ANNUAL REPORT FOR THE YEAR 2016

"A Clean Water Facility"

Edward J. Haller, Director
Water Pollution Control
2323 Main Ave SW
Warren, Ohio 44481-9603

City Officials

William D. Franklin, Mayor
Enzo C. Cantalamessa, Director of Public Safety and Service
Attorney Gregory Hicks, Director of Law
Vincent S. Flask, Auditor
John Homlitas, Treasurer

Council Members

James Graham, President of Council
Daniel J. Sferra, Council at Large
Eddie L. Colbert, Council at Large
Helen Rucker, Council at Large
Larry Larson, 1st Ward
Alford L. Novak, 2nd Ward
John R. Brown Jr., 3rd Ward
Mark Forte, 4th Ward
Danielle Polivka, 5th Ward
Cheryl Saffold, 6th Ward
Eugene Mach, 7th Ward
Brenda E. Smith, Clerk of Council

A Letter from the Director

My goals are to achieve & maintain full EPA compliance, and to refurbish the wastewater treatment plant, pump stations, and collection system to meet the needs of the Greater Warren Area for at least the next 20 years.

The assessment and workshops for the Plant and Pump Station Refurbishment were completed by Burgess & Niple (B&N) in 2016. The Capital Improvement Plan (CIP) for the Plant and Pump Station Refurbishment is currently being drafted and will be provided separately upon completion. Recommendations in the CIP will include new influent screens and grit removal facilities, refurbished Primary and Aeration Tanks, the addition of chemical feed to aid primary and secondary clarification, addition of a third disinfection tank, and refurbishment of Biosolids Handling and the Pump Stations.

The response from the EPA regarding our plan to close the Sanitary Sewer Overflow at High Street and N. Park included a requirement that we complete a comprehensive study of the sanitary sewers throughout the City. We are to provide the results of that study to the EPA by 12/1/17. AECOM started this study for us in November. They placed a series of 30 flow meters and four rain gauges throughout the system to monitor rates under higher flow conditions. This will provide us a computer model to determine how the system will respond under a wide range of hydraulic conditions. The result of this study will be a companion Capital Improvement Plan (CIP) for the Sanitary Sewer System. This $1.6M study is being financed for through a planning loan from the Water Pollution Control Loan Fund.

A study was done by AECOM for work in Star Allotment that needs to be completed. This will include installation of both sanitary and storm sewers at an estimated construction cost of $1,826,000. It was decided that this work will be split and approached using grants. With the help of Chris Stephenson and Paul Makosky we were able to receive an Issue 1 Grant to cover 39% of the first phase of this work. That was for $230,100 of the $590,000 for the first Phase which is essentially Elvina Ave.

The current EPA discharge permit for Warren WPC expired 1/31/17. The renewal process was started in 2016. The discharge permits are based on study of the receiving stream(s). In our case, the Mahoning River Study is completed and the report will be issued soon. Once that report is finalized, our permit can be drafted. We will operate under our current permit until the new permit is in place. We had an EPA facility inspection in late 2016 in preparation for the permit renewal process. The EPA acknowledged the many challenges we have with the facility and are glad to see we are working toward making improvements. They predicted presentation of our draft permit by mid-2017.

Because Warren is a Separate Sanitary Sewer Community, we were required under Ohio EPA's Small Municipal Separate Storm Sewer System (MS4) Permit to revise and submit an updated Stormwater Management Program (SWP) in 2016. MS Consultants was hired to work with our staff to complete this task. Two public meetings were held to review the draft before it was submitted.

Sludge Thickening continues to be a challenge for the plant. Approval for the purchase and installation of new sludge disc thickeners was obtained in 2016. The equipment has been ordered and the Permit to Install (PTI) has been submitted to the EPA.

