

## Source Water Assessment Summary:

Source Information		Summary of Susceptibility Factors		
		Low	Med	High
Source Name and Description	BRW 1 Located 110 ft SW of PUMPHOUSE	10	0	2
Source Name and Description	BRW 2 Located 150 ft W of PUMPHOUSE	10	1	1

Source Water Assessments are prepared by the NH Department of Environmental Services and are conducted to identify potential contamination sources within the protection area of public water supply wells. This allows communities to develop and implement source water protection programs. The complete assessment report for the Woodlands system is available at the Derry Department of Public Works, For more information you may contact the DPW at 603-432-6144 or visit the NHDES website at <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/reports/documents/derry.pdf>

*Note: This information is over 12 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.*

The complete assessment report for the Derry Core Water system is available at the Derry Department of Public Works, For more information you may contact the DPW at 603-432-6144 or visit the DES Drinking Water Source Assessment website at:

<http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm>

**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.

**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.

**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.

**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.

**How can I get involved?** The Town of Derry invites its customers to become more involved with the Town's water quality efforts. The Derry Town Council, who act as the Water Commission, meet periodically to discuss issues that concern our customers. Council meetings are usually held on the first and third Tuesdays of each month at the Derry Municipal Center at 14 Manning Street. For more information you can call the Municipal Center or visit our website [www.derry.nh.us](http://www.derry.nh.us).

## Town of Derry, New Hampshire

# ANNUAL CONSUMER CONFIDENCE REPORT

## Drinking water 2015 testing report For the Woodlands Community Water System

PWS ID 0612160



### To Our Customers at the Woodlands,

The Town of Derry's ongoing mission is to provide safe and reliable drinking water to Derry's residents, institutions and businesses complying with Federal and State Regulations. 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. Each year the Town budgets for the replacements of older undersized water pipelines, fire hydrants, and valves throughout our water system as well as repairs and upgrades to our pump stations.

**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 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.

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

The Derry Woodlands Community Water System is serviced by two groundwater supply bedrock wells located off Lester Lane, a storage tank, a water booster station, and 5,500 feet of plastic water lines. The water is filtered to remove arsenic. This filtration also reduces iron and manganese concentrations. Chlorine is then injected prior to distribution in order to maintain adequate disinfection. The system provides drinking water to 60 single family residential homes on Gervaise Dr., Lester Ln., Modean Dr., Long Ave., and Kelley Dr.

**Lead in Drinking Water:** As required by the State and EPA, the Town periodically samples select homes in the Woodlands for lead. As you are aware, during our last sampling round, 1 of the 5 homes sampled exceed the action level for lead. Although the likely source of the lead is associated with the internal plumbing of the home, the Town is still responsible or the quality of the water that caused the lead to leach into the water.

**MtBE - Public Water Line Connection:** Over the past few years, the Woodlands has had a number of issues with its water quality from iron and manganese, to calcium deposits, sulfur, arsenic and most recently lead. Last year the NH Department of Environmental Services detected the gasoline additive MtBE in drinking water wells along the Route 28 corridor. There are concerns that this contamination may migrate east toward the Woodlands area. This concern, along with the past water issues, has prompted the Town's decision to connect the Woodlands to the Derry core water system and discontinue the wells.

Derry's core water system receives its water from Manchester Water Works whose water is supplied from Lake Mas-sachusetts. More detailed information will be provided as the project moves forward.

## Town of Derry, NH Woodlands Community Water System Sampling Results for 2015

The **Table** below lists the contaminants detected in Derry's **Woodlands Community Water System in 2015**. In addition to those detected, the Town tests your drinking water for over 100 additional contaminants such as pesticides, herbicides, radionuclides, MTBE etc. using both Town resources and local laboratories.

**How to read this table:** This table shows the results of our water quality analyses. Every regulated contaminant that we detected in your water, even in the minutest traces, is listed here. The table contains the names of each contaminant, the highest level allowed by State and EPA regulations (MCL), the ideal goals for public health (MCLG), the amount detected, and the most common sources of the contaminant. Footnotes explaining our findings and a key to the units of measure are also included in this table. Definitions of MCL and MCLG are important.

DETECTED WATER QUALITY RESULTS						
CONTAMINANT (Units)	YEAR SAMPLED <sup>1</sup>	HIGHEST LEVEL DETECTED	MCL	MCLG	VIOLATION YES/NO	LIKELY SOURCE OF CONTAMINANT
Arsenic (ppb)	2015	5.1 RANGE of DETECTED VALUES = 4.5 to 5.1	10	N/A	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2014	0.0341	2	N/A	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	2015	0.010 RANGE of DETECTED VALUES = 0.010 to 0.43	MRDL = 4	MRDLG = 4	NO	Water additive used for disinfection; to control microbes
Fluoride (ppm)	2014	0.55	4.0	4.0	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Copper (ppm)	2015	90 <sup>th</sup> percentile = 0.204 ----- # of samples exceeding AL = 0	AL = 1.3	AL = 1.3	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2015	90 <sup>th</sup> percentile = 17 ----- # of samples exceeding AL = 0	AL=15	0	YES	Corrosion of household plumbing systems, erosion of natural deposits
<b>DISINFECTION BYPRODUCTS</b>						
Total Trihalomethanes (TTHM) ppb (Bromodichloro-methane Bromoform Dibromomethane Chloroform)	2013	RAA = 4.5	RAA = 80	N/A	NO	By-product of drinking water chlorination
Haloacetic Acids (HAA) (ppb)	2013	RAA = 1.2	RAA = 60	NA	NO	By-product of drinking water disinfection
<b>ADDITIONAL TESTING</b>		<b>RANGE OF DETECTED VALUES</b>		<b>AVERAGE VALUE</b>		<b>WHY DO WE TEST FOR THESE CONTAMINANTS?</b>
Sodium (ppm)	2014	18.6		18.6		The Derry <b>Woodlands Community Water System</b> is required by the Safe Drinking water Act (SDWA) to sample its water system for inorganic compounds (IOC's). Derry will sample for these contaminants more frequently as they are in some cases of common interest to consumers.
Calcium (ppm)	2014	48.1		48.1		
Manganese (ppm)	2014	0.0029		0.0029		
Magnesium (ppm)	2014	7.25		7.25		
Zinc (ppm)	2014	0.0393		0.0243		
Chloride (ppm)	2014	63		63		
Sulfate (ppm)	2014	17		17		
Hardness (mg CaCO <sub>3</sub> /l)	2014	150		150		

1. The State of NH and EPA allow for water systems to monitor for contaminants noted less than once per year because the concentrations for these contaminants do not change frequently. Some of this data, though representative, is more than one year old.

### DEFINITIONS

**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

<b>BDL:</b> Below Detection Limit	<b>mg/L:</b> milligrams per Liter
<b>NA:</b> Not Applicable	<b>ND:</b> Not Detectable at testing limits
<b>pCi/L:</b> picoCurie per Liter	<b>ug/L:</b> micrograms per Liter
<b>ppb:</b> parts per billion	<b>ppm:</b> parts per million
<b>RAA:</b> Running Annual Average	

### 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 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>

**Arsenic:** (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.