

# **MADISON WATER UTILITY**

## **FINANCIAL PLAN UPDATE**

For the years 2022 - 2033

Public Service Commission Docket 3280-WR-116

**Prepared by**

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**February 2023**



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# Madison Water Utility Financial Plan Update

## Executive Summary

### Goals

The overall goal of this plan is to provide the Utility with a roadmap to keep safe drinking water accessible and affordable to all through a robust program of infrastructure renewal that is funded primarily with current revenues instead of new debt.

Since 2019, the Madison Water Utility (MWU) has stabilized its financial condition, established adequate reserve funds, refinanced debt at more favorable terms, reduced its overall debt burden, improved financial reporting, held the line on operation and maintenance expenses, and secured a dedicated source of cash funding for main replacements. However, investments in infrastructure renewal and replacement have been lower than desired over the past few years.

The Utility's broad goals for the next phase of this plan are to:

1. Maintain sound financial management.
2. Manage customer impacts.
3. Reduce outstanding debt to a level that does not burden the Utility or restrict its financial options.
4. Keep debt burden low in the future by using debt only as needed to provide rate stability and intergenerational equity.
5. Eliminate the need for the cash adder.
6. Build an adequate, sustainable program of infrastructure renewal and replacement.

### Key Metrics, Timeline, and Milestones

As described in more detail in this plan, MWU developed metrics for this updated financial plan to support each of its goals.

The key metrics, targets, timelines, and milestones are summarized in the following table. As shown below and explained in detail in the plan, MWU expects to meet all its goals within the 10-year planning horizon except for reducing the rate of return to the benchmark established by the Public Service Commission of Wisconsin (PSC). However, the achievement of benchmark rate of return depends in part on factors that are not within MWU control, such as the level of the benchmark rate of return.

Metric	Goal	Benchmark	Status	Target Date
Debt Coverage	Bond Covenant Requirements	The minimum coverage required by bond covenants is 1.25x the highest principal and interest payment. The Utility intends to target a coverage ratio of 1.40x total debt service payments to provide a margin	Met, Continue to Monitor	Ongoing
Depreciation Reserve	Bond Covenant Requirements	\$750,000	Met, Continue to Monitor	Ongoing
Debt Redemption Reserve	Bond Covenant Requirements	Current-year bond principal payment + interest payment – due on January 2 of the following year; per bond repayment schedules	Met, Continue to Monitor	Ongoing
Debt Reserve	Bond Covenant Requirements	The lowest of 125% of average future debt service, maximum annual future debt service, or 10% of the par value of outstanding bonds	Met, Continue to Monitor	Ongoing
Expense Depreciation for Main Replacement	Sustainable Infrastructure Renewal	Increase expense depreciation to an amount equal to the cost to replace 1.0% of the Utility's water mains per year	Needs Improvement	2028
Rate Stability	Manage Customer Impacts	MWU Policy O-2D, Affordability states “Annualized Rate Increases” not exceed 9% in any single year, applied from the beginning of the last rate increase to when new rates become effective	Met, Continue to Monitor	Ongoing
Percent Debt	Reduce Debt Burden	Reduce the percentage of debt to a maximum of 50 percent debt	Needs Improvement	2026
Ratio of Outstanding Debt to Operating Revenues	Reduce Debt Burden	Outstanding debt equal to no more than 2.00 times annual operating revenues	Needs Improvement	2025
Interest Expense as a Percent of Operating Revenues	Reduce Debt Burden	Reduce interest expense to no more than 10% of operating revenues	Needs Improvement	2025
Use of Debt	Keep Debt Burden Low	Use debt only as needed to provide rate stability and intergenerational equity; avoid issuing debt for routine annual capital projects	Future Goal	Ongoing
Rate of Return	Eliminate Cash Adder	Fully fund the Utility's cash needs at a rate of return equal to or less than the PSC benchmark rate of return	Needs Improvement	2033/2034
Operation and Maintenance Reserve	Cash Flow Management	Three to six months operation and maintenance expenses	Met, Continue to Monitor	Ongoing

**Summary of Action Plan**

MWU plans to take the following actions to implement this plan.

1. Update this plan every six months and file a report with PSC.
2. Monitor financial conditions and adjust this plan as needed. Potential adjustments to the plan are described under Framework for an Updated Plan and Summary of the Updated Plan.
3. Apply for water rate increases with test years of 2025 and 2027.

4. Apply for Safe Drinking Water Loan Program loans and principal forgiveness for SFY 2023 and 2024 as described in this plan.
5. Fund annual capital improvements with current revenues except as noted in this plan or as needed to finance major improvements. The capital improvement program will be updated on an annual basis to reflect updated projections of revenue available to fund capital improvements.
6. The plan includes issuing bonds in 2032 and 2033 to finance \$20 million of the \$70 million of capital improvements planned for those two years. The Utility will evaluate the need for debt issuance to promote rate stability or intergenerational equity and may adjust the timing of projects or the amount of debt issued.

## **Introduction**

### **Overview of Historical Financial Conditions**

The Madison Water Utility (MWU) has historically been proactive about investing in infrastructure renewal and replacement, including replacement of water mains. However, under the traditional utility basis for determining revenue requirements, the Utility has not generated enough revenue to cash fund more than a portion of its ongoing infrastructure renewal and replacement program. As a result, the Utility carried increasing levels of debt over time.

The Wisconsin Public Service Commission (PSC) generally considers a reasonable capital structure to consist of 50 percent debt and 50 percent utility or municipal equity. However, the Utility's debt exceeded 50 percent in 2003 and continued to increase to well over this level. The Utility reached the point where the amounts it is allowed to recover in rates for depreciation expense and the PSC benchmark rate of return on investment are insufficient to provide adequate debt coverage. The financial condition of the Utility was documented in past water rate cases as described below:

- In the 2015 rate case, the PSC noted in the final decision that the Utility's capital structure was 77.16 percent debt, and the Utility required a 6.50 percent rate of return, substantially higher than the benchmark rate of 5.00 percent at the time.<sup>1</sup>
- In the 2018 rate case, Utility's capital structure was 78.12 percent debt and an 8.00 percent rate of return on investment was required to provide adequate debt coverage. As part of the rate order in that case, the PSC required the Utility to develop and submit a plan detailing actions that the Utility would take to strengthen its financial position such that the standard municipal rate of return would be sufficient to support its required credit metrics and achieve a capital structure more reasonably balance between debt and equity within a reasonable period. The Utility submitted a Financial Improvement Plan on January 31, 2019. The rate order further required the Utility to submit quarterly updates on its progress in meeting its financial goals.<sup>2</sup>
- In the 2020 rate case, the PSC noted that, while the Utility completed and filed the required financial plan and regular updates, several financial metrics continued to be of concern. Specifically, the percentage of debt remained high at 79.29 percent. Instead of an 8.00 percent rate of return as requested by the Utility, the PSC authorized a 'cash adder' of \$6,855,953 to provide adequate debt coverage. The PSC further required that revenue from the cash adder be maintained in a separate, segregated, restricted account and limited to use for Utility debt retirement or capital improvements. The rate order also specified that these funds not be considered a return on investment that could be

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<sup>1</sup> Docket 3280-WR-113, PSC REF#: 275662, p. 4-5.

<sup>2</sup> Docket 3280-WR-114, PSC REF#: 352551, p. 23.

diverted to the City for non-utility purposes. The rate order required the Utility to continue filing quarterly reports on its financial metrics.<sup>3</sup>

- By the 2022 rate case, the capital structure had improved to 30.00 percent equity and 70.00 percent debt. However, the Utility still required a cash adder of \$6,500,000 to provide adequate debt coverage. Given the changes in the Utility's CIP and the fact that more than three years had passed since the Utility wrote the original Financial Improvement Plan, the PSC ordered the Utility to submit an updated Financial Improvement Plan within 60 days of the effective date of the Final Decision in the rate case. The Utility was also ordered to continue filing semiannual updates on its progress in meeting its financial goals.<sup>4</sup>

### **Summary of Rate Order Requirements**

The Final Decision<sup>5</sup> in the 2022 rate case required that the updated Financial Improvement Plan cover the period 2022 through 2030, include target dates, and detail actions taken to strengthen its financial conditions such that the benchmark municipal rate of return will be sufficient to support its required credit. The financial plan must include:

- a. A description of actions MWU has taken to achieve the benchmark rate of return on rate base for municipal utilities, a capital structure of 50 percent debt and 50 percent equity, and other benchmark financial and operating covenants;
- b. Progress on detailed goals and operational adjustments;
- c. An established timeline with milestones for achieving the goals;
- d. A description of potential obstacles to achieving the goals;
- e. A description of consequent customer impacts, both positive and negative, that may result from implementing the plan;
- f. Evaluation of the use of a surcharge as a future tool for improving the Utility's financial situation; and
- g. A description of additional actions MWU will take to improve its financial condition and address its operational and management challenges.

### **Purpose of the Updated Financial Plan**

The purpose of this updated plan is to comply with Order Point 17 in the 2022 rate case and provide the Utility with a roadmap to keep safe drinking water accessible and affordable to all through a robust program of infrastructure renewal that is funded primarily with current revenues instead of new debt.

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<sup>3</sup> Docket 3280-WR-115, PSC REF#: 392413, p. 6-8.

<sup>4</sup> Docket 3280-WR-116, PSC REF#: 455440, p. 23-24.

<sup>5</sup> Docket 3280-WR-116, PSC REF#: 455440, p. 39

## **Definitions**

Benchmark rate of return – this is the standard rate of return that the PSC allows municipal utilities to earn on their investment in utility assets.

Capital structure – the combination of debt and equity used by a utility to finance its operations and capital investments.

Cash adder – an amount added to the normal revenue requirements of operation and maintenance expenses, taxes, depreciation expense, and return on investment, to allow the Madison Water Utility sufficient revenues to provide debt coverage.

Equity – value of the utility’s assets less outstanding debt. For this financial plan, equity was calculated as the total value of utility financed plant, contributed plant, materials and supplies, and reserve fund balances, less accumulated depreciation and outstanding debt.