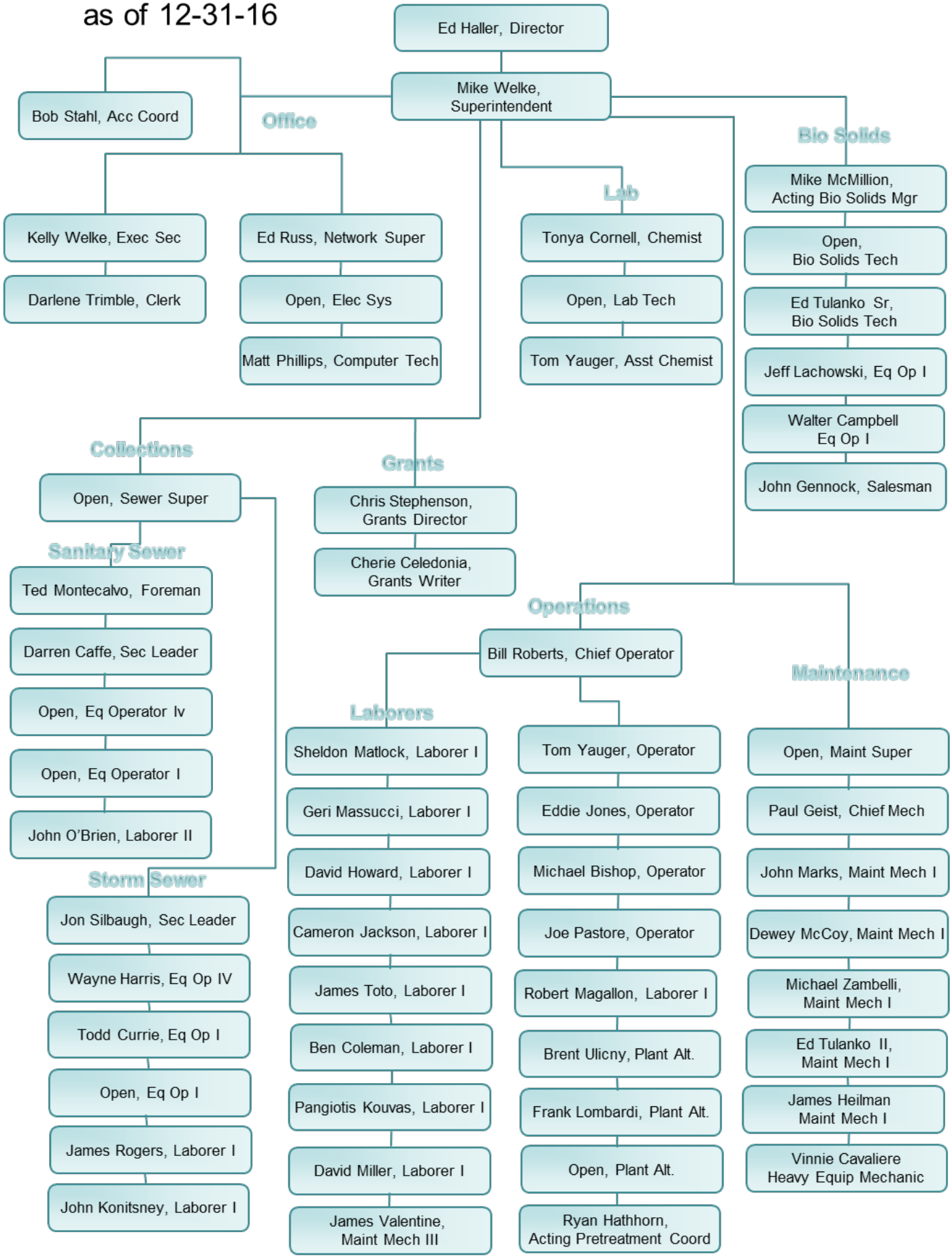
The plant and pump stations continue to experience equipment failures and process challenges. The plant staff continues diligently to operate and maintain the equipment and processes to consistently produce clean water until we are able to replace and refurbish the equipment.

Edward J. Haller, Director

Water Pollution Control

Water Pollution Control Org Chart

as of 12-31-16



Ohio EPA Certified Employees

Class IV Wastewater Operator

Edward J. Haller, Director

Class III Wastewater Operator

Tonya R. Cornell
Ryan N. Hathhorn
Samuel M. Ludwick
Michael L. McMillion
William R. Roberts
Edward A. Russ
Michael T. Welke
James E. Wilden

Class II Wastewater Operator

Jon L. Silbaugh
Thomas D. Yauger

Class II Wastewater Analyst

Tonya R. Cornell

Class I Wastewater Operator

James P. Heilman
Ted J. Montecalvo

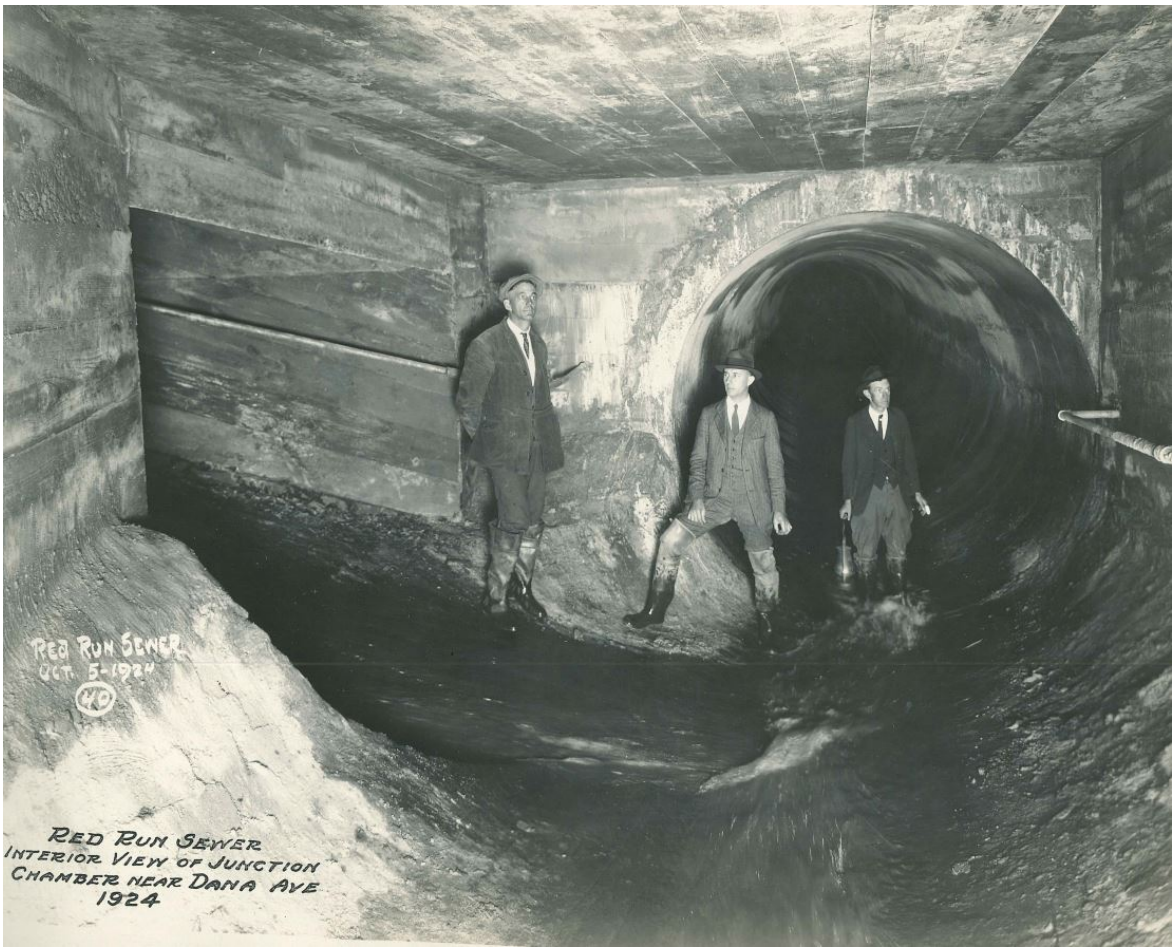
Classes are held weekly to assist employees
interested in obtaining or advancing their operator certification.

