



Information For Your Records

BILL DATE	Apr 3, 2012	
TOTAL AMOUNT DUE BY	Apr 24, 2012	\$93.66
AMOUNT PAYABLE AFTER DUE DATE		\$95.06
Total Electric Charges		\$74.78
Total Lighting Charges		\$20.21
Total Miscellaneous Charges		-\$1.43
Current Amount Due		\$93.66
Prior Amount Due		\$0.00
Total Amount Due		\$93.66



# Electric, Water and Domestic Wastewater Cost of Service and Rate Design Studies

Grand Rapids Public Utilities Commission

David A. Berg, PE  
Principal – Dave Berg Consulting  
Nov. 29, 2022



**GRAND RAPIDS  
PUBLIC UTILITIES**  
*Service is Our Nature*



# **A Review of Where We Are**

## **Operating Results at Existing Rates**

**Table 2-3**  
**Projected Operating Results**  
**Existing Rates**

<b>Year</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Operating Revenues	\$19,061,765	\$18,448,198	\$18,977,138	\$19,515,558	\$20,064,303	\$20,624,106
Less Operating Expenses	(15,133,717)	(16,471,822)	(17,535,707)	(18,642,543)	(19,600,947)	(20,298,209)
Less Non -Operating Expenses	<u>(1,075,942)</u>	<u>(1,045,042)</u>	<u>(1,044,661)</u>	<u>(1,047,838)</u>	<u>(1,047,100)</u>	<u>(1,065,454)</u>
Net Income	2,852,105	931,335	396,769	(174,823)	(583,744)	(739,557)
Net Income as Percent of Revenues	15.0%	5.0%	2.1%	-0.9%	-2.9%	-3.6%

**Table 2-3**  
**Projected Operating Results**  
**Existing Rates**

Year	2022	2023	2024	2025	2026	2027
Operating Revenues	\$1,917,471	\$1,935,782	\$1,955,944	\$1,976,291	\$1,996,965	\$2,017,865
Less Operating Expenses	(1,857,320)	(1,924,009)	(2,188,640)	(2,309,776)	(2,422,246)	(2,536,321)
Less Non -Operating Expenses	<u>(58,171)</u>	<u>(69,105)</u>	<u>(293,836)</u>	<u>(288,518)</u>	<u>(279,975)</u>	<u>(274,149)</u>
Net Income	\$1,980	\$(57,332)	\$(526,532)	\$(622,003)	\$(705,257)	\$(792,605)
Net Income as Percent of Revenues	0.1%	-3.0%	-26.9%	-31.5%	-35.3%	-39.3%

**Table 2-3**  
**Projected Operating Results**  
**Existing Rates**

Year	2022	2023	2024	2025	2026	2027
Operating Revenues	\$1,857,414	\$1,875,029	\$1,892,336	\$1,909,774	\$1,927,476	\$1,945,311
Less Operating Expenses	(1,739,764)	(1,925,685)	(1,685,572)	(1,751,177)	(1,817,935)	(1,892,360)
Less Non -Operating Expenses	<u>(81,595)</u>	<u>(86,371)</u>	<u>(162,550)</u>	<u>(168,633)</u>	<u>(160,547)</u>	<u>(155,261)</u>
Net Income	36,054	(137,027)	44,213	(10,037)	(51,006)	(102,310)
Net Income as Percent of Revenues	1.9%	-7.3%	2.3%	-0.5%	-2.6%	-5.3%

## Cash Reserves at Existing Rates

**Table 2-4**  
**Projected Cash Reserves**  
**Existing Rates**

Year	2022	2023	2024	2025	2026	2027
Beginning Balance	\$1,520,146	\$4,118,902	\$4,521,158	\$4,755,960	\$4,495,451	\$3,990,969
Plus Net Income	2,852,105	931,335	396,769	(174,823)	(583,744)	(739,557)
Less Capital Improvements	(950,607)	(1,176,840)	(929,440)	(883,440)	(884,440)	(886,440)
Less ERP Proj Costs	-	(80,833)	-	-	-	-
Plus Deprec/Amort	910,382	942,069	981,297	1,012,278	1,041,726	1,071,208
Less Debt Principal	(135,100)	(135,450)	(135,800)	(136,500)	-	-
Less LCP Payment	<u>(78,024)</u>	<u>(78,024)</u>	<u>(78,024)</u>	<u>(78,024)</u>	<u>(78,024)</u>	<u>(78,024)</u>
Ending Balance	\$4,118,902	\$4,521,158	\$4,755,960	\$4,495,451	\$3,990,969	\$3,358,155
As a percent of revenue	21.6%	24.5%	25.1%	23.0%	19.9%	16.3%



