

City of Grand Ledge

WATER RATE CALCULATION REPORT

MARCH 2021'



Prepared By:

Name	Title	Employer	Email
Mike Engels	Circuit Rider	Michigan Rural Water Association	mengels@mrwa.net
Adam Smith	City Manager	City of Grand Ledge	asmith@cityofgrandledge.com
Kurt Ristow	DPW Superintendent	City of Grand Ledge	kristow@cityofgrandledge.com
Dave Gutchess	DPS Superintendent	City of Grand Ledge	dgutchess@cityofgrandledge.com
David Pawley	Finance Director	City of Grand Ledge	dpawley@cityofgrandledge.com

YOUR RATE EVALUATION SHOULD BE REVIEWED BY A CERTIFIED FINANCIAL PLANNER AND YOUR ATTORNEY

BACKGROUND / STARTING INFORMATION

Name of Community :	Grand Ledge Water
Population Served :	7802
BUDGET FOR FISCAL YEARS <u>STARTING</u> YEAR OF	2021
<u>Current Rate Structure</u>	
Are bills based on 1,000 gallons units or 100 cubic feet units?	1,000
Number of Residential Customer Invoices per Year	12
What are the dates of the Fiscal Year	7/1-6/30
Year of Last Rate Increase	7.50%
<i>This rate evaluation was completed using the following information</i>	
System Evaluations (MDEQ etc)	
List the names of the different Entities Served - Originating Entity	City Water < 4,000
2nd Entity	City Water > 4,000
3rd Entity	Township < 4,000
4th Entity	Township > 4,000

Grand Ledge Water					
CURRENT RATE CHARGES & NUMBER OF CUSTOMERS					
Customers Are Invoice MONTHLY PER					
RATE CLASS 1					
City Water < 4,000					
TYPE OF WATER UNITS	1,000 GALLONS	UNDER 4,000 GALLONS PER MONTH - DOES NOT INCLUDE SPRINKLER ACCOUNTS			
COST PER WATER UNIT	\$5.04				
INVOICES PER YEAR	12				
METER SIZE IN INCHES	CURRENT "BASE RATE" CHARGE	NUMBER OF METERS / REU'S	INVOICE FREQUENCY	ANNUAL INCOME	
3/4	\$14.49	2789	12	\$484,951	
1	\$36.23	37	12	\$16,086	
1 1/2	\$72.45	32	12	\$27,821	
2	\$115.92	36	12	\$50,077	
3	\$231.84	6	12	\$16,692	
4	\$362.25	3	12	\$13,041	
6	\$724.50	1	12	\$8,694	
8	\$1,449.00		12	\$0	
TOTALS		2904		\$617,363	

RATE CLASS 2					
City Water > 4,000					
TYPE OF WATER UNITS	1,000 GALLON	Ratio Entity # 2 vs. 1	THESE ARE GALLONS OF WATER OVER 4,000 GALLONS PER MONTH		
COST PER WATER UNIT	\$6.83	1.36			
INVOICES PER YEAR	12				
METER SIZE IN INCHES	CURRENT "BASE RATE" CHARGE	Ratio Entity # 2 vs. 1	NUMBER OF METERS / REU'S	INVOICE FREQUENCY	ANNUAL INCOME
3/4		0.00		12	\$0
1				12	\$0
1 1/2				12	\$0
2				12	\$0
3				12	\$0
4				12	\$0
6				12	\$0
8				12	\$0
TOTALS			0		\$0

NOTES

Current Rate Charges

Currently customers are charged based on two factors

Consumption Charge, Which is based on gallons of water that goes through the customer's water meter. Sewage usage is based on water usage. Customers are currently invoiced per unit of water / sewer at the listed price.

A monthly "Ready to Serve" charge which is based on the size of the customers water meter, which is listed in inches. Customers are invoiced on a monthly basis. The number of meters listed above does NOT include irrigation meters.

MICHIGAN RURAL WATER ASSOCIATION RATE EVALUATION PROGRAM

RATE CLASS 3						RATE CLASS 4					
Township < 4,000						Township > 4,000					
TYPE OF WATER UNITS	1,000 GALLONS	Ratio Entity # 3 vs 1	ALL OF THE ONEIDA TWP CUSTOMERS ARE LISTED HERE - THEY ARE ALL INVOICED ON A MONTHLY BASIS. AND ALL OF THE WATER INVOICED UNDER 4,000 GALLONS PER MONTH - TOWNSHIP CUSTOMERS ARE INVOICED AT TWICE THE CITY RATE FOR BOTH READY TO SERVE AND PER UNIT OF WATER			TYPE OF WATER UNITS	1,000 GALLONS	Ratio Entity # 4 vs 1	Township over 4,000		
COST PER WATER UNIT	\$10.08	2.00				COST PER WATER UNIT	\$13.66	2.71			
INVOICES PER YEAR	12					INVOICES PER YEAR	12				
METER SIZE IN INCHES	CURRENT "BASE RATE" CHARGE	Ratio Entity # 3 vs 1	NUMBER OF METERS / REU'S	INVOICE FREQUENCY	ANNUAL INCOME	METER SIZE IN INCHES	CURRENT "BASE RATE" CHARGE	Ratio Entity # 4 vs 1	NUMBER OF METERS / REU'S	INVOICE FREQUENCY	ANNUAL INCOME
3/4	\$28.98	2.00	367	12	\$127,628	3/4		0.00		12	\$0
1	\$72.46		16	12	\$13,912	1				12	\$0
1 1/2	\$144.90		0	12	\$0	1 1/2				12	\$0
2	\$231.84		1	12	\$2,782	2				12	\$0
3	\$463.68		1	12	\$5,564	3				12	\$0
4	\$724.50		0	12	\$0	4				12	\$0
6	\$1,449.00		0	12	\$0	6				12	\$0
8	\$2,898.00		0	12	\$0	8				12	\$0
\$0.00			385		\$149,886	\$0.00			0		\$0

MICHIGAN RURAL WATER ASSOCIATION RATE EVALUATION PROGRAM

REU EQUIVALENTS PER METER SIZE

100%

2021 YEAR 1	RATE CLASS 1	RATE CLASS 2	RATE CLASS 3	RATE CLASS 4						
	City Water < 4,000	City Water > 4,000	Township < 4,000	Township > 4,000						
METER SIZE IN INCHES	NUMBER OF METERS / REU'S	NUMBER OF METERS / REU'S	NUMBER OF METERS / REU'S	NUMBER OF METERS / REU'S	TOTAL CUSTOMERS ALL ENTITIES	<u>EQUIVALENT</u> METERS / REU'S - BASED ON RATES	SELECTED METER EQUIVALENT	CALCULATED METER EQUIVALENT USED	EQUIVALENT REU'S PER BILLING CYCLE	ANNUAL EQUIVALENT REU'S (UNITS)
3/4	2789	0	367	0	3156	3,523	1.00	1.00	3,523	42,276
1	37	0	16	0	53	69	2.50	2.50 5.00 8.00 16.00 25.00 50.00 100.00	173	2,070
1 1/2	32	0	0	0	32	32	5.00		160	1,920
2	36	0	1	0	37	38	8.00		304	3,648
3	6	0	1	0	7	8	16.00		128	1,536
4	3	0	0	0	3	3	25.00		75	900
6	1	0	0	0	1	1	50.00		50	600
8	0	0	0	0	0		100.00			
TOTAL	2904	0	385	0	3289	3674				4,413
TOTAL <u>EQUIVALENT</u> ANNUAL REU'S									52,950	
PERCENT REDUCTION OR INCREASE									0.00%	
REU REDUCTION PER BILLING CYCLE									0.0	
ANNUAL <u>EQUIVALENT</u> REU'S USED FOR RATE EVALUATION									52,950	

The table above list the number of water meters being invoiced for each size water meter, for each entity being served. It then calculates the annual equivalent REU's (Residential Equivalent Meters). This figure will be used to calculate the Ready to Serve Charge for