Fund 703 WPC Last 5 Years Financial Data

Year	2012	2013	2014	2015	2,016
Total 703 Revenue	**8,446,138**	**8,057,062**	**8,262,852**	**7,862,819**	**8,844,488**
Department 450 - WPC - General					
Contracted Labor And Services	2,118,525	2,334,989	2,233,383	2,410,436	2,231,765
Supplies	86,738	121,398	92,247	82,864	153,696
Maintenance (Performed By City Emp)	46,382	42,150	92,036	30,826	74,724
Capital Outlay	-	-	324,776	335,493	484,735
Other Miscellaneous Expenses	15,538	24,533	12,717	13,128	16,518
Debt Service	2,176,873	1,776,624	1,132,955	1,057,560	1,044,276
Department 450 TOTALS . .	**4,444,055**	**4,299,695**	**3,888,113**	**3,930,308**	**4,005,715**
Department 451 - WPC - Administartion					
Salaries And Wages	367,217	371,292	438,113	537,205	535,780
Fringe Benefits	181,246	183,402	185,522	232,542	227,022
Department 451 TOTALS . .	**548,462**	**554,694**	**623,634**	**769,747**	**762,802**
Department 452 - WPC - Plant Operations					
Salaries And Wages	449,022	423,198	445,437	458,909	453,518
Fringe Benefits	280,376	275,274	289,530	275,161	267,109
Contracted Labor And Services	2,062	41	-	-	47
Supplies	6,018	4,405	4,892	4,415	4,690
Maintenance (Performed By City Emp)	4,725	18,381	19,242	17,527	46,855
Department 452 TOTALS . .	**742,203**	**721,299**	**759,102**	**756,012**	**772,219**
Department 4521 - WPC - Plant Laboratory					
Salaries And Wages	139,037	158,233	149,760	157,331	115,774
Fringe Benefits	74,081	92,243	86,747	97,766	64,215
Contracted Labor And Services	20,718	20,514	24,592	13,922	16,168
Supplies	8,908	5,643	16,625	11,651	6,958
Maintenance (Performed By City Emp)	356	19	13	1,411	1,508
Department 4521 TOTALS .	**243,101**	**276,652**	**277,736**	**282,081**	**204,623**
Department 453 - WPC - Maintenance					
Salaries And Wages	193,416	258,729	224,444	227,986	283,546
Fringe Benefits	126,788	157,139	150,899	139,807	201,801
Contracted Labor And Services	297	224	118	90	103
Supplies	5,051	4,730	4,394	5,737	7,856
Maintenance (Performed By City Emp)	9,889	4,284	7,750	3,098	1,175
Department 453 TOTALS . .	**335,441**	**425,106**	**387,605**	**376,720**	**494,481**
Department 4531 - WPC - Labor					
Salaries And Wages	132,045	123,442	199,815	214,345	209,631
Fringe Benefits	75,099	75,798	143,678	172,719	148,935
Contracted Labor And Services	575	47	1,894	296	506
Department 4531 TOTALS .	**207,719**	**199,286**	**345,387**	**387,359**	**359,073**
Department 4532 - WPC - Pump Stations Maintenance					
Salaries And Wages	38,076	39,002	37,391	37,996	41,901
Fringe Benefits	24,457	23,712	24,251	7,646	594
Contracted Labor And Services	120,981	184,811	125,408	225,559	182,664
Supplies	199	247	472	40	100
Maintenance (Performed By City Emp)	14,678	5,114	33,567	12,670	11,514
Department 4532 TOTALS .	**198,391**	**252,885**	**221,089**	**283,911**	**236,774**
Department 454 - WPC - Sewer Maintenance					
Salaries And Wages	176,675	130,492	131,303	133,049	114,478
Fringe Benefits	92,767	66,815	77,565	75,090	67,559
Contracted Labor And Services	10,396	7,459	5,307	37,884	24,266
Supplies	8,493	20,208	17,776	11,250	18,545
Maintenance (Performed By City Emp)	26,627	2,615	6,358	3,154	5,214
Department 454 TOTALS . .	**314,958**	**227,588**	**238,309**	**260,427**	**230,061**
Department 480 -Bio Solids					
Salaries And Wages	241,512	241,186	266,083	212,177	244,135
Fringe Benefits	129,692	131,986	135,502	150,759	157,976
Contracted Labor And Services	39,250	36,841	33,716	40,916	35,222
Supplies	215,367	253,703	269,701	216,866	259,124
Maintenance (Performed By City Emp)	29,597	66,908	36,484	35,174	41,518
Other Miscellaneous Expenses	845	265	256	363	88
Department 480 TOTALS . .	**671,159**	**742,780**	**753,608**	**656,254**	**738,063**
Total 703 Expenses	**7,705,490**	**7,699,986**	**7,494,584**	**7,702,819**	**7,803,812**
703 Year End Fund Balances	**2,204,231**	**2,573,328**	**3,355,178**	**3,515,178**	**4,555,854**