Expense depreciation – a method of increasing utility revenue requirements to allow sufficient revenues to cash fund replacement of up to 1.0 percent of water mains per year. This practice is similar to the tax concept of expense depreciation, where businesses claim expense depreciation to a certain threshold, rather than capitalizing the assets and expensing them over time. In this case, the utility capitalizes the water main replacements, but records an amount of depreciation expense equal to the cost of the main replacements in the same year. That additional depreciation expense is included in the revenue requirements for ratemaking purposes under the condition that the utility use this amount to cash fund replacement of water mains on an annual basis.

Net investment rate base (NIRB) – the value of utility plant assets on which a utility is allowed to earn a return on investment under PSC ratemaking practices. It is calculated by taking the original cost of plant assets funded by the utility, less accumulated depreciation on those assets, plus the value of materials and supplies.

Payment in lieu of taxes (PILOT) – a payment made by a municipal utility to the general fund of the municipality in lieu of property taxes on utility-owned property. It is calculated by taking the total tax rate of the overlying taxing jurisdictions (municipal, school district, vocational-technical college district, and county) times the value of all utility owned plant within the limits of the municipality, including both utility financed and contributed plant.

Return on investment – an amount of return or ‘profit’ that a municipal utility is allowed to earn on its net investment in utility plant assets. It is calculated by applying a percentage rate of return to the utility’s net investment rate base (NIRB).

Revenue requirements – the amount of revenue that the PSC allows a utility to recover through its user charge rates. For municipal utilities, revenue requirements include operation and maintenance expenses, taxes, depreciation expense, and a return on investment.



## Overview of the 2019 Plan and Progress Made

### Financial Goals

The 2019 plan established the following financial goals for MWU:

Financial Metric	Benchmark	MWU Goal	Timeline
Infrastructure Investment	Replace critical infrastructure within expected service life	\$136 million	Achieve by 2027
Rate of Return	200 basis points above US 20-year municipal bond rates for a given period	5.00%	Achieve by 2027
Capital Structure (debt to equity ratio)	50% Debt and 50% Equity (Net Assets)	50% Debt / 50% Equity	Achieve by 2032
Debt Coverage Ratio	1.25 x highest outstanding principal and interest payment (revenue bond debt only)	1.25 x	Achieve Annually
Affordability and Rate Stability	MWU Policy O-2D, Affordability states "Annualized Rate Increases" not exceed 9% in any single year, applied from the beginning of the last rate increase to when new rates become effective	Less than 9% per year	Comply Annually
Operation and Maintenance	Three to six months of operation and maintenance expenses (funded over 18 months beginning in 2019)	\$4,000,000*	Achieve by 2021
Depreciation (Debt Requirement)	Used to report resources set aside to fund plant renewals or replacement or make up potential future deficiencies in the redemption account - \$750,000 per bond resolution	\$750,000	Achieve Annually
Redemption (Debt Requirement)	Current-year bond principal payment + interest payment – due on January 2 of the following year; per bond repayment schedules	\$12,772,842**	Achieve Annually
Reserve (Debt Requirement)	The lowest of 125% of average future debt service,	\$17,707,577**	Achieve Annually

	maximum annual future debt service, or 10% of the par value of outstanding bonds; per bond closing statement		
Standpipe Maintenance Reserve	Estimated cost to paint all reservoirs over 20-year useful life – Funded over 20 years	\$11,320,000 total or \$566,000 / yr.	Fully Fund by 2038
Well Rehab Reserve	Estimated cost to rehab 3 wells per year funded over ten years - \$50,000 per well	\$150,000 total or \$15,000 / yr.	Fully Fund by 2028
Main Addition Capital Reserve	One year of capital main additions funded over 10 years – Per 2019 capital budget	\$8,000,000 total or \$800,000 / yr.	Fully Fund by 2028

Annual Reserve Funding Goal (Non-debt related; 2021 and beyond) = \$1,381,000

Total Reserve Goal (without debt) = \$19,470,000

\*\*\* Total Reserve Goal (with debt) = \$54,700,419

\* Calculation does not include plant or equity (net assets) associated with property contributed to the utility

\*\* Calculation will vary annually based upon current year operations, repayment obligations, or changes in water rate orders

\*\*\* Total cash reserve balances in attached alternatives may differ from reserve goal due to changes in reserve balance associated with changes in forecasted debt levels

**Actions Taken Since Adoption of the 2019 Plan**

The Utility has taken many steps since 2019 to improve its operations, develop enhanced reports for decision making, and make progress towards its financial goals.

Regular Rate Increases – The Utility applied for rate increases on July 1, 2019, which was approved June 22, 2020, and on November 30, 2021, with the rate increase approved on December 29, 2022.

Financial Manager – The Utility created a CFO position in 2018 and filled this role in December 2018. The position has since been renamed Financial Manager.

Financial Forecasting and Reporting – The Utility developed a 10-year cash flow analysis and financial forecast that is used for internal analysis and periodic reporting to the City Finance

Department and Water Utility Board. This 10-year plan is used to help inform and develop the 10-year CIP plan. This plan is also used to help monitor the Utility's Financial Improvement Plan.

Accounting – The Utility switched to the City of Madison's ERP system, Munis, in 2019. This allowed the Utility to monitor its cash position in real time and it eliminated the need to double enter all transactions into two systems. The City is now able to see and monitor the Utility's cash as well.

Billing system – The Utility changed billing systems from CIS to Tyler in 2022 and is now entirely on the City of Madison's ERP system. The Utility also changed from self-hosting its metering system to a vendor-hosted metering system in order to improve efficiency and reduce costs.

Operation and Maintenance Expenses – For 2019 through 2022, the Utility has kept O&M expenses below the 2017-2018 levels.

Capital Improvement Program – One of MWU's priorities in its capital improvement/investment strategy is its water main replacement program. The 2021 and 2022 adopted capital budgets reduced all capital improvement spending to help minimize the need for long-term financing.

In the 2022 water rate case, MWU obtained approval for \$5.0 million of annual expense depreciation to fund water main replacements; this represents an approximate annual replacement rate of 0.4% of the water mains in MWU's system. Generally, an annual replacement rate of 1% of the water mains in MWU's system will provide for the full replacement cost of a given main within its lifespan and is the preferred benchmark by both MWU and the Wisconsin Public Service Commission to avoid intergenerational inequities. MWU expects to increase the amount of funding for the main replacement program to the level of 1% in the coming years as it progresses through this financial plan and, more specifically, reduces its debt load.

Debt – The Utility has taken multiple steps to reduce its debt and future interest costs:

- Refunded \$46.7 million of high interest debt in 2019, resulting in a net savings of \$7.2 million
- Refinanced \$24.9 million of revenue debt with City of Madison general obligation debt in 2022, resulting in a net savings of \$4.5 million and a reduction in the required bond reserve
- Applying for Safe Drinking Water Loan Program funds for SFY 2023 and 2024 to refund bond anticipation notes (BANs) issued in 2019 and take advantage of principal forgiveness and subsidized interest rates

### **Progress Made on Financial Goals**

The following chart shows the status of the Utility's financial metrics for 2021 and estimates for 2022 for those metrics for which data is available.

<u>Financial Metric</u>	<u>Benchmark</u>	<u>MWU Goal</u>	<u>Timeline</u>	<u>2021</u>	<u>2022</u>
Infrastructure Investment	Replace critical infrastructure within expected service life	\$136 million	Achieve by 2027	<b>See Narrative Below</b>	
Rate of Return	200 basis points above US 20-year municipal bond rates for a given period	5.00%	Achieve by 2027	<b>7.89%</b>	<b>Not available yet</b>
Capital Structure (debt to equity ratio)	50% Debt & 50% Equity (Net Assets)	50% Debt / 50% Equity	Achieve by 2030	<b>71% Debt 29% Equity</b>	<b>Not available yet</b>
Debt Coverage Ratio	1.25 x highest outstanding annual principal and interest payment(revenue bond debt only)	1.25x	Achieve Annually	<b>1.69</b>	<b>1.94</b>
Affordability and Rate Stability	MWU policy O-2D, Affordability states “Annualized Rate Increases” not exceed 9% in any single year, applied from the beginning of the last increase to when new rates become effective	Less than 10% per year	Comply with annually	<b>Rate Case filed 11/28/21 - 18.2% revenue increase requested</b>	<b>Rate Order received 12/29/2022 - new rates to be implemented 3/1/2023</b>
Operation and Maintenance	Three to six months of operation and maintenance expenses (funded over 18 months beginning in 2019)	\$4,000,000 for 2021	Achieve by 2021	<b>\$ 4,000,000</b>	<b>\$ 4,333,000</b>
<u>Financial Metric</u>	<u>Benchmark</u>	<u>MWU Goal</u>	<u>Timeline</u>	<u>2021</u>	<u>2022</u>
Depreciation (Debt Requirement)	Used to report resources set aside to fund plant renewals and replacement or make up potential future deficiencies in the redemption account - \$750,000 per bond resolution	\$750,000	Achieve Annually	<b>\$ 750,000</b>	<b>\$750,000</b>
Redemption (Debt Requirement)	Current-year bond principal payment + interest payment - due on January 2 of following year; per bond repayment schedules	Amount due on 1/1 of following year	Achieve Annually	<b>\$ 14,917,677</b>	<b>\$13,164,827</b>
Reserve (Debt Requirement)	The lowest of 125% of average future debt service, maximum annual future debt service, or 10% of the par value of outstanding bonds; per bond closing statement	Changes annually	Achieve Annually	<b>\$ 15,738,047</b>	<b>\$12,631,436</b>
Standpipe Maintenance Reserve	Estimated cost to paint all reservoirs over 20 year useful life – Funded over 20 years	\$11,320,000 total or \$566,000 / yr	Fully Fund by 2038	<b>\$ 1,698,000</b>	<b>\$2,264,000</b>
Well Rehab Reserve	Estimated cost to rehab 3 wells per year funded over ten years - \$85,000 per well	\$225,000 total	Fully Fund by 2028	<b>\$ 225,000</b>	<b>\$225,000</b>
Main Addition Capital Reserve	One year of capital main additions funded over ten years – Per 2019 capital budget	\$8,000,000 total or \$800,000 / yr	Fully Fund by 2028	<b>\$ 4,210,156</b>	<b>\$0</b>
BAN Repayment Fund	2019 BANs are due on 11/01/2024. Expect \$5M in SDWL, cash fund the remainder.	\$15,000,000 total or \$3,750,000 / yr	Fully Fund by 11/2024	<b>\$ 5,000,000</b>	<b>\$9,020,294</b>

### Rate of Return / Cash Adder

In the 2018 rate case, the PSC allowed a rate of return of 8.00%. In the 2020 rate case, the PSC allowed a 4.90% rate of return and a cash adder of \$6,855,953, or an equivalent rate of return of 8.00%. The actual rates of return earned by the Utility were 6.62% in 2019, 6.63% in 2020, and 7.89% in 2021.

