Gardiner Water Quality Report – 2019
Reporting Year 2018

To comply with Safe Drinking Water Act amendments and the Washington State Department of Health mandates, Jefferson County Public Utility District #1 annually issues a report on monitoring performed on each of its water systems. The purpose of this report is to advance consumers understanding of drinking water and heighten awareness of the need to protect precious water resources. If you have any specific water system questions please feel free to contact the Gardiner water system manager, Doug Reeder, at 385-8347 or 301-0708 (cell). Additionally, the PUD Board meets on the first and third Tuesday of each month at 5:00 p.m. at the Transit Authority at 63 Four Corners Road; please feel free to attend. Your district is District 3 and your commissioner is Dan Toepper. Please conserve and use water wisely. You can find conservation tips on our web site at jeffpud.org. FREE conservation kits are available at the PUD office.

Is my water safe? Last year in 2018, in each month sampled, the Gardiner system tested negative for the presence of coliform bacteria. Inorganic compounds were scheduled for sampling in 2017 (see below). All parameters met or exceeded state and federal water quality standards.

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 elements, and can pick up substances resulting from the presence of animals or from human activity.

Your water comes from a single municipal well located across Gardiner Beach road from the Olympic Northern Forest Products Lumber Company. Water to the well ultimately comes from fall and winter rainfall that recharges the aquifer each year. The well is over 300 feet deep and is pumped at a rate of 305 gpm. Unlike many of our systems, the high quality of your deep well water does not require disinfectant or treatment. The well was designed for a planned resort that never happened. The drive shaft style pump is old and parts are difficult to find. A replacement well may be drilled in 2019 or 2020.

Typical examples of 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 metal, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming, Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses, Radioactive contaminants, which are naturally occurring, and 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, storm water runoff, and septic systems.

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (1-877-481-4091).

Drinking water, including bottled water, may reasonably be expected to contain at least small amount 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 EPA’s Safe Drinking Water Hotline (1-877-481-4091) or Sophia Petro at the State DOH (360-236-3046).

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. We treat our water according to EPA=s regulations. Food and Drug Administration regulations establish limits for contaminant in bottled water which must provide the same protection for public health.

Regarding Arsenic detected in your water: While your drinking water meets EPA's standard, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Testing has shown varying trace amounts of arsenic in Gardiner samples from 2001, 2003, 2008 and 2016 of 0.006 mg/l, 0.005 mg/l, 0.003 and 0.004 mg/l respectively.
The table below lists all the drinking water contaminants that we tested for during the 2018 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 - December 31, 2018. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Due to recent news regarding lead and copper, we are including results that were reported to you in 2014 in this year’s report.

Terms & abbreviations used below:  Maximum Contaminant Level Goal (MCLG): the level of a contaminant in drinking water below which there is not known or expected risk to health. MCLGs allow for a margin of safety.  Maximum Contaminant Level (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.  Treatment technique (TT): A required process intended to reduce the level of a contaminant in drinking water.  Action Level (AL): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.  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.  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.  N/a: not applicable; nd: not detectable at testing limit  ppb: parts per billion or micrograms per liter  ppm: parts per million or milligrams per liter  pCi/l: picocuries per liter (a measure of radiation);  mg/L: milligrams per liter (same as ppm). Presence/Absence indicates whether or not bacteria were found in sample.

<table>
<thead>
<tr>
<th>EPA Regulated Primary</th>
<th>MCL or TT/AL</th>
<th>MCLG</th>
<th>Well Results</th>
<th>Sample Date</th>
<th>Violation</th>
<th>Typical Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate</td>
<td>10 mg/l</td>
<td>10 mg/l</td>
<td>ND</td>
<td>9/27/2018</td>
<td>No</td>
<td>Runoff from fertilizer use; leaks from septic tanks, sewage; erosion of natural deposits</td>
</tr>
<tr>
<td>Arsenic</td>
<td>10 ppb</td>
<td>Zero</td>
<td>3.6 ppb</td>
<td>9/28/2016</td>
<td>No</td>
<td>Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes</td>
</tr>
<tr>
<td>Asbestos</td>
<td>7 MFL</td>
<td>7 MFL</td>
<td>ND</td>
<td>9/27/2018</td>
<td>No</td>
<td>Decay of asbestos cement in water mains, erosion of natural deposits</td>
</tr>
</tbody>
</table>

Arsenic has been detected in trace amounts in your water in the past but did not exceed maximum contaminant levels (see information above about arsenic in your drinking water. Bacteria sampling in 2018 resulted in no detection of coliform bacteria. The PUD tested for herbicides in 2018. None were detected.

Note: The EPA requires monitoring of over 80 drinking water contaminants. Those listed above are the only contaminants detected in your drinking water. You can search all our water test results at Washington Department of Health’s Sentry Database at https://fortress.wa.gov/doh/eh/portal/odw/si/. Search for “Gardiner” and click on the “Samples” tab,