

## The Consolidated Report of Activities for the quarter ended September 30, 2023

For

The Interim Stipulated Order as Entered on November 29, 2022

By United States District Judge Henry T. Wingate

In Case Number 3:22-cv-00686-HTW-LGI

The United States v. The City of Jackson, Mississippi

And

EPA Grant Numbers 84054501, 84060101 SDWA Section 1442 (b)

October 30, 2023

Prepared by Edward "Ted" Henifin, P.E. The Interim Third-Party Manager Of the City of Jackson's Drinking Water System

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## **Executive Summary**

This quarterly report is submitted for the Court's review and approval in accordance with Section 16.a of the Interim Stipulated Order and in accordance with EPA's Section 1442(b) grant to JXN Water. This report summarizes activities affecting the operation of the entire water system serving the City of Jackson, Mississippi. The scope and magnitude of this effort is unprecedented. As detailed below, significant progress has been made across the board. With the foundational systems and improvements described below, progress will accelerate even faster. While significant challenges remain, the team of local and national professionals who are working with the ITPM to implement the Court's Interim Special Order deserve special recognition for their exceptional dedication and public service.

#### Grant 84054501-0 ITPM Professional Budget



#### Grant 84060101-0 1442(b) Projects



Project	Description	Original	Current	Comments
No.		Comp	Comp	
1	O&M Contract Phase 1	3/2023	2/2023	In place – COMPLETE
1	O&M Contract Phase 2	7/2023	12/2023	Negotiations continue
2	Winterization	12/2023	12/2023	Close out underway
3	Corrosion Control JHF	9/2023	12/2023	Close out underway
3	Corrosion Control OBC	9/2023	3/2024	Awaiting Equipment
4	Emergency Water Supply*	9/2023	9/2027	Available throughout ISO term
5	Distribution System	7/2023	12/2023	Underway since 1/2023
	Improvement Plan			
6	System Stabilization and	3/2023	3/2024	Needs to build off of PP 5
	Sustainability Plan			
7	SCADA	9/2023	3/2024	Design started 9/2023
8	Chemical Systems	10/2023	12/2024	Design at 30% - expanded scope
				to include chlorine system
9	Chlorine System at OBC –	2/2023	2/2023	Complete
	temporary improvements			
9	Chlorine System at OBC –	12/2023	12/2024	Included in design for PP 8
	Replacement			
10	Intake Structure Repairs	12/2023		

#### **Priority Project Status**

11	Treatment Facilities		12/2025	Assessment report draft complete 9/2023
12	Sludge Assessment and Removal	6/2023	On-Hold	Plants cannot be shut down long enough for assessment at this time.
13	Resilient Power Plan	9/2023	12/2023	Assessment complete and technical memo to be submitted 12/2023

\* Scope changed submitted on September 19, 2023 without comment during 20-day comment period.

#### **Minority Participation**

DBE/SWAM Spend to Date	\$ 7,459,095.03	
Total JXN Water Spend to date	\$ 48,366,952.12	
Jacobs Contract	\$ 18,828,277.03	
Total JXN Water Spend w/o Jacobs	\$ 29,538,675.09	
MBE Percentage Total Spend	15%	
MBE Percentage without Jacobs	25%	

#### Precautionary Boil Water Notices

#### No city-wide notices have been necessary since December 2022.

With intensive leak repair on-going, precautionary notices are required related to leak repairs where pressure must be reduced or lines isolated. Over the course of the reporting period nearly 200 small diameter pipe leaks were repaired and dozens of larger pipe leaks with only a portion requiring precautionary notices.

- Total Issued 55
- Average Number of Customers Impacted 40
- Average Duration 3 days

#### A. Purpose

The Interim Stipulated Order, Section 16.a. requires quarterly reporting to include the following components:

- i. A description of the projects and activities conducted during the reporting period to comply with the requirements of this Stipulated Order.
- ii. A summary of any delays encountered or anticipated that may affect the ITPM's performance or implementation of this Stipulated Order, including the Priority Project List, and any actions taken to address such delays.
- iii. Any modification to the Priority Project List or Implementation Schedule consistent with Paragraphs 15 (Priority Project List) and 18 (EPA Review);
- iv. An accounting of the expenditures from, additions to, and remaining balance of the ITPM Professional Budget.
- v. A projection of work to be performed pursuant to this Stipulated Order during the next or succeeding Quarter; and
- vi. In each Status Report filed in the month of January, except in the Status Report due January 31, 2023, an audited financial statement of the ITPM Professional Account, O&M Account, and Capital Improvements Account for the City's previous fiscal year. Any information revealing bank account numbers or constituting personally identifiable information shall be redacted.

The EPA Grant that funded the Interim Third-Party Manager also has quarterly reporting requirements that include the following:

- A comparison of actual accomplishments to the outputs/outcomes (these are deliverables, reports, milestones) established in the assistance agreement work plan for the period;
- The reasons why established outputs/outcomes were not met; and
- Additional pertinent information, including, when appropriate, analysis and explanation of cost overruns or high-unit costs.

As these reports have similar requirements, this consolidated report will satisfy the purposes and requirements of both the ISO and the EPA Safe Drinking Water Act (SDWA) Section 1442 (b) grant.

#### B. Introduction

On December 20, 2022, the US EPA awarded grant number 84054501 under the authority of the Safe Drinking Water Act, Section 1442 (b). The stated purpose of the grant is as follows:

This agreement will provide support to the City of Jackson, MS, which is currently experiencing a drinking water emergency. The City entered into an Interim Stipulated Order with the Environmental Protection Agency and Department of Justice approved in Federal District Court on November 29, 2022, and this funding will be used to fulfill commitments established in the Order. The activities include establishing an Interim Third-Party Manager who will then hire support staff, enter into and maintain contracts to accomplish tasks required in the Order and of 75

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deemed necessary to address violations of the Safe Drinking Water Act. Anticipated deliverables include hiring staff, entering into and maintaining contracts allowing for proper operations and maintenance of the system. Expected outcomes include supporting the System in complying with the Safe Drinking Water Act, fulfilling commitments established through the Order, and ensuring residents of Jackson have clean and safe drinking water. Intended beneficiaries include approximately 160,000 persons served by the City of Jackson Public Water System. No subawards are included in this assistance agreement. City of Jackson Public Water System Emergency Drinking Water Grant.

This report is the third quarterly report as required by the grant agreement and covers eligible activities that began July 1, 2023, through September 30, 2023. These reports are aligned with the reporting requirements of the Interim Stipulated Order that appointed the Interim Third-Party Manager funded by and managing this grant. This report is submitted for the Court's review and approval.

#### C. PROJECTS AND ACTIVITIES CONDUCTED DURING THE REPORTING PERIOD

The ISO includes thirteen priority projects for the ITPM to accomplish under the terms of the ISO. The activities conducted related to the priority projects (PP) are included in Section M of this report, beginning on page 42.

Beyond the priority project work, many activities have been conducted to comply with the requirements of the ISO during this reporting period. These include:

**Billing and Collections:** JXN Water continues to work to resolve billing issues that hamper collection of water-related revenues. During the reporting period many changes have been made to reduce issues with bills, but much more remains to be done. With over 80 percent of the new meters installed, the majority of customers are getting accurate bills based on meter readings from the new meters. Those without new meters are receiving estimated bills, based on actual averages from the accounts with new meters installed. This represented a significant increase in many bills that had been underestimated for years. The new estimates will be in place until new meters are installed at these premises. As JXN Water can see usage through more new meters, there is clear evidence of leaks on the customer's side of the meter in many instances. The on-going drought has caused soils to contract and in many cases break pipes on private property (as well as JXN Water lines).

During this reporting period, JXN Water has made progress scrubbing and cleaning customer data. A request was made to Entergy for customer data to assist locating premises receiving water service without an account in the JXN Water system. This work will continue through 2024.

Billing data, which includes deposits for new services, miscellaneous charges (primarily connection fees) and actual water and sewer charges, is shown in Figure 1 and payment data in Figure 2 for the ten months, December 2022 through September 2023. The collection rate for this period was 61.6 percent, up significantly from the previous quarter results of 56.2 percent.



	Bills Generated		Deposit	ľ	Misc Service		Water	Wastewater	Monthly TOTAL	Sanitation
JUL '23	4,965	\$	9,995.00	\$	20,185.78	\$	1,489,259.36	\$ 1,683,283.12	\$ 3,202,723.26	\$ 1,140.20
AUG '23	5,197	\$	5,870.00	\$	2,232.55	\$	1,704,184.97	\$ 1,777,288.77	\$ 3,489,576.29	\$ 1,853.70
SEP '23	5,210	\$	5,695.00	\$	4,716.70	\$	1,891,525.41	\$ 1,859,109.88	\$ 3,761,046.99	\$ 1,924.00
	15,372	\$	21,560.00	\$	27,135.03	\$	5,084,969.74	\$ 5,319,681.77		\$ 4,917.90
TOTAL:					\$10,4	53,	346.54			
					RESIDE	VITI/	AL - Billing Data			
	Bills Generated		Deposit	r	Misc Service		Water	Wastewater	Monthly TOTAL	Sanitation
JUL '23	44,456	\$	29,780.00	\$	31,170.57	\$	1,603,007.51	\$ 1,297,996.40	\$ 2,961,954.48	\$ 1,778,360.10
AUG '23	45,734	\$	40,650.00	\$	40,843.59	\$	1,318,381.55	\$ 1,050,498.36	\$ 2,450,373.50	\$ 1,863,304.29
SEP '23	45,964	\$	30,180.00	\$	34,691.41	\$	1,970,980.59	\$ 1,572,646.07	\$ 3,608,498.07	\$ 1,521,411.62
	136,154	\$	100,610.00	\$	106,705.57	\$	4,892,369.65	\$ 3,921,140.83		\$ 5,163,076.01
TOTAL:					\$9,02	20,8	26.05			
JXN Water Billed Customers <b>\$19,474,172.59</b> for Water related services over the past quarter.										

## **<u>C2M Financial Overview</u>:** Quarterly Billing Data



#### **C2M Financial Overview: Quarterly Payment Data** COMMERCIAL - Payment Data Bills Monthly **Misc Service** Wastewater Deposit Water Sanitation TOTAL Generated JUL '23 127,631.39 \$ 953,713.28 \$ 1,167,699.31 **\$ 2,251,216.85** 4,965 2,172.87 334.40 \$ \$ \$ AUG '23 5,197 \$ 2,519.36 \$ 129,544.52 \$ 1,019,054.02 \$ 1,267,803.32 \$ 2,418,921.22 \$ 730.91 67,963.17 \$ 5,210 715,978.64 \$ SEP '23 871,905.23 533.90 1.665.43 \$ \$ 1.657.512.47 \$ \$ 15,372 6,357.66 325,139.08 \$ 2,688,745.94 \$ 3,307,407.86 \$ 1,599.21 \$ Ś TOTAL: \$6,327,650.54 **Residential - Payment Data** Bills Monthly **Misc Service** Wastewater Deposit Water Sanitation Generated TOTAL JUL '23 44,456 10,125.55 78,062.73 \$ 786,310.59 \$ 707,831.41 \$ 1,582,330.28 826,190.44 \$ \$ \$ AUG '23 45,734 \$ 15,632.24 \$ 108,684.74 \$ 1,058,873.59 \$ 880,919.03 \$ 2,064,109.60 \$ 1,154,218.53 SEP '23 45,964 \$ 18,317.29 \$ 93,715.15 \$ 1,052,864.82 \$ 855,708.59 \$ 2,020,605.85 \$ 866,496.54 136,154 44,075.08 280,462.62 \$ 2,898,049.00 \$ 2,444,459.03 \$ 2,846,905.51 \$ \$ TOTAL: \$5,667,045.73 JXN Water Customers Paid \$11,994,696.27 for Water related services for the past quarter. Revenue Collection Rate at 61.6%.



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**Obtaining Funding:** The ITPM worked with EPA to apply for the portion of the funding provided by the US Congress in the CAA (Consolidated Appropriations Act) 2023 flowing through the authority of the SDWA, Section 1442 (b). The first phase grant was awarded on May 11, 2023, in the amount of \$115.1 million (of the appropriated \$150 million) as listed in Figure 3. The first \$44 million of this approved grant was made available to JXN Water on May 18, 2023. The accounting for dollars drawn down and spent during this reporting period is shown on Page 22.

Priority Project No.	Description	Total (Millions)		202	23	202	24	202	25
5.a.ii	Valve and Hydrant Assessment	\$	7.4	\$	4.9	\$	2.5		
5.a.vii	Service Line Inventory	\$	0.1	\$	0.1				
5.a.iv	Distribution System Leaks – Find and Fix	\$	22.5	\$	10.0	\$	7.5	\$	5.0
1	Phase 2 O&M Contract - Open Book Actual Cost	\$	12.0	\$	12.0				
1	Phase 3 O&M Contract - Long Term Fixed Price	\$	63.0	\$	13.0	\$	25.0	\$	25.0
6	System Stabilization and Sustainability Plan	\$	2.0	\$	2.0				
	ITPM Professional Budget	\$	8.5	\$	0.9	\$	3.8	\$	3.8
	Grant 84060101-0	\$115	5.5	\$42	2.9	\$38	3.8	\$33	8.8

Figure 3 – Projects Approved in First Phase Application for SDWA 1442 (b) Grant 84060101-0

#### D. Detailed Accounting of Grant 84060101-0 Funding

Eligible expenses for the projects approved in the first phase of the grant have been charged to the grant and the ITPM has drawn down Federal funding to pay these costs during the reporting period. Costs incurred after February 2, 2023, are eligible. The accounting is shown in Figure 4.