In the recently completed rate case, the PSC allowed a 5.4% rate of return and a cash adder of \$6,500,000 for test year 2022. This is the equivalent of a rate of return of 8.33%. The rates will not be effective until March 1, 2023, so the Utility is unlikely to earn this amount for either 2022 or 2023. The estimated actual rate of return for 2022 is 7.86%.

The Utility is not yet able to meet its debt obligations with the benchmark rate of return or to reduce the amount of the combined return on investment and cash adder because the Utility's annual debt service payments remain elevated. Based on current debt service obligations and the Utility's plans for financing upcoming capital improvements, it is expected that debt service payments will gradually decrease beginning in 2025, eventually allowing the Utility to phase out the cash adder. This plan develops an updated timeline for doing so.

### Infrastructure Investment

As noted above, the Utility prioritized investment in main replacements over other capital projects and reduced its capital spending overall to avoid issuing more debt. In the last four years, 2019-2022, the Utility spent approximately \$25.4 million on capital outlay, the majority of which was spent on mains, services, and hydrants. This was much lower than the \$90.9 million spent on infrastructure for the prior four years, 2015-2018.

In the 2022 water rate case, the Utility requested, and obtained, approval for \$5.0 million per year of expense depreciation for main replacements. This will provide the utility with a baseline amount to cash fund main replacements instead of continuing to issue debt.

The amount of future infrastructure investment will depend on the amount of additional expense depreciation that the PSC approves and the amount of funding that is generated by the Utility's debt coverage requirements. This plan develops an updated estimate of expected future funds for infrastructure investment over the next ten years.

### Capital Structure

The Utility issued no new debt since 2019. The amount of outstanding debt decreased by \$36.7 million between 2019 and 2022, from \$214.8 million to \$178.1 million. For 2022, the Utility's capital structure is estimated to be comprised of 70.00 percent debt, 30.00 percent equity.

### Debt Coverage Ratio

The Utility has consistently maintained a debt coverage ratio of at least the 1.25 times the highest principal and interest payment for revenue bond debt.

### Rate Stability

The Utility obtained an 8.9 percent rate increase in 2020 and an 18.2 percent rate increase in 2022, both of which met the Utility's policy of keeping rate increases below 9.0 percent per year.

### Reserve Funds

The Utility has maintained adequate operating reserve funds equal to at least 3 months of operation and maintenance expenses and other reserves required by bond covenants. The Utility has established and is funding other maintenance reserves, as well as a BAN Repayment Fund to set aside funds to repay a portion of the BANs in 2024. A portion of the BANs will also be refinanced with new loans from the Safe Drinking Water Loan Program.

## **Framework for the Updated Plan**

### **Overall Goals**

Since 2019, the Madison Water Utility has stabilized its financial condition, established adequate reserve funds, refinanced debt at more favorable terms, reduced its overall debt burden, improved financial reporting, held the line on operation and maintenance expenses, and secured a dedicated source of cash funding for main replacements. However, investments in infrastructure renewal and replacement have been lower than desired over the past few years.

The Utility's broad goals for the next phase of this plan are to:

7. Maintain sound financial management.
8. Manage customer impacts.
9. Reduce outstanding debt to a level that does not burden the Utility or restrict its financial options.
10. Keep debt burden low in the future by using debt only as needed to provide rate stability and intergenerational equity.
11. Eliminate the need for the cash adder.
12. Build an adequate, sustainable program of infrastructure renewal and replacement.

### **Approach**

The Utility recognizes the need to balance many factors and concerns in developing this plan. It also acknowledges that past financial decisions made by the Utility, as well as the rate setting practices of the PSC, place some constraint on the Utility's alternatives. Key considerations and constraints include the following.

In developing the plan, these factors were considered in the following order:

1. Is a rate increase needed to provide adequate debt coverage?
2. If the increase needed to provide adequate debt coverage is less than 9.0 percent per year, does the Utility need to increase its expense depreciation program to achieve replacement of 1.0 percent of mains per year? How much of an increase in expense depreciation can be achieved within a rate increase of 9.0 percent or less per year?
3. In addition to main replacements and associated services and hydrants, how much revenue will the Utility have each year to cash fund other capital improvements while maintaining adequate reserve funds?
4. Are there any large capital improvement projects that the Utility needs to complete that should be debt financed, and when will the Utility have sufficient capacity to issue new debt?

## **Specific Metrics**

MWU developed the following metrics for this updated financial plan to support each of its goals.

### **Maintain Sound Financial Management**

At a minimum, MWU must comply with its bond covenant requirements and maintain sufficient reserves to manage fluctuations in cash flow or unexpected expenses.

MWU will continue to meet all bond covenant requirements for debt coverage and bond reserves as listed in the table below. Although the minimum debt coverage requirement is 1.25x the highest principal and interest payment for revenue bond debt only, MWU plans to request rate increases that will provide at least 1.40x total principal and interest payments. This will provide a margin in the event of lower-than-expected revenues or higher than expected expenses and will also help the Utility maintain adequate debt coverage between rate increases.

In the 2019 financial plan, MWU established an operation and maintenance reserve target of 3 to 6 months of operation and maintenance expenses, as well as reserves totaling almost \$19.5 million for well rehabilitation, standpipe maintenance, and main replacement. In this updated plan, MWU will maintain an operation and maintenance reserve equal to at least 3 months of operation and maintenance expenses.

However, instead of building up and holding substantial reserves for specific maintenance and replacement purposes, MWU has programed the cost of standpipe maintenance, well rehabilitation, and water main replacement into its annual financial projections. The projected operation and maintenance expenses include the anticipated timing and costs for standpipe maintenance. The annual capital improvement program includes \$400,000 per year for ongoing well rehabilitation projects. The Utility has secured a source of funding for the annual water main replacement program.

### **Manage Customer Impacts**

MWU will need to increase water rates in future years to accomplish all the goals in this plan. The Utility plans to manage the impacts on customers by increasing rates gradually and limiting rate increases to no more than 9.0 percent per year.

MWU also intends to minimize interest costs in the future to mitigate the need for and size of future rate increases.

### Reduce the Utility's Debt Burden

As required by the Final Decision<sup>6</sup>, one of MWU's metrics for debt burden is debt as a percentage of capital structure. The Utility plans to reduce its percentage of debt to no more than 50 percent. MWU added two additional metrics to measure the Utility's debt burden.

Moody's Investors Service uses the ratio of outstanding debt to operating revenues to evaluate debt burden. The calculation for this metric is net debt divided by the prior year's operating revenues, where net debt is long-term debt less debt service reserve funds. To obtain the highest score for this criterion, Moody's requires a ratio of debt to operating revenues of less than 2.00.<sup>7</sup>

MWU also considers annual interest expense as a part of its debt burden. This plan includes a metric to measure interest expense as a percentage of operating revenues. The benchmark of interest expense less than 10 percent of the Utility's operating revenues was developed based on a review of interest expense carried by other large utilities in Wisconsin. However, it is the Utility's intent to minimize interest expense consistent with its overall goal of keeping drinking water affordable for customers.

### Keep the Debt Burden Low in the Future

This plan does include metrics for debt carried by the Utility to inform the Utility and PSC regarding the Utility's debt burden and indicate if the debt burden is too high. However, the Utility does not intend to use these metrics to keep the debt burden at a certain level. The Utility intends to use debt only as needed to provide rate stability and intergenerational equity. This approach will keep the overall burden of debt and interest costs on the Utility and its customers to a minimum.

### Eliminate the Need for the Cash Adder

Under PSC rate setting practices, utilities are allowed to recover operation and maintenance expenses, taxes, depreciation expense, and a rate of return on net investment rate base. This approach does not factor in a utility's cash needs to fund capital improvements. MWU has been allowed to recover a cash adder in addition to the normal benchmark rate of return only because it needs the cash adder to provide adequate debt coverage. This has two important implications for this financial plan:

- As long as MWU needs the cash adder, the amount needed to provide adequate debt coverage will be a key limiting factor in how much revenue the Utility can generate.
- As long as revenue requirements are limited by debt coverage, the amount of current revenues available for capital improvements, other than the main replacements covered by expense depreciation, will be limited.

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<sup>6</sup> Docket 3280-WR-116, PSC REF#: 455440, p. 39

<sup>7</sup> "Rating Methodology: US Municipal Utility Revenue Debt", Moody's Investors Service, p. 10-12.



### Develop a Sustainable Infrastructure Renewal Program

Expense Depreciation – In the 2022 rate case, the Utility requested and obtained approval for \$5.0 million per year of expense depreciation to cash fund watermain replacements. This amount is expected to fund replacement of 0.4 percent of the Utility’s water mains per year. In the Final Decision<sup>8</sup>, the PSC encouraged MWU to evaluate increasing its level of expense depreciation in future capital improvement and financial plans to achieve a full one percent of expense depreciation. This plan presents a proposed timeline for achieving this goal. However, the Utility’s ability to achieve and sustain a full one percent of expense depreciation will need to be balanced with trends in construction costs and affordability concerns.

