2016 Annual Drinking Water Quality Report
Safe Harbor

Westbrook, CT
PWSID #CT1548011

WhiteWater
WATER & WASTEWATER SOLUTIONS

We're pleased to present to you our Annual Drinking Water Quality Report, also known as the Consumer Confidence Report. This report, a requirement of the 1996 amendments to the Safe Drinking Water Act, is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Water Source
Our water source consists of two (570-foot and 300-foot) bedrock groundwater wells, located on the property and referred to as Safe Harbor. We maintain less than one mile of water main and our system serves a population of 50 residents. Our certified lab is Phoenix Environmental Laboratories, Inc.

We do not require treatment at this time. Over the past year, our system underwent routine maintenance. At this time, we do not have any projects scheduled In the near future. Our customers are notified of our annual meeting, usually held in June. If you have any questions about this report or concerning your water system, please contact Andrew Donnelly of White Water, Inc. at 253 B Worcester Road, Charlton, MA 01507 or at 774-633-1223. We want our valued customers to be informed about their water system.

White Water, Inc. provides the Safe Harbor water system with contract operation services. The contract operation includes the services of a state certified operator who monitors the water system for compliance with all state and federal drinking water regulations. The operating contract also includes services such as making emergency repairs when needed, making recommendations for improving water quality and increasing system reliability.

Source Water Protection
Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health sense, good economic sense, and good environmental sense. You can be aware of the challenges of keeping drinking water safe and take an active role in protecting drinking water. There are lots of ways that you can get involved in drinking water protection activities to prevent the contamination of the ground water source. Dispose properly of household chemicals, help clean up the watershed that is the source of your community's water, attend public meetings to ensure that the community's need for safe drinking water is considered in making decisions about land use. Contact our office for more information on source water protection, or contact the Environmental Protection Agency (EPA) at 1.800.426.4791. You may also find information on EPA's website at http://cfpub.epa.gov/safewater/sourcewater/.

A source water assessment report was recently completed by the Connecticut Department of Public Health, Drinking Water Division. The completed Assessment report is available for access on the Drinking Water Division's web site: http://www.ct.gov/dph/cwp/view.asp?a=3139&q=398262&dphNav_GID=1824. The assessment found that this public drinking water source has a **moderate** susceptibility to potential sources of contamination. Additional source water assessment information can be found at the Environmental Protection Agency's website: http://cfpub.epa.gov/safewater/sourcewater/.

Water Quality

Safe Harbor routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows any detection resulting from our monitoring for the period of January 1 to December 31, 2016. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

The sources of drinking water include rivers, lakes, ponds and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic contaminants, such as salts and metals, 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 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, 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 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, U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The table below lists all of the drinking water contaminants that were detected through out water quality monitoring and testing. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

<table>
<tr><th colspan="7" style="text-align:center">TEST RESULTS
Unless otherwise noted, testing was done in 2016.</th></tr>
<tr><th>Contaminant</th><th>Violation Y/N</th><th>Level Detected</th><th>Unit Measurement</th><th>MCLG</th><th>MCL</th><th>Likely Source of Contamination</th></tr>
<tr><td colspan="7">Microbiological Contaminants</td></tr>
<tr><td>Total Coliform Bacteria (July 2016)</td><td>Y</td><td>**Present** *(6 positive)*</td><td>Highest monthly # of positive samples</td><td>Absent</td><td>1 positive</td><td>Naturally present in the environment</td></tr>
<tr><td>Total Coliform Bacteria (August 2016)</td><td>Y</td><td>**Present** *(11 positive)*</td><td>Highest monthly # of positive samples</td><td>Absent</td><td>1 positive</td><td>Naturally present in the environment</td></tr>
<tr><td>Turbidity (2016)</td><td>N</td><td>**0.75**</td><td>ntu</td><td>n/a</td><td>TT</td><td>Soil runoff</td></tr>
<tr><td colspan="7">Radioactive Contaminants</td></tr>
<tr><td>Gross Alpha (2016)</td><td>N</td><td>**4.63**</td><td>pCi/L</td><td>0</td><td>15</td><td>Naturally occurring radioactivity in bedrock.</td></tr>
<tr><td>Uranium (2016)</td><td>N</td><td>**5.57**</td><td>μg/L</td><td>0</td><td>30</td><td>Naturally occurring radioactivity in bedrock.</td></tr>
<tr><td colspan="7">Inorganic Contaminants</td></tr>
<tr><td>Copper* (2015)</td><td>N</td><td>**0.096**</td><td>ppm</td><td>1.3</td><td>AL=1.3</td><td>Corrosion of household plumbing systems; erosion of natural deposits</td></tr>
<tr><td>Lead* (2015)</td><td>N</td><td>**1.5**</td><td>ppb</td><td>0</td><td>AL=15</td><td>Corrosion of household plumbing systems</td></tr>
<tr><td>Nitrate [as Nitrogen] (2016)</td><td>N</td><td>**0.13**</td><td>ppm</td><td>10</td><td>10</td><td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td></tr>
</table>

Nitrite [as Nitrogen] (2016)	N	**0.05**	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

* = Reported results are the 90th percentile value (the value that 90% of all samples are less than).

