



# UTILITIES DEPARTMENT

## MONTHLY ACTIVITY REPORT

### JUNE 2025

<b>BCWWTP</b>	
<b>5/1/2025</b>	-Staff troubleshoot MBR train #6 (RAS pump failure) – replaced VFD.
<b>5/5/2025</b>	-Plant staff initiated annual MBR recovery cleans (approx. 6-week process).
<b>5/12/2025</b>	-Provided a plant tour for cub pack 406.
<b>5/23/2025</b>	-Repairs were made the MBR bridge crane.
<b>6/2/2025</b>	-Operators moved the influent sampler pump to the south wet in order for them to repair IPS inlet gate 141; Parts were ordered.
<b>Franklin Acres Pump</b>	-No Operational Issues.
<b>Briar Creek Pump Station</b>	-No Operational Issues.
<b>Wolfe Run Pump Station</b>	-No Operational Issues.
<b>Laurel Point Lift Station</b>	-No Operational Issues.
<b>Water Supply</b>	5/23-Repaired south tank discharge check valve. 6/7-Plant staff assisted field crew in locating a water break.
<b>**Commonly Used Acronyms</b>	<b>IPS:</b> Influent Pump Station, <b>EPS:</b> Effluent Pump Station, <b>RDT:</b> Rotating Drum Thickener, <b>ATAD:</b> Autothermal Thermophilic Aerobic Digestion, <b>MCC:</b> Motor Control Center <b>FOG:</b> Fats, Oils and Grease, <b>OCV:</b> Automatic Control Valve, <b>NASSC:</b> National Association of Sewer Service Companies, <b>BOD:</b> Biochemical Oxygen Demand, <b>RAS:</b> Return Activated Sludge, <b>MBR:</b> Membrane Bioreactors, <b>UPS:</b> Uninterruptible Power Supply, <b>FAPS:</b> Franklin Acres Pump Station, <b>WRPS:</b> Wolfe Run Pump Station, <b>BCTP:</b> Brush Creek Treatment Plant <b>POTW:</b> Publicly owned treatment works, <b>OTP:</b> One time programmable, <b>ORP:</b> Oxidation Reduction Potential, <b>PLC:</b> Programmable Logic Controller, <b>UPS:</b> Uninterruptible Power Supply. <b>TTHM:</b> Total Trihalomethanes
<b>COLLECTION SYSTEM MAINTENANCE</b>	
<b>Industrial Users</b>	-Headworks Analysis submitted to EPA. Working through follow up comments from EPA. -Gannett Fleming reviewing DMR reports for industrial users. Setting up meetings with IU's to discuss reporting practices.
<b>Incoming FOG Users</b>	- Mission BBQ, Togyu Asian BBQ & Bar, Jersey Mike's (Rt. 228), Mr. Mister, Ichiban Express.
<b>Existing FOG Maintenance</b>	-Performing <b>FOG</b> permit renewal inspections. -Site visits for "Non-compliant" and "No Pump Outs" <b>FOG</b> user. -9 Establishments are non-compliant with their pump out schedule. - Gannett Fleming is now taking a role in carrying out the Township's FOG program. This will include ongoing compliance monitoring and reporting.
<b>Flow Metering</b>	-32 SmartCover flow monitors are installed on the interceptors and sub-basins. -3 SmartCovers currently require maintenance. Coordinating maintenance with crew.
<b>Manhole Assessment</b>	-EdgeAi CCTV robot now being deployed in the field. Performing inspections in Fernway area to identify deficiencies. -Manhole inspections being conducted by field crew on a weekly basis to better determine where to conduct remediation efforts. -Monitoring H2S gas in manholes exhibiting signs of deterioration.
<b>Sewer Repair &amp; Maint.</b>	-Working with Insight Pipe to prepare quote for Interceptor 1 CCTV and lining. Roughly 17,000' of sewer main will be inspected to assess scope of lining efforts. -ROW clearing completed near Woodbine and Graham School Rd.
<b>Force Main</b>	-Continuing to monitor sewer gas levels being discharged at each force main. Working with lab to create plan for pH sampling. -Changed out 2 air relief valves on Wolfe Run FM as part of routine maintenance.
<b>Miscellaneous</b>	-Commons at Thorn Hill sewer access agreement is fully executed. Working with Public Works to construct the access road. -Drafting outline for implementation of a Point-of-Sale Program for sewer lateral certification.

