



Rochester Hills Water Supply System Water System Advisory Council Water System Update May 1, 2024



Rochester Hills Water System Advisory Council (WSAC)

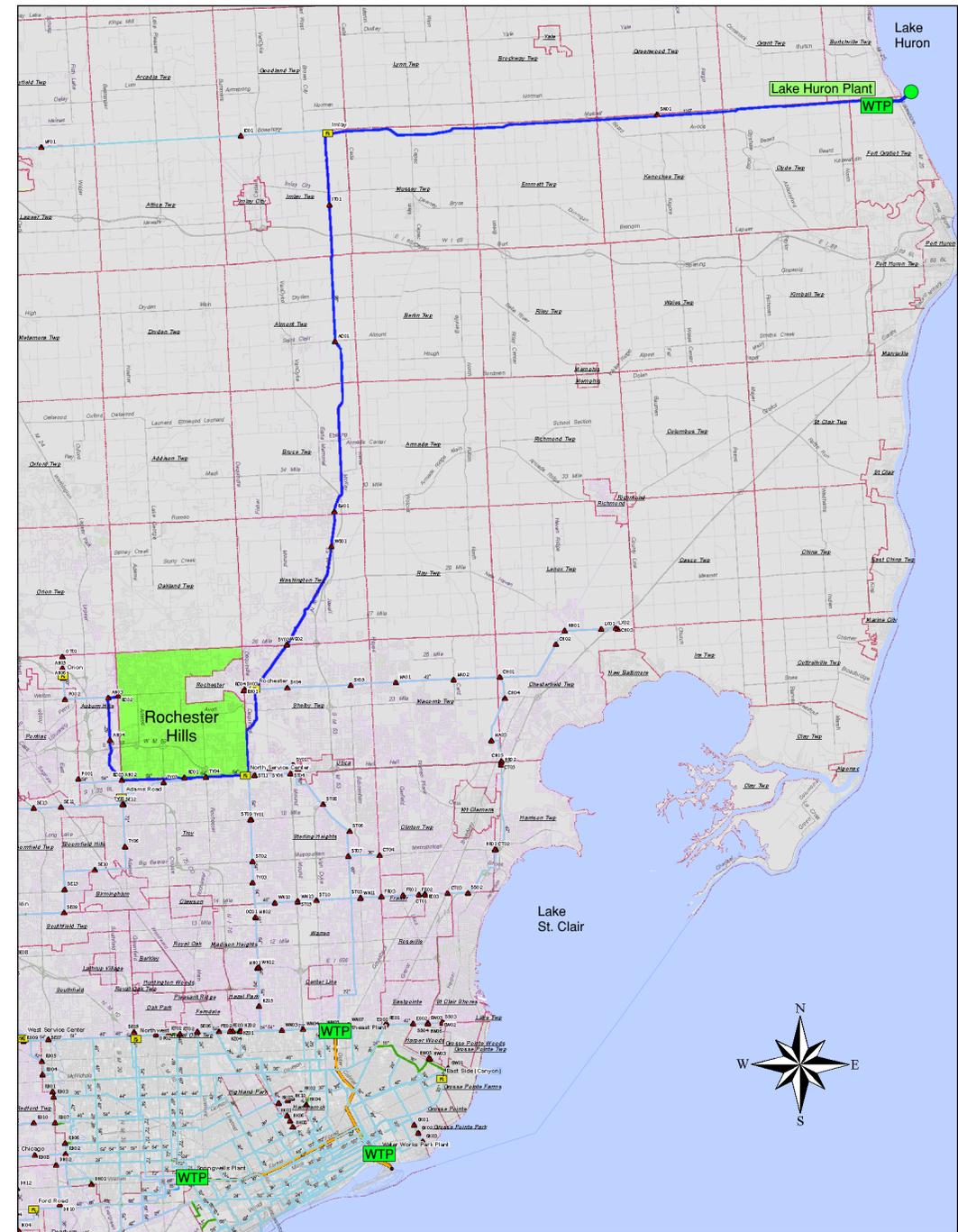
The creation of the Rochester Hills WSAC is a requirement of the MDEQ Lead and Copper Rule changes effective June 14, 2018. All water systems that provide drinking water to a population greater than 50,000 are required to create a WSAC. The Water & Sewer Technical Review Committee was changed to the WSAC to meet these requirements at the November 12, 2018 City Council Meeting.

