

**MADISON WATER UTILITY**

Financial Forecast - Sources and Uses of Funds Summary - *MODEL #1 (One-time Rate Increase & Debt Refunding's)*  
 Actual 2017 - Forecasted 2025  
*(As of Q3 2019 Projections)*

11/12/2019

Sources of Funds	Actual 2017	Actual 2018	Projected 2019	Budgeted 2020	Forecasted				
					2021	2022	2023	2024	2025
Operating income (exclude current year rate increase)	\$ 9,543,413	\$ 9,621,636	\$ 18,305,005	\$ 18,872,987	\$ 17,929,098	\$ 16,965,632	\$ 15,981,989	\$ 14,977,549	\$ 13,951,676
<b>Operating income from rate increase (current year)</b>				<b>1,740,900</b>	<b>3,551,500</b>	<b>3,551,500</b>	<b>3,551,500</b>	<b>3,551,500</b>	<b>3,551,500</b>
Add: Depreciation/Depreciation charged	6,944,967	7,548,684	7,737,401	7,930,836	8,129,107	8,332,335	8,540,643	8,754,159	8,973,013
Changes in receivables and payables *	1,444,543	1,061,001	-	-	-	-	-	-	-
<b>Total From Operations</b>	<b>17,932,923</b>	<b>18,231,321</b>	<b>26,042,406</b>	<b>28,544,723</b>	<b>29,609,705</b>	<b>28,849,467</b>	<b>28,074,132</b>	<b>27,283,208</b>	<b>26,476,189</b>
From Other Sources:									
Proceeds from debt issue	-	40,155,000	20,000,000	-	33,725,000	-	36,331,000	-	-
Interest income	511,259	413,102	1,016,885	510,220	525,527	541,292	557,531	574,257	591,485
Special assessments	868,493	666,197	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Other cash in-flows **	335,876	2,034,930	133,148	-	-	-	-	-	-
Cash implicitly financed	6,159,367	-	-	-	-	-	-	-	-
<b>Total From Other Sources</b>	<b>7,874,995</b>	<b>43,269,229</b>	<b>21,650,032</b>	<b>1,010,220</b>	<b>34,750,527</b>	<b>1,041,292</b>	<b>37,388,531</b>	<b>1,074,257</b>	<b>1,091,485</b>
<b>Total Sources of Funds</b>	<b>\$ 25,807,918</b>	<b>\$ 61,500,550</b>	<b>\$ 47,692,439</b>	<b>\$ 29,554,943</b>	<b>\$ 64,360,231</b>	<b>\$ 29,890,759</b>	<b>\$ 65,462,663</b>	<b>\$ 28,357,465</b>	<b>\$ 27,567,674</b>
<b>Uses of Funds</b>									
Acquisition and construction of utility plant	\$ 23,155,792	\$ 18,230,809	\$ 10,249,000	\$ 9,925,000	\$ 13,187,000	\$ 16,793,000	\$ 22,854,000	\$ 20,550,000	\$ 21,641,000
Repayment of cash implicitly financed	-	6,159,367	-	-	-	-	-	-	-
For Debt Service - existing revenue bonds	16,249,644	13,255,178	17,195,292	19,094,553	<b>16,481,767</b>	<b>18,066,559</b>	<b>18,794,259</b>	<b>18,549,009</b>	<b>18,334,415</b>
For Debt Service - existing advance from city	909,597	907,937	967,766	144,600	152,090	159,850	167,423	175,552	-
For Debt Service - proposed revenue bonds *****	-	-	-	176,000	352,000	1,278,600	1,897,400	3,123,450	4,011,300
Other cash out-flows	1,220,274	3,029,300	-	-	-	-	-	-	-
Tax Equivalent ***	6,765,049	6,771,980	7,200,000	7,500,000	7,687,500	7,879,688	8,076,680	8,278,597	8,485,562
