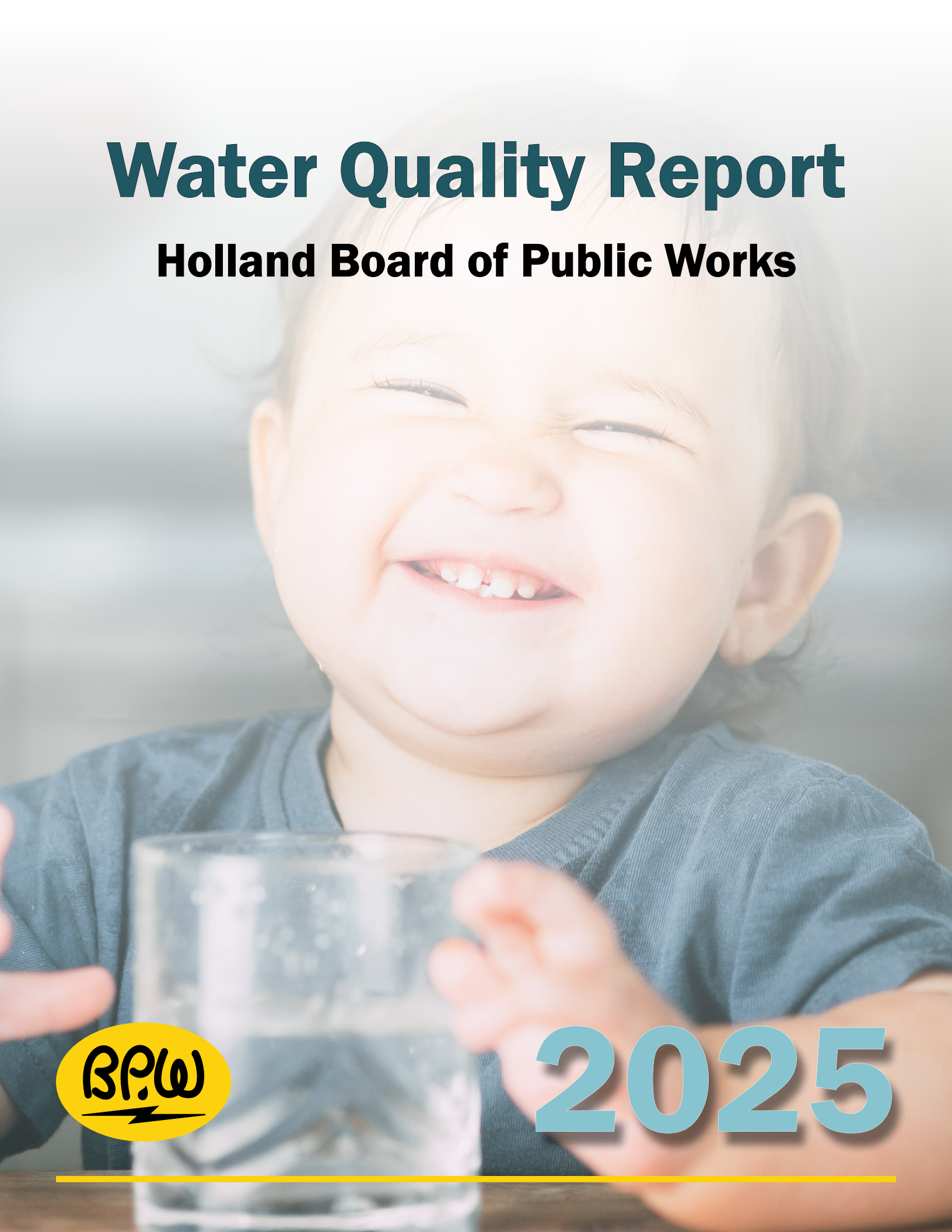


# Water Quality Report

**Holland Board of Public Works**



**2025**



# A LETTER FROM THE SUPERINTENDENT

Dear Neighbor,

The Holland BPW Water Treatment Plant is committed to providing the community with reliable, high-quality drinking water drawn from Lake Michigan. Through careful treatment and responsible stewardship, our staff work to protect this essential resource while maintaining consistent water quality.

