Financial Management Plan

January 31, 2024

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Executive Summary

The Interim Third-Party Manager has prepared this update to the Financial Management Plan (the "Plan") per the requirement of the Stipulated Order on the Sewer System dated September 30, 2023. The Plan presented herein include the following key findings:

- Current cashflow is very challenged with expenses exceeding revenues monthly indicating JXN Water is experiencing an operating deficit.
- Additionally, the City of Jackson had fully depleted the required reserve funds prior to transferring the Water and Sewer Enterprise to the ITPM as a result of the sewer order entered on September 30, 2023. *(See "Cash Flow Challenges" on page 19)*
    - Operations and Maintenance Fund (1/12th of annual budget)
    - Contingent Fund (2/12th of annual budget)
    - Depreciation Fund (minimum of $100,000)
- The ITPM had no reserves to rely on to begin the sewer work and has had to "borrow" heavily from local ARPA match funds. These funds will need to be replenished to fully leverage the Mississippi Municipality & County Water Infrastructure Grant Program Act ("MCWI"). *(See "Cash Flow Challenges" on page 19)*
- JXN Water must replenish and maintain adequate reserves. *(See "Historical Financial Challenges" on page 6 and "Cash Flow Challenges" on page 19)*
- The existing debt cannot be supported going forward. *(See "Financial Modeling" on page 15)*
- JXN Water is pursuing a text amendment to the congressional appropriation of funds provided under section 1452 of the Safe Drinking Water Act to facilitate debt extinguishment – which is critical to the future financial stability of the utility.*(See "Debt Restructuring Evaluation" on page 17)*
- Scenario A, which is modeled in this update and assumes no change to the existing debt, requires a **41 percent rate increase by year five**. Customers of JXN Water cannot afford rates at those levels. **THE DEBT MUST BE RETIRED USING FEDERAL FUNDS AVAILABLE FOR THIS PURPOSE – AS SOON AS POSSIBLE.** *(See "Financial Modeling" on page 15)*
- Scenario B modeled in this update (with debt retired by the end of 2024) will lead to a financially sustainable utility with no rate increase in 2025, 2.5 percent in 2026 and 2027 and modest annual rate increase of 3 percent thereafter. *(See "Financial Modeling" on page 15)*
- *It is critical the amendments to the funds provided under section 1452 of the Safe Drinking Water Act are approved so that JXN Water is able to sustain utility operations, manage through escalating costs and to begin to move toward improved financial metrics.*

Introduction

The Plan for the City of Jackson Mississippi's ("the City") Water and Sewer System (the "System") has been developed in accordance with paragraph 6.p. of the Interim Stipulated Order ("the Water Order") entered on November 29, 2022, in case 3:22-cv-00686-HTW-LGI, the United States of America v. the City of Jackson, Mississippi and with paragraph 5.v. of the Stipulated Order on Sewer System ("the Sewer Order" and collectively with the Water Order, "the Orders") entered on September 30, 2023, in case no. 3:12-cv-790-HTW-LGI, the United States of America v the City of Jackson, Mississippi. The Orders appoint an Interim Third-Party Manager ("ITPM") to stabilize the System, build confidence in the System's ability to supply reliable and safe drinking water to customers, and address problems plaguing the City's sewer system.

The Order requires the Plan to include short-term, mid-term, and long-term funding needs; identify possible sources for those needs; opportunities for debt-restructuring; suggested rate structure changes, including the mechanism for assessing customers for water and sewage uses; and alternative governance options.

The Sewer Order was entered at the end of the City's fiscal year, September 30, 2023. In accordance with the Sewer Order, billing and collection of all funds generated through the operation of the System have been assumed by JXN Water (rather than the City) beginning October 1, 2023. Similarly, all indebtedness and related responsibilities were transferred to JXN Water as of October 1, 2023. JXN Water has elected for its fiscal year to end on December 31. As such, JXN Water's first fiscal year will include three months (October – December 2023) and the first full fiscal year will end December 31, 2024.

The Plan has been prepared by the ITPM, in consultation with PFM Financial Advisors LLC ("PFM"), one of the largest financial advisory firms in the nation, and Stantec Consulting Services Inc., with engineering and rate consulting expertise in the water and sewer industry. The analyses presented herein includes projected revenue and revenue requirements for fiscal year 2024 through fiscal year 2043 (the "Planning Period"). Specifically, the Financial Management Plan addresses the following elements:

- Assesses the financial capability of the System to meet current and future anticipated financial obligations,
- Evaluates various funding strategies, including rate structure and rate changes needed to meet financial objectives,
- Develops a financial plan through fiscal year 2043 sufficient to fund System operations and capital financing needs, and
- Establishes minimum financial goals for the System to provide for future financial stability.

The Plan reflects early estimates of operating expenses, revenues, capital needs, and debt restructuring alternatives. The Plan was developed based upon the information available to the ITPM at the time of the report.

Background

The water system failed in the summer of 2022 due to unanticipated treatment challenges created by severe flooding. A Federal disaster was declared on August 30, 2022, as water pressures and water quality had been impacted across the City and access to safe, reliable drinking water was disrupted for the 150,000 people that live and work in Jackson.

The City, like many older core municipalities, has experienced a loss in population over the past decades, leaving a smaller number of customers to pay to maintain an oversized and aging water system. The loss of customers does not reduce the costs of operating and maintaining a drinking water system, as those costs are largely fixed and are only incrementally impacted by reduced consumption. Plant sizes remain unchanged, requiring the same staffing. The size of the distribution system and related storage facilities do not change with population loss. The only savings of a reduced population is found in the incremental reduction in chemicals and power used to treat and distribute the water, a very small percentage of the cost of providing reliable and safe drinking water to a city of 150,000 spread over more than 100 square miles.

Since 2013, the sewer system has been under a federal consent decree to undertake, among other things, the evaluation and rehabilitation of certain infrastructure; the development of numerous programs to ensure proper capacity, management, operations and maintenance; and the implementation of certain work required by two prior administrative orders between the City and the Mississippi Department of Environmental Quality. The City failed to achieve significant progress under the consent decree. As a result, the sewer system experiences recurring sewer failures that spill raw sewage into homes, businesses, streets, yards, waterways, and other properties. Additionally, the sewer system repeatedly releases untreated or under-treated wastewater into the Pearl River.

The System is also stressed with aging infrastructure and escalating costs of repair and replacement. As stated in the Moody's Investors Service ("Moody's") rating report dated October 24, 2022, "*The System has struggled for years to effectively manage and resolve its infrastructure challenges, which is a key component of the System's failure to improve."* Exacerbating the cost of infrastructure, the System has faced major construction cost inflation, including materials and labor. For example, iron and steel prices increased over 40% between December 2020 and September 2023 (PPI: Iron and Steel). The Consumer Price Index increased by 18% over the same time period (CPI: U.S. Cities) and inflationary figures are significantly higher than in previous years adding cost pressures to the System's ratepayers in all other aspects of their lives.