**Table 2-3**  
**Projected Cash Reserves-Water**  
**Existing Rates**

Year	2022	2023	2024	2025	2026	2027
Beginning Balance	\$1,087,187	\$178,992	\$(858,321)	\$92,587	\$(1,121,727)	\$(2,305,049)
Plus Net Income	1,980	(57,332)	(526,532)	(622,003)	(705,257)	(792,605)
Less Capital Improvements	(452,761)	(6,005,500)	(1,363,575)	(973,580)	(912,511)	(1,274,000)
Less ERP Project Costs	-	(80,833)	-	-	-	-
Plus Depreciation	332,035	347,127	547,310	592,763	625,216	654,633
Plus State Grants	-	-	2,500,000	-	-	-
Plus Available Bond Funds	-	4,850,000	-	-	-	-
Less Existing Debt Principal	(789,450)	(90,775)	(94,100)	(94,250)	(68,250)	(71,500)
Less New Debt Principal	-	-	<u>(112,195)</u>	<u>(117,244)</u>	<u>(122,520)</u>	<u>(128,033)</u>
Ending Balance	\$178,992	\$(858,321)	\$92,587	\$(1,121,727)	\$(2,305,049)	\$(3,916,555)
Reserves as % of Operating Revenue	9.3%	-44.3%	4.7%	-56.8%	-115.4%	-194.1%

# Domestic Wastewater

**Table 2-3  
Projected Cash Reserves  
Existing Rates**

<b>Year</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Beginning Balance	\$904,673	\$280,237	\$933,198	\$296,946	\$(336,782)	\$(1,118,796)
Plus Net Income	36,054	(137,027)	44,213	(10,037)	(51,006)	(102,310)
Less Capital Improvements	(344,289)	(1,097,350)	(735,067)	(697,100)	(849,435)	(528,000)
Less ERP Project Costs	-	(80,833)	-	-	-	-
Plus Depreciation/Amortization	237,213	248,690	285,268	309,770	333,007	361,321
Plus Available Bond Funds	-	1,900,000	-	-	-	-
Less Existing Debt Principal	(553,414)	(180,519)	(185,788)	(189,464)	(165,572)	(171,094)
Less New Debt Principal	-	-	<u>(44,878)</u>	<u>(46,898)</u>	<u>(49,008)</u>	<u>(51,213)</u>
Ending Balance	\$280,237	\$933,198	\$296,946	\$(336,782)	\$(1,118,796)	\$(1,610,092)
Reserves as % of Operating Revenue	15.1%	49.8%	15.7%	-17.6%	-58.0%	-82.8%

## Combined End of Year Reserves – Existing Rates

	2022	2023	2024
Electric	\$ 4,118,902	\$ 4,521,158	\$ 4,755,960
Water	178,992	(858,321)	92,587
Domestic WW	280,237	933,198	296,946
Total	<u>\$ 4,578,131</u>	<u>\$ 4,596,034</u>	<u>\$ 5,145,493</u>
	2025	2026	2027
Electric	\$ 4,495,451	\$ 3,990,969	\$ 3,358,155
Water	(1,121,727)	(2,305,049)	(3,916,555)
Domestic WW	(336,782)	(1,118,796)	(1,610,092)
Total	<u>\$ 3,036,941</u>	<u>\$ 567,123</u>	<u>\$ (2,168,492)</u>

## Cost of Service

**Table 3-3**  
**Cost of Service Results**  
**Comparison of % Cost and Revenues**  
**2021 Test Year**

<b>Customer Classification</b>	<b>Allocated Cost to Serve</b>	<b>Revenues</b>	<b>Increase/ (Decrease)</b>
Residential	32.5%	34.1%	-4.8%
Commercial	17.6%	18.0%	-2.2%
Demand & Energy	36.1%	35.4%	2.0%
Industrial	9.7%	9.3%	3.8%
Load Management	3.0%	2.0%	53.3%
Lighting	<u>1.1%</u>	<u>1.2%</u>	<u>-7.8%</u>
Total	100.0%	100.0%	0.0%

