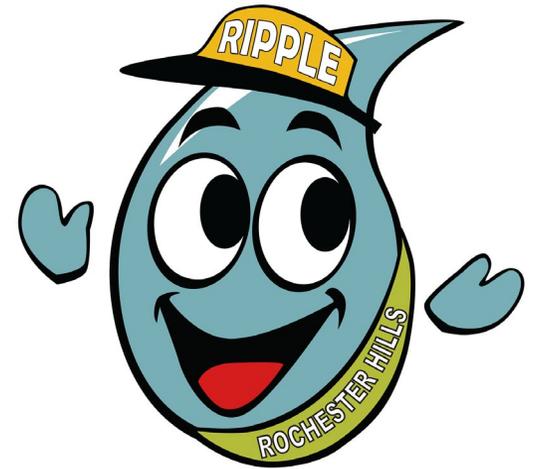




Rochester Hills Water Supply System Water System Advisory Council Water System Update April 30, 2025



Rochester Hills Water System Advisory Council (WSAC)

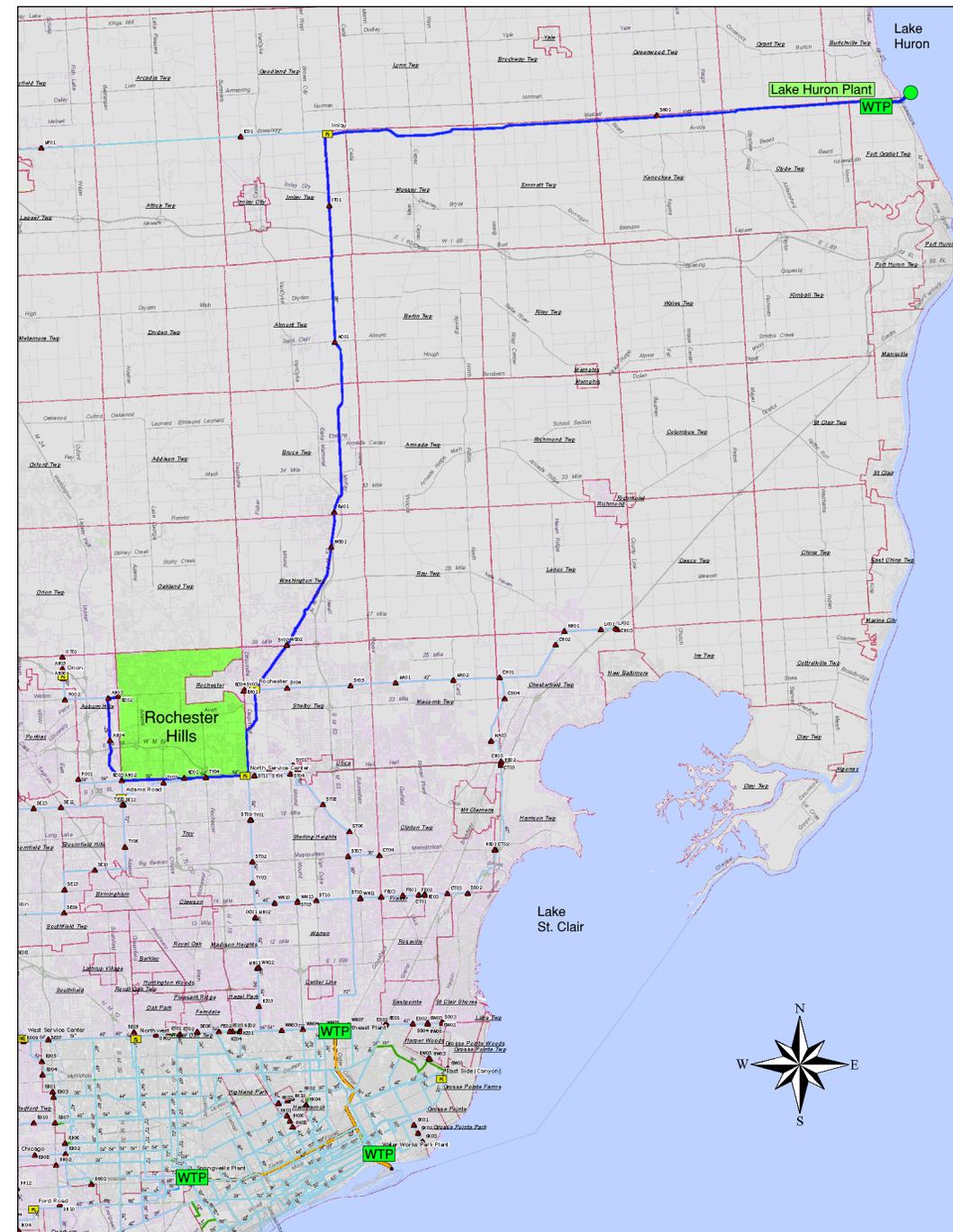
The creation of the Rochester Hills WSAC is a requirement of the EGLE Lead and Copper Rule changes effective June 14, 2018. All water systems that provide drinking water to a population greater than 50,000 are required to create a WSAC. The Water & Sewer Technical Review Committee was changed to the 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:

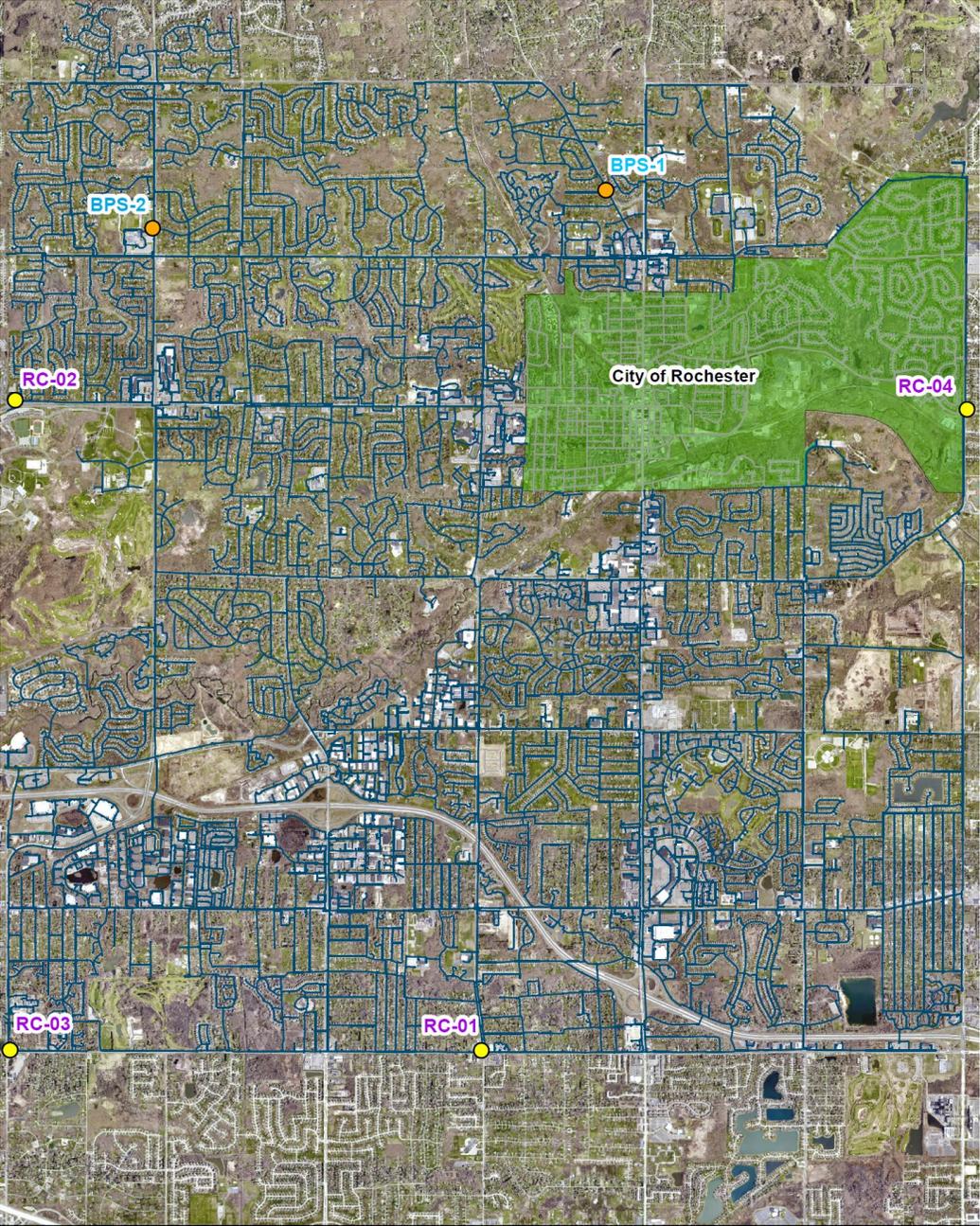
- City Council Members:
 - Jason Carlock, Carol Morlan , and David Walker
- Citizen Representatives:
 - Ryan Garvey, Greg Hooper, Bradley Limberg, Philip Hurst, and John Paille
- Youth Council Representatives:
 - Jackson Otlewski and Kishyo Giri
- Administrative Staff Members:
 - Angie Hysinger, Public Utilities Engineering Manager and Leon Luedeman, Water & Sewer Operations Manager