**WATER DISTRIBUTION**

All Meter Svs	-No Operational Issues.			
Connect Tap	-19 taps, Breckenridge, Laurel Point, Forest Edge, Park Place.			
Water Main Break Repairs	-5/20-Route 19 (Streets of Cranberry) -5/22-Route 19 (Cordello Lighting) -6/3-62 Monmouth -6/5-Route 19 (Gillese transmission) -6/6-Kandyce Road -6/8-Executive Drive -6/9-147 McDonald Drive			
Leak Checks	-20 Leaks investigated.			
Service Line Repairs	-212 Brookston Dr.			
Terminations	-6/10-5 Terminations. -6/17-14 Terminations.			
USIC/Comcast	-No Operational Issues.			
PA One-Calls	-8011 Maureen- Wire Replacement. -500 Quail Drive- No Power Repair.			
Flushing Program	-Flushing program has been suspended due to influx of water breaks.			
Curb Box Maintenance	-5 Curb boxes have been repaired or replaced; Marty’s Suburban, 714 England Dr, 713 England Dr, 237 Creekwood, & 711 England Dr.			
Hydrant Maintenance	-No Operational Issues.			
Valve Maintenance	-3 Valves Repaired: Heights and Camelot			
Monthly Utility Counts: Apr. 2025	Meter Replacements: 2	Inspections (Water, Sewer & Development): 11		
	Taps: 10	Meter Installs: 29		
Backflow Program				
Program Start Date: 2/7/2022			Compliance Percentage: 93.35%	
Total # of Devices: 1445		Total Tests Performed: 1349		Total Tests Passed: 1305
Water/Sewer/Storm (CA1) One Call Utility Locates				
Apr. 2025	Cran. Twp.	Emergency After Hours: 2	Design: 4	
	USIC	Tickets Received: 475	Tickets Marked: 139	Emergency: 26

## BRUSH CREEK SEWAGE TREATMENT PLANT

## Flow History

\*\* Flow is in millions of gallons multiply by Brush Creek Capacity 8.7 mg Marshall Allocation .135 mg Purchased Water (West View) Annual allocation 4,150 MGD

NOTE: As of 7/9/2020 all flow data is based on Marshall Twp billing cycle and NOT monthly averages since billing is not based on a calendar month.

2025	12/09/25-1/10/26	1/10/25-2/7/26	2/7/25-3/7/26	3/7/25-4/14/26	4/14/25-05/08/26	5/8/25-6/9/26						TO DATE
B.C.T.P. FLOW	126.204	114.656	129.685	140.993	96.578	123.206						731.322
DAILY AVG.	3.9440	4.0950	4.632	3.7100	4.0241	3.8500						24.2551
MARSHALL FLOW	21.144	17.941	21.619	27.69	15.648	12.584						116.626
DAILY AVG.	0.6608	0.6408	0.7721	0.7287	0.6520	0.6745						4.1289
NEW SEWICKLEY	0.334	0.298	0.244	0.339	0.223	0.350						1.788
DAILY AVG.	0.0104	0.0106	0.0087	0.0089	0.0093	0.0109						0.0588
RAIN FALL	2.73	1.15	3.79	4.33	4.36	4.49						20.85
PURCHASED WATER	93,260	85,010	82,677	110,972	78,074	110,057						93,726.790
DAILY AVG.	2.914	3.036	2.952	2.92	3.253	3.439						3.086

2024	12/7/23-1/8/24	1/8/24-2/8/24	2/8/24-3/8/24	3/8/24-4/8/24	4/8/24-05/08/24	5/8/24-6/7/24	6/7/24-7/8/24	7/8/24-8/12/24	8/12/24-9/9/24	9/9/24-10/10/24	10/10/24-11/8/24	11/8/24-12/9/24	TO DATE
B.C.T.P. FLOW	121.975	145.367	114.982	153.168	126.917	103.565	87.609	128.237	109.012	97.2330	84.322	108.845	1381.232
DAILY AVG.	3.8117	4.6890	3.965	4.9410	4.2310	3.4522	2.8260	6.6640	3.8930	3.1370	2.9077	3.5110	48.0286
MARSHALL FLOW	20.624	25.911	19.310	26.845	25.014	20.76	9.849	33.983	16.792	18.539	16.979	18.731	253.337
DAILY AVG.	0.6445	0.8358	0.6659	0.8660	0.8338	0.6920	0.3177	0.9709	0.5997	0.5980	0.5855	0.6042	8.2140
NEW SEWICKLEY	0.355	0.308	0.269	0.299	0.297	0.278	0.297	0.365	0.287	0.290	0.251	0.308	3.604
DAILY AVG.	0.0111	0.0099	0.0093	0.0096	0.0099	0.0093	0.0096	0.0104	0.0102	0.0094	0.0087	0.0099	0.1173
RAIN FALL	3.36	4.19	3.32	7.76	5.45	3.5	2.84	8.28	3.21	2.5	0.37	4.3	49.1
PURCHASED WATER	80,565	86,484	78,369	67,318	83,944	93,422	106,564	119,667	92,654	97,608	83,348	88,202	1,093,498
DAILY AVG.	2.518	2.79	2.702	2.667	2.798	3.114	3.438	3.419	3.309	3.149	2.874	2.845	2.969

