



Woodard
& Curran



Annual Operating Report MONMOUTH, IL DEPARTMENT OF PUBLIC WORKS

Year 10 ending April 30, 2023

woodardcurran.com



CONTENTS

- Executive Summary3**
- 1. Health & Safety5**
- 2. Wastewater Treatment.....7**
- 3. Water Treatment8**
- 4. Customer Service and Collection.....9**
- 5. Year End Annual Cost..... 11**
- 6. Staffing..... 13**
- 7. Capital Improvements 14**
- 8. Woodard & Curran Support Staff..... 15**



EXECUTIVE SUMMARY

Woodard & Curran has concluded the tenth year with the City of Monmouth, IL and is honored to be the City's partner in the operation and maintenance of the City's Public Works Department. The year had many challenges and successful moments captured in this report. A summary of all the activity and statistical data for the past twelve months related to safety, effluent quality, potable water information, chemical usage/cost, maintenance and repair, performance to budget, billing/collection data, Public Works staff, and capital planning is provided later in the report.

Safety is always a number one priority for Woodard & Curran. For the year 2022-23, all safety training and plan initiatives were completed. We are happy to report there were zero lost time accidents within the department, which is a testament by all staff and field employees to continue to work safely. Heightened awareness of any potential hazard goes a long way towards incident prevention.

Woodard & Curran's Environmental Compliance and Operations monitored and processed over 1.5 billion gallons of wastewater, meeting discharge limitations and remaining 100% compliant at the Wastewater Treatment Facility for 2022-2023. The Water Treatment system produced over 1 billion gallons of high-quality water, meeting the IEPA's water quality requirements without losses of service or water quality complaints outside of rusty water when hydrant flushing occurs. The annual consumer confidence report was submitted in April 2023.

Woodard & Curran continued to provide technical assistance and support for governmental relations outreach and economic development. Woodard and Curran consultant's provided regular advisory services to the mayor and administrator regarding governmental relations strategies, funding opportunities and outreach.

The Woodard & Curran Funding Team, working with our stable of engineers and local staff members, assisted the City in applying for numerous grants from Federal and State grant programs.

To date the City has successfully been awarded the following grants:

- » IEPA Green Infrastructure Grant Opportunity - school district parking lot runoff control
 - › (Value \$190,000)
- » Rebuild IL Regional Economic Development grant – Smithfield growth
 - › (Value \$2,000,000)
- » Federal STAG Grant – West Harlem water main replacement
 - › (Value \$500,000)
- » CDBG Federal Grant – West Harlem water main replacement
 - › (Value \$550,000)
- » State of Illinois Grant – Rebuild Downtown and Main Street
 - › (Value \$3,000,000)
- » IEPA State Revolving Loan/Grant – Disinfection mandate at the wastewater treatment plant
 - › (Value \$936,000 of principal loan forgiveness)
- » Community Project grant from US Congressmen Sorenson – lead water service line replacement
 - › (Value \$2,000,000)
- » IEPA lead service line inventory grant
(Value \$40,000)

Grant opportunities that have been applied for include:

- » CDBG Economic Development Grant – Smithfield growth
- » USDA Loan/Grant – downtown sewer replacement

As the City and Woodard & Curran move forward and focus on the safe and compliant optimization of the Public Works operation there will be more challenges. Through effective planning, training, and execution we will continue to provide a safe, compliant, and cost-effective service to the residents of Monmouth. Thank you for the opportunity to serve the City of Monmouth.



SECTION 1 HEALTH & SAFETY



1.1 Summary of Lost Time/Safety Incidents

Woodard & Curran takes pride in making safety the number one priority for all our contract operations. Ensuring each employee goes home healthy each day increases productivity, saves money, and promotes a safe work environment for all. This past year we had no lost time accidents within the department. This is an outstanding accomplishment given the wide range of tasks performed by the employees under all conditions plus dealing with the pandemic and the CDC requirements.