**Table 3-3**  
**Water Cost of Service Results**  
**Comparison of % Cost and Revenues**  
**2021 Test Year**

<b>Customer Classification</b>	<b>Allocated Cost to Serve</b>	<b>Revenues</b>	<b>Increase/ (Decrease)</b>
Residential	37.5%	38.3%	-2.1%
Commercial	41.3%	34.8%	18.6%
Industrial	8.8%	10.1%	-13.3%
Multi - Family	9.9%	14.4%	-31.4%
LaPrairie	2.6%	2.4%	7.0%
Total	100.0%	100.0%	0.0%

# Domestic Wastewater LaPrairie and Cohasset

**Table 3-1**  
**LaPrairie and Cohasset**

Item	GRPUC Total	Cohasset	LaPrairie
System Investment	\$ 5,649,642	\$427,588	\$7,695
3% Depreciation	\$169,489	\$12,828	\$231
2% Interest	\$112,993	\$8,552	\$154
5% O&M	<u>\$282,482</u>	<u>\$21,379</u>	<u>\$385</u>
Total Fixed Cost	\$564,964	\$42,759	\$769
Sales	304,606	47,055	10,701
Fixed Cost/Unit	\$1.85	\$0.91	\$0.07
Cost Reduction/Unit	n/a	\$0.95	\$1.78
Current Commodity Rate	\$4.44	\$2.75	\$2.65
Current Reduction	n/a	\$1.69	\$1.79

## Rate Recommendations



# Overall Recommendations

- **Electric**
  - Redesign purchased power adjustment to reflect new MP contract
  - Results in overall 6.5% decrease in 2023
- **Water**
  - Annual increases of 10% per year
- **Domestic Wastewater**
  - Annual increases of 5%

# Residential Bill Impact

## 2023 Residential Bill Impact

Utility	Current	2023	Increase (\$)	Increase (%)
Electric (700 kWh)	\$88.61	\$83.34	(\$5.27)	(5.9%)
Water (3000 gallons)	20.04	22.05	2.01	10.0%
Wastewater (3000 gallons)	<u>24.34</u>	<u>25.54</u>	<u>1.20</u>	<u>4.9%</u>
Total	\$132.99	\$130.93	(\$2.06)	(1.5%)

# Commercial Bill Impact

## 2023 Commercial Bill Impact

Utility	Current	2023	Increase (\$)	Increase (%)
Electric (2000 kWh)	\$262.51	\$247.46	(\$15.05)	(5.7%)
Water (17,000 gallons)	68.69	77.38	8.69	12.7%
Wastewater (17,000 gallons)	<u>94.32</u>	<u>97.83</u>	<u>3.51</u>	<u>3.7%</u>
Total	\$425.52	\$422.77	(\$2.75)	(0.6%)

# Combined Reserve Funds

## Projected EOY Cash Reserves Proposed Rates

Utility	2022	2023	2024	2025	2026	2027
Electric	\$4,118,902	\$4,492,526	\$4,726,758	\$4,910,742	\$4,957,575	\$4,990,807
Water	280,237	1,025,670	577,164	234,045	(145,995)	(119,038)
Wastewater	<u>178,992</u>	<u>(689,700)</u>	<u>619,768</u>	<u>(21,990)</u>	<u>(391,611)</u>	<u>(917,842)</u>
Total	\$4,578,131	\$4,828,496	\$5,923,691	\$5,122,797	\$4,419,969	\$3,953,928

## **Rate Recommendations - Electric**

# Electric

- **Redesign purchased power adjustment to reflect new MP contract**
- **Results in overall 6.5% decrease in 2023**
- **Changes to Load Management and EV Charging Rates**

# Load Management Rates

**Table 4-2**  
**Load Management Energy Rates**  
(\$/kWh)

Customer Groups	Current Rate	Proposed 2023	Proposed 2024	Proposed 2025
Off Peak Heat/Cool	0.0648	0.0699	0.0750	0.0800
Storage Heat	0.0545	0.0630	0.0715	0.0800

# EV Charging Rates

**Table 4-3  
EV Charging Rate**

<b>Item</b>	<b>GRPUC Existing Rate</b>	<b>GRPUC Proposed Rate</b>
Customer charge	\$4.10/mo. – existing cust \$26.00/mo – stand alone	\$4.10/mo. – existing cust \$26.00/mo – stand alone
On-peak Energy <sup>(1)</sup>	\$0.1515/kWh	\$0.1612/kWh
Off-peak Energy	\$0.0422/kWh	\$0.055/kWh

