2017 Consumer Confidence Report

Pine Grove Cooperative

2303010

Introduction

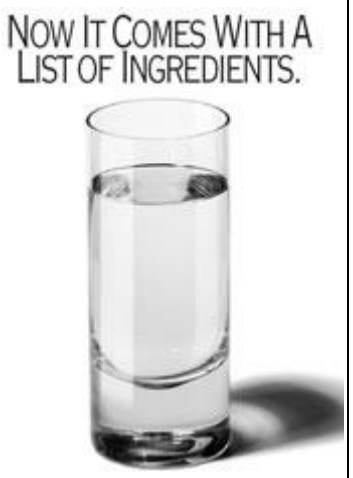
Like any responsible public water system, our mission is to deliver the highest quality drinking water and reliable service at the lowest, appropriate cost. Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future.

These investments along with on-going operation and maintenance costs are supported by the rents/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.

Due to drought conditions experienced last summer, our shallow wells couldn't meet the demand. We utilized a backup well for a couple months, until the water table recovered. The Coop has recently begun the development of a new well, utilizing state funds.

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?

We obtain our water from two gravel packed wells, located to the northwest of the park. Their yields are 34 and 12 gallons per minute. The water system utilizes a chlorinator to control microbes and a soda ash system for corrosion control.

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 October 25, 2002 are noted below.

Both wells had one susceptibility factor that was rated high, two that were rated medium, and nine that were rated low.

Note: This information is fifteen 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 online for review at the DES Drinking Water Source Assessment website at http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm. For more information, call your water system operator, Daniel Crosby, at (603) 357-2577.

How can I get involved?

For more information about your drinking water, please contact your board of directors or the water system operator, Daniel Crosby, with EAI Analytical Labs, at 357-2577. Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions or concerns.

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

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

System Name: Pine Grove Mobile Home Coop EPA ID: 2303010

2017 (2016 testing results)

DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Inorganic Contaminants						
Chlorine (ppm)	0.4 to 2.0	MRDL = 4	MRDLG = 4	No	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.
Nitrate (as Nitrogen) (ppm)	0.5	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	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.
Radioactive Contaminants						
Combined Radium 226 + 228 (pCi/L)	0.58	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.
Volatile Organic Contaminants						
Total Trihalomethanes (ppb) (Bromodichloromethane, Bromoform, Dibromomethane and Chloroform)	3.5	100/80	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.

LEAD AND COPPER

Contaminant (Units)	Action Level	90th percentile sample value	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	0.15	6/2016	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.
Lead (ppb)	15	1	6/2016	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 a other homes in the community as a result of materials used in your home's plumbing. I 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).

Environmental Fact Sheet

Home Water Efficiency: Fixing Leaks

Leaks are responsible for wasting tremendous amounts of water and energy. A leaky toilet can waste 200 gallons of water per day and are notorious for high water and sewer bills and overloaded septic tanks. A dripping faucet can waste 3,000 gallons of water a year or enough water to take a shower every day for four months. That's a lot of water. The good news is that it is easy to check for and even repair some types of leaks yourself.

What to check:

- Check your faucets to see if they drip or if water comes out of places it should not. Old and worn faucet washers and gaskets frequently cause leaks in faucets.
- Inspect other household pipes, fittings and valves for leaks. If you find leaks, don't ignore them—make the repair or call a plumber if you don't know how.
- Check the shower for leaks near the showerhead and at the tub spout when the shower is on and off. Leaks where the pipe stem meets the showerhead can normally be fixed by unscrewing the showerhead, placing pipe tape around the threads on the pipe stem, and screwing the showerhead back on tightly. Leaks from the tub spout will probably require replacement of the spout.
- Leaky toilets waste a lot of water and cost a lot in bills. Unfortunately, many toilet leaks go undetected, but the good news is that it is easy to check for a leak by dropping food coloring (12 drops) or a leak detector dye tablet in the tank. Do not flush for 15 or 20 minutes. If the tank leaks, the dye will show up in the bowl. Old and warn toilet flappers are often the culprit and are very easy to replace.
- Check your hose for any leaks. If the hose is leaking where it is screwed into the spigot, replace the hose washer.

For additional information:

Go to the EPA WaterSense website at www.epa.gov/watersense/our_water/howto.html to learn more about how to fix leaks yourself.

Contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov, or visit the DES Water Conservation Program webpage by going to www.des.nh.gov, clicking on the "A to Z" list and scrolling down to "Water Conservation."

Reference:

U.S. EPA WaterSense Program, www.epa.gov/watersense

An Introduction to Water Use Management and Water Efficiency Practices

Water is essential to all life on our planet. Surface and ground waters support a variety of human uses including drinking, irrigation of crops and landscape, industrial processes, domestic applications, and recreation.

Residents have historically thought of New Hampshire as water rich and that conservation was something only people in arid states needed to practice. However, that perception is changing. As Ben Franklin said, "When the well's dry, you know the worth of water," later paraphrased by Rowland Howard as "You never miss the water 'til the well runs dry." In some parts of the state, wells have indeed gone dry. Water levels in some New Hampshire lakes, ponds, aquifers, and streams have dropped, largely due to over-mining of groundwater supplies. When private and public water wells withdraw more water than the aquifer that supplies them can provide, surface waters may recharge the groundwater. This condition can have serious impacts on both public health and the economy.

Federal regulations applicable to public drinking water quality have become progressively more stringent. Untreated water that once met federal drinking water quality standards is no longer considered potable, and public water suppliers are faced with the increasing chemical, energy, and waste disposal costs of treating raw water. This increase is passed along to their customers in the form of higher rates.

Groundwater supplies are more frequently experiencing quantity deficits. Many private and community wells in New Hampshire have been deepened, replaced, or abandoned due to dwindling production. This decline can be attributed to the stress of escalating housing and industrial development and periodic near-drought conditions. Drilling more or deeper wells, however, will not solve long-term water availability problems. This does not mean New Hampshire residents have to do without adequate water. It simply means that we need to adopt more efficient ways of using water.

States that are less water-rich than New Hampshire have practiced water efficiency methods for decades. Hundreds of water efficient products are now available. Water efficiency management techniques have also been developed including water use and conservation audits, water fixture retrofitting, irrigation scheduling, xeriscape, and water supply maintenance programs.

Water efficiency practices are proven to save valuable water resources and protect the environment. One of the great side benefits of these practices is the simple fact that they save money. Even though the initial cost of replacements or retrofits might be high, most water users find the water-related savings result in a surprisingly short payback period.

Water Efficiency Success Stories

During 2008-2009, DES retrofitted 22 bathrooms in its Concord office with water-efficient toilets, urinals, and faucets. In all, 76 toilets, 30 urinals, and 86 faucet sets were replaced with more efficient models. DES anticipates saving 1.8 million gallons per year resulting in an annual reduction of $13,000 in water and sewer bills.

To help you save money and protect the environment and New Hampshire's valuable drinking water supplies, DES has created a series of fact sheets on water efficiency practices and conservation techniques. Water efficiency fact sheets may be found at http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm#efficiency.

For Additional Information

Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit our website at http://des.nh.gov/organization/divisions/water/dwgb/index.htm. The bureau's fact sheets are online at http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm. More information about the DES Water Conservation Program can be found at http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/index.htm.

References:

New England Interstate Water Pollution Control Commission (NEIWPCC), *MRI Water Conservation Technical Bulletin #1, Water Conservation Best Management Practices General Practices and References;* NEIWPCC, Lowell, MA; 1996.

Vickers, Amy; *Handbook of Water Use and Conservation;* WaterPlow Press, Amherst, MA; 2001; pp 2-9, 276.