#### Figure 4 – Grant 84060101-0 Funded Projects Dashboard

		JXN Water					
<b>Profit and Loss by Customer</b> January - September, 2023							
	ITPM 2979	1442B PROJECTS	TOTAL ITPM 2979	τοτα			
Income	:						
Grants		30,712,942.07	30,712,942.07	\$30,712,942.0			
Total Income	\$0.00	\$30,712,942.07	\$30,712,942.07	\$30,712,942.0			
GROSS PROFIT	\$0.00	\$30,712,942.07	\$30,712,942.07	\$30,712,942.0			
✓ Expenses							
Corrosion Control		278,720.40	278,720.40	\$278,720.4			
Find and Fix		11,898,598.82	11,898,598.82	\$11,898,598.8			
O&M 1442		16,984,481.64	16,984,481.64	\$16,984,481.6			
Service Line Inventory		16,700.68	16,700.68	\$16,700.6			
Valve Assessment		924,093.16	924,093.16	\$924,093.1			
Winterization		206,230.25	206,230.25	\$206,230.2			
Total Expenses	\$0.00	\$30,308,824.95	\$30,308,824.95	\$30,308,824.9			
NET OPERATING INCOME	\$0.00	\$404,117.12	\$404,117.12	\$404,117.1			
NET INCOME	\$0.00	\$404,117.12	\$404,117.12	\$404,117.1			

## Figure 5 – Grant 84060101-0 Funded Projects Profit and Loss

**SRF Funding:** The balance of the funding from the CAA 2023 will be provided through the existing State Revolving Loan Fund (SRF). The ITPM developed a work plan for these funds for inclusion in the state's intended use plan. The Mississippi Local Governments and Rural Water Systems Improvements Board approved the Intended Use Plan (IUP) for the DISASTER RELIEF SUPPLEMENTAL APPROPRIATION (a portion of the \$450 million appropriation – Figure 6) on June 30, 2023. Discussions continue with the MSDH on access to these funds in accordance with the work plan in the approved IUP.



#### Figure 6 – SRF DISASTER RELIEF SUPPLEMENTARY APPROPRIATION

The ITPM responded to a solicitation by the Mississippi Local Governments and Rural Water Systems Improvements Board for two new programs funded as part of the Bi-partisan Infrastructure Law (BIL) on June 19, 2023, requesting funding for Lead Service Line Replacements (LSLR) and for addressing Emerging Contaminants. Both were included in the approved IUPs, but at a fraction of the total project cost. The LSLR project is estimated at \$88 million across a 10-year construction period. The Emerging Contaminant project, scoped to add Granular Activated Carbon (GAC) filtration to the OB Curtis Water Treatment Plant, is estimated at \$119 million.

#### FIGURE 7 – SRF FFY-2024 BIL EC PRIORITY LIST

Project	Project Description	Zip Code	Priority Points	Service Area Population	Eligible PF Amount	Loan Amount Request	Statewide Cum. \$
Category IX:	Existing Facilities Upgrade (Meeting Primary	v Standa	ards)				
Jackson, City of	Study, Design & Construction, Emerging Contaminants	39216	11099	155000	\$5,000,000	\$5,000,000	\$5,000,000

#### FIGURE 8 - SRF FFY-2024 BIL LSLR PRIORITY LIST

Project Category XIII: Other	Project Description	Zip Code	Priority Points	Service Area Population	Eligible PF Amount	Loan Amount Request	Statewide Cum. \$
Jackson, City of	Replacement of Lead Service Lines	39216	110	150000	\$500,000	\$5,000,000	\$26,427,135
Mount Olive, Town of	Surveying and Inventorying Lead Service Lines	39119	102	982	\$450,000	\$1,000,000	\$27,427,135
Fayette, City of	Surveying & Inventory of Lead Service Lines	39069	0	0	\$56,250	\$125,000	\$27,552,135
Collins, City of	Surveying and Inventorying Lead Service Lines	39428	0	4000	\$175,000	\$500,000	\$28,052,135

**Disputed Debt**: The ITPM inherited nearly \$56 million in billing arrearages. Many accounts had arrearages dating back years due to the many metering and billing challenges over the past decade in Jackson. Almost all account arrearages could be attributed, in whole or in part, to those challenges or to billing for inadequate or non-existent services. Hundreds of these bills had been disputed prior to the appointment of the ITPM, and the disputes remained unresolved. Lacking adequate and/or reliable information to defend prior billing or resolve disputed bills, the ITPM instituted a program to compromise debt that pre-dated the ITPM appointment for all disputed accounts. To accomplish this, the ITPM retained Promise Pay to gather attestations from customers that had aging arrearages (prior to December 1, 2022) and that had disputed these charges.

On August 31, 2023, the program was closed because the number of people accessing the program had dropped to less than one per week. That made the cost of operating the program unsustainable. A total of 8,251 accounts attested their dispute through Promise Pay and \$19,513,774 in disputed charges were compromised (removed from individual accounts).

The disputed debt program demonstrated the overwhelming majority of the aging arrearages were the result of disputed bills. As a result, all arrearages prior to November 29, 2022, have been moved in the billing system to a separate Service Agreement (SA) and are no longer visible on customer bills. At some future point JXN Water may choose to pursue these arrearages but at the current time, staff is focused on getting all customers using water into the system and current on their bills. It is highly likely that JXN Water would spend more on collection efforts for the aged arrearages (prior to November 29, 2022) than would be recovered.

**Low Income Household Water Assistance Program (LIHWAP):** For debt that accrued post the appointment of the ITPM, the ITPM retained Promise Pay to identify qualified applicants and apply for the LIHWAP grant funding on behalf of JXN Water. The program expired on September 30, 2023, with no extension or replacement program currently moving in Congress. As of the end of the program, 413 accounts received Federal LIHWAP grant assistance through the state for a total amount of \$756,263.76.

**Community Engagement:** The ITPM participated in numerous meetings to discuss the ISO and the ITPM role in stabilizing and restoring the Jackson water system. The ITPM made presentations to 7 groups, participated in one town hall during the reporting period as listed Figure 9.

DATE	EVENT
July 18	Ward 5 Town Hall
July 25	Downtown Jackson Partnership Luncheon
August 3	Meeting with Hope Credit Union CEO – Bill Bynum
August 3	Jacksonians 4 Jackson Meeting
August 21	Rotary Club of Jackson
August 22	Society of American Military Engineers
September 9	McLeod Neighborhood Association
September 20	Sherwood Forest Garden Club
September 26	Rotary Club of South Jackson

#### FIGURE 9 – JXN Water Community Engagement Q3

**Minority Business Enterprise Engagement:** JXN Water continues to focus on MBE for direct contracts. Eliminating bonding challenges and paying invoices within days has made JXN Water friendly to MBEs. The spend to date has been significant, nearly \$7.5 million, 15 percent of the total spend to date. The Jacobs Operations and Maintenance contract is by far the largest contract with JXN Water. There were no MBE firms available to meet that need. When that contract value (paid to date) is removed from the total spend, MBE spend accounts for 25 percent of the total JXN Water spend. See Figure 10 for details.

JXN Water has entered into a contract with the Jones Group to assist with developing and executing a Small Minority Business Initiative (SMBI). An early focus has been working with Jacobs, Stantec, and HDR to help DBEs navigate the process to qualify as subcontractors with their firms. Another goal is to create and/or develop small Black owned firms to provide some of the specialized skills that are not currently available in the Jackson area. Examples include valve and hydrant maintenance and piping contractors. These needs will go on perpetually in Jackson, long after the Interim Stipulated Order is finished.

Firm	Total Paid to Date
Bless Hands Cleaning	\$ 14,725.00
BOSS Utility Solutions	\$ 1,852,643.38
Fahrenheit Creative Group	\$ 271,607.56
GCW Paving	\$ 2,069,236.85
Hardaway Realty	\$ 39,000.00
Hydroflow Solutions	\$ 199,350.00
IMS	\$ 476,092.72
Iron Horse Grill	\$ 1,308.00
Kelly Factory	\$ 1,800.00
Love Trucking	\$ 719,430.00
Phoenix Security	\$ 280,604.78
Promise Pay	\$ 1,334,722.24
R&L Unlimited	\$ 107,734.50
SD Systems	\$ 42,000.00
Southern Infrastructure Solutions	\$ 48,840.00
DBE/SWAM Spend to Date	\$ 7,459,095.03
Total JXN Water Spend to date	\$ 48,366,952.12
Jacobs Contract	\$ 18,828,277.03
Total JXN Water Spend w/o Jacobs	\$ 29,538,675.09
MBE Percentage Total Spend	15%
MBE Percentage without Jacobs	25%

#### FIGURE 10 – MBE SPEND

Water and Sewer Billing Administration (WSBA): JXN Water has stepped up customer communication efforts in advance of resuming severance (shut off for non-payment). As billing and account establishment processes continue to improve, the focus has turned towards getting all customers paying and current. Shut offs are the only tool available to get some customers to pay their bills. While JXN Water never wants to shut off service to anyone, everyone needs to pay their share for the system to become financially stable and sustainable.

The billing system conversion to a fully cloud-based solution that will be supported with a single contractor, BOSS, continues to move forward. Go-Live for the update/conversion has slipped from the end of Q4 to the end of 2024 Q1. This delay should be transparent to customers but will delay some cost savings anticipated from the conversion. This meter-to-cash solution will resolve many issues that have plagued Jackson's billing issues for years.

**Call Center:** ProTel has been in business supporting clients throughout Mississippi for more than 30 years. A contract for 24/7 call center operations was developed and the JXN Water customer service number (601-500-5200) went live on June 5, 2023.

The call center can address many billing questions (majority of calls), dispatches the metering contractor for meter issues, dispatches appropriate resources for leaks, low pressure, discolored water, etc. Call center key performance indicators for the quarter are shown in Figure 11.

Figure 11 -	- Call Center	r KPIs for Q3
-------------	---------------	---------------

Total Calls	Average Talk Time	Average Wait Time
25,741	3:22 minutes	0:56 minutes

**Mississippi Municipality & County Water Infrastructure Grant Program Act (MCWI):** The first reimbursements requests have been submitted for one of the two approved projects. The ITPM continues to work with the MCWI staff to receive that initial reimbursement.

The two projects approved and underway are:

- **OB Curtis Filter Improvements** This project was designed and bid prior to the effective date. The ITPM made award after the effective date to the low bidder, Hemphill Construction. The work includes full rehabilitation of conventional filter 5 to place that filter back into service after years of dis-repair. This will increase the capacity of the conventional side of OB Curtis by 16 percent. Construction has begun. Other details can be found in the priority project status updates at the end of this report.
- **OBC and JHF Chemical Feed System Improvements** This project will replace all the chemical feed systems to include pumps, pipes, tanks (as required) and other associated controls and equipment. The first phase of this is focused on OB Curtis. Additionally, this contract will replace the gaseous chlorine system with an on-site hypochlorite generation system, significantly improving safety. This project is nearing 30 percent design completion and is being designed by HDR. More details can be found in the PPL status update at the end of this report.

Hinds County Board of Supervisors had approved a MCWI project for pressure improvements in South Jackson. JXN Water had worked closely with Hinds County to develop the scope and assist with the application in December 2022. The project was approved at \$12 million. During this reporting period the Hinds County Board abandoned this project. As a result, the \$12 million for South Jackson will be removed from the Financial Management Plan in the next update.

**System Pressure Improvements:** Work to address system pressure challenges continued throughout the reporting period. Wachs Water has been working with JXN Water staff to continue to find valves, make repairs, and change positions (typically from fully closed to fully open). To date:

- 698 valves fully exercised (1692 cumulative)
- 33 op nut repairs completed (37 cumulative)
- 40 valves uncovered (97 cumulative)
- 5 frozen valves repaired (7 cumulative)
- 95 valve positions changed (219 cumulative)
- 302 hydrant assessments (302 cumulative)

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The system remains vulnerable but stable with pressure improvements noted throughout the system. A few outlying areas continue to have pressure issues including Merit Health Hospital, the Shannon Dale Road area off Forest Hill Road, and the Henley Young Juvenile Detention Center. The Shannon Dale area off Forest Hill Road was converted to the groundwater system on October 17, 2023. As this is outside of the reporting period, more details will be provided in the Q4 report.

#### Leak Find and Fix:

During the reporting period the Find and Fix program continued and made significant progress. Larger leaks are included in the Priority Project reporting at the end of this report. Small diameter leaks (6-Inch and less) are reported and mapped here. Using a combination of local contractors, JXN Water completed 384 repairs with an additional 383 under construction at the end of the quarter.

ITEM NO.	REPAIR TYPE	July 2023 In Construction	July 2023 InJuly 2023AConstructionComplete*		August 2023 Complete*	Sept. 2023 In Construction	Sept. 2023 Complete*					
1	CUT REPAIR	8	102	44	105	102	107					
2	HYDRANT- LEAK	23	0	23	1	23	11					
3	METER-LEAK	215	31	217	31	216	38					
4	TAP & METER INSTALL	4	23	3	24	1	33					
5	VALVE LEAKING & REPAIRS	8	0	8	0	8	0					
6	WATER-LEAK	48	69	31	75	33	195					
	Total	306	225	326	236	383	384					

#### Figure 12 – Find and Fix (6-inch diameter and less)

#### JXN WATER REPAIR



FIGURE 13 – FIND AND FIX (6-INCH AND LESS) IN COMPLETE 9/30/2023

FIGURE 14 – FIND AND FIX (6-INCH AND LESS) IN CONSTRUCTION 9/30/2023



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**Metering:** The contract to install Automated Metering Infrastructure (AMI) continued in the quarter. The project is now approximately 87 percent complete with nearly 53,000 meters installed. One of the biggest challenges continues to be data cleansing of the billing system. The ITPM retained Horne, LLP, to assist with data clean up in the reporting period. To date the installed meters are reporting nearly 97 percent successfully. Issues still exist around power to three collectors and the ITPM and metering contractor are working together to resolve those. Once resolved, the percentage of successful reads will increase significantly. The project status is summarized in Figure 15.

All meter operations were successfully outsourced to UMS. The contract consolidates all meter maintenance, repairs, reading, installs, etc., with a single source, eliminating hand-offs, inefficiencies and finger pointing.