Other Capital Improvements – Recent years’ investments in capital improvements have been lower than normal or desirable due to the focus on stabilizing the Utility’s financial position. It is the Utility’s goal to build a more robust capital improvement program to renew and replace infrastructure. However, it is critical that this be done in a sustainable manner that relies on current revenues to fund routine annual expenditures rather than continuously issuing new debt to fund most of the program.

The Utility has obtained approval for \$5.0 million per year of expense depreciation to provide a dedicated source of revenue for its main replacement program. For other capital improvements, however, the amount of current revenues for cash funding routine capital projects will be limited in the short term to the amount of revenues needed to provide debt coverage. Rather than augmenting this amount with new debt, it is the Utility’s intent to limit the use of debt financing to major projects for which debt financing is necessary to provide rate stability and intergenerational equity. While this will limit the amount of funding available for capital improvements in the short term, it will reduce interest costs and provide a more sustainable program in the long term. This plan shows how much funding the Utility expects to have available for other capital improvements, however MWU did not include a metric for the amount of funding for capital improvements other than main replacements.

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<sup>8</sup> Docket 3280-WR-116, PSC REF#: 455440, p. 11

<b>Metric</b>	<b>Goal</b>	<b>Benchmark</b>
Debt Coverage	Bond Covenant Requirements	The minimum coverage required by bond covenants is 1.25x the highest principal and interest payment. The Utility intends to target a coverage ratio of 1.40x total debt service payments to provide a margin
Depreciation Reserve	Bond Covenant Requirements	\$750,000
Debt Redemption Reserve	Bond Covenant Requirements	Current-year bond principal payment + interest payment – due on January 2 of the following year; per bond repayment schedules
Debt Reserve	Bond Covenant Requirements	The lowest of 125% of average future debt service, maximum annual future debt service, or 10% of the par value of outstanding bonds
Expense Depreciation for Main Replacement	Sustainable Infrastructure Renewal	Increase expense depreciation to an amount equal to the cost to replace 1.0% of the Utility's water mains per year
Rate Stability	Manage Customer Impacts	MWU Policy O-2D, Affordability states “Annualized Rate Increases” not exceed 9% in any single year, applied from the beginning of the last rate increase to when new rates become effective
Percent Debt	Reduce Debt Burden	Reduce the percentage of debt to a maximum of 50 percent debt
Ratio of Outstanding Debt to Operating Revenues	Reduce Debt Burden	Outstanding debt equal to no more than 2.00 times annual operating revenues
Interest Expense as a Percent of Operating Revenues	Reduce Debt Burden	Reduce interest expense to no more than 10% of operating revenues
Use of Debt	Keep Debt Burden Low	Use debt only as needed to provide rate stability and intergenerational equity; avoid issuing debt for routine annual capital projects
Rate of Return	Eliminate Cash Adder	Fully fund the Utility's cash needs at a rate of return equal to or less than the PSC benchmark rate of return
Operation and Maintenance	Cash Flow Management	Three to six months operation and maintenance expenses

## **Summary of the Updated Plan**

This section of the plan describes how the Utility plans to manage its finances over the next ten years (2024 – 2033) to keep safe drinking water accessible and affordable to all through a robust program of infrastructure renewal that is funded primarily with current revenues instead of new debt.

### **Key Assumptions**

Several assumptions were used to develop the projections used in this financial plan as described below.

2023 sales revenues – Since the new water rates take effect on March 1, 2023, the water sales revenues for 2023 assume revenues at the old rates for two months and revenues at the new rates for 10 months.

Customer demand – Trends in customer growth and water sales were thoroughly analyzed by customer class and type of rate to develop projections of water sales and revenues as a baseline for the next ten years. This baseline did not assume any impact from projected rate increases, but potential impacts are discussed in the final section of this report. The projections assume a minor amount of growth annually.

Other operating income – It was assumed that other operating income will remain at the 2022 level, which was somewhat lower than prior years.

Interest income – Projected interest income is shown on a cash basis and is calculated at 1.0 percent of total reserve fund balances.

Operation and maintenance expenses – The forecast for 2023 uses the approved 2022 revenue requirements as the basis, adjusted for planned standpipe and water tower painting expenses by year. Operation and maintenance expenses are inflated by 2.0 percent per year for future years.

PILOT – It was assumed that the City of Madison will continue to take the full amount of the PILOT payment as authorized. The base year PILOT assumption is an average of the actual amounts paid in 2021 and 2022, as there was a significant deviation in the tax rates between the two years. The PILOT for future years was assumed to increase each year in proportion to the net increase in total plant in service, taking into account projected additions and retirements of both utility financed and contributed plant. The largest variable in projecting the PILOT amount, over which MWU has no control, is the underlying tax rates that form the basis of the PILOT calculation.

Percentage of mains replaced in 2023 – Since the rate increase does not take effect until March 1, 2023, the Utility will have 10 months of expense depreciation, or \$4,166,667, for main replacements in 2023.

Inflation in main replacement costs – The cost per foot of utility financed main replacement in Madison more than doubled between 2011 and 2020, from \$124 per foot to \$258 per foot, or

about 8.5 percent per year on average. During this same time the average annual increase in construction costs nationwide was about 4.0 percent. This plan assumes an increase of 4.0 percent per year for main replacement costs in the future.

Timing of rate increases – The Final Decision in the 2022 rate case required the Utility to file another water rate application with a test year of 2025.<sup>9</sup> It was assumed that the rates approved for the 2025 rate case would not be effective until 2026. It is projected that the Utility will be eligible for and file another water rate application with a 2027 test year, with rates effective in 2028. After 2027, the ability of the Utility to qualify for an additional rate increase during the planning period will depend on whether it needs another rate increase to maintain debt coverage or a program of replacing 1.0 percent of water mains per year.

Safe Drinking Water Loans – The Utility submitted Notices of Intent to Apply for Safe Drinking Water Loans for SFY 2023 and 2024 for the following projects:

- 2023 SFY - \$5,826,899 to reimburse the Utility for water main replacements constructed in 2020 and 2021, initially financed with 2019 BANs.
- 2024 SFY – \$3,300,000 to reimburse the Utility for water main replacements constructed in 2022, initially financed with 2019 BANs.
- 2024 SFY - \$3,738,000 for improvements to Unit Well 14.
- 2024 SFY - \$5,878,000 of principal forgiveness to treat PFAS in Unit Well 15.
- 2024 SFY - \$6,800,000 for improvements to address radium, iron, and manganese in Unit Well 19.
- 2024 SFY - \$1,000,000 for a variety of operational resiliency projects in 2023.

Some of the proceeds will be used to refinance the 2019 BANs while others will be used to finance future projects. The interest rate for the loans was assumed to be 1.650 percent, the current rate as of the date of this plan.

Rate of return – The PSC authorized a 5.40 percent rate of return in the 2022 rate case. The current benchmark rate of return as of the date of this plan is 6.30 percent. For purposes of this plan, the projected rate of return is evaluated compared to the 5.40 percent authorized in the 2022 rate case.

### **Timeline with Milestones**

Detailed financial projections for the period 2024-2033, with 2022 and 2023 figures included for context, are included in Appendix A. The tables on the following pages summarize the projected rate increases, operating funds, construction funds, percentage of water mains replaced, other reserves, and key financial metrics by year. Highlighted figures indicate the following:

- Green – the figure meets or exceeds the targeted benchmark for that metric.

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<sup>9</sup> Docket 3280-WR-116, PSC REF#: 455440, p. 40

- Yellow – the figure is close to the targeted benchmark for that metric but needs improvement.
- Orange – the figure is significantly different than the targeted benchmark for that metric.

Based on these projections, MWU expects to accomplish the following within the planning period of 2024-2033:

- Reduce the ratio of outstanding debt to operating revenues to less than 2.00 and reduce interest expense to less than 10.0 percent of operating revenues by 2025.
- Reduce outstanding debt to less than 50 percent of the capital structure by 2026.
- Increase expense depreciation to an amount sufficient to replace 1.0 percent of water mains per year by 2028.
- Eliminate or nearly eliminate the need for a cash adder by 2033, depending on many factors including the benchmark rate of return in future years.
- Invest in about \$232 million of capital improvement projects, with \$212 million cash funded and \$20 million debt financed.

Debt coverage is projected to be below 1.25x total principal and interest payments in 2023 and 2025. This is due in part to planned standpipe maintenance projects in 2023 and 2025 that will increase operation and maintenance expenses in these two years. It is also due in part to the actual or anticipated effective date of rate increases. With the 2022 rate increase becoming effective on March 1, 2023, the Utility will not have a full year of increased revenues in 2023. Similarly, it is expected that a rate increase submitted for a 2025 test year will not become effective until the beginning of 2026. A portion of the Utility's debt was refinanced with General Obligation bonds in 2022, so the Utility expects to meet 1.25x principal and interest payments on its revenue bonds.

A ten-year Capital Improvement Program for 2023-2033 is included in Appendix B. This plan includes the planned program of main replacements and associated services and hydrants, major improvements to several wells and booster pump stations, and an annual allowance for routine capital improvements and vehicle and equipment purchases.

This plan is based on numerous estimates and assumptions about future conditions. MWU expects actual performance to vary from these projections and will regularly monitor actual performance and adjust the plan to changing conditions as needed.