Funds 720 & 721 Storm Water Last 5 Years Financial Data

Year	2012	2013	2014	2015	2016
Total 720 Revenue	**736,899**	**674,586**	**702,712**	**669,416**	**666,058**
Department 470 -Storm Water					
Salaries And Wages	248,418	222,810	181,364	182,351	189,239
Fringe Benefits	148,858	136,451	122,294	124,679	125,975
Contracted Labor And Services	278,500	157,434	304,335	199,727	241,367
Supplies	22,377	25,315	22,643	15,265	23,699
Maintenance (Performed By City Emp)	7,586	2,399	8,151	2,424	7,178
Capital Outlay	-	-	-	-	-
Other Miscellaneous Expenses	1,977	318	545	2,147	1,660
Debt Service	1,797	2,696	1,797	1,797	1,797
Department 470 TOTALS . .	**709,513**	**547,423**	**641,129**	**528,390**	**590,915**
Total 720 Expenses	**709,513**	**547,423**	**641,129**	**528,390**	**590,915**
720 Year End Fund Balances	**580,785**	**707,948**	**769,531**	**910,557**	**985,701**
Fund 721 Revenue	**292,828**	**347,888**	**344,633**	**344,837**	**343,564**
Total 721 Capital Expenses	**180,865**	**13,374**	**53,003**	**617,790**	**141,181**
721 Year End Fund Balances	**472,373**	**806,887**	**1,098,517**	**825,564**	**1,027,947**



Active Customers for 2016

	JANUARY 2016	JANUARY 2017
INSIDE SEWER	14,938	14,920
OUTSIDE SEWER	615	625
METERED SEWER	5	5
SATELLITE SEWERS SYSTEMS	4	4
LEACHATE DISCHARGERS	1	1
STORMWATER	14,846	14,771

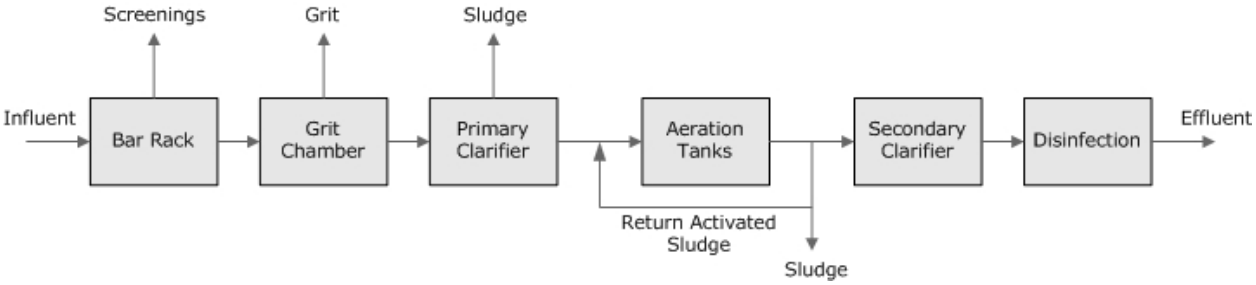
Top Ten Customers for 2016

	Jan - Dec 16
Trumbull County Sanitary Engineer	1,257,646.03
Lafarge	721,695.89
ArcellorMittal Steel Warren	617,932.93
Delphi Automotive Systems	272,212.24
PATRIOT WATER TREATMENT	213,155.73
STERICYCLE	71,972.94
McCoy Septic Tank Service	68,680.40
Tom's Septic Service	61,568.40
Kings Sanitary Services, LIC	58,926.15
Village of Lordstown	54,553.35

How do we treat the waste water to make it safe to discharge to the Mahoning River?

Biological Wastewater Treatment with Activated-Sludge Process

The picture below shows a simplified flow diagram for biological processes used for wastewater treatment. The influent wastewater (e.g. municipal wastewater) goes through several stages in which different compounds are removed from the wastewater.



Simplified flow diagram for biological wastewater treatment with an activated-sludge process.

In the Bar Rack, coarse solids are removed, such as sticks, rags, and other debris in untreated wastewater by interception.