During the 2025 calendar year, the plant continued its strong performance, meeting or exceeding all applicable state and federal drinking water targets. We completed more than 60,000 water quality analyses through our state-certified laboratory and independent third-party testing, verifying the safety and reliability of the water delivered to you.



This report presents an overview of drinking water quality for 2025, including information about water sources, treatment processes, and monitoring results. Test data are compared with standards established by the U.S. Environmental Protection Agency (EPA) and the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Additional sections highlight our affordability, infrastructure improvements, and commitment to water conservation.

We routinely conduct water quality monitoring to ensure compliance with regulatory requirements and set our internal performance targets higher than minimum standards. While this report identifies substances detected through testing, many other potential contaminants were evaluated and not found. We publish this report annually and remain dedicated to transparency and ongoing communication.

We appreciate your interest in learning more about your drinking water and your continued support in preserving this vital community resource.

Sincerely,

Nathan Johnson  
Water Treatment Plant  
Superintendent

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

\*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.\*

# LEARN MORE

This report is available at [hollandbpw.com/water-quality-report](https://hollandbpw.com/water-quality-report) and printed copies are also available at our Service Center, 625 Hastings Ave.

Your comments and participation in decisions that affect drinking water quality are welcome at our public board meetings. Email [publiccomment@hollandbpw.com](mailto:publiccomment@hollandbpw.com) or attend in person at the Holland BPW Service Center, 625 Hastings Ave. Meetings are typically held on the Monday between the first and second Wednesday of each month at 4:00pm.

- We recommend that you call to confirm the meeting time, date and location prior to arriving, or visit our website at [hollandbpw.com](https://hollandbpw.com) for details about the meetings.
- For more information about your water or the contents of this report, please contact Holland Water Treatment Plant at (616) 355-1589.
- For more information about safe drinking water from EGLE, visit [michigan.gov/egle/about/organization/drinking-water-and-environmental-health/drinking-water](https://michigan.gov/egle/about/organization/drinking-water-and-environmental-health/drinking-water).
- For more information about safe drinking water from the US EPA, visit [epa.gov/safewater](https://epa.gov/safewater).



# GET TO KNOW YOUR WATER SOURCE

## Your Health

Some people may be more vulnerable to contaminants in drinking water than others. People with weakened immune systems have a higher risk of infection, including but not limited to the following groups:

- People receiving chemotherapy
- Organ transplant recipients
- People with HIV/AIDS or other immune systems disorders
- Some elderly individuals
- Infants

These groups should seek advice from their health care providers about drinking water. The EPA and the Center for Disease Control also have guidelines to lessen your risk of infection by microbial contaminants.

## Contaminants

Drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of contaminants does not necessarily mean that water poses a health risk.

You can get more information about contaminants and potential health effects by calling the EPA's Safe Drinking Water hotline at (800) 426-4791 or visiting [epa.gov/safewater](http://epa.gov/safewater).

## Source Water Protections

In 2003, the State of Michigan performed an assessment on our source water. This assessment looked at Lake Michigan's susceptibility or the relative potential of contamination. The susceptibility rating is given on a scale from "very-low" to "very-high," with seven possible ratings. Ratings are based on geologic sensitivity, water chemistry and contamination sources. The State rated the Holland BPW's water intake as "moderately sensitive." It rated the water source itself as having a "moderately high" susceptibility to contamination.

The State identified 364 potential sources of contamination in the 175 square miles of watershed that could impact our water source. Their report further states, "Historically, the Holland Board of Public Works Water Treatment Plant has effectively treated this water source to meet drinking water standards. There have been no detections of synthetic or volatile organic contaminants in the system's raw water." You can get a copy of Holland BPW's full Source Water Assessment by calling (616) 355-1589.

