

# 2022 Consumer Confidence Report

## Town of Seabrook Water System

PWS ID# 2111010

### Introduction

Like any responsible public water system, our mission is to deliver the best-quality drinking water and reliable service at the lowest, appropriate cost. Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future.

In the coming year we will be cleaning and redeveloping Rockwell No. 2.

These investments along with on-going operation and maintenance costs are supported by user rates. When considering the high value we place on water, it is truly a bargain to have water service that protects public health, fights fires, supports businesses and the economy, and provides us with the high-quality of life we enjoy.

### What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

NOW IT COMES WITH A  
LIST OF INGREDIENTS.



**The sources of drinking water** (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, and can also come from gas stations, 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.

**In order to ensure that tap water is safe to drink**, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### What is the source of my drinking water?

The Seabrook water system is supplied by groundwater from five gravel-packed wells and seven rockwells located in the western part of town. These wells supplied approximately 366 million gallons of water to the Town in 2021. The gravel-

packed wells range from 50 to 125 feet deep. The rockwells are 400 to 500 feet deep. Gravel-Packed Wells 1, 3 and 7 pump water directly into the distribution system and are chlorinated with sodium hypochlorite. Raw water is pumped to the WTF from nine wells consisting of seven bedrock wells and two gravel-packed wells. The WTF process includes greensand filtration for iron, manganese, and arsenic removal and bubble aeration for radon removal. The raw water is treated with sulfuric acid which decreases the pH for optimum iron, manganese and arsenic removal. Sodium hypochlorite promotes oxidation of iron, manganese and arsenic. Ferric chloride absorbs oxidized arsenic. After water passes through the pressure filters and the aeration units, sodium hypochlorite can be added to the water for disinfection. The clearwell, a concrete basin located below the facility, stores the finished water until delivery to the water system. At this point, potassium hydroxide is added for final pH adjustment and optimal corrosion control for customer plumbing.

**Why are contaminants in my water?** 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 Environmental Protection Agency's (EPA's) Safe Drinking Water Hotline at 1-800-426-4791.

**Do I need to take special precautions?** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 at 1-800-426-4791.

## Source Water Assessment Summary

DES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The assessment for the wells in Seabrook was prepared on June 13, 2000 except for GPW 7 which was prepared on June 10, 2005.

Note: This information is over sixteen years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

| Source Assessment Information |                        |     |      |
|-------------------------------|------------------------|-----|------|
| Source Name                   | Susceptibility Factors |     |      |
|                               | Low                    | Med | High |
| GPW 1                         | 4                      | 5   | 3    |
| GPW 2                         | 5                      | 4   | 3    |
| GPW 3                         | 3                      | 6   | 3    |
| GPW 4                         | 4                      | 5   | 3    |
| GPW 7                         | 6                      | 4   | 2    |
| RW 1 and RW 2                 | 4                      | 4   | 4    |
| RW 3                          | 5                      | 4   | 3    |
| RW 4 and RW 5                 | 5                      | 5   | 2    |

GPW – Gravel-packed well; RW – Rockwell

The complete Assessment Report is available for review at the Seabrook Water Department Office, 550 Route 107 or visit the NHDES website.

## How can I get involved?

For more information about this report, or any questions relating to your drinking water, please call George Eaton, Primary Operator, at (603) 474-9921 or send an email to [gmeaton@seabrooknh.org](mailto:gmeaton@seabrooknh.org). Also, the Town Manager and Selectmen can be contacted at (603) 474-3311, if additional information is required. The Board of Selectmen/Water Commissioners meets every other Monday.

**Violations and Other Information:** A violation was issued for failing to collect the required water source samples within the required timeframe following a routine bacteria sample that was present for total coliform bacteria. However, the distribution samples collected within the timeframe were free of bacteria, the makeup source water samples were immediately collected and also showed the absence of bacteria.

## Definitions

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

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

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

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

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

## Abbreviations

N/A: Not Applicable  
ND: Not Detectable at testing limits  
ppb: parts per billion  
ppm: parts per million  
ppt: parts per trillion  
RAA: Running Annual Average  
GWR-TM: Groundwater Rule-Triggered Monitoring

**Lead in Home Plumbing:** 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. This water system is responsible for high quality drinking water, but cannot control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and cooking. If you are concerned about lead in drinking 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://water.epa.gov/drink/info/lead/index.cfm>.

**System Name: Seabrook      PWS ID: 2111010**  
**2022 Report (2021 data)**

**VIOLATIONS**

| VIOLATION                            | Date of Violation | Explain Violation   | Length of Violation | Action taken to resolve  | Health Effects of Contaminant   |
|--------------------------------------|-------------------|---|---------------------|--|---|
| GWR-TM Triggered Additional Sampling | 08/14/21          | GWR-Triggered Monitoring samples were taken outside of the required 24-hour window. | 08/27/21            | Makeup source samples were collected on 8/23/21 and were free of bacteria. | 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. In August, one of our monthly samples tested present for total coliform bacteria. We immediately collected samples in the distribution system within the required timeframe and these samples were free of bacteria. |

