2022 Water Quality Report

Published June 2023

We are pleased to present our Annual Water Quality Report for the reporting year of 2022. This report is designed to inform you about the water quality and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

City of Pacific Water Information & Water Service Area

The City of Pacific currently utilizes groundwater from three wells for its public water supply and may receive water from the City of Auburn and/or Sumner in emergencies. The City's three water supply wells are located to the north of Ellingson Road and east of Pacific Avenue in the City of Algona.

Pacific disinfects its groundwater using a chlorination system, Sodium hydroxide injection, to bring the water to a neutral pH balance. The City maintains a 750,000 gallon storage reservoir and approximately 30 miles of water mains. Lakehaven Utility District services residents in the West Hill area.

General Health Effects Information

With groundwater-sourced drinking water, water travels through the ground dissolving naturally occurring minerals, and in some cases can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present include microbes, inorganic and organic chemicals, pesticides and herbicides, and radioactive materials. To ensure that tap water is safe to drink, The United States Environmental Protection Agency prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must only provide the same protection as public drinking water systems.

Keeping Contaminants Out of Your Drinking Water

Cross-connections are channels for contaminants to spread throughout the public water distribution system. It is the City's main goal to eliminate cross connections whenever possible. However, when cross connections cannot be eliminated, they must be controlled by the installation of an approved backflow assembly. Backflow assemblies are often required to be installed on actual or potential hazards to the drinking water system such as irrigation systems, boilers, fire protection systems, and properties with wells—to name a few. Water can be pulled backwards when water pressure drops within the distribution system. Pressure drops are not uncommon and without a proper functioning backflow assembly protecting hazardous connections, contaminants can easily be pulled back into the drinking water supply. Water inside an irrigation system can sit in the system for months and can contain chemicals and hold harmful bacteria—not something you want mixed in with your drinking water! Backflow assemblies are required on irrigation systems and must be tested each spring by a certified backflow assembly tester. Boilers and properties with wells are also common hazards to the public drinking water system where the City of Pacific requires backflow protection. If you have questions regarding cross-connections and backflow assembly testing, please contact the City of Pacific's Cross-Connection Control Office at 253-929-1116.

The average cost for water supplied to a home in the U.S. is about \$2.00 for 1,000 gallons, which equals about 5 gallons for a penny.

Who Needs 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 800-426-4791.

Nearly 97% of the world's water is salty or otherwise undrinkable. Another 2% is locked in ice caps and glaciers. That leaves just 1% for all of humanity's needs — all its agricultural, residential, manufacturing, community, and personal needs.

Residential Tap Monitoring for Lead and Copper

Our source waters do not contain lead or copper. However, lead and copper can leach into residential water from building plumbing systems containing copper plumbing, lead-based solder, brass fixtures, or some types of zinc coatings used on galvanized pipes and fittings (individual water services, not water mains). Homes built or plumbed with copper pipe prior to the 1985 King County lead solder ban would have likely used lead-based solder, and are considered "high risk" under EPA's criteria. Brass fixtures, regardless of age, generally contain some lead. Metals can leach into building plumbing systems when the water is stagnant in the pipes for extended periods of time (six hours or greater).

By regulation, lead and copper monitoring is conducted at "high risk" homes. Samples are collected from these homes after the water is allowed to stand in the pipes overnight. We are required to report the "90th percentile" result of the testing. This means that 90 percent of the high-risk homes have concentrations less than the reported value and 10 percent have concentrations higher than the reported value. Lead and copper monitoring were conducted most recently in 2019 and were either at or below the action levels. Compliance is determined on a regional basis.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Pacific 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 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 (800) 426-4791 or at www.epa.gov/safewater/lead.

Water Use Efficiency Performance

Total Water Produced – 182,451,056 gallons Authorized Consumption – 176,987,333 gallons Distribution System Leakage (DSL) 5,463,723 Gallons. (3.0% loss for 2022) Three Year Average-loss of 5.4%

There is the same amount of water on Earth as there was when the Earth was formed. The water from your faucet could contain molecules that dinosaurs drank.