The loss of revenue caused by a shrinking population and the escalating costs of infrastructure and maintenance must be made up with increases in rates. Increased rates could lead to further population loss as citizens with the means could move to adjacent suburban communities with lower taxes and utility costs. The cycle is a slow death spiral that many cities in the United States have faced over the past four decades.

In the City's case, the issue is complicated by its high poverty rate with over one-quarter of the population at or below the Federal poverty level[1] (25.9% per U.S. Census Bureau). Unable to raise rates without significant impact to those at or below the poverty level, the City has been unable to generate the needed funds for operations, maintenance, and regular reinvestment, resulting in a System that has suffered from underinvestment and minimal maintenance. The result is a system that has little to no capacity to overcome any interruption like source water changes, or large or numerous (due to cold weather) pipe breaks. Without adequate revenues, staffing levels cannot be maintained at necessary levels and the existing staff are overworked.

[1] Source: US Census Bureau population estimates, of July 1, 2023

This Plan has been developed with a focus on getting the System onto a path to sustainable, affordable operation that can reliably provide safe drinking water to all current users of the System and can provide a more safe and reliable wastewater system. Through the efforts of Mayor Chokwe Lumumba and advocates for the City across all levels of government, business, non-profits, foundations, and community organizations, significant funding has been provided to Jackson to get the drinking water portion of the System's infrastructure back to a stable and reliable condition. Getting and keeping the wastewater portion of the System operated and maintained safely and reliably will require on-going regular investments funded by the residents of Jackson through a local revenue stream generated by the System's customers.

Historical Financial Challenges

In 1971, the City's water and sewer systems were separated, and, over time, the City established separate funds to account for the different operations of the systems: the Water Fund, the Jackson Disposal System Fund, the Rankin Sewage Disposal System Fund, and the Madison Sewage Disposal System Fund. Following the issuance of the Water & Sewer Revenue Refunding Bonds, Series 1993-A and pursuant to the General Bond Resolution adopted March 11, 1993 (the "General Bond Resolution"), and as amended, the Water System and the Jackson Sewage Disposal System, along with the Water Fund and the Sewer Fund, were combined[2]. As such, holders of bonds issued under the General Bond Resolution are legally entitled to the net revenues of the combined System for payment of their bonds. Currently, $159 million of bonds are outstanding under the General Bond Resolution through December 2040.

Like most other communities which sought to upgrade their metering technology, the City has experienced persistent challenges with its billing system (i.e., unbilled revenue) and the implementation of its new metering system in 2015. The most recent available data (2021 CAFR) indicates that aging receivables, or uncollected revenues, exceed $56 million from known customer accounts. A recent review of water accounts as compared with assessor data indicates over 6,500 parcels in the City have improvements but no corresponding water accounts. While there may be valid reasons for this discrepancy, the majority are believed to be receiving water services without an account and would not be included in the $56 million.

Due to these challenges, there is uncertainty regarding consumption patterns and, consequently, the ability to collect adequate operating revenues going forward. The City implemented a rate increase that went into effect in 2021, however, the expected revenue increase was hampered due to the challenges with billing and collections.

The City has had a unique and challenged history with metering water for billing purposes. The City entered into a contract with Siemens in 2015 to replace their existing meters with advanced metering infrastructure ("AMI") and integrate the AMI with a completely new billing system. That contract failed to result in an operable metering and billing system and the City, and its attorneys successfully sued Siemens and recovered the $90 million spent on the contract less 30 percent in attorney's fees.

As a result of the failed contract and the delays in getting a replacement metering and billing system installed, thousands of customers went months (some even years) without a functioning meter and

[2] *Source: City of Jackson, Mississippi, Water & Wastewater System, Series 2016 – Appendix B.*

without a bill for services. Bills that were produced were often in question as the Siemens meters were subject to any number of failures and issues.

A new AMI metering contract was awarded in 2021 and meters are being installed in Jackson in accordance with the contract. Currently, the new meter replacement project is over 98% complete. In conjunction with the new meter installations, JXN Water is taking several steps intended to increase the systems collection rate, which is critical to improving the financial stability of the System. Those steps include but are not limited to the implementation of a new billing system, the creation of a new customer call center, focused outreach to customers regarding billing system changes, beginning turnoffs for nonpayment, revising billing and collection policies/practices, and the creation of a new customer assistance fund.

Historical strains on finances described above eroded the System's liquidity, creating a need for support from the City's General Fund and 1% infrastructure tax funds.[3] S&P Global Ratings ("S&P"), in a report, dated September 1, 2022, notes transfers of $14.5 million from the General Fund from fiscal years 2018 to 2020 and the City's issuance of an "emergency" general obligation note of $7 million in fiscal year 2020 to support utility operations.

As a result of these financial challenges, the System has failed to meet several General Bond Resolution requirements in recent fiscal years. The General Bond Resolution, requirements include and are not limited to the following:

- The "Rate Covenant," (Section 6.01 of the General Bond Resolution) which requires Net Revenues of the System in each fiscal year must be:
    - 120% of the sum of the annual debt service requirement on the bonds in each fiscal year, and
    - 100% of the sum of:
        - The annual debt service requirement on all bonds (including subordinate debt). all indebtedness payable from Net Revenues) in each fiscal year,
        - The amounts required to be paid during the fiscal year into any debt service reserve fund and contingent fund, and
        - The amount of all other charges and lines payable out of the revenues during each fiscal year.
- The "Additional Bonds Test" (Section 3.02 of the General Bond Resolution) to issue additional new money bonds requires a certificate of the City and an Independent Consulting Engineer [or Engineering Firm] that asserts that no Event of Default has occurred and is continuing. A failure to comply with any of the covenants in the General Bond Resolution or any Series Resolution is considered an "Event of Default."
- The "Debt Service Reserve Account" (Section 6.03 of the General Bond Resolution) or subaccount must be equal to an amount which is the lesser of (1) 10% of the lesser of the par

[3] To the best knowledge of JXN Water, based on the City's audited financial statements through FY 2021.

amount or the proceeds of such bond, (2) maximum annual debt service requirement for all outstanding bonds, and (3) 125% of the annual debt service requirement for all outstanding bonds; but not exceeding the maximum amount of Bond proceeds which may be deposited to the Account.