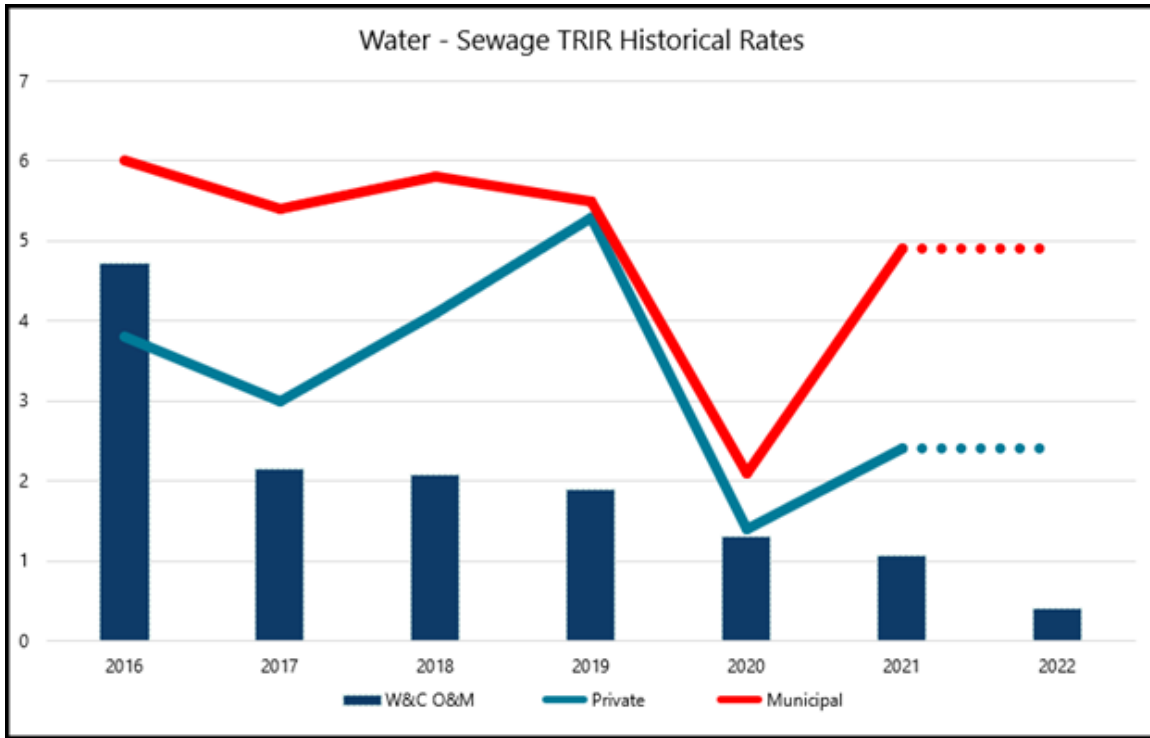
1.2 Summary of Training

Throughout the year, Woodard & Curran has required employees to watch safety videos and participate in various safety exercises. Woodard & Curran employees were required to complete the Woodard & Curran site specific training as well as other elements such as Confined Space, Arc Flash, CPR & First Aid, Hazard Awareness, and Fall Protection.