City Water < 4,000		2021 UNITS OF WATER INVOICED TO CUSTOMI FOR THIS EVALUATION WE WILL USE THE LOWEST					BY DEFAULT THE PROGRAM USES THE LOWEST YEAR					
USAGE REPORTED IN	GALLONS											
USAGE REPORTED IN	FISCAL YEARS											
FISCAL YEAR ENDING IN YEAR OF												
	2016	2017	2018	2019	2020	PERCENT OF TOTAL	AVERAGE	MAX. YEAR	MIN. YEAR	PERCENT DIFFERENCE FROM MAX. TO MIN. YEAR	ANTICIPATED PERCENT REDUCTION NEXT YEAR	UNITS USED IN RATE EVALUATION
City Water < 4,000	93,026,185	92,001,240	92,028,700	98,853,500	92,842,000	46.0%	93,750,325	98,853,500	92,001,240	7%	0%	92,001,240
City Water > 4,000	99,359,655	94,277,375	90,247,500	90,876,500	85,189,400	42.2%	91,990,086	99,359,655	85,189,400	14%	0%	85,189,400
Township < 4,000	14,078,182	12,764,475	13,897,000	15,183,400	14,415,100	7.1%	14,067,631	15,183,400	12,764,475	16%	0%	12,764,475
Township > 4,000	12,216,982	9,417,025	9,063,300	8,094,900	9,294,700	4.6%	9,617,381	12,216,982	8,094,900	34%	0%	8,094,900
TOTALS	218,681,004	208,460,115	205,236,500	213,008,300	201,741,200		209,425,424	225,613,537	198,050,015	18%		198,050,015
		1050638.98	1034391.96	1073561.832	1016775.648							
		GALLONS OF REDUCTION										0
		GALLONS USED FOR EVALUATION										198,050,015

TOTAL COMBINED <u>CURRENT</u> INCOME				1,000				Grand Ledge Water				
FISCAL YEAR 2020				12								
CURRENT METER / BASE RATE INCOME												
		City Water < 4,000			City Water > 4,000	Township < 4,000	Township > 4,000	0	0			
METER SIZE IN INCHES	CURRENT RATES	NUMBER OF METERS / REU'S	INVOICE FREQUENCY	ANNUAL INCOME	ANNUAL INCOME	ANNUAL INCOME	ANNUAL INCOME	ANNUAL INCOME	ANNUAL INCOME	INCOME	% INCOME	% TOTAL INCOME
3/4	\$14.49	2,789	12	484,951	\$0	\$127,628	\$0	\$0	\$0	\$612,579	80%	29%
1	\$36.23	37	12	16,086	\$0	\$13,912	\$0	\$0	\$0	\$29,998	4%	1%
1 1/2	\$72.45	32	12	27,821	\$0	\$0	\$0	\$0	\$0	\$27,821	4%	1%
2	\$115.92	36	12	50,077	\$0	\$2,782	\$0	\$0	\$0	\$52,860	7%	3%
3	\$231.84	6	12	16,692	\$0	\$5,564	\$0	\$0	\$0	\$22,257	3%	1%
4	\$362.25	3	12	13,041	\$0	\$0	\$0	\$0	\$0	\$13,041	2%	1%
6	\$724.50	1	12	8,694	\$0	\$0	\$0	\$0	\$0	\$8,694	1%	0%
8	\$1,449.00	0	12	0	\$0	\$0	\$0	\$0	\$0	\$0	0%	0%
BASE RATE INCOME				\$617,363	\$0	\$149,886	\$0	\$0	\$0	\$767,250		37%
CURRENT VOLUME SALES INCOME												
		City Water < 4,000			City Water > 4,000	Township < 4,000	Township > 4,000	0	0	TOTALS		
GALLONS / CUFT SOLD	92,842,000			85,189,400	14,415,100	9,294,700	0	0	201,741,200			
COST PER UNIT	\$5.04			\$6.83	\$10.08	\$13.66	\$0.00	\$0.00				% INCOME
WATER SALES INCOME	\$467,924			\$581,844	\$145,304	\$126,966			\$1,322,037			63%
TOTAL METER SALES INCOME				\$767,250								
TOTAL VOLUME SALES INCOME				\$1,322,037								
TOTAL INCOME CUSTOMER SALES				\$2,089,287								
"NON OPERATING" INCOME REDUCTION CONTRIBUTION				\$75,000								
TOTAL INCOME ALL SOURCES				\$2,164,287								
NEW INPUTTED RATE BUDGET				\$2,629,199								
SCHEDULED / ANTICIPATED PROFIT / LOSS AT CURRENT RATE STRUCTURE				(\$464,912)								
										PERCENT OF INCOME		
										BASE RATE	VOLUME SALES	
										37%	63%	

This page has no influence on the rate calculation.

This page calculates your current income. It is used as a checks and balances page. Ideally the calculated current income on this page should be relatively close to your actual reported income last year when these rates were / are in place.

If this income does not come close to your income it means the data you entered into the program - number of customers, gallons of water are inaccurate and will need to be looked at again.

Grand Ledge Water				MICHIGAN RURAL WATER ASSOCIATION RATE EVALUATION PROGRAM		YEAR 3	YEAR 4	YEAR 5
NON-SALES & OTHER REVENUE	FY 2019 ACTUALS	FY 2020 ACTUALS	2021 Budget	2021	2022	2023	2024	2025
628.000 OPERATIONAL REVENUES	\$3,003	\$470	\$1,850	\$1,810	\$1,846	\$1,883	\$1,921	\$1,959
628.001 INSURANCE DIVIDENDS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
635.010 REIMBURSE MAINT SUPPLY - WATER	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
635.011 REIMBURSEMENT-SALARIES-WATER	\$1,174	\$1,391	\$1,235	\$1,292	\$1,318	\$1,344	\$1,371	\$1,399
635.012 REIMBURSE EQUIP RENTAL - WATER	\$4,006	\$2,680	\$13,562	\$6,884	\$7,022	\$7,163	\$7,306	\$7,452
635.013 REIMBURSE FRINGE BENE - WATER	\$563	\$0	\$746	\$445	\$454	\$463	\$472	\$482
635.014 REIMBURSE OPER SUPPLIES-WATER	\$826	\$285	\$971	\$708	\$722	\$736	\$751	\$766
					\$0	\$0	\$0	\$0
650.003 TURN ON CHARGES	\$9,025	\$6,025	\$867	\$5,412	\$5,520	\$5,630	\$5,743	\$5,858
650.005 PENALTIES	\$56,043	\$45,368	\$50,730	\$51,728	\$52,763	\$53,818	\$54,894	\$55,992
651.002 MISC WATER SALES	\$85	\$933	\$193	\$412	\$420	\$428	\$437	\$446
651.005 WATER CAPITAL INVESTMENT FEES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
651.009 WATER TAP FEES	\$18,128	\$50,020	\$11,500	\$27,080	\$27,622	\$28,174	\$28,738	\$29,313
					\$0	\$0	\$0	\$0
651.011 TOWER RENTAL	\$36,441	\$39,205	\$32,000	\$32,000	\$32,640	\$33,293	\$33,959	\$34,638
673.000 SALE OF FIXED ASSETS								
TOTAL INCOME (NON SALES)	\$129,295	\$146,377	\$113,654	\$127,771	\$130,326	\$132,933	\$135,591	\$138,303
AVERAGE NON SALES INCOME		\$137,836	\$129,775	\$129,274	\$129,532	\$126,171	\$131,655	\$134,288
Portion of (Non Sales) Revenue Guaranteed :				\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Percent Applied Towards Fixed Rate RTS Charge - PERCENT applied per REU				35%	35%	35%	35%	35%
ANNUAL DOLLARS APPLIED TOWARDS <u>FIXED BUDGET</u> - BASE RATE - RTS				\$25,901	\$25,901	\$25,901	\$25,901	\$25,901
TOTAL ANNUAL RESIDENTIAL EQUIVALENT UNITS "REU'S"				52,950	52,950	52,950	52,950	52,950
REDUCTION PER REU PER BILLING PERIOD				\$0.49	\$0.49	\$0.49	\$0.49	\$0.49
ANNUAL DOLLARS APPLIED TOWARDS <u>VARIABLE BUDGET</u> - PER UNIT				\$49,099	\$49,099	\$49,099	\$49,099	\$49,099
ANNUAL UNITS OF WATER OR SEWER INVOICED				198,050	92,001	198,050	198,050	
REDUCTION PER UNIT OF WATER OR SEWER				\$0.25	\$0.53	\$0.25	\$0.25	

A portion of this revenue will be re-applied back to the water budget to help lower the water rates.