- Establishment & Maintenance of Certain Funds (Section 6.03 of the General Bond Resolution) – The City shall establish and maintain, among other funds and accounts,
  - Operation and Maintenance (O&M) Fund equal to one month (1/12th) of operating expenses;
  - A Bond Fund where it shall deposit on a monthly basis one-sixth (1/6th) of the next interest payment due on all outstanding bonds and one-twelfth (1/12th) of the next principal payment due on all outstanding bonds (together, the "1/6th and 1/12th payments");
  - A Contingent Fund equal to two months ($2/12^{th}$) of operating expenses.
  - A Depreciation Fund equal to an amount as determined to be appropriate, but not less than $100,000.

The current credit rating on System debt, is 'BB-' by S&P, which is non-investment grade and considered to have "major ongoing uncertainties and exposure to adverse business, financial or economic conditions, which could lead to the obligor's inadequate capacity to meet its financial commitments[4]. This low credit rating and the continued failure to meet the existing General Bond Resolution requirements means that as of the Plan date, the System is unable to access the municipal bond market to support its capital program.[5]

For the credit rating to improve, the System will need to meet its various General Bond Resolution requirements, demonstrate steady growth of cash and reserve balances, strengthen revenue collections, and improve operations.

Financial Tenets

Several financial tenets are foundational to the Financial Management Plan's development:

- One-time funding should be used for one-time expenses such as, capital improvement and debt prepayment, or as a "bridge" for operation and maintenance until a recurring and sustainable revenue stream can be developed.

- Rates for services must be equitable, affordable, and sustainable.

[4] S&P Global Ratings Definitions

[5] In December 2023, Moody's Investors Service withdraw its 'Ba2' rating on the Jackson Water and Sewer System revenue bonds due to lack of sufficient information from the City regarding the fiscal 2022 financial statements for the water and sewer system.

- Estimates for mid-term and long-term revenues and expenditures should be realistic but on the conservative side because of the significant unknowns and uncertainties regarding the future of the System.

- When possible, large capital investments should be supported by the benefiting users over the life of the assets. In other words, the System should strategically use financing to ensure future generations of users pay their fair share of long-life assets.

- Annual reinvestment should be at or above 2% of the plant value. See Appendix A for the calculation for the System included in this Plan.

Summary of the Financial Management Plan's Action Items

The Plan is based upon several imperative actions in the short, medium, and long-term designed to meet the System's needs:

Short-Term (next 12 – 18 months)

- Implement new billing rate structure for customers by Q1 2024.[6]
- Produce audited financial statements.
- Establish operations policies, including billing, collections, and billing dispute policies.
- Retire all debt using a portion of the $450 million provided through the Consolidated Appropriations Act, 2023.

Medium-Term (1.5 to 5 years)

- Stabilize revenue and collections resulting in the System generating net revenues from rates to move towards financial goals established above.
- Establish written financial goals as governing principles establishing (i) minimum days cash on hand (e.g., 90 days) (ii) full funding plan of capital program, and (iii) establishment of cash fund capital / pay-go target of $20 million per year to align with medians for A rated utilities (e.g., 1.35x debt service coverage).
- Develop a new governance structure for the utility management.
- Fund portions of the capital improvement plan with current revenues, ramping up to the policy target of $20 million per year by FY 2029.

Long-Term (more than 5 years)

- Build to an investment grade credit that is sustainable and affordable for the citizens of Jackson.
- Fund all but the largest capital improvements with cash during the Planning Period.

[6] Goal achieved, with new rates becoming effective at the end of January 2024.

- Look for opportunities to consolidate water treatment plants and sewer treatment facilities.

Introduction to Financial Plan Analysis

The primary issue addressed in the analysis is revenue sufficiency. The results are meant to provide a framework to achieve the System's financial goals in light of the new rate structure, cost of operating and capital improvement needs and determine the future levels of revenues required to sustain financial stability.

The Plan also looks to address opportunities to reduce costs, particularly financing costs related to existing debt of the System.

It was previously determined as part of the Financial Management Plan for the Water System that the then existing rate structure and revenues being generated with that rate structure would not be sufficient to meet the System's operating and capital costs. As a result, the ITPM is implementing a new rate structure that is expected to generate sufficient revenues in the short-term (see "Basis of Rate Design" herein). The ITPM through PFM, prepared a financial projection of revenues and expenditures for the System. A comparison of projected revenues and expenditures provides insight into the adequacy of overall revenue levels to meet current and future needs.

The Plan evaluates the following basic metrics:

- Projection of operating expenses and capital improvement plan costs.
- Projection of revenues under the new rate structure.
- Forecast of potential additional needed revenue increases.

The financial performance of the scenarios modeled was evaluated based on the following requirements:

- Fund the Contingent Fund to the minimum required under the existing General Bond Resolution (i.e., 2 months of budgeted operating expenses)
- Grow reserves to reach 90 days of cash by FY 2029.
- Reach targeted minimum debt service coverage of 1.35x by FY 2029.
- Provide $20 million per year of sustainable capital improvement plan, pay-as-you-go funds annually by FY 2029.

A critical component of improving the System's financial performance is increasing the System's collection efforts. JXN Water's collection efforts will be stepped up significantly with the goal of not allowing customers to fall more than one month behind in paying their bills. The ultimate goal is to increase revenue collection rates to 95% (from 56% as of June 2023) over the next 3 years. JXN Water believes the differential classifications (see "Basis of Rate Design" herein) are essential to meeting this goal.

Funding Requirements

Operating expenses consist of all costs that are necessary and appropriate for the operation, maintenance, and administration of the System during each year.

Projections of operating expenses include expenses such as contracts, personal services, supplies, and other services and charges. Projected operation and maintenance expenses for the System increase from $72.4 million in FY 2024 to more than $123.2 million in FY 2042. This is with a relatively optimistic estimate of 3% per year of increase applied to operating expenses. The optimism is based on having a national utility operator contracted to operate and maintain the System. Costs are projected to come down with the efficiencies and upgrades made with a contract operator. The net growth of 3% is inclusive of the potential savings.

Current annual debt service, including principal and interest payments on all existing debt, for the System is approximately $23.4 million for FY 2024.

Capital Funding and Project Program

A significant amount of Federal grant funding has been provided to the System. This includes:

<u>Water Funds</u>

- $150,000,000 for technical assistance and grants under section 1442(b) of the Safe Drinking Water Act (42 U.S.C. 300j–1(b)) with up to 3% of the amounts made available for salaries, expenses, and administration.
- $450,000,000, to remain available until expended, for capitalization grants under section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j–12). The requirements of section 1452(d) of the Safe Drinking Water Act, for the funds appropriated under this paragraph in this Act, each State shall use 100 percent of the amount of its capitalization grants to provide additional subsidization to eligible recipients in the form of forgiveness of principal, grants, negative interest loans, other loan forgiveness, and through buying, refinancing, or restructuring debt or any combination. (Consolidated Appropriations Act 2023).
- $2,800,000 through an Environmental Protection Agency ("EPA") State and Tribal Assistance Grant ("STAG") included in the Congressional-directed spending portion of the Consolidated Appropriations Act 2023.
- $4,000,000 through an EPA Community Grant.

