Water Source

The source of drinking and irrigation water for the customers of the City of Coeur d'Alene is the Rathdrum Prairie Aquifer. The City currently has 10 wells that can pump a total of 44.0 million gallons of water a day. D.E.Q. has completed an assessment of our source water, which is available. Call 208-769-1422 for information. The City is within the Rathdrum wellhead protection area as administered by D.E.Q. As a result of their efforts, we expect long-term great water quality to continue.

Special Needs Customers

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons 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 this is your situation, please seek advice about drinking water from your health care provider.

Water Treatment

In an effort to provide the customer with the safest possible product, the City disinfects the water at each well with chlorine. A small amount of excess chlorine remains in the water to protect it from contamination as it travels through water mains and to the customer. This is not harmful to humans or pets. The City does not add fluoride to the water.

Inside this issue

- Water Source, Treatment, Contaminants, Special Needs Customers
- Water Testing
- Backflow Prevention
- Water Conservation

Water Tests

PA/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 1-800-426-4791. The sources of drinking water (both tap and bottled) 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. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, providing the same protection for public health. 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 and 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which may be naturally occurring or may be the result of oil and gas production and mining activities.
### WATER TESTING

The City has an extensive water quality-testing program that exceeds State and Federal requirements. This includes taking over 50 samples a month to test for bacteria from various locations throughout the distribution system. Samples are also taken at the wells for 76 compounds. Last year, as in years past, your tap water has met all chemical Federal and State drinking water standards. Low levels of a few contaminants have been detected. They are summarized on the following table. Because our water system tests for contaminants from several well sources, we are including the lowest and highest levels detected from all of our well sources.

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL</th>
<th>MCLG</th>
<th>Lowest Level</th>
<th>Highest Level</th>
<th>Violation?</th>
<th>Sample Date</th>
<th>Typical Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate (ccr unit)</td>
<td>10 ccr unit</td>
<td>10 ccr unit</td>
<td>0.00 ccr unit</td>
<td>2.46 ccr unit</td>
<td>No</td>
<td>5/2018(L) 7/2018(H)</td>
<td>Runoff from fertilizer; Leaching from septic tanks, sewage; Erosion of natural deposits</td>
</tr>
<tr>
<td>Arsenic (ccr unit)</td>
<td>10 ccr unit</td>
<td>0.0</td>
<td>1.4 ccr unit</td>
<td>26.0 ccr unit</td>
<td>No</td>
<td>1/2018(L) 6/2018(H)</td>
<td>Erosion natural deposits. Runoff orchards, glass and electronics productions wastes.</td>
</tr>
<tr>
<td>Chlorine Residual (ppm)</td>
<td>MRDL =4</td>
<td>MRDL G=4</td>
<td>0.18 ccr unit</td>
<td>0.56 ccr unit</td>
<td>No</td>
<td>7/2018(L) 3/2018(H) 0.37(ave)</td>
<td>Water additive used to control microbes.</td>
</tr>
<tr>
<td>Combined Uranium</td>
<td>30 ccr unit</td>
<td>0</td>
<td>1.9 ccr units</td>
<td>3.9 ccr units</td>
<td>No</td>
<td>5/2016 (L) 8/2016 (H)</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Gross Alpha incl Radon</td>
<td>15 ccr unit</td>
<td>0</td>
<td>0.6 ccr units</td>
<td>4.0 ccr units</td>
<td>No</td>
<td>5/2016 (L) 5/2016 (H)</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Radium 226</td>
<td>5 ccr unit</td>
<td>0 pCi/L</td>
<td>0.17 ccr units</td>
<td>4.7 ccr units</td>
<td>No</td>
<td>5/2016 (L) 5/2016 (H)</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Barium</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0.043 ccr units</td>
<td>No</td>
<td>5/2016</td>
<td>Discharge of drilling wastes, metal refineries. Erosion of natural deposits.</td>
</tr>
<tr>
<td>Coliform</td>
<td>0</td>
<td>0</td>
<td>Absent</td>
<td>Absent</td>
<td>No</td>
<td>9/2018</td>
<td>Naturally present in the environment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Action Level</th>
<th>MCLG</th>
<th>Our Water</th>
<th>Lowest Level</th>
<th>Highest Level</th>
<th>Violation?</th>
<th>Sample Date</th>
<th>Typical Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>1.3 15</td>
<td>0</td>
<td>0.83</td>
<td>3 ccr</td>
<td>ND</td>
<td>0.259</td>
<td>No</td>
<td>July 2016 30 samples</td>
</tr>
<tr>
<td>Lead</td>
<td>13</td>
<td>1.3</td>
<td>0.11</td>
<td>0.13.</td>
<td>No</td>
<td>No</td>
<td>Natural presence</td>
<td></td>
</tr>
</tbody>
</table>