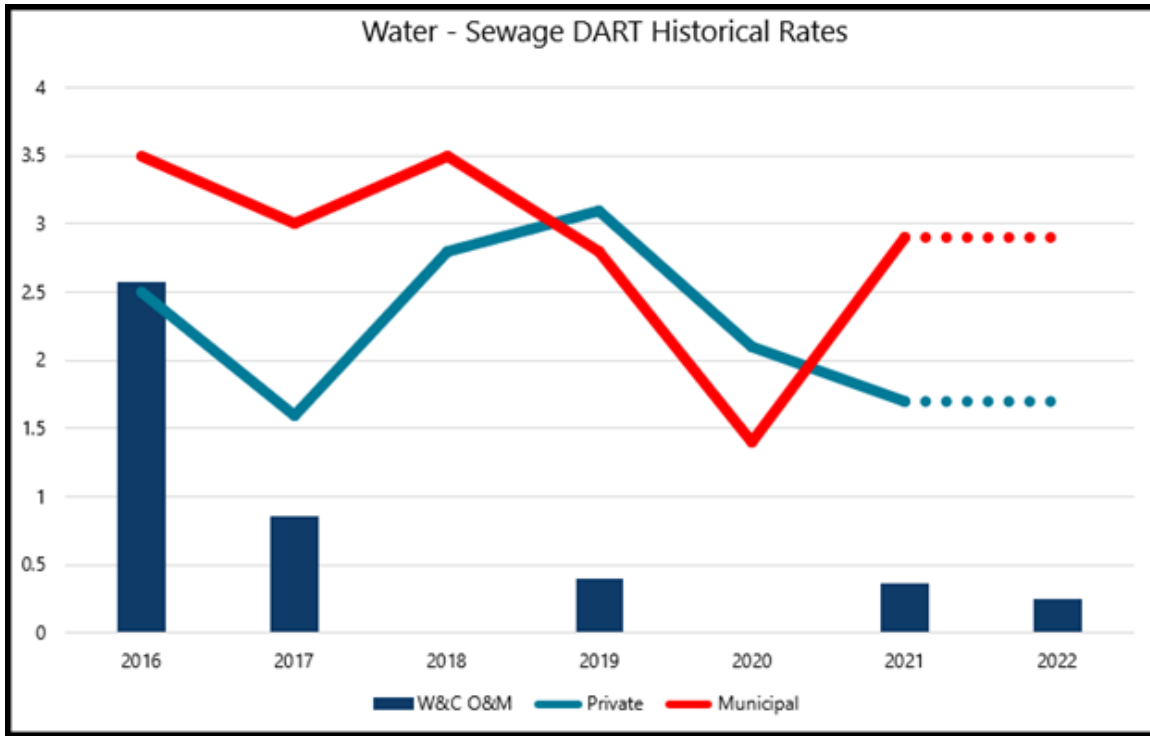
In addition Woodard & Curran employees are required to complete monthly Pure Safety Training. The table below lists these trainings:

Preventing Back Injury
Blood-borne pathogens
Hearing Conservation
Small chemical spill cleanup/response
Preventing heat stress and heat related illness
Industrial Ergonomics
Confined Space Entry Training
Fire Extinguisher Safety
Guarding Floor and Wall Openings and Holes
Personal Protective Equipment (PPE)
Lockout/Tagout
Traffic Control Through Work Zones
Driver Fatigue
Respiratory Protection

Water-Sewage TRIR Historical Rates



Water-Sewage DART Historical Rates



The TRIR and DART historical rates are Woodard & Curran as a company whole versus the industry.

SECTION 2

WASTEWATER TREATMENT

The table below highlights effluent quality vs NPDES permit limits for the contract year.

Table 2.1: Effluent Quality

	Annual Average	Permit Limit
Daily Flow (MGD)	4.24	4.62
Ammonia N mg/l	0.1	1.5
CBOD5 mg/l	2	10
Chlorides mg/l	339	500
Suspended Solids mg/l	7	12
Total Phosphorus	0.8	1.0

SECTION 3

WATER TREATMENT

3.1 Overview

The water treatment plants produced 1.13 billion gallons of finished water during the contract year, which was consistent with last year's production total.

Chemical usage and associated costs were consistent with water production as both are linear with production. The finished water quality met all standards per the Clean Water Act for drinking water. The Consumer Confidence Report was published on April 4th, 2023, with no violations of the Clean Water Act.

The table below outlines the chemical usage for ion exchange softening for the year.

Table 3.1: Monthly Chemical Usage for Ion Exchange Softening

	Daily Average	Annual Total
Treated Water to System	3.2 MGD	1.13 BG
Poly Phosphate Usage (lbs)	98	34,724 (lbs)
Salt Usage (tons)	4.7	1,706 (tons)
Chlorine Usage (lbs)	121	42,957 (lbs)

