

# Roche Harbor Water Systems, INC Consumer Confidence Report



We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of your water and services we deliver to you every day. Our constant goal is to provide you with a safe and enjoyable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

## 2022

Group A, Class III, .5-M.G.D. Water Treatment Plant.  
445 Connections Served, Treatment Volume 36 Million gallons.

## Water Source

Briggs Lake provides our community with 175,500,000 gallons of storage. It is a shallow (average depth 9 feet, maximum depth 15 feet) 39-acre lake located approximately 2 miles southeast of Roche Harbor Resort. The lake is refreshed via rainfall from the 527-acre watershed. Briggs Lake is open to the public and is a popular destination for hiking, biking, horseback riding, and trail running. In order to keep our source water as clean as possible, please keep dogs and horses at least 50 feet from the water edge.

The shallow water contributes to a high level of dissolved organic compounds in the lake. These organics contribute to high levels of disinfection byproducts in our treated water. Organic matter takes precise chemistry to be removed from water, representing a challenge to water operators all over. We utilize many tools to measure water quality, above and beyond the requirements to ensure that our water remains clean and safe, and aesthetically pleasing.

## Treatment Plant

Our (2003) treatment plant notably improved our ability to produce adequate quantity and improved quality of our water. In the past, we struggled to meet the TTHM and HAA contaminant levels required by the State. Since we've installed our two granular activated carbon (GAC) vessels in the plant, our TTHMs & HAAs levels have dropped significantly and we have notably improved the taste and odor of our water! With constant monitoring/adjusting chemicals & sufficient testing, we have done very well with extending the life of the carbon media. We change out the carbon media annually in April or May in anticipation of our peak demand summer months.

Did you know we use chlorine in our water system? Chlorine not only serves as a disinfection vector for water at the plant, but it is maintained in our entire distribution system, so that no re-growth can occur. We monitor chlorine at the water plant and at several remote testing stations in the neighborhood. You may even see our operators out performing routine samples and testing.

## Distribution System

Roche Harbor Water maintains 12.5 miles of water distribution mains, 445 water connections, 65 fire hydrants and we have capacity to store 418,000 gallons of treated water.

At our last Roche Harbor Neighborhood meeting we agreed as a community to new water use efficiency goals. Roche Harbor Water customers agreed to decrease per capita annual consumption by 2% (approximately 900 gallons per customer) over the next 6 years.

What you can do to help meet this goal:

- Use low flow toilets, appliances, shower heads and faucets
- Fix leaks
- Install shutoff valve for use when property is unoccupied
- Reduce outdoor watering
- Choose low water use landscaping
- Properly winterize plumbing

What we are doing to meet this goal

- Send regular conservation reminders
- Help customer with leak detection
- Send utility bill showing consumption history
- Encourage *Xeriscaping* (low-water use landscaping)
- Provide educational material

Roche Harbor Water has also agreed to maintain annual distribution system leakage rate of less than 10%. Our 2022 leakage rate was only **4.2%**. To meet this goal we employ:

- Source meter calibration
- Service meter replacement
- Leak Detection surveys

Roche Harbor Water maintains the trails and right of ways where our water mains are located. Trail users can report potential water leaks to our office.



# Routine Sampling

Roche Harbor Water System routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the test results of our monitoring for the period of January 1st to December 31st. All other results were N/D-(not detected). All drinking water, including bottled drinking water, may contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

Contaminant	Violation (YES / NO)	(Low-High) Range	Reported Value	MCL Max Allowed
TTHMS's [Total Trihalomethanes]	NO	3.7 - 53.8 ppb	53.8 ppb	80 ppb
HAA5's [Haloacetic acids]	NO	17.1 - 25.8 ppb	19.3 ppb	60 ppb
Maximum Effluent Turbidity	NO	0.017 - 0.088 NTU	0.088 NTU	<.3 NTU 95% of run-time

## Lead and Copper

Testing required every 3 years.

In 2022, we performed one round of testing from our sample group of homes. The 5 homes were tested in August. Regulations specify that no more than 10% of the samples exceed the MCL of 1.3 ppm for Copper and 15 ppb for Lead. In 2022, all homes passed the test for Lead and Copper.

We continue to perform corrosion control by way of using caustic soda in our water treatment plant. This will help to stabilize our PH at 7.8, which will reduce our chances for lead and copper to precipitate into the consumers lines. Roche Harbor Water uses NO LEAD in any of our service lines to our customers.

# Test Result Definitions

To help you better understand the terms and abbreviations you might not be familiar with we have provided the following definitions:

**(PPM)** Parts per million or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**(PPB)** Parts per billion or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**(MCL)** Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.

**(NTU)** Turbidity: For systems that use conventional or direct filtration, at no time can turbidity (cloudiness of water) go higher than 1 Nephelometric Turbidity Unit (NTU), and samples for turbidity must be less than or equal to 0.3 NTUs in at least 95 percent of the samples in any month.

**(TTHM)** Total Trihalomethanes are formed as a by-product predominantly when chlorine is used to disinfect drinking water. They are generally referred to as disinfection by-products. They result from the reaction of chlorine or bromine with organic matter present in the water being treated.

**(HAA5)** Haloacetic acids are a group of disinfection byproducts that form when chlorine compounds that are used to disinfect water react with other naturally-occurring chemicals in the water.

**(DBP)** Disinfection by-product. DBP's are leftover constituents from the disinfection of organic material in the water. They form from chlorine's reaction to organic matter.

To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Lead: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced, or reduced.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hot line at 1-800426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer, undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hot line (800-426-4791).

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as Facilities & Construction (FAC/CONST) charges. Thank you for understanding.

We at Roche Harbor Water System, Inc. work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. If you have any questions about the Roche Harbor Water System or the quality of your water, please contact our office at the number listed below.



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