2022 Consumer Confidence Report

Hooksett Village Water Precinct

PWS ID# 1181020

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.

In the past year, energy audit, asset management plan update, distribution system modeling, Bow interconnection feasibility and tank replacement funding projects were completed. In the coming year we plan to: complete a vertical Asset Management Grant project; continue installing cellular ultrasonic meters; develop a service meter testing program; and host an open house to showcase our system.

These investments along with ongoing operation and maintenance costs are supported almost entirely by user rates and fees. 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.

We are committed to providing you the best water quality available and encourage you to contact us with any questions. Your drinking water continues to meet all applicable state/federal health standards.

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).



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 stormwater 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, the US 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 Precinct's sources include four gravel-packed wells (North Well, East Well, South Well and South Backup Well). The wells are near Pinnacle Pond. We also have an emergency interconnection with Central Hooksett Water Precinct on Route 3.

To meet state and federal requirements for public drinking water, our source water receives treatment before it is supplied to our customers. Our water treatment system includes the addition of sodium hypochlorite for disinfection; sodium carbonate ("soda ash") for pH control; and phosphate for corrosion control and iron/manganese sequestration.

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
The NH Dept. of Environmental Services (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 each 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 results of our assessment, prepared on 12-03-01, 10-14-02 and 11-12-04, are noted below.

- *Well #1 (North Well) Susceptibility Factors:* 5 rated high, 0 rated medium and 7 rated low.
- *Well #2 (South Well) Susceptibility Factors:* 3 rated high, 2 rated medium and 7 rated low.
- *Well #3 (South Backup Well) Susceptibility Factors:* 3 rated high, 2 rated medium and 7 rated low.

Note: The source assessment information is over 17 years old and includes information that was current at the time the report was completed. Therefore, some of the susceptibility ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

The complete Assessment Report is available for review at 7 Riverside St., Hooksett, NH 03106. For more information, call Supt. Michael Heidorn at 603-485-3392 or visit DES' Source Assessment website: https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/hooksett.pdf.

How can I get involved? Monthly meetings open to the public occur at the Precinct's Riverside Street office @ 6PM on the last Tuesday of the month.

For more information about your drinking water, please call the owner's representative / primary operator Michael Heidorn at 603-485-3392.

Violations and Other Information: *No water quality violations have occurred in at least the last 5 years.*

On October 28, 2020, a Significant Deficiency (SD) was identified by DES as a result of their August 25, 2020 Sanitary Survey. The SD included severe deterioration of the Oak Hill storage tank. A Corrective Action Plan (CAP) including a proposed engineering evaluation of the tank was approved by DES on November 25, 2020. The evaluation was completed in 2021. Tank replacement was recommended. Approximately $2.5M in grant/loan funds for the project was tentatively secured as of March 2022 and the replacement is scheduled for 2022-23.

Definitions:

Ambient Groundwater Quality Standard or **AGQS**: The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.

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

Maximum Contaminant Level or **MCL**: 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.

Maximum Contaminant Level Goal or **MCLG:** 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.

Maximum Residual Disinfectant Level or **MRDL:** 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.

Maximum Residual Disinfectant Level Goal or **MRDLG:** 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.

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

Abbreviations:

- BDL: Below Detection Limit
- mg/L: milligrams per Liter
- N/A: Not Applicable
- ND: Not Detectable at testing limits
- NTU: Nephelometric Turbidity Unit
- pCi/L: picoCurie per Liter
- ppb: parts per billion
- ppm: parts per million
- ppt: parts per trillion
- RAA: Running Annual Average
- TTHM: Total Trihalomethanes
- ug/L: micrograms per Liter

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 can not 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 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://water.epa.gov/drink/info/lead/index.cfm.

Sample Dates: Reportable detections of contaminants from the most recent annual round of testing done within the last five years in accordance with the regulations are included below. DES allows water systems to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Thus some of the data present, though representative, may be more than one year old. It is important to note that some contaminants are not included on the table simply because they were not detected.

Water Main Flushing: We flush hydrants in the Village area during daytime hours in the spring and fall. The flushing schedule will be posted on our website and in the newspaper. Flushing is very important to maintain good water quality and fire flow. We apologize for any temporary inconvenience.

Tips for Saving Water:

- Visit our website for money-saving water conservation ideas. Use efficient appliances.
- Pay attention to leaky toilets and fixtures. Repair as needed; see our website for help.
- If your water bill is unusually high or you suspect a leak, please contact us right away.
- Check your meter readings. Use the leak alert and monitoring features on your meter.