PRIOR YEAR ACTUALS EXPENSES (COMPARISON PURPOSES ONLY)	PRIOR YEAR ACTUALS EXPENSES (COMPARISON PURPOSES ONLY)	PRIOR YEAR ACTUALS EXPENSES (COMPARISON PURPOSES ONLY)	MICHIGAN RURAL WATER ASSOCIATION RATE EVALUATION PROGRAM	YEAR 2	YEAR 3	YEAR 4	YEAR 5	
YEAR OF	YEAR OF	YEAR OF	Grand Ledge Water	PROPOSED BUDGET FOR FISCAL YEAR	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	
FY 2019 ACTUALS	FY 2020 ACTUALS	2021 Budget	ANNUAL PERCENT INCREASE	2.00%	2.00%	2.00%	2.00%	
			Dept: 591.544 PUMPING	2021	2022	2023	2024	2025
\$10,355	\$12,955	\$13,394	703.000 SALARIES/WAGES	\$22,781	\$23,237	\$23,701	\$24,175	\$24,659
				\$0	\$0	\$0	\$0	\$0
\$1,110	\$1,317	\$1,017	703.100 OVERTIME	\$1,116	\$1,138	\$1,161	\$1,184	\$1,208
				\$0	\$0	\$0	\$0	\$0
\$6,080	\$6,783	\$7,166	719.000 FRINGE BENEFITS	\$12,449	\$12,698	\$12,952	\$13,211	\$13,475
				\$0	\$0	\$0	\$0	\$0
\$1,934	\$2,257	\$2,000	776.000 MAINTENANCE SUPPLIES	\$2,000	\$2,040	\$2,081	\$2,122	\$2,165
				\$0	\$0	\$0	\$0	\$0
\$50,589	\$50,009	\$56,250	921.000 UTILITIES	\$56,250	\$57,375	\$58,523	\$59,693	\$60,887
				\$0	\$0	\$0	\$0	\$0
\$2,799	\$22,826	\$20,000	937.000 EQUIPMENT MAINTENANCE	\$20,000	\$20,400	\$20,808	\$21,224	\$21,649
				\$0	\$0	\$0	\$0	\$0
\$72,867	\$96,147	\$99,827	Dept: 591.544 PUMPING	\$114,596	\$116,888	\$119,226	\$121,610	\$124,043

PRIOR YEAR ACTUALS EXPENSES (COMPARISON PURPOSES ONLY)	PRIOR YEAR ACTUALS EXPENSES (COMPARISON PURPOSES ONLY)	PRIOR YEAR ACTUALS EXPENSES (COMPARISON PURPOSES ONLY)	MICHIGAN RURAL WATER ASSOCIATION RATE Grand Ledge Water	EVALUATION PROGRAM PROPOSED BUDGET FOR FISCAL YEAR	YEAR 2	YEAR 3	YEAR 4	YEAR 5
					NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR
YEAR OF FY 2019 ACTUALS	YEAR OF FY 2020 ACTUALS	YEAR OF 2021 Budget	Dept: 591.545 WATER TREATMENT	ANNUAL PERCENT INCREASE	2.00%	2.00%	2.00%	2.00%
				2021	2022	2023	2024	2025
\$10,721	\$6,969	\$22,260	703.000 SALARIES/WAGES	\$24,792	\$25,288	\$25,794	\$26,309	\$26,836
					\$0	\$0	\$0	\$0
\$125	\$422	\$704	703.100 OVERTIME	\$752	\$767	\$782	\$798	\$814
					\$0	\$0	\$0	\$0
\$6,268	\$3,888	\$11,909	719.000 FRINGE BENEFITS	\$13,407	\$13,675	\$13,949	\$14,228	\$14,512
					\$0	\$0	\$0	\$0
\$9,261	\$10,385	\$10,000	776.000 MAINTENANCE SUPPLIES	\$10,500	\$10,710	\$10,924	\$11,143	\$11,366
					\$0	\$0	\$0	\$0
\$9,593	\$8,622	\$10,500	777.000 CHEMICALS	\$11,025	\$11,246	\$11,470	\$11,700	\$11,934
					\$0	\$0	\$0	\$0
\$10,721	\$10,885	\$10,000	811.000 CONTRACTUAL	\$10,000	\$10,200	\$10,404	\$10,612	\$10,824
					\$0	\$0	\$0	\$0
\$33,670	\$37,939	\$40,000	921.000 UTILITIES	\$40,000	\$40,800	\$41,616	\$42,448	\$43,297
					\$0	\$0	\$0	\$0
\$9,629	\$11,073	\$10,000	937.000 EQUIPMENT MAINTENANCE	\$10,000	\$10,200	\$10,404	\$10,612	\$10,824
					\$0	\$0	\$0	\$0
\$89,988	\$90,183	\$115,373	Dept: 591.545 WATER TREATMENT	\$120,476	\$122,886	\$125,343	\$127,850	\$130,407

ACTUALS EXPENSES FROM PREVIOUS YEARS			GRAND LEDGE WATER ASSOCIATION	RATE EVALUATION PROGRAM	YEAR 2	YEAR 3	YEAR 4	YEAR 5
YEAR OF	YEAR OF	YEAR OF	Grand Ledge Water	PROPOSED BUDGET FOR FISCAL YEAR	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR
FY 2019 ACTUALS	FY 2020 ACTUALS	2021 Budget	Dept: 591.546 TRANSMISSION AND DISTRIBUTION	2021	2022	2023	2024	2025
					2.00%	2.00%	2.00%	2.00%
\$154,797	\$206,203	\$203,103	703.000 SALARIES/WAGES	\$217,756	\$222,111	\$226,553	\$231,084	\$235,706
					\$0	\$0	\$0	\$0
\$23,759	\$22,688	\$21,494	703.100 OVERTIME	\$21,722	\$22,156	\$22,600	\$23,052	\$23,513
					\$0	\$0	\$0	\$0
\$80,648	\$109,434	\$108,660	719.000 FRINGE BENEFITS	\$111,508	\$113,739	\$116,013	\$118,334	\$120,700
					\$0	\$0	\$0	\$0
\$25,739	\$22,448	\$20,000	776.000 MAINTENANCE SUPPLIES	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473
					\$0	\$0	\$0	\$0
\$36,014	\$25,377	\$40,466	811.000 CONTRACTUAL	\$44,513	\$45,403	\$46,311	\$47,238	\$48,182
					\$0	\$0	\$0	\$0
\$4,444	\$4,313	\$5,000	921.000 UTILITIES	\$5,000	\$5,100	\$5,202	\$5,306	\$5,412
					\$0	\$0	\$0	\$0
\$843	\$17,159	\$30,000	931.000 BUILDING MAINTENANCE	\$30,000	\$30,600	\$31,212	\$31,836	\$32,473
					\$0	\$0	\$0	\$0
\$51,172	\$3,250	\$54,000	936.001 MAINTENANCE OF TOWERS - subtract 1 time expenses	\$50,000	\$51,000	\$52,020	\$53,060	\$54,122
					\$0	\$0	\$0	\$0
\$5,985	\$23,264	\$0	936.002 MAINTENANCE OF SERVICE - 100,000 - LISTED ON FINAL PAGE	\$0	\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0
\$192,595	\$239,234	\$0	936.003 MAINTENANCE OF METERS - \$150,000 LISTED ON FINAL PAGE	\$0	\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0
\$0	\$0	\$4,500	936.004 MAINTENANCE OF HYDRANTS	\$4,500	\$4,590	\$4,682	\$4,775	\$4,871
					\$0	\$0	\$0	\$0
\$18,160	\$42,564	\$32,970	936.005 MAINTENANCE OF MAINS	\$32,970	\$33,629	\$34,302	\$34,988	\$35,688
					\$0	\$0	\$0	\$0
\$7,819	\$5,470	\$17,500	937.000 EQUIPMENT MAINTENANCE	\$17,500	\$17,850	\$18,207	\$18,571	\$18,943
					\$0	\$0	\$0	\$0
\$4,346	\$11,045	\$10,000	940.000 EQUIPMENT RENTAL	\$12,000	\$12,240	\$12,485	\$12,734	\$12,989
\$606,322	\$732,449	\$547,693	Dept: 591.546 TRANSMISSION AND	\$577,469	\$589,019	\$600,799	\$612,815	\$625,072

