



woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

Monthly Operating REPORT

Monmouth, Illinois

Department of
Public Works

February 2017



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EXECUTIVE SUMMARY

The February Public Works monthly report provides an overview of the month's activities and statistical data including: 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.

Feel free to stop by the office or give me a call, 309-734-4026.

Regards, Andy

1. WASTEWATER TREATMENT

The Consolidated WWTP treated and discharged 110 million gallons of wastewater in the month of February. There were no combined sewer overflow events in February. The weather station at the plant reported 0.45” of rainfall and 1.5” of snow during the month. The Consolidated Plant continues to produce excellent effluent quality. The table below outlines the water quality vs. NPDES permit limits.

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

	Monthly Average	Permit Limit
Flow (MGD)	2.89	4.62
Ammonia N mg/l	0.3	1.5
CBOD5 mg/l	3	10
Chlorides mg/l	386	500
Suspended Solids mg/l	9	12
Total Phosphorus	0.9	1.0

2. WATER TREATMENT

The water treatment plants produced 69 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 2-1: Monthly Chemical Usage for Ion Exchange Softening

	Daily Average	Monthly Total
Treated Water to System	2.46 MG	69 MG
Poly Phosphate Usage-lbs.	86	2,394 lbs
Salt Usage — tons	4.9	136 tons
Chlorine Usage - lbs.	99	2,772 lbs

3. BILLING AND COLLECTION

Table 3-1: Billing/Collection

The table below outlines the revenue collected for the month of February from the Municipal Services billings.

DATE	PAYMENTS	PAYMENTS FEBRUARY 2017							FARM SURCHARGE	PENALTY
		WATER	SEWER	LANDFILL	RECYCLE	GARBAGE	YARD WASTE	FARM BONDS		
02/01/17	\$13,106.40	\$5,903.64	\$4,554.18	\$795.40	\$531.59	\$1,242.28	\$78.00	\$0.00	\$0.00	\$1.31
02/02/17	\$13,557.66	\$5,726.43	\$4,084.11	\$1,090.72	\$740.69	\$1,797.62	\$113.10	\$0.00	\$0.00	\$4.99
02/03/17	\$15,765.70	\$6,978.32	\$4,435.88	\$1,273.63	\$867.15	\$2,080.84	\$129.88	\$0.00	\$0.00	\$0.00
02/06/17	\$86,495.52	\$42,206.85	\$28,423.77	\$4,708.88	\$3,190.72	\$7,392.35	\$460.74	\$0.00	\$0.00	\$112.21
02/07/17	\$10,904.21	\$4,596.06	\$3,366.62	\$853.98	\$574.75	\$1,423.76	\$89.04	\$0.00	\$0.00	\$0.00
02/08/17	\$142,571.88	\$60,064.83	\$64,116.38	\$668.78	\$446.92	\$1,059.93	\$66.30	\$15,886.40	\$262.34	\$0.00
02/09/17	\$33,321.35	\$15,892.96	\$12,505.81	\$1,493.50	\$1,002.04	\$2,108.31	\$131.95	\$0.00	\$0.00	\$186.78
02/10/17	\$85,125.38	\$38,938.13	\$30,723.74	\$4,545.23	\$3,061.78	\$7,383.47	\$461.66	\$0.00	\$0.00	\$11.37
02/13/17	\$5,794.14	\$2,720.40	\$1,672.15	\$349.95	\$233.88	\$585.24	\$37.05	\$0.00	\$0.00	\$195.47
02/14/17	\$4,347.68	\$1,747.58	\$1,277.28	\$350.95	\$234.55	\$545.82	\$34.22	\$0.00	\$0.00	\$157.28
02/15/17	\$8,907.23	\$3,894.49	\$2,848.05	\$532.81	\$354.58	\$894.26	\$54.60	\$0.00	\$0.00	\$328.44
02/16/17	\$6,017.92	\$2,551.55	\$1,832.03	\$418.12	\$279.43	\$672.29	\$42.25	\$0.00	\$0.00	\$222.25
02/17/17	\$10,368.88	\$4,484.37	\$3,385.30	\$635.50	\$421.10	\$995.44	\$61.66	\$0.00	\$0.00	\$385.51
02/21/17	\$15,873.11	\$6,846.09	\$5,196.91	\$910.20	\$624.23	\$1,621.13	\$96.36	\$0.00	\$0.00	\$578.19
02/27/17	\$6,925.36	\$2,893.80	\$2,033.46	\$547.84	\$376.36	\$973.70	\$72.61	\$0.00	\$0.00	\$27.59
02/28/17	\$10,622.49	\$4,594.80	\$3,344.46	\$782.43	\$530.97	\$1,271.82	\$98.01	\$0.00	\$0.00	\$0.00
	\$0.00									
	\$0.00									
	\$0.00									
	\$0.00									
TOTAL	\$469,704.91	\$210,040.30	\$173,800.13	\$19,957.92	\$13,470.74	\$32,048.26	\$2,027.43	\$15,886.40	\$262.34	\$2,211.39