Backflow Protection: Backflow is when water flows in the opposite direction from normal due to a change in pressures. During backflow, contaminants may enter the water system through cross-connections. Cross-connections can occur in many residential, commercial and institutional settings and must be adequately protected with special backflow prevention devices. For more information on cross-connection control and backflow prevention for your home or business, including requirements for irrigation systems, please contact us.

System Name: Hooksett Village Water Precinct PWS ID: 1181020

2022 Report (2021 data)

DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected	MCL	MCLG	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Inorganic Contaminants:						
Arsenic (ppb)	Range = ND – 2.3 Average = 0.6± (2021)	5	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	*(2.5 ppb through 5 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. *(above 5 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)	Range = 0.0044 – 0.013 Average = 0.007 (2021)	2	2	No	Discharge of drilling wastes; 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)	Range = 0.11 – 0.53 Average = 0.34 (2021)	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.
Fluoride (ppm)	Range = ND – 0.14 Average ≤ 0.07 (2018)	4 *(SMCL = 2)*	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Volatile Organic Contaminants:						
Haloacetic Acids (HAA) (ppb)	Range = ND – 2.4 Max. Loc. Run Avg. = 1.2± (2021)	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 (TTHM) *(Bromodichloromethane Bromoform Dibromochloromethane Chloroform)* (ppb)	Range = 7.1 – 11 Max. Loc. Run Avg. = 9.1 (2021)	80	N/A	No	By-product of drinking water chlorination	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.

LEAD AND COPPER RESULTS

Contaminant (Units)	Action Level	90th percentile sample value	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	0.16	2021	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching of 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	1 *(ND in 2021)*	2018	0	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). *(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.

SECONDARY CONTAMINANTS

Contaminant (Units)	Level Detected	Date	Treatment technique (if any)	AL, Secondary MCL (SMCL) or AGQS	Specific contaminant criteria and reason for monitoring
Chloride (ppm)	Average = 23 / Range = 12 - 37	2021	N/A	250 (SMCL)	We are required to regularly sample for chloride.
Iron (ppm)	Average = 1.0 / Range = 0.073 – 3.4*	2021	N/A	0.3 (SMCL)	We are required to regularly sample for iron.
Manganese (ppm)	Average = 0.06 / Range = 0.017 – 0.085	2021	N/A	0.05 (SMCL) - 0.3 (AGQS)	We are required to regularly sample for manganese.
Nickel (ppm)	Average = 0.0013 / Range = 0.0012 – 0.0014	2021	N/A	0.1 (AGQS)	We are required to regularly sample for nickel.
pH (unitless)	Average = 6.86 / Range = 6.07 – 7.77**	2021	N/A	6.5 – 8.5 (SMCL)	We are required to regularly sample for pH.
Sodium (ppm)	Average = 34 / Range = 27 - 41	2021	N/A	250 (SMCL)	We are required to regularly sample for sodium.
Sulfate (ppm)	Average = 8.5 / Range = 6.4 - 11	2021	N/A	250 (SMCL) - 500 (AGQS)	We are required to regularly sample for sulfate.
Zinc (ppm)	Average = 0.022 / Range = 0.0056 – 0.042	2021	N/A	5 (SMCL)	We are required to regularly sample for zinc.

SIGNIFICANT DEFICIENCY

Significant deficiency description and date of sanitary survey	Source of ***E.coli***	Date deficiency was addressed or corrected	Approved plan and timeframe for correction	Health Effects (Env-Dw 811.21)
2020: Storage tank deterioration (see text)	N/A	In progress	In progress	N/A

**Note: An anomalous (outlier) result, 3.4 ppm, for the South well iron sample collected on 11/16/2021 heavily skewed the reported average and range. The historical average and range for iron at the South Well are 0.04± ppm and ND – 0.265 ppm, respectively. The anomaly in 2021 is suspected to have occurred due to a one-time disturbance associated with a well repair immediately prior to sampling.*

***Note: Three samples collected on 11/16/21 at the North, South and South Backup Wells were reported to have an average pH of 6.32 and pH range of 6.07 – 6.77. The lab confirmed that these samples contained pre-chlorinated water that was not representative of typical conditions. Excluding these samples yields an average of 7.41 and range of 7.21 – 7.77, which is consistent with pump station operational data.*