

# Consumer Confidence Report

Drew Woods

EPA # 0612150

2020

## 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 storm water runoff, and residential uses.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

**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.

**In order to ensure that tap water is safe to drink**, the EPA prescribes regulations which limit the amounts 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 source of the Drew Woods water supply is four wells located in the Drew Woods system off Olsen Road near Drew Woods Drive in East Derry, NH. Treatment consists of aeration to reduce Radon levels, and phosphate addition to sequester iron and manganese. In early 2011, an interconnection with the town of Derry was completed in order to provide supplemental water to the Drew Woods system. Derry purchases its water from the city of Manchester. Treatment for Manchester consists of chloramines to kill microbes, fluoride addition to prevent tooth decay, Phosphoric acid to also prevent corrosion, deep-bed granular-activated carbon (GAC) filters that completes the physical removal of particles, ozone that removes color, taste and odor along with inactivating harmful organisms in water, and soda ash to adjust the pH and alkalinity to provide aid in coagulation and control pipe corrosion.  
<http://www.manchesternh.gov/website/Departments/WaterWorks/ConsumerConfidence/tabid/410/Default.aspx>

**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.

Source Name	Date	Low	Med	High
Bedrock Well # 4 - Located 100' north of the pump house	3/18/02	7	4	1
Bedrock Well # 5 - Located 275' northwest of the pump house	3/18/02	8	3	1
Bedrock Well # 6 - Located 310' northwest of the pump house	3/18/02	9	2	1
Bedrock Well # 7 - Located 437' northwest of the pump house	3/18/02	8	3	1
Lake Massabesic - City of Manchester	9/10/02	5	4	4

Note: This information is over 15 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 is available for review. For more information, call *Matt Day* at 800-553-5191 or 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 our laboratory at 800-553-5191 or send an email to [customer-service@pennichuck.com](mailto:customer-service@pennichuck.com). Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions you may have.

**Violations: We are pleased to announce there were no violations.**

### Drinking Water Contaminants:

**Radon:** Radon is a radioactive gas that you cannot see, taste or smell. It can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. It is a known human carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer.

**Sodium:** Sodium sensitive individuals such as those experiencing hypertension, kidney failure, or congestive heart failure, who drink water containing sodium, should be aware of levels where exposures are being carefully controlled.

**Fluoride:** Your public water supply is fluoridated. According to the Centers for Disease Control and Prevention, if you child under the age of 6 months is exclusively consuming infant formula reconstituted with fluoridated water, there may be an increased chance of dental fluorosis. Consult your child's health care provider for more information.

**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>.

### 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.

**Turbidity:** A measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus helps measure the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.

### Abbreviations

**NA:** Not Applicable

**ND:** Not Detectable at testing limits

**NTU:** Nephelometric Turbidity Unit

**pCi/L:** picoCurie per Liter

**ppt:** parts per trillion

**ppb:** parts per billion

**ppm:** parts per million.

**RAA:** Running Annual Average

## 2020 Report (2019 Test Results)

REGULATED SUBSTANCES							
SUBSTANCE (Unit of Measure)	Year Sampled	MCL	MCLG	Level Detected	Range Low-High	Violation Yes/No	Typical Source of Contaminant
Arsenic (ppb)	2019	10	0	RAA 1.38	ND-1.6	No	Erosion of natural geological deposits; pesticide residue, industrial waste
Barium (ppm)	2018/2019	2	2	0.0173	0.0019-0.0173	No	Geological; oil/gas drilling, painting, industrial waste
Beta/Photon Emitters <sup>1</sup> (pCi/L)	2017	50	0	1.7	NA	No	Decay of natural and man-made deposits.
Bromate (ppb)	2019	10	0	Average 1.03	ND - 8.9	No	By-product of drinking water disinfection.
Chloramines (ppm)	2019	4-MRDL	4-MRDLG	0.72	ND - 4	No	Water additive used to control microbes.
Chromium (ppb)	2017/2019	100	50	1.0	ND-1.0	No	Discharge from steel and pulp mills; Erosion of natural deposits
Compliance Gross Alpha (pCi/L)	2015	15	0	1.2	ND-1.2	No	Erosion of natural deposits and radioactive materials
Combined Radium (pCi/L)	2015	5	0	RAA-1.38	ND-1.8	No	Erosion of natural deposits
Fluoride (ppm)	2017/2019	4	4	Average 0.72	0.39 - 0.82	No	Geological; additive to drinking water, toothpaste
Total Organic Carbon <sub>3</sub> (ppm)	2019	TT	NA	Average 1.83	1.45 - 2.43	No	Naturally present in the environment
Turbidity (NTU) <sup>2</sup>	2019	TT= <1 NTU	NA	0.05	0.02 - 0.05	No	Soil Runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2019	TT=95% of samples < 0.3 NTU	NA	100 %	NA	No	Soil Runoff
Chlorine Total (ppm)	2019	4-MRDL	4-MRDLG	Average 0.26	ND - 1.27	No	Water additive used to control microbes.
Total Haloacetic acids (ppb)	2019	60	NA	RAA 4.0	ND - 11	No	By-product of drinking water chlorination.
Total Trihalomethanes (ppb)	2019	80	NA	RAA 6.5	3.0 - 15	No	By-product of drinking water chlorination.

