



[woodardcurran.com](http://woodardcurran.com)  
COMMITMENT & INTEGRITY DRIVE RESULTS

# Monthly Operating REPORT

Monmouth, Illinois

Department of  
Public Works

September 2018



---

## TABLE OF CONTENTS

### SECTION

---

<b>Executive Summary</b> .....	
<b>1. HEALTH AND SAFETY/STAFF</b> .....	
<b>2. WASTEWATER TREATMENT</b> .....	
<b>4. REVENUE COLLECTION</b> .....	
<b>5. ESTIMATED ANNUAL COST</b> .....	
<b>6. MAINTENANCE/REPAIR ACTIVITIES</b> .....	
<b>7. CAPITAL PROJECTS</b> .....	

## LIST OF TABLES

### TABLE

---

Table 1-1:	Water Quality vs. NPDES Permit Limits .....	
Table 2-1:	Monthly Chemical Usage for Ion Exchange Softening .....	
Table 3-1:	Revenue Collection .....	
Table 4-1:	Estimated Annual Budget – Year 5 .....	

|

---

## EXECUTIVE SUMMARY

The September 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.

As you are all aware, a large distribution water main broke early Monday morning at the intersection of East Euclid and North 5<sup>th</sup>. Since this was a major artery in very close proximity to the main production facility we were forced to shut down the North Water Plant to safely make the required repairs. In doing so it caused a significant drop in system pressure which required public notification of a city-wide boil order to go into effect. Once the plant was shut down, the main break was repaired in less than an hour with no injuries to our employees. The plant then resumed operation and the system was restored to full capacity. Samples were collected and analyzed per IEPA regulations Monday after the break was repaired. All the sample results indicated there was no contaminants present and we were able to lift the boil order around 10am on Tuesday morning.

As autumn has now fully arrived, leaf pickup has gotten underway. Yard waste bags will continue to be picked up through November 30<sup>th</sup> if residents choose to not wait for the machine.

Feel free to stop by the office or give me a call, 309-734-4026 if you have any questions or comments.

Regards, Andy

## 1. HEALTH AND SAFETY/STAFF

Staff completed the annual guarding floor and wall openings. There were no safety incidents or near misses in September.

## 2. WASTEWATER TREATMENT

The Consolidated WWTP treated and discharged 143 million gallons of wastewater in the month of September. There were 3 combined sewer overflow events in September. The weather station at the plant reported 5.4” 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)	4.78	4.62
Ammonia N mg/l	0.1	1.5
CBOD5 mg/l	1	10
Total Phos	1	1
Chlorides mg/l	313	500
Suspended Solids mg/l	7	12

## 3. WATER TREATMENT

The water treatment plants produced 83 million gallons of finished water in September. 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	2.77 MG	83 MG
Poly Phosphate Usage-lbs.	93 lbs	2,781 lbs
Salt Usage — tons	5.2	157 tons
Chlorine Usage - lbs.	109	3,276 lbs

## 4. REVENUE COLLECTION

**Table 4-1: FY to date**

The table below outlines the revenue collected through the month of September from the Municipal Services billings.

PAYMENT TOTALS 2018-2019 FISCAL YEAR										
MONTH	WATER	SEWER	LANDFILL	RECYCLE	GARBAGE	YARD WASTE	FARM BONDS	FARM SURCHARGE	OTHER	PENALTY
MAY '18	\$223,175.52	\$182,177.89	\$21,254.42	\$14,775.79	\$34,593.81	\$2,802.00	\$34,065.81	\$329.60	\$154.22	\$2,969.59
JUNE	\$243,900.96	\$191,773.28	\$20,996.37	\$14,578.83	\$35,059.08	\$2,801.42	\$34,065.81	\$425.02	\$50.00	\$2,782.76
JULY	\$252,903.95	\$191,101.15	\$21,601.59	\$15,033.34	\$35,932.18	\$2,808.27	\$34,065.81	\$274.83	\$50.00	\$3,021.89
AUGUST	\$254,552.50	\$202,407.33	\$22,132.81	\$15,357.54	\$36,523.99	\$2,900.33	\$49,952.21	\$79.52	\$0.00	\$2,668.54
SEPTEMBER	\$230,824.54	\$171,906.02	\$18,460.93	\$12,837.41	\$30,827.09	\$2,434.80	\$34,065.81	\$0.00	\$50.00	\$2,519.13
OCTOBER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NOVEMBER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DECEMBER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
JANUARY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FEBRUARY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MARCH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
APRIL '19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>YEAR TO DATE</b>	\$1,205,357.47	\$939,365.67	\$104,446.12	\$72,582.91	\$172,936.15	\$13,746.82	\$186,215.45	\$1,108.97	\$304.22	\$13,961.91

