



# Noquochoke Village

2020

PWS ID: #4334092

## REPORT ON WATER QUALITY

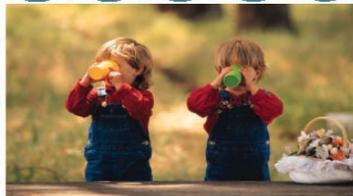
This report is a snapshot of the quality of the drinking water that we provided last year. The statistics in this report are based on testing done throughout 2019 and prior years. We hope you will find it helpful to know the sources of your water and the process by which safe drinking water is delivered to your home.

### ***Where Does My Water Come From?***

Noquochoke Village is located in Westport, MA and serves approximately 180 residents. The water supply for this subdivision is provided by one bedrock (groundwater) well located on the property. This well is approximately 800 feet deep and has a capacity of 7.5 gallons per minute. The well pumps into a 20,000-gallon atmospheric storage tank and is then pumped into the distributions system with a booster pump.

Our water system makes every effort to provide you with safe and pure drinking water. Your water is treated first by removing sediment using filter media, after which it enters an ion exchange treatment area where suspended iron, manganese, and radium is removed. The water quality of our system is constantly monitored by us and the MassDEP to determine if any future treatment may be required.

### **Water Quality**



**It's Their Legacy**

### ***SHOULD SOME PEOPLE TAKE SPECIAL PRECAUTIONS?***

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 microbial contaminants are available from the Safe Drinking Water Hotline (800)426-4791.

### ***Maintaining Water Quality***

Noquochoke Village continuously strives to produce the highest quality water possible to meet or surpass every water quality standard. We monitor both our sources and distribution system very closely. The standards we operate under were enacted by the U.S. Congress as the Safe Drinking Water Act in 1974 and were amended in 1986 and 1996.

In order to ensure tap water is safe to drink, the DEP and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### ***Opportunities to Participate***

Please contact our water operator, WhiteWater, Inc., at (888) 377-7678 if you have any water-related concerns.

## Noquochoke Village

***The Noquochoke Village Water System is operated and maintained by WhiteWater, Inc. If you have any questions about this report, please contact Russell Tierney at 1-888-377-7678.***

*Additional copies of this report are available upon request and at [www.whitewateronline.com](http://www.whitewateronline.com)*

**WhiteWater**  
WATER & WASTEWATER SOLUTIONS

## DISTRIBUTION SYSTEM WATER QUALITY

This report summarizes only those items detected during sampling - not all contaminants that are monitored.

<b>Microbial Results</b>	<b>Highest # Positive in a Month</b>	<b>Total # Positive</b>	<b>MCL</b>	<b>MCLG</b>	<b>Violation</b>	<b>Possible Source of Contamination</b>
Total Coliform	10	22	1	0	Yes	Naturally present in the environment
E. Coli	0	0	*	0	No	Human and animal fecal waste

\*Compliance with Fecal Coliform / E. Coli MCL is determined upon additional repeat testing.

**Total Coliforms** are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an assessment to identify problems and to correct any problems that were found during these assessments.

<b>Assessments</b>	<b>Number Required</b>	<b>Number completed</b>	<b>Number of corrective actions required</b>	<b>Number of corrective actions completed</b>	<b>Assessment Findings</b>
Level 1 Assessment	1	1	1	1	In August 2019, several routine and repeat samples were positive for total coliform. After an investigation it was determined that the potential cause was a lack of sealant around the piping into the storage tank. New drains were installed, the drainage system from the booster pumps was re-piped and the system was flushed and chlorinated. Subsequent samples came back clean.
Level 2 Assessment	1	1	5	5	In October and November 2019, several more routine and repeat samples tested positive for total coliform, thus triggering a Level 2 Assessment. This more in-depth assessment concluded that water was draining from the pumps into the clearwell, thus causing a contamination. The drainage was modified to prevent this.

<b>Lead &amp; Copper</b>	<b>Date(s) Collected</b>	<b>90<sup>th</sup> Percentile of Sample</b>	<b>Action Level</b>	<b>MCLG</b>	<b># of Sites sampled</b>	<b># of Sites Above Action Level</b>	<b>Exceeds Action Level?</b>	<b>Possible Source of Contamination</b>
Lead (ppb)	2019	0	15	0	10	0	No	Corrosion of household plumbing systems
Copper (ppm)		0.126	1.3	1.3			No	Corrosion of household plumbing systems

### SOURCE WATER CHARACTERISTICS

**Key to Tables**

- ppm – Parts per million, corresponds to one penny in \$10,000
- ppb – Parts per billion, corresponds to one penny in \$10,000,000
- ppt—Parts per trillion, corresponds to one penny in \$10 billion
- pCi/L – Picocuries per liter (a measure of radioactivity)
- ND – Not detected
- n/a - not applicable
- RAA –Running annual average
- TT—Treatment technique

