

# 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 158,355 per the Southeast Michigan Council of Governments (SEMCOG) data as of July 2023.

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. 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.

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 the YCUA wastewater treatment plant.

## TOTAL CONSUMPTION

Calendar Year Ended December 31	Total Wastewater Volume (thousand gallons)
2023	4,739,859
2022	4,400,954
2021	5,249,352
2020	5,104,068
2019	5,253,449
2018	5,179,868
2017	5,325,623
2016	5,748,684
2015	5,546,613
2014	5,580,509

## WESTERN TOWNSHIPS UTILITIES AUTHORITY

### 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
2023	13.36	29.01
2022	13.05	27.78
2021	15.35	32.44
2020	14.46	33.62
2019	15.68	34.36
2018	16.51	34.97
2017	16.54	37.27
2016	15.70	37.33
2015	15.19	35.71
2014	15.29	31.57

### 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	102,851
2	Northville	Highland Lakes	34,130
3	Northville	Arbor Hills Landfill	27,694
4	Northville	Park Place Apartments	25,975
5	Canton	Glen Ridge Mfg Homes	24,328
6	Plymouth	Tower Automotive	16,122
7	Canton	West Point Manor	15,850
8	Northville	Kings Mill	15,179
9	Northville	Terrace at Northville Ridge	10,929
10	Canton	Lifetime Fitness	10,052
11	Canton	Metallic Steel	9,665
12	Northville	Springwater Park	9,506
13	Northville	Northville Forest	9,466
14	Northville	Country Club	9,436
15	Plymouth	Aunt Millie's Bakeries	8,638
16	Northville	Northville Village Center	8,626
17	Canton	Canton Renewables	8,588
18	Northville	Northville Woods Apartments	7,722
19	Plymouth	Saint John's Complex	7,666
20	Canton	Salem High School	7,539

\*All usage units are expressed in thousands of gallons.