## 5. TOTAL ANNUAL COST

Table 5-1: Annual Budget – Year 6

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget	over(under)
Labor (D.L. + FB)	\$126,442	\$135,358	\$632,212	\$606,983	\$1,517,309	(\$25,229)
Utilities	\$3,175	\$5,476	\$15,875	\$14,152	\$38,100	(\$1,723)
Chemicals Costs	\$25,250	\$27,224	\$126,250	\$135,588	\$303,000	\$9,338
Maintenance\Repair	\$27,642	\$19,333	\$138,208	\$156,683	\$331,700	\$18,475
Sludge Disposal Costs	\$500	\$0	\$2,500	\$0	\$6,000	(\$2,500)
Lab Supplies\Equip	\$3,479	\$2,928	\$17,396	\$20,477	\$41,750	\$3,081
Office Supplies	\$1,504	\$1,834	\$7,521	\$8,561	\$18,050	\$1,040
Miscellaneous Expenses	\$4,058	\$4,998	\$20,292	\$21,277	\$48,700	\$985
Other Operating Costs	\$12,529	\$19,742	\$62,646	\$92,920	\$150,350	\$30,274
Overhead (G.A.)	\$28,552	\$30,565	\$142,758	\$137,061	\$342,618	(\$5,697)
Subtotal Year 5	<b>\$233,131</b>	<b>\$247,458</b>	<b>\$1,165,657</b>	<b>\$1,193,702</b>	<b>\$2,797,577</b>	\$28,045
Fixed Fee Year 5	\$16,785	\$17,817	\$83,927	\$85,947	\$201,426	\$2,019
<b>Total</b>	<b>\$249,917</b>	<b>\$265,275</b>	<b>\$1,249,584</b>	<b>\$1,279,648</b>	<b>\$2,999,003</b>	<b>\$30,064</b>

---

## 6. MAINTENANCE/REPAIR ACTIVITIES

### A SUMMARY OF MAINTENANCE & REPAIR ACTIVITIES:

#### Water/Street Facilities

Maintenance staff completed 91 routine/preventative and 23 corrective work orders for the water plants, distribution system, sewer collection system, and fleet in September. 92 requests for service were responded to by service personnel. 122 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 RPZ at North Water Plant
- Replaced 12 water meters
- Repaired water main 1000 South 2<sup>nd</sup>
- Repaired curb stop 116 East Boston
- Repaired curb stop 415 East 11<sup>th</sup>
- Repaired curb stop 300 West Harlem
- Repaired curb stop 620 East 2<sup>nd</sup>
- Repaired curb stop 507 South D
- Repaired Well 9, new motor, added check valve, replaced pitless adapter
- Repaired intake 200 block North G

#### Wastewater Facilities

Maintenance staff performed 121 routine/preventative and 9 corrective work orders at the Consolidated Plant and North Pretreatment Plant.

- Replace 4 skimmer links on the GEMS unit
- Rewired blower motor on gas blower #1
- Installed new motor starter on gas blower #2
- Replaced motor coupler on 200 HP blower
- Replaced VFD on return sludge pump #1
- Replaced return sludge pump and new belts at pre-treatment plant
- Installed rebuilt alum pump at GEMS unit
- Install new outlet at anaerobic pump station

### Street/Grounds/Right of Way/Fleet

- Various tree removal and trimming, pot hole patching, street sweeping
- Scheduled vehicle service work (lube, oil, filters)
- Repaired fuel pump T18
- Replaced battery T4
- Replaced oil seal, rotor and brake pads, bearings T19



---

## 7. CAPITAL PROJECTS

Several capital projects in the que include the design and construction of the remaining North Pre-Treatment Plant once the financing arrangements with Smithfield have been agreed upon and executed, and, Phase 2 design of the CSO Long Term Control Plan which is due to IEPA next spring.