

WESTERN TOWNSHIPS UTILITIES AUTHORITY

THE SYSTEM

The Western Townships Utilities Authority (WTUA) service area includes the Charter Townships of Canton, Northville and Plymouth. The service area is approximately seventy (70) square miles in size with an estimated population of 147,612 per the Southeast Michigan Council of Governments (SEMCOG) data as of December 2015.

The three communities are in the northwest corner of Wayne County, Michigan. The rectangular shaped service area is roughly bounded by I-275 on the east, Eight Mile Road to the north, The Wayne County/Washtenaw County border on the west and US-12 on the south. The WTUA service area does not include the City of Plymouth or the City of Northville.

The WTUA system is comprised of a number of gravity interceptors, lift stations, pump stations, force mains and equalization basins. The equalization basins are used for shaving peak flows, especially during wet weather events. General flows are intercepted from the local township sanitary sewer systems using a combination of newly constructed (i.e. 1990's) and older (i.e. 1930's and 1960's) sanitary sewer interceptors. The entire local service area has separated sanitary sewers. About 12,500 homes have footing drains connected to the local sanitary sewers. The flows travel in a southerly direction to the Middle Rouge lift station where pumps lift the wastewater about 55 feet so it may continue to flow by gravity to the Lower Rouge pump station or to the DWSD WWTP via Wayne County. At the Lower Rouge pump station, flows are pumped using large centrifugal pumps, westerly along US-12 to the Ypsilanti Community Utilities Authority (YCUA) wastewater treatment plant via twin force main pipes. Flow from Lower Rouge can also be directed to the DWSD WWTP via Wayne County.

WTUA also owns the final treated effluent pump station at the YCUA wastewater treatment plant, which transports the tertiary level treated flows via large force main pipe back to the Lower Rouge River in Canton Township at a point north of US-12.

WTUA contracts, either on behalf of or through its member townships, for wastewater treatment services at both the YCUA wastewater treatment plant and the Wayne County – Rouge Valley Sewage Disposal System that sends flows on to the Detroit Water and Sewerage Department (DWSD) wastewater treatment plant.

TOTAL CONSUMPTION

Calendar Year Ended December 31	Total Adjusted Water Volume (thousand gallons)	Total Wastewater Volume (thousand gallons)
2015	4,712,000	5,546,613
2014	4,513,720	5,580,509
2013	4,750,707	5,391,372
2012	5,552,564	5,037,299
2011	5,357,506	6,150,809
2010	5,212,910	5,346,946
2009	5,222,590	5,725,810
2008	5,832,617	5,934,666
2007	6,011,688	5,695,188
2006	5,365,195	5,855,047

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SEWAGE FLOWS

WTUA maintains a network of flow meters around its service area to monitor wastewater flows. The table below provides the average daily flow and maximum daily flow for the last ten years.

Calendar Year	Daily Flow (MGD)	
	Average	Maximum
2015	15.19	35.71
2014	15.29	31.57
2013	14.76	36.74
2012	13.76	28.51
2011	16.85	50.86
2010	14.64	47.39
2009	15.70	38.63
2008	16.23	47.37
2007	15.58	31.82
2006	16.05	35.05

TOP TWENTY MAJOR USERS OF THE WTUA SYSTEM

While the majority of the flow generated within the WTUA service area is residential wastewater, the following business and institutions comprise our top twenty users, based on volume of water used.

No.	Township	Business/Institution Name	Annual Usage*
1	Plymouth	Absopure Water Company	135,227
2	Northville	Advanced Disposal (actual wastewater discharged)	27,059
3	Plymouth	Tower Automotive	18,120
4	Canton	Yazaki North America	15,297
5	Plymouth	Plymouth Township	12,845
6	Canton	Lifetime Fitness	9,808
7	Canton	Metaltec Steel	9,310
8	Northville	Northville Village Center	8,740
9	Plymouth	St. John's Complex	8,467
10	Canton	A.D. Transport	6,847
11	Plymouth	Aunt Millie's Bakeries	6,532
12	Northville	ZF Group	6,007
13	Northville	Northville Schools	5,728
14	Plymouth	Hilton Garden Inn	5,547
15	Canton	Republic Services (actual wastewater discharged)	5,463
16	Canton	Sysco Food Services	5,028
17	Plymouth	Independence Village	5,020
18	Northville	Meadowbrook Country Club	4,970
19	Plymouth	Johnson Controls	4,888
20	Plymouth	Plymouth Industrial	4,603

*All usage units are expressed in thousands of gallons.

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HISTORICAL REVENUES & EXPENDITURES

Below is a table that depicts the operating revenues and expenditures for WTUA since 2005. Prior year numbers have been restated for a change in accounting principal implemented in fiscal year 2010. In previous years the YCUA look-back was recorded on a one-year lag due to the timing of the computation. The Authority is now able to reasonably estimate the look-back; therefore, an estimated look-back is recorded in the current period.

Fiscal Year September 30	Operating Revenues	Operating Expenses	Surplus
2016*	\$ 15,981,358	\$ 15,981,358	\$ -
2015	14,379,036	14,379,036	-
2014	12,824,009	12,824,009	-
2013	12,121,008	12,121,008	-
2012	12,222,616	12,222,616	-
2011	11,914,384	11,914,384	-
2010	12,071,271	12,071,271	-
2009	11,882,428	11,882,428	-
2008	12,059,040	12,059,040	-
2007	11,347,545	11,347,545	-
2006	10,929,627	10,929,627	-
2005	10,138,593	10,134,593	4,000

*Current year budget.

WTUA NET ASSETS

The table below shows the net assets over the past ten years.

Fiscal Year Ended September 30	Net Assets
2015	\$ 95,910,446
2014	89,719,125
2013	83,889,705
2012	79,677,402
2011	76,145,605
2010	73,050,648
2009	69,138,230
2008	53,311,884
2007	41,514,024
2006	37,582,401

CURRENT RATE

WTUA is reimbursed for its costs incurred by the member Townships. Costs are billed to the Townships on a monthly basis. The imputed rate of operations for the last two fiscal years was \$2.57 and \$2.23 per thousand gallons of wastewater processed, respectively. The imputed rate of all billings to the Townships for operations, current capital contributions and debt payments for the last two fiscal years was \$4.80 and \$4.46 per thousand gallons of wastewater processed, respectively.