# Consumer Confidence Report Pillsbury Lake District Franklin Pierce & Peninsula Systems

2016

#### 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, 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 Franklin Pierce water system obtains its water from two bedrock wells (BRW.) BRW 4 and BRW 7 serve this system. The wells are located near the pumphouse on Franklin Pierce Drive. The water is pumped from the wells into an atmospheric storage tank, and then is pumped by booster pumps into a hydropneumatic tank to prove adequate system pressure.

The Peninsula system is obtains its water from two bedrock wells, BRW 5 and BRW 6. The water is treated with a particulate filter and then an arsenic removal system. Aqua Mag blended phosphate is added to keep

iron sequestered. Chlorine is also injected just before the filtration system to remove odor. Water is stored in an atmospheric tank and pressure to the system is supplied by duplicate booster pumps.

We have provided the information for both systems together in this one report because there are times when the two systems are interconnected to provide adequate water to all of our consumers.

#### 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 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 results of the assessments, prepared during 2001 and 2005 are noted below.

#### Franklin Pierce system:

- BRW 1, one susceptibility factor was rated high, two were rated medium, and nine were rated low.
- BRW 2, one susceptibility factor was rated high, two were rated medium, and nine were rated low.

#### Peninsula system:

- BRW 5, two susceptibility factors were rated high, two were rated medium, and eight were rated low.
- BRW 6, two susceptibility factors were rated high, two were rated medium, and eight were rated low.

Note: Some of this information is over 10 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 but we are required to present it in this report.

The complete Assessment Report is available for review at WSO Plus, Inc. For more information, call Joe Damour at 428-3525 or visit the DES Drinking Water Source Assessment website at <a href="http://des.nh.gov/organization/divisions/w">http://des.nh.gov/organization/divisions/w</a> ater/dwgb/dwspp/dwsap.htm.

**How can I get involved?** The Pillsbury Lake District holds regular meetings on the second Wednesday of the month at 7:00 PM. Changes in meeting schedule are posted at

the Community building and are shown on the District web site. For more information about your drinking water, please call 746-3191. The District has contracted with WSO Plus, Inc. to provide trained and certified professional operators for the water system. WSO Plus, Inc. can be reached at 603-428-3525

**Violations and Other information:** There were no violations during 2015.

#### **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.

#### **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

#### **Drinking Water Contaminants:**

**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 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 vour water tested. Information on lead in drinking water, testing methods, and steps vou can take to minimize exposure is available from the Safe Drinking Water Hotline or at

<a href="http://water.epa.gov/drink/info/lead/index">http://water.epa.gov/drink/info/lead/index</a>
<a href="http://water.epa.gov/drink/info/lead/index">.cfm</a>

Sample Dates: The results for detected contaminants listed below are from the most recent monitoring done in compliance with regulations ending with the year 2014. The State of New Hampshire 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.

## System Name: Pillsbury Lake District/Franklin Pierce ID: 2462040 2015

## **DETECTED WATER QUALITY RESULTS**

Contaminant (Units)	Level Detected	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Microbiologica	Contaminants			1		
Total Coliform Bacteria	12 Absent 0 Present Sampled 201	Not more than 1 positive sample in a one month period.	0	No	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

**Inorganic Contaminants** 

Arsenic (ppb)	Range-0-4 Average = 3.3 Sampled 2015	10	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.  (above 10 ppm) 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.
Copper (ppm)	90 <sup>th</sup> Percentile= 0.168 Sampled 2015	AL=1.3	1.3	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.
Fluoride (ppm)	1.3 Sampled 2015	4	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.

Lead (ppb)	90 <sup>th</sup> Percentile= 3 Sampled 2015	AL=15	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.
Mercury (inorganic) (ppb)	0.2 Sampled 2015	2	2	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

**Additional Testing** 

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Additional Tests & Secondary MCLs (SMCL)	Results	Date	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)
Chloride (ppm)	3	Sampled 2015	
Sodium (ppm)	10	Sampled 2015	
Sulfate (ppm)	5	Sampled 2015	AGQS = 500
Zinc (ppm)	0.063	Sampled 2015	

#### **Violations**

VIOLATIONS	Date of violation	Explain violation	Return to Compliance
CCR Report Violation /Major	7/1/2015	Consumer Confidence Reporting	7/24/2015
CCR Adequacy/Availability/Content Vio (minor)	7/1/2015	Consumer Confidence Reporting	7//24/2015

## 2015

## **DETECTED WATER QUALITY RESULTS**

Contaminant (Units)	Level Detected	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Microbiologic	cal Contaminants	8		_		
Total Coliform Bacteria	12 Absent 0 Present Sampled 2015	Not more than 1 positive sample in a one month period.	0	No	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Radioactive	Contaminants	, ,		•		

Compliance Gross Alpha (pCi/L)	1.4 Sampled 2015	15	0	No	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.
Combined Radium 226 + 228 (pCi/L)	0.5 Sampled 2015	5	0	No	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.

### **Inorganic Contaminants**

					Erosion of natural	(5 ppb through 10 ppb) While your drinking water meets EPA's standard for
Arsenic	Range=0-4	10	0	No	deposits; runoff from	arsenic, it does contain low levels of arsenic. EPA's standard balances the current
(ppb)	Average=2				orchards; runoff from	understanding of arsenic's possible health effects against the costs of removing
	Sampled 2015				glass and electronics	arsenic from drinking water. EPA continues to research the health effects of low
					production wastes	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 10 ppm) 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)	0.004 Sampled 2015	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.
Copper (ppm)	90 <sup>th</sup> Percentile= 0.045 Sampled 2015	AL=1.3	1.3	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.
Fluoride (ppm)	0.52 Sampled 2015	4	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.
Lead (ppb)	90 <sup>th</sup> Percentile= 2 Sampled 2015	AL=15	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.

**Synthetic Organic Contaminants Including Pesticides and Herbicides** 

1,3-Dim	ethyl-2-	103				
nitrobe	enzene	Sampled 2012				
(pp	ob)					

**Volatile Organic Contaminants** 

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Total	0.9	100/80	N/A	No	By-product of	Some people who drink water containing trihalomethanes in excess of the MCL
Trihalomethanes	Sampled 2012				drinking water	over many years may experience problems with their liver, kidneys, or central
(TTHM)					chlorination	nervous systems, and may have an increased risk of getting cancer.
(Bromodichloro-						
methane						
Bromoform						
Dibromomethane						
Chloroform)						
(ppb)						

**Additional Testing** 

Additional Tests & Secondary MCLs (SMCL)	Results	Date	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)
Chloride (ppm)	41	Sampled 2015	
Manganese (ppb)	170	Sampled 2015	AGQS = 840
Sodium (ppm)	22	Sampled 2015	
Sulfate (ppm)	7	Sampled 2015	AGQS = 500
Zinc (ppm)	0.066	Sampled 2015	

#### **Violations**

VIOLATIONS	Date of violation	Explain violation	Return to Compliance
CCR Report Violation /Major	7/1/2015	Consumer Confidence Reporting	7/24/2015
CCR Adequacy/Availability/Content Vio (minor)	7/1/2015	Consumer Confidence Reporting	7//24/2015