The council shall consist of at least 5 members. The current members of the WSAC are:

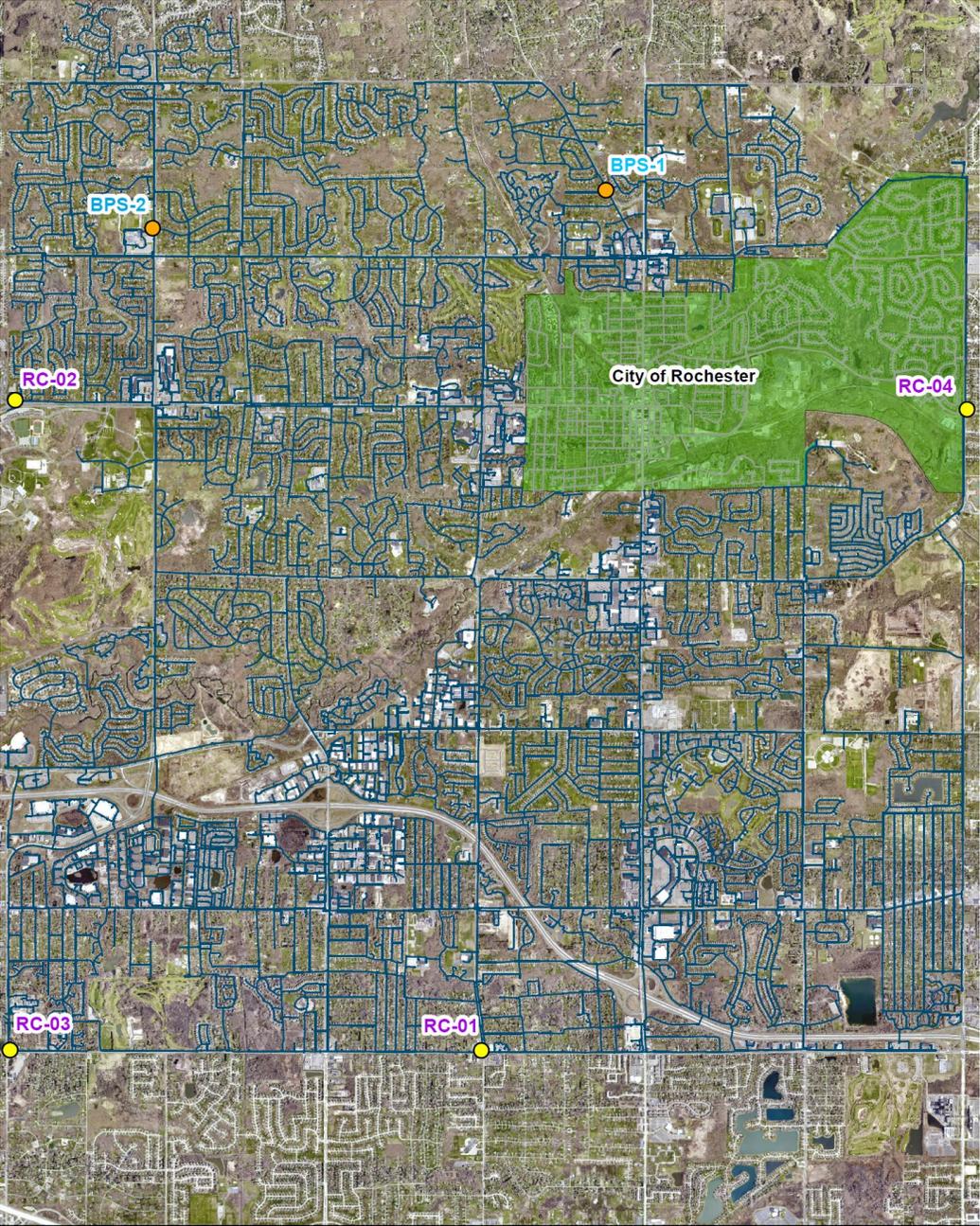
- City Council Members: Jason Carlock, David Walker, and Carol Morlan
- Youth Council Representatives: Jackson Otlewski and Aaron Yoon
- Administrative Staff Members: Tracey Balint, Public Utilities Engineering Manager and Leon Luedeman, Water & Sewer Operations Manager
- Citizen Representatives: Ryan Garvey, Greg Hooper, Philip Hurst, Zef Ivanaj, and John Paille