To continue these efforts, Holland BPW has an award-winning Surface Water Intake Protection Plan (SWIPP) in place. The EPA and EGLE encourage this voluntary effort that outlines community-wide actions and efforts to protect drinking water sources. For more information about Holland BPW's SWIPP, please call the Water Treatment Plant at (616) 355-1589.

## Sources of Drinking Water

Drinking water (both from the tap and bottled water) can come from rivers, lakes, streams, ponds, reservoirs, springs or wells.

Holland BPW's drinking water comes from Lake Michigan.

As water travels across land or underground, it dissolves naturally occurring minerals and sometimes radioactive material. Water can also pick up contaminants that come from animal or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria. These contaminants may come from wastewater treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals. Some of these occur naturally. Salts and metals can also come from urban storm water runoff, industrial or domestic wastewater, oil and gas production, mining or farming.
- Pesticides and herbicides. These may come from a variety of sources including agriculture and residential uses.
- Radioactive contaminants. These can be naturally-occurring or the result of oil and gas production and mining activities.
- Organic chemical contaminants. These include synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. Organic chemical contaminants can also come from gas stations, urban storm water runoff and septic systems.

To ensure that tap water is safe to drink, the EPA limits the levels of certain contaminants in public water systems. Similarly, Federal Food and Drug Administration regulations limit contaminants in bottled water to protect public health.



# WATER SERVICE LINES TO YOUR HOME

Pipes can be made of a variety of materials such as iron or plastic. In the past, some may have been made from galvanized metals or lead. Holland BPW completed an inventory of water service lines in 2025. **This inventory did not identify any service lines made completely out of lead pipe.** This inventory was based on information provided in construction records and plumbing inspections required when service lines were installed or replaced and was verified through visual inspection of a statistically significant number of randomly selected service lines. The inventory is updated any time new records and inspections are obtained.

Most metals disintegrate as they corrode. However, corroding galvanized pipes pick up deposits that the water carries from other pipes in the system. Because these galvanized pipes were once connected to lead goosenecks, lead deposits may have built up inside the galvanized pipe.

A gooseneck is a short piece of flexible pipe that connects the service line pipe to the water main pipe. In the past, lead was used to make goosenecks because it was durable and flexible. Modern goosenecks are made of flexible piping materials such as copper and plastic.

For this reason, **Holland BPW has a program in place to replace all remaining galvanized lines in the system by the end of 2038.** This time frame aligns with State of Michigan regulations and Holland BPW's asset management plan. This replacement program includes:

1. The public section of the galvanized service lines from the water main to the property line.
2. The private section between the property line and the home, which is usually the responsibility of the homeowner.

Any galvanized piping inside the home is still the responsibility of the homeowner to replace as desired.

Number of Service Line Types in 2025	
Service Description	Number of Residences
Copper, Plastic, and Other Non-Lead	14,535
Lead Service: Lead Pipe	0
Lead Service: Galvanized Pipe with Lead Gooseneck	1,644
Lead Service: Galvanized Pipe Previously Connected to Lead Gooseneck	1,445
<b>Total</b>	<b>17,624</b>

## Reporting Requirements Not Met for Holland Board of Public Works

We are required to annually deliver notifications to customers with lead service lines, galvanized service lines previously connected to lead, or service lines of unknown lead status, and certify to the State that these notifications were sent.

It is important for consumers to know if the water they are receiving has been delivered through such a service line so they can make decisions on whether and what actions to take to reduce their exposure to lead in drinking water.

While we completed the required notifications for 2024 to impacted customers in a timely manner, we were late to certify to the State by July 1, 2025 that we had delivered the notifications. The failure to comply with the reporting deadline does not create a risk to public health, but we are required to inform you of this violation.