In the Grit Chamber, grit is removed consisting of sand, gravel, cinders, or other heavy solid materials that have subsiding velocities or specific gravities substantially greater than those of the organic putrescible solids in wastewater.

The Primary Clarifier is a basin where water has a certain retention time where the heavy organic solids can sediment (suspended solids). Efficiently designed and operated primary sedimentation tanks should remove from 50 to 70 percent of the suspended solids and 25 to 40 percent of the BOD (biochemical oxygen demand).

The influent of the aeration tank is mixed with activated sludge and then this mixed liquor is aerated in the Aeration Tanks. By aerating the mixed liquor the aerobic processes will be stimulated, the growth rate of the bacteria will be much faster.

Because the bacteria deplete the substrate, flocculation takes place. The soluble substrate becomes a solid biomass. These flocks of biomass will sediment in the Secondary Clarifier.

At the end of the process the effluent water is treated to disinfect it and make it free of disease-causing organisms.

Grit and screenings removed in the preliminary treatment process are hauled to a landfill.

Sludge removed during the process is held in a mixing tank and pumped to our Bio Solids Processing facility to be pressed to remove excess water, mixed with lime to raise the pH and pasteurized to remove harmful pathogens and additional water. Our Class A EQ (Exceptional Quality) Bio Solids are then hauled to farms for recycling as soil amendments.

2016 Exceedances of the Warren WPC NPDES Permit

Barium Concentrations
Preliminary Effluent Limit
340 ug/L
(micrograms per liter)
(parts per billion parts)

Date	Value
1/8	521
2/2	540
3/2	711
3/15	916
4/19	1010
5/3	1490
5/17	827
6/2	603

Chlorine Residual Concentrations
Instantaneous Maximum
0.024 mg/L
(milligrams per liter)
(parts per million parts)

Date	Value
None	

Dissolved Oxygen Concentrations
Instantaneous Minimum
5.0 mg/L

Date	Value
4/11	4.93

E. Coliform Bacteria
Weekly Maximum Geometric Average
284/100 mL
(# Bacteria in 100 milliliters)

Week	Value
None	

CBOD
Weekly Maximum Average
1090 kg/d

Week	Value
4/8-4/14	1090

Suspended Solids Concentration
Weekly Maximum Average
30 mg/L

Week	Value
3/15-3/21	32
4/8-4/14	136

Monthly Maximum Average
20 mg/L

Month	Value
March	25

Suspended Solids Loading
Weekly Maximum Average
1817 kg/d

Week	Value
3/15-3/31	2981
4/8-4/14	14308

Monthly Maximum Average
1211 kg/d

Month	Value
March	1754

2016 Monthly Concentrations of Significant Pollutants

Month	Flow (MGD)	Suspended Solids (mg/L)	Ammonia (mg/L)	CBOD (mg/L)
Monthly Ave Limit	**16.00** (Design)	**20.00**	**3.00**	**12.00**
January	10.29	8	0.099	3
February	13.94	8.4	0.285	3
March	13.85	25.4	0.249	3
April	12.85	37.66	0.081	3
May	10.17	7.42	0.165	3
June	8.77	26	0.516	1
July	8.45	5.14	0.170	1
August	8.71	5.26	0.168	1
September	9.25	5.71	0.262	1
October	9.27	5.9	0.192	1
November	8.54	7.15	0.084	1
December	11.11	13.23	0.746	2
Year Average	10.43	12.98	0.251	1.92

CBOD is Carbonaceous Biochemical Oxygen Demand, a measure of pollution concentration determined by how much oxygen is used by the microorganisms eating the food in the water when incubated for five days.

Our NPDES Permit allows us to discharge to the Mahoning River (lower) Watershed

The Mahoning River watersheds (Lower shown in purple, upper shown in blue) are located in northeastern Ohio on the Ohio-Pennsylvania border. Youngstown, Warren and Lordstown are major municipalities in the lower watershed. Youngstown and its surrounding communities are predominant in the central portion of the watershed. Other land uses include pasture and hay lands, forest and cultivated crops. Mosquito Creek Lake and Meander Creek Reservoir are located in this watershed.

2016 Overflows from High Street and N. Park Avenue

Date	Overflow Gallons	Date	Overflow Gallons
23-Feb	36	13-Jul	55
24-Feb	50259	18-Jul	6597
14-Mar	105268	24-Jul	22
15-Mar	12376	31-Jul	749740
24-Mar	14973	11-Aug	6817
28-Mar	34440	16-Aug	148
31-Mar	359	25-Aug	202
11-Apr	50007	8-Sep	10228
5-Jun	49	10-Sep	73869
6-Jun	436	26-Sep	89
16-Jun	221	29-Sep	28742
23-Jun	121	30-Sep	265
27-Jun	49	20-Oct	213443
6-Jul	51	27-Oct	95
7-Jul	13819	3-Nov	27
		30-Nov	91

Why water overflows at the High St Location

A sanitary sewer overflow (SSO) is a discharge of untreated, raw wastewater into local waterways. The discharge may come from manholes, cracks and other defects in sewer lines, emergency relief outlets, and other sources within a sanitary sewer system.

Trouble in the pipes! A mystery solved.

