



## 2018 Consumer Confidence Report

### Cotton Farms Water System

EPA ID: 0583030

Hampstead Area Water Services Company is committed to providing its customers with water that far exceeds all drinking water standards. We are pleased to report that our drinking water is safe and meets all federal and state requirements. Today's consumers are keenly aware of environmental and health issues. This Water Quality Report is designed to keep you as the customer informed so that you will be able to make educated decisions for you and your family. This report contains results from our 2017 testing, details about your water source, how it is treated, what we are doing to protect it, and how it compares to standards set by regulatory agencies.

### 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 your 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.

**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?

Cotton Farms obtains its water from four bedrock wells located at two locations in the system. The Wesley St. pump house and the Mary St. pump house. At the Wesley St, PH the water is treated with chlorine before passing through greensand filters for iron, manganese, and arsenic removal. Water flows from three wells to three 10,000-gallon atmospheric storage tanks. The treated water is transferred via duplicate booster pumps to a 6,160-gallon hydro pneumatic storage tank and feeds the distribution system. At the Mary St. PH water flows from the two wells into two 5,000-gallon atmospheric storage tanks. It is then transferred via duplicate booster pumps to distribution.

### 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 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 Assessment Information EPA ID:0583030		Susceptibility Factors		
Source Name	Date	Low	Medium	High
Bedrock Well #6	8/14/2001	5	4	3
Bedrock Well #7	8/14/2001	5	4	3
Bedrock Well #8	8/14/2001	5	4	3
Bedrock Well #9	3/11/2005	8	1	3

*The NH Department of Environmental Services has prepared a Source Water Assessment Report for the sources serving the community water system, assessing the sources vulnerability to contamination. The results of the assessment are in the above table.*

Note: This information is several 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 this present time, DES has no plans to update this data.

For more information visit the DES Drinking Water Source Assessment website at <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm>

## How can I get involved?

For more information about your drinking water, please call Hampstead Area Water Services Company at: (603) 362-5333 Monday through Friday 8:00am – 4:30pm. Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions you may have.

## Definitions

**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.

**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.

**Level I Assessment:** A study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

**Level II Assessment:** A very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**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.

**Violations and other information:** See violation list in table included.

## Abbreviations

**BDL:** Below Detection Limit

**mg/L:** milligrams per Liter

**NA:** 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

**RAA:** Running Annual Average

**TTHM:** Total Trihalomethanes

**UCMR:** Unregulated Contaminant Monitoring Rule

**ug/L:** micrograms per Liter

**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. 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 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>



## Cotton Farms Water System

### EPA ID: 0583030

### 2018 Report (2017 data)

#### ADDITIONAL TESTING

Additional Tests & Secondary MCLs (SMCL)	Results	Date	Treatment technique (if any)	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Sodium (ppm)	22	2016	NA	100-250	We are required to regularly sample for sodium

#### LEAD AND COPPER

Contaminant (Units)	Action Level	90 <sup>th</sup> percentile sample value	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
<b>Copper (ppm)</b>	1.3	0.552	2016	0	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.
<b>Lead (ppb)</b>	15	3	2016	0	NO	Corrosion of household plumbing systems, erosion of natural deposits	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. 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).

## DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected	Range	MCL	MCLG	Violation YES/NO	Year	Likely Source of Contamination	Health Effects of Contaminant
<b>Radioactive Contaminants</b>								
<b>Combined Radium 226 + 228 (pCi/L)</b>	2.8	NA	5	0	NO	2017	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Compliance Gross Alpha (pCi/L)</b>	2.7	NA	15	0	NO	2015	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
<b>Uranium (ug/L)</b>	2	NA	30	0	NO	2015	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>								
Contaminant (Units)	Level Detected	Range	MCL	MCLG	Violation YES/NO	Year	Likely Source of Contamination	Health Effects of Contaminant
<b>Arsenic (ppb)</b>	8.5 Average	6-14	10	0	NO	2017	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	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.
<b>Barium (ppm)</b>	0.098	NA	2	2	NO	2016	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.
<b>Chlorine (ppm)</b>	0.44 Average	0-0.89	MRDL = 4	MRDLG = 4	NO	Monthly 2017	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.

Inorganic Contaminants								
Contaminant (Units)	Level Detected	Range	MCL	MCLG	Violation YES/NO	Year	Likely Source of Contamination	Health Effects of Contaminant
Chromium (ppb)	9	NA	100	100	NO	2016	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.
Fluoride (ppm)	0.56	NA	4	4	NO	2016	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								
Contaminant (Units)	Level Detected	Range	MCL	MCLG	Violation YES/NO	Year	Likely Source of Contamination	Health Effects of Contaminant
Total Trihalomethanes (TTHM) (Bromodichloro-methane Bromoform Dibromochloro-methane Chloroform) (ppb)	32	NA	80	N/A	NO	2017	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.