ACTUALS EXPENSES FROM PREVIOUS YEARS (COMPARISON PURPOSES ONLY)			MICHIGAN RURAL WATER ASSOCIATION Grand Ledge Water	PROPOSED BUDGET FOR FISCAL YEAR	YEAR 2	YEAR 3	YEAR 4	YEAR 5
YEAR OF	YEAR OF	YEAR OF	ANNUAL PERCENT INCREASE	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR	NEW BUDGET FOR YEAR
FY 2019 ACTUALS	FY 2020 ACTUALS	2021 Budget	Dept: 591.548 WATER-GENERAL EXPENSE	2021	2022	2023	2024	2025
\$75,002	\$52,418	\$47,865	703.000 SALARIES/WAGES	\$45,000	\$45,900	\$46,818	\$47,754	\$48,709
					\$0	\$0	\$0	\$0
\$1,220	\$309	\$855	703.100 OVERTIME	\$329	\$336	\$342	\$349	\$356
					\$0	\$0	\$0	\$0
\$43,199	\$29,007	\$25,608	719.000 FRINGE BENEFITS	\$26,787	\$27,322	\$27,869	\$28,426	\$28,995
					\$0	\$0	\$0	\$0
\$1,540	\$2,047	\$1,500	726.000 PERSONNEL ADMINISTRATION	\$1,500	\$1,530	\$1,561	\$1,592	\$1,624
					\$0	\$0	\$0	\$0
\$4,121	\$1,281	\$2,800	728.000 OFFICE SUPPLIES	\$2,800	\$2,856	\$2,913	\$2,971	\$3,031
					\$0	\$0	\$0	\$0
\$9,618	\$4,632	\$8,000	728.001 POSTAGE	\$8,000	\$8,160	\$8,323	\$8,490	\$8,659
					\$0	\$0	\$0	\$0
\$947	\$1,080	\$3,300	744.000 UNIFORMS	\$3,300	\$3,366	\$3,433	\$3,502	\$3,572
					\$0	\$0	\$0	\$0
\$59,508	\$90,447	\$34,872	801.000 ENGINEERING - subtract 1 time costs	\$38,555	\$39,326	\$40,113	\$40,915	\$41,733
					\$0	\$0	\$0	\$0
\$2,164	\$11,452	\$2,000	802.000 LEGAL FEES subtract 1 time costs	\$2,000	\$2,040	\$2,081	\$2,122	\$2,165
					\$0	\$0	\$0	\$0
\$7,715	\$5,760	\$3,604	802.010 LABOR ATTORNEY	\$8,000	\$8,160	\$8,323	\$8,490	\$8,659
					\$0	\$0	\$0	\$0
\$437	\$629	\$500	803.000 TRASH REMOVAL	\$500	\$510	\$520	\$531	\$541
					\$0	\$0	\$0	\$0
\$1,001	\$685	\$2,500	811.001 CONTRACTUAL - COMPUTER	\$2,500	\$2,550	\$2,601	\$2,653	\$2,706
					\$0	\$0	\$0	\$0
\$5,912	\$3,881	\$6,000	811.003 MDEQ FEES	\$6,000	\$6,000	\$6,120	\$6,242	\$6,367
					\$0	\$0	\$0	\$0
\$3,403	\$6,439	\$5,000	824.000 TRAINING	\$5,000	\$5,000	\$5,100	\$5,202	\$5,306
					\$0	\$0	\$0	\$0
\$10,853	\$10,430	\$10,948	840.000 INSURANCE	\$10,948	\$10,948	\$11,167	\$11,390	\$11,618
					\$0	\$0	\$0	\$0
\$8,140	\$10,165	\$6,500	853.000 TELEPHONE/INTERNET	\$6,825	\$6,825	\$6,962	\$7,101	\$7,243
					\$0	\$0	\$0	\$0
\$3,029	\$2,678	\$2,000	900.000 PRINTING/PUBLISHING	\$2,000	\$2,000	\$2,040	\$2,081	\$2,122
					\$0	\$0	\$0	\$0
\$2,399	\$0	\$2,400	923.000 PROPERTY TAXES & ASSESSMENTS	\$2,400	\$2,400	\$2,448	\$2,497	\$2,547
					\$0	\$0	\$0	\$0
\$1,106	\$0	\$5,000	936.006 WELL MAINTENANCE	\$5,000	\$5,000	\$5,100	\$5,202	\$5,306
					\$0	\$0	\$0	\$0
\$266,558	\$266,008	\$0	959.000 DEPRECIATION	\$0	\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0
\$0	\$0	\$0	975.000 BUILDING	\$0	\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0
\$60,840	\$7,440	\$0	977.000 EQUIPMENT Listed on replacement schedule	\$0	\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0
\$28,372	\$37,432	\$0	981.001 VEHICLE REPLACEMENT- Lised in capital improvements	\$0	\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0
\$0	\$0	\$0	991.000 DEBT-PRINCIPAL - LISTED ON SEPARATE PAGE	\$0	\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0
\$55,445	\$73,703	\$0	995.000 DEBT-INTEREST - LISTED ON SEPARATE PAGE	\$0	\$0	\$0	\$0	\$0
					\$0	\$0	\$0	\$0

\$145,000	\$147,069	\$152,403	997.101 INDIRECT COST CHARGES	\$157,623	\$160,775	\$163,990	\$167,270	\$170,616
					\$0	\$0	\$0	\$0
\$188	\$125	\$150	998.000 DEBT-PAYING AGENT FEES	\$150	\$153	\$156	\$159	\$162
\$797,714	\$765,117	\$323,805	Dept: 591.548 WATER-GENERAL EXPENSE	\$335,216	\$341,157	\$347,980	\$354,940	\$362,038

Grand Ledge Water	
PROPOSED NEW LOAN CALCULATION	
No Tax revenue or special assessment revenue is applied to these payments	
PROPOSED NEW DEBT - TOTAL FUNDED	\$14,810,000
INTEREST RATE	2.95%
LENGTH OF LOAN (YEARS)	40
ANNUAL PAYMENT	\$635,547
ESTIMATED COST PER REU	\$12.00
LOAN ORIGATION YEAR	2021
WHAT YEAR IS LOAN PAID OFF	2061
IS DEBT LISTED SEPARATELY ON WATER BILL	
IF USDA RD LOAN ESTIMATE RESERVE	
ESTIMATE BOND RESERVE = 10% OF PAYMENT	\$63,555
ESTIMATE USDA RRI ANNUAL RESERVE = 15% OF PAYMENT	\$95,332
ESTIMATED USDA TOTAL RESERVE	\$158,887
ESTIMATED COST FOR USDA RESERVE FUNDING	\$3.00
ESTIMATED TOTAL COST PER REU FOR LOAN AND RESERVE FUNDING	\$15.00

NOTE: **USDA LOANS ONLY** -
 ONCE BOND RESERVE IS FULLY FUNDED IN YEAR 10 - ALL BOND RESERVE ANNUAL FUNDING WOULD SHIFT TO RRI FUNDING. THUS THE TOTAL ANNUAL FUNDING WOULD NOT CHANGE FOR THE LIFE OF THE LOAN. THE RRI ANNUAL FUNDING OF 15% IS JUST A STARTING POINT / GUESS OF WHAT IS TYPICAL. THIS WILL BE ADJUSTED BASED ON EACH INDIVIDUAL SYSTEM. - MOVE OR DELETE THIS BOX IF NOT NEEDED.