(1) On-peak – 8 a.m. to 10 p.m. Monday through Friday



# Projected Operating Results at Proposed Rates

**Table 4-4**  
**Projected Operating Results**  
**Proposed Rates**

<b>Year</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Operating Revenues	\$19,061,765	\$18,419,566	\$18,977,138	\$19,960,632	\$20,607,360	\$21,270,933
Less Operating Expenses	(15,133,717)	(16,471,822)	(17,535,707)	(18,642,543)	(19,600,947)	(20,298,209)
Less Non -Operating Expenses	<u>(1,075,942)</u>	<u>(1,045,042)</u>	<u>(1,045,230)</u>	<u>(1,048,419)</u>	<u>(1,038,842)</u>	<u>(1,046,235)</u>
Net Income	2,852,105	902,702	396,200	269,670	(32,429)	(73,511)
Net Income as Percent of Revenues	15.0%	4.9%	2.1%	1.4%	-0.2%	-0.3%

# Projected Cash Reserves at Proposed Rates

**Table 4-5**  
**Projected Cash Reserves**  
**Proposed Rates**

<b>Year</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Beginning Balance	\$1,520,146	\$4,118,902	\$4,492,526	\$4,726,758	\$4,910,742	\$4,957,575
Plus Net Income	2,852,105	902,702	396,200	269,670	(32,429)	(73,511)
Less Capital Improvements	(950,607)	(1,176,840)	(929,440)	(883,440)	(884,440)	(886,440)
Less ERP Proj Costs	-	(80,833)	-	-	-	-
Plus Deprec/Amort	910,382	942,069	981,297	1,012,278	1,041,726	1,071,208
Less Debt Principal	(135,100)	(135,450)	(135,800)	(136,500)	-	-
Less LCP Payment	<u>(78,024)</u>	<u>(78,024)</u>	<u>(78,024)</u>	<u>(78,024)</u>	<u>(78,024)</u>	<u>(78,024)</u>
Ending Balance	\$4,118,902	\$4,492,526	\$4,726,758	\$4,910,742	\$4,957,575	\$4,990,807
As a percent of revenue	21.6%	24.4%	24.9%	24.6%	24.1%	23.5%

# Neighboring Utilities – Residential Comparison

**Table 4-9  
Monthly Bill Comparison  
Residential Rates**

Monthly Consumption kWh	GRPUC existing	GRPUC 2023 Proposed	LCP Existing	Brainerd Existing	MP Existing	MP Interim
300	\$41.64	\$39.38	\$84.09	\$44.69	\$49.26	\$51.68
700	88.61	83.34	140.21	82.61	102.53	107.42
1000	127.68	120.16	182.30	111.05	142.49	149.22
1250	160.24	150.83	217.38	134.75	175.79	184.05
1500	192.80	181.51	252.45	158.45	209.09	218.89

# Time-of-Use Considerations

**Table 4-10**  
**Example TOU Rate**  
Residential

Item	Rate
Customer charge	\$10.25/mo.
On-peak Energy <sup>(1)</sup>	\$0.1612/kWh
Off-peak Energy	\$0.0806/kWh

(1) On-peak – 8 a.m. to 8 p.m. Monday through Friday

# Large Transformer - Residential

**Table 4-11**  
**Increased Transformation Charge**  
Residential

Item	Value
Installed Cost (25 kVa)	\$10,756
Annual Fixed Costs as % of Cost	
Depreciation	3%
Interest	4%
O&M	1%
Total	8%
Annual Fixed Cost (25 kVa)	\$860
Annual Fixed Cost/kVa	\$34.42
Monthly Fixed Cost/kVa	\$2.87

## Electric Bottom Line

- **Total Electric 2027 cash reserves increase by \$1.6 million**
- **New PPAC passes through more MISO transmission costs which are outside GRPUC control**

## **Rate Recommendations - Water**

# Water

- Annual increases of **10%** per year
- Some cost-of-service adjustments



# Cost-of-Service Adjustments

**Table 4-1**  
**Average Annual Rate Increases**

<b>Customer Class</b>	<b>Avg Increase</b>
Residential	10.0%
Commercial	12.5%
Industrial	8.1%
Multi-Family	4.7%
LaPrairie	10.4%
Total System	10.0%