<u>Water & Sewer Funds</u>

- $125,000,000 to design and construct improvements to the Sewer System and Water System through the US Army Corps of Engineers under the Water Resources Development Act Section 219 program.
- $46 million in American Rescue Plan Act ("ARPA") funds, $23M of which the City received in a direct allocation from the COVID-19 relief measure, and an equal amount it may receive through a matching grant program established by the State of Mississippi[7]. ARPA funding recipients must obligate the funds by December 31, 2024, and spend them by December 31, 2026.[8]

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[7] *Reported: https://www.wlbt.com/2023/01/05/800m-federal-funding-secured-shore-up-jacksons-water-system/*
[8] *NCSL: https://www.ncsl.org/fiscal/arpa-state-fiscal-recovery-fund-allocations*

These sources combine for approximately $778 million available to address the System's infrastructure and other needs. Each of these funding streams comes with restrictions on the permitted uses. Importantly, many of these funds are currently restricted for use on the Water System only. As described further under "Debt Restructuring Evaluation," this limits the ability to restructure debt that was issued for both water and sewer purposes. Furthermore, this limitation imposes an additional burden of reporting and allocating funds when the System accounting, as required under the existing General Bond Resolution, is based on a combined water and sewer system. As such, JXN Water is currently seeking additional flexibility to use the federal funds for either or both water or sewer purposes. Furthermore, not all of the federal funds are available immediately. The Plan incorporates the use of these funds and the permitted uses, as the funds become available.

There are tremendous capital needs to make the System safe, reliable, and sustainable. The Water Order includes 13 priority projects and the Sewer Order includes 11 priority projects as well as fixing emergency sewer failures at more than 200 locations. These are in addition to other needs already identified during the ARPA process, with the currently open SRF Loan, and with the USCOE 219 funding. Distribution system improvements remain largely undefined pending a modeled analysis of the System, with the exception of the replacement of the 109 miles of small pipes (4 inches and less) throughout the System.

A preliminary program (Appendix B) has been developed to apply the various sources of funding to eligible and priority projects along with revenue from the pay-go generated by the two financial scenarios that are described below. Based on this programming, all known requirements can be met.

Basis of Rate Design

The prior rate structure could not sustainably fund either the current or long-term needs of the System. As a result, JXN Water has developed a new rate structure founded on three critical public policy needs of (1) ensuring safe drinking water is available to everyone, all the time, (2) increasing revenue to ensure the revenues are sufficient at all times to pay the expenses of operating and maintaining the System, while (3) removing barriers for all users to pay for these services. Everyone needs to pay their share to support these essential community services but with recognition of the disconnect between the System design (to serve a population of 300,000) against the current reality of serving less than half that customer base, across the same footprint and still losing customers.

Income disparity that exists across any population is perhaps the single biggest barrier for all users to pay for services at a level sufficient to generate the revenue necessary to be self-sustaining. Because, as noted above, the costs per connected customer increase as serviced populations decrease, JXN Water is faced with a serious dilemma in rate design and revenue collection. Without taking into account each class of users' ability to pay, JXN Water's rate structure is unlikely to result in increased revenue and is likely to see increased (avoidable) expenses for payment monitoring and collection actions.

Water and sewer services are essential public services. The US has a long-established policy of assisting people to meet their survival need for food with the Supplemental Nutrition Assistance Program ("SNAP"). Through this Federally funded, state administered program, low-income people are provided assistance to pay for food. These SNAP beneficiaries have been recognized by the US Government and the State of Mississippi as being differently situated than the general population and eligible to participate in the SNAP program to meet the US policy of eliminating hunger.

As this population has already been classified as differently situated by the State of Mississippi, JXN Water also identifies SNAP beneficiaries as a classification of users differently situated than other residential customers. By creating this classification of users, JXN Water seeks to address the biggest barrier to all users paying for essential services – the ability to pay. This classification in turn will improve the overall ability of JXN Water to *increase* revenue collections while reducing the cost and impact of collection efforts. Minimizing the cost of collection efforts frees up revenues to apply to the cost of maintenance and operations, keeping rates for all customers as low as possible. Minimizing all operating costs is foundational to good rate design given that rates must recover the full cost of system operations in addition to capital investment.

Differential classification of users is permitted by Section 21-27-7 of the Mississippi Code of 1972 as amended by HB698 during the 2023 session:

> *"While a municipality may set different rates for different classifications of users, a municipality shall not discriminate in setting rates among members of the same classification."*

Similarly, the Mississippi Attorney General's Office has instructed that utilities may "create different classifications of users which have a *reasonable basis* and *relationship to accomplishment of a public policy objective*." Miss. A.G. Op., Gillespie (Jan. 24, 1990) (emphasis added).

To that end, JXN Water has created and implemented user classifications for water and sewer services beginning calendar year 2024 as follows:

- Commercial User – Connections with meters 1 ½ inch and larger
- Residential User – Connections with meters less than 1 ½ inch
- SNAP User – Customers who receive SNAP benefits from the State of Mississippi

JXN Water Rate Structure: Historically the cost to provide water and sewer services in the US are often not specifically related to the structure of the rates used to recover the costs. In other words, the majority of service costs are *fixed* in nature and associated with the infrastructure operation and maintenance, the labor, capital investment, and any debt the system may be carrying. The variable costs associated with the amount of water consumed (used) is limited to the chemicals used to treat the water and or wastewater and the energy (electricity) needed to move it through a distribution or collection system. The fixed costs are high; the variable costs are low. This explains why a decline in serviced population does not result in reciprocal cost savings associated with a decline in the amount of water consumed. The cost exists in the fixed infrastructure and must be spread across a lower number of connected users. The decrease (or increase) in consumption has a negligible impact on the cost of operating the system. Yet, the majority of utilities across the United States over-allocate fixed costs to the volumetric portion of the rate structure.

The legislature amended Section 21-27-7 of the Mississippi Code of 1972 with HB698 to clearly acknowledge this historical misalignment between a rate based nearly entirely on consumption and one with costs more appropriately aligned with the actual cost allocation of providing water services between consumptive costs and fees necessary for the non-variable costs to provide such services:

"The calculation of a user's bill shall be limited to the actual amount of volumetric usage, plus those fees reasonable and necessary for the cost of capital expenses, system operation and maintenance, and debt service."