	2022	2023	2024	2025
Overall Rate Increase	0.0%	18.2%	0.0%	17.0%
<b>Section I. Operating Fund</b>				
Beginning Balance	\$7,926,723	\$8,067,123	\$6,156,378	\$10,452,433
<i>Revenues / Transfers In</i>				
Operating Revenues	\$48,779,344	\$55,620,982	\$57,039,487	\$57,040,270
Transfer from Bond Reserve Account <sup>(1)</sup>	\$2,359,583			
Transfer from Principal & Interest Account <sup>(1)</sup>	\$2,680,625			
Transfer from BAN Repayment Fund <sup>(1)</sup>	\$0	\$0	\$13,326,899	\$0
<i>Expenses / Transfers Out</i>				
Operation and Maintenance Expenses	(\$16,656,843)	(\$20,277,436)	(\$18,919,776)	(\$20,034,845)
Taxes	(\$7,518,886)	(\$8,058,267)	(\$8,184,940)	(\$8,539,339)
Debt Service	(\$24,071,874)	(\$18,767,624)	(\$38,965,615)	(\$19,033,532)
Accounts Receivable/Payable Adjustment	(\$1,210,678)			
Net Cash Flow from Operations	\$4,361,271	\$8,517,655	\$4,296,056	\$9,432,554
Transfer to BAN Repayment Fund	(\$2,500,000)	\$0		
Transfer to Construction Fund	(\$1,720,871)	(\$10,428,401)	\$0	(\$5,907,000)
Ending Balance	\$8,067,123	\$6,156,378	\$10,452,433	\$13,977,987
3 Months' Operating Expenses	\$4,164,211	\$5,069,359	\$4,729,944	\$5,008,711
6 Months' Operating Expenses	\$8,328,422	\$10,138,718	\$9,459,888	\$10,017,422
Amount Over / (Under) Reserve Targets	\$0	\$0	\$992,546	\$3,960,565
<b>Section II. Construction Fund</b>				
Beginning Balance	\$8,343,940	\$6,581,266	\$0	\$3,093,000
Transfer in from Operating Fund	\$1,720,871	\$10,428,401	\$0	\$5,907,000
SDW Loan Proceeds	\$0	\$0	\$14,438,000	\$400,000
SDW Principal Forgiveness	\$0	\$0	\$5,878,000	\$0
Bonds Issued	\$0	\$0	\$0	\$0
Capital Expenditures	(\$3,483,545)	(\$17,009,667)	(\$17,223,000)	(\$9,400,000)
Ending Balance	\$6,581,266	\$0	\$3,093,000	\$0
Percentage of Mains Replaced per Year		0.3%	0.4%	0.4%
<b>Section III. Reserves</b>				
Principal and interest account - Restricted	\$13,164,827	\$13,191,166	\$13,217,358	\$13,407,103
Bond reserve account - Restricted	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565
Depreciation account - Restricted	\$750,000	\$750,000	\$750,000	\$750,000
Assessment account - Restricted	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770
BAN Repayment Fund - Restricted	\$7,500,000	\$13,326,899	\$0	\$0
Total	\$36,717,162	\$42,570,400	\$29,269,693	\$29,459,438
<b>Section IV. Financial Metrics</b>				
Debt Coverage	146%	123%	132%	122%
Outstanding Debt	\$178,174,672	\$171,581,983	\$153,046,611	\$139,724,015
Percent Debt	68.8%	65.5%	58.7%	54.3%
Ratio of Outstanding Debt to Oper. Revenues	3.15	2.62	2.23	1.99
Interest Expense	\$7,331,916	\$6,348,036	\$5,983,529	\$5,310,935
Interest as a % of Operating Revenues	15.0%	11.4%	10.5%	9.3%
Projected PILOT	\$6,845,437	\$7,371,349	\$7,484,283	\$7,824,669
PILOT as a % of Operating Revenues	14.0%	13.3%	13.1%	13.7%
Effective Rate of Return	7.86%	7.14%	7.65%	6.94%

(1) Transfer from reserve funds for refunding existing bonds.

	2026	2027	2028	2029
Overall Rate Increase	0.0%	8.0%	0.0%	0.0%
<b>Section I. Operating Fund</b>				
Beginning Balance	\$13,977,987	\$14,583,650	\$13,835,538	\$13,005,060
<i>Revenues / Transfers In</i>				
Operating Revenues	\$66,637,035	\$66,713,773	\$72,263,919	\$72,481,141
Transfer from Bond Reserve Account <sup>(1)</sup>				
Transfer from Principal & Interest Account <sup>(1)</sup>				
Transfer from BAN Repayment Fund <sup>(1)</sup>	\$0	\$0	\$0	\$0
<i>Expenses / Transfers Out</i>				
Operation and Maintenance Expenses	(\$19,870,559)	(\$20,661,012)	(\$20,851,904)	(\$21,354,421)
Taxes	(\$8,899,183)	(\$9,120,272)	(\$9,483,326)	(\$9,858,856)
Debt Service	(\$19,011,631)	(\$18,580,601)	(\$18,509,168)	(\$17,717,573)
Accounts Receivable/Payable Adjustment				
Net Cash Flow from Operations	\$18,855,662	\$18,351,888	\$23,419,522	\$23,550,291
Transfer to BAN Repayment Fund				
Transfer to Construction Fund	(\$18,250,000)	(\$19,100,000)	(\$24,250,000)	(\$24,350,000)
Ending Balance	\$14,583,650	\$13,835,538	\$13,005,060	\$12,205,351
3 Months' Operating Expenses	\$4,967,640	\$5,165,253	\$5,212,976	\$5,338,605
6 Months' Operating Expenses	\$9,935,280	\$10,330,506	\$10,425,952	\$10,677,210
Amount Over / (Under) Reserve Targets	\$4,648,370	\$3,505,032	\$2,579,108	\$1,528,140
<b>Section II. Construction Fund</b>				
Beginning Balance	\$0	\$0	\$0	\$0
Transfer in from Operating Fund	\$18,250,000	\$19,100,000	\$24,250,000	\$24,350,000
SDW Loan Proceeds	\$0	\$0	\$0	\$0
SDW Principal Forgiveness	\$0	\$0	\$0	\$0
Bonds Issued	\$0	\$0	\$0	\$0
Capital Expenditures	(\$18,250,000)	(\$19,100,000)	(\$24,250,000)	(\$24,350,000)
Ending Balance	\$0	\$0	\$0	\$0
Percentage of Mains Replaced per Year	0.7%	0.7%	1.0%	1.0%
<b>Section III. Reserves</b>				
Principal and interest account - Restricted	\$13,175,901	\$13,435,198	\$12,824,967	\$11,361,979
Bond reserve account - Restricted	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565
Depreciation account - Restricted	\$750,000	\$750,000	\$750,000	\$750,000
Assessment account - Restricted	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770
BAN Repayment Fund - Restricted	\$0	\$0	\$0	\$0
Total	\$29,228,236	\$29,487,533	\$28,877,302	\$27,414,314
<b>Section IV. Financial Metrics</b>				
Debt Coverage	146%	144%	144%	147%
Outstanding Debt	\$125,445,876	\$111,057,838	\$96,064,653	\$81,321,069
Percent Debt	48.6%	43.0%	37.2%	31.5%
Ratio of Outstanding Debt to Oper. Revenues	1.49	1.26	0.97	0.78
Interest Expense	\$4,733,492	\$4,192,563	\$3,515,982	\$2,973,989
Interest as a % of Operating Revenues	7.1%	6.3%	4.9%	4.1%
Projected PILOT	\$8,170,220	\$8,376,730	\$8,724,913	\$9,085,275
PILOT as a % of Operating Revenues	12.3%	12.6%	12.1%	12.5%
Effective Rate of Return	8.87%	8.35%	8.24%	7.84%

	2030	2031	2032	2033
Overall Rate Increase	0.0%	0.0%	0.0%	0.0%
<b>Section I. Operating Fund</b>				
Beginning Balance	\$12,205,351	\$13,445,621	\$14,642,180	\$19,233,902
<i>Revenues / Transfers In</i>				
Operating Revenues	\$72,702,631	\$72,948,465	\$73,197,787	\$73,484,972
Transfer from Bond Reserve Account <sup>(1)</sup>				
Transfer from Principal & Interest Account <sup>(1)</sup>				
Transfer from BAN Repayment Fund <sup>(1)</sup>	\$0	\$0	\$0	\$0
<i>Expenses / Transfers Out</i>				
Operation and Maintenance Expenses	(\$21,767,865)	(\$22,189,578)	(\$23,389,452)	(\$23,314,641)
Taxes	(\$10,326,404)	(\$10,797,365)	(\$11,254,601)	(\$11,752,620)
Debt Service	(\$16,118,092)	(\$12,814,963)	(\$12,032,012)	(\$10,233,869)
Accounts Receivable/Payable Adjustment				
Net Cash Flow from Operations	\$24,490,271	\$27,146,559	\$26,521,722	\$28,183,843
Transfer to BAN Repayment Fund				
Transfer to Construction Fund	(\$23,250,000)	(\$25,950,000)	(\$21,930,000)	(\$28,770,000)
Ending Balance	\$13,445,621	\$14,642,180	\$19,233,902	\$18,647,744
3 Months' Operating Expenses	\$5,441,966	\$5,547,394	\$5,847,363	\$5,828,660
6 Months' Operating Expenses	\$10,883,932	\$11,094,789	\$11,694,726	\$11,657,320
Amount Over / (Under) Reserve Targets	\$2,561,689	\$3,547,391	\$7,539,176	\$6,990,424
<b>Section II. Construction Fund</b>				
Beginning Balance	\$0	\$0	\$0	\$0
Transfer in from Operating Fund	\$23,250,000	\$25,950,000	\$21,930,000	\$28,770,000
SDW Loan Proceeds	\$0	\$0	\$0	\$0
SDW Principal Forgiveness	\$0	\$0	\$0	\$0
Bonds Issued	\$0	\$0	\$10,000,000	\$10,000,000
Capital Expenditures	(\$23,250,000)	(\$25,950,000)	(\$31,930,000)	(\$38,770,000)
Ending Balance	\$0	\$0	\$0	\$0
Percentage of Mains Replaced per Year	1.0%	0.9%	0.9%	0.9%
<b>Section III. Reserves</b>				
Principal and interest account - Restricted	\$8,179,486	\$7,508,851	\$6,337,284	\$6,448,696
Bond reserve account - Restricted	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565
Depreciation account - Restricted	\$750,000	\$750,000	\$750,000	\$750,000
Assessment account - Restricted	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770
BAN Repayment Fund - Restricted	\$0	\$0	\$0	\$0
Total	\$24,231,821	\$23,561,186	\$22,389,619	\$22,501,031
<b>Section IV. Financial Metrics</b>				
Debt Coverage	158%	193%	194%	227%
Outstanding Debt	\$67,686,831	\$56,956,677	\$56,635,344	\$58,123,952
Percent Debt	26.2%	21.7%	20.7%	20.2%
Ratio of Outstanding Debt to Oper. Revenues	0.63	0.49	0.50	0.52
Interest Expense	\$2,483,853	\$2,084,810	\$1,710,679	\$1,722,477
Interest as a % of Operating Revenues	3.4%	2.9%	2.3%	2.3%
Projected PILOT	\$9,537,351	\$9,992,531	\$10,433,671	\$10,915,271
PILOT as a % of Operating Revenues	13.1%	13.7%	14.3%	14.9%
Effective Rate of Return	7.47%	7.07%	6.19%	5.66%



## **Description of Potential Obstacles**

This plan depends on many factors and changes in any of these factors could prove to be obstacles to successful implementation as described below.