Category	Item	Period Ending Date (9/6/23)	Period Ending Date (9/20/23)	Period Ending Date (10/4/23)
Installations	Total Period	988	1126	1044
	Total to Date	50625	51751	52795
Removed From Scope	This Period	243	259	328
	Total to Date	6399	6658	6986
Assists Pending	This Period	19	228	650
e Magnolia, Greater Industrial Tanl	k and Springridge Collectors <u>off line</u> .		QUICK STAT	۲ <b>S</b>

**Judicial Activities:** The ITPM participated in five status conferences, and three meetings with Judge Wingate and his clerk during the reporting period.

**Communications:** Additional communications resources have been added to the ITPM staff and consulting team. All communication efforts are coordinated by Ameerah Palacios with HDR. Jacobs hired an on-site communications specialist, Tepricka Morgan, who while focused on Jacobs' specific needs will be supporting the ITPM needs as well. A communications strategy was developed during Q3, with the Executive Summary shown in Figure 16. Articles of interest can be found on the JXN Water website.

#### Figure 16 – JXN Water Communication Strategy Summary





Figure 17 – Media Reach



#### Figure 18 – Media Sentiment and Themes

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#### **Paid Media Campaign**

In August 2023, JXN Water entered into a six month paid media campaign with WLBT, the number one ranked news station in the Jackson market. The campaign includes sponsored articles placed prominently on the WLBT home page, short community video ads, display ads on WLBT social media and website, as well as sponsorship of a new afternoon lifestyle show – Studio 3. Performance of the various tactics are shown in Figures 20 – 24.



Figure 20 – WLBT Paid Media Results - Overall



Figure 21 – WLBT Paid Media Results – Display Ads

Figure 22 – WLBT Paid Media Results - Video





Figure 23 – WLBT Paid Media Results – Native Articles

Figure 24 – WLBT Paid Media Results – Studio 3 Sponsorship



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**Precautionary Boil Water Notices:** There have been no city-wide precautionary boil-water notices since December 2022. The extensive draught impacting central Mississippi created a number of breaks from mid-August through mid-September as the clay soil dried out and contracted breaking pipes in the process. A listing of the BWNs issued during the reporting period can be found in Figure 25. At the request of EPA quarterly reports will include lift dates. JXN Water did not begin tracking lift dates until the reporting period was partially completed and went back to add lift dates where we had data. The data is incomplete this reporting period as a result. Our system will track lift dates going forward.

As noted in the Executive Summary, most of the BWNs were in response to pipe repairs made by JXN Water during the reporting period. While we don't ever like BWNs, these numbers actually reflect significant progress in addressing system defects. Moreover, the brevity of these outages is even more encouraging.

Boil Water	BWN	Surface	Well	Area Impacted	#
Notice Date	Lift Date				
7/4/2023			Х	[1200-1299] Springridge Rd [6100-8199] McRaven Rd	50
7/05/2023		Х		[300-999] W. Woodrow Wilson Blvd	25
7/13/2023		Х		[4400-4498] W. Northside Dr	25
7/15/2023		x		[2400-2599] Prosperity St [2400-2599] Williamson Ave John Street Luke Street Denson Street	50
7/15/2023		x		<ul> <li>Kimwood Dr, Cr</li> <li>Belle Glade St</li> <li>Northcliff Dr</li> <li>Highland Meadows Dr</li> <li>Pond Side Dr</li> <li>Highland Place Dr</li> </ul>	100
7/18/2023		Х		Carter St	50
7/27/2023		Х		[601-646] Seneca Ave	12
8/3/2023		X		[440-555] E. Woodrow Wilson [421] S. Stadium Dr [2395-2407] N. State St	29
8/7/2023	8/11/23	Х		[3505-3552] Edwards Ave	15
8/15/2023	8/18/23	Х		[9-17] Windy Ridge Cove	9
8/17/2023	8/23/23	X		[4604-4698] Londonberry Dr [505-573] Avalon Rd [510-572] Robinhood Rd [506-573] Wellington Rd [505-563] Belvedere Rd	97
8/18/2023	8/23/23	X		[202-391] Sheppard Rd [5039] Ames Avenue [5080-5094] Woodmont Dr	32
8/20/2023	8/23/23	Х		[2800-3000] Oxford Ave	24

#### FIGURE 25 – Precautionary Boil Water Notices

8/21/2023	9/1/23	Х		[1544 - 1552] Riverwood Dr	26
0 / 22 / 2022	0/4/22			[5000 - 5100] Romany Dr	20
8/22/2023	9/1/23	Х		[5010-5156] Romany Dr	28
o /o = /o o o o	0 /00 /00		-	[1544-1552] Riverwood Dr	
8/25/2023	8/30/23	x			162
				[3300-4000] Shannon Dale Dr	
				[1300-1500] Canterbury Ln	
				[1400-1500] Gloucester Dr	
				[1500-1600] Sleepy Hollow Dr	
				[100-200] Brenda Dr	
				[100-200] Hampton Ct	
				[3400-3500] Warren St	
				[3400-3500] Dundee Ln	
8/25/2023	8/30/23	Х		[1600-1799] Winchester St	40
8/26/2023	8/30/23	Х		[4600 -4683] HIllside St	20
				[600-700] Heather Ln	
8/27/2023	8/30/23	х		[1413-1476] Glouchester Drive	47
-, ,	-,, -			[124-134] Brenda Street	
				[1402-1462] Sleeny Hollow Drive	
8/29/2023	9/1/23	x		[3460 - 5590] I-55 South Frontage Road	30
0/20/2023 0/20/2022	571725	v		[4162 4667] Casablanca Dr	20
8/30/2023 8/30/2023		×			20
8/30/2023		X			23
9/1/2023		X		[850] Lindbergh Dr (The Residences at Glen Oaks)	31
9/2/2023		х		[600-695] Tifton Dr	49
				[600-645] Spryfield Rd	
9/3/2023		Х		[5400 - 5551] Mimosa Dr	18
9/4/2023			Х	[400-457] N. Siwell Dr	15
				[1400-1500] South McRaven Rd	
9/6/2023		X		[5305-5376] Farnsworth Dr	16
9/7/2023		х		[5400 - 5498] River Thames St	50
0/12/2022			v	Cival Dood All places of husiness /homes hetween	40
9/15/2025			^	Siwell Road - All places of busiless/homes between	40
0/45/2022	0/20/22				60
9/15/2023	9/20/23	X		[809-1334] Adkins Blvd	60
				[811-1006] Fairfax Cr	
9/16/2023			Х	[100-200] Country Bend Pl	61
				[100-200] Hollow Pines St	
9/16/2023		Х		[1100 - 1200] St. Ann St	23
9/17/2023	9/20/23	х		[100-300] Cedarhurst Dr	41
				[4800 - 4900] Maplewood Dr	
9/26/2023	9/29/23	Х		[105-145] Sumner Street	7
9/26/2023	9/29/23		Х	Siwell Road-All Places of business/homes between	40
				Henderson Rd & Gary Rd	
9/30/2023	10/6/23	X		[4315-4482] Old Canton Rd	
				(Meadowbrook Rd to Eastpark Dr)	

### E. SUMMARY OF DELAYS ENCOUNTERED OR ANTICIPATED

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No delays that should impact the achievement of the objectives of the ISO were encountered during the reporting period.

### F. ACCOUNTING OF GRANT 84054501-0 ITPM PROFESSIONAL BUDGET

The summary financial report through the end of the third quarter is shown in Figure 26. All budget categories are at or below the annual percentage (ten months cumulative) 83.3 percent of the year. The ITPM staff wages and fringes are below budget as the City has not invoiced for the share of salary and benefits they are providing.

It should be noted that the ITPM Budget as included in the ISO totaled \$2,976,500. EPA approved Grant 84054501-0 for the ITPM Budget at only \$2,676,500, a full 10 percent less than required. Further, the funding made available under Grant 8405501-0 was only \$2,170,000, 27 percent below the budget in the ISO. The ITPM has made a request for the balance of the approved grant funding, which will still be \$300,000 below the budget included in the ISO and agreed to by all parties.

Details of the ITPM Professional Budget spending can be found in Figures 27 - 29.

	BUDGET	Expense Thru 9/30	BALANCE	Percent of Budget
ITPM Compensation - \$33,333.33/month				
• Salary				
• Living expenses				
Travel expenses	\$400,000			
ITPM Compensation Sub-total	\$400,000	\$333,333.30	\$66,666.69	83.3%
ITPM Staff Compensation and Expenses				
Local deputy administrator/senior project manager				
<ul> <li>Project managers/contract inspectors</li> </ul>				
<ul> <li>Contract administrator/invoice processor</li> </ul>	<b># 72 5</b> 000			
<ul> <li>Environmental compliance manager</li> </ul>	\$725,000	\$451,820.83		
Other staff as needed				
• Payroll taxes, fringe benefits, and human resources	\$385,500	\$49,241.41		
administration				
ITPM Staff	\$1,110,500	\$501,062.24	\$609,437.76	45.1%
ITPM Contractor and Consultant Support and Services				
• General and regulatory legal support	\$200,000	\$180 201 15		
• A accounting	\$200,000	\$169,201.15		
Accounting     Financial advisor	\$300.000	\$101 007 21		
	\$500,000	\$191,907.21		
<ul> <li>Engineering</li> <li>Information technology and website</li> </ul>	\$450,000	\$168 841 25		
Community on go goment	\$750,000	\$100,041.25		
• Community engagement				
Communications     Driving/meters	\$450,000	\$591 327 90		
<ul> <li>Pricing/rates</li> <li>Other contractors and consultants as needed</li> </ul>	\$ 12 0,000	<i><i><i>40 1</i>,<i>02 1</i>,<i>0</i></i></i>		
ITPM Contractor and	\$1 400 000	\$1 141 277 51	\$258 722 49	81.5%
Consultant Support and Services Sub-total	\$1,400,000	φ1,1+1,277.31	\$230,722.77	01.570
Other Direct Expenses				
Phones and computers for ITPM and staff				
Professional liability insurance				
• Office supplies/miscellaneous consumables				
• Other direct expenses as needed				
Other Direct Expenses Sub-total	\$66,000	\$0	\$66,000	0%
OVERALL ITPM PROFESSIONAL	\$2,976,500	\$1,707,717.07	\$1,268,782.93	57.4%
BUDGET TOTAL				
ACTUAL GRANT AUTHORIZATION	\$2,676,500	\$1,707,717.07	\$968,782.93	63.8%
ACTUAL CD ANT FUNDING I EVEL	\$2 170 000	\$1.707.717.07	\$167 787 03	78 70/
ACTUAL ONAINT TUNDING LEVEL	φ <b>4,1</b> 70,000	\$1,707,717.07	\$404,404.7J	/0.//0

## Figure 26 - Financial Report from 12/01/22 through 9/30/23 (83.3% of budget year)

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#### Figure 27 – GRANT 84054501-0 - ITPM Professional Budget Dashboard

JXN Water												
January - September, 2023												
	ITPM 2979	ITPM PROFESSIONAL (EPA)	TOTAL ITPM 2979	τοται								
▼ Income												
Grants		1,656,112.30	1,656,112.30	\$1,656,112.30								
Total Income	\$0.00	\$1,656,112.30	\$1,656,112.30	\$1,656,112.30								
GROSS PROFIT	\$0.00	\$1,656,112.30	\$1,656,112.30	\$1,656,112.30								
🕶 Contractual				\$0.00								
Accounting		56,907.21	56,907.21	\$56,907.2								
Billing		168,841.25	168,841.25	\$168,841.25								
Communications/PR		323,371.92	323,371.92	\$323,371.92								
Financial Management		135,000.00	135,000.00	\$135,000.00								
Legal		189,201.15	189,201.15	\$189,201.15								
Total Contractual		873,321.53	873,321.53	\$873,321.53								
				\$0.00								
ITPM Compensation		333,333.30	333,333.30	\$333,333.30								
ITPM Employee Wages		451,820.83	451,820.83	\$451,820.83								
Taxes		49,241.41	49,241.41	\$49,241.41								
Total Payroll Expenses		834,395.54	834,395.54	\$834,395.54								
Total Expenses	\$0.00	\$1,707,717.07	\$1,707,717.07	\$1,707,717.07								
NET OPERATING INCOME	\$0.00	\$ -51,604.77	\$ -51,604.77	\$ -51,604.77								
NET INCOME	\$0.00	\$ -51,604.77	\$ -51,604.77	\$ -51,604.77								

#### Figure 28 – GRANT 84054501-0 - ITPM Professional Budget Profit and Loss

A detail of payroll data is included in Figure 29. The spending shown for payroll does not include reimbursement to the City of Jackson for salaries and benefits for these employees. Employment of these key people is critical to the success of the ISO. As an interim order, pension and benefits are not practical to establish and asking people to give up those to join JXN Water would discourage many candidates. As a result, the ITPM negotiated an arrangement with the City of Jackson to allow these employees to continue to receive their City salaries and all benefits to be fully reimbursed by the ITPM. No reimbursement request (invoice) has been submitted to date.

Name	Bonus	Salary	Allowance	Other Earnings	Total
*Abdul-Tawwab, Tariq	-	\$46,153.86	\$1,963.64	\$118,224.68	\$166,342.18
Byrd, Terence	-	\$73,076.85	-		\$73,076.85
Carson, Aisha S	-	\$18,461.52	\$1,846.16	-	\$20,307.68
Chambers, Orlando	-	\$20,832.42	-	-	\$20,832.42
Hillman, Jordan	-	\$105,000.00	\$9,978.24	-	\$114,978.24
Love, Marcus	\$9.82	\$11,344.04	-	-	\$11,353.86
Whittsett, Tiana	-	\$37,544.96	\$7,384.64	-	\$44,929.60
Total pay	\$9.82	\$312,413.65	\$21,172.68	\$118,224.68	\$451,820.83

#### Figure 29 – GRANT 84054501-0 - ITPM Professional Budget Employee Wages Detail

#### G. AMENDED ITPM PROFESSIONAL BUDGET

The 1442(b) grant that funded the ITPM Professional Account was based upon a workplan that was developed in November 2022, before anyone had a good idea of what would be required to accomplish the goals of the unprecedented ISO. The ITPM has requested that the Parties agree to the following modifications to the ITPM Budget in accordance with the ISO as shown in Figure 30.