**LEAD AND COPPER**

| Contaminant (Units) | Action Level | 90 <sup>th</sup> percentile | Date                 | # of Sites Above AL | Violation YES/NO | Likely Source of Contamination   | Health Effects of Contaminant  |
|---------------------|--------------|-----------------------------|----------------------|---------------------|------------------|--|--|
| Copper (ppm)        | 1.3          | 0.448                       | 07/07/21 to 09/14/21 | 1 of 33 Sites       | NO               | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives | 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 (ppb)          | 15           | 2.4                         | 07/07/21 to 09/14/21 | 0 of 33 Sites       | NO               | Corrosion of household plumbing systems; erosion of natural deposits                                   | (15 ppb in more than 5%) Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).<br><br>(Above 15 ppb) 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. |

**DETECTED WATER QUALITY RESULTS**

| Contaminant (Units)             | Level Detected    | MCL | MCLG | Violation YES/NO | Likely Source of Contamination   | Health Effects of Contaminant  |
|---------------------------------|-------------------|-----|------|------------------|--|--|
| <b>Radioactive Contaminants</b> |                   |     |      |                  |  |  |
| Uranium (ppb) (2019)            | 1.6<br>One sample | 30  | 0    | NO               | Erosion of natural deposits  | Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.  |
| <b>Inorganic Contaminants</b>   |                   |     |      |                  |  |  |
| Arsenic (ppb)                   | ND – 2.8          | 5   | 0    | NO               | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes | (5 ppb through 10 ppb) While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.<br><br>(Above 10 ppb) Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. |

|                                      |                           |          |           |    |   |  |
|--------------------------------------|---------------------------|----------|-----------|----|---|--|
| Barium (ppm)                         | 0.0192 – 0.0285           | 2        | 2         | NO | Discharge from metal refineries; erosion of natural deposits                                | Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.   |
| Chlorine (ppm)                       | 0.12 - 0.83<br>RAA = 0.41 | MRDL = 4 | MRDLG = 4 | NO | Water additive used to control microbes   | Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.   |
| Chromium (ppb)                       | ND - 1.5                  | 100      | 100       | NO | Discharge from steel and pulp mills; erosion of natural deposits.                           | Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.  |
| Nitrate (as Nitrogen) (ppm)          | ND - 1.43                 | 10       | 10        | NO | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits | (5 ppm through 10ppm) Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.<br>(Above 10 ppm) Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. |
| <b>Volatile Organic Contaminants</b> |                           |          |           |    |   |  |
| Haloacetic Acids (HAA5s) (ppb)       | 4.4 - 4.5                 | 60       | N/A       | NO | By-product of drinking water disinfection   | Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.   |
| Total Trihalomethanes (TTHMs) (ppb)  | 21 - 31                   | 80       | N/A       | NO | By-product of drinking water disinfection   | Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.   |

## PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONTAMINANTS

| Contaminant (Units)                         | Level Detected      | MCL | MCLG | Violation YES/NO | Likely Source of Contamination   | Health Effects of Contaminant  |
|---|---------------------|-----|------|------------------|--|--|
| Perfluorohexane sulfonic acid (PFHxS) (ppt) | ND – 2.10 Ave. 0.18 | 18  | 0    | NO               | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems | Some people who drink water containing perfluorohexane sulfonic acid (PFHxS), perfluorooctane sulfonic acid (PFOS) or perfluorooctanoic acid (PFOA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, or may experience increased cholesterol levels. It may also lower a woman's chance of getting pregnant. |
| Perfluorooctane sulfonic acid (PFOS) (ppt)  | ND – 5.22 Ave. 1.11 | 15  | 0    | NO               |  |  |
| Perfluorooctanoic acid (PFOA) (ppt)         | ND – 9.72 Ave. 4.56 | 12  | 0    | NO               |  |  |

## SECONDARY CONTAMINANTS

| Secondary MCL's (SMCL) Units of Measure | Level Detected | Date | Treatment Technique (if any) | SMCL      | Specific contaminant criteria and reason for monitoring |
|---|----------------|------|------------------------------|-----------|---|
| Chloride (ppm)                          | 59 - 126       | 2021 | N/A                          | 250       | Wastewater, road salt, water softeners, corrosion       |
| Iron (ppm)                              | ND – 0.061     | 2021 | N/A                          | 0.3       | Geological  |
| Manganese (ppm)                         | ND – 0.0067    | 2021 | N/A                          | 0.05      | Geological  |
| Nickel (ppm)                            | ND – 0.0022    | 2021 | N/A                          | N/A       | Geological; electroplating, battery production ceramics |
| pH (units)                              | 6.69 – 8.24    | 2021 | N/A                          | 6.5 – 8.5 | Precipitation and geology                               |
| Sodium (ppm)                            | 32.7 – 50.4    | 2021 | N/A                          | 100 - 250 | We are required to regularly sample for sodium          |
| Sulfate (ppm)                           | 22 - 57        | 2021 | N/A                          | 250       | Naturally occurring                                     |
| Zinc (ppm)                              | ND – 0.0022    | 2021 | N/A                          | 5         | Galvanized pipes  |
| <b>Additional Testing</b>               |                |      |                              |           |   |
| Hardness (ppm)                          | 141 - 260      | 2021 | N/A                          | N/A       | Naturally present in the environment                    |