<b>Total Uses of Funds</b>	<b>\$ 48,300,356</b>	<b>\$ 48,354,571</b>	<b>\$ 35,612,058</b>	<b>\$ 36,840,153</b>	<b>\$ 37,860,357</b>	<b>\$ 44,177,697</b>	<b>\$ 51,789,762</b>	<b>\$ 50,676,608</b>	<b>\$ 52,472,277</b>
<b>Net Cash Flows</b>	<b>\$ (22,492,438)</b>	<b>\$ 13,145,979</b>	<b>\$ 12,080,381</b>	<b>\$ (7,285,210)</b>	<b>\$ 26,499,874</b>	<b>\$ (14,286,937)</b>	<b>\$ 13,672,901</b>	<b>\$ (22,319,143)</b>	<b>\$ (24,904,603)</b>
Beginning Cash*	\$ 36,193,930	\$ 13,701,492	\$ 26,847,471	\$ 38,927,852	\$ 31,642,642	\$ 58,142,516	\$ 43,855,579	\$ 57,528,480	\$ 35,209,337
Ending Cash	\$ 13,701,492	\$ 26,847,471	\$ 38,927,852	\$ 31,642,642	\$ 58,142,516	\$ 43,855,579	\$ 57,528,480	\$ 35,209,337	\$ 10,304,735
<i>Bond Redemption (Restricted)</i>	\$ 9,781,679	\$ 12,772,842	\$ 15,461,345	\$ 13,253,127	\$ 15,078,640	\$ 16,072,919	\$ 16,101,340	\$ 16,002,669	\$ 16,216,746
<i>Construction Proceeds (Restricted)</i>	-	8,024,067	20,000,000	13,000,000	33,725,000	20,041,000	36,331,000	18,669,000	-
<i>Depreciation Fund (Restricted)</i>	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
<i>Internally Designated (Restricted)</i>	3,148,893	2,263,850	-	-	-	-	-	-	-
<b>Total Restricted Cash</b>	<b>13,680,572</b>	<b>23,810,759</b>	<b>36,211,345</b>	<b>27,003,127</b>	<b>49,553,640</b>	<b>36,863,919</b>	<b>53,182,340</b>	<b>35,421,669</b>	<b>16,966,746</b>
<b>Unrestricted Cash</b>	<b>20,920</b>	<b>3,036,712</b>	<b>2,716,507</b>	<b>4,639,514</b>	<b>8,588,876</b>	<b>6,991,660</b>	<b>4,346,140</b>	<b>(212,331)</b>	<b>(6,662,011)</b>
<b>Total Cash</b>	<b>\$ 13,701,492</b>	<b>\$ 26,847,471</b>	<b>\$ 38,927,852</b>	<b>\$ 31,642,642</b>	<b>\$ 58,142,516</b>	<b>\$ 43,855,579</b>	<b>\$ 57,528,480</b>	<b>\$ 35,209,337</b>	<b>\$ 10,304,735</b>
<b>Bond Reserve Funds (Investments)</b>	<b>\$ 13,151,324</b>	<b>\$ 16,180,624</b>	<b>\$ 17,707,576</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>
Minimum Targeted Unrestricted Cash ****	\$ 4,607,890	\$ 4,343,579	\$ 3,942,705	\$ 4,218,886	\$ 4,345,453	\$ 4,475,816	\$ 4,610,091	\$ 4,748,394	\$ 4,890,845
Excess (Deficiency) for Targeted Cash	\$ (4,586,970)	\$ (1,306,867)	\$ (1,226,198)	\$ 420,628	\$ 4,243,423	\$ 2,515,844	\$ (263,951)	\$ (4,960,725)	\$ (11,552,856)
<b>Months of Unrestricted Cash - Forecasted</b>	<b>0.01</b>	<b>2.10</b>	<b>1.89</b>	<b>3.30</b>	<b>5.93</b>	<b>4.69</b>	<b>2.83</b>	<b>(0.13)</b>	<b>(4.09)</b>
<b>Debt Coverage</b>	<b>1.04</b>	<b>1.00</b>	<b>1.35</b>	<b>1.73</b>	<b>1.64</b>	<b>1.51</b>	<b>1.45</b>	<b>1.38</b>	<b>1.27</b>
<b>Rate of Return</b>	<b>2.51%</b>	<b>2.44%</b>	<b>6.39%</b>	<b>7.29%</b>	<b>7.50%</b>	<b>6.82%</b>	<b>6.08%</b>	<b>5.41%</b>	<b>4.76%</b>