- Change the original listed positions to the ones shown in Figure 30
- Change the contracts originally listed to the ones in Figure 30
- Eliminate the following categories of expenses:
  - o Travel
  - o Supplies
  - Other (Professional Liability Insurance)
- Total Grant Value remains unchanged from approved total \$2,670,000
- Based on current spend, the ITPM requested the term of the grant period be extended to March 31, 2024, without a change in value.

The request for the term extension has been approved. The budget changes remain under review.

#### H. GRANT 84054501-0 PROPOSED BUDGET FOR 2024

Based on current experience, the ITPM is recommending the 2024 budget remain flat, consistent with the amendment as proposed in Section G above and ultimately moved to Grant 84060101-0 after the end of the term for Grant 84054501-0 (March 31, 2024).

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#NAME?																	
Grant Budget																	
			Orig	inal	Ame	ended Budget											
Personnel			\$	950,000.00	\$	1,295,342.18											
Fringes			\$	220,000.00	\$	132,800.00											
Travel		Eliminated from Grant	\$	4,000.00	\$	-											
Equipment			\$	-													
Supplies		Eliminated from Grant	\$	54,000.00	\$												
Contractual			\$	1,430,000.00	\$	1,241,000.00											
Construction			\$	-	1												
Other		Eliminated from Grant	\$	12,000.00	\$	-											
			\$	2,670,000.00	\$	2,669,142.18											
Personnel and Fringes Detai	ls																
Name		Position	City	Salary	JXN	Water Salary	Tot	al	Car	Allowance	Est	mated Fringes	Mo	nthly Cost	Proj	jected thru 12/23	
Jordan Hillman	January	Chief Operating Officer	\$	70,000.00	\$	130,000.00	\$	200,000.00	\$	12,000.00	\$	40,000.00	\$	20,000.00	\$	240,000.00	
Terence Byrd	January	Water Systems Program Manager	\$	50,000.00	\$	100,000.00	\$	150,000.00	JXN	Truck	\$	20,000.00	\$	14,166.67	\$	170,000.00	
Tiana Whitsett	February	Administrative Services Manager	\$	36,000.00	\$	84,000.00	\$	120,000.00	\$	12,000.00	\$	26,400.00	\$	12,200.00	\$	134,200.00	
Aisha Carson	August	Social Strategist			\$	120,000.00	\$	120,000.00	\$	12,000.00	\$	12,000.00	\$	11,000.00	\$	66,000.00	
Orlando Chambers	February	Water Distribution Project Manager	\$	38,000.00	\$	42,000.00	\$	80,000.00	JXN	Truck	\$	15,200.00	\$	7,933.33	\$	87,266.67	
Marcus Love	April	Assistant Water Distribution Project Manager	\$	33,000.00	\$	32,000.00	\$	65,000.00	JXN	Truck	\$	13,200.00	\$	6,516.67	\$	58,650.00	
Tariq Abdul-Tawwab	Jan - Mar	Chief Experience Officer	\$	-	\$	160,342.18	\$	160,342.18	\$	6,000.00	\$	6,000.00			\$	166,342.18	
					\$	668,342.18	\$	895,342.18	\$	36,000.00	\$	132,800.00			\$	922,458.85	
ITPM Compensation							\$	400,000.00									
							\$	1,295,342.18					\$	71,816.67	\$	372,883.33	
Contractual			Est /	Annual Budget	Est I	Monthly Cost											
Legal - AquaLaw			\$	100,000.00													
Legal - Forman Watkins			\$	90,000.00													
Accounting - MCL			\$	80,000.00													
Compliance - Horne			\$	150,000.00													
Billing		Southern Infrastructure Solutions	\$	150,000.00													
Communications		Fahrenheit	\$	300,000.00													
		Falcon	\$	13,000.00													
		HDR	\$	153,000.00													
		KSO	\$	5,000.00													
Financial Advisor		PFM	\$	200,000.00													
			\$	1,241,000.00	\$	103,416.67											

Figure 30 – Proposed Amendment to the ITPM Professional Budget

#### I. FEDERAL GRANT ACCOMPLISHMENTS IN RELATION TO REQUIRED OUTPUTS AND OUTCOMES

# Goal 1 - Establish the Interim Third-Party Manager (ITPM) to operate, maintain, manage, and control the System in compliance with the SDWA. Comply with all requirements of the Order.

Goal 1 was achieved during the quarter ended March 31, 2023. The ITPM established JXN Water, Inc., as the business entity necessary to implement and achieve the goals and objectives of the Interim Stipulated Order and this grant.

The approved grant workplan included five tasks under Goal 1 for the Interim Third-Party Manager. While the stated goal was accomplished with establishment of the ITPM, these five tasks will continue throughout the term of the grant.

• Implement the Project Priority List Implementation Schedule.

The Priority Project schedule was developed and submitted. Progress on PPL projects is provided within this report. This work will continue throughout the grant period in accordance with the schedule.

• Advise, consult, and collaborate with the Director of Public Works. Regular communications and meetings are held with the Director of Public Works and will continue throughout the grant term.

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- **Perform reporting requirements; and respond to requests.** All reporting requirements and requests during the quarter have been satisfied and/or responded to, as appropriate.
- Hire, enter into contracts, alter existing contracts, seek out other funding sources, and make purchases for the benefit of the System.
   See details herein.
- **Develop and implement a Financial Management Plan for the System.** The Financial Management Plan (FMP) was developed and submitted on January 29, 2023, as required. Implementation of the currently effective version of the FMP is on-going.

#### Support Personnel:

One additional employee was hired during the reporting period, a Social Strategist, to perform a variety of duties around grants, advocacy, communications, public education, and related activities. The organizational chart for the ITPM and JXN Water is shown in Figure 31. The two orange blocks represent contract employees performing staff functions.




# **Contractual Support for ITPM**

With additional experience, the roles of various contractors have been evaluated and modified from the original grant workplan. At this time these are the contractors supporting the ITPM:

**Legal Services – Regulatory and General Counsel** – AquaLaw (Paul Calamita) has been engaged with the local support of Forman Watkins (Malissa Wilson). Mr. Calamita has more than 30 years of experience representing public drinking water and sewer utilities nationwide. Ms. Wilson is a Partner at Forman Watkins and her team is able to provide a wide range of necessary support with extensive experience with Mississippi clients.

**Accounting** – Kim Hardy, CPA with Matthews, Cutrer, and Lindsay has been retained. Horne has been retained to assist with compliance monitoring.

**Financial Advisor** – PFM (Ricardo Callender) has been retained to provide financial advisory services. There may be additional support necessary under this item related to the debt retirement.

**Billing Support** – Southern Infrastructure Solutions is providing a former City of Jackson employee (Carla Dazet) to manage the billing system and support the new billing and rate structure. Horne has been retained to assist with cleaning up the customer account data in addition to the compliance support they are providing.

**Communications Support** – HDR (Ameerah Palacios) has been retained to lead the JXN Water communications effort. This broad tasking includes, client consultation, project management, communications strategy, crisis communications, internal and external communications, copywriting, copy editing, graphic design, social media management, website design and development, and public relations services.

# Goal 2 – Establish an Operations and Maintenance Contract for the City of Jackson Water System.

This goal was accomplished when Jacobs entered a contract with JXN Water for Operation and Maintenance of the two water treatment plants, the wells, and the storage tanks throughout the system on February 20, 2023. This contract is an open-book time and materials contract for a six-month term. During this term Jacobs will develop a better understanding of the cost to operate and maintain the plants and will use that data to inform their fixed-price bid on a ten-year contract, with a goal of awarding by December 31, 2023. That goal is subject to the Parties' and this Court's ability to provide fair liability protection for ITPM contractors and agents. Discussions are ongoing and we expect to provide the Court with an update on this critical issue in the coming weeks.

The contract requires Jacobs to meet all SDWA standards, MSDH regulations, and any other applicable laws, regulations, and standards. The plant outcomes for this quarter are shown in Figure 23.

Plant	July	August	September	Q3 Average	Q2 Average	Q1 Average
OBC Conventional	15.3	15.9	17.1	16.1	13.3	15.1
OBC Membrane	22.8	22.8	19.6	21.7	22.4	21.8
JH Fewell	10.4	15.5	22.1	15.9	11.5	13.4
Total	48.5	54.2	58.8	53.7	47.2	50.2

Figure 32 - Water Production (into Distribution System) in million gallons per day

# Power and Chemical Cost for Water Treatment

# Figure 33 - Plant Operational Cost – Chemical and Electrical

	July 2023	August 2023	September 2023	Q3 Average
Plant Flows MG (Monthly Average MG for All Plants)	1,455	1,623	1,764	1,614
Estimated Chemical and Power Cost Per MG	\$1,175*	\$608	\$375	\$719/MG \$0.46/CCF

\*Includes previous months – not reflective of July's cost.

# O&M Contract Staffing Plan and Progress

Jacobs has continued to recruit to fill all positions in their staffing plan. The plan calls for a long-term total of approximately 54 people with a short-term requirement for an additional 12 maintenance people to expedite corrections and deficiencies related to deferred maintenance. Eighteen full-time and one part-time position have been filled with former City of Jackson employees. As of September 30, 2023, 45.5 positions of 66.5 are filled (68.4 percent). Figure 34 shows the current staffing plan.



# Figure 34 – Jacobs Staffing Plan with Current Status

The Financial Management Plan, submitted on January 29, 2023, included a spending plan that extends through the 20-year planning period. The current plan is shown in Figure 35.

	Source	Project No.	Description	Tota	al	-	2023		2024		2025	20	26		2027		2028
	14425	2	Winterization	¢	1.0	ć	1.0										
	14420 1442b	2	Corrosion Control	¢	1.0	ç ç	1.0										
	14420	5	Value and Hudrant Accessment	¢	7.4	ç ç	1.0	ć	25								
	14420	5 a vii	Service Line Inventory	ç	0.1	c c	4.5	Ş	2.5								
	14420 1442b	5 a iv	Distribution System Leaks - Find and Fix	¢	22.5	¢ ¢	10.1	¢	75	ċ	5.0						
	14420	7	SCADA Improvements	ç	5.0	¢	10.0	ć	1.0	Ŷ	5.0						
	14420	, 11	Plant Treatment Processes	ç	17.0	c c	7.0	ć	5.0	ċ	5.0						
	14420 1442b	11	Sediment Assessment and Removal	¢	2.0	¢ ¢	2.0	ş	5.0	Ş	5.0						
	14420	12	Resilient Payor Blan	ć	6.0	ć	2.0	ć	2.0	ć	1.0						
	14420 1442b	15	EPA Administration	ç	4.5	ç ç	1.5	ç	1.5	ç	1.0						
	14420 1442b		ITPM Professional Budget	¢	9.5	, c	1.5	¢	3.9	¢	3.9						
	14420		In wirrolessional budget	¢	75.0	Ļ	0.5	Ş	5.0	Ŷ	5.0						
	14426	1	O&M Contract	¢	75.0	¢	25.0	ć	25.0	ć	25.0						
	14420	-		Å	150.0	Ļ	25.0	Ŷ	25.0	Ŷ	25.0						
			TOTAL 14420	Ş	150.0												
																	_
	ARPA	889	OBC/JHF Chemical Feed Improvements and Chlorine System	Ş	5.9	Ş	5.9										
	ARPA	11.g	JHF Filters	Ş	9.8			Ş	4.0	Ş	5.8						
	ARPA	11.a,g	OBC Filters/Conventional and Membrane	Ş	9.6			Ş	9.6								_
	ARPA	11.i,j	JHF Pumps	Ş	5.5			Ş	5.5								
	ARPA	11.b.	OBC Raw Water Pumps	Ş	3.3			Ş	3.3								
Active	ARPA		48 Inch Transmission Line	Ş	7.8	Ş	7.8										
Active	ARPA	11.g	OBC Filter Mods	Ş	5.0	Ş	5.0										
	ARPA (Hinds Co)	5.a.v	Distribution System Optimization - South Jackson	Ş	12.0	\$	3.0	Ş	9.0								
			TOTAL ARPA	\$	58.9												
	BRIC		New Plant Feasiblity Study and Planning	\$	13.8			\$	4.0	\$	4.0	\$ 4	.0	\$	1.8		
	Comm Grant	4	Alternative Water Response Plan	\$	1.0	\$	1.0										
	Comm Grant	6	System Stabilization and Sustainablity Plan	\$	1.2	\$	1.2										
	Comm Grant		WSBA Facility Replacement	\$	1.8	\$	1.8										
			TOTAL COMMUNITY GRANT	¢	4.0												
				Ŷ	4.0												
	NEW SRE		Implement BRIC Study Findings (New/Rehab)	¢	150.0												
	NEW SIG		implement blic Study Findings (New) Kendby	ç	150.0												
	Pav-Go		Distribution System Penairs	¢	65.0												
	Pay Go		Plant Treatment Processos	é	65.0												
	Pay-Go		Small Ding Replacement	ç	65.0												
	Pay-Go		Sewer System Repairs	ç	178.0			ć	20.0	ć	25.0	\$ 17	0	ć	16.0	ć	20.0
	1 ay-00		TOTAL DAY CO	, ,	272.0			Ŷ	20.0	Ŷ	25.0	ý 12	.0	Ŷ	10.0	Ŷ	20.0
			TOTAL PAT-GO	Ş	5/5.0												_
																	_
Active	SRF Loan 3		Membrane Irain	Ş	0.3	Ş	0.3										
Active	SRF Loan 3		Membrane Building	Ş	1.5	Ş	1.5										_
Active	SRF Loan 3		OBC Winterization	Ş	4.1	Ş	4.1										
Active	SRF Loan 3		JHF Corrosion Control	Ş	9.6	Ş	5.0	Ş	4.6								
Active	SRF Loan 3		JHF Filters 24/26	Ş	1.8	Ş	1.8										_
			TOTAL ACTIVE SRF LOAN 3	\$	17.3												
	SRF Omni	5.a.v	Distribution System Optimization	\$	32.5	\$	4.5	\$	14.0	\$	10.0	\$ 4	.0				
	SRF Omni	5.a.i	Distribution System Assessment/Modeling	\$	6.0	\$	4.0	\$	2.0								
	SRF Omni	5.a.vii	Corrosion Control Renewal	\$	4.0			\$	4.0								
	SRF Omni	10	Intake Structure Repair	\$	5.0	\$	2.0	\$	3.0								
	SRF Omni		Implement BRIC Study Findings (New/Rehab)	\$	60.5									\$	0.5	\$	30.0
	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	s	2.0	Ś	1.2	\$	0.2	\$	0.2	\$ 0	.2	\$	0.1	\$	0.1
			TOTAL SRF OMNIBUS	Ś	450.0												
				4	/50.0												
	SPE Omni (CD)	11 g	General Filter Renairs at IHE	¢	2.8			¢	28								
	SKE OHIIII (CD)	11.g	General ritter repails at JHP	ډ	2.8			ç	2.8								
	USCOT 210/CD		Carall Dian Dealerson ant	ć	20.0	ć	20.0										
	USCUE 219/CR		Small Pipe Replacement	Ş	20.0	Ş	20.0										_
	115505 240 4400		Contraction of the second s	~	20.0			<i>.</i>	20.0								_
	USCOE 219/WRD	A	Small Pipe Replacement	\$	30.0		5.0	\$	30.0	~	20.0	¢ 20			5.0		_
	USCUE 219/WKD	A	Sewer System Work	Ş	70.0	Ş	5.0	\$	20.0	Ş	20.0	\$ 20	.0	Ş	5.0		
			TOTAL CIP SPEND (All Sources) 2023-2042	\$	942.0	\$	113.9	\$	176.8	\$	95.8	\$ 40	.0	\$	23.3	\$	50.0
			TOTAL FEDERAL SPEND CIP*	Ś	359.6												
				Ŷ	555.0												
			Tinculaes US Army Corps of Engineers Section 219 funding														
			TOTAL FEDERAL SPEND O&M	\$	75.0												
			TOTAL FEDERAL SPEND DEBT RETIREMENT	Ś	290.0												
				é	E0.0												
			IUTAL AKPA SPEND	\$	58.9												
			TOTAL JXN WATER PAY-GO	\$	373.0												
			TOTAL NEW SRF (2030-2035)	\$	150.0												
			CRAND TOTAL INVECTMENT 2022 2012	¢.	1 200 5												
			GRAND TOTAL INVESTIVIENT 2023-2042	Ş	1,306.5												

