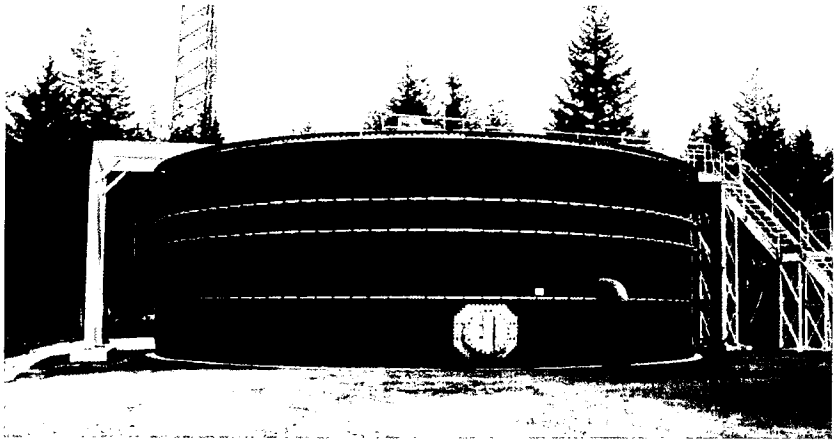
2021 Water Quality Report

City of Bandon - Water Treatment Plan



The City of Bandon Clarifier and Ultraviolet Light disinfection project. This project began in September, 2007 and was completed in April, 2008, and has ensured the uninterrupted supply of safe drinking water to the public.

We are pleased to present to you this year's Annual Water Quality Report. In accordance with the Safe Drinking Water Act, this report 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 are committed to ensuring the quality of your water and want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

The City of Bandon uses water from two sources, Ferry Creek and Geiger Creek. During 2021 we treated approximately 193 million gallons of water.

Water treatment is the process of cleaning the water. The City of Bandon's Water Treatment Plant uses a four-step process to treat the water. In the first step alum (aluminum sulfate) is added to the untreated water to make particles like dirt, sediment and other substances in the water coagulate, or stick together. These particles clump together into larger particles called "floc" in the second step; the water enters the settling tank, or sedimentation basin. The floc particles are heavier than water, so they settle to the bottom of the tank. During the third step, the water flows through the sand and charcoal filters. In the final step, chlorine is added to the water to kill any germs and to keep it safe in the distribution system as it travels to your tap. With the new plant online, the City has installed a chlorine generator which produces our own chlorine on site and it is not classified as a hazardous material.

The City of Bandon routinely monitors for components in your drinking water according to Federal and State laws. The following table in this report shows the results of our monitoring for the period of January 1 to December 31, 2021. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some components. It's important to remember that the presence of these components does not necessarily pose a health risk.

In the table, you will find many terms and abbreviations you might not be familiar with. To help you better understand those terms we are providing the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the component is not present.

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.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU will appear as just enough cloudiness to be noticeable to the average person.

Action Level - 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.

Maximum Contaminant Level - The "Maximum Allowed" (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 - The "Goal" (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.

MCL's are set at stringent levels. To understand the possible health effects described for many regulated components, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

control the variety of plumbing components used in your building. 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 two 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 (1-800-426-4791) or at www.epa.gov/safewater/lead. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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. All potential sources of lead in the household should be identified and removed, replaced or reduced.

5 – The 90th percentile is the highest result found in 90% of the samples when they are listed in order from the lowest to the highest results. EPA requires testing for lead and copper at customers' taps most likely to contain these substances based on when the house was built. The EPA determines that if the sample results exceeded the Action Level (AL), the City must take action in reducing the risk of leaching of lead and or copper. As you can see by the table above, your water was well below the action level on our last round of testing in 2021. Our next testing is scheduled for 2024.

6 – Total Organic Carbon (TOC) has no health effects; however, TOC provides a medium for the formation of disinfection byproducts (DBPs). These byproducts include *trihalomethanes [7] (TTHMs)* and *haloacetic[8] (HAAs)*. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects; liver, kidney or central nervous system problems, and may have an increased risk of cancer.

A source water assessment has been completed by the Department of Environmental Quality and is available at City Hall. The primary intent of this source water assessment is to provide the background information for the community to use in developing a local Drinking Water Protection Plan. The susceptibility of the public drinking water system depends on the natural conditions as well as the land use and facilities operating in the watershed.

If you have any questions about this report, or concerning your water utility, please contact Jim Youravish, Water Treatment Plant Operator, at 541-347-3007 or Dan Chandler, City Manager, at 541-347-2437 or via email at citymanager@cityofbandon.org. We want our valued customers to be informed about their water utility. To learn more, please attend any of our regularly scheduled City Council meetings. They are held on the first Monday of every month at 7:00 PM in the City Council Chambers at City Hall. Meeting times and dates subject to change. See City of Bandon website at www.cityofbandon.org for up-to-date information.