4. ESTIMATED ANNUAL COST

Table 4-1: Estimated Annual Budget – Year 4

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget
Labor (D.L. + FB)	\$124,386	\$105,653	\$1,243,861	\$1,131,533	\$1,492,633
Utilities	\$2,500	\$6,683	\$25,000	\$30,403	\$30,000
Chemicals Costs	\$22,667	\$22,425	\$226,667	\$217,049	\$272,000
Maintenance and Repair Costs	\$27,833	\$20,985	\$278,333	\$288,932	\$334,000
Sludge Disposal Costs	\$0	\$0	\$0	\$5,000	\$0
Lab Supplies & Equipment	\$3,375	\$2,369	\$33,750	\$30,012	\$40,500
Office Supplies	\$1,500	\$1,411	\$15,000	\$15,979	\$18,000
Miscellaneous Expenses	\$5,017	\$6,914	\$50,167	\$55,915	\$60,200
Other Operating Costs	\$12,494	\$3,118	\$124,939	\$96,497	\$149,927
Overhead (G&A of D.L.)	\$28,087	\$23,857	\$280,872	\$255,507	\$337,046
Subtotal of Costs - Contract Year 4	\$227,859	\$193,415	\$2,278,588	\$2,126,827	\$2,734,306
Fixed Fee for Contract Year 4	\$16,406	\$13,926	\$164,058	\$153,132	\$196,870

5. MAINTENANCE/REPAIR COST DETAIL

5.1 MAINTENANCE AND REPAIR COSTS

Maintenance and Repair costs as compared to the monthly threshold

Table 5-1: Maintenance and Repair Costs

	Month	YTD
Grounds	138	12,709
Electrical	3,501	22,413
Street	3,469	74,958
Water Distribution	2,172	44,085
Sewer Collection	2,130	8,042
Instrumentation	0	2,340
Mechanical	5,493	71,163
Vehicle	3,032	41,366
Tools	73	683
Janitorial/Misc.	709	6,652
HVAC Maintenance	105	3,429
Maintenance Agreements	23	203
Landscaping	0	748
Snow Removal	0	0
Misc. Maintenance	141	141
Total Expenditures	20,985	288,931
Threshold	27,833	278,330
Over (Under)	(6,848)	10,601

A SUMMARY OF MAINTENANCE & REPAIR ACTIVITIES:

Water/Street Facilities

Maintenance staff completed 59 preventatives and 7 corrective work orders for the water plants, distribution system, and fleet in February. 56 requests for service were responded to by service personnel. 102 requests for City utility locates from the J.U.L.I.E. call center were completed.

Water distribution system and sewer collection system items:

- Replaced 5 water meters
- Repaired water main 300 block North 5th
- Repaired water service 826 South 8th
- Advanced Plumbing replaced 14 feet of 12” sanitary sewer 200 block North 6th

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- Located/raised manhole at intersection of North 5th Street and East Boston, storm drain intakes were disconnected from the combined sewer and connected into the college storm sewer along their new parking lot.
 - Repaired backflow preventer at North Water Plant.

Wastewater Facilities

Maintenance staff performed 79 preventatives and 6 corrective work orders at the Consolidated Plant, and, 35 preventatives work orders and 1 corrective work order at the Pre-Treatment plant.

- Parkway Manor lift station pumps pulled, inspected, cleaned, wet well vacuumed out, main disconnect fuses replaced
- Industrial Park lift station pumps pulled, inspected, cleaned, wet well vacuumed out
- Replaced GEMS unit skimmer attachment chain links

Street/Grounds/Right of Way/Fleet

- Various tree removal and trimming
- Scheduled vehicle service work (lube, oil, filters)
- Street sweeping
- Patching
- Replaced kingpins and front brakes on T14

5.2 CHEMICAL COST DETAIL

Process chemical costs for water treatment

Table 5-2: Process Chemical Costs

	Month	YTD
Chlorine	2,096	19,821
Salt	20,329	171,735
Polyphosphate	0	25,495
Total	22,425	217,050
Threshold	22,667	226,670
Over (Under)	(242)	(9,620)

6. HEALTH & SAFETY

Staff trained on the use of tablets vs paper forms for the following safety programs:

Hot work permits

Lock Out Tag Out permits

Electrical work permits

Monthly vehicle inspection forms

Confined Space entry permits

The tasks outlined above all require supervisory sign offs prior to completing the task as a reminder to employees who are performing the tasks that potential hazards are recognized and mitigated prior to performing the work. This is part of the Woodard Curran Employee Safety Program. By using the field tablet, an employee can quickly go through the permit requirements, supervisory sign off, and electronic submittal and cloud storage without all the paper forms. As we look to the coming year, maintenance and repair work orders will be added into the program to move away from paper generation and bulky maintenance records storage.

7. CAPITAL PROJECTS

Well 10 – awaiting C2 Well permit and raw water main construction permit from the Illinois Environmental Protection Agency

CSO Phase 1 – contractor, (Leander) has secured their bonds and insurance per the contract documents, signatures and notice to proceed have been issued to Leander. Anticipate construction will commence once the weather straightens up.

North WWTP Design – no new update