Over the past several years, the Water Pollution Control Dept. has experienced an increase in the amount of "ragging" of equipment in the plant. Ragging occurs when material; specifically fibers become entangled with machinery in the process stream. In the past this was limited to small amount of clothing and other fabric that found its way into the waste stream. More recently the amount and type of ragging was different, not only was the volume much greater, but the composition was different. Rather than small individual pieces this was large masses of fibers whose origin was not readily identifiable. Upon doing some research, it was discovered that the recent increase in the marketing of non-woven disposable wipes is causing waste water plants all across the United States to experience a similar problem. Baby wipes, personal hygiene and cleaning wipes marketed as disposable and in some cases flushable are entering the sewer system breaking down to their individual fibers and then recombining when caught on our equipment. The photos below show a large 14" gear in a primary settling tank with and without the ragging.

In response we are working to improve our screening results to remove more at the beginning of our treatment process and asking for the public's help by not flushing these and other items that can cause problems in our collection and treatment systems. Towards that end, we inserted the flyer below in the Utility Bills this summer in hopes of some relief.

DON'T FLUSH TROUBLE!

THESE ITEMS BELONG IN THE TRASH CAN!

Cleaning Wipes

Disposable Diapers

Hair

Nursing Pads & Baby Wipes

Cooking Grease

Condoms

Facial Wipes

Tampons and Pads

The label might say "flushable," but disposable wipes and other products are clogging our sewer lines and damaging pumps and other equipment.

Not only are these problems expensive to fix, they can also cause raw sewage overflows into homes, businesses and local water ways. So, think trash not toilets!

Historic Capital of the Western Reserve — City of Warren, Ohio

City of Warren Water Pollution Control

2323 Main Ave SW, Warren, Ohio 44481 330-841-2591

2016 ANNUAL SUMMARY OF OPERATIONS FOR THE WATER POLLUTION CONTROL CENTER, WARREN, OHIO

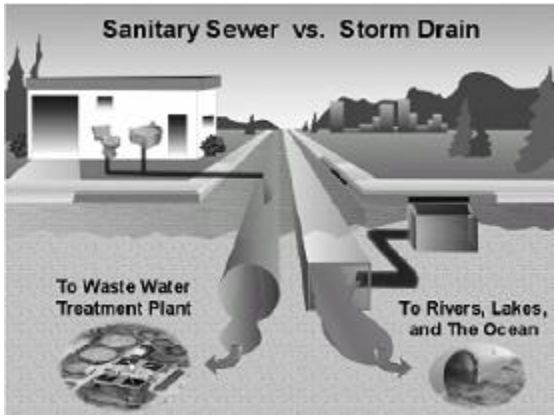
	Flow				Suspended Solids			5 Day CBOD					Dissolved Oxygen			Sludge				Cl2			Total	
	MGD		by-pass		mg/l daily avg.			mg/l daily avg.					mg/l			in 1000 gallons		cu/yds		total	res	NA HS03	Monthly	
Month	Total	Avg/day	Raw	Set	Raw	Set	Final	Raw	Set	Final	above	below	Final	above	below	hold tank	press	Grit	Screen	lbs	mg/l	lbs	Cost	Precipitation
Jan	318.975	10.29	0	0	94	79	8	74	50	0	0	3	11.239	14	13.5	564,600	0	22	4	28	0	0	$457,330.27	1.18
Feb	390.202	13.94	0	0	110.8	67.263	8.4	75.8421	50.278	2	0	3	11.411	14.1	13	683,700	0	22	16	28	0	0	$397,949.71	3.27
Mar	429.296	13.85	0	0	106.26	68.609	25.4	70.6957	48.217	4	0	3	10.329	13	12.9	766,900	0	9	6	29	0	0	$56,156.81	3.51
Apr	385.543	12.85	0	0	111.14	135.33	37.667	42.4737	41.211	0	0	3	9.6233	12.2	11.9	846,600	0	10	6	34	0	0	$579,447.14	2.42
May	315.239	10.17	0	0	120.38	108	7.4286	75.3	67.05	5	3	3	9.6	11.9	12	604,400	0	12	0	161	0	0	$671,381.68	1.91
Jun	262.975	8.77	0	0	146.45	304	26	85.3333	103	4	0	1	9	8.2	7.9	30,783	0	26	4	196	0	0	$513,674.38	2.21
Jul	262.059	8.45	0	0	138.95	89.9	5.1429	92.1429	63.9	0	0	1	8.3613	8.1	7.7	833,500	0	26	6	141	0	0	$559,187.32	2.54
Aug	269.906	8.71	0	0	125.32	74.435	5.2609	60.1818	49.727	2	0	1	8.0581	8	7.6	#REF!	#REF!	28	4	150	0	0	$623,681.08	3.21
Sep	277.569	9.25	0	0	147.81	69.333	5.7143	86.4545	57.524	0	0	1	8.0233	7.6	7.4	543,181	0	20	8	158	0	0	$473,011.69	4.29
Oct	287.395	9.27	0	0	97.7	75.7	5.9	67.2	60.421	1	0	1	8.571	9.1	8.8	653,800	0	22	6	154	0	0	$669,193.32	4.93
Nov	256.262	8.54	0	0	77.368	105.26	7.1579	70.0526	69.947	1	0	1	9.3767	8.8	8.8	#REF!	#REF!	20	4	23	0	0	$357,512.31	0.72
Dec	344.417	11.11	0	0	65.619	73.1	13.238	70	39.947	0	0	2	8.9516	10.3	10.3	436,200	0	5	2	20	0	0	$428,614.85	2.49
Total	3799.84	125.20	0.10	0.27	1342.3	1250	155.75	869.288	700.94	19	3	23	112.54	125.3	121.8	#REF!	#REF!	222	66	1,122	0	0	$5,787,140.54	32.68
Avg	316.65	10.43	0.10	0.27	111.85	104.17	12.98	72.44	58.41	2.71	3.00	1.92	9.38	10.44	10.15	596366.43	#DIV/0!	18.50	6.00	93.49	#DIV/0!	#DIV/0!	$ 482,261.71	2.72