Rochester Hills Water Supply System

- The City of Rochester Hills drinking water is surface water from the lower Lake Huron watershed and is treated at the Great Lakes Water Authority (GLWA) Lake Huron Water Treatment Plant in Port Huron.
- The Rochester Hills water system is a member of the North Oakland County Water Authority (NOCWA) system.
- The water system consists of 8 pressure districts and approximately 440 miles of water main. Construction records indicate initial water main installation occurred in the late 1960's with construction of water main in locations like University Hills and Tienken Manor Estates Subdivisions. On community wells prior to connecting to water from Detroit.
- The first agreement with the City of Detroit to purchase water was finalized on January 26, 1970.



City of Rochester Hills Water System



- RC01 – RC04, water feeds from GLWA
- BS1 – water booster station #1
- BS2 – water booster station #2



DPS Water Related Accomplishments

- Submitted the annual cross-connection and annual pumpage report to EGLE, March 2023.
- The 2023 Water Quality Report (Consumers Confidence Report, CCR) is now available to all of our water customers.
- PRV 9 Relocation has been completed, final restoration items still needed. The pressure reducing valve (PRV) was located in Walton Blvd, just east of Brewster. The PRV was relocated to the ROW prior to the RCOC resurfacing Walton Blvd.
- Avon Industrial Water Main Replacement Project, replacing approximately 9,000 LFT of asbestos cement water main. The contractor is on-site and work is expected to commence this week.
- 2024 Water Replacement Project, Judson Park & Brabach Orchards Subdivisions, replacing approximately 18,000 LFT of asbestos cement water main. Project is expected to start at the beginning of June, 2024.
- 2024 Lead and Copper Sampling. Communication to participates to go out mid-May. Sampling to be performed end of July / beginning of August. Annual sampling required at 30 residential locations constructed prior to July 1, 1998.
- Several upcoming water main replacement projects have been added to the Capital Improvement Plan (CIP) over the last few years. Project completion dates are subject to change.

- The MDEQ lead and copper regulation revisions were effective June 14, 2018.
- Prior to the revisions, the City performed lead & copper testing at 13 locations every 3 years.
- **Annual** lead and copper sampling is now required at 30 homes. This is still a reduced number, the number of locations could increase to 60 based on results.
- Water Quality Parameter (WQP) sampling; Ten samples per quarter is now required, previously not required.
- Rochester Hills is required to submit a Complete Distribution System Materials Inventory (CDSMI) to the EGLE on October 16, 2024.

***THERE ARE NO
KNOWN LEAD
SERVICE LINES IN
THE CITY OF
ROCHESTER HILLS***

**MDEQ
Lead and Copper
Rule Changes**



Lead and Copper in your Water Quality Report

2023 Lead and Copper Monitoring at Customers' Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Samples over AL	Range of Individual Results	Violation yes/no	Major Sources in Drinking Water
Lead	2023	ppb	0	15	0	0	0 – 1.2	no	Corrosion of household plumbing system; Erosion of natural deposits.
Copper	2023	ppm	1.3	1.3	0.05	0	0 – 0.1	no	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.

*The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

Historical Lead Results



Year	2023	2022	2021	2020	2019	2017	2014
90 th percentile value	0	0.06	0	0	0	0	0
Total number of samples	30	30	30	30	30	13	13
Number \geq 15 ppb	0	0	0	1	0	0	0