Accordingly, the rate structure for JXN Water now includes the following volumetric and availability fee components:

- A Volumetric Component applied to all customers' actual water use in an inclining block structure. These blocks were established based on consumption data from 2023 derived from the new meters installed in the JXN Water system. Not all customers have new meters and as a result will receive estimated bills based on actual averages from the 2023 averages for the same size meter. Estimates will convert to actual consumption upon installation of the new meter. The inclining blocks have been established as follows and apply to all classes of customers:

  - Consumption of the first 50 CCF — $ 6.00 per CCF
  - Consumption of between 51 CCF and 150 CCF — $12.00 per CCF
  - Consumption of between 151 and 350 CCF — $14.00 per CCF
  - Consumption of more than 350 CCF — $16.00 per CCF

  Note, this volumetric component is *not* limited to the variable costs only. Instead, it seeks to defray both the variable costs and some portion of the fixed costs across all classifications.

- A monthly Availability Fee to cover costs of system operations, maintenance, capital, and debt service for both the water and sewer systems will also be applied as follows:

  Residential and Commercial Customer Classifications

▪ 5/8-inch meter	$ 40.00
▪ 1-inch meter	$ 60.00
▪ 1 ½ inch meter	$ 200.00
▪ 2-inch meter	$ 320.00
▪ 4-inch meter	$ 640.00
▪ 6-inch meter	$ 1,280.00
▪ 8-inch	$ 2,560.00

  SNAP Customer Classification $ 10.00

Under the new rate structure, the average customer using 6 CCF with a 5/8-inch meter is estimated to have a monthly water and sewer combined bill (on average) of $76.00 or 13.4% ($9.19) higher than the average under the prior rate structure. This is a very reasonable average increase for this class of customers given the condition of the water/sewer systems. As noted above, we anticipate much more modest increases over the coming years – as shown below.

Privately Funded Customer Assistance - JXN Water has worked with the Mississippi Community Foundation to create and administer a donor-supported fund to assist customers with paying their bills during personal financial crisis. Payment plans will also be available to assist customers.

Financial Modeling

With the new rate structure in place, two primary scenarios were solved to achieve the financial goals and objectives contained in this Financial Management Plan. Scenario A assumes no changes to the existing debt while Scenario B assumes the System's existing debt is retired as soon as practical (assumed to occur by the end of 2024 for modeling purposes), which is discussed in more detail in the "Debt Restructuring Evaluation" section of this plan (Model Outputs are shown in Appendix C). The analysis shows that additional revenue increases are required throughout the planning period in order to meet the financial goals and objectives stated herein. The required revenue increases were modeled to maintain the "days cash on hand" as close to 90 days throughout the planning period. While there are multiple ways to increase the revenue over the planning period, the tables below summarize the assumed annual change in rates. The model assumes that total revenues are increased by the respective percentage, however the individual increases to the Volumetric Component and/or Availability Fee has not been determined at this time.

Importantly, both scenarios assume average collection rates of 80% in 2024, 85% in 2025, 90% in 2026 and 95% in 2027.

Scenario	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
A	25%	3%	3%	3%	3%		3%		-	3%
B	0%	2.5%	2.5%	3%	3%	3%	3%	3%	3%	3%

Scenario	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
A	-	3%	-	-	3%	-	3%	-	-	-
B	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%

JXN Water can achieve the financial goals under both scenarios. Scenario A requires significant rate increases in the first two years to overcome the significant cash requirement to meet the required balances in the funds required by the General Bond Resolution. This places most of the rate burden on current customers, many of which cannot afford a 41 percent increase in rates by 2029. Those rate increases would be significant and should be avoided in a city with Jackson's economic demographics.

Scenario B, requires a modest 11.5% increase by 2029. Additionally, without the need for such a large increase in year one, as is required in Scenario A, Scenario B does not place a disproportionate share of revenue needs on current ratepayers but distributes those costs across the 20 year modeling period.

Overview of Existing Debt

The System's outstanding debt includes:

- Water and Sewer Revenue bonds, issued under the General Bond Resolution ("GBR") adopted March 11, 1993 ("GBR debt"). The GBR debt is secured by a pledge of net revenues of the combined System. This debt was issued in the capital markets, with the most recent bond issuance in 2016. As of December 1, 2023, there was $159 million of GBR debt outstanding. It is important to note that 97% of the GBR debt can be prepaid at any time, with no penalty. This is because the System has reached the optional call dates on the bonds and has been unable to refinance because the System has not been and is not currently in compliance with its General Bond Resolution. For FY 2024, debt service on the GBR debt totals approximately $19.2 million.

Series	Original Issue Size	Delivery Date	Final Maturity	Outstanding Par*	Next Call Date
2011A	$46,720,000	8/18/11	9/1/34	$26,080,000	Anytime
2011B	2,565,000	8/18/11	9/1/34	1,605,000	N/A
2012A	63,045,000	8/29/12	9/1/34	54,170,000	Anytime
2013	89,990,000	6/27/13	12/1/40	74,635,000	Anytime
2016	17,135,000	8/30/16	9/1/24	2,460,000	N/A
Totals	**$238,635,000**			**$158,950,000**	

*Outstanding as of December 1, 2023

- Drinking Water Revolving Loan Fund ("DWRLF") and Clean Water Revolving Loan Fund ("CWRLF") loans. This debt was not issued under the General Bond Resolution, rather, it is paid from the City's sales tax rebate payments before they are distributed to the City. The System then reimburses the City's General Fund for that sales tax reduction. As of December 1, 2023, there was $59 million of this type of debt outstanding, with an additional $64 million approved and still being drawn by the System to fund capital needs. For FY 2024, debt service on these loans totals approximately $4.2 million.

