

Ashville Utility Department Monthly Operations Report



Tom Bouts/Adam Kehoe/James Welsh
Information Collection
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Utility Team



Water and Sewer Divisions

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Ashville Vision Statement

Remembering our rural heritage, Ashville will be a vibrant and friendly community, offering an enhanced quality of life achieved through planning, progress and collaboration.

It will be a welcoming place where people want to live and businesses prosper.



Utility Purpose Statement

"Quality of Life" will be enhanced by offering the best quality of water to our community and by ensuring that water is returned to Walnut Creek in the best possible condition for our environment.

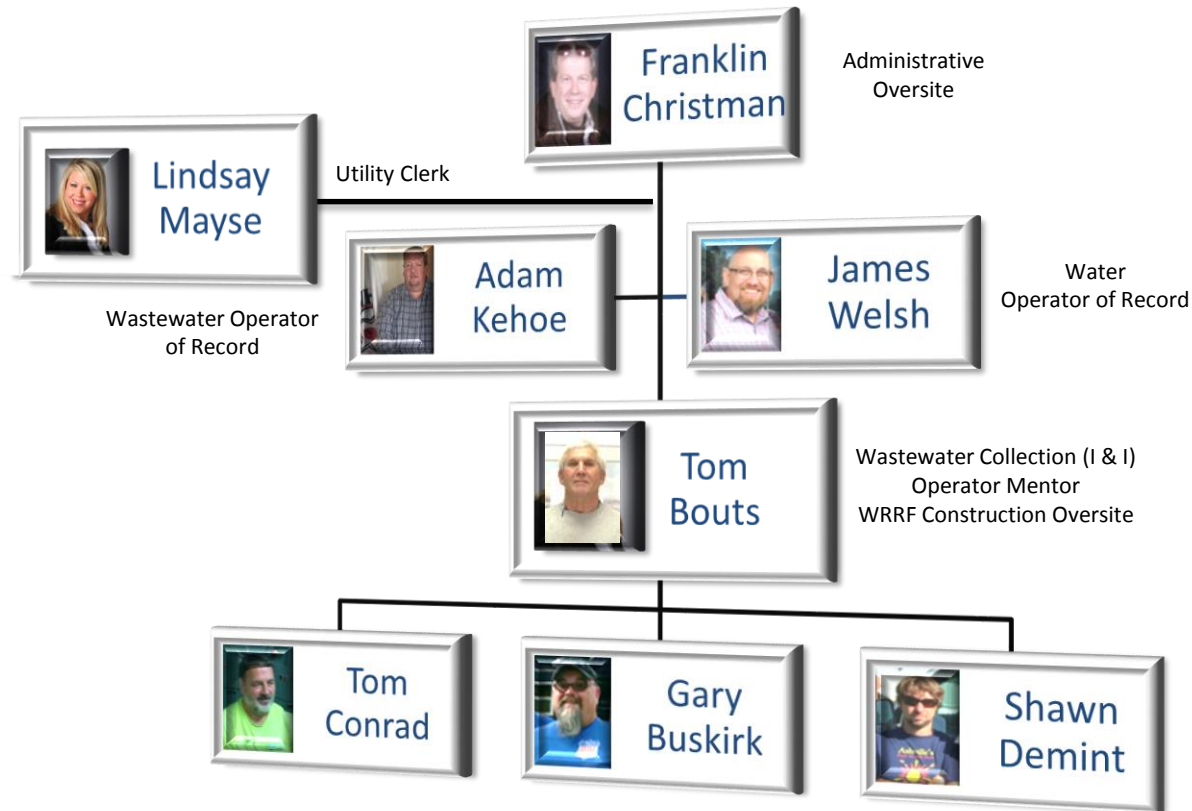
The Utility Consumer will be treated in a "Friendly Manner". Operations will be done in a manner to cost effective.

Services will be provided in a manner to create a place where people want to live and businesses prosper.



Ashville's Utility Department

October 2, 2016



Tom Bouts is contracted and displayed as part of the Organizational Structure to indicate operational support for the indicated areas

Water Resource Recovery Facility

The facility is being constructed between CSX and Norfolk Southern south of State Route 752. The aerial view was taken on July 7th. More information can be found at our website at www.ashvilleohio.gov and follow the banner to the left. It will provide increased processing capacity and put the Village of Ashville in compliance with the OhioEPA Director's Finding and Orders.



