2016 Consumer Confidence Report Reporting for 2015

Winchester Water Works #2531010

Introduction

Like any responsible public water system, our mission is to provide safe drinking water to consumers by maintaining the Town's sources of water and distribution system to the highest degree possible. Water is also supplied for firefighting and other emergencies. Winchester is supported by three NH D.E.S. licensed Water Operators: Richard M. Meleski #2764, Chief Operator and Superintendent; Steve Hammond #3440 and Ricky K. Meleski #3290.





The Winchester Water Department supplies water to its customers in accordance with the regulations put forth by the United States Environmental Protection Agency (U.S. EPA), the New Hampshire Department of Environmental Services (NH D.E.S.) and our local regulations and ordinances. Maintenance of the well recharge areas, pumping facilities, storage tank and distribution system allows us to deliver safe drinking water to our customers as efficiently as possible.

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. Emergency water main breaks create such inconvenience to our modern day life. A strong preventative maintenance plan, with regular inspection and maintenance, on all three wells and the emergency water storage tank will reduce the risks of unplanned repairs and unexpected water loss. Controlling water losses through the detection and repair of distribution leaks is fundamental to operating an efficient water system. Not only is reducing leakage important for protecting water resources, but it also reduces the amount of energy used to operate the system, and sets a positive example for others in the community.

Replacing expiring fire hydrants, residential curb valves, and defective water gate valves are important to the infrastructure and insurance to the residents who rely on the fire protection system. Those costs are supported by the revenues collected from new connection fees and quarterly user 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. Please feel free to stop by the town hall for a copy of Winchester Annual Report for specific information on the department's 2015 projects. Also, do not hesitate to ask about the scheduled 2016 projects.

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 chart included in this report reflects the contaminants detected during our required sampling. It is not a complete list of all the potential contaminants in our drinking water. If a contaminant is not detected it is not reported in the CCR. To view a complete list of samplings and their results visit https://www2.des.state.nh.us/DESOnestop/PWSDetail.aspx?l D=2531010 . There you also find the sampling requirements for 2016 by looking for the icon labeled "Master Sampling Schedule & Sampling Forms".

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.

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 Town of Winchester has three gravel packed wells that supply water that meets federal and state requirements.

- Well #1 installed in 1947, located on Route 10 (Keene Rd) 2.5 miles north of the center of town. EPA ID #253 1010-001
- Well #2 installed in 1952, located on Route 10 (Keene Rd) 2.5 miles north of the center of town. EPA ID #2531010-002
- Well #3 installed in 1970, located off Plumb Pak Road 1 mile east of the center of town. EPA ID #2531010-003

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 assessment, prepared on August 8, 2006 and last updated on Sept. 26, 2007 are noted below.

- Well #1, received one high susceptibility ratings, two medium susceptibility ratings, and nine low susceptibility ratings.
- Well #2, received one high susceptibility ratings, two medium susceptibility ratings, and nine low susceptibility ratings.

 Well #3, received one high susceptibility ratings, four medium susceptibility ratings, and eight low susceptibility ratings.

Note: This information is over 6 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 at 1 Richmond Rd., Winchester, NH. For more information, call Danielle Roy at 239.4951 x105 or visit the DES Drinking Water Source Assessment website at http://des.nh.gov/organization/divisions/water/dwgb/dwspp/reports/documents/winchester.pdf

How can I get involved?

Winchester's Board of Selectman meet every Wednesday evening at 7 pm in Winchester's Town Hall, 1 Richmond Rd. welcoming your suggestions and opinions. For more information contact the system owner, Winchester's Board of Selectman at 239.4951 or Winchester's Water Superintendent, Richard M. Meleski, Monday-Friday 7am-3:30pm at 239.4132.

Violations and Other information: No violations to report

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.

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

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

THE FOLLOWING APPLIES if these contaminants are present - see table for detected levels.

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 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

Radon: Radon is a radioactive gas that you can't 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 showing, 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.

System Name: Winchester Water Works

2016 (reporting for **2015**)

EPA ID: 2531010

DETECTED WATER QUALITY RESULTS (for the 2014 calendar year)						
Contaminant (Units)	Level Detected	MCL	MCLG	Violation YES/NO		Health Effects of Contaminant
Inorganic Contar Copper (ppm)	0.42 (tested in July 2015)	AL=1.3 mg/l	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.
Nitrate (as nitrogen) (ppm)	Well#1 0.9 Well#2 0.1 Well#3 1.6 (tested in January 2015)	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	(5 ppm through 10ppm) Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider. (Above 10 ppm) Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Lead (ppb)	0 (tested in July 2015)	AL=15 (0.015 mg/l)	0	No	Corrosion of household plumbing systems, erosion of natural deposits	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).
Volatile Organic Contaminants Site #321 95 Ashuelot Main St. & Site #322 616 Warwick Rd. Results reported are a running annual average (RAA)						
Total Trihalomethanes (TTHM) (Bromodichloromethane Bromoform Dibromomethane Chloroform) (ppb)	Site #321 0.002 Site #322 0.002	100/80 (0.080 mg/l)	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.
Haloacetic Acids (HAA) (ppb)	Site #321 0.0017 Site #322 0.0017	60 (0.060 mg/l)	NA	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.