

# MONTHLY OPERATION REPORT

Monmouth, Illinois

Department of Public Works

February 2023





MONMOUTH
CITY
HALL

woodardcurran.com



## **TABLE OF CONTENTS**

SEC	TION	PAGE NO.		
EXECUTIVE SUMMARY				
1.	HEALTH & SAFETY	1-3		
2.	WASTEWATER TREATMENT	2-1		
3.	WATER TREATMENT	3-1		
4.	REVENUE COLLECTION	4-1		
5.	ANNUAL BUDGET – YEAR 9	5-1		
6.	MAINTENANCE ACTIVITIES	1		

# **TABLES**

Table 2-1: Water Quality vs. NPDES Permit Limits

Table 3-1: Monthly Chemical Usage for Ion Exchange Softening

Table 4-1: FY to Date
Table 5-1: Annual Budget



#### **EXECUTIVE SUMMARY**

The February Public Works monthly report provides an overview of the month's activities and statistical data including safety training, wastewater treatment effluent quality, water production, billing and collection statistics for municipal services, maintenance activities, maintenance and repair costs vs. monthly thresholds, water treatment chemical costs, overall project cost and performance to annual budget.

Kurita will be on site in mid-April to refurbish the other 2 softening vessels at the North Water Plant.

C&D Electric should be finishing up the Variable Frequency Drive installation at the water plants in April. By installing these drives, the City will receive about \$65,000 for the consequent electrical load reduction once the installation is completed and the drives go online.

The sewer pipe has been delivered for the sewer project on East Clinton/North 5<sup>th</sup>. The contractor is awaiting delivery of the manhole structures before they can begin the replacement project. Structures are expected to be delivered within the next couple of weeks.

Below is an update on upcoming construction projects

#### East Euclid/North 6th Water Main

Work & Activities to Date

Survey has been completed. Water main design is in final reviews.

Schedule Update

Coordinating dates to go out to bid with City. Will indicate in contract that construction is not to start until after college graduation.

Bid Schedule: Wed April 12<sup>th</sup> – Out to Bid, Bid Opening May 4<sup>th</sup>/5<sup>th</sup>. Construction in June.

#### **Downtown Water Main and Sewer Replacement (ARPA)**

Work & Activities to Date & Schedule Update

Survey is complete. Proceeding with design work. Include BABA provisions in bid documents as required for federal funding. Tentative Schedule as follows: Design – April, Permitting – May/June, Bidding – July/August, Construction - September

#### Well No. 11

Work & Activities to Date

STAR Workshop has led to good progress on the design. Remaining items to be worked out include:

- Finalizing road details with Don and site/civil.
- Permit Application to be Reviewed by IEPA left message on 3/23. It has now been > 50 days.
   Jenny asked about future standby power, so hopefully this means it is getting reviewed.
- C-II Permit pump test water handling >1,000,000 gallons
- Construction Budget
- FAA Permit
   Schedule Update



- Develop plans and specs by May 2023. Contact potential contractors to get project on their radar.
- Bid in May 2023. Award in June 2023.
- Construction July to October 2023.
- C-II permit application and review period October 2023 to January 2024.

## Budget:

RIRED Grant – need to follow grant requirements. Construction must be complete by May 2024.

Please contact me at 309-734-4026 if you have any questions,

Andy J



## 1. HEALTH & SAFETY

There were no safety incidents or near misses in February. Staff continues to complete monthly and annual training on the required OSHA topics.





## 2. WASTEWATER TREATMENT

The Consolidated WWTP treated and discharged 156 million gallons of treated wastewater in the month of February . There were no combined sewer overflow events in February . The weather station at the plant reported 3" of rain during the month. The Consolidated Plant continues to produce excellent effluent quality. The table below outlines the water quality vs. NPDES permit limits.

**Table 2-1: Water Quality vs. NPDES Permit Limits** 

	Monthly Average	Permit Limit
Flow (MGD)	5.5	4.62
Ammonia N mg/l	0.1	1.5
CBOD5 mg/l	3	10
Total Phos	0.7	1
Chloride's mg/l	317	500
Suspended Solids mg/l	6	12



## 3. WATER TREATMENT

The water treatment plants produced 89 million gallons of finished water in February. Finished water quality met all standards per the Clean Water Act for drinking water. The table below outlines the chemical usage for ion exchange softening for the month.

**Table 3-1: Monthly Chemical Usage for Ion Exchange Softening** 

	Daily Average	Monthly Total
Treated Water to System	3.2 MG	89 MG
Poly Phosphate Usage-lbs.	95	2,646 lbs.
Salt Usage tons	4.7 Tons	131 tons
Chlorine Usage - lbs.	125	3,500 lbs.



# 4. REVENUE COLLECTION

The table below outlines the revenue collected from the Municipal Services billings for the fiscal year.