### What should I do?

The late certification did not impact the quality of water delivered to customers and there is nothing you need to do at this time.

### What is being done?

Although certification to the State was delayed, we notified those served on November 11, 2024, and submitted certification on September 29, 2025, resolving the violation as of that date.

For more information, please contact the Holland BPW Water Department at 616-355-1643 or 625 Hastings Ave, Holland MI 49423.



## LEAD

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing.

Holland BPW has a long history of lead tests showing low to non-detections for lead. We are responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk.

Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures.

Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for at least 5 minutes to flush water from both your home plumbing and the lead service line.

If you are concerned about lead in your water and wish to have your water tested, contact Holland BPW at 616-355-1589 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).



## COPPER

Copper is an essential nutrient. However, drinking water with copper levels higher than the action level in a short amount of time could cause gastrointestinal distress. Some people who drink water with copper levels higher than the action level over many years could suffer liver or kidney damage. People with Wilson's Disease or other conditions that limit the body's ability to remove excess copper should talk to their health care provider.

## PFAS

Per- and polyfluoroalkyl substances (PFAS) are a group of chemicals that are resistant to heat, water, and oil. The U.S. EPA has named PFAS as an emerging contaminant. For decades, PFAS have been used in industrial applications and consumer products and are still used today. Products with PFAS include carpeting, waterproof clothing, upholstery, food paper wrappings, fire-fighting foams, and metal plating. PFAS have also been found at low levels in both the environment and blood samples from the general U.S. population.

These chemicals are persistent, which means they do not break down in the environment. PFAS chemicals also bioaccumulate, meaning the amount of the chemical in a person's body builds up over time in their blood and organs.

### Why Was Holland BPW's Source Water Tested for PFAS?

Holland BPW follows the EGLE standard compliance monitoring schedule for PFAS Maximum Contaminant Levels (MCLs). In 2020, EGLE developed MCLs for seven PFAS compounds in Michigan. Even before EGLE developed PFAS MCLs, Holland BPW participated in EGLE-coordinated voluntary sampling in 2019. With health and safety at the core of our values, we saw this initiative as a chance to learn about our source water.

### How Can PFAS Affect People's Health?

Although our understanding of these emerging contaminants constantly changes, higher levels of PFAS have the potential to cause negative health effects.

These include increased cholesterol, changes in hormones and the immune system, decreased fertility, and increased risk of some cancers. Epidemiological and laboratory studies in animal models support these links to health effects in humans.

If you are concerned about exposure to PFAS in your drinking water, please contact:

- Michigan Department of Health and Human Services Toxicology hotline at (800) 648-6942.
- Center for Disease Control and Prevention/ATSDR at [cdc.gov/cdc-info/about-us](http://cdc.gov/cdc-info/about-us) or (800) 232-4636.

Scientists are still learning about the health effects of exposure to PFAS, including exposure to mixtures.

### What Other Ways Could I Be Exposed to PFOA, PFOS and Other PFAS Compounds?

PFAS are used in many consumer products, including:

- Food packaging such as fast-food wrappers and microwave popcorn bags
- Waterproof and stain-resistant fabrics such as outdoor clothing, upholstery, and carpeting
- Nonstick coatings on cookware
- Cleaning supplies including some soaps and shampoos

Exposure to PFAS can come from house dust, indoor and outdoor air, food, and drinking water. More research is needed to understand how people can be exposed to PFAS.

### Who Can I Call if I Have Questions About PFAS in My Drinking Water?

If you have additional questions regarding this issue, you can reach the State of Michigan Environmental Assistance Center at (800) 662-9278.