Yearly Plant Performance

Removal of Suspended Solids	6.86933 % Raw to Suspended	88.3961 % Raw to Final
Reduction 5 day BOD	19.3656 % Raw to Suspended	97.8143 % Raw to Final

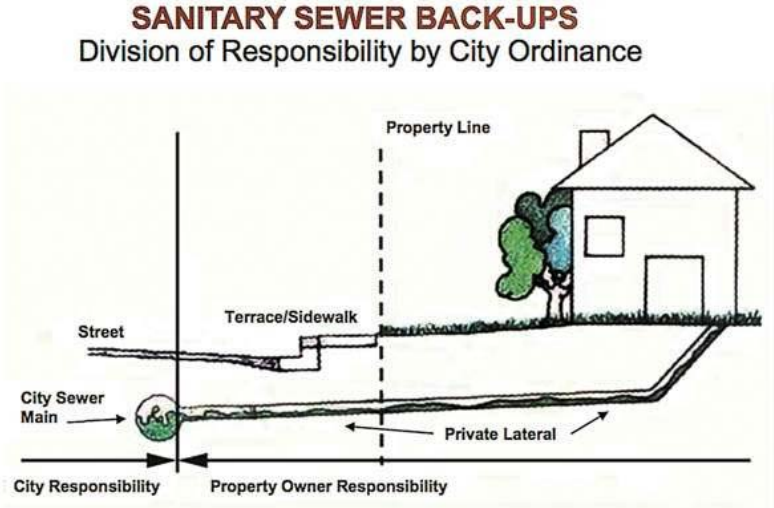
2016 Nature's Blend Division

Month	Gallons Sludge to press	% Solids		% Volatile		Polymer		Lime		N B Dry Tons	Total Cost per dry/ton	Sludge Fee
		Sludge	Cake	Sludge	Cake	lbs	Cost	tons	Cost			
January	0	5.50	25.08	8.1	57	2,580	$2,709.00	33	$5,270.49	364	$21.95	91
February	0	5.46	26.60	8	57	2,623	$2,754.15	38	$5,971.53	378	$23.10	99
March	0	5.61	24.56	0	87.3	2,494	$2,618.70	45	$7,054.62	439	$22.04	109
April	0	4.76	24.48	7.8	72.5	3,827	$4,018.35	53	$8,337.27	571	$21.64	139
May	0	5.23	25.03	7.6	56	3,139	$3,704.02	32	$4,596.88	331	$25.04	83
June	0	6.42	26.51	8	8	7,912	$8,307.60	87	$12,414.19	1,044	$19.85	255
July	0	5.44	26.34	7.8	42.9	3,526	$3,169.87	41	$5,874.08	538	$16.81	141
August	0	6.80	26.34	7.8	34.8	3,569	$3,172.84	36	$5,171.52	508	$16.41	134
September	0	5.18	26.14	7.9	33.6	4,558	$5,378.44	44	$6,254.18	484	$24.03	127
October	0	4.93	24.04	8	75.8	4,085	$4,820.30	48	$6,845.77	562	$20.78	135
November	0	4.70	8.00	8	35.8	3,518	$3,162.68	47	$6,703.84	479	$20.58	111
December	0	4.79	20.93	8	24.9	1,407	$1,264.89	33	$4,739.81	334	$17.99	70
Total	0	64.81	284.06	87.00	585.60	43,238	$ 45,080.85	536	$ 79,234.16	6,032	250.22	1493
Average	#DIV/0!	5.40	23.67	7.91	48.80	3603.17	$ 3,756.74	44.70	$ 6,602.85	502.65	20.85	124



2016 ANNUAL REPORT
SANITARY DIVISION

MONTH	SEWER COMPLAINT	OWNER'S RESPON	CITY'S RESPON	MAIN SURCHARGED	FEET FLUSHED	FLUSH JOBS	PREVENT MAINT	DAILY MAINT	REPAIRS MADE	DYE TEST	TV FOOTAGE	MH CASTINGS REPLACED	MH CASTINGS RAISED	MONITOR OVERFLOWS	SMOKE TEST	VAPO ROOT
JANUARY	4	4	0	0	9545	0	0	71	4	5	250	0	0	0	7	0
FEBRUARY	25	22	3	0	22870	0	0	86	5	8	760	2	2	0	0	0
MARCH	13	11	2	0	15550	0	78	0	6	4	1450	2	2	0	0	0
APRIL	9	8	1	0	25160	0	0	50	1	5	1105	0	0	0	0	0
MAY	5	4	1	0	68870	0	0	69	0	4	55	0	0	0	1	0
JUNE	10	9	1	0	51185	0	0	49	0	0	0	0	0	0	0	0
JULY	8	8	0	0	67460	0	0	74	4	6	650	2	2	0	0	0
AUGUST	5	5	0	0	78040	0	0	71	3	5	0	2	2	0	0	0
SEPTEMBER	7	7	0	0	54750	0	0	57	3	1	0	2	2	0	0	3676
OCTOBER	6	4	2	0	23125	0	0	66	3	13	890	2	2	1	0	0
NOVEMBER	3	2	1	0	43320	0	0	47	0	3	2070	1	1	0	0	0
DECEMBER	17	13	4	0	9720	0	0	42	0	0	0	0	0	0	0	0
TOTAL	112	97	15	0	469595	0	78	682	29	54	7230	13	13	1	8	3676



