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?

Our water is obtained by two gravel packed (GPW) wells. GPW #1 is 40 feet deep and located inside the well house. GPW #2 is 41 feet deep and is located 25 feet from the well house.

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 for both wells are noted below.

- GPW #1 (0) susceptibility ratings were high, (4) was rated medium and (8) were rated low.
- GPW #2 (0) susceptibility ratings were high, (4) were rated medium and (8) were rated low.

Note: Some of 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.

How can I get involved?
For more information about your drinking water, or if you would like to attend a monthly meeting, please call the Hill Water Works Commissioners at 934-3951 or the water system operator Frank Gerlarneau at 934-7100.

Violations and Other information:
There were no violations for our water system in 2012.

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
BDL: Below Detection Limit
mg/L: milligrams per Liter
NA: Not Applicable
ND: Not Detectable at testing limits
pCi/L: picoCurie per Liter
ppb: parts per billion
ppm: parts per million
RAA: Running Annual Average
TTHM: Total Trihalomethanes
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 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

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 showings, 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.
## 2012 DETECTED WATER QUALITY RESULTS

### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Contaminant (Units)</th>
<th>Level Detected (please list date sampled if prior to current reporting year)</th>
<th>MCL</th>
<th>MCLG</th>
<th>Violation YES/NO</th>
<th>Likely Source of Contamination</th>
<th>Health Effects of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate (as Nitrogen) (ppm)</td>
<td>0.063mg/L (well #1) ND (well #2)</td>
<td>10</td>
<td>10</td>
<td>NO</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td>
<td>(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.</td>
</tr>
<tr>
<td>Nitrite (as Nitrogen) (ppm)</td>
<td>ND (both wells)</td>
<td>1</td>
<td>1</td>
<td>NO</td>
<td>(same as Nitrate)</td>
<td>Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill, and if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.</td>
</tr>
<tr>
<td>Copper (ppm)</td>
<td>&lt; 1.3 (2010)</td>
<td>AL=1.3</td>
<td>1.3</td>
<td>NO</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
<td>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.</td>
</tr>
<tr>
<td>Lead (ppb)</td>
<td>&lt; 15 (2010)</td>
<td>AL=15</td>
<td>0</td>
<td>NO</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
<td>(15 ppb in more than 5%) 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 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). (above 15 ppb) 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.</td>
</tr>
</tbody>
</table>

### Volatile Organic Contaminants

<table>
<thead>
<tr>
<th>Contaminant (Units)</th>
<th>Level Detected (well #1) BDL (well #2)</th>
<th>MCL</th>
<th>MCLG</th>
<th>Violation YES/NO</th>
<th>Likely Source of Contaminant</th>
<th>Health Effects of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4-Dioxane (ug/L) (5/19/11)</td>
<td>BDL BDL</td>
<td>3.0</td>
<td>3.0</td>
<td>NO</td>
<td>Primarily used as a stabilizer and solvent and is also a component of some cosmetics, detergents and shampoos.</td>
<td>The New Hampshire Ambient Groundwater Quality Standard (AGQS) for 1,4-dioxane is 3.0 ug/L. At the AGQS, there is a one-in-one-million increase in the risk of cancer for each 10 years of exposure assuming 2 liters of water are consumed daily. No non-cancer health effects are expected at 1,4-dioxane drinking water concentrations below 200 ug/L.</td>
</tr>
<tr>
<td>Additional Tests &amp; Secondary MCLs (SMCL)</td>
<td>Results</td>
<td>Date</td>
<td>Treatment technique (if any)</td>
<td>AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)</td>
<td>Specific contaminant criteria</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Sodium (well #1)</td>
<td>13.2 mg/L</td>
<td>11/17/11</td>
<td>N/A</td>
<td>Guideline = 250 mg/L</td>
<td>A component of table salt. When dissolved in water, it can taste bad and can also be a health risk for people with heart problems.</td>
<td></td>
</tr>
<tr>
<td>Sodium (well #2)</td>
<td>12.0 mg/L</td>
<td>5/7/10</td>
<td>N/A</td>
<td>Guideline = 250 mg/L</td>
<td>A component of table salt. When dissolved in water, it can taste bad and can also be a health risk for people with heart problems.</td>
<td></td>
</tr>
<tr>
<td>Sulfate (well #1)</td>
<td>4.1 mg/L</td>
<td>11/17/11</td>
<td>N/A</td>
<td>Guideline = 250 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfate (well #2)</td>
<td>4.5 mg/L</td>
<td>5/7/10</td>
<td>N/A</td>
<td>Guideline = 250 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chloride (well #1)</td>
<td>4.3 mg/L</td>
<td>11/17/11</td>
<td>N/A</td>
<td>Guideline = 250 mg/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>