1-The MCL for beta particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.  
 2-Turbidity is a measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus helps measure the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.  
 3-The value reported under Amount Detected for TOC is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of >1 indicates a violation of the TOC removal requirements.

LEAD & COPPER	Year Collected	90th Percentile	Action Level	MCLG	# of Sites Sampled	# Sites Above Action Level	Violation Yes/No	Possible Source of Contaminant
Lead (ppb)	2018	ND	15	0	11	1	No	Corrosion of household plumbing system; erosion of natural deposits
Copper (ppm)	2018	0.231	1.3	1.3	11	0	No	

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

Secondary Substances (Unit of Measure)	Year Collected	SMCL	Average Amount Detected	Range Low-High	Typical Sources
Aluminum (ppb)	2019	200	29.4	ND – 37	Erosion of natural deposits; Residual from some surface water treatment processes
Color (units)	2018	15	0	0 - 1	Naturally occurring organic materials
Chloride (ppm)	2017/2019	250	46.5	45 - 56	Runoff/leaching from natural deposits
Manganese (ppb)	2017/2019	50	12	2 – 48	Geological
pH (Units)	2019	6.5 – 8.5	7.71	7.34 – 7.91	Naturally occurring
Sulfate (ppm)	2017/2019	250	22.75	16 - 31	Naturally occurring
Zinc (ppm)	2017/2019	5	0.001	ND – 0.0104	Galvanized pipes

**UNREGULATED AND OTHER SUBSTANCES**

Substances (Unit of Measure)	Year Collected	Average Amount Detected	Range Low-High	Typical Sources
Alkalinity (ppm)	2017/2019	23	20 - 60	Naturally occurring and/or added for pH adjustment.
Ammonia, as Nitrogen (ppm)	2019	0.40	0.22 – 0.59	By-product of drinking water disinfection.
Ammonia, Free (ppm)	2019	0.06	0.04 – 0.09	By-product of drinking water disinfection.
Bromochloroacetic Acid (ppb)	2018	1.1	0.682-1.680	Used as a food additive (antioxidant)
Butylated Hydroxyl Anisole (ppb)	2018	0.0297	NA	Used as a food additive (antioxidant)
Calcium (ppm)	2017/2019	4.5	4.44 – 24.1	Erosion of natural deposits
Magnesium (ppm)	2017/2019	1.02	0.97 – 2.57	Erosion of natural deposits
o-Toluidine (ppb)	2018	0.00693	NA	Used in the production of dyes, rubber, pharmaceutical, and pesticides
Perfluorooctanoic acid (PFOA) (ppt)	2019	5.08	NA	Industrial processes, firefighting foam, landfills, wastewater treatment and septic systems
Phosphate (ppm)	2019	0.51	0.47 – 2.75	Corrosion control additive
Quinoline (ppb)	2018	0.0198	NA	Used as a pharmaceutical (antimalarial) and Flavoring agent; Produced as a chemical intermediate; Component of coal
Radon (pCi/L) (Drew Woods)	2019	RAA 1247	950 - 1473	Erosion of natural deposits and radioactive materials
Silica (ppm)	2019	4.50	3.53 – 6.18	Naturally present in the environment
Sodium (ppm)	2017/2019	42.9	39.3 – 46.8	Road salts, septic systems (salt from water softeners)
Total Hardness (ppm)	2017/2019	15.48	15.1 – 70.8	A measure of dissolved minerals, primarily calcium and magnesium

**UNREGULATED CONTAMINANT MONITORING RULE – PART 3 (UCMR3)**

Substances (Unit of Measure)	Year Collected	Amount Detected	Range Low-High
Chlorate (ppb)	2014	180.9	32 – 380
Chromium (ppb)	2014	0.119	ND – 0.27
Chromium-6 (ppb)	2014	0.060	0.040 – 0.079
Strontium (ppb)	2014	47.6	41 - 52
Vanadium (ppb)	2014	0.36	ND – 0.56

Manchester Water Works participated in the 4<sup>th</sup> stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminants monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800)426-4791