SECTION 4

CUSTOMER SERVICE/ COLLECTION

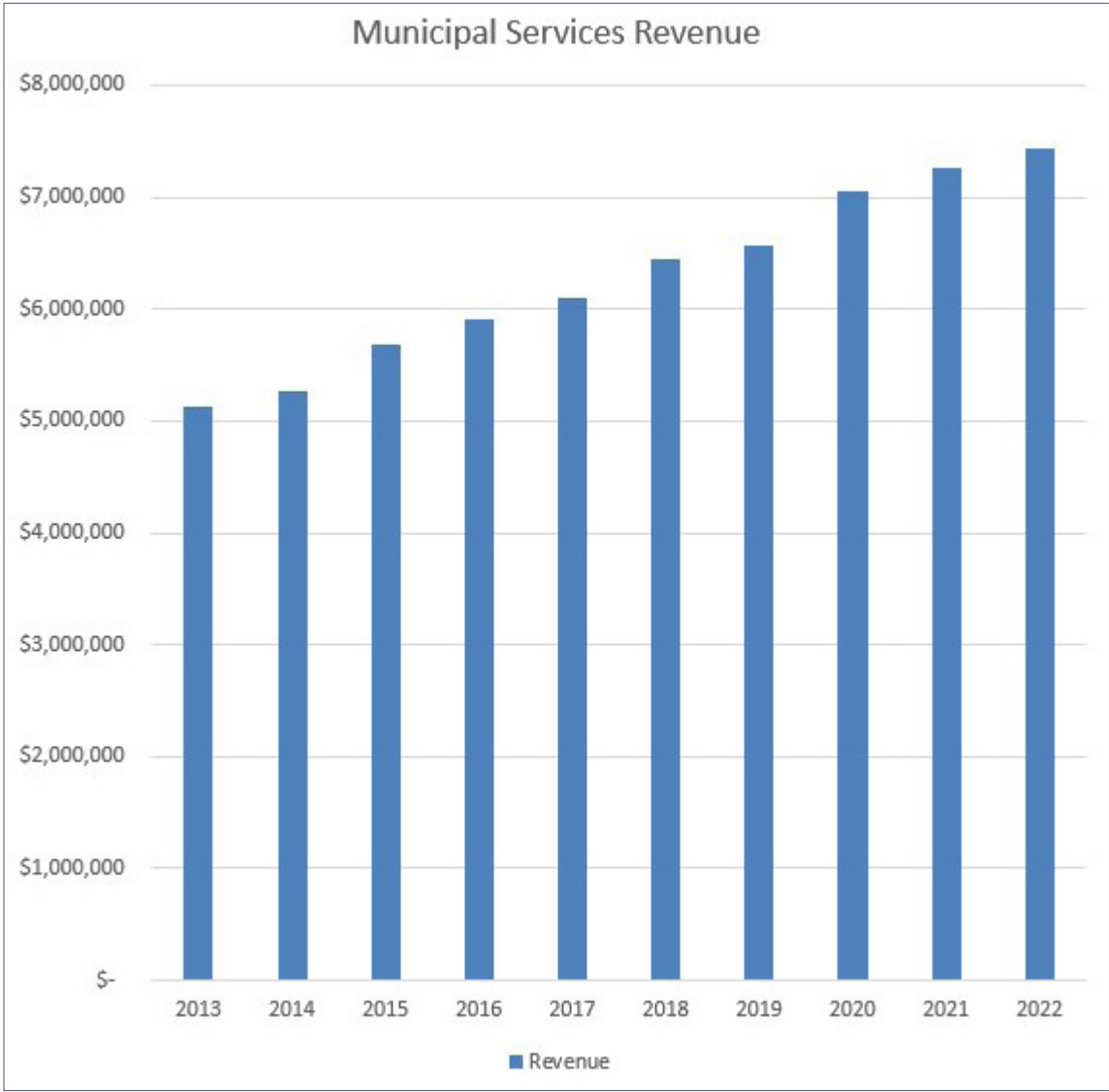
The Customer Service Office collected \$7,436,360 of revenue for water, sewer, infrastructure, recycling, garbage, and Smithfield services for the fiscal year. Overall water and sewer user revenues increased just under 3% from last fiscal year. The table below outlines the breakdown for each category per month.