# Figure 35 – Spending Plan with Source Funding

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Each of the 13 Priority Projects included in the ISO have funding sources identified in the Spending Plan. The Spending Plan has a planning goal to have these 13 projects accomplished by the end of 2025. While that is the goal, it was established despite the fact that many of the priority projects are still at a conceptual planning level. Engineering design has not been initiated and once it is, that may increase project completion estimates or identify long-lead time materials that could require an adjustment to the goals for completion of one or more of the Priority Projects. The quarterly reports will provide regular progress updates for each Priority Project.

The ISO also required an Implementation Schedule for the Priority Projects. Anticipated deviations from the dates in the Implementation Schedule will be noted in each update within the quarterly report and formally requested in accordance with the ISO after submittal of the report. The updated Implementation Schedule is below. Requests to modify the PPL milestones will follow this report in accordance with the ISO.

# J. Modifications to the Priority Project List or Schedule

# 1. **O&M Contract**

- a. Establish, support, and maintain a contract(s) for operation and maintenance of the System. The contract must establish clear level of service goals including minimum appropriate staffing in accordance with Miss. Admin. Code § 15-20-72.2.2.1(5) and all applicable laws and regulations.
  - Phase 1 Contract operations for both plants and wells based on openbook cost plus model. This phase allows for continued negotiations to long-term contract while contractor is learning more about costs to operate to start by March 2023
  - Phase 2 Contract operations of complete system including distribution system with an initial 5-year term with options to renew. July 2023- New Date 10/31/2023 in Q1 report. Continuing to address liability concerns with ISO Parties and legal teams. New target date December 31, 2023, subject to resolving liability concerns.
- 2. Winterization of system This project completes work in progress as of the effective date. This work was contracted by the City of Jackson. JXN Water is managing these contracts through Jacobs Consulting. This work is almost complete and Jacobs is is reviewing the plants for any gaps and will provide a detailed assessment of any needed further measures.
  - a. Develop and implement to the extent funding and schedule permit a comprehensive plan to properly winterize both O.B. Curtis and J.H. Fewell.
    - Short term immediate measures March 2023
    - Plan for longer-term measures July 2023
    - Implement plan for winter 2023/2024 December 2023
  - b. Complete membrane winterization project.
    - August 2023-Final close out underway. Foundation issues discovered that may delay closeout. Timing for correction of these defects cannot be

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#### estimated at this time.

- 3. **Corrosion control** This project was originally intended to complete the projects that were under construction as of the ISO effective date. A full review has resulted in JXN Water requesting a change from the approved OCCT from the MSDH. Approval is anticipated based on discussions with MSDH and implementation will be complete by the end of Q4.
  - a. Address any outstanding issues impeding full implementation of optimized corrosion control treatment ("OCCT") at J.H. Fewell and O.B. Curtis, and complete implementation of such OCCT as required by MSDH and consistent with the MSDH-approved OCCT plans to meet State-approved water quality parameters.
    - September 2023 Extensive lead times on equipment have slowed completion down at both plants. JH Fewell is further along with OB Curtis a few months behind. Current estimated completion dates are December 31, 2023 for JHF and March 31, 2024 for OBC.
- 4. Alternative water source plan
  - a. Implement an Alternative Water Source Plan ("AWSP") including entering into agreements for the immediate provision of alternative water at least one gallon per person per day. A revised plan scope was submitted to EPA on September 19, 2023. EPA and MSDH provided no comments within the 20-day comment period. The new scope is as follows: Implement an Emergency Water Supply Plan to provide pressurized temporary connections and tanker truck supplied potable water to customers impacted by JXN Water work on the distribution system or as a temporary measure until distribution system improvements can be completed.
    - The plan was implemented effective September 30, 2023
- 5. Distribution system study, analysis, and implementation
  - a. Develop a plan for EPA review and approval for distribution system study and analysis to include at a minimum: Plan submittal July 2023 (within 60 days – no schedule adjustment required) Plan submittal December 2023.

iv.

- i. A GIS-based dynamic hydraulic model ii. Valve and hydrant location and assessment, including valve size
  - iii. An asset management system
  - Water loss identification and reduction
  - v. System operation optimization and configuration standards
- 1. Pressure study HGL analysis
- 2. Implement pressure control/pressure zones/booster pumping as recommended and as funding and schedule permit.

Corrosion control

vii. Service line inventory and replacement planning

vi.

1. Prioritize replacement of any lead lines found, with schedule

approved by EPA and MSDH.

- 2. Update lead service line replacement plan in compliance with Lead and Copper Rule Revisions.
- b. Implement plan as funding and schedule permit. Implementation of many activities has commenced with all elements to commence no later than plan approval date. Implementation will continue into 2024 and beyond.

# 6. System stabilization and sustainability plan - March 2023 New date 10/31/2023 in Q1 report.

- a. Develop a sustainable plan to stabilize and invest in the water system to ensure safe and reliable drinking water for all of Jackson, all the time.
- b. Key areas to be addressed include sustainable revenue models, appropriate levels of renewal and replacement, asset management plan, service levels, water demand modeling, and other related factors.
  - March 2024 requires input from distribution system plan (PPL 5) as well as Jacobs condition assessment (draft submitted in October 2023).
- 7. **SCADA system improvement**s sensors, actuators, sensors, etc. This project is to evaluate and replace the SCADA system at OB Curtis and JH Fewell.
  - September 2023 unable to estimate completion until upgrade evaluation is completed in September 2023 (30 percent design) at which time construction schedule will be developed and submitted. Design work commenced in Q3 with scope limited to prepare 30 percent design in Q1 2024. SCADA replacement estimated complete in 2026.

# 8. Chemical systems at plants and wells

- a. Assess and repair, as necessary, all chemical feed pumps and associated equipment at all facilities, including but not limited to; controls, sensors, weight indicators, and feed lines, to return all chemical feeds to fully functional status, ensure operational redundancy, and establish flow paced automated dosing for all chemical feed systems.
  - **Complete Oct 2023** This project changes from a repair effort to a complete replacement of all chemical feed systems at OB Curtis. PP 9 has been included in the design currently at 30 percent. Schedule for contract completion extends to end of 2024.

# 9. Chlorine system improvements at O.B. Curtis

- a. Make replacements or immediate interim repairs as necessary for continuous safe operation.
  - February 2023 Complete to operate in accordance with Jacobs' safety

protocols.

- b. Develop and implement plan to eliminate use of gaseous chlorine at O.B. Curtis.
  - Plan has been developed and design started to be accomplished in coordination with PP 8. Design is at 30 percent. Project to be completed by December 31, 2024.

# 10. Intake Structure Repairs

- a. Assess and repair, as necessary, the intake structures at J.H. Fewell and O.B. Curtis, including, but not limited to, sensors (including related remote SCADA capabilities), chemical feed systems, valves, electrical components, screens, physical structure, and any appurtenances, to return the intake structures and related components to fully operational status.
  - Complete December 2023 JHF scope may be much more complex and if so – a specific schedule will be developed once assessment is complete in Summer 2023.
  - Assessment complete September 2024
- Treatment facilities (J.H. Fewell and O.B. Curtis as applicable) unit processes and pumps evaluate performance and restore redundancy – Start Dec 2022 with assessment by JACOBS. Work accomplished throughout 2023 in coordination with JACOBS as contract operator. No completion date can be established until extent of repair/remediation/replacement work can be fully determined.
  - a. Membrane system
  - b. Raw water pumping and screening
  - c. Oxidation basins
  - d. Rapid mix
  - e. Flocculation and sedimentation
  - f. Sludge removal
  - g. Filters
  - h. UV
  - i. Transfer pumping
  - j. High service pumping

# 12. Sludge assessment in all finished water storage facilities

a. Assess sludge levels and remove as required. Develop operating procedures to minimize future sludge accumulation in all finished water storage facilities.

Assessment June 2023 – Assessment could not be completed. Divers met with JXN Water staff and Jacobs on site to plan assessment and determined the treatment facilities are unable to safely shut down for the time required for the

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divers to perform assessment. This project will be re-evaluated at the end of 2024. Accomplishment is dependent on continued progress on distribution system repairs and plant redundancy. Removal, if required, December 2023

# 13. **Resilient power plan**

a. Assess power vulnerability throughout the system and develop and implement a plan to address issues identified in the assessment, as funding and schedule permit.

# Assessment September 2023. Technical Memo to be submitted in Q4. Implementation schedule will be developed based on TM recommendations.

#### Status Updates from JXN Water

Status Change Quarter Ending September 30, 2023	Status Quarter Ending September 30, 2023	Delays	Projection of Work Ending Quarter Ending December 31, 2023
Entire System Stabilizat			
Continued stabilization actions	Completed satellite sensor assessment of water loss. Transient testing performed in the distribution system. Collected information was used to inform investigation and calibrate the hydraulic distribution model. Plants consistently produced needed water to support the system. Pressure monitors installed last quarter continue to inform decision making related to the distribution system. Water tank water levels holding more consistently. Continued opening valves on smaller distribution lines (less than 16" diameter). Started construction on 20" transmission main running west across city along Fortification Street. Issues include multiple breaks with one under railroad. Completed design, permitting, bid award and procured materials for 30" transmission main repair running along Woodrow Wilson south to Fortification Street. Issues include multiple breaks in creek and multiple broken/closed valves. Received 20" and larger valves to keep in stock to expedite repairs. Completed altitude valve assessment on tanks and initiated emergency design for repair on the valve at Chastain Tank. Evaluated water tank storage response to plant flows. Continued improving call center service and responsiveness.	None	Continue evaluation of distribution system and implement corrective actions to further stabilize the system. Coordinate with plants to set system pressure requirements and goals. Continue evaluation of high-pressure areas (consistent water line breaks) for valve closures. Perform acoustic leak detection. Complete construction of 20" transmission main repair running west across city along Fortification Street. Begin construction on 30" transmission main repair running along Woodrow Wilson south to Fortification Street. Being addressing repairs on tank altitude valves.
South Jackson System S			T
Continued stabilization actions	Identified pressure zones for the South Jackson area. Implementation of the pressure zones is being determined. Suncrest Tank taken offline after it was determined it was a demand on the system without providing head back to the system. Planned the conversion of the Forrest Hills area from surface to well system.	None	Continue evaluation of distribution system and implement corrective

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Improved and continued to address pressure issues at CMMC hospital.	actions to further stabilize
Performed focused leak detection activities.	the system.
Performed pressure checks along known transmission water lines to verify elevation/grade levels historically.	Pressure checks along
Tested water quality from hydrants on known transmission lines to verify which treatment plant water is	known transmission water
providing water to the area and the quality of that water.	lines to verify
Identified several potential incomplete tie-ins for further investigation and repair if required.	elevation/grade levels
	historically.
	Test water quality from
	hydrants on known
	transmission lines to
	verify which treatment
	plant is providing water to
	the area and the quality of
	that water.
	Search known water line
	maps to find valves that
	could be causing pressure
	build-up or stagnant
	water based on field
	findings.