### Where Can I Learn More About PFAS?

For information on PFOA, PFOS, and other PFAS, including possible health outcomes, please visit the following websites:

- [epa.gov/pfas](http://epa.gov/pfas)
- [atsdr.cdc.gov/pfas](http://atsdr.cdc.gov/pfas)
- [michigan.gov/pfasresponse](http://michigan.gov/pfasresponse)

# TERMS & ABBREVIATIONS USED

<b>90th Percentile</b> 90 percent of the samples taken were below the number listed.	<b>AL Action Level.</b> Samples with concentrations higher than an action level of a contaminant require treatment or other procedures a water system must follow.
<b>Highest Local Running Average</b> The highest average of a specific contaminant over the annual sampling period from a single sampling point. This measure is used in reporting TTHM and HAA5.	<b>MCL Maximum Contaminant Level.</b> The highest level of a contaminant allowed in drinking water. MCLs are set above, but as close to an MCLG as possible.
<b>MCLG Maximum Contaminant Level Goal.</b> Below this level of a contaminant there is no known or expected risk to health.	<b>MRDL Maximum Residual Disinfectant Level.</b> The highest level of a disinfectant allowed in drinking water. Added disinfectant helps to control microbial contaminants.
<b>MRDLG Maximum Residual Disinfectant Level Goal.</b> Below this level of disinfectant there is no known or expected risk to health. MRDLGs do not negate the benefits of using disinfectants to control microbial contaminants.	<b>NTU Nephelometric Turbidity Unit.</b> A measure of water clarity.
<b>PFOS Perfluorooctanesulfonic acid.</b>	<b>ppb Parts per billion</b> or micrograms per liter.
<b>ppm Parts per million</b> or milligrams per liter.	<b>ppt Parts per trillion</b> or nanograms per liter.
<b>TT Treatment Technique.</b> A required process intended to reduce contaminant levels in drinking water.	<b>Unregulated Contaminants</b> Contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act (SDWA).

# WATER QUALITY DATA

The tables below list all the drinking water contaminants that we detected during the 2025 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in this table is from testing done January 1 - December 31, 2025.

## Holland Water Treatment Plant Data for 2025 (WSSN 3190)

Regulated at Water Treatment Plant						
Substance (units)	Highest Level EPA Allows (MCL)	EPA Goal Amount (MCLG)	Highest Level Detected in Our Water	Violations	Range of Results in Our Water	Typical Source of Contaminant
Fluoride (ppm)	4.00	4.00	0.80	None	0.13 - 0.80	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.330	None	0.330 - 0.330	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Turbidity (NTU)	1.0	Not Applicable	0.270	None	0.01 - 0.270	Clarity of water; Good indicator of the effectiveness of our filtration system
PFOS (ppt)	EGLE MCL: 16 EPA MCL: 4.0	0	2.4	None	2.3 - 2.4	Food packaging, waterproof fabric, non-stick coating, etc.
PFAS (ppt)	EGLE MCL, EPA MCL, & EPA MCLG Vary		All other PFAS chemical results not listed in this report were less than the EGLE minimum reporting limit or not detected.			



### Regulated at Customer's Tap

Substance (units)	Highest Level EPA Allows (MCL)	EPA Goal Amount (MCLG)	Highest Level Detected in Our Water	Violations	Range of Results in Our Water	Typical Source of Contaminant
Copper (ppm)	1.3	1.3	0.0	None	0.0 - 0.0	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	12	0	1	None	0 - 12	Lead service line, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits

### Unregulated Contaminants

Substance (units)	Highest Level EPA Allows (MCL)	EPA Goal Amount (MCLG)	Highest Level Detected in Our Water	Violations	Range of Results in Our Water	Typical Source of Contaminant
Sodium (ppm)	Not Applicable	Not Applicable	11.3	None	11.3 - 11.3	Erosion of natural deposits

These are contaminants for which the EPA has not established drinking water standards. The purpose of the unregulated contaminants monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water. Holland BPW performed additional testing for other unregulated contaminants; no detections were found. Results of these tests are available by contacting the Water Treatment Plant at (616) 355-1589.

### Unregulated Contaminants Monitoring Rule (UCMR5)

The 1996 Safe Drinking Water Act (SDWA) amendments require that once every five years the EPA must issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems.