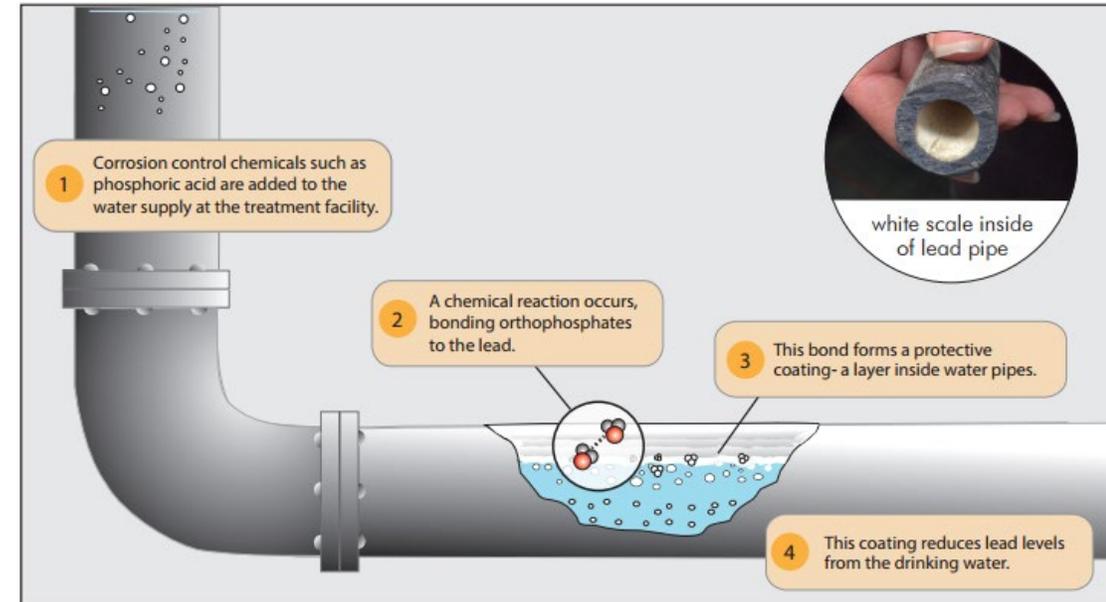
Current action level (AL) is 15 ppb for 90th percentile sample.

Maximum Contaminant Level Goal is 0 ppb.

How is our water protected from lead getting into the drinking water?

- GLWA treats our drinking water with orthophosphate prior introducing the water into the distribution system.
- The orthophosphate forms a protective layer on the inside of plumbing materials to prevent lead and other metals from dissolving in the water.
- This protective layer binds with internal metal surfaces on plumbing to prevent lead from leaching into the drinking water.
- Orthophosphate has been used to control corrosion in the GLWA service area since 1996.

How Do Orthophosphates Coat and Protect Water Pipes?



City Received Drinking Water Asset Management (DWAM) Grant

In 2021, the City of Rochester Hills was awarded \$707,180 for a Drinking Water Asset Management Grant from the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The grant will assist the City in meeting the requirements set forth by the State of Michigan's Safe Drinking Water Act (MI-SDWA) to develop a Complete Distribution System Materials Inventory (CDSMI) by January 1, 2025.

The Grant will allow the completion of the following items:

- Recent guidance from EGLE identified the minimum number of service lines that need to be inventoried for the development of the CDSMI. Based on the guidance, the City of Rochester Hills is required to physically verify the material of a minimum of 379 water services lines. The investigation of the service lines consisted of potholing the curb stop locations to physically observe the public and private side of the service line piping materials as well as an internal verification of the service line material upstream of the homes meter. Inspections nearly complete.
- To develop a transmission main and large valve maintenance and rehabilitation program, the City is proposing to access existing valve vaults and assess the condition of the existing 16-inch and larger valves, perform a pipeline integrity assessment of the 16-inch and larger water mains and strategically inspect the pipes (16-inch & larger) that the City has identified.

Other Water Quality Sampling Initiatives



- Bacti Sampling, 80 samples / month. GLWA takes the samples on behalf of Rochester Hills. Rochester Hills is responsible for finding locations to sample. We have escorted GLWA during the last several weeks as access to buildings has been limited.
- TTHM & HAA5 (chlorine byproducts) routine sampling.
- UCMR4, EPA mandate, sampling was completed at in November 2020. Sampling results are reported on the 2020 Water Quality Report (HAA6 BR & HAA9).
- UCMR5, EPA mandate, additional sampling will be required in 2024. Testing for approximately 30 PFAS and Lithium contaminants. Testing started in February.



Questions





Thank You!