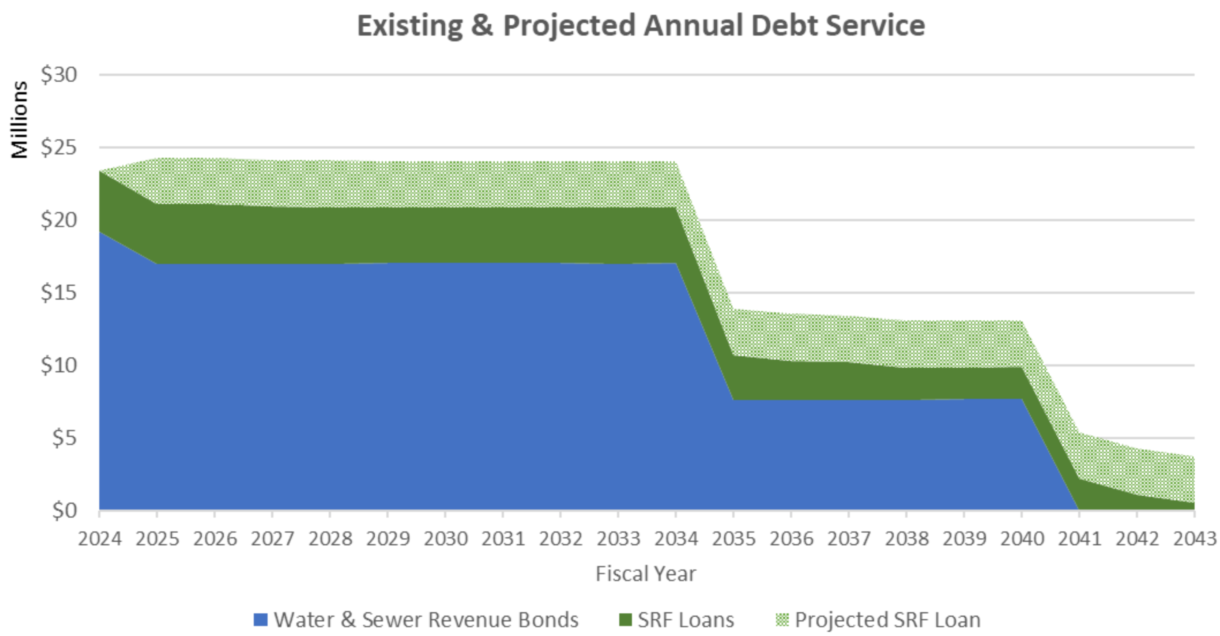
	Outstanding Par*	Additional Authorized Par**	Total Par
DWRLF	$15,053,641	$18,410,826	$33,464,467
CWRLF	44,309,184	31,683,000	75,992,184
Total	**$59,362,825**	**$63,574,999**	**$109,456,651**

*Outstanding as of December 1, 2023

** Expected to be closed out in FY 2024

For FY 2024, based on currently outstanding debt, debt service on the combined System's debt totals approximately $23.4 million (see graph that follows). If the DWRLF and CWRLF loans are fully drawn in FY 2024, debt service increases to approximately $24.3 million beginning in FY 2025 ($900K increase compared to FY 2024. The $23.4 million payment is equivalent to approximately 25% of projected FY 2024 System operating revenues. The System's aggregate debt service to final maturity in FY 2051 (including estimated debt service for the undrawn SRF debt) is approximately $365 million, of which $241 million will be paid over the next 10 years (including FY 2024).[9]

[9] Existing and projected debt service excludes debt service on the City's $7M GO Note that was issued for water and sewer purposes.



Debt Restructuring Evaluation

As described under "Historical Financial Challenges," the System has not complied with all of the covenants under the General Bond Resolution for several years, particularly its Rate Covenant and the requirement to fund an O&M Fund, Bond Fund, Contingent Fund and Depreciation Fund. Though it appears the Bond Fund has been brought into compliance with the required funding levels, the O&M Fund, Contingent Fund and Depreciation Fund were not funded at the required level at the time JXN Water assumed responsibility for the System. ***As such, it appears that an Event of Default has occurred and is continuing. As a result, without a waiver or curing the defaults, the System is legally prohibited from refinancing its debt through the issuance of bonds under the existing General Bond Resolution.***

Options to manage the System's debt include:

- **Maintain the current debt portfolio**. When the financial condition of the System improves and the System comes into compliance with all terms of the General Bond Resolution and meets the requirements to sell additional bonds, re-evaluate a refinancing of the debt. If the System is able to once again secure investment grade ratings, a refinancing is more likely to result in debt service savings (subject to market conditions). This option may take a while to come to fruition and, thus, the System's opportunity for debt service savings could be greatly diminished.

- Refinance the water and sewer bonds through Mississippi's SRF loan program in order to 1) secure a lower cost of funds and 2) potentially, restructure the debt by deferring payments due. As outlined in the Financial Management Plan dated January 2023, JXN Water intends to use a portion of the $450,000,000 provided under section 1452 of the Safe Drinking Water Act to retire all debt as soon as practicable. In pursuing this option, JXN Water has encountered a challenge that has delayed the restructuring of most of the debt. Specifically, as outlined under "Capital Funding and Project Program," most of the federal funding available to JXN Water, including the $450,000,000 described above, is currently limited to use on water projects. Due in part to the lack of available documentation from the City regarding the use of the original bond proceeds, JXN Water is currently unable to ensure that through a restructuring, the federal funds would be limited to use on water projects. As such, the ITPM is currently seeking additional flexibility to use the federal funds for both water and sewer purposes.

Another critical component of this option is the security offered to the SRF for repayment of the debt. Preferably, System debt will be repaid from net revenues of the System and the debt would not need to be secured by and/or paid from the City's sales tax rebate payments. Because the System is currently legally prohibited from refinancing debt through the existing General Bond Resolution, this would require full repayment of all outstanding water and sewer revenue bonds and the establishment of new bond covenants that are acceptable to both JXN Water and the investors who would be purchasing the new debt.

Due to the challenges described herein, this Plan assumes that the majority of the proposed debt restructuring occurs in December 2024, which would generate significant debt service savings beginning in fiscal year 2025. We cannot overemphasize the importance of debt retirement to the future financial viability of the utility.

Notwithstanding these challenges, JXN Water anticipates it will be able to restructure a small portion of the outstanding System debt using $15 million of funds, as outlined in the State DWRLF Intended Use Plan dated July 28, 2023. JXN Water anticipates these funds can be used soon to fully defease the outstanding $14.5 million in DWRLF loans. This defeasance is estimated to generate approximately $52,000 per month in debt service savings.

	Cost of Full Pay-Off (on December 1, 2024)	Debt Service Savings (FY25)
Water & Sewer Revenue Bonds	$150.5 million	$17.0 million
SRF Loans	$106.0 million	$6.7 million
Total	$256.5 million	$23.7 million

The benefits of paying off the outstanding debt include:

- Creates significant annual cash flow savings. The savings would be immediate, with an estimated $23.7 million of savings in FY 2025. The elimination of the debt burden and related savings would more quickly re-establish the financial solvency and creditworthiness of the System.
- Allows the System to fund a portion of its future capital improvements with pay-go funding. As noted previously, this Plan targets the use of $20 million per year in pay-go funding by FY 2029. Absent grant funding, pay-go funding is the lowest cost method of funding capital improvements because no interest costs are incurred.
- Assuming all water and sewer bonds are paid off, allows the System to close the existing General Bond Resolution. This would cure the covenant breaches that are currently present. This would also allow the System to establish a new General Bond Resolution to

govern the issuance of future debt. Such new resolution could modernize the covenants that currently date back to 1993. A new resolution would also give the System flexibility to make changes to the organizational and operational structure, if desired.