		1	2	3	4	5	6	7	8	9	10
	FISCAL YEAR STARTING	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2014 Refunded complete 2025		\$343,463	\$343,463	\$343,463	\$343,463	\$343,463					
ESTIMATED COST PER REU	\$6.49	\$6.49	\$6.49	\$6.49	\$6.49	\$6.49					
DATE OF ISSUE	2004	NOTES									
DATE OF MATURITY	2025	AVERAGE ANNUAL		\$343,463							
PAID BY RATES	YES										
RESERVE REQUIREMENT	No										
2019 Capital Improvement Bonds		\$146,978	\$146,978	\$146,978	\$146,978	\$146,978	\$146,978	\$146,978	\$146,978	\$146,978	\$146,978
ESTIMATED COST PER REU	\$2.78	\$2.78	\$2.78	\$2.78	\$2.78	\$2.78					
DATE OF ISSUE	2020										
DATE OF MATURITY	2035										
PAID BY RATES	Yes										
RESERVE REQUIREMENT	no										
TOTAL CURRENT ANNUAL DEBT PAYMENTS		\$490,441	\$490,441	\$490,441	\$490,441	\$490,441	\$146,978	\$146,978	\$146,978	\$146,978	\$146,978
USDA RESERVE REQUIREMENTS		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CURRENT ANNUAL DEBT PAYMENTS		\$490,441	\$490,441	\$490,441	\$490,441	\$490,441	\$146,978	\$146,978	\$146,978	\$146,978	\$146,978
COST PER REU		\$9.26	\$9.26	\$9.26	\$9.26	\$9.26	\$2.78	\$2.78	\$2.78	\$2.78	\$2.78

NEW ANTICIPATED CAPITAL LOANS

		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Iron Removal Plant			\$0	\$0	\$794,000	\$794,000	\$794,000	\$794,000	\$794,000	\$794,000	\$794,000
COST PER REU	\$0.00	\$0.00	\$0.00	\$0.00	\$15.00	\$15.00					
DATE OF ISSUE	TBD										
DATE OF MATURITY	TBD										
PAID BY RATES	Yes										
RESERVE REQUIREMENT	Yes										
RESERVE REQUIREMENT	Yes										
River Crossing				\$209,993	\$209,993	\$209,993	\$209,993	\$209,993	\$209,993	\$209,993	\$209,993
COST PER REU	\$0.00	\$0.00	\$0.00	\$3.97	\$3.97	\$3.97					
DATE OF ISSUE	2023										
DATE OF MATURITY	2038										
PAID BY RATES	Yes										
RESERVE REQUIREMENT	No										
RESERVE REQUIREMENT											
Well Projects			\$453,100	\$453,100	\$453,100	\$453,100	\$453,100	\$453,100	\$453,100	\$453,100	\$453,100
COST PER REU	\$0.00	\$0.00	\$8.56	\$8.56	\$8.56	\$8.56					
DATE OF ISSUE	2023										
DATE OF MATURITY	2038										
PAID BY RATES	Yes										
RESERVE REQUIREMENT	No										
RESERVE REQUIREMENT											
NEW ANTICIPATED CAPITAL LOANS		\$0	\$453,100	\$663,093	\$1,457,093	\$1,457,093	\$1,457,093	\$1,457,093	\$1,457,093	\$1,457,093	\$1,457,093
EXISTING + NEW		\$490,441	\$943,541	\$1,153,534	\$1,947,534	\$1,947,534	\$1,604,071	\$1,604,071	\$1,604,071	\$1,604,071	\$1,604,071

Grand Ledge Water

EQUIPMENT REPLACEMENT SHORT LIVED ASSETS

2021

SHORT LIVED ASSETS SOMEWHERE BETWEEN 0-15 OR 20 YEARS

YOUR ANTICIPATED NORMAL INTENDED USEFUL LIFE OR YEARS BETWEEN REHAB SHOULD BE BASED ON PAST MAINTENANCE HISTORY, WELL MAINTENANCE RECORDS AND WATER TOWER INSPECTION REPORTS. - A COPY OF THESE REPORTS SHOULD BE INCLUDED IN YOUR RATE EVALUATION AS AN ATTACHEMET OR APPENDIX --- ALSO NOTE YOU ARE APPLYING FOR A USDA RURAL DEVELOPMENT GRANT OR HOPE TO GET A USDA GRANT - THE REMAINING YEARS OF LIFE FOR ANY EQUIPMENT CAN NOT EXCEED 15 YEARS. FOR ANYTHING - WATER METERS WATER TOWER PAINTING ECT. ONCE THE USEFUL LIFE OR NEXT ANTICIPATED MAINTENANCE IS LESS THAN 15 YEARS AWAY IT CAN BE LISTED HERE,

FIXED ASSET INVENTORY		ASSET REPLACEMENT SCHEDULE								
EQUIPMENT LIST / MAINTENANCE ACTIVITY	DESCRIPTION / MAINTENANCE HISTORY	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	REPLACEMENT MONEY RESERVED ANNUALLY
IRON REMOVAL PLANT										
HIGH SERVICE PUMP 1 - 1500	NEW IN 1989 & REHABED 2017	2017	15	4	2032	11	\$18,000	73%	27%	\$1,200
HIGH SERVICE PUMP 2 - 1000	NEW 1989 REHABED 2005 & 2018	2018	15	3	2033	12	\$18,000	80%	20%	\$1,200
HIGH SERVICE PUMP 3 - 500	NEW 1989/ Rebuilt and upgraded 2019	2019	20	2	2039	18	\$10,000	90%	10%	\$500
FILTER MEDIA REPLACEMENT & PAINT INTERIOR		2009	20	12	2029	8	\$25,000	40%	60%	\$1,250
BLOWER MOTORS 1	covered under O & M	2019	15	2	2034	13	\$1	87%	13%	\$0
BLOWER MOTORS 2	covered under O & M	2019	15	2	2034	13	\$1	87%	13%	\$0
CHEMICAL FEED SYSTEM - FL & CHL & PSP PUMPS PACE UNIT - SCALES ETC.		2017	10	4	2027	6	\$18,000	60%	40%	\$1,800
ELECTRICAL CONTROLS / SCADA		2016	10	5	2026	5	\$25,000	50%	50%	\$2,500
FLOW METERS 2 UNITS		2016	20	5	2036	15	\$14,000	75%	25%	\$700
PRESSURE TRANSMITTER	covered under O & M	2014	15	7	2029	8	\$1	53%	47%	\$0
VFD DRIVE 3 UNITS -10K EACH	High service 3 new VFD 2019	2005	20	16	2025	4	\$30,000	20%	80%	\$1,500
ROTORK VALVE	PARTIAL / REHABED IN 2014 -NEW SEALS ETC \$1500	2005	25	16	2030	9	\$15,000	36%	64%	\$600
W-8 4X X PICKUP 2/4 TON	INCLUDES PLOWS & SERVICE BODY 10K	2016	8	5	2024	3	\$38,500	38%	63%	\$4,813
Dump Truck		2005	20	16	2025	4	\$150,000	20%	80%	\$7,500
Backhoe		2003	20	18	2023	2	\$115,000	10%	90%	\$5,750
Air Compressor		2008	20	13	2028	7	\$25,000	35%	65%	\$1,250
2018 Dodge PICKUP 4x4	INCLUDES PLOWS & SERVICE BODY 10K	2018	8	3	2026	5	\$38,500	63%	38%	\$4,813
2019 4x 4 Dodge PICKUP	INCLUDES PLOWS & SERVICE BODY 10K	2019	8	2	2027	6	\$38,500	75%	25%	\$4,813
W-4 PICKUP		2014	10	7	2024	3	\$20,000	30%	70%	\$2,000
IRON PLANT ROOF		2009	20	12	2029	8	\$20,000	40%	60%	\$1,000
BOOSTER PUMP STATION										
Generator/Cummins 250KWH DQDAA - W/ SWITCHGEAR		2005	40	16	2045	24	\$125,000	60%	40%	\$3,125
Split Case Pumps/Pentair Aurora 06-1411125-2 - PUMP 1 - 20K EACH size 8x8x11B		2005	20	16	2025	4	\$20,000	20%	80%	\$1,000
Split Case Pumps/Pentair Aurora 06-1411125-2 - PUMP 2 - 20K EACH size 8x8x11B		2005	20	16	2025	4	\$20,000	20%	80%	\$1,000
Split Case Pumps/Pentair Aurora 06-1411125-2 - PUMP 3 - 20K EACH size 8x8x11B	Rehabed 2014	2005	20	16	2025	4	\$20,000	20%	80%	\$1,000
AURORA Electric Motors D75V2B - 3 UNITS		2005	20	16	2025	4	\$20,000	20%	80%	\$1,000
Krohne 12" MAG Flowmeter	covered under O & M	2005	20	16	2025	4	\$1	20%	80%	\$0
Krohne 16" MAG Flowmeter		2005	20	16	2025	4	\$13,400	20%	80%	\$670
Control Panel/Allen Bradley Panelview Plus 1250	covered under O & M	2018	15	3	2033	12	\$1	80%	20%	\$0
VFD DRIVE 3 UNITS - ONE FOR EACH PUMP	\$10K EACH	2005	20	16	2025	4	\$30,000	20%	80%	\$1,500
Electric Panel/Gear		2005	20	16	2025	4	\$10,000	20%	80%	\$500
Singer Pressure Reducing Valves (2)		2005	20	16	2025	4	\$13,000	20%	80%	\$650
Singer Pressure Reducing Valves (1)	covered under O & M	2005	20	16	2025	4	\$1	20%	80%	\$0
Singer Pressure Reducing Valves (1)	covered under O & M	2005	20	16	2025	4	\$1	20%	80%	\$0
Rotork Actuator (1)		2005	20	16	2025	4	\$15,350	20%	80%	\$768
Rotork Actuator (1)		2005	20	16	2025	4	\$13,100	20%	80%	\$655
ETEK PSI Gauge Transmitter	covered under O & M	2005	20	16	2025	4	\$1	20%	80%	\$0
CHLORINE FEED SYSTEM	covered under O & M	2018	15	3	2033	12	\$1	80%	20%	\$0
UND STORAGE TANK EXTERIOR PAINTING		2005	20	16	2025	4	\$20,000	20%	80%	\$1,000