Water Division 2016

Treatment Plant Activity:

Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Total	Projected	Ave	Mean	Measure
Total Gallons Raw Water Pumped:	19.951	19.141	20.213	19.323	19.785	17.946	18.693	19.361	18.213	18.338	18.383	18.609	227.956	227.956	19.00	18.917	MGD
Total Gallons Treated:	18.385	17.235	18.192	17.428	18.028	16.376	17.014	17.662	16.669	16.744	16.78	16.654	207.167	207.167	17.26	17.1245	MGD
Total Water Billed	6.993	6.697	6.794	7.161	6.980	7.739	7.524	7.741	8.296	6.764	7.472	6.439	86.6	86.6	7.22	7.077	MGD
Total Gallons to Waste:	1.566	1.906	2.021	1.895	1.757	1.57	1.679	1.699	1.544	1.564	2.058	1.955	21.214	21.214	1.77	1.728	MGD
Average Daily Treated Water:	0.593	0.594	0.587	0.581	0.582	0.546	0.549	0.57	0.556	0.541	0.559	0.537	6.795	6.795	0.57	0.5645	MGD
Total Chlorine Used: (disinfection)	832	828	896	842	876	775	827	905	836	824	647	620	9708	9708	809.00	830	Gallons
Average Chlorine used/day:	27	28	29	28	24.75	26	27	29	28	27	22	20	315.75	315.75	26.31	27	GPD
Average Chlorine Residual:	0.52	0.88	0.77	0.86	0.69	0.48	0.62	0.57	0.66	0.71	0.41	0.26	7.43	7.43	0.62	0.64	mg/l
Total Salt used:	25.39	24.92	0	23.99	24.75	23.93	0	19.95	0	21.16	0	0	164.09	164.09	13.67	20.555	Tons
Percentage between Treated & Billed	61.96%	61.14%	62.65%	58.91%	61.28%	52.74%	55.78%	56.17%	50.23%	59.60%	55.47%	61.34%	58.20%	58.20%	58.11%	59.26%	Percentage

Distribution System Activity:

Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Total	Projected	Ave	Mean	Measure
Average Iron Concentration:	0.25	0.22	0.2	0.21	0.28	0.13	0.19	0.14	0.18	0.54	0.21	0.23	2.78	2.78	0.23	0.21	mg/l
Average Manganese Concentration:	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.36	0.36	0.03	0.03	mg/l
Average Hardness Concentration:	277	190	193	221	262	192	207	223	250	253	335	334	2937	2937	244.75	236.5	mg/l
Average Chlorine Residual:	0.35	0.33	0.35	0.29	0.44	0.37	0.32	0.5	0.27	0.3	0.29	0.3	4.11	4.11	0.34	0.325	mg/l

Work Order Activity:

Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Total	Projected	Ave	Mean
Meters Installed (Radio Read):	2	0	3	0	2	5	4	4	1	2	2	2	27	27	2.25	2
New Water Tap Inspections:	0	0	0	2	0	0	0	0	0	0	0	0	2	2.181818182	0.18	0
Meter Inspections (Checks)	6	3	6	1	3	5	3	0	4	4	5	4	44	44	3.67	4
Final Reads:	6	6	12	10	3	3	9	8	9	6	6	5	83	83	6.92	6
Meter Reread:	1	2	0	1	2	1	2	1	3	3	0	1	17	17	1.42	1
Monthly Water Shut-offs Notice:	88	75	98	75	86	96	80	100	110	88	91	110	1097	1097	91.42	89.5
Water Shut-offs:	11	12	11	5	4	1	4	8	5	1	7	5	74	74	6.17	5
Water Turn On's:	2	1	3	0	1	2	2	2	1	0	2	2	18	18	1.50	2
Curb Box Repairs/Replace:	1	1	0	2	0	1	4	0	0	0	0	0	9	9	0.75	0
Hydrant Test with Fire Department	0	0	5	0	0	0	0	0	0	0	0	0	5	5	0.42	0
Line Locates including OUPS:	1	0	1	3	5	22	38	35	21	29	33	42	230	230	19.17	21.5
Customer Service - Check for Leaks:	0	0	0	0	0	0	0	8	0	0	0	0	8	8.727272727	0.73	0
Customer Service - Miscellaneous	3	1	0	4	1	3	1	0	0	0	1	0	14	14	1.17	1
Water Breaks:	5	0	0	0	0	0	0	2	0	0	0	0	7	7	0.58	0
Meter Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Tags Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Backflow Surveys/Inspections	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Frozen Service Intervention	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Fire Hydrant Repair/Replace	0	1	0	0	1	0	0	0	0	0	0	0	2	2.181818182	0.18	0
Total Scheduled Activities & Work Order	126	102	139	103	108	139	147	168	154	133	147	171	1637	1637	136.42	139

