

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
Operating income from rate increase (current year)				1,740,900	3,551,500	3,551,500	3,551,500	3,551,500	3,551,500
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	-	-	-	-	-	-	-
Total From Operations	17,932,923	18,231,321	26,042,406	28,544,723	29,609,705	28,849,467	28,074,132	27,283,208	26,476,189
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	-	-	-	-	-	-	-	-
Total From Other Sources	7,874,995	43,269,229	21,650,032	1,010,220	34,750,527	1,041,292	37,388,531	1,074,257	1,091,485
Total Sources of Funds	\$ 25,807,918	\$ 61,500,550	\$ 47,692,439	\$ 29,554,943	\$ 64,360,231	\$ 29,890,759	\$ 65,462,663	\$ 28,357,465	\$ 27,567,674
Uses of Funds									
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	16,481,767	18,066,559	18,794,259	18,549,009	18,334,415
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
Total Uses of Funds	\$ 48,300,356	\$ 48,354,571	\$ 35,612,058	\$ 36,840,153	\$ 37,860,357	\$ 44,177,697	\$ 51,789,762	\$ 50,676,608	\$ 52,472,277
Net Cash Flows	\$ (22,492,438)	\$ 13,145,979	\$ 12,080,381	\$ (7,285,210)	\$ 26,499,874	\$ (14,286,937)	\$ 13,672,901	\$ (22,319,143)	\$ (24,904,603)
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	-	-	-	-	-	-	-
Total Restricted Cash	13,680,572	23,810,759	36,211,345	27,003,127	49,553,640	36,863,919	53,182,340	35,421,669	16,966,746
Unrestricted Cash	20,920	3,036,712	2,716,507	4,639,514	8,588,876	6,991,660	4,346,140	(212,331)	(6,662,011)
Total 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
Bond Reserve Funds (Investments)	\$ 13,151,324	\$ 16,180,624	\$ 17,707,576	\$ 16,703,057	\$ 16,703,057	\$ 16,703,057	\$ 16,703,057	\$ 16,703,057	\$ 16,703,057
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)
Months of Unrestricted Cash - Forecasted	0.01	2.10	1.89	3.30	5.93	4.69	2.83	(0.13)	(4.09)
Debt Coverage	1.04	1.00	1.35	1.73	1.64	1.51	1.45	1.38	1.27
Rate of Return	2.51%	2.44%	6.39%	7.29%	7.50%	6.82%	6.08%	5.41%	4.76%

* 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
Operating income from rate increase (current year)				1,740,900	3,551,500	3,551,500	7,282,700	7,282,700	11,278,000
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	-	-	-	-	-	-	-
Total From Operations	17,932,923	18,231,321	26,042,406	28,544,723	29,609,705	28,849,467	31,805,332	31,014,408	34,202,689
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	-	-	-	-	-	-	-	-
Total From Other Sources	7,874,995	43,269,229	21,650,032	1,010,220	34,750,527	1,041,292	37,388,531	1,074,257	1,091,485
Total Sources of Funds	\$ 25,807,918	\$ 61,500,550	\$ 47,692,439	\$ 29,554,943	\$ 64,360,231	\$ 29,890,759	\$ 69,193,863	\$ 32,088,665	\$ 35,294,174
Uses of Funds									
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	16,481,767	18,066,559	18,794,259	18,549,009	18,334,415
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
Total Uses of Funds	\$ 48,300,356	\$ 48,354,571	\$ 35,612,058	\$ 36,840,153	\$ 37,860,357	\$ 44,177,697	\$ 51,789,762	\$ 50,676,608	\$ 52,472,277
Net Cash Flows	\$ (22,492,438)	\$ 13,145,979	\$ 12,080,381	\$ (7,285,210)	\$ 26,499,874	\$ (14,286,937)	\$ 17,404,101	\$ (18,587,943)	\$ (17,178,103)
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	-	-	-	-	-	-	-
Total Restricted Cash	13,680,572	23,810,759	36,211,345	27,003,127	49,553,640	36,863,919	53,182,340	35,421,669	16,966,746
Unrestricted Cash	20,920	3,036,712	2,716,507	4,639,514	8,588,876	6,991,660	8,077,340	7,250,069	8,526,889
Total 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 Reserve Funds (Investments)	\$ 13,151,324	\$ 16,180,624	\$ 17,707,576	\$ 16,703,057	\$ 16,703,057	\$ 16,703,057	\$ 16,703,057	\$ 16,703,057	\$ 16,703,057
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
Months of Unrestricted Cash - Forecasted	0.01	2.10	1.89	3.30	5.93	4.69	5.26	4.58	5.23
Debt Coverage	1.04	1.00	1.35	1.73	1.64	1.51	1.64	1.57	1.68
Rate of Return	2.51%	2.44%	6.39%	7.29%	7.50%	6.82%	7.71%	6.99%	7.95%

* 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.

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