Table 4-1: FY to Date

PAYMENT TOTALS 20			ALS 2022-2023 FISC	AL YEAR						
MONTH	WATER	SEWER	INFRASTRUCTURE	RECYCLE	GARBAGE	YARD WASTE	FARM BONDS	FARM SURCHARGE	OTHER	PENALTY
MAY '22	\$238,138.83	\$182,768.79	\$20,903.44	\$16,627.00	\$37,535.70	\$2,947.42	\$73,395.48	\$0.00	\$0.00	\$1,276.70
JUNE	\$252,784.63	\$194,196.43	\$20,831.30	\$16,275.74	\$37,909.78	\$2,754.18	\$73,712.48	\$0.00	\$50.00	\$1,717.98
JULY	\$258,021.50	\$202,500.53	\$20,167.27	\$15,865.46	\$36,806.86	\$2,707.88	\$73,712.48	\$0.00	\$100.00	\$2,031.32
AUGUST	\$274,851.26	\$205,046.08	\$21,898.91	\$17,425.06	\$39,956.16	\$2,859.64	\$73,712.48	\$322.89	\$50.00	\$2,751.97
SEPTEMBER	\$273,088.98	\$200,824.79	\$21,048.49	\$16,556.20	\$37,604.00	\$2,731.24	\$73,712.48	\$0.00	\$160.00	\$2,420.30
OCTOBER	\$296,258.34	\$217,360.71	\$22,235.16	\$17,545.06	\$40,128.98	\$2,987.99	\$73,712.48	\$0.00	\$59.96	\$2,295.75
NOVEMBER	\$258,245.61	\$191,830.82	\$19,222.77	\$15,134.23	\$34,377.77	\$2,663.73	\$73,712.48	\$0.00	\$50.00	\$1,527.30
DECEMBER	\$269,712.45	\$199,656.08	\$22,266.31	\$17,675.18	\$40,166.97	\$2,826.98	\$73,712.48	\$593.84	\$55.14	\$2,052.16
JANUARY	\$289,717.70	\$215,450.95	\$21,589.54	\$16,955.51	\$38,908.74	\$3,008.37	\$73,712.48	\$129.46	\$125.00	\$2,876.34
FEBRUARY	\$261,817.54	\$199,565.56	\$18,945.38	\$14,917.08	\$34,391.13	\$2,514.94	\$73,712.48	\$0.00	\$100.00	\$1,595.26
MARCH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
APRIL '23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
YEAR TO DATE	\$2,672,636.84	\$2,009,200.74	\$209,108.57	\$164,976.52	\$377,786.09	\$28,002.37	\$736,807.80	\$1,046.19	\$750.10	\$20,545.08
TOTAL REVENUE	\$6,220,860,30									



# 5. ANNUAL BUDGET - YEAR 10

The table below outlines the month and annual cost summary

Table 5-1: Annual Budget

<b>Budget Category</b>	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget	Over (Under)
Labor (D.L. + FB)	\$120,644	\$122,004	\$1,293,370	\$1,256,839	\$1,568,372	(\$36,531)
Utilities	\$3,036	\$7,068	\$32,550	\$43,265	\$39,471	\$10,715
Chemicals Costs	\$23,628	\$26,357	\$253,300	\$303,340	\$307,158	\$50,040
Maintenance\Repair	\$28,734	\$20,250	\$308,043	\$282,749	\$373,541	(\$25,294)
Sludge Disposal Costs	\$549	\$0	\$5,888	\$0	\$7,140	(\$5,888)
Lab Supplies\Equip	\$3,099	\$1,861	\$33,225	\$36,685	\$40,290	\$3,460
Office Supplies	\$1,695	\$1,738	\$18,168	\$21,052	\$22,031	\$2,884
Miscellaneous Expenses	\$3,742	\$4,223	\$40,118	\$62,778	\$48,648	\$22,660
Other Operating Costs	\$14,478	\$7,082	\$155,208	\$178,168	\$188,209	\$22,960
Overhead (G.A.)	\$27,242	\$27,549	\$292,051	\$283,802	\$354,149	(\$8,249)
Subtotal Year 10	\$226,847	\$218,132	\$2,431,923	\$2,468,679	\$2,949,009	\$36,756
Fixed Fee Year 10	\$16,333	\$15,705	\$175,098	\$177,745	\$212,329	\$2,646
Total	\$243,180	\$233,837	\$2,607,021	\$2,646,423	\$3,161,338	\$39,403

#### 6. MAINTENANCE ACTIVITIES

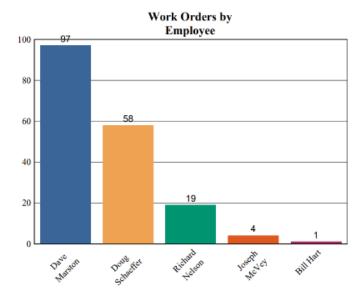
Utilizing the Utility Cloud maintenance management program, staff completed 179 preventative, corrective, and inspection workorders in February



# Maintenance History Report Monmouth

Report Start 2/1/2023 Report End 2/28/2023

Work Orders by Type	Total
Corrective Maintenance	26
Inspections	42
Preventative Maintenance	111
Total	179



#### Work Orders by Description Weekly Compressor PM Weekly Eyewash PM Daily Rounds Water Plant Weekly Barscreen & Grit Removal PM Monthly Softener Valve PM Monthly Brine Piping Inspection Quarterly High Service Pump PM Monthly Oxidation Ditch PM Monthly Health & Safety Inspection Corrective WO Monthly Generator PM Daily OPS Lift Station Monthly Fire Extinguisher PM Monthly Gate PM Semi-Annual Well PM Weekly Clarifier PM NWWTP Monthly Digester Blower PM Monthly Tower PM Monthly Well Furnace PM Daily OPS North WW Plant Daily Rounds Chemicals Monthly Acid Clean Monthly Air Dryer PM Monthly Alum Pump PM Monthly Dehumidifier PM Monthly Grit Collector PM Monthly Reznor Furnace PM Monthly Screw Pump PM Monthly Secondary Clarifier PM Monthly Water Heater PM Quarterly Aerator PM Quarterly Decant Pump PM Quarterly Sanitary Pump Station PM Semi-Annual Eyewash Inspection Annual Well 10 PM Monthly Bench Grinder PM Monthly Clarifier PM NWWTP Monthly Hoist Inspection

12

16

20

Monthly Loader PM Monthly SCBA Inspection





woodardcurran.com