Unregulated Contaminants *(contaminants with a health advisory)*

Contaminant	Level Detected	Unit Measurement	DWEL	Likely Source of Contamination
Chloride (2014)	**21**	ppm	250	Erosion of natural deposits, Storm water runoff containing road salt
Sodium (2014)	**14.5**	ppm	28	Erosion of natural deposits, urban storm runoff
Sulfate (2014)	**10**	ppm	250	Erosion of natural deposits, urban storm runoff

Note: The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Not all contaminants are tested for every year due to monitoring waivers and therefore we must use the most recent round of sampling. Some of our data is more than one year old, however, is limited to no older than 5 years.

Units:
Parts per million **(ppm)** *or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in $10,000.
Parts per billion **(ppb)** *or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Picocuries per liter **(pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
Micrograms per Liter **(μg/1)** – a measure of radioactivity in water.
Millirems per year **(mrem/year)** – a measure of radiation absorbed by the water.
Nephelometric Turbidity Unit **(NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Definitions:
Action Level **(AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique **(TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Million Fibers per Liter **(MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
Maximum Contaminant Level **(MCL)** - The MCL is 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 **(MCLG)** - The MCLG is 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.
Drinking Water Equivalent Level **(DWEL)** – A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.
Maximum Residual Disinfectant Level **(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 **(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.
Running Annual Average **(RAA)** - The average of all monthly or quarterly samples for the last year at all sample locations.
Non Detect **(ND)** - The contaminant was not detected.
Not Applicable, Not Established **(N/A)**

IMPORTANT INFORMATION:
Lead - Major Sources in Drinking Water: *Corrosion of household plumbing systems; erosion of natural deposits.*
Health Effects Statement: *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.*
Copper - Major Sources in Drinking Water: *Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives*
Health Effects Statement: *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: *Fluoride levels must be maintained between 1-2 ppm, for those water systems that fluoridate the water.*
Gross Alpha: *If the results of this sample had been above 5 pCi/L, our system would have been required to complete additional testing for radium. Certain minerals are radioactive and may emit a form of radiation known 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. Because the results were below 5 pCi/L, no testing for radium was required.

Lead/Copper: *Action levels are measured at consumer's tap. 90% of the tests must be equal to or below the action level; therefore, the listed results above have been calculated and are listed as the 90th percentile.*

Nitrate: *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 advice from your health care provider.*

Total Coliform Bacteria - *Reported as the highest monthly number of positive samples, for water systems that take < 40 samples per month. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Our tests have all been negative.*

Turbidity: *Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.*

Revised Total Coliform Rule (RTCR) Level 1 Assessment

During the July 1, 2016 to July 31, 2016 monitoring period, our routine water testing results were positive for the presence of coliform bacteria. As a result, our system exceeded a Level 1 treatment technique trigger as defined in 40 CFR Section 141.859(a)(1) and we were required to conduct a Level 1 assessment. A Level 1 assessment is an evaluation of the water system to identify sanitary defects that could provide a pathway for microbial contamination or indicate a potential failure of protective barriers against microbial contamination. It may be conducted by the water system operator or owner. If any sanitary defects are identified during the Level 1 assessment, they should be corrected by the time the assessment form is submitted to the DPH or within the Department-approved timeframe. Our Level 1 assessment was completed on August 2 and submitted to the CT DPH by the required deadline.

Revised Total Coliform Rule (RTCR) Level 2 Assessment

Our system has exceeded a Level 1 treatment technique trigger as defined in 40 CFR Section 141.859(a)(1) for the second time within a rolling 12-month period. A second Level 1 trigger with a rolling 12-month period triggers a public water system to conduct a Level 2 assessment. A Level 2 assessment is an in-depth examination of the distribution system, water sources, treatment facilities, storage facilities, and relevant operational practices at a public water system. A Level 2 assessment helps to identify possible sanitary defects that may have triggered the assessment. Level 2 Assessments must be performed by a Level 2 Assessor that is not an employee of the water system. If any sanitrary defectes are identified during the Level 2 Assessment, they should be corrected by the time the assessment form is submitted to the CT DPH or within the DPH-approved timeframe. Our Level 2 assessment was completed on August 2 and submitted to the CT DPH by the required deadline.

Total Coliform Bacteria MCL Violation

During the July and August 20165 monitoring periods, our water testing results were positive and at least 1 recheck sample was positive for the presence of coliform bacteria. To resolve this problem, we chlorinated our wells, the water storage tanks and the distribution system. Public notification was posted or distributed to all concerned residents. Coliforms are bacteria which 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. Subsequent tests have been negative. **Total Coliform**: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

All 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 the 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.

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, 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/Center of Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for thirty (30) seconds to two (2) minutes before using water for drinking or 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://www.epa.gov/safewater/lead.

We, at Safe Harbor, work hard to provide top quality water to every tap. Water is a limited resource so it is vital that we all work together to maintain it and use it wisely. We ask that all our customers help us protect and preserve our drinking water resources, which are the heart of our community, our way of life, and our children's future. Please contact us with any questions. Thank you for working together for safe drinking water.