- If all of the SRF loans are paid off, the City's sales tax rebate payments would not be used to pay the System's SRF debt. This would alleviate a current liability for the City and be viewed favorably in the context of the City's existing credit ratings (e.g., its general obligation bond and sales tax bond ratings).
- The System, with cooperation of EPA and facilitation through the DWRLF, could use $257 million of the $450 million under section 1452 of the Safe Drinking Water Act to pay off the existing debt. This would require the System to refinance the existing debt with new debt. With the new debt structured with 100% principal forgiveness and 0% interest, this would have the practical effect of paying off the entire existing debt.

Cash Flow Challenges

In October, 2023, when JXN Water assumed responsibility from the City for billing and collection of all funds generated through the operation of the System, the Sewer Order required the City to transfer all System revenues, including existing balances and reserves in System accounts to JXN Water. The transfer included the following:

- Balance in the Consent Decree Supplemental Environmental Project fund $ 651,327.24
- APRA Local Match Funds for Sewer $8,828,041.00

Balances (if any) in the following funds (required by the General Bond Resolution) have not been transferred as of January 21, 2024 and as such, the ITPM assumes these funds were totally depleted by the City of Jackson during 2022-2023 (no financial statements are available to confirm this assumption).

- Operations and Maintenance Fund (1/12th of annual budget)
- Contingent Fund (2/12th of annual budget)
- Depreciation Fund (minimum of $100,000)

As discussed previously, the $778 million in federal funding that has been allocated to the System is subject to a number of limitations regarding its use. While collections of the System's revenues have generally increased over the past six months and a new rate structure is effective beginning January 2024, expenses are exceeding revenues monthly, even with the Federal funds regularly applied to eligible water operations and maintenance expenses. Revenues will need to exceed expenses before the System can build up its fund balances and reserves. In other words, in the near-term, the System lacks capacity to fund its minimum operating and expense needs. To meet current needs, the ITPM has been forced to borrow from the local ARPA funds, held for match for future ARPA projects.

At the same time, in order to release certain federal funding, JXN Water needs to first contribute matching funds. More specifically, JXN Water is seeking to unlock approximately $40 million in funding available through the US Army Corps of Engineers under the Water Resources Development Act Section 219 program in order to complete certain high-priority sewer projects. To unlock this funding, JXN Water must first spend its matching requirement.

JXN Water is exploring addressing this challenge by executing an interim bridge loan. Any additional debt is challenged by the requirement to meet the covenants in the General Bond Resolution (GBR) of fully funding the three required funds prior to issuance of new debt. Based on the 2024 JXN Water budget, the total required to fund the GBR required funds is $18,315,001.

As an alternative, JXN Water is exploring an amendment to the agreement with Sustainability Partners for the AMI metering project. An amendment to the monthly fee per meter can unlock cash to ease the cash flow challenges, restore the borrowed APRA dollars, and meet match requirements of some early USACE Section 219 projects.

Future Governance Models

The Orders include future governance as an element to be addressed in the Plan. There are many potential options ranging from putting the System back under traditional City government as part of the Public Works Department to full privatization. The concept of privatization does not appear feasible or desirable for the City. The City would be challenged to find any entity willing to compensate them for the value of the assets based on their current condition, history of failures, and liability for future failures. Preliminary discussions with other investor-owned water utility companies clearly demonstrated the lack of interest in purchasing or even operating the System in the near term. With the significant investments that the Federal, State and ratepayers (pay-go) partnership will make over the next 20-years, the System will become more attractive to investor-owned utilities in the future. After this incredible public investment, privatization would essentially equate to a $1B gratuity to any private purchaser (unless these funds were returned to the City as part of any sale).

One likely superior option would be the creation of a local utility authority for the Jackson System that includes the customers in Ridgeland, Hinds County and Byram. This is a viable option under current state law but may not achieve the long-term goals of a sustainable and reliable water system with an entity bound by procurement and human resource rules and regulations applicable to political subdivisions. Enabling legislation that frees the entity from those procurement and human resource limitations may make that option more attractive. Keeping local politics out of board appointments would also be a challenge.

Putting the System back under the traditional local government as a city department is also infinitely more challenging with the new Federal funding. The City would have the same procurement and human resource challenges cited in the local authority option and there is the added risk of each change in administration could bring a change in priorities and delay or impede the spending of available Federal funding.

Creation of any future governance to operate JXN Water will only occur with judicial oversight. The Court should participate in the establishment of whatever entity provides future governance and some overlap transition time should be built into any plan. Additionally, judicial oversight should remain in place until at least all the Federal funding has been obligated per this Plan, estimated to be no earlier than the end of Fiscal Year 2028. A determination as to further need for judicial oversight can be made at that time.

Recommendations

Based upon this Plan the following actions will be undertaken by the ITPM after further consultation with key stakeholders:

- Implement the financial model Scenario B.
    - Use a portion of the $450,000,000 provided under section 1452 of the Safe Drinking Water Act to retire all debt as soon as practicable (estimated $24.3 million in annual debt service savings). This requires congressional clarification to allow the funds to be used on System projects (i.e., water and sewer projects instead of water projects only).
- Continue efforts to address the System's near-time cash flow challenges.
- Continue to refine the concept for future governance.
- Continuously refine and update this Plan as new information becomes available.

APPENDIX A - Calculation of Recurring Re-investment Needs Based on Plant Value

From 2021 Annual Comprehensive Financial Report (latest available data)

Property, plant, and equipment at cost

• Land	$1,387,999
• Buildings	3,256,474
• Water plant, distribution system and equipment	751,628,297
	$756,272,770

