

**City of Port Washington
Wastewater Utility
2015 Annual Report**

Operations Performance Summary

The Wastewater Utility recorded a total annual influent plant flow of 536,790,000 gallons (+7.2%)* in 2015. The average daily plant flow was 1.47 million gallons versus 1.37 million in 2014. There was no bypassing of flow during 2015. Total rainfall in 2015 was 37.86 inches (+22.9 %).

The plant Influent Biochemical Oxygen Demand (BOD) loading was 1,003,617 pounds (+ 13.5 %) for a daily average of 2,750 pounds, or 251 mg/l. The WWTP has typically processed over 1 million pounds each year. The treatment plant reduced the BOD in the effluent to 46,534 pounds(- 2.5 %) for the year and a daily average of 127 lbs, or 10 mg/l.

The plant Influent Suspended Solids (TSS) loading was 855,533 pounds (+ 9.9 %), for a daily average of 2344 pounds, or 191 mg/l. The treatment plant reduced the yearly effluent TSS to 32,078 pounds(+4.1 %), with a daily average of 88 pounds or 7 mg/l.

The plant influent phosphorus loading for the year was 22,225(+21.8 %) pounds for a daily average of 61 pounds or 5.0 mg/l. The treatment plant reduced the yearly effluent phosphorus to 2980 pounds(+10.0 %), with a daily average of 8.2 pounds or 0.67 mg/l. Phosphorus removal was achieved with 55,297 pounds (+ 6.9 %) 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>2015 discharges</u>	<u>% Removal</u>
BOD - 30 mg/l	46,534 lbs.	95.4 %
TSS - 30 mg/l	32,078 lbs.	96.3 %
Phosphorus - 1.0 mg/l	2,980 lbs.	86.6 %

In 2015 the plant produced a total of 1,607,500 gallons (+ 27.9 %) of anaerobic sludge. All of this material was land applied and injected. For the first time since the plant was upgraded, all sludge was applied in the fall of 2015.

The Sewage Utility Rate did not increase in 2015 and no rate increases are planned for 2016.

WWTP Capital purchases for 2015

- WWTP Roof and Railings - \$516,756
- WWTP Walkway project - \$499,066
- New Control unit East Sludge Boiler - \$2830.43
- Transducer for Sludge Storage Tank - \$1960
- Check Valves replacement TWAS pumps - \$3402
- Aeration Tank 2 Air Control Valves replaced - \$8233
- Security Camera System - \$10,671
- Rebuilt #2 Sludge Recirculation pump - \$7993

**CITY OF
PORT WASHINGTON**

**DEPARTMENT OF
PUBLIC WORKS**

WASTEWATER UTILITY

Dan E. Buehler
Wastewater Supt.
450 North Lake Street
P. O. Box 307
Port Washington, WI
53074-0307

Phone: (262) 284-5051

Fax: (262) 284-5798

Email:

dbuehler@ci.port-washington.wi.us

**Port Washington City Hall
100 West Grand Avenue
P.O. Box 307
Port Washington, WI
53074-0307**

- Replaced TWAS flow meters - \$13,151
- Rebuilt Plant Boiler Actuator - \$1537

Lift Station and Collection System Capital purchases

Lift Station 1 Grinder Rebuild - \$14,353

Revenue and Expense Summary

2015 Waste Hauler revenue for septage, holding tank, grease trap, landfill leachate, and other surcharged wastewaters totaled \$359,663(+19.7%).

Additional information on revenues and expenses vs. the 2015 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 2015 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

- Blue Spruce Ct. – Replaced castings and adjusted 2 manholes at east end of Blue Spruce Ct.
- Stanford St. between W. Monroe St. and W. Whitefish Rd. – Adjusted 2 manholes and replaced castings.
- South end of Upper Lake Park near bathrooms – Replaced casting.
- N. Maple St. at Simplicity building – Raised manhole in creek and replaced casting.
- Cleaned 10.0 miles of sanitary sewer main.
- Televised 2.9 miles of sanitary sewer main.

Major Sanitary Repairs and Maintenance

- Installed 428 feet of 6 inch and 1152 feet of 8 inch sewer pipe for High Bluff Estates Development.
- Installed 12 manholes in High Bluff Estates Development

* (%) Indicates % increase or decrease from 2014