Grand Ledge Water

EQUIPMENT REPLACEMENT SHORT LIVED ASSETS

2021

YOUR ANTICIPATED NORMAL INTENDED USEFUL LIFE OR YEARS BETWEEN REHAB SHOULD BE BASED ON PAST MAINTENANCE HISTORY, WELL MAINTENANCE RECORDS AND WATER TOWER INSPECTION REPORTS. - A COPY OF THESE REPORTS SHOULD BE INCLUDED IN YOUR RATE EVALUATION AS AN ATTACHEMET OR APPENDIX --- ALSO NOTE YOU ARE APPLYING FOR A USDA RURAL DEVELOPMENT GRANT OR HOPE TO GET A USDA GRANT - THE REMAINING YEARS OF LIFE FOR ANY EQUIPMENT CAN NOT EXCEED 15 YEARS. FOR ANYTHING - WATER METERS WATER TOWER PAINTING ECT. ONCE THE USEFUL LIFE OR NEXT ANTICIPATED MAINTENANCE IS LESS THAN 15 YEARS AWAY IT CAN BE LISTED HERE,

SHORT LIVED ASSETS SOMEWHERE BETWEEN 0-15 OR 20 YEARS

FIXED ASSET INVENTORY		ASSET REPLACEMENT SCHEDULE								
EQUIPMENT LIST / MAINTENANCE ACTIVITY	DESCRIPTION / MAINTENANCE HISTORY	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	REPLACEMENT MONEY RESERVED ANNUALLY
WATER TOWER 500K INTERIOR PAINT	AVG OF SAND BLAST EVERY 3RD PAINTING VS NON SAND BLAST	2018	18	3	2036	15	\$200,000	83%	17%	\$11,111
WATER TOWER 500K EXTERIOR PAINT	AVG OF SAND BLAST EVERY 3RD PAINTING VS NON SAND BLAST	2018	15	3	2033	12	\$200,000	80%	20%	\$13,333
WATER TOWER 500K DRY INTERIOR	AVG OF SAND BLAST EVERY 3RD PAINTING VS NON SAND BLAST	2018	15	3	2033	12	\$75,000	80%	20%	\$5,000
WATER TOWER 100K INTERIOR PAINT	AVG OF SAND BLAST EVERY 3RD PAINTING VS NON SAND BLAST	2004	25	17	2029	8	\$60,000	32%	68%	\$2,400
WATER TOWER 100K EXTERIOR PAINT	AVG OF SAND BLAST EVERY 3RD PAINTING VS NON SAND BLAST	2004	18	17	2022	1	\$125,000	6%	94%	\$6,944
Allied jack hammer	Backhoe mounted	2018	10	3	2028	7	\$15,000	70%	30%	\$1,500
HAND HELD METER READ 1		2016	10	5	2026	5	\$10,000	50%	50%	\$1,000
HAND HELD METER READ 2		2018	10	3	2028	7	\$10,000	70%	30%	\$1,000
RELIABILITY STUDY / GENERAL PLAN UPDATE	DONE EVERY 5 YRS	2017	5	4	2022	1	\$15,000	20%	80%	\$3,000
UB reader/Truck mount		2018	10	3	2028	7	\$30,000	70%	30%	\$3,000
Customer Meters		2021	17	0	2038	17	\$150,000	100%	0%	\$8,824
Customer Meters		2020	17	1	2037	16	\$150,000	94%	6%	\$8,824
Customer Meters		2019	17	2	2036	15	\$150,000	88%	12%	\$8,824
Customer Meters		2017	17	4	2034	13	\$150,000	76%	24%	\$8,824
Customer Meters		2015	17	6	2032	11	\$150,000	65%	35%	\$8,824
Customer Meters		2013	17	8	2030	9	\$150,000	53%	47%	\$8,824
							\$2,578,359	43%		\$ 157,286