Meter rolled over adjustment will be reflected in next month

NPDES Compliance History Report 2023  
Brush Creek Water Pollution Control Facility

Parameter													Parameter					
Limit mg/L	CBOD 10/20*	Total Suspended solids 30	Ammonia Nitrogen 2/5*	Dissolved Oxygen 5 min	Phosphorus 2.0	Chlorine Residual 0.18	p H** standard units	Flow MG/D 8.73	Fecal Coliform 200/100* 2100/100*	Total Nitrogen M&R	E. coli M&R		Free Cyanide M&R	Hex Chromium M&R	Total Copper M&R	Dissolved Iron M&R	Total Zinc M&R	Regulatory Compliance Y/N
January	< 2.0	<2.0	<0.03	7.5	1.35	0	6.4	7.2	3.511	<1.0	30.2	<1.0	<0.005					Y
February	< 2.0	<2.0	<0.19	7.35	0.7	0	6.5	7.3	4.532	<1.0	29.2	<1.0	<0.005	<0.001	0.006	0.004	0.0003	Y
March	< 2.0	<2.0	<0.03	7.82	1.05	0	6.3	7.3	3.57	<1.0	30	<1.0	<0.005					Y
April	< 2.0	<2.0	<0.03	6.71	1.28	0	6.5	7.4	4.027	<1.0	43.6	<1.0	<0.005	<0.001	0.005	0.04	0.0002	Y
May	< 2.0	< 2.0	<0.03	6.4	1.42	0	6.7	7.2	3.98	<1.0	39.2	<1.0	0.003					Y
June																		Y
July																		Y
August																		Y
September																		Y
October																		Y
November																		Y
December																		Y
Yearly Avg.	0.0	0.0	0.0	7.2	1.2	0.000	6.5	7.3	3.9	0.0	34.4	0						Y

\* Different limits during the summer and winter months (seasonal limits)

\*\* Between 6.0 and 9.0 standard units

M&R - Monitor and Report only

NOTE: ALL DATA (INCLUDING FLOW) VALUES ARE MONTHLY AVERAGES AS REQUIRED BY PERMIT

## Definitions:

Ammonia Nitrogen	Ammonia nitrogen (NH <sub>3</sub> -N) is a measure for the amount of ammonia, a toxic pollutant often found in sewage. It can also be used as a measure of the health of water in natural bodies such as rivers or lakes and creeks.
Chlorine Residual	Chlorine is added to kill harmful bacteria, residual chlorine even at low concentrations, can be toxic to aquatic life and must be removed.
Dissolved Oxygen	The dissolved oxygen (DO) is oxygen that is dissolved in water. It is essential for the survival of fish & other aquatic organisms.
Fecal Coliform	Coliform bacteria generally originate in the intestines of warm-blooded animals. Large quantities of fecal coliform bacteria in water may indicate a higher risk of pathogens being present in the water.
Flow	Average Daily Flow is the average of 24-hour volumes to be received by the wastewater system for a continuous 12-month period. Treatment plants are designed to operate at a certain hydraulic capacity.
pH	pH is measured by a logarithmic scale from 0-14. If the pH of water is too high or too low, the aquatic organisms living within it will die the majority of aquatic life prefer a pH range of 6.5-9.0.
Phosphorus	Phosphorus removal is vital to ensuring public safety and protecting the environment. Removal of this nutrient from waste streams is key to preventing eutrophication – a natural process inciting algae blooms.
Seasonal Limits	Recreational water quality criteria that provides an appropriate level of protection or those recreating in Pennsylvania's surface waters.
Total Suspended solids	Total suspended solids are any particles that floats or "suspends" in water, including sand, sediment, or organic matter. High solids entering a receiving water may decrease water's natural dissolved oxygen levels and increase water temperature.
Total Nitrogen	Nitrogen is found in human waste, foods, cleaning detergents and discharges from industrial and commercial sources. Urea/urine is the largest source of nitrogen in residential wastewater. Nitrogen is a nutrient and can cause algae blooms.