		Status Change	Task Ord	er(s)	Sun	nmary of Work	Summary of	Projection of Work
PPL	Description	Quarter Ending	Quarter Ending S	eptember 30,	Quarter I	Ending September 30,	Delays	Quarter Ending December 31,
		September 30, 2023	2023	3		2023	Encountered	2023
1	O&M Contract	O&M contractor engaged and progressing work	Operations Consulting Support and Safety Audit Operations Consulting Support and Safety Audit (Amendment 1) O&M Secondment (Amendment 1) O&M Secondment (Amendment 2) O&M Phase 2 O&M Materials Procurement O&M Condition Assessment O&M Condition Assessment O&M Evaluation O&M Staff Augmentation (Amendment 1 and 2) O&M Phase 2 (Amendment 1)	Jacobs Jacobs Jacobs Jacobs Jacobs Jacobs Jacobs Jacobs Jacobs Jacobs	General	1.Continuedrecruiting and hiringactivities accordingto staffing plan: 45.5filled positions of66.5 total plannedpositions; 18.5positions currentlyfilled with convertedCity of Jacksonemployees.2.Continuedpreventativemaintenanceschedules androutines at both OBCurtis and JH Fewell.Routines include, butare not limited to,regular sedimentbasin cleanings andmembrane traincleanings.3.Establishedregularcommunicationprotocols with JXNWater to coordinateplant and distributionsystem actions duringthe period of highdemand related toextended drought.	Extreme heat and extended drought resulted in high water demand during Q3. Continuing to encounter lengthy lead times for some process equipment including valves and actuators.	Install backup chlorinator equipment at OB Curtis. Complete start-up activities for the liquid lime and CO2 systems at JH Fewell. Continue preventive maintenance schedules and routines at OB Curtis and JH Fewell. Continue with pulling, repairing, and returning to service raw water pumps and blowers to further stabilize the plants. Coordinate with JXN Water on the return to service of the Chastain Tank and the Highway 18 Tank. Continue repairs needed to return the Residual Handling Facility to service at OB Curtis. Progress repair of the main entrance road to OB Curtis to maintain access for plant personnel and deliveries.

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	OB Curtis Significant Repairs	
	and Maintenance	
	4. Completed	
	removal of	
	compacted soda ash	
	from the two soda	
	ash silos	
	5. Initiated	
	and nearly	
	completed	
	installation of freeze	
	protection on key	
	lines throughout	
	plant.	
	6. Repaired	
	cyclical valve on	
	Membrane Train #2	
	and returned train to	
	service.	
	7. Repaired	
	chlorinator system	
	and ordered spare	
	parts for	
	redundancy.	
	8. Repaired	
	damaged roof on the	
	intake building on	
	the Barnett	
	Reservoir.	
	9. Installed	
	bulk soda ash tank to	
	provide more	
	efficient handling and	
	feeding of soda ash.	
	10. Repaired	
	Membrane Blower B	
	and returned to	
	service.	

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	11. Initiated	
	repairs of the	
	Residual Handling	
	Facility.	
	12. Evaluated	
	the main plant	
	entrance road for	
	repair.	
	JH Fewell Significant Repairs	
	and Maintenance	
	13. Returned	
	Filters #24 and #26 to	
	service after the	
	completion of	
	construction	
	activities.	
	14. Received	
	training on the newly	
	installed liquid lime	
	and CO2 systems and	
	initiated process of	
	system startup.	
	15. Received	
	repaired Raw Water	
	Pump #2 from	
	contractor: installed	
	and returned to	
	service	
	16 Renaired	
	raw water screen	
	which will allow Raw	
	Water Pump #5 to be	
	returned to service	
	17 Initiated	
	repairs of the	
	chlorine material	
	bandling oguinment	
	nandling equipment.	

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					Wells, Tanks, and Booster Pump Stations Significant Repairs and Maintenance 18. Repaired burned motor leads and returned Siwell Road well to service. 19. Coordinate d with JXN Water on		
					repair and testing of Chastain Tank – tank anticipated to return to service in October 2023. 20. Installed additional lighting and cleared vegetation around fence lines at key well sites to improve security. 21. Corrected deficient site grading at Maddox Road tank.		
2	Winterization	Contractor engaged and progressing work	OBC Winterization Project – Construction Contract OBC Membrane Building – Construction Contract	Hemphill	Winterization 22. Installed soda ash bulk storage tank. 23. Installed CO2 feed system. 24. Started up soda ash pumps and CO2 feed systems. Membrane Building 25. Complete and is pending final reconciliation change	Delays related to the CO2 Tank pad location and decision on soda ash and dehumidificatio n scope of work impacted project completion date.	Winterization 26. Achieve substantial completion in October 2023 and final closeout by November 2023 Membrane Building 27. Administrativel y close out project.

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					order and closeout		
					The State (MSDH) has		
					completed their final		
					walkthrough		
2	Compaien Control			l La vas va la 111	Waiktinough.	Faulia as a set	Consulato sito non inconsulatorna
3	Corrosion Control	Contractor engaged and	JHF CO <sub>2</sub> Chemical	нетрпіі	Completed Installation of liquid	Equipment	Complete site paving and storm
		progressing work	Feed Equipment		lime system	procurement	drainage improvements
			Project		Completed installation of CO2	delays have	Progress punch list
			Construction		feed system	added 27 days	Achieve final completion and
			Contract		Started up liquid lime and CO2	per Change	project closeout in November
			JHF CO₂ Chemical		feed systems.	Orders 1, 2, and	2023.
			Feed Equipment		Started site paving and storm	3.	
			Project – Change		drainage improvements		
			Order #1 – Water				
			Line Repair and				
			Isolation				
			JHF CO₂ Chemical				
			Feed Equipment				
			Project – Change				
			Order #2 - Sump				
			Pumps at Lime Silo				
			Containment Area				
			JHF CO₂ Chemical				
			Feed Equipment				
			Project – Change				
			Order #3 -				
			Transformer				
			Deletion and CO2				
			Tank Orientation				
			Change				
			JHF Corrosion				
			Control -Site				
			Paving and Storm				
			Drainage				
			Improvements –				
			Change Order #4				
3	Construction	Consultant engaged and	Construction	lacobs	Continued improving.	Construction on	Negotiate and execute as directed
	Management Services for	nrogressing work	Management		undating and using	both the IHF	by IXN Water modifications
	OBC and JHF	P. 00. 000118 1011	Services for OBC		construction project	Corrosion	required to construction contracts
	OBC and JHF	progressing work	Services for OBC		construction project	Corrosion	required to construction contracts

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Winterization and       management system (Trimble       Control and OBC to address findings from co         JHF Corrosion       ProjectSight).       Winterization       control and winterization do         Control (Task       Made improvements to the       projects have       reviews with contractor.         Order #7)       Description       Description       Description	rosion esign
JHF Corrosion     ProjectSight).     Winterization     control and winterization do       Control (Task     Made improvements to the projects have reviews with contractor.       Order #7)     naument process to streamling experienced     Provide applies construction	esign
Control (Task Made improvements to the projects have reviews with contractor.	
Order #7) not provide an activity of the provide and the provi	
payment process to streamine experienced provide ongoing construction	n
Amendment #1 to processing including the use of delays from management services throu	ghout
Construction electronic signatures and original contract the quarter. Advance substa	intial
Management electronics transmittals to each dates due to completion on JHF Corrosio	n
Services (Task party. equipment Control and OBC Winterizat	ion
Order#7) Continued construction site procurement projects during fourth quar	er
General visits for observation and delays. based on current construction	on
Construction inspection. schedules.	
Management Continued contract	
Services (Task administration including	
Order #3) payment application review,	
submittal reviews, answering	
RFI's, coordination with Plant	
Operations, writing requests	
for change proposals,	
developing work change	
directives and change orders.	
Attended and then conducted	
monthly construction meetings	
for each project.	
Supported field engineering for	
troubleshooting construction	
issues and providing input to	
the contractor and JXN Water;	
continued coordinating soda	
ash silo decisions with	
corrosion control study	
recommendations.	
5a Distribution Plan for EPA Initiated development N/A – Plan Stantec/Jacobs Continued coordination with None Submit plan for review and	
Review and Approval of plan including the included in already JXN Water's lead water approval.	
initial work already existing Task distribution engineering	
accomplished Orders for consultant regarding the plan.	
Distribution Work Continued coordination with	
the Corrosion Control Study	
Team regarding plan	
development.	

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5.a.i	Distribution System	Consultant engaged and	Development of	Stantec	Data Collection	Stantec was	Continue collecting and
	Assessment and	progressing work	data analysis,		Continued gathering	unable to	documenting data and the team
	Modeling	TO1 Amendment 1 was	hvdraulic		data for hydraulic	complete 4	will review and analyze data for
		approved by JXN which	modeling, and		model development as	hydrant tests	hydraulic model development as
		included scope and	alternative		data becomes	, during the field-	data becomes available.
		budget to perform field	analysis.		available. Specially,	testing period	Continue updating the model
		testing for the hydraulic	,		Stantec analyzed the	because of low	based on newly acquired data and
		model, install LEC			meter consumption	pressure in the	information discovered in the
		pressure monitors,			data from the READy	system. Stantec	field.
		analysis/troubleshootin			software and utilized	, deployed 5 out	Develop groundwater system
		g of LEC pressure data,			the largest 50 water	of 8 transient	transmission model.
		develop a transmission			consumers for model	loggers during	Draft a Model Calibration and
		model for the			demand	field testing due	Pressure Boundary Analysis
		groundwater system.			development.	to	Report.
		с ,			Stantec continued	malfunctioning	Continue evaluating the
					analyzing data and	equipment.	conceptual projects (48" Pipeline
					identified data gaps		near Galatin Street and
					and technical issues		Repurposing of Maddox/TV Rd
					with the LEC/IQ2		Pump Station/New Pressure Zone
					platform. Stantec		in South Jackson) for the south side
					downloaded the data		of Jackson.
					from the platform		Develop an all-pipe model based
					weekly and imported		on the completed GIS and develop
					into a spreadsheet for		an efficient workflow between
					ease of reviewing.		GIS/Modeling teams. (Amendment
					Stantec submitted the		required)
					field-testing plan on		
					July 20, 2023, to JXN		
					for field testing in		
					August 2023.		
					Field Testing		
					Stantec performed field		
					testing between July 31		
					and August 3, 2023.		
					Stantec performed 20		
					hydrant tests and		
					installed 5 transient		
					data loggers.		
					Additionally, Stantec		

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1			
		observed pump testing	
		at the OB Curtis and JH	
		Fewell WTP with	
		support from JXN and	
		plant operations staff.	
		After field testing was	
		completed, Stantec	
		analyzed field data and	
		used the information	
		for model validation.	
		Hydraulic Modeling	
		Stantec finished	
		importing and updating	
		the pipeline	
		transmission network	
		in the hydraulic model.	
		Stantec finished model	
		demand development	
		using census data, land	
		use, and the	
		consumption data from	
		the READy software.	
		Then, Stantec allocated	
		the demand to the	
		model demand nodes.	
		Then, Stantec utilized	
		field testing data and	
		SCADA from JXN to	
		perform model	
		validation and	
		calibration. The model	
		meets typical	
		calibration guidelines in	
		the northern portion of	
		the system, while the	
		model predicts a higher	
		hydraulic grade line	
		(HGL), i.e., higher	
		pressure, in the	

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	southern portion of the
	system. Stantec is
	working with JXN
	Operations to
	determine the cause of
	the variations in the
	model and field data
	and assist JXN in
	identify locations of
	problems areas (leak or
	closed/partially closed
	valve) that may be
	causing lower pressure
	in the field compared
	to the model.
	Stantec successfully
	built a hydraulic model
	of the surface water
	system that can be
	used for preliminary
	analyses and support
	JXN Operations in
	identify immediate
	solutions to the
	system. The
	transmission model
	development will be
	on-going, and the
	model will continue to
	be updated as latest
	information is
	acquired.
	South Jackson Alternative
	Analysis
	Stantec received a request
	from JXN to identify
	projects to improve
	pressure in South Jackson
	that can be used for grant

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5.a.ii	Valve and Hydrant Assessment	Consultant engaged and progressing work	Leak Detection and Mapping Services	Xylem (Wachs Water)	funding provided by Hinds County. Stantec identified two projects (48" Pipeline near Galatin Street and Repurposing of Maddox/TV Rd Pump Station/New Pressure Zone in South Jackson). Stantec submitted a TM to JXN describing the project components, estimate construction cost and schedule. The grant funding was selected for other projects at the County's discretion, but Stantec continued to progress the analysis of the two projects. Continued assessing valve condition in areas of concern. Completed the following repairs and field activities:	None.	Deploy 500 leak loggers throughout the distribution system. Continue transmission main assessments and repair activities during the next quarter. Continue assessing the entire distribution system valves and hydrants and perform needed hydrant flow tests.
					<ul> <li>95 valve positions changed (219 cumulative)</li> </ul>		

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					• 302 hydrant assessments (302 cumulative)		
5.a.ii	Valve and Hydrant Assessment	Consultant engaged and progressing work	Management of Leak Detection Services, GIS Mapping, and Field Support Services	Stantec	Completed the assessment of transmission mains. No major valve repairs completed, frozen valves repaired, and minor repairs completed. Assessed the valves, logged working issues. Started repair plan. Maintained spreadsheet of issues. Emergency responses – pressure issues troubleshoot valve. Hydrant testing program has begun.	None	Assessment in the distribution areas. GIS mapping for the distribution is ongoing. Continuing Hydrant testing program.
5.a.iii	GIS Mapping	Addendum 2 under development for additional GIS scope items.	Technical management of GIS system map to support hydraulic modeling, the hydrant, valve and flushing / flow testing program, and operations and maintenance activities.	Stantec	8000+ sheets digitized comprising both transmission and distribution mains. Priority Area 3, Road Resurfacing Ph 1, and Road Resurfacing P2 complete. Priority Area 4 is 95% complete. Addendum 2 completed and approved. Enabled real time sharing of GIS data with the use of a map service. Continued development and maintenance of the Interactive GIS interface. Developed a gridding system to add in priority area	Quality and consistency of maps to be digitized. Significant number of unmapped / unknown valves; significant time to reconcile with existing data from drawings. Decreased time availability from existing staff due to other projects.	Further digitization and mapping of priority areas. Procedure for capturing completed work beyond maintenance to be developed. GIS Staff to travel to Pune to train staff on Digitization. Develop process to utilize grid and georeferenced drawings to divvy out remaining drawings for digitization.