Grand Ledge Water EQUIPMENT REPLACEMENT PAGE 2									
2021									
MID-TERM ASSETS 15-30 YEARS									
FIXED ASSET INVENTORY		ASSET REPLACEMENT SCHEDULE							ANNUAL RESERVE
EQUIPMENT LIST / MAINTENANCE ACTIVITY	DESCRIPTION / MAINTENANCE HISTORY	ORIGINAL INSTALLATION YEAR	NORMAL INTENDED USEFUL LIFE	CURRENT AGE	NEXT REPLACEMENT YEAR	REMAINING LIFE YEARS BEFORE REPLACEMENT	TOTAL REPLACEMENT COST	PERCENT CONSUMED	REPLACEMENT MONEY RESERVED ANNUALLY
Electric Motor 40 h.p./GE5K404XA17H - WELL 2	covered under O & M	1995	40	26	2035	14	\$1	65%	\$0
Water Specialties Flow Meter 6"	covered under O & M	2007	15	14	2022	1	\$1	93%	\$0
Hypochlorinator	covered under O & M	2017	8	4	2025	4	\$1	50%	\$0
Electric Gear/Panels	covered under O & M	2005	18	16	2023	2	\$1	89%	\$0
Check Valve	covered under O & M	2005	25	16	2030	9	\$1	64%	\$0
Phosphate Pump	covered under O & M	2017	8	4	2025	4	\$1	50%	\$0
Air Vacuum Valve	covered under O & M	2005	25	16	2030	9	\$1	64%	\$0
WELL PUMP		1995	40	26	2035	14	\$45,000	65%	\$1,125
WELL CLEANING	covered under O & M	1995	30	26	2025	4	\$1	87%	\$0
WELL 8 - 1980's									
Electric Motor A286TPA 30 h.p.	covered under O & M	2015	20	6	2035	14	\$1	30%	\$0
Check Valve Apco Swing	covered under O & M	1996	35	25	2031	10	\$1	71%	\$0
Check Valve 8"	covered under O & M	1996	30	25	2026	5	\$1	83%	\$0
Flow Meter Water Specialties 8"	covered under O & M	1996	25	25	2021	0	\$1	100%	\$0
Electric Gear/Panels	covered under O & M	1996	25	25	2021	0	\$1	100%	\$0
Air Vacuum Valve	covered under O & M	1996	25	25	2021	0	\$1	100%	\$0
WELL PUMP		2015	10	6	2025	4	\$45,000	60%	\$4,500
WELL CLEANING	covered under O & M	2011	20	10	2031	10	\$1	50%	\$0
WELL 8 VFD DRIVE	covered under O & M	2021	15	0	2036	15	\$1	0%	\$0
WELL 7 - 1970's									
Electric Motor 346TP 50 h.p.	covered under O & M	2018	20	3	2038	17	\$1	15%	\$0
Flow Meter Water Specialties 8"	covered under O & M	2005	20	16	2025	4	\$1	80%	\$0
Check Valve	covered under O & M	1984	40	37	2024	3	\$1	93%	\$0
(2) Valves - GATE VALVES	covered under O & M	1984	40	37	2024	3	\$1	93%	\$0
Generator 125 KWH		2005	33	16	2038	17	\$50,000	48%	\$1,515
WELL PUMP	REHAB 2011 & 2018	2018	10	3	2028	7	\$45,000	30%	\$4,500
WELL CLEANING	covered under O & M	2018	20	3	2038	17	\$1	15%	\$0
WELL 7 VFD DRIVE		2018	15	3	2033	12	\$10,000	20%	\$667
WELL 6 1950'S									
Motor 75 h.p.	REHAB 2007 & 2016	2016	20	5	2036	15	\$10,000	25%	\$500
Generator	REBUILT ENGINE 2017	1989	45	32	2034	13	\$120,000	71%	\$2,667
Flow Meter	covered under O & M	2010	15	11	2025	4	\$1	73%	\$0

**Grand Ledge Water
EQUIPMENT REPLACEMENT PAGE 2**

2021

MID-TERM ASSETS 15-30 YEARS

FIXED ASSET INVENTORY									ANNUAL RESERVE
		ASSET REPLACEMENT SCHEDULE							
EQUIPMENT LIST / MAINTENANCE ACTIVITY	DESCRIPTION / MAINTENANCE HISTORY	ORIGINAL INSTALLATION YEAR	NORMAL INTENDED USEFUL LIFE	CURRENT AGE	NEXT REPLACEMENT YEAR	REMAINING LIFE YEARS BEFORE REPLACEMENT	TOTAL REPLACEMENT COST	PERCENT CONSUMED	REPLACEMENT MONEY RESERVED ANNUALLY
Electric Panel/Gear	covered under O & M	2016	20	5	2036	15	\$1	25%	\$0
Air Vacuum Valve	covered under O & M	2007	20	14	2027	6	\$1	70%	\$0
WELL PUMP	REHAB 2007 & 2016	2016	10	5	2026	5	\$45,000	50%	\$4,500
WELL CLEANING	covered under O & M	2015	20	6	2035	14	\$1	30%	\$0
WELL 6 VFD DRIVE		2019	15	2	2034	13	\$10,000	13%	\$667
							\$380,024		\$ 20,641

MICHIGAN RURAL WATER ASSOCIATION
RATE EVALUATION PROGRAM

Grand Ledge Water	2021					
CAPITAL IMPROVEMENT PROJECTS S		Projects are determined at 60% water 40% sewer				
CAPITAL IMPROVEMENT IDEAS WERE GENERATED FROM RELIABILITY STUDY, CITY STAFF AND CITY ENGINEER						
ENTER ITMES ON THIS PAGE FIRST - THEN SEE INDIVIDUAL PAGES FOR ENTERING DETAILS ON EACH PROJECT -						
CAPITAL PROJECTS - FOR DETAILS OF EACH PROJECT SEE INDIVIDUAL PAGES	PRIORITY	ESTIMATED PROJECT COST	RATES / CASH CONTRIBUTION	AMOUNT FINANCED	COMPLETE IN YEAR OF	MONEY NEEDED ANNUALLY
Railroad crossing pipe replacement - 2019 bonds		\$0	\$0	\$0	2021	
River Crossing*		\$2,500,000	\$0	\$2,500,000	2023	\$0
Road Project 2023		\$175,000	\$175,000	\$0	2023	\$87,500
Green St. Reconstruction, Seminary St to W South		\$175,000	\$175,000	\$0	2022	\$175,000
Spring St Walnut to Kent		\$175,000	\$175,000	\$0	2024	\$58,333
Union Street Phase 2		\$250,000	\$250,000	\$0	2026	\$50,000
Union Street Phase 1		\$250,000	\$250,000	\$0	2025	\$62,500
Orchard St, Clinton to Morley - 2019 bonds		\$0	\$0	\$0	2021	
Water Tower budgeted			\$0	\$0	2021	
Well 2 raw water line		\$2,500,000	\$0	\$2,500,000	2022	\$0
Well 9 construction		\$1,000,000	\$0	\$1,000,000	2022	\$0
WELL 10 DEVELOPMENT*		\$2,000,000	\$0	\$2,000,000	2022	\$0
Annual Rate Contingency		\$138,383		\$138,383	2021	
TOTALS		\$9,163,383	\$1,025,000	\$8,138,383		\$433,333

MICHIGAN RURAL WATER ASSOCIATION
RATE EVALUATION PROGRAM

CAPITAL IMPROVEMENT RUNNING BALANCE PROJECTIONS & ANNUAL FUNDING					
ANNUAL COST OF LIVING INCREASE TO PROJECTS					2.00%
CURRENT RESERVE BALANCE APPLIED TO CAPITAL IMPROVEMENTS					\$1,000,000
AVG. INTEREST RATE IN SAVINGS					0.00%
IF AN ANNUAL COLA RATE ADJUSTMENT PERCENT OF					0.00%
YEAR	RATES / CASH CONTRIBUTION	EXTRA FUNDING FROM ?	AVERAGE ANNUAL FUNDING AMOUNT IN RATE BUDGET	TOTAL COMBINED ANNUAL FUNDING	RUNNING BALANCE
2021	\$0		\$822,000	\$822,000	\$1,822,000
2022	\$178,500	\$0	\$822,000	\$822,000	\$2,465,500
2023	\$182,000	\$0	\$822,000	\$822,000	\$3,105,500
2024	\$185,500	\$0	\$822,000	\$822,000	\$3,742,000
2025	\$270,000	\$0	\$822,000	\$822,000	\$4,294,000
2026	\$275,000	\$0	\$822,000	\$822,000	\$4,841,000
2027	\$0	\$0	\$822,000	\$822,000	\$5,663,000
2028	\$0	\$0	\$822,000	\$822,000	\$6,485,000
2029	\$0	\$0	\$822,000	\$822,000	\$7,307,000
2030	\$0	\$0	\$822,000	\$822,000	\$8,129,000
2031	\$0	\$0	\$822,000	\$822,000	\$8,951,000
2032	\$0	\$0	\$822,000	\$822,000	\$9,773,000
2033	\$0	\$0	\$822,000	\$822,000	\$10,595,000
2034	\$0	\$0	\$822,000	\$822,000	\$11,417,000