Test for Distribution:

The Village will be conducting Iron, Lead, Copper and Manganese tests in 2016. To the right you will find the Copper and Lead Levels

Description	Copper-Action level 1.35 for ppm	Lead-Action Level 15 for ppb
Average	0.05950	0.00505
Mean	0.05000	0.00500
High	0.12	0.006
Low	0.05	0.005

None of the ten samples exceeded Action Level

Wastewater Division 2016

Treatment Plant Activity:

Total Rainfall:	1.73	4.16	4.34	3.35	4.81	1.9	4.59	4.93	8.46	2.3	0.93	4.15	45.65	45.65	3.80	4.16	Inches
Total Gallons Treated	11.682	16.833	17.704	12.919	10.749	8.419	9.221	12.731	15.634	13.486	7.995	13.729	151.102	151.102	12.59	12.83	MGD
Total Wastewater Billed	6.430	5.804	5.813	6.132	6.214	6.691	6.416	6.368	7.190	5.955	6.258	5.800	75.071	75.071	6.26	6.236	MGD
Average Daily Treated Water:	0.377	0.584	0.571	0.431	0.347	0.281	0.29745	0.411	0.521	0.435	0.267	0.443	4.96545	4.96545	0.41	0.42	MGD
Total Chlorine Used: (disinfection)	0	0	0	0	310	300	310	310	300	300	0	0	1830	1830	152.50	150.00	Gallons
Average Chlorine used/day:	0	0	0	0	10	10	10	10	10	10	0	0	60	60	5.00	5.00	GPD
Average Chlorine Residual:	0	0	0	0	0.015	0.015	0.018	0.0213	0.016	0.1	0	0	0.1853	0.1853	0.02	0.01	mg/l
Total Bisulfite Used for Dechlor:	0	0	0	0	465	450	465	465	450	450	0	0	2745	2745	228.75	225.00	lbs
Average Bisulfite Used /Day:	0	0	0	0	15	15	15	15	15	15	0	0	90	90	7.50	7.50	lbs
Average Raw (inflow) CBOD/Day:	534.51	414.63	455.98	561.65	578.8	424.77	524.06	569.86	669.15	584.99	463	507.56	6288.96	6288.96	524.08	529.29	lbs/day
Average CBOD removed/Day:	525.08	389.67	428.36	546.88	566.14	410.71	511.97	544.58	643.08	566	455	486.32	6073.79	6073.79	506.15	518.53	lbs/day
% Removed CBOD:	98.24	93.98	93.94	97.37	97.81	96.69	97.69	95.56	96.11	96.7	98	95.8	1157.89	1157.89	96.49	96.70	%
Average Raw Total Suspended Solids:	496.78	752.5	678.03	635.8	723.5	492.14	533.36	581.86	723.46	564.13	563	612.38	7356.94	7356.94	613.08	597.12	lbs/day
Average TSS Removed/Day:	488.92	734.24	655.98	625.81	711.92	468.94	527.16	576.72	452.33	556.43	585	599.99	6983.44	6983.44	581.95	580.86	lbs/day
% Removed TSS:	98.42	97.57	96.75	98.43	98.4	95.29	98.84	99.12	62.50%	98.60%	99.00%	97.9	883.321	883.321	73.61	97.74	%
Average Daily Dissolved Oxygen:	8.16	8.64	7.85	7.93	8.2	7.94	8.22	7.85	7.65	7.82	8.9	7.8	96.96	96.96	8.08	7.94	mg/l
Total Sludge Wasted to Digester:	108,780	1,272,430	767,490	173,830	348,910	384,540	353,140	273,550	151,740	542,020	542,020	468,980	5,387,430	5,387,430	448,953	368,840	Gallons
Total Sludge Land Applied	0	0	13.33	0	0		18.22	0	0	12.32	6.588	0	50.458	55.04509091	4.59	0.00	Dry Tons
Sludge removed to other facility	0	0	0	0	0		0	0	0	0	0	0	0	0	0.00	0.00	Gallons
Percentage between Treated & Billed	55.04%	34.48%	32.83%	47.46%	57.81%	79.47%	69.58%	50.02%	45.99%	44.16%	78.27%	42.25%	201.28%	201.28%	53.11%	48.74%	Percentage