### *Inflation in Operation and Maintenance Costs*

MWU kept operation expenses for 2019-2022 below 2017-2018 levels, and the projected 2023 expenses used in this plan are about 11 percent higher than 2022 expenses. However, the rate of inflation has been significantly more than 2.0 percent over the past year, so future inflation of expenses may be higher than projected in this plan. The projected rate increases in this plan are well below the target of no more than 9.0 percent per year, so the Utility may have the ability to implement higher rate increases if needed to cover higher operation and maintenance expenses.

### *Inflation in Construction Costs*

As noted above, MWU's construction costs per foot of main more than doubled between 2011 and 2020, increasing at an average rate of 8.5 percent per year. This plan assumed average inflation in main replacement costs of 4.0 percent per year based on the average increase in the Construction Cost Index reported by Engineering News Record over the last ten years. If MWU's construction costs continue to increase at a faster pace compared to the overall rate of construction cost inflation this may have several implications for this plan:

- Higher rate increases or additional rate increases may be needed to achieve or maintain replacement of 1.0 percent of water mains per year.
- MWU may not be able to complete all the capital improvements listed in Appendix B within the planning period.
- A review of why MWU's construction costs are increasing faster than the overall pace of construction cost inflation may be warranted.

### *Timing of Rate Cases*

The Final Decision<sup>10</sup> in the 2022 rate case requires MWU to file a water rate case with a 2025 test year within two years of the decision. A rate application with a 2025 test year may be filed after August 1, 2024. However, the estimated processing time for a rate case that must be decided by the Commission is a full year or more. This plan assumed new rates would take effect at the beginning of 2026.

### *PILOT*

This plan modeled out potential future increases in PILOT based on MWU's planned investments in infrastructure as well as a baseline annual amount of new contributed plant, less retirements. PILOT is expected to increase substantially in absolute terms but is not projected to increase as a percentage of operating revenues. However, in practical terms, this means that PILOT will

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<sup>10</sup> Docket 3280-WR-116, PSC REF#: 455440, p. 40

increase faster than projected inflation and is projected to increase by over \$3 million annually by 2032.

To mitigate the financial impacts of the increased program of infrastructure renewal and replacement on MWU and its customers, the City of Madison could choose to limit future increases in PILOT payments. For example, if the City were to freeze the PILOT at the 2023 level, MWU could save about \$16 million cumulatively over the next 10 years, which could be used for additional capital investment or rate relief for customers. Considering that the PILOT from MWU only accounts for about 2% of the City's budgeted operating revenues, and it takes up about 13% of MWU's operating revenues, providing PILOT relief to the utility has a much greater impact for utility customers than the extra PILOT revenues would provide to the City's general fund.

### Variability in Water Sales

Total water sales of MWU have been on a declining trend for several years. The baseline water demand projections include a minor amount of growth in the customer base, with water sales projections varying depending on the customer class. Revenues generated from volumetric user rates are projected to be about 72.5% of total operating revenues, based on the approved rates. If less water is sold than what is projected, MWU will generate less revenue to meet the financial goals of this plan. For example, for every 0.25% decrease in water sales, the utility would collect about \$100,000 less in revenue. Such a scenario could delay the timing of when MWU will meet its various financial metrics or would require a higher rate increase if that were to continue. If more revenues were collected via fixed charges based on meter size, that would mitigate the risk that variation in water sales might negatively impact MWU's financial health.

### **Description of Customer Impacts**

Under the new approved rates that will take effect March 1, 2023, the average single-family residential MWU customer pays \$33.90 per month, assuming 4,000 gallons of water use. A residential customer with the same water use that is participating in MWU's customer assistance program would pay either \$25.90 or \$21.90 per month, depending on the level of assistance received. This plan projects rate increases of 17% and 8% in 2026 and 2028, respectively. Assuming the percentage increase would apply to all rates proportionately, this would result in monthly bills of \$39.66 and \$42.83 for the average residential customer, or increases of \$5.76 and \$3.17, respectively.

The actual direct impacts to customers will vary by customer size and class. In the Final Decision of the most recent rate case, percentage increases varied greatly by customer class and type of charge.<sup>11</sup> The rates for future years will depend on changes in customer class demand characteristics, MWU's cost structure, and proposed changes to the rate structure to aid in meeting these financial goals, which will ultimately be decided by the Public Service Commission.

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<sup>11</sup> Docket 3280-WR-116, PSC REF#: 455440, Appendix B.

Indirect impacts of implementing the financial plan include long-term rate stability for customers, lower future rates through reduced annual interest expense, and sustained investment in the water infrastructure to provide a reliable source of drinking water and water for fire protection.

### **Evaluation of the Use of a Surcharge as a Future Tool for Improving the Utility's Financial Position**

The 2019 Financial Plan evaluated several alternatives in which MWU would request approval from PSC to charge customers a monthly surcharge per equivalent meter to generate additional revenue. The Plan noted that this was a hypothetical alternative, that the PSC had not established a surcharge template for utilities, and it was unclear what surcharge template PSC would approve. For these reasons the plan stated that attempting to obtain approval for a surcharge was not the desired path.<sup>12</sup>

MWU reviewed the 2019 Financial Plan and concluded that this statement remains true. PSC has not approved a surcharge and it is unclear whether such a charge would be approved. In addition, MWU has developed a plan to meet its financial goals and develop a robust capital improvement plan without the use of a surcharge.

In the 2022 rate case, MWU requested that a portion of the expense depreciation be recovered from customers as a fixed water main replacement charge. The Commission noted that the percentage of expense depreciation proposed to be recovered as a fixed charge was higher than the percentage allowed in the Fort Atkinson water rate case, docket 2060-WR-160. It also noted that the proposed charge would not increase MWU's the overall percentage of revenues from fixed charges. However, PSC denied the request to add a new water main replacement charge.<sup>13</sup>

MWU intends to evaluate a potential water main replacement charge in the next water rate case as it believes that maintaining a reasonable balance between fixed and volumetric revenues is important to the financial health of the Utility.

### **Description of Additional Actions**

MWU plans to take the following actions to implement this plan.

1. Update this plan every six months and file a report with PSC.
2. Monitor financial conditions and adjust this plan as needed. Potential adjustments to the plan are described under Framework for an Updated Plan and Summary of the Updated Plan.
3. Apply for water rate increases with test years of 2025 and 2027.
4. Apply for Safe Drinking Water Loan Program loans and principal forgiveness for SFY 2023 and 2024 as described in this plan.

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<sup>12</sup> Madison Financial Improvement Plan, January 2019, PSC REF#: 358776, p. 23-24.

<sup>13</sup> Docket 3280-WR-116, PSC REF#: 455440, p. 27-28.

5. Fund annual capital improvements with current revenues except as noted in this plan or as needed to finance major improvements. The capital improvement program will be updated on an annual basis to reflect updated projections of revenue available to fund capital improvements.
6. The plan includes issuing bonds in 2032 and 2033 to finance \$20 million of the \$70 million of capital improvements planned for those two years. The Utility will evaluate the need for debt issuance to promote rate stability or intergenerational equity and may adjust the timing of projects or the amount of debt issued.