\* Reconciles this summary to the 2017 and 2018 audited financial statements. Cash does not include Bond Reserve Funds which are considered "Investments" for financial statement purposes.

\*\* Line includes Build America Bond rebates associated with the 2010 Revenue Bonds

\*\*\* This is no longer an operating expense under GASB 34.

\*\*\*\* This has been defined as three months operating expenses

\*\*\*\*\* Proposed revenue debt service is based upon interim financing with BANS and a 20-year repayment period under the Wisconsin Safe Drinking Water Loan Program

**MADISON WATER UTILITY**

Financial Forecast - Sources and Uses of Funds Summary - *MODEL #2 (Multi-Year Rate Increases & Debt Refundings)*  
 Actual 2017 - Forecasted 2025  
 (As of Q3 2019 Projections)

11/12/2019

Sources of Funds	Actual 2017	Actual 2018	Projected 2019	Budgeted 2020	Forecasted				
					2021	2022	2023	2024	2025
Operating income (exclude current year rate increase)	\$ 9,543,413	\$ 9,621,636	\$ 18,305,005	\$ 18,872,987	\$ 17,929,098	\$ 16,965,632	\$ 15,981,989	\$ 14,977,549	\$ 13,951,676
<b>Operating income from rate increase (current year)</b>				<b>1,740,900</b>	<b>3,551,500</b>	<b>3,551,500</b>	<b>7,282,700</b>	<b>7,282,700</b>	<b>11,278,000</b>
Add: Depreciation/Depreciation charged	6,944,967	7,548,684	7,737,401	7,930,836	8,129,107	8,332,335	8,540,643	8,754,159	8,973,013
Changes in receivables and payables *	1,444,543	1,061,001	-	-	-	-	-	-	-
<b>Total From Operations</b>	<b>17,932,923</b>	<b>18,231,321</b>	<b>26,042,406</b>	<b>28,544,723</b>	<b>29,609,705</b>	<b>28,849,467</b>	<b>31,805,332</b>	<b>31,014,408</b>	<b>34,202,689</b>
From Other Sources:									
Proceeds from debt issue	-	40,155,000	20,000,000	-	33,725,000	-	36,331,000	-	-
Interest income	511,259	413,102	1,016,885	510,220	525,527	541,292	557,531	574,257	591,485
Special assessments	868,493	666,197	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Other cash in-flows **	335,876	2,034,930	133,148	-	-	-	-	-	-
Cash implicitly financed	6,159,367	-	-	-	-	-	-	-	-
<b>Total From Other Sources</b>	<b>7,874,995</b>	<b>43,269,229</b>	<b>21,650,032</b>	<b>1,010,220</b>	<b>34,750,527</b>	<b>1,041,292</b>	<b>37,388,531</b>	<b>1,074,257</b>	<b>1,091,485</b>
<b>Total Sources of Funds</b>	<b>\$ 25,807,918</b>	<b>\$ 61,500,550</b>	<b>\$ 47,692,439</b>	<b>\$ 29,554,943</b>	<b>\$ 64,360,231</b>	<b>\$ 29,890,759</b>	<b>\$ 69,193,863</b>	<b>\$ 32,088,665</b>	<b>\$ 35,294,174</b>
<b>Uses of Funds</b>									
Acquisition and construction of utility plant	\$ 23,155,792	\$ 18,230,809	\$ 10,249,000	\$ 9,925,000	\$ 13,187,000	\$ 16,793,000	\$ 22,854,000	\$ 20,550,000	\$ 21,641,000
Repayment of cash implicitly financed	-	6,159,367	-	-	-	-	-	-	-
For Debt Service - existing revenue bonds	16,249,644	13,255,178	17,195,292	19,094,553	<b>16,481,767</b>	<b>18,066,559</b>	<b>18,794,259</b>	<b>18,549,009</b>	<b>18,334,415</b>
For Debt Service - existing advance from city	909,597	907,937	967,766	144,600	152,090	159,850	167,423	175,552	-
For Debt Service - proposed revenue bonds *****	-	-	-	176,000	352,000	1,278,600	1,897,400	3,123,450	4,011,300
Other cash out-flows	1,220,274	3,029,300	-	-	-	-	-	-	-
Tax Equivalent ***	6,765,049	6,771,980	7,200,000	7,500,000	7,687,500	7,879,688	8,076,680	8,278,597	8,485,562