# Projected Operating Results at Proposed Rates

**Table 4-2**  
**Projected Operating Results**  
**Proposed Rates**

Year	2022	2023	2024	2025	2026	2027
Operating Revenues	\$1,917,471	\$2,104,403	\$2,314,504	\$2,548,847	\$2,810,666	\$3,103,141
Less Operating Expenses	(1,857,320)	(1,924,009)	(2,188,640)	(2,309,776)	(2,422,246)	(2,536,321)
Less Non -Operating Expenses	<u>(58,171)</u>	<u>(69,105)</u>	<u>(293,836)</u>	<u>(288,518)</u>	<u>(279,975)</u>	<u>(274,149)</u>
Net Income	\$1,980	\$111,289	\$(167,972)	\$(49,447)	\$108,444	\$292,670
Net Income as Percent of Revenues	0.1%	5.3%	-7.3%	-1.9%	3.9%	9.4%

# Projected Cash Reserves at Proposed Rates

**Table 4-3**  
**Projected Cash Reserves**  
**Proposed Rates**

<b>Year</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Beginning Balance	\$1,087,187	\$178,992	\$(689,700)	\$619,768	\$(21,990)	\$(391,611)
Plus Net Income	1,980	111,289	(167,972)	(49,447)	108,444	292,670
Less Capital Improvements	(452,761)	(6,005,500)	(1,363,575)	(973,580)	(912,511)	(1,274,000)
Less ERP Project Costs	-	(80,833)	-	-	-	-
Plus Depreciation	332,035	347,127	547,310	592,763	625,216	654,633
Plus State Grants	-	-	2,500,000	-	-	-
Plus Available Bond Funds	-	4,850,000	-	-	-	-
Less Existing Debt Principal	(789,450)	(90,775)	(94,100)	(94,250)	(68,250)	(71,500)
Less New Debt Principal	-	-	<u>(112,195)</u>	<u>(117,244)</u>	<u>(122,520)</u>	<u>(128,033)</u>
Ending Balance	\$178,992	\$(689,700)	\$619,768	\$(21,990)	\$(391,611)	\$(917,842)
Reserves as % of Operating Revenue	9.3%	-32.8%	26.8%	-0.9%	-13.9%	-29.6%

# Residential Bill Impact

**Table 4-4**  
**Monthly Water Bill Comparisons**

Residential Usage (gallons)	2,000	3,000	6,000
Current Rate	\$16.25	\$20.04	\$33.39
2023 Proposed	17.88	22.05	36.74
2024 Proposed	19.67	24.26	40.43
2025 Proposed	21.64	26.69	44.48
2026 Proposed	23.81	29.37	48.95
2027 Proposed	26.20	32.32	53.86

## Water Bottom Line

- **Total Water 2027 cash reserves increase by \$3 million**

# **Rate Recommendations – Domestic Wastewater**

# Domestic Wastewater

- Annual increases of 5% per year
- New water meter size based customer charges

# Monthly Customer Charges

- **Current monthly customer charges**
  - **All City Customers - \$11.02**
  - **All Rural Customers - \$12.04**
  - **LaPrairie - \$11.73**
  - **Cohasset - \$12.14**



# Customer Charges

<b>Customer Charges</b>	<b>Current</b>	<b>2023 Proposed</b>	<b>2024 Proposed</b>	<b>2025 Proposed</b>	<b>2026 Proposed</b>	<b>2027 Proposed</b>
<b>Residential/Commercial/Industrial</b>	<b>Rate</b>	<b>Rate</b>	<b>Rate</b>	<b>Rate</b>	<b>Rate</b>	<b>Rate</b>
5/8-3/4 inch	n/a	11.50	12.00	12.60	13.30	14.00
1 inch	n/a	13.00	15.00	17.00	19.00	21.00
1 1/4 inch	n/a	15.00	17.00	19.00	21.50	24.00
1 1/2 inch	n/a	17.00	20.00	23.00	26.00	29.00
2 inch	n/a	20.00	25.00	30.00	40.00	50.00
3 inch	n/a	25.00	30.00	35.00	45.00	55.00
4 inch	n/a	35.00	45.00	55.00	65.00	75.00
6 inch	n/a	50.00	60.00	70.00	75.00	85.00

