$0	\$0	\$0	\$0
\$18,510	\$16,000	592-556-801-000	Contract Services	\$25,000	\$25,750	\$26,523	\$27,318	\$28,138
\$7,976	\$30,000	592-556-806-000	Engineering	\$15,000	\$15,450	\$15,914	\$16,391	\$16,883
\$99	\$160	592-556-813-000	Legal Service	\$165	\$170	\$175	\$180	\$186
\$0	\$3,000	592-556-931-000	Equip Repair & Maint - Misc.	\$3,090	\$3,183	\$3,278	\$3,377	\$3,478
\$6,653	\$7,500	592-556-931-001	Equip Repair & Maint - Hydrant	\$7,725	\$7,957	\$8,195	\$8,441	\$8,695
\$4,575	\$5,000	592-556-931-002	Equip Repair & Maint - Mains	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796
\$915	\$5,000	592-556-931-003	Equip Repair & Maint - Meters	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796
\$32,921	\$28,000	592-556-940-000	Equipment Rental	\$28,840	\$29,705	\$30,596	\$31,514	\$32,460
\$2,400	\$2,800	592-556-956-000	Dues & Miscellaneous	\$2,884	\$2,971	\$3,060	\$3,151	\$3,246
\$1,194	\$3,000	592-556-957-000	Education and Training	\$3,090	\$3,183	\$3,278	\$3,377	\$3,478
\$84,507	\$40,000	592-556-975-000	Capital Improvement	\$30,000	\$30,900	\$31,827	\$32,782	\$33,765
\$280,000	\$280,000	592-556-992-002	DRINKING WATER SRF BOND PRINCIPAL		\$0	\$0	\$0	\$0
\$93,995	\$88,496	592-556-995-000	DRINKING WATER SRF BOND INTEREST		\$0	\$0	\$0	\$0
		592-560-958-002	Water Depreciation		\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0
\$1,368,514	\$1,379,340		TOTAL	\$399,066	\$411,038	\$423,369	\$436,070	\$449,152

Village of Lake Orion Water system													
EQUIPMENT REPLACEMENT SHORT LIVED ASSETS													
2026													
SHORT LIVED ASSETS SOMEWHERE BETWEEN 0-15 OR 20 YEARS													
FIXED ASSET INVENTORY		THESE COLUMNS ARE OPTIONAL - HIDE THEM IF NOT USING				ASSET REPLACEMENT SCHEDULE							
EQUIPMENT LIST / MAINTENANCE ACTIVITY	DESCRIPTION / MAINTENANCE HISTORY	RATING GPM - ETC	MANUFACTURE MAKE / BRAND	MODEL #	LOCATION	ORIGINAL INSTALLATION YEAR OR LAST REHAB YEAR	ESTIMATED NORMAL INTENDED USEFUL LIFE	CURRENT AGE	NEXT ANTICIPATED REPLACEMENT YEAR	REMAINING LIFE - YEARS BEFORE REPLACEMENT	TOTAL REPLACEMENT COST	PERCENT OF ASSET LEFT	PERCENT CONSUMED
reliability study	updated every 5 yr.		NFE			2021	5	5	2026	0	\$3,000	0%	100%
5/8-3/4" meters	1197 meters @ \$120.00 each		neptune			2008	20	18	2028	2	\$143,640	10%	90%
1" meters	213 meters @ \$230.00 each		neptune			2008	20	18	2028	2	\$48,990	10%	90%
1.5" meters	32 meters @ \$575.00 each		neptune			2008	20	18	2028	2	\$18,400	10%	90%
2" meters	15 meters @ \$765.00		neptune			2008	20	18	2028	2	\$11,475	10%	90%
3" meters	3 meters @ \$2700.00		neptune			2008	20	18	2028	2	\$8,100	10%	90%
r900 antenna	1460 total @ \$96.00		neptune			2017	20	9	2037	11	\$140,160	55%	45%
meter reading software upgrades	5000		neptune			2025	10	1	2035	9	\$5,000	90%	10%
meter reading hardware	1 each @ \$16,500.00		BSA			2013	20	13	2033	7	\$16,500	35%	65%
											\$395,265	26%	

EQUIPMENT REPLACEMENT SHORT LIVED ASSETS - RUNNING BALANCE SHEET

COST OF LIVING INCREASE	4.00%
CURRENT RESERVE BALANCE APPLIED TO THIS ACCOUNT - INCLUDES RRI BALANCE	\$100,000
AVG. INTEREST RATE IN SAVINGS	0.10%

ANNUAL COLA ADJUSTMENT AS ADOPTED BY COUNCIL	0.00%
Annual Funding Applied to Budget / Rates	<u>\$35,000</u>
USDA RURAL DEVELOPMENT "RRI" ANNUAL RESERVE - ALL LOANS	<u>\$0</u>
USDA R.D. BOND RESERVE LOAN 1 BECOMES AVAILABLE FOR RRI IN YEAR OF	
USDA R.D. LOAN 1 ANNUAL BOND RESERVE(S)	
USDA R.D. BOND RESERVE LOAN 2 BECOMES AVAILABLE FOR RRI IN YEAR OF	
USDA R.D. LOAN 2 ANNUAL BOND RESERVE(S)	