**An Explanation of Total Coliform**

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. The City of Coeur d’Alene is constantly testing the water served to our customers for Total Coliform Bacteria. A sample collected from Sample Station 21 on September 19th, 2018, indicated a potential presence of bacteria. Other Sample Stations in our water system had no detect or absent testing results. Follow-up testing at Station 21 and related sources per Drinking Water Rule directives resulted in a no detect or absence of coliform. Testing for E.Coli was done at the same time and the results were no detect or absence of E.Coli. Testing results for Coliform and E.Coli have been no detect or absent at all city sample stations since September 19th. It is thought to have been a weather related false positive where the sample was collected on a day with bad air quality or the presence of atmospheric moisture.
An Explanation of Arsenic

The maximum contaminant level (MCL) of Arsenic that is allowed in drinking water is 10 ppb. This level was established by the Environmental Protection Agency in a rule that took effect on January 23rd, 2006. The prior standard was 50 ppb. In 2018 the Arsenic levels in the Hanley and Annie Wells ranged from 0.0 ppb to 26.0 ppb with an annual running average of 9.2 ppb. For this reason we want to notify you of the health impacts related to the long term use of water containing Arsenic. This mineral, when in drinking water, has been demonstrated to cause skin damage, circulatory system disorders, and cancer when consumed continuously. At the levels in our water there is no acute or immediate effect from using it. We try not to use these wells unless it is absolutely necessary to maintain an adequate supply of water in the water system. Unfortunately we do not have the ability to shut these wells down or to treat the water to remove the Arsenic, so when they are activated our customers in the local area may receive water containing this contaminant. These wells pumped water in varying volumes into our system for 113 days (Hanley) and 988.4 hours (Annie) in the summer of 2018.

- If you wish to obtain more information about Arsenic in drinking water you may contact the Safe Water Drinking Hotline at 800-426-4791.
- On the internet, EPA has provided information that can be accessed at http://www.epa.gov/safewater/arsenic/basicinformation.html.
- A summary of the Arsenic Rule can be found at http://www.epa.gov/safewater/arsenic/pdfs/quickguide.pdf.
- A more technical discussion of Arsenic can be found at http://www.atsdr.cdc.gov/toxprofiles/tp2.html.
- If you need additional information please contact the DEQ Regional Office at: https://apps.deq.idaho.gov/water/swaonline/ or the City Water Department at 208-769-2210

An Explanation of 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. The City of Coeur d’Alene is 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 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking 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.

<table>
<thead>
<tr>
<th>MCL</th>
<th>Maximum Contaminant Level. Highest amount of contaminant allowed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCLG</td>
<td>Maximum Contaminant Level Goal. Level of contaminant below which there is no known or expected risk to health.</td>
</tr>
<tr>
<td>MREH</td>
<td>Maximum Residual Detection Level.</td>
</tr>
<tr>
<td>MREH G</td>
<td>Maximum Residual Detection Level Goal.</td>
</tr>
</tbody>
</table>

Backflow

To protect your drinking water from potential contamination, it is important to have an approved backflow prevention assembly on your irrigation system. A lawn irrigation system not protected by an approved backflow prevention assembly endangers the health of a household, neighborhood, and community. All lawn irrigation systems - new or existing - must be equipped with an approved backflow prevention assembly. The City of Coeur d’Alene Water Department is responsible for providing safe drinking water to all its customers. To ensure drinking water quality, the Water Department monitors backflow protection on known health hazards to meet Idaho Rule IDAPA 58.01.08. The Water Department strives to make it easy for its customers to keep their drinking water safe and to meet state requirements by allowing a Double Check Valve, Pressure Vacuum Breaker, Atmospheric Vacuum Breaker, or Reduced Pressure Principle Backflow Assembly to be installed on a lawn irrigation system.

Hardness and pH Level

- pH Level: 7.89 (Average)  
  5 Sample Sites. 1-9/2018
- Hardness: 85 mg/L (Low)  170 mg/L (High)  
  127 mg/L (Average) = medium hard/hard  
  CDA 12 Sample Sites. 1-9/2018

A measure of acidity or alkalinity of water soluble substances (pH stands for 'potential of Hydrogen'). A pH value is a number from 1 to 14, with 7 as the middle (neutral) point. Values below 7 indicate acidity which increases as the number decreases, 1 being the most acid. Values above 7 indicate alkalinity which increases as the number increases, 14 being the most alkaline.

Water hardness is a measure of the amount of calcium and magnesium salts in water. Calcium and magnesium enter water mainly through the weathering of rocks. The more calcium and magnesium in water, the harder the water. Water hardness is usually expressed in milligrams per liter (mg/l) of dissolved calcium and magnesium carbonate.

CONSERVATION PROGRAM

You may be eligible to receive a utility bill credit when you purchase: Hose Bib Timer.  
Moisture Sensor.  
Rain Sensor.

For more details:  
Call: Water Department Office 769-2210  
Online: www.cdaid.org/water