Table 4.1: Collection

Month	Water	Sewer	Infrastructure Landfill	Recycle	Garbage	Yard Waste	Smith Bonds	Smith Surcharge	Other	Penalty
May 2022	\$238,139	\$182,769	\$20,903	\$16,627	\$37,536	\$2,947	\$73,395	\$0	\$0	\$1,277
June 2022	\$252,785	\$194,196	\$20,831	\$16,276	\$37,910	\$2,754	\$73,712	\$0	\$50	\$1,718
July 2022	\$258,022	\$202,501	\$20,167	\$15,865	\$36,807	\$2,708	\$73,712	\$0	\$100	\$2,031
August 2022	\$274,851	\$205,046	\$21,899	\$17,425	\$39,956	\$2,860	\$73,712	\$323	\$50	\$2,752
September 2022	\$273,089	\$200,825	\$21,048	\$16,556	\$37,604	\$2,731	\$73,712	\$0	\$160	\$2,420
October 2022	\$296,258	\$217,361	\$22,235	\$17,545	\$40,129	\$2,988	\$73,712	\$0	\$60	\$2,296
November 2022	\$258,246	\$191,831	\$19,223	\$15,134	\$34,378	\$2,664	\$73,712	\$0	\$50	\$1,527
December 2022	\$269,712	\$199,656	\$22,266	\$17,675	\$40,167	\$2,827	\$73,712	\$594	\$55	\$2,052
January 2023	\$289,718	\$215,451	\$21,590	\$16,956	\$38,909	\$3,008	\$73,712	\$129	\$125	\$2,876
February 2023	\$261,818	\$199,566	\$18,945	\$14,917	\$34,391	\$2,515	\$73,712	\$0	\$100	\$1,595
March 2023	\$269,323	\$203,465	\$22,261	\$17,760	\$40,887	\$2,976	\$73,712	\$86	\$95	\$1,850
April 2023	\$249,933	\$185,612	\$18,966	\$14,920	\$35,158	\$2,521	\$73,712	\$197	\$18	\$2,046
Year to Date	\$3,191,893	\$2,398,278	\$250,336	\$197,656	\$453,831	\$33,499	\$884,233	\$1,330	\$863	\$24,442
Total Revenue	\$7,436,360									

The graph below outlines revenue collected through the billing office for municipal services since 2013.

Figure 4-1: Revenue



SECTION 5

YEAR END ANNUAL COST

As we concluded our tenth year of contract operations and reviewed the cost summary, the operations and maintenance costs came in \$16,273 over the contract budget of \$3,161,338. This amount will be carried into contract year eleven as cost. In the year eleven budget we were better able to anticipate the impact of last years' unprecedented inflation.