LOAN INFORMATION CAPITAL PROJECTS						
THESE LOAN PAYMENTS WILL NEED TO BE MANUALLY ENTERED INTO THE DEBT SCHEDULE PAGE						
41 DEBT SCHEDULE PAGE						
INTEREST RATE LENGTH IN YEARS OF LOAN						
2.00%						
YEAR	ESTIMATED AMOUNT FINANCED with COLA	INTEREST RATE	LENGTH OF LOAN IN YEARS	CASH CONTRIBUTION	ESTIMATED ANNUAL LOAN PAYMENT	COST PER REU
2021	\$0			\$0		
2022	\$5,610,000	2.50%	15	\$178,500	\$453,100	\$8.56
2023	\$2,600,000	2.50%	15	\$182,000	\$209,993	\$3.97
2024	\$0			\$0		
2025	\$0			\$0		
2026	\$0			\$0		
2027	\$0			\$0		
2028	\$0			\$0		
2029	\$0			\$0		
2030	\$0			\$0		
2031	\$0			\$0		
2032	\$0			\$0		
2033	\$0			\$0		
2034	\$0			\$0		

SUMMARY OF NEW CHARGES "ALL ENTITIES"

City Water < 4,000						City Water > 4,000		Township < 4,000		Township > 4,000	
CURRENT		NEW		PERCENT INCREASE	DIFFERENCE	CURRENT	NEW	CURRENT	NEW	CURRENT	NEW
\$5.04		\$5.30		5.2%	\$0.26	\$6.83	\$7.18	\$10.08	\$10.60	\$13.66	\$14.36
CURRENT		NEW		PERCENT INCREASE	DIFFERENCE PER MONTH	CURRENT	NEW	CURRENT	NEW	CURRENT	NEW
READY TO SERVE PER MONTH	CURRENT / OLD METER RATIO REU'S PER METER SIZE	READY TO SERVE PER MONTH	METER RATIO FACTOR - REU'S PER METER SIZE			READY TO SERVE PER MONTH	READY TO SERVE PER MONTH	READY TO SERVE PER MONTH	READY TO SERVE PER MONTH	READY TO SERVE PER MONTH	READY TO SERVE PER MONTH
\$14.49	1.00	\$22.72	1.00	56.8%	\$8.23	\$0.00	\$0.00	\$28.98	\$45.44	\$0.00	\$0.00
\$36.23	2.50	\$56.81	2.50	56.8%	\$20.58	\$0.00	\$0.00	\$72.46	\$113.63	\$0.00	\$0.00
\$72.45	5.00	\$113.61	5.00	56.8%	\$41.16	\$0.00	\$0.00	\$144.90	\$227.22	\$0.00	\$0.00
\$115.92	8.00	\$181.78	8.00	56.8%	\$65.86	\$0.00	\$0.00	\$231.84	\$363.56	\$0.00	\$0.00
\$231.84	16.00	\$363.56	16.00	56.8%	\$131.72	\$0.00	\$0.00	\$463.68	\$727.11	\$0.00	\$0.00
\$362.25	25.00	\$568.06	25.00	56.8%	\$205.81	\$0.00	\$0.00	\$724.50	\$1,136.11	\$0.00	\$0.00
\$724.50	50.00	\$1,136.11	50.00	56.8%	\$411.61	\$0.00	\$0.00	\$1,449.00	\$2,272.22	\$0.00	\$0.00
\$1,449.00	100.00	\$2,272.22	100.00	56.8%	\$823.22	\$0.00	\$0.00	\$2,898.00	\$4,544.45	\$0.00	\$0.00

MICHIGAN RURAL WATER ASSOCIATION RATE EVALUATION PROGRAM

FINAL ANALYSIS RATE CALCULATION - CURRENT FISCAL YEAR		2021		2021		
City Water < 4,000	ANNUAL BUDGET	PERCENT FIXED EXPENSES	BASE RATE FIXED EXPENSES	COST PER REU	CONSUMPTION VARIABLE EXPENSES	VOLUME COST PER UNIT
Dept: 591.544 PUMPING	\$114,596	35%	\$39,575	\$0.75	\$75,021	\$0.294
Dept: 591.545 WATER TREATMENT	\$120,476	35%	\$41,606	\$0.79	\$78,870	\$0.309
Dept: 591.546 TRANSMISSION AND DISTRIBUTION	\$577,469	35%	\$199,426	\$3.77	\$378,043	\$1.483
Dept: 591.548 WATER-GENERAL EXPENSE	\$335,216	35%	\$115,765	\$2.19	\$219,451	\$0.861
OPERATION & MAINTENANCE EXPENSES	\$1,147,758		\$396,372	\$7.49	\$751,386	\$2.948
DEBT - PRINCIPAL & INTEREST ANNUAL PAYMENTS						
2014 Refunded complete 2025	\$343,463	100%	\$343,463	\$6.49	\$0	\$0.00
2019 Capital Improvement Bonds	\$146,978	100%	\$146,978	\$2.78	\$0	\$0.00
ANNUAL DEBT PAYMENTS PRINCIPAL & INTEREST	\$490,441		\$490,441	\$9.26	\$0	\$0.00
ANNUAL O & M + DEBT	\$1,638,199		\$886,813	\$16.75	\$751,386	\$2.95
"NON OPERATING" INCOME REDUCTION CONTRIBUTION				0.489		0.193
CALCULATED RATE O & M + DEBT	PER REU	MONTH	\$16.26			\$2.75
RESERVES						
EQUIPMENT REPLACEMENT SHORT LIVED ASSETS	\$55,000	35%	\$18,994	\$0.36	\$36,006	\$0.14
EQUIPMENT REPLACEMENT PAGE 2	\$14,000	35%	\$4,835	\$0.09	\$9,165	\$0.04
CAPITAL IMPROVEMENT	\$822,000	35%	\$283,873	\$5.36	\$538,127	\$2.11
Lead and Copper	\$100,000	35%	\$34,534	\$0.65	\$65,466	\$0.26
CAPITAL + EQUIPMENT & RRI RESERVES	\$991,000		\$342,237	\$6.46	\$648,763	\$2.55
ADOPTED BUDGET	\$2,629,199		\$1,229,050		\$1,400,149	
REVENUE COLLECTED THROUGH RATES	\$2,554,199		47% \$1,203,149		53% \$1,351,050	
CALCULATED RATE PER PER REU	PER	35%	MONTH	\$22.72	1,000 GAL.	\$5.30
ANNUAL EQUIVALENT REU'S 52,950			CURRENT RATES	\$14.49		\$5.04
ANTICIPATED EQUIVALENT GALLONS / UNITS 254,915			PERCENT INCREASE	56.8%		5.2%
INVOICES PER YEAR 12			INCREASE OF	\$8.23		\$0.26

TYPICAL BILL - WATER				OLD RTS \$14.49			\$ PER 1,000 GAL.
City Water < 4,000		COST PER UNIT OF WATER \$5.30	MONTHLY	OLD COST PER UNIT OF WATER \$5.04			
METER SIZE IN INCHES	GALLONS USED	VOLUME CHARGE	BASE RATE CHARGE	NEW BILL	OLD BILL	CHANGE IN BILL	PERCENT INCREASE
3/4	3,000	\$15.90	\$22.72	\$38.62	\$29.61	\$9.01	30.44%
3/4	4,000	\$21.20	\$22.72	\$43.92	\$34.64	\$9.28	26.80%
3/4	5,000	\$26.50	\$22.72	\$49.22	\$39.69	\$9.53	24.02%
3/4	6,000	\$31.80	\$22.72	\$54.52	\$44.73	\$9.79	21.89%
3/4	7,000	\$37.10	\$22.72	\$59.82	\$49.77	\$10.05	20.20%
1	50,000	\$265.00	\$56.81	\$321.81	\$288.23	\$33.58	11.65%
1 1/2	75,000	\$397.50	\$113.61	\$511.11	\$450.45	\$60.66	13.47%
2	100,000	\$530.00	\$181.78	\$711.78	\$619.92	\$91.86	14.82%
3	200,000	\$1,060.00	\$363.56	\$1,423.56	\$1,239.84	\$183.72	14.82%
4	300,000	\$1,590.00	\$568.06	\$2,158.06	\$1,874.25	\$283.81	15.14%
6	400,000	\$2,120.00	\$1,136.11	\$3,256.11	\$2,740.50	\$515.61	18.81%