# **Appendix A**

Detailed Cash Flow Projections

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Projected Demand Change		0.0%	0.1%	0.1%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Assumed Annual Inflation		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Expense Depreciation		\$4,166,667	\$5,000,000	\$5,000,000	\$10,000,000	\$10,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000
Actual / Projected Rate Increase	18.2%	0.0%	0.0%	17.0%	0.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Months Increase in Effect	0	10	12	0	12	0	12	12	12	12	12	12
Revenues												
Subtotal Water Sales Revenues	\$47,107,266	\$54,130,891	\$55,576,047	\$55,636,208	\$65,228,648	\$65,299,329	\$70,856,957	\$71,082,483	\$71,311,970	\$71,545,401	\$71,782,758	\$72,024,026
Other Operating Revenues	\$918,084	\$918,084	\$918,084	\$918,084	\$918,084	\$918,084	\$918,084	\$918,084	\$918,084	\$918,084	\$918,084	\$918,084
Interest Income	\$584,811	\$382,007	\$355,356	\$295,978	\$300,303	\$306,360	\$298,879	\$290,574	\$282,577	\$294,980	\$306,945	\$352,862
Transfer In from Sewer Utility (PILOT on meters)	\$169,183	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000	\$190,000
Total Cash In	\$48,779,344	\$55,620,982	\$57,039,487	\$57,040,270	\$66,637,035	\$66,713,773	\$72,263,919	\$72,481,141	\$72,702,631	\$72,948,465	\$73,197,787	\$73,484,972
Expenses												
Source of Supply	\$76,523	\$135,099	\$137,801	\$140,557	\$143,368	\$146,236	\$149,160	\$152,143	\$155,186	\$158,290	\$161,456	\$164,685
Pumping	\$4,204,454	\$4,377,840	\$4,465,397	\$4,554,705	\$4,645,799	\$4,738,715	\$4,833,489	\$4,930,159	\$5,028,762	\$5,129,337	\$5,231,924	\$5,336,563
Water Treatment	\$734,930	\$823,446	\$839,915	\$856,713	\$873,847	\$891,324	\$909,151	\$927,334	\$945,881	\$964,798	\$984,094	\$1,003,776
Transmission & Distribution (excl. tank painting)	\$6,535,197	\$7,304,832	\$7,450,929	\$7,599,947	\$7,751,946	\$7,906,985	\$8,065,125	\$8,226,427	\$8,390,956	\$8,558,775	\$8,729,950	\$8,904,549
Tank Painting		\$1,820,000		\$643,422		\$303,677					\$769,727	\$256,165
Customer Service	\$800,466	\$735,624	\$750,336	\$765,343	\$780,650	\$796,263	\$812,188	\$828,432	\$845,001	\$861,901	\$879,139	\$896,722
General & Administrative	\$4,305,273	\$4,979,487	\$5,079,077	\$5,180,658	\$5,284,271	\$5,389,957	\$5,497,756	\$5,607,711	\$5,719,865	\$5,834,263	\$5,950,948	\$6,069,967
Customer Assistance Program		\$101,108	\$196,321	\$293,499	\$390,677	\$487,856	\$585,035	\$682,214	\$682,214	\$682,214	\$682,214	\$682,214
Subtotal O&M	\$16,656,843	\$20,277,436	\$18,919,776	\$20,034,845	\$19,870,559	\$20,661,012	\$20,851,904	\$21,354,421	\$21,767,865	\$22,189,578	\$23,389,452	\$23,314,641
Subtotal Taxes	\$7,518,886	\$8,058,267	\$8,184,940	\$8,539,339	\$8,899,183	\$9,120,272	\$9,483,326	\$9,858,856	\$10,326,404	\$10,797,365	\$11,254,601	\$11,752,620
Net Debt Service	\$24,071,874	\$18,767,624	\$38,965,615	\$19,033,532	\$19,011,631	\$18,580,601	\$18,509,168	\$17,717,573	\$16,118,092	\$12,814,963	\$12,032,012	\$10,233,869
Capital Outlay - Mains Replacements	\$2,786,836	\$4,166,667	\$5,000,000	\$5,000,000	\$10,000,000	\$10,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000
Capital Outlay - Services & Hydrants	\$696,709	\$1,750,000	\$1,250,000	\$1,250,000	\$2,500,000	\$2,500,000	\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000
Capital Outlay - UW14 and UW19		\$7,350,000	\$2,788,000	\$400,000								
Capital Outlay - UW 15 PFAS		\$743,000	\$5,135,000	\$0								
Capital Outlay - Other Improvements		\$3,000,000	\$3,050,000	\$2,750,000	\$5,750,000	\$6,600,000	\$5,500,000	\$5,600,000	\$4,500,000	\$7,200,000	\$13,180,000	\$20,020,000
Less: Principal Forgiveness			\$5,878,000									
Less: SDWLP Borrowing			\$11,138,000	\$400,000								
Less: SDWLP Borrowing (Reimbursement)		\$5,826,899	\$3,300,000									
Less: Bonds Issued											\$10,000,000	\$10,000,000
Net Cash Funded Capital Outlay	\$3,483,545	\$11,182,768	(\$3,093,000)	\$9,000,000	\$18,250,000	\$19,100,000	\$24,250,000	\$24,350,000	\$23,250,000	\$25,950,000	\$21,930,000	\$28,770,000
Total Cash Out	\$51,731,148	\$58,286,095	\$62,977,331	\$56,607,716	\$66,031,372	\$67,461,885	\$73,094,398	\$73,280,850	\$71,462,361	\$71,751,906	\$68,606,066	\$74,071,130
Net Cash Flow	(\$2,951,804)	(\$2,665,113)	(\$5,937,843)	\$432,554	\$605,662	(\$748,112)	(\$830,478)	(\$799,709)	\$1,240,271	\$1,196,559	\$4,591,722	(\$586,157)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Summary: Operating Fund</b>												
Beginning Balance	\$7,926,723	\$8,067,123	\$6,156,378	\$10,452,433	\$13,977,987	\$14,583,650	\$13,835,538	\$13,005,060	\$12,205,351	\$13,445,621	\$14,642,180	\$19,233,902
Revenues:												
Sales of water	\$47,107,266	\$54,130,891	\$55,576,047	\$55,636,208	\$65,228,648	\$65,299,329	\$70,856,957	\$71,082,483	\$71,311,970	\$71,545,401	\$71,782,758	\$72,024,026
Other Revenues	\$1,087,267	\$1,108,084	\$1,108,084	\$1,108,084	\$1,108,084	\$1,108,084	\$1,108,084	\$1,108,084	\$1,108,084	\$1,108,084	\$1,108,084	\$1,108,084
Interest Income	\$584,811	\$382,007	\$355,356	\$295,978	\$300,303	\$306,360	\$298,879	\$290,574	\$282,577	\$294,980	\$306,945	\$352,862
Transfer from Bond Reserve Account	\$2,359,583											
Transfer from Principal & Interest Account	\$2,680,625											
Use of Fund Balance (BAN Repayment Fund)			\$13,326,899									
Proceeds from Refunding Bonds	\$24,332,143	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenues	\$78,151,695	\$55,620,982	\$70,366,386	\$57,040,270	\$66,637,035	\$66,713,773	\$72,263,919	\$72,481,141	\$72,702,631	\$72,948,465	\$73,197,787	\$73,484,972
Expenditures:												
Operations & Maintenance	\$16,656,843	\$20,277,436	\$18,919,776	\$20,034,845	\$19,870,559	\$20,661,012	\$20,851,904	\$21,354,421	\$21,767,865	\$22,189,578	\$23,389,452	\$23,314,641
Taxes	\$673,449	\$686,918	\$700,656	\$714,669	\$728,963	\$743,542	\$758,413	\$773,581	\$789,053	\$804,834	\$820,931	\$837,349
Debt Service - Principal & Interest	\$48,404,017	\$18,767,624	\$38,965,615	\$19,033,532	\$19,011,631	\$18,580,601	\$18,509,168	\$17,717,573	\$16,118,092	\$12,814,963	\$12,032,012	\$10,233,869
Transfer Out to City (PILOT)	\$6,845,437	\$7,371,349	\$7,484,283	\$7,824,669	\$8,170,220	\$8,376,730	\$8,724,913	\$9,085,275	\$9,537,351	\$9,992,531	\$10,433,671	\$10,915,271
Accrual Adj. / Adj.for Other Reserves	\$1,210,678	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures	\$73,790,424	\$47,103,327	\$66,070,331	\$47,607,716	\$47,781,372	\$48,361,885	\$48,844,398	\$48,930,850	\$48,212,361	\$45,801,906	\$46,676,066	\$45,301,130
Net Operating Income	\$4,361,271	\$8,517,655	\$4,296,056	\$9,432,554	\$18,855,662	\$18,351,888	\$23,419,522	\$23,550,291	\$24,490,271	\$27,146,559	\$26,521,722	\$28,183,843
Transfer Out to Capital Fund	\$1,720,871	\$10,428,401	\$0	\$5,907,000	\$18,250,000	\$19,100,000	\$24,250,000	\$24,350,000	\$23,250,000	\$25,950,000	\$21,930,000	\$28,770,000
Transfer Out to BAN Repayment Fund	\$2,500,000	\$0										
Ending Balance	\$8,067,123	\$6,156,378	\$10,452,433	\$13,977,987	\$14,583,650	\$13,835,538	\$13,005,060	\$12,205,351	\$13,445,621	\$14,642,180	\$19,233,902	\$18,647,744
3 Month's Operating Expenses	\$4,164,211	\$5,069,359	\$4,729,944	\$5,008,711	\$4,967,640	\$5,165,253	\$5,212,976	\$5,338,605	\$5,441,966	\$5,547,394	\$5,847,363	\$5,828,660
Net Over and Above Target Level	\$3,902,913	\$1,087,019	\$5,722,490	\$8,969,276	\$9,616,010	\$8,670,285	\$7,792,084	\$6,866,745	\$8,003,655	\$9,094,786	\$13,386,539	\$12,819,084
<b>Construction Fund - Restricted</b>												
Beginning Fund Balance	\$8,343,940	\$6,581,266	\$0	\$3,093,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenues:												
Bond/Loan/Principal Forgiveness Proceeds	\$0	\$0	\$20,316,000	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000,000	\$10,000,000
Transfer from Operating Fund / Reserves	\$1,720,871	\$10,428,401	\$0	\$5,907,000	\$18,250,000	\$19,100,000	\$24,250,000	\$24,350,000	\$23,250,000	\$25,950,000	\$21,930,000	\$28,770,000
Total Capital Revenues	\$1,720,871	\$10,428,401	\$20,316,000	\$6,307,000	\$18,250,000	\$19,100,000	\$24,250,000	\$24,350,000	\$23,250,000	\$25,950,000	\$31,930,000	\$38,770,000
Expenditures:												
CIP	\$3,483,545	\$17,009,667	\$17,223,000	\$9,400,000	\$18,250,000	\$19,100,000	\$24,250,000	\$24,350,000	\$23,250,000	\$25,950,000	\$31,930,000	\$38,770,000
Total Capital Expenditures	\$3,483,545	\$17,009,667	\$17,223,000	\$9,400,000	\$18,250,000	\$19,100,000	\$24,250,000	\$24,350,000	\$23,250,000	\$25,950,000	\$31,930,000	\$38,770,000
Ending Fund Balance	\$6,581,266	\$0	\$3,093,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>BAN Repayment Fund</b>												
Opening Fund Balance	\$5,000,000	\$7,500,000	\$13,326,899									
Transfer from Operating Fund	\$2,500,000	\$0	\$0									
SDWL Proceeds	\$0	\$5,826,899	\$0									
Transfer to Operating Fund	\$0	\$0	(\$13,326,899)									
Ending Fund Balance	\$7,500,000	\$13,326,899	\$0									
<b>Other Funds</b>												
Principal and interest account - Restricted	\$13,164,827	\$13,191,166	\$13,217,358	\$13,407,103	\$13,175,901	\$13,435,198	\$12,824,967	\$11,361,979	\$8,179,486	\$7,508,851	\$6,337,284	\$6,448,696
Bond reserve account - Restricted	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565	\$13,950,565
Depreciation account - Restricted	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
Assessment account - Restricted	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770	\$1,351,770
<b>Total Reserves</b>	\$38,200,724	\$35,535,612	\$29,597,768	\$30,030,322	\$30,635,985	\$29,887,873	\$29,057,395	\$28,257,686	\$29,497,956	\$30,694,515	\$35,286,237	\$34,700,079
<b>Minimum Reserve Level Targets</b>	\$26,797,812	\$21,121,694	\$23,875,279	\$21,061,046	\$21,019,975	\$21,217,588	\$21,265,311	\$21,390,940	\$21,494,301	\$21,599,729	\$21,899,698	\$21,880,995