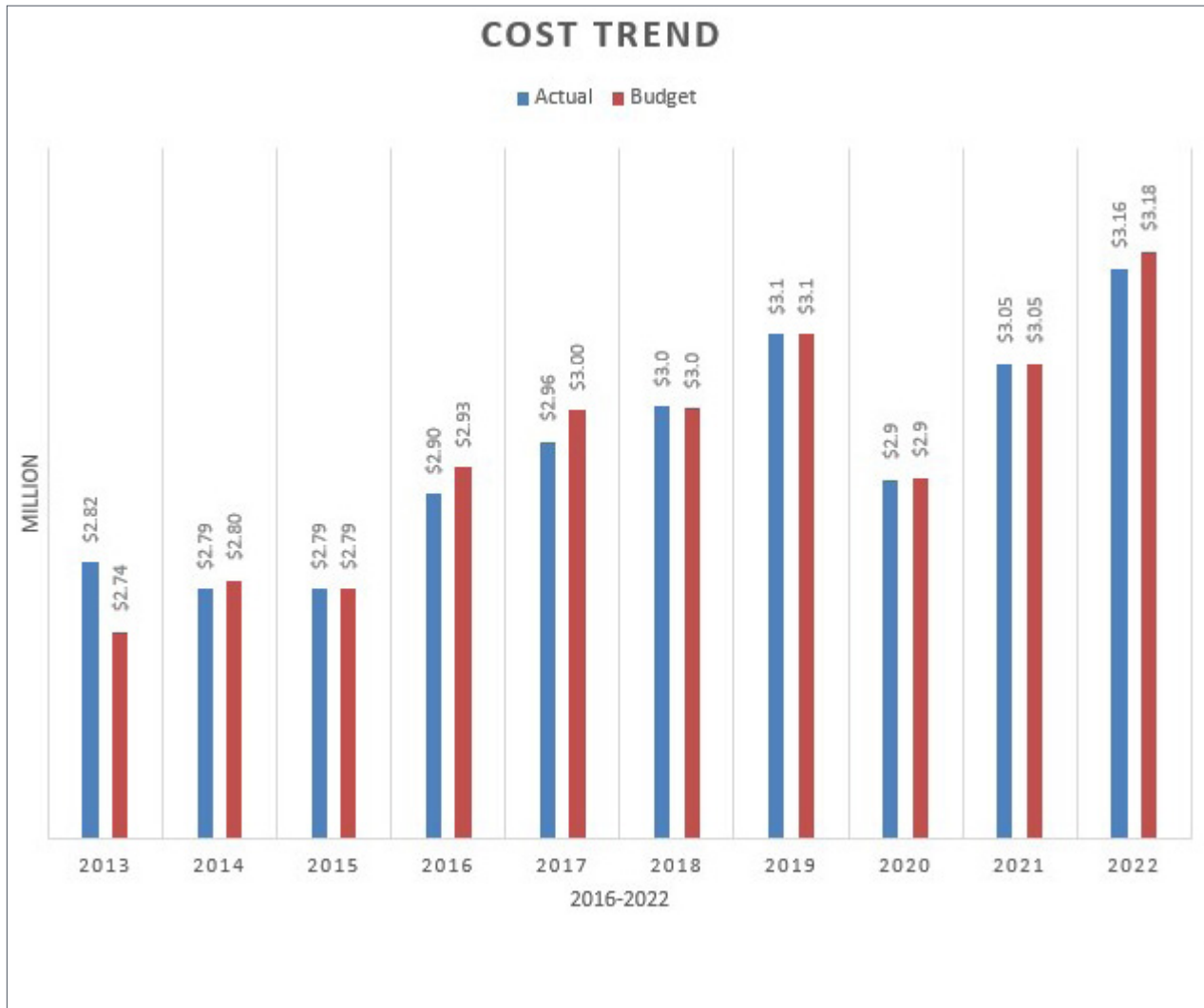
Water treatment chemical costs, LP gas, and fuel costs were the three categories hit hardest by inflation. Chemical prices were raised several times through the year and fuel costs seemed to go up each month. The chart below details cost performance to budget.

Table 5.1: Annual Cost

Budget Category	Year to Date Actual	Annual Budget	Over (Under)
Labor (D.L. + FB @ 50%)	\$1,529,571	\$1,568,372	(\$38,801)
Utilities	\$59,686	\$39,471	\$20,215
Chemical Costs	\$366,238	\$307,158	\$59,080
Maintenance and Repair Costs	\$316,596	\$373,541	(\$56,945)
Sludge Disposal Costs	\$0	\$7,140	(\$7,140)
Lab Supplies & Equipment	\$45,368	\$40,290	\$5,078
Office Supplies	\$24,644	\$22,031	\$2,613
Miscellaneous Expenses	\$72,336	\$48,648	\$23,688
Other Operating Costs	\$204,783	\$188,209	\$16,574
Overhead (G&A of D.L.)	\$345,387	\$354,149	(\$8,762)
Sub Total	\$2,964,609	\$2,949,009	\$15,600
Fixed Fee	\$213,452	\$212,329	\$1,123
Contract Year 10 Total	\$3,178,061	\$3,161,338	\$16,723

The graph below outlines department performance to budget since 2013. During that time period, actual costs have increased about 1.5% per year. The effect of the nationwide inflation is seen in the graph below after the pandemic induced spending cuts in 2020.

Graph 5.1: Annual Cost Trend



The department is responsible for operations and maintenance of 2 water treatment plants, 2 wastewater treatment plants, 120 lane miles of streets and right of way, 75 miles of water mains/distribution, 50 miles of sanitary and combined sewer, 10 miles of storm sewer, 8 lift stations, grounds keeping of the cemetery/airport/Citizens Lake complex/city owned properties, 3,500 customers for water/sewer/infrastructure/recycling/garbage collection fees, and the approximately 9,000 residents that are served by the department.

SECTION 6

STAFFING

The Public Works Department Staff and their respective departments are listed below.