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 445 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 2025.
- The 2024 Water Quality Report (Consumers Confidence Report, CCR) is now available to all of our water customers.
- 2024 Water Replacement Project, Judson Park & Brabach Orchards Subdivisions. Completed the replacement of approximately 18,000 LFT of asbestos cement water main.
- 2025 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.
- 2025 Water Replacement Project, Brewster Road (between Walton and Tienken). Replacement of approximately 3,890 LFT of 16" concrete water main. Construction anticipate to begin in June and be substantially completed by mid-July.
- 2025 Water Replacement Project, University Hills Subdivision and Avon Rd (between Old Perch and Crooks). Replacement of approximately 22,000 LFT of asbestos cement water main and the extension of approximately 1,400 LFT of 16" water main. Construction anticipate to begin in June and be substantially completed by mid-July.
- 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 EGLE 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; 10 samples per quarter is now required, previously not required.
- Per EGLE requirements, Rochester Hills has completed and 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***

**EGLE
Lead and Copper
Rule Changes**

City of Rochester Hills Annual Water Quality Report

Water Testing Performed in 2024



Lead and Copper in your Water Quality Report

2024 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 | 2024 | ppb | 0 | 15 | 0 | 0 | 0 – 4 | no | Corrosion of household plumbing system; Erosion of natural deposits. |
| Copper | 2024 | ppm | 1.3 | 1.3 | 0.068 | 0 | 0 – 0.164 | 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.

****Starting in the 2025 Reporting Period the Action Level for Lead is being reduced to 12 ppb****



Historical Lead Results

| Year | 2024 | 2023 | 2022 | 2021 | 2020 | 2019 | 2017 | 2014 |
|-----------------------------------|------|------|------|------|------|------|------|------|
| 90 th percentile value | 0 | 0 | 0.06 | 0 | 0 | 0 | 0 | 0 |
| Total number of samples | 30 | 30 | 30 | 30 | 30 | 30 | 13 | 13 |
| Number ≥ 15 ppb | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

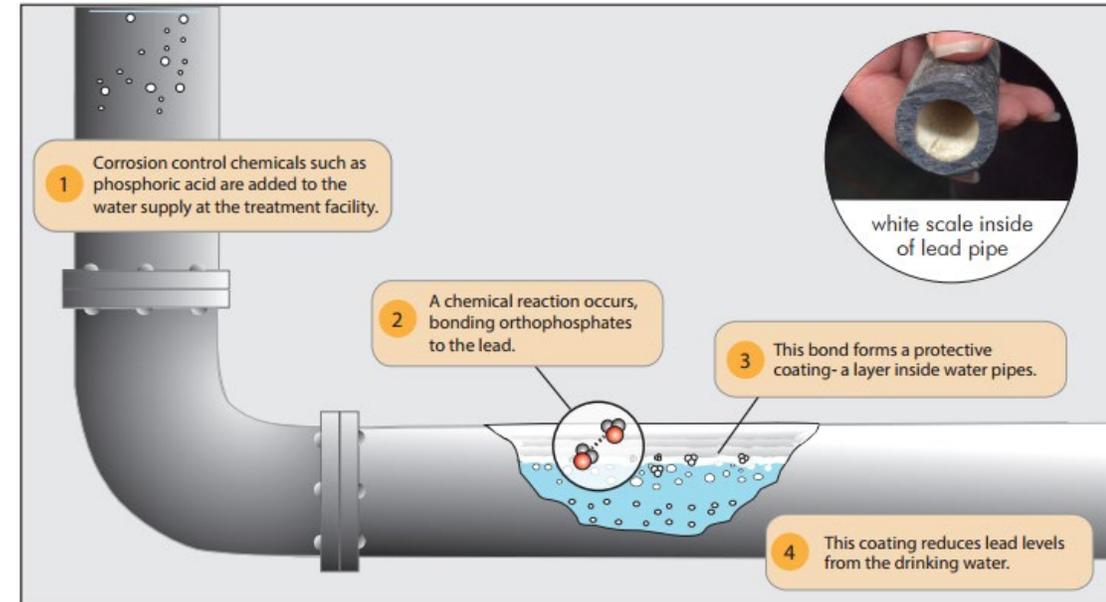
Current action level (AL) is 15 ppb for 90th percentile sample.

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 to 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 have been completed.
- 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. The valve assessment has been completed by HRC and the transmission main assessment is anticipated to be completed by June 2025.

Other Water Quality Sampling Initiatives



- Bacteriological Sampling, 80 samples / month. GLWA takes the samples on behalf of Rochester Hills. Rochester Hills is responsible for finding locations to sample.
- TTHM & HAA5 (chlorine byproducts) routine sampling.
- UCMR5, EPA mandate, sampling was completed in November 2024. Testing was for approximately 30 PFAS and Lithium contaminants. No detectable levels were found in the City's water system.



Questions





Thank You!