YEAR	PURPOSE	ANNUAL REPLACEMENT EXPENDITURES WITH C.O.L.	FUNDING WITH COLA	RUNNING BALANCE
2026	reliability study	\$3,000	<u>\$35,000</u>	\$132,135
2027		\$0	\$35,000	\$167,267
2028		\$249,053	\$35,000	(\$46,619)
2029	meter change out	\$0	\$35,000	(\$11,666)
2030		\$0	\$35,000	\$23,323
2031		\$3,600	\$35,000	\$54,746
2032	reliability study	\$0	\$35,000	\$89,801
2033		\$21,120	\$35,000	\$103,771
2034	meter reading hardware	\$0	\$35,000	\$138,874
2035		\$6,800	\$35,000	\$167,213
2036		\$4,200	\$35,000	\$198,180
2037		\$201,830	\$35,000	\$31,548
2038		\$0	\$35,000	\$66,580
2039		\$0	\$35,000	\$101,646
2040		\$0	\$35,000	\$136,748

EQUIPMENT REPLACEMENT SHORT LIVED ASSETS - RUNNING BALANCE SHEET

COST OF LIVING INCREASE			4.00%	
CURRENT RESERVE BALANCE APPLIED TO THIS ACCOUNT - INCLUDES RRI BALANCE			\$100,000	
AVG. INTEREST RATE IN SAVINGS			0.10%	
ANNUAL COLA ADJUSTMENT AS ADOPTED BY COUNCIL			0.00%	
2041		\$4,800	\$35,000	\$167,085
2042		\$0	\$35,000	\$202,252
2043		\$0	\$35,000	\$237,454
2044		\$0	\$35,000	\$272,692
2045		\$8,800	\$35,000	\$299,164
2046		\$5,400	\$35,000	\$329,063
				\$208,000

Village of Lake Orion Water system
2026

DEBT SCHEDULE / AMORTIZATION SCHEDULE PRINCIPAL & INTEREST

	1	2	3	4	5	6	7	8	9	10
FISCAL YEAR STARTING	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2017 Water SRF	\$360,391	\$360,344	\$360,207	\$359,979	\$364,662	\$364,165	\$363,577	\$368,299	\$362,131	\$366,273
Water Main Replacements Phase 1&2										
DATE OF ISSUE	2018									
DATE OF MATURITY	2038									
PAID BY RATES	YES									
RESERVE REQUIREMENT	YES									
EXISTING + NEW	\$360,391	\$360,344	\$360,207	\$359,979	\$364,662	\$364,165	\$363,577	\$368,299	\$362,131	\$366,273

MICHIGAN RURAL WATER ASSOCIATION RATE EVALUATION PROGRAM

FINAL ANALYSIS RATE CALCULATION - CURRENT FISCAL YEAR		2026				RTS CHARGE		VOLUME CHARGE	
Village of Lake Orion Water system	ANNUAL BUDGET	PERCENT FIXED EXPENSES	ASSIGNED AS FIXED EXPENSES	ANTICIPATED ANNUAL METER EQUIVALENTS	COST PER METER EQUIVALENT	ASSIGNED AS VARIABLE EXPENSES	ANTICIPATED EQUIVALENT UNITS	\$ COST PER 100 CUBIC FEET	
OPERATING EXPENSES	\$399,066	35%	\$139,673	7,936	\$17.60	\$259,393	108,117	\$2.399	
PURCHASED WATER	\$566,695	35%	\$198,343	7,936	\$24.99	\$368,352	108,117	\$3.407	
OPERATION & MAINTENANCE EXPENSES	\$965,761		\$338,016		\$42.59	\$627,745		\$5.806	
DEBT - PRINCIPAL & INTEREST ANNUAL PAYMENTS									
2017 Water SRF	\$360,391	100.00%	\$360,391	7,936	\$45.41	\$0	108,117	\$0.00	
ANNUAL DEBT PAYMENTS PRINCIPAL & INTEREST	\$360,391		\$360,391		\$45.41	\$0		\$0.00	
ANNUAL O & M + DEBT	\$1,326,152		\$698,407		\$88.00	\$627,745		\$5.81	
NON SALES INCOME	\$0	35%	\$0		\$0.00	\$0		\$0.000	
REVENUE COLLECTED THROUGH RATES	\$1,326,152		\$698,407			\$627,745			
CALCULATED RATE O & M + DEBT		METER EQUIVALENT		QUARTER				\$88.00	
				CURRENT RATE				\$97.66	
RESERVES									
EQUIPMENT REPLACEMENT AVERAGE ANNUAL BUDGETED AMOUNT	\$35,000	35%	\$12,250	7,936	\$1.54	\$22,750	108,117	\$0.21	
EQUIPMENT REPLACEMENT & RESERVE REQUIREMENTS	\$35,000		\$12,250		\$1.54	\$22,750		\$0.21	
CAPITAL IMPROVEMENT AVERAGE ANNUAL BUDGETED AMOUNT	\$50,000	35%	\$17,500	7,936	\$2.21	\$32,500	108,117	\$0.30	
CAPITAL + EQUIPMENT & RRI RESERVES	\$85,000		\$29,750		\$3.75	\$55,250		\$0.51	
ADOPTED BUDGET									
	\$1,411,152		\$728,157	7,936		\$682,995	108,117		
		35.00%	52%			48%			
REVENUE COLLECTED CALCULATED RATES	\$1,411,152		\$728,157			\$682,995			
CALCULATED RATE PER METER EQUIVALENT					PER QUARTER		RATE PER 100 CUFT		\$6.32
ANNUAL METER EQUIVALENTS / REU'S COUNT 7,936					CURRENT RATES		\$97.66		\$7.30
ANTICIPATED EQUIVALENT GALLONS / UNITS 108,117					PERCENT INCREASE		-6.05%		-13.46%
INVOICES PER YEAR 4					INCREASE OF		(\$5.91)		(\$0.98)
TOTAL NUMBER OF CUSTOMERS / METERS 1,522							0		\$0.00
ANTICIPATED UNITS INVOICED 10,811,668									
GALLONS USED 4,000									
AMOUNT OF BILL \$186.51									
PERCENT INCREASE -10%							EVERY MILLION GALLONS GENERATES REVENUE OF		\$6,317
NOTES PERCENT RESERVE 6.0%									