Table 6.1: Public Works Staffing

Name	Title	Department
Andy Jackson	Public Works Director	
Name	Title	Department
Joe McVey	Superintendent	Street Department
Ken Hall	Foreman/Equipment Operator	
Greg Sage	Equipment Operator	
Jeff Carlson	Maintenance	
Shannon Reeves	Maintenance	
Brennan Anderson	Maintenance	
Name	Title	Department
Richard Nelson	Superintendent	Water Department
Brad Scroggins	Service	
Dave Marston	Maintenance	
Seth McBride	Operations	
Jeff Ehlen	Meter Reader	
Name	Title	Department
Bill Hart	Superintendent	Wastewater Treatment Lift Stations
Doug Schaeffer	Maintenance	
Ray Brodrick	Lab Technician/Operations	
Roger Mettler	Operations	
Name	Title	Department
Laura Armstrong	Billing Clerk	Billing Collection Administration
Peg Ballard	Administration	
Jane Berg	Service Clerk	

SECTION 7

CAPITAL IMPROVEMENTS/ REPAIRS

During City fiscal year 2022/23, much of the capital improvements were necessitated from aging infrastructure in the form of capital repair work. These were unplanned, unbudgeted replacements that became necessary due to aging pipes and equipment failures.

- » Well repair work was performed on 3 of the 6 deep wells, (Well 5 is awaiting equipment).
- » 1,000 feet of new sewer was installed on East Clinton/North 3rd/North 5th to replace a 130-year-old sewer interceptor.
- » 2 water softening vessels at the North Water Treatment Plant were refurbished.
- » The Harlem water tower was twice repaired for leaks.
- » Replaced 350 feet of water main in the 1000 block of South 2nd Street.
- » Replaced 350 feet of water main in the 300 block of North 5th.

In fiscal year 2022/23, the City invested over \$230,000 in new equipment for the department include a new trailer mounted hydro vacuum for sewer cleaning and water service repairs and ordered a new leaf vac machine to replace the antiquated 1980 leaf machine. New high service pump motors with variable speed drives were installed at both water treatment plants through a reimbursement grant from Ameren. These variable speed motors will reduce electrical costs and also prevent pressure spikes and water hammer in the distribution system which should reduce the number of water main breaks in the future. Below is a list of projects that are in various stages of either construction, design, or conceptual.

Table 7.1: Capital Improvement Projects

Under Construction in 2023:
<ul style="list-style-type: none"> » East Euclid / North 6th water main replacement and road reconstruction » Drilling Well 11
Designed and Awaiting Funding:
<ul style="list-style-type: none"> » Wastewater Disinfection requirement – awaiting IEPA revolving loan fund approval » West Harlem water main – awaiting CDBG and STAG grant agreements » West Harlem Road Reconstruction – awaiting IDOT approval of design and funding options
In Design:
<ul style="list-style-type: none"> » Downtown underground utility replacement project.
Funding Applications for Conceptual Projects:
<ul style="list-style-type: none"> » Downtown sewer and runoff control through USDA.

SECTION 8

STAFFING AND SUPPORT

All the Woodard & Curran staff listed below has been directly involved in the support and ongoing management of the operations of the Public Works facilities.

Table 8.1: Staffing and Support

Name	Title	Function
Allison Watson	Chief Executive Officer	Management Support
Brian Bzdawka	President O&M	Management Support
Marc Thomas	National Operations Leader	Management Support
Shannon Eyler	Director of Health & Safety	Health & Safety Support
Greg Frieden	Area Manager	Management Support
Jesse Reynolds	Technical Manager	SCADA Support
Ray Giguere	SCADA Specialist	SCADA Support
Jennifer Anders	Senior Client Manager	Engineering Support
Jason Kreil	P.E.	Engineering Support
Celina Bland	Ops. Specialist	Project Support
Kim Brierley	Project Administrator	Accounting Support
Wendy Foreman	Health & Safety	Health & Safety Support
Sarah Coen	Human Resources	HR Support
Linsay McAuliffe	Human Resources	HR Support
Alan Fabiano	Technology Manager	IT Support
Jeannie Dubois	IT Specialist	IT Support
Jackie Smith	Senior Project Assistant	Project Support Specialist
Lizzie Dovich	Recruiter	Human Resources Support
Steve Lindemann	Health & Safety	Health & Safety Support
Rena Schield	Health & Safety	Health & Safety Support