The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published in the Federal Register on December 27, 2021. UCMR 5 required monitoring for 30 chemical contaminants between 2023 and 2025 using analytical methods developed by EPA and consensus organizations. This monitoring provides a basis for future regulatory actions to protect public health. **We are actively monitoring the unregulated contaminants required by UCMR 5 and have found no results that measured at or above the minimum reporting level.**

For more information about UCMR5 visit [epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule](https://epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule).

### Regulated in Distribution System

Substance (units)	Highest Level EPA Allows (MCL)	EPA Goal Amount (MCLG)	Highest Level Detected in Our Water	Highest Average from a Single Sampling Point (Highest Local Running Average)	Violations	Range of Results in Our Water	Typical Source of Contaminant
Chlorine [Cl2] (ppm)	Highest Level of Disinfectant Allowed (MDRL): 4.0	No known or expected health risks below (MRDLG): 4.0	1.61	1.28	None	0.08 - 1.61	Water additive used to control microbes
Total Trihalomethanes [TTHM] (ppb)	80	0	58.8	51.5	None	28.6 - 58.8	Byproduct of drinking water disinfection
Haloacetic Acids [HAA5] (ppb)	60	0	26.0	21.0	None	10.0 - 26.0	Byproduct of drinking water disinfection
Total Coliform Bacteria	Treatment Technique	0	1	Not Applicable	None	0 - 1	Naturally present in the environment

# PAY FOR WATER, NOT THE BOTTLE

Holland BPW customers are great stewards of their resources. They understand the value of public utilities such as water, electricity, and fiber internet. Having a community-owned utility company means that we are responsible to our customers for keeping rates affordable for all our utilities.

Drinking tap water is a great way to save money. Compared to drinking bottled water, drinking tap water saves hundreds of dollars per year. Bottled water is also often the same water, just conveniently bottled and slightly more treated.

## What's in Bottled Water?

Bottled water can come from many places, including aquifers, springs, lakes, rivers and other water sources. In the last 25 years, bottled water companies in the US have shifted from bottling natural spring water to bottling "purified water," which typically means municipal water that has gone through additional treatment such as reverse osmosis (Consumer Reports, 2020).

One such company that bottles municipal water is Dr. Pepper Keurig. In fact, Dr. Pepper Keurig uses Holland BPW's tap water for bottling water and sodas. Other food manufacturers in our area also use our water in processing beverages, desserts and frozen meals.

## Let's Do the Math

The biggest difference between bottled water and Holland BPW's tap water is price. A gallon of bottled water at Meijer currently costs \$1.40, while a gallon of BPW tap water is two-hundredths of a cent. According to the CDC, the average water intake for an adult is 44oz per day, or 125.5 gallons per year.

If you, as an average adult, only drank **bottled water** for an entire year, you would spend \$175.65 assuming prices stay the same.

**But if you only drank tap water for a year, you would spend 33 cents.**

**In this specific case, bottled water costs 500 times more than tap water.** And that is only if you're purchasing generic brand bottled water. Some higher-end bottled water brands can cost 1,000 times more than tap water.

## Quality Water

Our customers depend on Holland BPW to keep rates affordable and drinking water clean and healthy. To do this, we perform tens of thousands of tests per year on our water. Operators at our Water Treatment Plant collect water samples from our plant, from the distribution system at service stations and water towers and from businesses throughout our service area. Each year our operators and a third-party lab perform over 60,000 tests to ensure the highest quality water.

We are also proud to say that Holland BPW has some of the lowest water rates in the lower peninsula. Our Lake Michigan treated water is clean and within or below the threshold amounts for any contaminants as

required by the EPA and EGLE, as well as additional contaminants not required by the state or federal entities.