<b>Total Uses of Funds</b>	<b>\$ 48,300,356</b>	<b>\$ 48,354,571</b>	<b>\$ 35,612,058</b>	<b>\$ 36,840,153</b>	<b>\$ 37,860,357</b>	<b>\$ 44,177,697</b>	<b>\$ 51,789,762</b>	<b>\$ 50,676,608</b>	<b>\$ 52,472,277</b>
<b>Net Cash Flows</b>	<b>\$ (22,492,438)</b>	<b>\$ 13,145,979</b>	<b>\$ 12,080,381</b>	<b>\$ (7,285,210)</b>	<b>\$ 26,499,874</b>	<b>\$ (14,286,937)</b>	<b>\$ 17,404,101</b>	<b>\$ (18,587,943)</b>	<b>\$ (17,178,103)</b>
Beginning Cash*	\$ 36,193,930	\$ 13,701,492	\$ 26,847,471	\$ 38,927,852	\$ 31,642,642	\$ 58,142,516	\$ 43,855,579	\$ 61,259,680	\$ 42,671,737
Ending Cash	\$ 13,701,492	\$ 26,847,471	\$ 38,927,852	\$ 31,642,642	\$ 58,142,516	\$ 43,855,579	\$ 61,259,680	\$ 42,671,737	\$ 25,493,635
Bond Redemption (Restricted)	\$ 9,781,679	\$ 12,772,842	\$ 15,461,345	\$ 13,253,127	\$ 15,078,640	\$ 16,072,919	\$ 16,101,340	\$ 16,002,669	\$ 16,216,746
Construction Proceeds (Restricted)	-	8,024,067	20,000,000	13,000,000	33,725,000	20,041,000	36,331,000	18,669,000	-
Depreciation Fund (Restricted)	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Internally Designated (Restricted)	3,148,893	2,263,850	-	-	-	-	-	-	-
<b>Total Restricted Cash</b>	<b>13,680,572</b>	<b>23,810,759</b>	<b>36,211,345</b>	<b>27,003,127</b>	<b>49,553,640</b>	<b>36,863,919</b>	<b>53,182,340</b>	<b>35,421,669</b>	<b>16,966,746</b>
<b>Unrestricted Cash</b>	<b>20,920</b>	<b>3,036,712</b>	<b>2,716,507</b>	<b>4,639,514</b>	<b>8,588,876</b>	<b>6,991,660</b>	<b>8,077,340</b>	<b>7,250,069</b>	<b>8,526,889</b>
<b>Total Cash</b>	<b>\$ 13,701,492</b>	<b>\$ 26,847,471</b>	<b>\$ 38,927,852</b>	<b>\$ 31,642,642</b>	<b>\$ 58,142,516</b>	<b>\$ 43,855,579</b>	<b>\$ 61,259,680</b>	<b>\$ 42,671,737</b>	<b>\$ 25,493,635</b>
<b>Bond Reserve Funds (Investments)</b>	<b>\$ 13,151,324</b>	<b>\$ 16,180,624</b>	<b>\$ 17,707,576</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>	<b>\$ 16,703,057</b>
Minimum Targeted Unrestricted Cash ****	\$ 4,607,890	\$ 4,343,579	\$ 3,942,705	\$ 4,218,886	\$ 4,345,453	\$ 4,475,816	\$ 4,610,091	\$ 4,748,394	\$ 4,890,845
Excess (Deficiency) for Targeted Cash	\$ (4,586,970)	\$ (1,306,867)	\$ (1,226,198)	\$ 420,628	\$ 4,243,423	\$ 2,515,844	\$ 3,467,249	\$ 2,501,675	\$ 3,636,044
<b>Months of Unrestricted Cash - Forecasted</b>	<b>0.01</b>	<b>2.10</b>	<b>1.89</b>	<b>3.30</b>	<b>5.93</b>	<b>4.69</b>	<b>5.26</b>	<b>4.58</b>	<b>5.23</b>
<b>Debt Coverage</b>	<b>1.04</b>	<b>1.00</b>	<b>1.35</b>	<b>1.73</b>	<b>1.64</b>	<b>1.51</b>	<b>1.64</b>	<b>1.57</b>	<b>1.68</b>
<b>Rate of Return</b>	<b>2.51%</b>	<b>2.44%</b>	<b>6.39%</b>	<b>7.29%</b>	<b>7.50%</b>	<b>6.82%</b>	<b>7.71%</b>	<b>6.99%</b>	<b>7.95%</b>

\* Reconciles this summary to the 2017 and 2018 audited financial statements. Cash does not include Bond Reserve Funds which are considered "Investments" for financial statement purposes.

\*\* Line includes Build America Bond rebates associated with the 2010 Revenue Bonds

\*\*\* This is no longer an operating expense under GASB 34.

\*\*\*\* This has been defined as three months operating expenses

\*\*\*\*\* Proposed revenue debt service is based upon interim financing with BANS and a 20-year repayment period under the Wisconsin Safe Drinking Water Loan Program