NPDES Exceedences: Nitrogen Ammonia Monthly concentration: Reported 8.7 mg Nitrogen Ammonia week 3: Reported 13.35 mg/l- Limit 11.7
Exceedences due to solids overload and oxygen transfer

Stream Conditions:

Up Stream Dissolved Oxygen:	13.5	11.7	11.7	12.4	8.4	8.3	7.1	7.9	7.6	9.3	15.9	12.5	10.53	10.50	10.53
Up Stream pH:	8	8.5	8.3	8.3	8.1	8.1	7.8	8.1	7.9	7.9	8.1	8.2	8.11	8.10	8.11
Up Stream Temperature:	3	9	9	12	18	23	24	26	21	19	8	7	14.92	15.00	14.92
Down Stream Dissolved Oxygen:	12.7	11.7	11.6	12.2	7.9	8.2	6.9	8.2	7.6	9.5	16.2	11.6	10.36	10.55	10.36
Down Stream pH:	7.9	8.5	8.3	8.3	8	8.1	7.8	8.1	7.9	7.9	8.1	8.1	8.08	8.10	8.08
Down Stream Temperature	6	7.4	9	13	18	22	24	25	21	19	10	9	15.28	15.50	15.28

Work Orders and Collection System:

New Taps:	0	2	0	0	0	0	0	1	0	0	3	2	8	8	0.66666667	0
Collection Maintenance Calls:	1	4	0	0	4	1	1	0	4	3	1	3	22	22	1.83333333	1
Mark Lines (OUPS)	0	0	0	2	0	0	8.5833	11.17	10	42	51	35	159.7533	159.7533	13.312775	5.29165
Located Sewer Taps	0	0	1	0	0	0	0	0	0	0	0		1	1.090909091	0.09090909	0
Lift Station Degreased & Cleaning of Prol	8	8	8	8	8	8	8	8	8	11	1	10	94	94	7.83333333	8
Greased Mechanical Equipment (Rotors, Blow	1	1	1	1	1	1	1	4	1	1	1	4	18	18	1.5	1
Generator check	4	4	4	4	4	4	4	0	0	0	0	4	32	32	2.66666667	4
Total Scheduled Activities & Work Order	14	19	14	11	13	10	18.5833	24.17	23	57	57		302.7533	302.8442091	25.2370174	15.29165
Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Total	Projected	Budget	Ave



ACTIVITY REPORT

Monthly 2016 & YTD Information



Expenses and Revenue Comparison

Water

Water Division Tank Revenue	\$1,647.83	\$1,761.35	\$1,582.81	\$1,540.83	\$1,637.35	\$1,622.76	\$2,228.27	\$2,488.38	\$2,352.55	\$2,460.53	\$2,052.77	\$2,233.54	\$23,608.97	\$23,608.97	\$30,164.00	\$1,967.41	\$1,907.06
Water Division Total Revenue	\$24,789.60	\$25,293.33	\$24,405.75	\$35,780.69	\$24,968.26	\$27,344.04	\$36,806.91	\$34,683.88	\$35,560.29	\$34,630.21	\$30,614.83	\$34,869.68	\$369,747.47	\$369,747.47	\$681,064.00	\$30,812.29	\$32,622.52
Water Division Expenses	\$17,937.17	\$33,463.43	\$23,097.38	\$17,954.43	\$26,638.86	\$30,570.32	\$30,672.45	\$25,610.37	\$26,385.43	\$18,140.25	\$26,419.28	\$25,168.00	\$302,057.37	\$302,057.37	\$443,359.00	\$25,171.45	\$25,997.90
Water Balance	\$6,852.43	(\$8,170.10)	\$1,308.37	\$17,826.26	(\$1,670.60)	(\$3,226.28)	\$6,134.46	\$9,073.51	\$9,174.86	\$16,489.96	\$4,195.55	\$9,701.68	\$67,690.10	\$67,690.10	\$237,705.00	\$5,640.84	\$6,493.44