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					identification and work assignment. Began onboarding 10+ Pune staff in increase productivity rate. Trained Pune staff on georeferencing. Priority Areas 5 and 6 are currently being georeferenced.		
5.a.III	Information & Asset Management	No change.	Development of Asset Management system to support operations activities.	Stantec	Drafted initial set of Level of Service (LOS) standards and metrics to be reviewed and validated. Document workflows for capturing work and asset data for ongoing repairs and replacements in the field. Prototype design for work management application integrating ArcGIS applications including Survey 123 and Workforce. Began initial coordination with Cartegraph to assist with the CMMS implementation. Analyzed and evaluated Kamstrup acoustic data as a mechanism for predicting pipe failure. Call Center data entry sheet created, evaluated, and deployed. Designed, built, and evaluated temporary work management application integrating ArcGIS applications including Survey 123 and Field Maps. Design approved by client.	Cartegraph implementation is on hold	Support the implementation of Cartegraph Phase 1. Develop a plan for rollout of JXN Enterprise GIS. Prepare plan for integration of hydraulic model and utility network. Prepare a condition assessment strategy. Train field crews and deploy the temporary work management application. Cleanse legacy call center data and integrate it with the new work tracking system. Support the implementation of Cartegraph Phase 1. Develop a plan for rollout of JXN Enterprise GIS. Prepare plan for integration of hydraulic model and utility network. Build dataset and interactive tools for monitoring progress of emergency repair projects. Start of planning of migrating GIS systems currently hosted by JXN Water.

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					Began initial coordination with Cartegraph to assist with the CMMS implementation		
5.a.iv	Distribution System Leaks – Find and Fix	Consultant engaged and progressing work	Management of Leak Detection and Repair Program	IMS	Evaluated backlog of known leaks (focus on pipe diameters 6 inches and smaller). Performing Drive-by Windshield Leak Detection Survey of all roads in the JXN Water service area. Performed real time leak detection identification and issued Work Orders to Contractors. Provided Weekly Summary Update of program progress. Provided Quarterly Update of Program progress.	None	Continue to progress project and issue repair work orders. Continue PM Field Related Activities. Continued Drive-by Windshield Leak Detection Survey.
5.a.iv	Distribution System Leaks – Find and Fix	Consultant engaged and progressing work Addendum 1 under development for additional projects.	Management of Identification and Repair of Major Water System Leaks	Stantec	48-inch main break on former Colonial Country Club Project complete.	48-inch main break on former Colonial Country Club Multiple rain events and depth of main break delayed completion of the project. Depth of break on above required additional equipment to be sourced and brought in.	48-inch main break on former Colonial Country Club Project complete.
					48-inch ARV leak on East Beasley Road	48-inch ARV leak on East Beasley Road	<b>48-inch ARV leak on East Beasley</b> <b>Road –</b> 48-inch ARV to be installed.

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		Stantec recommends that a	None	Anticipate completion in
		new ARV be installed along		November 2023.
		with the new valve. This was		
		not originally requested at the		
		not originally requested at the		
		time of the repair.	20 is shown in	
		30-inch main break crossing	30-inch main	30-inch main break crossing Town
		I own Creek at Fortification	break crossing	Creek at Fortification and Prentiss
		and Prentiss Streets	Town Creek at	Streets
		Completed design of trenchles	sFortification	Submit design to MS Dept of Heath
		crossing plans and	and Prentiss	for review and approval.
		specifications.	Streets	Anticipate repairs to begin
			Mobilization	Oct/Nov 2023.
			time	
			Easement needs	
			to be obtained	
			for a portion of	
			the pipeline	
			alignment.	
		20-inch break on railroad	20-inch break	20-inch break on railroad
		easement south of	on railroad	easement south of Fortification
		Fortification Street –	easement south	Street
		Completed design of trenchles	s of Fortification	Submit design to MS Dept of Heath
		crossing plans and	Street	for review and approval.
		specifications.	Mobilization	Anticipate repairs to begin
		Permit obtained for KCS	time	Oct/Nov 2023.
		Railroad.		
		Pipe and Valve Replacement	Pipe and Valve	Pipe and Valve Replacement @
		@ Intersection of Prentiss and	Replacement @	Intersection of Prentiss and
		Fortification	Intersection of	Fortification
		UCI mobilized on site and	Prentiss and	Anticipate work to begin Oct/Nov
		completed utility investigation	Fortification	2023.
		and condition assessments	Condition of	
		needed to begin pipe and valv	e pipe and casing	
		replacement.	under railroad	
		Plan and profile prepared for	was confirmed	
		new trenchless RR crossing	during site	
		based on existing utility	investigation. It	
1		locations once uncovered.	cannot be re-	

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				1
		Submitted to KCS Railroad for	used and	
		permit (under review)	requires	
			replacement has	
			delayed the	
			project due to	
			railroad	
			permitting	
			requirements.	
			Anticipate work	
			to begin	
			Oct/Nov 2023.	
		Northside Dr 24-inch Valve	Northside Dr	Northside Dr 24-inch Valve
		Replacement and Chastain Dr.	24-inch Valve	Replacement and Chastain Dr.
		Valve Replacements	Replacement	Valve Replacements
		Performed site reconnaissance	and Chastain	Wicker Construction is scheduled
		and identified repair options.	Dr. Valve	to mobilize October 16, 2023.
		Stantec prepared scope, cost	Replacements	
		proposal, and drawing for pipe		
		and valve replacement.	None	
		Wicker Construction has been		
		selected to perform the work.		
		20-inch Pipe Replacement	20-inch Pipe	20-inch Pipe Replacement
		Emergency (Fortification –	Replacement	Emergency (Fortification –
		Palmyra to Prentiss)	Emergency	Palmyra to Prentiss)
		Performed site reconnaissance	(Fortification –	Anticipate replacement to begin
		and identified repair options.	Palmyra to	October 2023
		Stantec is preparing scope, cost	Prentiss)	
		proposal, and figure for pipe	None	
		replacement.		
		JXN Water selected UCI to		
		perform the work.		
		Procurement or Owner		
		supplied materials is complete.		
		20-inch Pipe Replacement	20-inch Pipe	20-inch Pipe Replacement Design
		Design (Fortification – Prentiss	Replacement	(Fortification – Prentiss to I-220)
		to I-220)	Design	Railroad easement access
		Completed site survey and	(Fortification –	permissions and permits need to
		geotechnical investigations.		be obtained.

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	Stantec is workir preliminary align replace pipeline.	g on a Prentiss to I- ment study to 220) Railroad easement access permissions and permits need to	Easement needs to be obtained for a portion of the alignment.
	20-inch Pipe Des	be obtained. Easement need to be obtained for a portion of the alignment. ign (Gallatin & 20" Pipe Desigr	20-inch Pipe Design (Gallatin &
	<b>McDowell)</b> Completed site s geotechnical invo Stantec is workir preliminary align replace pipeline.	(Gallatin & McDowell) estigations. Railroad g on a easement ment study to access permissions and permits need to be obtained.	McDowell) Complete design and specifications for bidding and procure Contractor. Anticipate repairs to begin August 2024.
	20-inch Pipe Des - McCluer St to T Stantec preparin proposal.	ign (Siwell Rd 20-inch Pipe erry Rd) Design (Siwell g design Rd - McCluer St to Terry Rd) None	<ul> <li>20-inch Pipe Design (Siwell Rd - McCluer St to Terry Rd)</li> <li>Complete design and specifications for bidding and procure</li> <li>Contractor.</li> <li>Anticipate repairs to begin Nov</li> <li>2024.</li> </ul>
	<b>48-inch Pipe Des</b> <b>and Rankin Rd)</b> Stantec preparin proposal.	ign (West St g a design g a design de	<b>48-inch Pipe Design (West St and Rankin Rd)</b> Complete design and specifications for bidding and procure Contractor. Anticipate repairs to begin Dec

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		Sampling Station	Sampling	Sampling Station Replacements
		Replacements	Station	JXN Water to bid project and
		Stantec has prepared three bid	Replacements	award Contractor(s)
		packages to replace all	None	Anticipate Repairs to begin Nov
		sampling sites through the		2023.
		water system		
		Valve and Hydrant	Valve and	Valve and Hydrant Replacements
		Replacements Valve and	Hydrant	Valve and Hydrant Replacements
		Hydrant Replacements	Replacements	JXN Water to bid project and
		Stantec is working with	Valve and	award Contractor(s)
		condition assessment team to	Hydrant	Anticipate Repairs to begin Jan/Feb
		identify replacements.	Replacements	2024.
		Valve and Hydrant	Condition	
		Replacements	Assessment	
			Completion	
			Valve and	
			Hydrant	
			Replacements	
			Stantec to	
			prepare bid	
			packages for	
			valve and	
			hydrant	
			replacements.	
		Management Valve Repair	Management	Management Valve Repair
		Program	Valve Repair	Program
		Initial assessment of 11	Program	Anticipate completion of the
		altitude valves completed.	Valves testing is	Chastain tank altitude valve by
		Developed scope of work to	on hold until	October 2023.
		replace the altitude valve at	sufficient	Anticipate having LOE for
		Chastain Tank.	system	additional altitude valve
		UCI was selected to perform	pressures can	replacement by December 2023
		the work.	allow tanks to	
		UCI began work to replace the	overflow to	
		altitude valve and all	evaluate the	
		associated pipe September	valve	
		2023.	performance.	

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					Ctautas has has a divested to	Nama	
					stantec has been directed to	None.	
					develop plans to replace all		
					ineffective altitude valves.		
					Distribution System Ongoing	Distribution	Distribution System Ongoing
					Construction Support	System Ongoing	Construction Support
					Oversight over two projects:	Construction	36-in water main tie-in Riverside
					Riverside Drive Improvements,	Support	Drive, to be scheduled when the
					and 48-in transmission line	Railroad permit,	water system is stable enough to
					installation.	resolved during	allow for a temporary shut off of
					Received railroad bore permit	this quarter.	the existing 36" pipe.
					for 48-in transmission main.	Railroad bore	Commissioning of the completed
					Railroad bore failed. The	failed. The	portions of the 48-in transmission
					designed path is being	designed route	main expected November 2023.
					abandoned and the project	must be	Design changes to the original 48"
					route is being reconsidered.	revised.	water line route being considered
					36-in water line completion is		by design team.
					delaved due to system issues		, .
					preventing the temporary shut		
					off on the existing 36" pipe.		
					Merit Hospital Fire Line	Merit Hospital	Merit Hospital Fire Line
					Connection Pipeline Design	Fire Line	Connection Pipeline Design
					(Project No. 2309) - 5 Percent	Connection	(Project No. 2309) - 5 Percent
					Performed site reconnaissance	Pipeline Design	Anticipate resolution of the
					and identified repair options.	(Project No.	property easement issues by
					Stantec is preparing a	2309) - 5	December 2023.
					proposed pipeline alignment	Percent	
					figure to coordinate alignment	Pipeline	
					with landowner on easement.	easement on	
					Stantec is preparing design	private property	
					scope and fee.	will require	
					Not a contracted project vet.	coordination	
						and acquisition.	
5.a.iv	Distribution System Small	Consultant engaged and	Development of	Stantec	Pilot Proiect	Pilot Proiect	Pilot Proiect
	Main Replacement	progressing work	Engineering		Pilot Project plans and	Survey and 30%	Award Pilot project and begin
	-1		Standard Details		specifications completed. and	design	construction. Anticipate
			and Specifications		MS Dept of Health approval	completed for	construction to begin Dec 2023
			for 2-Inch Water		obtained.	new water	/Jan 2024.
					-	replacement	r

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			Main Replacement Pilot Project Management of Leak Detection and Repair Program.		Pilot projects bidding has been completed and Contractor negotiations started. In discussion with JXN Water and contractor to award project.	project in Choctaw Village. Choctaw Village - Sewer lines adjacent to waterline replacements have been inspected using CCTV and manhole inspections have been completed.	Design and specifications will be completed for Choctaw Village, and the project will be competitively bid. Anticipate construction to begin May 2024.
					Broadmoor Area Water & Sewer Replacement Design (Project No. 2311) - 1 percent Stantec is preparing design scope and fee. Not a contracted project yet.	Broadmoor Area Water & Sewer Replacement Design (Project No. 2311) - 1 percent None	Broadmoor Area Water & Sewer Replacement Design (Project No. 2311) - 1 percent Anticipate construction to begin October 2023.
					Brown Street Water & Sewer Replacement Design (Project No. 2312) 1 percent Stantec is preparing design scope and fee. Not a contracted project yet.	None	Anticipate construction to begin November 2023.
5.a.v	Lead Service Lines Inventory	Consultant contracted to provide support in creating lead service line inventory.	Management and field services in detecting and inventorying of lead service lines.	Stantec	Held preliminary meeting with JXN Water staff and contractors in the area to understand potential locations of lead in the water system. Coordination meetings with Blue Conduit (predictive modeling), ACE Pipe Cleaning (potholing contractor), HDR	None	Distribution of public outreach materials to residents. Actively investigating service lines through potholing and testing. Analysis of initial service line data collected. Planning of second iteration of potholing and testing locations.

