

**City of Port Washington
Wastewater Utility
2017 Annual Report**

Operations Performance Summary

The Wastewater Utility recorded a total annual influent plant flow of 568,120,000 gallons (-3.2%)* in 2017. The average daily plant flow was 1.56 million gallons versus 1.61 million in 2016. There was no bypassing of flow during 2017. Total rainfall in 2017 was 35.75 inches (-3.7%).

The plant Influent Biochemical Oxygen Demand (BOD) loading was 958,845 pounds (-3.4%) for a daily average of 2,627 pounds, or 202 mg/l. The treatment plant reduced the BOD in the effluent to 45,272 pounds (-1.2 %) for the year and a daily average of 124 lbs, or 10 mg/l.

The plant Influent Suspended Solids (TSS) loading was 875,853 pounds (-1.3%), for a daily average of 2359 pounds, or 185 mg/l. The treatment plant reduced the yearly effluent TSS to 22,078 pounds (-29.4 %), with a daily average of 60 pounds or 4.7 mg/l.

The plant influent phosphorus loading for the year was 23,187(+8.8 %) pounds for a daily average of 64 pounds or 4.9 mg/l. The treatment plant reduced the yearly effluent phosphorus to 2538 pounds (-5.3 %), with a daily average of 7.0 pounds or 0.54 mg/l. Phosphorus removal was achieved with 63,483 pounds (-.05 %) of iron from a ferrous chloride solution.

The City of Port Washington Wastewater Utility Wisconsin Pollutant Discharge Elimination System (WPDES) permit, calls for effluent limits of the above mentioned evaluating criteria to be:

<u>Permit Limits</u>	<u>2017 discharges</u>	<u>% Removal</u>
BOD - 30 mg/l	45,272 lbs.	95.3 %
TSS - 30 mg/l	22,078 lbs.	97.5 %
Phosphorus - 1.0 mg/l	2,538 lbs.	89.1 %

In 2017 the plant produced a total of 257 metric tons (+ 19.0 %) of anaerobic sludge.

The Sewage Utility Rate did not increase in 2017 and no rate increases are planned for 2018.

WWTP Capital purchases for 2017

- Purchase of Shared Sewer Camera - \$5000
- RAS pump VFD replacement - \$6975
- Installation of Drain for L.S.2 Forcemain - \$6941.25
- Stored Sludge Tank Flow meter - \$2784.01
- Sludge Valve Boiler Room - \$889.59
- Sewer Crew Communication Headsets - \$2792.50
- South Grit Lift Gearbox Replacement - \$5055.45
- Phase 1 Controls SCADA upgrade WWTP - \$162,150

CITY OF
PORT WASHINGTON

DEPARTMENT OF
PUBLIC WORKS

WASTEWATER UTILITY

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- Ferrous Chloride pump replacement - \$8572
- Lift Station 4 valve actuator replacement - \$2771

Revenue and Expense Summary

2017 Waste Hauler revenue for septage, holding tank, grease trap, landfill leachate, and other surcharged wastewaters totaled \$348,555 (- .06%).

Additional information on revenues and expenses vs. the 2017 WWTP budget plan can be found in the final Revenue and Expense Report summary.

The Compliance Maintenance Annual Report (CMAR) which shows in greater detail the operational performance of the Wastewater Utility for 2017 will be forwarded to the DNR Plymouth Service Center, upon approval from the Board of Public Works and the City Council. The CMAR is available on May 31 with a June 30th submittal deadline.

SANITARY SEWER MAINTENANCE SUMMARY

Basic Sanitary Sewer Street Dept. Utility Repairs and Maintenance

- 1609 Parknoll Circle – Replaced top 4 feet sanitary manhole and installed new casting.
- Intersection of Maritime Drive and Mineral Springs - Replaced casting and adjusting ring on manhole.
- Misty Ridge – Reset casting around vent end of retention pond along Highway 32.
- End of Jackson Street – Reset Sanitary manhole in parking lot of Newport Shores.

There was no sanitary sewer lining in 2017. 15,000 feet of Sanitary sewer was cleaned and inspected via camera in 2017.

* (%) Indicates % increase or decrease from 2016