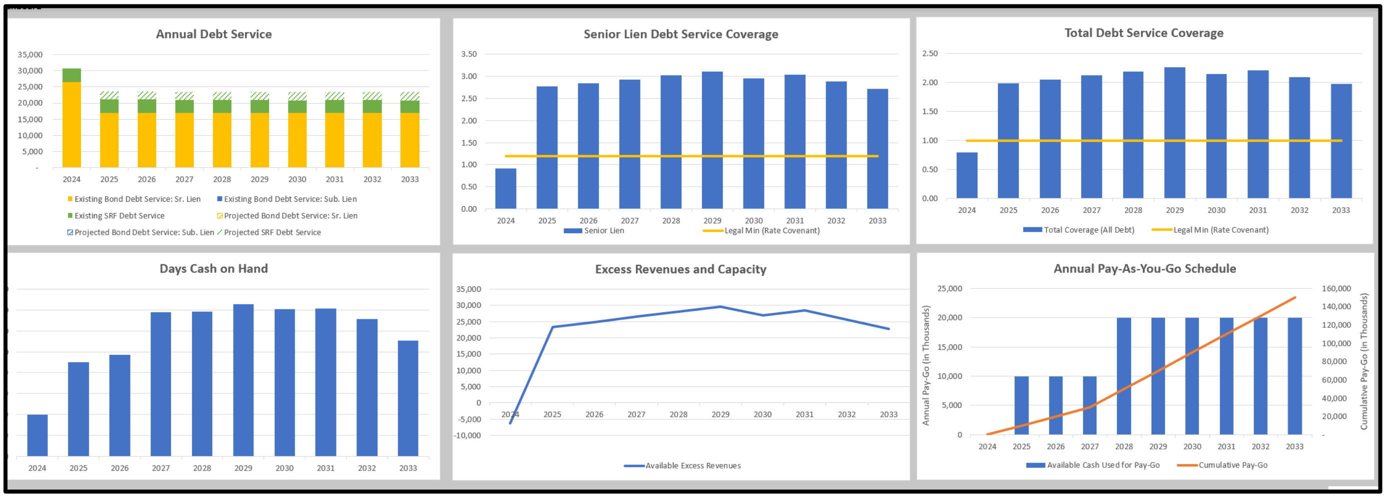
Minimum goal is 2% reinvestment per year = ~$15,000,000
Financial Plan target = $20,000,000 per year or 2.6%

Appendix B – Investment Plan

	Source	Priority Project No.	Description	Total	2023	2024	2025	2026	2027	2028	2029
	1442b	2	Winterization	$ 1.0	$ 0.2	$ 0.8					
	1442b	3	Corrosion Control	$ 1.0	$ 0.3	$ 0.7					
	1442b	5.a.ii	Valve and Hydrant Assessment	$ 7.4	$ 1.9	$ 5.5					
	1442b	5.a.vii	Service Line Inventory	$ 1.0	$ 0.2	$ 0.8					
	1442b	5.a.iv	Distribution System Leaks - Find and Fix	$ 32.6	$ 23.2	$ 9.4					
	1442b	5.a	Distribution System Analysis and Improvements	$ 5.0	$ 0.7	$ 4.3					
	1442b	11	Plant Treatment Processes Design and Implement	$ 2.0	$ -	$ 2.0	$ -				
	1442b	4	Emergency Water Supply	$ 2.0	$ -	$ 2.0					
	1442b	13	Resilient Power Plan	$ 6.0	$ -	$ 5.0	$ 1.0				
	1442b		Small Pipe Replacement Pilot	$ 7.0	$ -	$ 7.0					
	1442b		EPA Administration	$ 4.5	$ 1.5	$ 1.5	$ 1.5				
	1442b		ITPM Professional Budget	$ 7.6	$ -	$ 3.8	$ 3.8				
				$ 77.1							
	1442b	1	O&M Contract	$ 72.9	$ 26.7	$ 30.0	$ 16.2				
			TOTAL 1442b	**$ 150.0**	$ 54.7	$ 72.8	$ 22.5				
	ARPA		Savanna Street Improvements	$ 10.0		$ 10.0					
	ARPA		Small Pipe Replacement	$ 10.0		$ 10.0					
	ARPA	11.a,g	OBC Filters/Conventional and Membrane	$ 9.6		$ 9.6					
	ARPA		Sewer Find and Fix	$ 16.0	$ 4.0	$ 12.0					
			TOTAL ARPA	**$ 45.6**							
	Comm Grant		Maintenance Facilities Improvements	$ 2.2		$ 2.2					
	Comm Grant		WSBA Facility Replacement	$ 1.8		$ 1.8					
			TOTAL COMMUNITY GRANT	**$ 4.0**							
	Pay-Go		Distribution System Repairs	$ 75.0						$ 5.0	$ 5.0
	Pay-Go		Plant Treatment Processes	$ 75.0						$ 5.0	$ 5.0
	Pay-Go		Small Pipe Replacement	$ 65.0							
	Pay-Go		Sewer System Repairs	$ 182.0		$ 12.0	$ 17.0	$ 22.0	$ 22.0	$ 22.0	$ 22.0
			TOTAL PAY-GO	**$ 397.0**							
Active	SRF Loan 3		Membrane Train	$ 0.3	$ 0.3						
Active	SRF Loan 3		Membrane Building	$ 1.5	$ 1.5						
Active	SRF Loan 3		OBC Winterization	$ 4.1	$ 4.1						
Active	SRF Loan 3		JHF Corrosion Control	$ 5.0	$ 5.0						
Active	SRF Loan 3		JHF Filters 24/26	$ 1.8	$ 1.8						
			TOTAL ACTIVE SRF LOAN 3	**$ 12.7**							
	SRF Omni	5.a.v	Distribution System Optimization	$ 28.5	$ 4.5	$ 10.0	$ 10.0	$ 4.0			
	SRF Omni	10	Intake Structure Repair	$ 5.0	$ 2.0	$ 3.0					
	SRF Omni		Find and Fix Water Leaks	$ 24.0		$ 12.0	$ 12.0				
	SRF Omni		Chemical Feed Repair OBC	$ 24.0		$ 24.0					
	SRF Omni		Treatment Process Renewals	$ 26.5		$ 10.0	$ 16.5				
	SRF Omni		Small Pipe Replacement	$ 50.0	$ 10.0	$ 20.0	$ 20.0				
	SRF Omni		Retire Private Debt	$ 175.5	$ 175.5						
	SRF Omni		Retire SRF	$ 114.5	$ 114.5						
	SRF Omni		EPA Administration/Technical Assistance	$ 2.0	$ 1.2	$ 0.2	$ 0.2	$ 0.2	$ 0.1	$ 0.1	
			TOTAL SRF OMNIBUS	**$ 450.0**							
	SRF Omni (CD)	11.g	General Filter Repairs at JHF	$ 2.8		$ 2.8					
	USACE 219/WRDA		100 MGD Pump	$ 5.0		$ 5.0					
	USACE 219/WRDA		Membrane Cassette Purchase	$ 10.0		$ 10.0					
	USACE 219/WRDA		Small Pipe Replacement	$ 40.0		$ 15.0	$ 15.0	$ 10.0			
	USACE 219/WRDA		Sewer System Work	$ 50.0	$ 5.0	$ 20.0	$ 30.0	$ 30.0			
	USACE 219/WRDA		Dredging Storm Basins at Savanna	$ 25.0		$ 10.0	$ 15.0				
				$ 125.0							

Appendix C– Model Outputs

Scerario A – With Existing Debt



Scenario B – Debt Retired in 2024