Wastewater

Wastewater Division I & I Revenue	\$2,202.84	\$3,362.90	\$2,021.26	\$1,935.05	\$2,093.53	\$2,242.11	\$2,049.03	\$2,304.33	\$2,273.80	\$2,413.94	\$2,188.00	\$2,102.60	\$27,189.39	\$27,189.39	\$26,370.00	\$2,265.78	\$2,195.42
Debt Service Fee	\$8,484.06	\$7,469.54	\$7,672.70	\$7,438.06	\$8,035.77	\$7,536.57	\$7,620.92	\$8,669.71	\$10,947.99	\$13,097.70	\$12,837.70	\$11,985.06	\$111,795.78	\$111,795.78	\$0.00	\$9,316.32	\$8,259.92
Wastewater Division Total Revenue	\$52,633.93	\$54,961.25	\$48,973.12	\$48,380.44	\$49,047.50	\$47,291.70	\$56,462.16	\$52,996.37	\$54,465.01	\$55,971.59	\$55,934.27	\$54,441.78	\$631,559.12	\$631,559.12	\$563,622.00	\$52,629.93	\$53,719.08
Wastewater Division Expenses	\$24,153.68	\$30,924.95	\$31,283.02	\$30,393.45	\$89,401.00	\$54,518.18	\$47,118.85	\$40,253.07	\$36,373.71	\$33,431.67	\$41,564.20	\$53,582.62	\$512,998.40	\$512,998.40	\$754,569.00	\$42,749.87	\$38,313.39
Wastewater Balance	\$28,480.25	\$24,036.30	\$17,690.10	\$17,986.99	(\$40,353.50)	(\$7,226.48)	\$9,343.31	\$12,743.30	\$18,091.30	\$22,539.92	\$14,370.07	\$859.16	\$118,560.72	\$118,560.72	(\$190,947.00)	\$9,880.06	\$16,030.09
Wastewater Plant Expansion	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00							\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Stormwater

Stormwater Division Total Revenue	\$7,178.99	\$7,184.32	\$7,113.98	\$6,964.13	\$7,002.43	\$6,848.16	\$6,813.58	\$7,240.64	\$7,081.09	\$7,340.08	\$7,466.81	\$6,953.21	\$85,187.42	\$85,187.42	\$88,022.00	\$7,098.95	\$7,097.54
Stormwater Division Expenses	\$10,860.40	\$2,474.75	\$658.84	\$447.85	\$565.63	\$23,381.51	\$377.93	\$5,370.34	\$10,746.78	\$10,657.79	-\$18,011.58	\$17,611.20	\$65,141.44	\$65,141.44	\$103,061.00	\$5,428.45	\$3,922.55
Stormwater Balance	(\$3,681.41)	\$4,709.57	\$6,455.14	\$6,516.28	\$6,436.80	(\$16,533.35)	\$6,435.65	\$1,870.30	(\$3,665.69)	(\$3,317.71)	\$25,478.39	(\$10,657.99)	\$20,045.98	\$20,045.98	(\$15,039.00)	\$1,670.50	\$3,289.94

Water Plant Maintenance

August:

- None

September:

- Water Tower on State Route 752 processed by Utility Services
- 2" line repair
- New water line and valve installed
- Work involving water at Long and State Route 752
- Manufactured Fire Hydrant Gauges for pressure testing



Water Plant Maintenance

January:

- New Air Valve and Actuator #2 Filter
- New Air Lines on all four (4) Filters
- SWAP Program completed and submitted to OhioEPA
- Inspections of Long and State Route 752 water main crossings

February:

- Main Line Valve 8 inch
- Fire Hydrant Flushing on February 2, 2016 - partial
- New Filter Wash Down Lines Installed times four February 3
- Lead and Copper testing on February 11, 2016 and results on page three of this report.
- Fire Hydrant and Watch Valve replacement
- Batteries replace at well four and 752 Tower
- New Flow Controls on #2 and #3 Softeners

March:

- No details

April:

- Water Tower Lock Replaced

May:

- New six inch tap for Water Resource Recovery Facility

June:

- New WTP Chlorine Line, Chlorine Pump, and Light

July:

- Fire Hydrant Flushing on July 31st.