# Projected Operating Results at Proposed Rates

**Table 3-2**  
**Projected Operating Results**  
**Proposed Rates**

Year	2022	2023	2024	2025	2026	2027
Operating Revenues	\$1,857,414	\$1,967,502	\$2,080,082	\$2,200,382	\$2,329,451	\$2,463,563
Less Operating Expenses	(1,739,764)	(1,925,685)	(1,685,572)	(1,751,177)	(1,817,935)	(1,892,360)
Less Non -Operating Expenses	<u>(81,595)</u>	<u>(86,371)</u>	<u>(162,550)</u>	<u>(168,633)</u>	<u>(160,547)</u>	<u>(155,261)</u>
Net Income	36,054	(44,554)	231,959	280,572	350,969	415,942
Net Income as Percent of Revenues	1.9%	-2.3%	11.2%	12.8%	15.1%	16.9%

# Projected Cash Reserves at Proposed Rates

**Table 3-3**  
**Projected Cash Reserves**  
**Proposed Rates**

Year	2022	2023	2024	2025	2026	2027
Beginning Balance	\$904,673	\$280,237	\$1,025,670	\$577,164	\$234,045	\$(145,995)
Plus Net Income	36,054	(44,554)	231,959	280,572	350,969	415,942
Less Capital Improvements	(344,289)	(1,097,350)	(735,067)	(697,100)	(849,435)	(528,000)
Less ERP Project Costs	-	(80,833)	-	-	-	-
Plus Depreciation/Amortization	237,213	248,690	285,268	309,770	333,007	361,321
Plus Available Bond Funds	-	1,900,000	-	-	-	-
Less Existing Debt Principal	(553,414)	(180,519)	(185,788)	(189,464)	(165,572)	(171,094)
Less New Debt Principal	-	-	<u>(44,878)</u>	<u>(46,898)</u>	<u>(49,008)</u>	<u>(51,213)</u>
Ending Balance	\$280,237	\$1,025,670	\$577,164	\$234,045	\$(145,995)	\$(119,038)
Reserves as % of Operating Revenue	15.1%	52.1%	27.7%	10.6%	-6.3%	-4.8%

# Residential Bill Impact

**Table 3-4**  
**Monthly Wastewater Bill Comparisons**

Residential Usage (gallons)	2,000	3,000	6,000
Current Rate	\$19.90	\$24.34	\$37.66
2023 Proposed	20.86	25.54	39.58
2024 Proposed	21.88	26.82	41.64
2025 Proposed	22.98	28.17	43.74
2026 Proposed	24.16	29.59	45.88
2027 Proposed	25.36	31.04	48.08

## Domestic Wastewater Bottom Line

- **Total Domestic Wastewater 2027 cash reserves increase by \$1.5 million**

# Blandin Wastewater Treatment Billing

- **Blandin pays its calculated share of WW treatment plant costs**
- **Current monthly billing is very detailed and time consuming**
- **Recommending new billing process**
  - Annual estimate of Blandin costs
  - Monthly bill = annual cost divided by 12
  - End of year detailed reconciliation of estimate vs. actual
  - Difference between estimate and actual included in first 6 monthly bills of succeeding year

## Before and After Reserves

## Combined End of Year Reserves – Existing Rates

	2022	2023	2024
Electric	\$ 4,118,902	\$ 4,521,158	\$ 4,755,960
Water	178,992	(858,321)	92,587
Domestic WW	280,237	933,198	296,946
Total	<u>\$ 4,578,131</u>	<u>\$ 4,596,034</u>	<u>\$ 5,145,493</u>
	2025	2026	2027
Electric	\$ 4,495,451	\$ 3,990,969	\$ 3,358,155
Water	(1,121,727)	(2,305,049)	(3,916,555)
Domestic WW	(336,782)	(1,118,796)	(1,610,092)
Total	<u>\$ 3,036,941</u>	<u>\$ 567,123</u>	<u>\$ (2,168,492)</u>



# Combined Reserve Funds – Proposed Rates

## Projected EOY Cash Reserves Proposed Rates

Utility	2022	2023	2024	2025	2026	2027
Electric	\$4,118,902	\$4,492,526	\$4,726,758	\$4,910,742	\$4,957,575	\$4,990,807
Water	280,237	1,025,670	577,164	234,045	(145,995)	(119,038)
Wastewater	<u>178,992</u>	<u>(689,700)</u>	<u>619,768</u>	<u>(21,990)</u>	<u>(391,611)</u>	<u>(917,842)</u>
Total	\$4,578,131	\$4,828,496	\$5,923,691	\$5,122,797	\$4,419,969	\$3,953,928

## Questions/Discussion