The sources of drinking water in the United States (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from

urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. These contaminants can also come from gasoline storage, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

## SUMMARY OF FINISHED WATER CHARACTERISTICS

<u>Regulated Contaminants</u>	Date(s) Collected	Highest Detect Value	Range Detected	MCL	MCLG	Violation	Possible Source of Contamination
<b>Radioactive Contaminants</b>							
Gross Alpha (pCi/L) (minus Uranium)	2019	9.2	6.9-9.2	15	0	No	Erosion of natural deposits
Radium 226 & 228 (pCi/L) (combined values)	2019	2.33	1.2-2.33	5	0	No	Erosion of natural deposits
<u>Unregulated</u>	Date(s) Collected	Result or Range	Average	SMCL	ORSG or Health Advisory	Possible Source of Contamination	
<b>Inorganic Contaminants</b>							
Sodium (ppm)	2019	8.6-110	49.9	-	20	Natural sources; runoff from use as salt on roadways; by-product of treatment process.	
<b>Radiological Contaminants</b>							
Radon (pCi/L)	2018	4990-8160	5390	-	10,000	Natural Sources	

**Sodium** is a naturally-occurring common element found in soil and water. It is necessary for the normal functioning of regulating fluids in human systems. Some people, however, have difficulty regulating fluid volume as a result of several diseases, including congestive heart failure and hypertension. The guideline of 20 mg/L for sodium represents a level in water that physicians and sodium sensitive individuals should be aware of in cases where sodium exposures are being carefully controlled. For additional information, contact your health care provider, your local board of health or the New Hampshire Department of Environmental Services at (603) 271-3503.

**Radon** is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home from tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon can lead to lung cancer. Drinking water containing radon may also cause increase risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call the Massachusetts Department of Public Health, Radon Program at 413-586-7525 or call EPA's Radon Hotline (800-SOS-RADON).

<u>Secondary Contaminants</u>	Date(s) Collected	Result or Range	Average	SMCL	ORSG or Health Advisory	Possible Source of Contamination
Manganese (ppb)	2019	12-56	37.25	50	300	Erosion of natural deposits, leaching from plumbing materials

\*US EPA and MassDEP have established health advisory levels for manganese to protect against concerns of potential neurological effects.

### TESTING FOR LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. **Noquochoke Village** is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

### SOME TERMS DEFINED

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

**Level 1 Assessment:** A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Secondary Maximum Contaminant Level (SMCL):** These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

**Massachusetts Office of Research and Standards Guideline (ORSG):** This is the concentration of a chemical in drinking water, at or below which, adverse, non-cancer health effects are likely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

**Total Coliform:** A bacteria that indicates other potentially harmful bacteria may be present.

**Unregulated Contaminants:** Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

**90<sup>th</sup> Percentile:** Out of every 10 homes, 9 were at or below this level.

## Source Water Assessment Summary

The Massachusetts Department of Environmental Protection (MassDEP) has not yet completed a Source Water Assessment Program (SWAP) Report for the water supply source serving Noquochoke Village. This report assesses the susceptibility of public water systems to contamination and makes recommendations for improvement. Once a SWAP report has been completed, we will notify you.

For further information, please visit <http://www.mass.gov/eea/agencies/massdep/water/drinking/overview-of-the-source-water-assessment-and-protection-pr.html>

Be assured that Noquochoke Village in concert with its certified operator, WhiteWater, Inc., will address any concerns as stated in the SWAP Report and welcomes your input to our planning. If you have any questions, please contact WhiteWater, Inc., at 1-888 377-7678.



## FOR YOUR INFORMATION

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MassDEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided to public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Where to go for more information ....

Massachusetts Department of Environmental Protection (MassDEP)  
<http://www.mass.gov/eea/agencies/massdep/water/drinking/>



## Cross Connection Control and Backflow Protection in your water system



Typical Hose  
Bibb Vacuum  
Breaker

A Cross Connection means any actual or potential physical connection or arrangement between a pipe conveying potable water from a public water system and any non-potable water supply, piping arrangement or equipment including, but not limited to, waste pipe, soil pipe, sewer, drain, other unapproved sources. Noquochoke Village recommends the installation of Hose Bibb type vacuum breakers on all outside faucets. This will protect all residents from the potential of backflow into their homes and the potable water system from a hose connection. Studies have shown that hoses are the most commonly unprotected cross connection. MassDEP and Noquochoke Village require the physical separation between the public water supply to your home and a private well used for irrigation or other purposes, these instances will be monitored for compliance. For more information please contact Russell Tierney, Cross Connection Coordinator, WWI at 888-377-7678.