The Orange Water Department has 3 sources of water consisting of 3 ground wells.

Well #1 is located off from Holtshire Rd. and is used for emergency use only.

Well #2 is located off from West River St.

Well #3 is located off from Daniel Shays Highway (Route 202).

We also have an interconnection with the Town of Athol on Brookside Rd.

Substances that may be present in source water include: microbial contaminants, such as viruses and bacteria; inorganic contaminants; such as salts and metals; pesticides and herbicides; organic chemical contaminants and radioactive contaminants.

Water Quality Report

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. Some people may be vulnerable to contaminants in drinking water more so 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. If you fall into this category please seek advice on drinking water from your health care provider.

Our list of detections follows in the chart on other side.
### Terms to Remember

**Maximum Contaminant Level or MCL:** This is the highest level of contaminant in drinking water. MCL's are set as close to MCLG's as feasible using the best available technology.

**Maximum Contaminant Level Goals or MCLG's:** These goals are set at levels which are below where there is no known health risk. MCLG's are considered a margin of safety (Safety Net).

**Micrograms/Liter or ug/l:** = parts per billion (Comparison)

**Milligrams/Liter or mg/l:** = parts per million (Comparison)

**Picocuries/Liter or pCi/l:** = A measure of radioactivity

### Tips For Saving Water

Understanding where you use water most can provide hints on where the most water can be conserved. Here are a few water conservation tips:

- Repair dripping faucets and toilets. One drop per second wastes 2,700 gallons of water a year.
- Don’t run a faucet when you’re not using the water, such as while brushing your teeth.
- Store drinking water in the refrigerator instead of running the tap until the water is cool.
- Avoid over watering your lawn. A heavy rain eliminates the need for watering for up to two weeks. Most of the year, lawns only need one inch of water per week.
- Position sprinklers so that water lands on the lawn and shrubs and not on paved areas.

Conservation Kits are available for free at the Water Department office and the Billing Clerk’s office.

In order to ensure that tap water is safe to drink, the Department of Environmental Protection and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. FDA and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### 2007 Water Quality Testing Results

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.

<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>HIGHEST DETECTED VALUE</th>
<th>RANGE DETECTED</th>
<th>AVERAGE DETECT</th>
<th>MCL</th>
<th>MCLG</th>
<th>VIOLATION (Y/N)</th>
<th>POSSIBLE SOURCE OF CONTAMINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>4.8ug/L</td>
<td>0.0 - 4.8ug/L</td>
<td>2.2ug/L</td>
<td>15ug/L</td>
<td>0</td>
<td>N</td>
<td>Corrosion of lead solder in household plumbing.</td>
</tr>
<tr>
<td>Copper</td>
<td>.21mg/L</td>
<td>.002 - .21mg/L</td>
<td>.14mg/L</td>
<td>1.3mg/L</td>
<td>0</td>
<td>N</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.</td>
</tr>
</tbody>
</table>

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.

Regulations require (20) lead & copper samples to be taken and ranked highest to lowest. The 90 percentile would relate to sample number 18 on this list and is indicated as the average for reporting purposes. Of the 20 samples taken, 0 samples exceeded the MCL for lead.

Nitrate: 5.0mg/L
- 0.0 - 5.0mg/L
- 4.6mg/L
- 10mg/L
- 10mg/L
- N
  - Runoff from fertilizer use. Leaching from septic tanks. Erosion of natural deposits.

Gross Alpha: 1.6 pCi/L
- 0.2 - 1.6pCi/L
- 0.9pCi/L
- 15pCi/L
- 0
- N
  - Erosion of Natural Deposits

Radium: 1.1pCi/L
- 0.0 - 1.1pCi/L
- 0.6pCi/L
- 5pCi/L
- 0
- N
  - Erosion of Natural Deposits

Fluoride: 0.08mg/L
- 0.05 - 0.08mg/L
- 0.066mg/L
- 4.0mg/L
- 4.0 mg/L
- N
  - MA Highway Department Winter Deicing Procedures