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Debt Coverage</b>												
Operating Revenues	\$48,610,161	\$55,430,982	\$56,849,487	\$56,850,270	\$66,447,035	\$66,523,773	\$72,073,919	\$72,291,141	\$72,512,631	\$72,758,465	\$73,007,787	\$73,294,972
Less: O&M	\$16,656,843	\$20,277,436	\$18,919,776	\$20,034,845	\$19,870,559	\$20,661,012	\$20,851,904	\$21,354,421	\$21,767,865	\$22,189,578	\$23,389,452	\$23,314,641
Less: PILOT	\$6,845,437	\$7,371,349	\$7,484,283	\$7,824,669	\$8,170,220	\$8,376,730	\$8,724,913	\$9,085,275	\$9,537,351	\$9,992,531	\$10,433,671	\$10,915,271
Less: Other Taxes	\$673,449	\$686,918	\$700,656	\$714,669	\$728,963	\$743,542	\$758,413	\$773,581	\$789,053	\$804,834	\$820,931	\$837,349
Less: Expense Depreciation	\$0	\$4,166,667	\$5,000,000	\$5,000,000	\$10,000,000	\$10,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000
Revenues available for Debt	\$24,434,432	\$22,928,613	\$24,744,772	\$23,276,086	\$27,677,293	\$26,742,489	\$26,738,689	\$26,077,864	\$25,418,363	\$24,771,522	\$23,363,734	\$23,227,712
Revenue Bond Debt Service	\$48,260,394	\$18,600,101	\$38,790,064	\$19,033,532	\$19,011,631	\$18,580,601	\$18,509,168	\$17,717,573	\$16,118,092	\$12,814,963	\$12,032,012	\$10,233,869
Less: Refinanced Debt	\$31,480,000		\$20,000,000									
Net Revenue Bond Debt Service	\$16,780,394	\$18,600,101	\$18,790,064	\$19,033,532	\$19,011,631	\$18,580,601	\$18,509,168	\$17,717,573	\$16,118,092	\$12,814,963	\$12,032,012	\$10,233,869
Debt Coverage	146%	123%	132%	122%	146%	144%	144%	147%	158%	193%	194%	227%
Average NIRB	\$222,444,751	\$223,827,358	\$228,913,021	\$229,314,942	\$227,573,613	\$228,013,235	\$228,790,239	\$229,518,466	\$229,571,576	\$230,245,428	\$235,028,678	\$245,887,934
Depreciation Expense	\$6,376,022	\$6,567,291	\$6,868,741	\$7,065,404	\$7,200,654	\$7,392,529	\$7,595,404	\$7,801,154	\$7,997,154	\$8,206,404	\$8,509,204	\$8,955,154
Expense Depreciation - Mains	\$0	\$4,166,667	\$5,000,000	\$5,000,000	\$10,000,000	\$10,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000
Net Income	\$17,473,599	\$15,979,314	\$17,520,675	\$15,914,705	\$20,176,336	\$19,043,600	\$18,844,407	\$17,986,136	\$17,138,632	\$16,270,139	\$14,547,585	\$13,919,695
Rate of Return	7.86%	7.14%	7.65%	6.94%	8.87%	8.35%	8.24%	7.84%	7.47%	7.07%	6.19%	5.66%
Outstanding Debt - End of Year	\$178,174,672	\$171,581,983	\$153,046,611	\$139,724,015	\$125,445,876	\$111,057,838	\$96,064,653	\$81,321,069	\$67,686,831	\$56,956,677	\$56,635,344	\$58,123,952
Equity	\$80,767,347	\$90,432,192	\$107,661,064	\$117,814,242	\$132,819,651	\$147,239,699	\$162,165,472	\$176,797,949	\$191,090,944	\$204,948,883	\$217,499,163	\$229,503,528
% Debt	68.8%	65.5%	58.7%	54.3%	48.6%	43.0%	37.2%	31.5%	26.2%	21.7%	20.7%	20.2%
% Equity	31.2%	34.5%	41.3%	45.7%	51.4%	57.0%	62.8%	68.5%	73.8%	78.3%	79.3%	79.8%
Ratio of debt to operating revenues	3.15	2.62	2.23	1.99	1.49	1.26	0.97	0.78	0.63	0.49	0.50	0.52
Net Income	\$17,473,599	\$15,979,314	\$17,520,675	\$15,914,705	\$20,176,336	\$19,043,600	\$18,844,407	\$17,986,136	\$17,138,632	\$16,270,139	\$14,547,585	\$13,919,695
Return on Investment	\$12,012,017	\$12,086,677	\$12,361,303	\$12,383,007	\$12,288,975	\$12,312,715	\$12,354,673	\$12,393,997	\$12,396,865	\$12,433,253	\$12,691,549	\$13,277,948
Expense Depreciation	\$0	\$4,166,667	\$5,000,000	\$5,000,000	\$10,000,000	\$10,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000
Cash Adder	\$5,461,582	\$3,892,637	\$5,159,371	\$3,531,698	\$7,887,361	\$6,730,885	\$6,489,734	\$5,592,139	\$4,741,767	\$3,836,886	\$1,856,036	\$641,747
Approved Rate of Return	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%	5.40%
Rate of Return Equivalent to Cash Adder	2.46%	1.74%	2.25%	1.54%	3.47%	2.95%	2.84%	2.44%	2.07%	1.67%	0.79%	0.26%



# **Appendix B**

## Capital Improvement Plan

# MADISON WATER UTILITY

## 10-YEAR CAPITAL IMPROVEMENT PLAN

			Year 1 2024	Year 2 2025	Year 3 2026	Year 4 2027	Year 5 2028	Year 6 2029	Year 7 2030	Year 8 2031	Year 9 2032	Year 10 2033	TOTALS
<b>Beginning Balance (Carryover)</b>			\$500,000	\$1,700,000	\$3,450,000	\$2,450,000	\$850,000	\$600,000	\$500,000	\$1,750,000	\$550,000	\$3,620,000	
<b>Revenues</b>			\$18,423,000	\$11,150,000	\$17,250,000	\$17,500,000	\$24,000,000	\$24,250,000	\$24,500,000	\$24,750,000	\$35,000,000	\$35,250,000	<b>\$232,073,000</b>
<b>Total Available Fiscal-Year Funds for Capital Projects</b>			<b>\$18,923,000</b>	<b>\$12,850,000</b>	<b>\$20,700,000</b>	<b>\$19,950,000</b>	<b>\$24,850,000</b>	<b>\$24,850,000</b>	<b>\$25,000,000</b>	<b>\$26,500,000</b>	<b>\$35,550,000</b>	<b>\$38,870,000</b>	<b>\$232,073,000</b>
<b>Project #</b>	<b>Project Name</b>	<b>Project Type</b>											
(Various)	Water Mains (Funded by Exp. Depreciation)	Water Mains	\$5,000,000	\$5,000,000	\$10,000,000	\$10,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$15,000,000	\$120,000,000
(Various)	Services & Hydrants	Water Mains	\$1,250,000	\$1,250,000	\$2,500,000	\$2,500,000	\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000	\$30,000,000
(Various)	System Planning, Maintenance & Fleet	Maintenance	\$3,050,000	\$1,750,000	\$1,750,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$3,500,000	\$3,500,000	\$23,550,000
1	Unit Wells 14 & 19 Treatments	Quality/Treatment	\$2,788,000	\$400,000									\$3,188,000
2	Unit Well 15 PFAS Treatment	Quality/Treatment	\$5,135,000										\$5,135,000
3	New Unit Well Facility and Site	Quantity/Supply						\$1,500,000	\$2,500,000	\$5,200,000	\$3,000,000		\$12,200,000
12	Unit Well 24 Treatment (Fe and Mn Filter)	Quality/Treatment										\$7,000,000	\$7,000,000
6	Unit Well 30 Water Treatment Improvements	Quality/Treatment									\$3,000,000	\$4,000,000	\$7,000,000
8	East/West Transfer - Zone 4 to 6W Conn.	Transfer									\$3,680,000	\$5,520,000	\$9,200,000
9	Zone 7/8 Transfer (Unit Well 12)	Transfer		\$1,000,000	\$4,000,000								\$5,000,000
11	Booster Pump Station 128 Upgrades	Transfer				\$1,100,000							\$1,100,000
13	Unit Well 27 Water Treatment Improvements	Quality/Treatment				\$3,500,000	\$3,500,000						\$7,000,000
14	Upgrade Booster Pump Station 213	Transfer						\$2,100,000					\$2,100,000
<b>Total Annual Project Expenditures</b>			\$17,223,000	\$9,400,000	\$18,250,000	\$19,100,000	\$24,250,000	\$24,350,000	\$23,250,000	\$25,950,000	\$31,930,000	\$38,770,000	<b>\$232,473,000</b>
<b>Total Annual Carryovers</b>			\$1,700,000	\$3,450,000	\$2,450,000	\$850,000	\$600,000	\$500,000	\$1,750,000	\$550,000	\$3,620,000	<b>\$100,000</b>	