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					(public relations), and Jacobs (water quality testing). Finalized proposal and fee, Notice-To-Proceed given on 8/17/2023. GIS team worked with potholing contractor's GIS team to set up contractor's tablets for field data entry. GIS team set up LSL dashboard. Coordination with HDR for production of Community Outreach materials. Held project kick-off call with potholing and restoration contractors		
5.a.vi	Program Support Services	Consultant engaged and progressing work	Technical support in the analysis, development, and implementation of new water rates. Development of a contractor prequalification application and bidding instructions to prospective	Stantec	Water Rate Modeling Finalized pricing model calculations based on current data using base/developed area. And shared with JXN Water Developed billing database/file with billing determinants, rates, and other information for integration into billing system. Worked with Horne & BOSS to map premise-based	None	Following completion of data updating by Assessor updating of registry for parcels. Support in developing draft rate design summary for JXN Water.
			bidders.		Contract Administration Support Completed documentation for procurement and bidding. Draft documents compiled and submitted to JXN for review. Identified and reviewed online bidding services.	None.	Complete standards and integrate process with JXN Water for implementation.

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					Field GIS verification and	Subcontractor	Train all field personnel on
					location logging of the	pricing and	10/18/2023 and provide them with
					recently installed water	selection	field equipment.
					meters.	required	Soft start of field data collection
					Scope finalized and submitted	negotiation and	with Stantec supervision
					to client on 10/11/2023.	additional	10/1/2023-10/20/2023
					Selected SOL Engineering to	discussions.	Full start of field data collection on
					support field data collection.	GPS equipment	10/23/2023
					Developed field collection tools	delivery was	Begin monitoring and tracking field
					and workflows.	delayed.	progress.
					Selected and purchased all		Start developing post processing
					needed field equipment.		procedures and workflows
					Began developing training		Finalize contractor prequalification
					materials for field personnel.		application and bidding
					Completed a draft version of		instructions per JXN Water
					contractor prequalification		comments.
					application and bidding		Support JXN Water in
					instructions to prospective		implementing online bidding
					bidders. Currently in review by		support service.
					JXN Water.		
					Reviewed online bidding		
					support services that would		
					digitize most of the		
					prequalification and bidding		
					process. One service was		
					recommended by Stantec to		
					begin contract negotiations		
					with JXN Water.		
5.a.vi	Corrosion Control	Consultant engaged and	Review of Designs	Jacobs	Planned and initiated field	Lack of available	Progress desktop corrosion control
	Renewal	progressing work	and Related		sampling activities to provide	historical data	study.
			Studies (Task		additional data for the desk-	and required	Complete field sampling activities,
			Order #7)		top corrosion control study.	efforts for data	currently projected mid-December
			Corrosion Control		Continued gathering historical	collection	Conduct data review workshop for
			Desktop Study		data and information to	continue to add	all applicable desk top study data
			(Task Order #5)		support desk-top study.	time and	findings with JXN Water
					Continued coordination with	complexity to	Coordinate with MSDH on
					ongoing process assessment	this task.	recommended path forward for
					for WTPs and ongoing	Sampling	interim corrosion control and
					construction projects at both	activities	perform design and construction

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					WTPs pertaining to corrosion control. Performed data analysis to compile comprehensive history of historical lead and copper sample site sample results. Met with MSDH to discuss modifying approved CCT method at the O.B. Curtis WTP Assessed feasibility of implementing liquid lime with carbon dioxide at the O.B. Curtis WTP as modified CCT and began developing conceptual design report for submission to MSDH for consideration of CCT method modification	interrupted due to security issue in field. Sampling activities scheduled to resume October 23rd.	work to advance implementation of approved interim solution. Complete liquid lime system conceptual design report and issue to MSDH for review and consideration Assuming MSDH CCT approval, continue advancing liquid lime system design and pre-procure liquid lime system equipment and tankage for expediting installation of the expanded liquid lime system.
		Initiated work. Issued	Third Party Review	HDR	No work has been completed	None	Complete a third-party review of
		consultant	of Corrosion Control Desktop Assessment (Task Order #4)		ует.		assessment.
6	System Stabilization/Sustainabilit y Plan – Water Treatment Plants, Wells, and Tanks Capital Improvement Plan	Consultant engaged and progressing work	None, initial planning work progressing under existing task order.	Jacobs	Developed a draft prioritized capital improvement plan based assessment of process, hydraulics, condition and maintenance related items.	None	Develop and deliver final Water Treatment Plants and Wells Capital Improvement Plant to JXN Water. Update CIP based on additional information and assessments on WTP and wells and assessment of tanks. Prioritize projects and develop a cost-loaded schedule for projected capital outlays.
7	SCADA Improvements	Consultant engaged and progressing work	SCADA, Operational Technology and Cybersecurity Schematic Design	Jacobs	Initiated Schematic Design Report (30% Design effort).	None	Progress 30% Design effort.

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			(PSA Task Order				
			#6).				
8, 9	OBC and JHF Chemical	Consultant progressing	Replacement of	HDR	Submitted draft BODR and 30%	Additional scope	Transmit notes and final
	Feed Improvements	work	<b>OB</b> Curtis Chemical		drawings.	added to	photographs from on-site
	(including Chlorine		Feed Building		Conducted BODR review	include the	hypochlorite generation site visits.
	System Replacement at		System – Basis of		workshop.	replacement of	Submit 60% design.
	OBC)		Design		Submitted draft BODR	the chlorine and	Finalize procurement documents
					workshop meeting notes.	ammonia gas	for De Nora's equipment.
			Replacement of		Addressed 30% BODR	systems. These	Submit draft plant utility water
			<b>OB</b> Curtis Chemical		comments and incorporated	changes have	technical memorandum and
			Feed Building		them into final BODR.	lengthened the	model.
			System Change		Submitted final BODR and 30%	design schedule	
			Order #2 - Survey		drawings.	and overall	
			and subsurface		Received and incorporated	design fee.	
			utility evaluation		final geotechnical report into		
			(SUE) will be		BODR.		
			required. The		Reviewed plant survey file and		
			additional effort		provided comments to		
			includes the		surveyor.		
			following items:		Reconciled plant survey with		
			complete		existing utility record		
			topographic,		drawings.		
			planimetric and		Reviewed geotechnical reports		
			Level C SUE of the		and provided comments to		
			entire OB Curtis		geotechnical engineer. A		
			WTP site.		meeting was held with		
					geotechnical engineer and		
			Replacement of		HDR's structural engineer.		
			OB Curtis Chemical		Attended on-site hypochlorite		
			Feed Building		manufacturer site visits to		
			System Change		assist JXN Water in selecting an		
			Order #3 -		equipment vendor.		
			Incorporation of		Developed scope and fee for		
			additional		final design.		
			geotechnical		Continued progressing design,		
			borings and		held coordination calls with		
			geotechnical		chlorine system manufacturer,		
			report to support		De Nora, to discuss next steps		
					for procuring on-site		

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			design of chemical feed systems.		hypochlorite generation system. Started developing De Nora		
			Task Order #1		procurement documents		
			Amendment #1 -		Continued to meet hi-weekly		
			Continue design		with Jacobs to coordinate		
			through final		activities		
			design including		Met weekly with HDR project		
			CMAR		leadership to report on project		
			construction		status.		
			document		Reviewed CMAR RFP		
			production. Both		documents by Jacobs.		
			chlorination		Updated design and		
			system and		construction schedules.		
			ammonia system				
			included in the				
			design project.				
11	Performance Evaluation	Subject work	Operations	Jacobs	Visually assessed major	None	None. Phase1 complete in Q1
	and Redundancy Plant	completed.	Evaluation at OBC		(parent) plant assets. Did not		2023.
	Treatment Processes		and JHF – Phase 1		perform predictive testing		
	Restoration		(MSA Task Order		because of upstream and		
			#3)		downstream equipment		
			Condition	Jacobs	unknowns and sensitivity to		
			Assessment at OBC		plant upsets.		
			– Phase 1 (MSA				
			Task Order #2)				
11	Source Water	Consultant progressing	OBC Raw Water	Jacobs	Completed raw water	None	Finalize Raw Water
	Quality/Treatability	work	Characterization		characterization and		Characterization and Treatability
	Characterization Study		and Treatability		treatability study at both WTPs		Study Report
	(OBC and Barnett		Study (Task Order		and prepared draft Report.		Finalize Process Assessment
	Reservoir)		#6)		Completed process assessment		Report
					at both WTP and prepared		Complete dynamic simulation
			Process Hydraulic		draft Report.		model for both WTPs and prepare
			Assessments at		Progressed hydraulic models of		Technical Memorandum
			OBC and JHF and		both WTPs.		
			UHF and OBC Raw				
			Water				
			Characterization				

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11.a,g	gOBC Filter Conventional and Membrane	Contractor progressing work	and Treatability Study (Amendment 1) Filter Rehabilitation Contact for OBC OBC Filter Rehabilitation – Change Order #1 - Valve and Actuator Manufacturer Change and Sediment Basin Drain Line Scope Reduction	Hemphill	Filter 5 – Filter cell rehabilitation Started the construction project, with the removal of existing filter media. Temporary sludge removal system installation Developed approach to procure equipment outside of construction contractor to mitigate delays due to long lead times. Continued to progressed design of sludge removal and effluent launder system. Working through key constructability issues related to operational shutdown windows at the WTP.	None	Filter 5 – filter cell rehabilitation Progress the construction project. Temporary sludge removal system installation Complete design, incorporating constructability comments. Initiate equipment procurement.
11.g	JHF Filters	Contractor progressing work	JHF Filters 24 and 26 Contract JHF Filters 24 and 26 Change Order # 1 – Concrete Crack and Leak Repair JHF Filters 24 and 26 Change Order # 2 – Filter to Waste Gullet and 30" Backwash Valve Replacement JHF Filters 24 and 26 Change Order # 3 – Final	Hemphill	Completed main construction activities in contract and all change order work including concrete leak and crack repair and 30" backwash valve replacement and placed both filters into service. Completed Filter to Waste tie- ins to waste gullet for twelve filters	Change Order 01 and 02 added 89 days to the contract.	Complete punch list items. Closeout project in October 2023

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			Reconciliation Change Order				
11.j	OBC High Service Pump VFD	Consultant engaged and progressing work	Engineering/Desig n Support and Existing Contract Redesign Services (Task Order #4)	Jacobs	Conducted alternative evaluation to investigate options to provide better control of HSP pumping rate. Prepared draft Technical Memorandum	None	Finalize Technical Memorandum. Progress to design with selected alternative.
12	Sludge Assessment at Finished Water Storage Facilities	Consultant engaged	None, initial work progressing under existing task order.	Jacobs	Coordinated review of inspection approach and analysis of operational risk to complete assessment.	Determined that time requirements to complete inspection of facilities exceed available operational window to shut plant down to allow safe inspection	Document assessment approach, risk to operations and long-term recommendations in summary memo.
13	OBC Electrical Resiliency and Reliability Evaluation	Initiated work. Issued task order to consultant	OB Curtis WTP Electrical System Reliability & Resiliency Evaluation (Task Order #3)	HDR	Completed electrical equipment evaluation.	None.	Submit draft electrical resiliency technical memorandum.
Other	Plant Operations Program Management	Consultant progressing work	Jackson Water Program Management Support (Task Order #2)	Jacobs	Prepared procurement approach and documents for a construction manager at risk (CMAR) to construct planned capital projects. Maintained previously implemented governance framework through regular executive meetings with JXN Water.	None	Select and contract with CMAR. Roll out management plans, including Controls, Procurement, Performance Management, Communications, Engineering Management, Construction Management, Health and Safety, and Quality Assurance. Continue updates of schedules, progress reports and dashboard.

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					Completed draft workflows		Continue communications support
					and tools for various processes		and coordination with IXN Water
					including construction		
					management quality		
					engineering project delivery		
					etc		
					Provided immediate		
					angineering management		
					engineering management		
					ongoing work including SCAL		
					CIP dovelopment JH Fewel		
					ammonia tank location		
					animonia tank location		
					evaluation, entrance road		
					tracor study, and surface to		
					well conversion		
				Propared and delivered			
				prepared and delivered			
					undated dashboard and		
					apuateu uasinboaru, anu		
					Continued providing		
					communications support and		
					continuit ations support and		
Other				laasha		Nana	
Other	Forrest Hill Surface to	Consultant progressing	Engineering/Desig	Jacobs	completed pre-conversion	None	Perform conversion.
	well conversion	work	n Support and		sampling of area to establish a		Conduct post-conversion
			Existing Contract		baseline condition and inform		sampling.
			Redesign Services		water quality modelling.		
			(Task Order #4)		Completed water quality		
					modelling and hydraulic		
					model.		
					Prepared flushing plan.		
					Prepared detailed		
					communication plan.		
					Prepared and submitted		
					request to MSDH for approval		
					to perform conversion.		
Other	Strategic	Consultant progressing	Issued task order	HDR	Met weekly/daily with JXN	None	Update JXNWater.com with new
	Communications Strategy	work	for		Water leadership.		homepage and newsroom
	and Consultation		communications				development.

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		strategy support issued	Finalized strategic communications pl social media strate Launched WLBT Pa Campaign. Supported as-need mail and public not mailings. Supported potholin verification commu Created videos for Water Comes From Understanding boil notices and recapp EMAC Reunion. Manage all media n social media. Manage JXNWater content updates. Provide as-needed	lan and gy. iid Media led direct tice ng and meter unication. Where Your n, I water ing the relations and .com	Coordinate JXN Water content for DOH, City of Jackson and EPA webpages. Prepare visual strategy for priority project dashboard and financial dashboards. Prepare direct mail newsletters for customer updates. Manage earned, owned, shared and paid media campaigns. Prepare community presentations and support quarterly public meeting.
			Provide as-needed	upport.	
Image: Construction Modelling MSDH   BIM = Building Information Modelling Health   BODR = Basis of Design Report NTP =   CIP = Capital Improvement Plan O&M =   CMAR = Construction Manager at Risk P&ID =   CMMS = Computerized Maintenance Management System diagra   CO <sub>2</sub> = carbon dioxide QA/QC   GIS = geographic information system RR = R		Mississippi State Department of operations and maintenance piping and instrumentation – quality assurance/quality control	SCADA = supervisory contr and data acquisition SOP = standard operating procedure SRF = State Revolving Fund TM = technical I memorandum(s) WCD – Work Change Directive	ol	