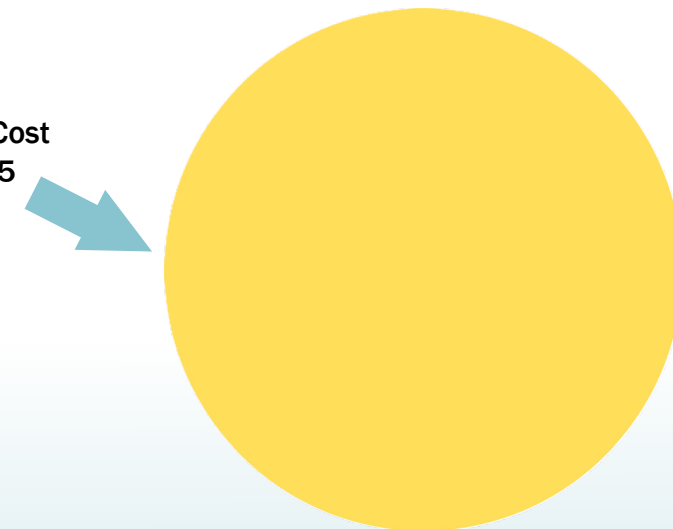
All of this hard work means that **your tap provides you with a high-quality, clean, affordable source of drinking water.**

So instead of getting another case of water the next time you're at the grocery store, consider buying a reusable water bottle. Filling up at the tap is just as good for you and your wallet.



## Cost Comparison Per Year

Bottled Water Cost  
\$175.65



Holland BPW  
Tap Water Cost  
\$0.33



## IMPROVEMENTS TO THE SYSTEM



The Water/Wastewater (W/WW) team has made many improvements over the past year with the equipment serving water to our customers.

One such improvement was the installation of iHydrants, **a new smart fire hydrant designed to monitor system conditions in real time.** Multiple iHydrants were installed over the course of 2025.

This innovative technology remotely tracks water pressure and temperature, alerting the W/WW team immediately if it detects a hydraulic event, rapid pressure changes, or temperature fluctuations, ensuring early detection and proactive maintenance to prevent pipe failures and service disruptions. Operating on a secure network, the iHydrant transmits data directly to BPW, enhancing our ability to respond quickly and efficiently to system changes. This communication means we can respond to potential concerns before they affect customers. This data also provides the W/WW team the ability to understand the water system operations by strategically placing the iHydrants in areas of interest.

Our Water/Wastewater team also launched another important infrastructure improvement: **replacing water meters.** Beginning in November 2025, Holland BPW began replacing aging water meters throughout our service area. The last water meter

replacement project was completed in 2005 and many of these meters are now reaching the end of their useful life and are in need of replacement. HBPW has partnered with a contractor, Utility Metering Solutions (UMS), to complete this work.

Water meters are essential tools for measuring water usage and ensuring accurate billing. When meters are used for a long time, they can become less accurate, potentially leading to incorrect usage readings, and in some cases develop leaks that can cause property damage.

The new meters will provide:

- Improved accuracy in water usage measurement
- Real-time data to detect and notify of potential leaks in your home
- Enhanced customer service through better usage insights and billing transparency
- Reliable utility service to prevent leaks by replacing aging meters

These initiatives align directly with HBPW's 2024 Strategic Plan, which emphasizes reliable utility service as a priority. By continuously evaluating and integrating accurate and advanced technologies like the iHydrant and new water meters, we not only enhance the services we provide but also reinforce our commitment to efficient, reliable, and forward thinking utility solutions.



## KEEPING RATES LOW

### Conserving Water

Holland Board of Public Works is dedicated to providing our community with reliable and affordable utility services. Efficient management of our resources helps us keep water rates competitive and we need your help!