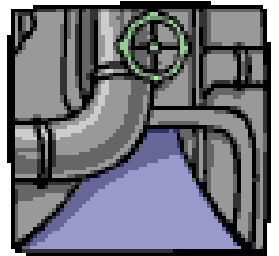
Wastewater Plant Maintenance

October:

- Dreier & Maller cleaned main sanitary line and influent channels to bar screen
- JR Mason to check south rotor, removing old barring's from south rotor, working on installation on new barring's for south rotor, Blower motor from blower #1 picked up by Columbus electrical works for repairs
- Ohio Commercial Doors working on main gate opener
- EC Babbert – pulled lift station pump at Columbus industries lift station.
- Pulled dislodged plug from Ashton Crossing lift station.
- Changes out manhole lid at Jefferson Ave. & Madison Ave. damaged manhole lid.
- Car to Oller's for passenger window door repair and oil change.

November:

- JR Mason working on South Rotor Bearing's, tightened up chain on Bar Screen, making final adjustment to South Rotor Bearing's and Shaft. \$ new belts put on.
- Bj Electric called repaired RAS Pump Station electrical short.
- Decker Construction on manholes that would be affected due to new pavement.
- Hemingway Ave. Sewer Lateral Tap Inspection, Burroughs Dr. Sewer Lateral tap Inspection.
- 2– Re – Read Meter
- Long St. Old sanitary Lateral cut and capped on NW corner on 752 & long St. which was used by the old Savings Bank.



Wastewater Plant Maintenance

July:

- NPDES Exceedences: Nitrogen Ammonia
 - 7/1/2016 – Monthly Concentration 7.8 reported 11.59
 - 7/1/2016 – Weekly Concentration 11.7 reported 15.35
 - 7/15/2016 – Weekly Concentration 11.7 reported 12.3

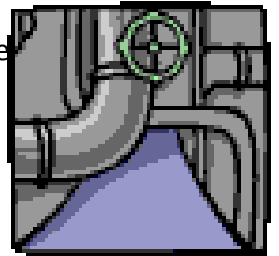
Exceedences due to low dissolved oxygen in oxidation ditch. Unable to waste sludge due to digesters full.
- Plant air conditioner repaired by Dale Hoover
- RAS starter replaced by BJ Electric
- Wheelers Septic land applying sludge
- Lift Station Maintenance - total time 8.8333 hours
- OUPS tickets - total time 8.5833 hours
- **Equipment Maintenance: 2009 Ford Crown Vic**, spark plugs, ignition coil, 2 front sway bar links \$524.89

August:

- NPDES Exceedences: None
- Lift Station Maintenance - total time 13.5 hours
- OUPS tickets - total time 11.17 hours

September:

- Changed out belts on south rotor
- Blower motor #1 Bj Electric found motor bad
- RAS pump station bad pump
- Local Waste fixed dumpster in bar-screen building
- Demo Inspection
- Rain event on September 18 resulted in many basements being flood which resulted in utility department inspection
- Dreier & Maller cleaned Ashton Woods Lift Station and cleaned 8 manholes



Wastewater Plant Maintenance

January:

- Routine Month

February:

- Sanitary lateral blockage times two
- Removal of Sump Pump for Sanitary Line times two

March:

- NPDES Exceedences: Loadings CBOD, TSS, NH3-14, 16-2016 due to high flows from rain average 1.233 MGD.
- Flow Meter Calibrated per OhioEPA standards
- Car tire repairs and oil change

April:

- Headworks building; Overhead door repair
- White Car: Window motor repaired

May:

- Return Activated sludge pump: Replaced ball float, Installed delay relay on pump 1, installed new overloads in pump 1 starter. Pulled #2 pump sent out for repair, not repairable per contractor. replaced main breaker #1 pump
- Generator Systems performed bi-yearly maintenance.
- Wright Street – cleaned out manhole front of property
- East Street – flushed out cleanout
- East Street – blockage in main
- Long Street – ongoing potential basement flooding
- Long Street – Mark Sanitary Sewer, South Central Power to Bore new line under roadway
- West Main – Sewer blockage, Private
- Sewer cleaning & CATV Long and Main Streets West under Railroad tracks to Ashville Grain
- F-350 quarterly maintenance done By Bill's on Broadway and Window Guard installed

June:

- Return Activated sludge pump : Installed new 7.5 hp Hydromatic pump
- Repaired Chlorine Feed Pump
- Repaired main gate auto opener
- Due to Vandalism: pumped out and cleaned North Final Clarifier, removed rocks, and reset EPA required Discharge sign