TYPICAL BILL COMPARISON USING NEW RATES							
<i>Village of Lake Orion Water system</i>							
<u>CURRENT RATES</u>				<u>NEW / CALCULATED RATES</u>			
RTS		\$97.66	\$91.75				
COST PER UNIT		\$7.30	\$6.32				
COST PER UNIT OF WATER \$6.32			QUARTERLY				
METER SIZE IN INCHES	CUBIC FT USED	VOLUME CHARGE	BASE RATE CHARGE	NEW BILL	OLD BILL	CHANGE IN BILL	PERCENT INCREASE
3/4	500	\$31.59	\$91.75	\$123.34	\$134.16	(\$10.82)	-8.1%
3/4	1,200	\$75.81	\$91.75	\$167.56	\$185.26	(\$17.70)	-9.6%
3/4	1,500	\$94.76	\$91.75	\$186.51	\$207.16	(\$20.65)	-10.0%
3/4	2,000	\$126.34	\$91.75	\$218.10	\$243.66	(\$25.56)	-10.5%
3/4	2,500	\$157.93	\$91.75	\$249.68	\$280.16	(\$30.48)	-10.9%
1	10,000	\$631.72	\$163.12	\$794.84	\$852.08	(\$57.24)	-6.7%
1 1/2	15,000	\$947.58	\$367.01	\$1,314.59	\$1,436.78	(\$122.19)	-8.5%
2	30,000	\$1,895.16	\$652.47	\$2,547.63	\$2,844.28	(\$296.65)	-10.4%
3	50,000	\$3,158.60	\$1,468.06	\$4,626.66	\$5,114.89	(\$488.23)	-9.5%
GALLONS INCLUDED MIN BILL				0	0		

TYPICAL BILL COMPARISON USING NEW RATES								
<i>Village of Lake Orion Water system</i>								
<u>CURRENT RATES</u>				<u>NEW / CALCULATED RATES</u>				
RTS		\$97.66			\$30.58			
COST PER UNIT		\$7.30			\$6.32			
COST PER UNIT OF WATER		\$6.32	MONTHLY					
METER SIZE IN INCHES	CUBIC FT USED	VOLUME CHARGE	BASE RATE CHARGE	NEW BILL	OLD BILL	CHANGE IN BILL	PERCENT INCREASE	
3/4	125	\$7.90	\$30.58	\$38.48	\$106.79	(\$68.30)	-64.0%	
3/4	300	\$18.95	\$30.58	\$49.54	\$119.56	(\$70.02)	-58.6%	
3/4	500	\$31.59	\$30.58	\$62.17	\$134.16	(\$71.99)	-53.7%	
3/4	750	\$47.38	\$30.58	\$77.96	\$152.41	(\$74.45)	-48.8%	
3/4	1,000	\$63.17	\$30.58	\$93.76	\$170.66	(\$76.90)	-45.1%	
1	2,200	\$138.98	\$54.37	\$193.35	\$282.68	(\$89.33)	-31.6%	
1 1/2	2,800	\$176.88	\$122.34	\$299.22	\$546.18	(\$246.97)	-45.2%	
2	3,500	\$221.10	\$217.49	\$438.59	\$909.78	(\$471.19)	-51.8%	
3	4,200	\$265.32	\$489.35	\$754.68	\$1,771.49	(\$1,016.82)	-57.4%	
GALLONS INCLUDED MIN BILL				0	0			