The Water Treatment Plant, although connected to Lake Michigan, has a current maximum treatment capacity of 38.5 million gallons per day. On an average day throughout the year, we treat ~15 million gallons per day. There are a few days each summer that we experience peak usage, pushing the plant to more than 30 million gallons per day. During stretches of high heat and a lack of rain that last several days, the Water Treatment Plant can come close to its maximum treatment capacity. A major contribution to excessive water usage is lawn sprinkling. Holland BPW asks that customers limit or forgo lawn sprinkling during periods of time like these to maintain access to drinking water for more important uses.

If Holland BPW exceeds 90% of the Water Treatment Plant capacity, the State of Michigan mandates that we begin construction on additional capacity, which can be very costly for the infrequent need of this increased capacity. **Holland Board of Public Works is confident that the Water Treatment Plant is appropriately sized for our area of service** and is dedicated to bringing the best value to our customers. Maintaining the current size of the Water Treatment Plant, or making smaller incremental changes to treatment capacity, is the best option for our customers.



# UPGRADING WATER PLANT INFRASTRUCTURE

Built in the 1950s, the Water Treatment Plant is unique in its multi-level design. While much of the infrastructure that treats the water coming in from Lake Michigan is underground on the surrounding property, the main building itself has a relatively small footprint that has been expanded over the years to accommodate more rapid sand filters. The building also stands three stories high, with chemical storage previously housed on the third floor.

As with our other utilities, Holland BPW plans far in advance to ensure that our customers continue to have access to reliable, essential services like drinking water. Part of that includes keeping our facilities up-to-date and using space efficiently.

## Chemical Storage

Currently, some components of the chemical storage area at our Water Treatment Plant are near the end of their useful life. Sitting on the third floor of the plant, the chemical storage area was neither convenient, nor optimized for safety.

One of the largest parts of this project is to relocate chemical storage to the ground floor. To accommodate the change, we have added a new section to the building east of the garage. This new area allows the chemicals used in the treatment process to have even more physical separation from each other, increasing safety. It is also innately safer to have the chemicals on the ground floor. Just as it is advisable to keep raw meat on the bottom shelf of your fridge so that there are no opportunities for leaks onto other food, it's also best practice to keep chemicals on the lowest floor.

New chemical tanks and space also increase our potential chemical storage capacity. This allows the necessary chemical reserves required to treat more water in the future to meet our growing community's needs.

All of this work has been coordinated carefully to keep the water plant operating. Its primary function is to deliver safe drinking water to our customers and construction has not hampered that mission.



## Elevators

The freight elevator that carried one of the chemicals up to the third floor was original to the 1950s building. Finding parts for maintenance and repairs became increasingly difficult and costly. A new freight elevator would have incurred large costs as well. Instead, a code-compliant stairwell was added in place of the freight elevator. As a complement to this stairwell, the existing passenger elevator's path was extended all the way to the third floor, making the building more accessible.

## Dehumidifier

Underneath our rapid sand filters is a gallery of pipes that move water to storage areas. Depending on the time of year and the temperature of the water, this gallery room can collect condensation on the pipes. For over 30 years, the facility has used a large dehumidifier to keep our pipe gallery dry. The dehumidifier was aging, natural gas-powered and ran at a single fan speed.

We replaced the aging dehumidifier with a more effective system. To make the dehumidifier easier to work with and safer for vendors to maintain or fix, we added an access door near the dehumidifier. In place of the old model we installed a continuously running fan, duct heater and electric dehumidifier to better care for our pipe gallery.

## Keeping the Water Flowing

With so many improvements happening at once, these capital projects require a lot of orchestration. Even with chemicals moving physical locations, basin rehabilitation, elevator decommissioning and dehumidifier replacement, we have never lost sight of our primary purpose. All of this work has been coordinated carefully to keep the water plant operating. Its primary function is to deliver safe drinking water to our customers, and construction has not hampered that mission.

Each of these changes will keep our Water Treatment Plant providing reliable, essential drinking water for years to come.



# Holland Water Quality Report 2025

Holland Water Treatment Plant  
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Holland, MI 49424  
(616) 355-1589

