

# 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 152,046 per the Southeast Michigan Council of Governments (SEMCOG) for December 2010.

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 is in the process of expanding the Lower Rouge pump station facility with an anticipated completion of July 2011. The expansion will add an additional 5.5 million gallons of storage capacity as well as increase the pumping capacity of the pump station. With this expansion, the collection and transportation system capacity is sufficient to handle all the projected future flows generated within the WTUA member townships.

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)
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
2005	5,896,964	5,438,869
2004	5,594,640	5,508,496
2003	5,541,869	5,464,465
2002	5,732,968	5,560,351
2001	5,222,105	6,037,609

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### SEWAGE FLOWS

WTUA has a network of wastewater flow meters around its service area. The metering program began in 1994 and is a major component of our annual operations and maintenance program.

Calendar Year	Daily Flow (MGD)	
	Average	Maximum
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
2005	14.92	35.86
2004	15.06	30.41
2003	14.94	36.87
2002	14.36	26.44
2001	16.14	37.13

### TOP TWENTY MAJOR USERS OF THE WTUA SYSTEM

While about 80% of the flow generated within the WTUA service area is residential wastewater, the following business and institutions comprise our top twenty list of users, based on volume of water used.

No.	Township	Business/Institution Name	Annual Usage*
1	Plymouth	Absopure	149,835
2	Northville	Veolia Environmental (actual wastewater discharged)	26,603
3	Canton	Yazaki N America	21,712
4	Plymouth	Automotive Components Holding	18,043
5	Canton	Lifetime Fitness	13,841
6	Plymouth	Tower Automotive	11,376
7	Canton	A.D. Transport	10,590
8	Plymouth	Johnson Controls, Inc.	8,889
9	Northville	Northville Schools	8,236
10	Northville	Northville Village Centers	8,207
11	Canton	Metaltec Steel	7,595
12	Northville	Hawthorn Center	7,156
13	Plymouth	Compuware Sports Arena	7,126
14	Canton	Sysco Food Services	7,126
15	Canton	Waltonwood at Cherry Hill	6,840
16	Canton	Salem High School	6,663
17	Canton	Canton High School	6,021
18	Plymouth	Hilton Garden Inn	5,993
19	Canton	IKEA	5,845
20	Canton	The Durcon Co	4,900

\*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 2001. Prior years numbers have been restated for a change in accounting principal implemented in fiscal year 2010. In previous years the YCUA lookback was recorded on a one-year lag due to the timing of the computation. The Authority is now able to reasonably estimate the lookback on a current basis, therefore an estimated lookback is recorded in the current period.

Fiscal Year September 30	Operating Revenues	Operating Expenses	Surplus
2011*	\$ 14,461,347	\$ 14,461,347	\$ -
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
2004	10,164,330	10,155,830	8,500
2003	9,968,837	9,959,337	9,500
2002	9,494,688	9,483,188	11,500
2001	8,865,363	8,865,363	-

\*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
2010	\$ 73,050,648
2009	69,138,230
2008	53,311,884
2007	41,514,024
2006	37,582,401
2005	30,953,324
2004	29,999,425
2003	28,564,414
2002	8,970,156
2001	4,869,091

## 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 \$2.21 and \$2.05 per thousand gallons of wastewater processed, respectively. The imputed rate of all billings to the Townships for operations, current capital contributions and debt payments was \$ 4.51 per thousand gallons of wastewater processed for the past fiscal year. The decrease from the prior year rate of \$ 6.41 (restated for change in accounting principal) per thousand gallons of wastewater processed is due mainly to a decrease in capital contributions for the Lower Rouge basin expansion project which is nearing completion.