2016 ANNUAL REPORT
STORM DIVISION

MONTH	SEWER COMPLAINT	NLET TOPS CLEANED	REBERM FOOTAGE	INLETS CLEANED	FEET FLUSH	FLUSH JOBS	PREVENT MAINT	DAILY MAINT	REP MADE	DYE TEST	FEET TV	MH CASTINGS REPLACED	MH CASTINGS RAISED	INLET CAST REPLACED	INLET COVER REPLACED	INLET BACKS REPLACED	INLET CAST RAISED	DITCHING FOOTAGE	INLETS REBUILT	DRIVE PIPE FLUSH FT.	DRIVEPIPE REP FT.	DITCHPIPE FT INSTALLED
JANUARY	5	250	20	27	0	0	0	54	2	1	0	0	0	0	3	0	0	0	0	0	0	0
FEBRUARY	18	96	0	29	7475	0	2	46	3	2	0	0	1	1	5	0	1	0	1	0	0	0
MARCH	18	160	0	71	3250	0	0	74	13	2	0	0	0	3	5	4	2	0	7	0	0	0
APRIL	32	35	0	61	1680	0	0	79	12	2	0	0	0	2	0	2	1	465	10	0	0	230
MAY	8	0	0	16	2050	0	0	41	5	1	0	0	0	4	4	0	4	660	5	0	0	40
JUNE	14	55	0	49	845	0	0	56	7	1	0	2	2	3	3	0	0	510	2	0	0	310
JULY	12	25	0	35	100	0	0	51	13	1	0	0	0	2	3	2	1	235	8	0	0	205
AUGUST	24	87	0	25	1200	0	0	71	13	1	800	0	0	12	12	12	10	380	9	710	0	115
SEPTEMBER	21	142	0	20	0	0	0	60	9	1	0	2	2	5	5	1	4	355	6	0	25	245
OCTOBER	18	82	0	41	1700	0	0	57	8	8	75	0	0	2	4	2	2	360	2	0	0	160
NOVEMBER	6	205	0	19	550	0	0	43	3	6	15	1	1	0	0	0	0	450	0	0	0	257
DECEMBER	6	134	290	10	240	0	0	27	2	0	0	0	0	0	0	0	0	290	0	0	0	0
TOTAL	182	1271	310	403	19090	0	2	659	90	26	890	5	6	34	44	23	25	3705	50	710	25	1562

Vehicle Inventory

Office Vehicle Inventory

Office vehicles in service during 2016:

- T-106 2014 Dodge Caravan for Pretreatment Coordinator
- T-107 2014 Ford Focus for Bio Solids Salesman and other office personnel
- T-109 2014 Ford Explorer for computer staff
- T-114 2016 Ford Focus for office staff

Plant and Sewer Crew Vehicles

Plant and Sewer vehicles in service during 2015:

- T-27 1996 Dodge 2500 Pickup w/5th wheel fair to poor condition
- T-28 2004 Ford F-250 Crew Cab Pickup good condition
- T-29 2004 Ford F-250 Pickup good condition
- T-30 2004 Ford F-250 Pickup good condition
- T-32 2016 Ford F-150 Pickup New
- T-101 2004 Ford F-250 Crew Cab Pickup good condition
- T-108 2014 GMC Sierra Pickup assigned to Maintenance Superintendent
- T-110 2014 Ford F250 Pickup with snow plow assigned to Sewer Foreman
- T-113 2016 Ford F-350 Utility Truck assigned to Maintenance

Specialized Equipment Vehicles not used for daily transportation

Specialized Equipment vehicles in service during 2015:

- T-5 1996 GMC Camera Van fair condition
- T-8 1996 GMC Flusher Truck poor condition (not road worthy)
- T-9 1989 Ford F-800 Flusher Truck poor/fair condition (pump needs replaced)
- T-20 1986 GMC C6000 Load Lugger Truck poor ccondition
- W-21 1990 Ford F-800 2½ Dump poor condition
- T-31 2004 Ford F-450 1 ton dump truck good condition
- T-104 2000 International 2½ ton Dump fair to good condition
- T-122 2006 Sterling VacTor Combination Sewer Cleaner good condition
- T-123 1994 Ford LNT 8000F Dump fair condition (former Vac Truck)
- T-124 1998 Ford Aeromax Dump fair condition
- T-111 2014 Ford F450 1 ton dump assigned to Sewer Crew
- T-112 2015 International 7400 SFA 2½ ton dump assigned to Sewer Crew
- T-125 2015 Freightliner VacTor Combination Sewer Cleaner