Water Quality Monitoring Requirements

State law requires municipal water systems to monitor for numerous contaminants on a regular basis. The City is pleased to report compliance with all water quality monitoring requirements. The State allows us to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. The following table summarizes the City's water quality monitoring requirements on a four-year cycle.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of 2022. The presence of 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 in the calendar year of this report. The Environmental Protection Agency (EPA) or the State Department of Health requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminants	SRL	MCLG or MRDLG	MCL	Your Water	Sample Date	Violation	Typical Source	
Nitrate (measured as Nitrogen)	0.5 mg/L	10.0 mg/L	10.0 mg/L	0.77mg/L	9/27/2023	No	Runoff from fertilizer use; leaching from septic tank sewage; erosion of natural deposits	
Dichloroacetic Acid MCAA (Test Location 1050 Butte Ave SW)	2.0μg/L	N/A	N/A	ND	9/27/2023	No	By-product of drinking water disinfection	
Dichloroacetic Acid MCAA (Test Location 16th St. E & Thornton Ave SW)	2.0μg/L	N/A	N/A	ND	9/27/2023	No	By-product of drinking water disinfection	
Total Haloacetic Acids HAA5s (Test Location 1050 Butte Ave SW)	NA	NA	60μg/L	ND	9/27/2023	No	By-product of drinking water disinfection	
Total Haloacetic Acids HAA5s (Test Location 16th St. E & Thornton Ave SW)	NA	NA	60μg/L	1.25µg/L	9/27/2023	No	By-product of drinking water disinfection	
Chloroform (Test Location 16th St. E & Thornton Ave SW)	0.5 μg/L	NA	NA	6.39µg/L	9/27/2023	No	By-product of drinking water disinfection	
Chloroform (Test Location 1050 Butte Ave SW)	0.5 μg/L	NA	NA	1.19μg/L	9/27/2023	No	By-product of drinking water disinfection	
Bromodichloromethane (Test Location 16th St. E & Thornton Ave SW)	0.5 µg/L	NA	NA	2.19µg/L	9/27/2023	No	By-product of drinking water disinfection	
Bromodichloromethane (Test Location 1050 Butte Ave SW)	0.5 μg/L	NA	NA	2.19μg/L	9/27/2023	No	By-product of drinking water disinfection	
Dibromochloromethane (Test Location 16th St. E & Thornton Ave SW)	0.5 μg/L	NA	NA	1.21µg/L	9/27/2023	No	By-product of drinking water disinfection	
Dibromochloromethane (Test Location 1050 Butte Ave SW)	0.5 μg/L	NA	NA	0.73µg/L	9/27/2023	No	By-product of drinking water disinfection	
Total Trihalomethanes (Test Location 16th St. E & Thornton Ave SW)	0.5 μg/L	NA	80 μg/L	9.72μg/L	9/27/2023	No	By-product of drinking water disinfection	
Total Trihalomethanes (Test Location 1050 Butte Ave SW)	0.5 μg/L	NA	80 μg/L	2.89µg/L	9/27/2023	No	By-product of drinking water disinfection	

PFAS

Per- and polyfluoroalkyl substances (PFAS) are a large family of human-made chemicals in use since the 1950s to make a wide variety of stain-resistant, water-resistant, and non-stick consumer products. Some examples include food packaging, outdoor clothing, and non-stick pans. PFAS also have many industrial uses because of their special properties. In Washington State, PFAS have been used in certain types of firefighting foams utilized by the U.S. military, local fire departments, and airports.

Some of the most common and best studied PFAS, such as perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), have been removed from most products because of health and environmental concerns. These long-lasting chemicals continue to be released into our environment from older products and discarded materials. Newer PFAS compounds have replaced older PFAS compounds and at least some appear to pose similar problems.

PFAS can get into drinking water if they are made, used, disposed of, or spilled near your water source. Because PFAS do not break down easily, they may remain in water supplies for many years.

To find more information on PFAS you can go to: https://doh.wa.gov/community-and-environment/contaminants/pfas
The City of Pacific tested for PFOS in August of 2022. The following are the test results. Please note that ND means Not Detected.

CONTAMINANT	RESULTS	STATE REPORTING LEVELS	STATE ACTION LEVELS	UNITS	EXCEEDS STATE ACTION LEVELS
(PFOA) Perfluorooctanoic acid	ND	2	10	ng/L	NO
(PFOS) Perfluorooctanesulfonic acid	ND	2	15	ng/L	NO
(PFHxS) Perfluorohexanesulfonic acid	ND	2	65	ng/L	NO
(PFNA) Perfluorononanoic acid	ND	2	9	ng/L	NO
(PFBS) Perfluorobutanesulfonic acid	ND	2	345	ng/L	NO
(PFHpA) Perfluoroheptanoic acid	ND	2	n/a	ng/L	NO
(PFHxA) Perfluorohexanoic acid	ND	2	n/a	ng/L	NO
(PFDA) Perfluorodecanoic acid	ND	2	n/a	ng/L	NO
(PFUnA) Perfluoroundecanoic acid	ND	2	n/a	ng/L	NO
(PFDoA) Perfluorododecanoic acid	ND	2	n/a	ng/L	NO
(ADONA) 4,8-Dioxa-3H-perfluorononanoic acid	ND	2	n/a	ng/L	NO
(9Cl-PF3ONS) 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND	2	n/a	ng/L	NO
(HFPO-DA) Hexafluoropropylene oxide dimer acid	ND	2	n/a	ng/L	NO
(11Cl-PF3OUdS) 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND	2	n/a	ng/L	NO
(4:2FTS)1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	ND	2	n/a	ng/L	NO
(6:2FTS)1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ND	2	n/a	ng/L	NO
(8:2FTS)1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ND	2	n/a	ng/L	NO
(NFDHA)Nonafluoro-3,6-dioxaheptanoic acid	ND	2	n/a	ng/L	NO
(PFBA)Perfluorobutanoic acid	ND	2	n/a	ng/L	NO
(PFHpS)Perfluoroheptanesulfonic acid	ND	2	n/a	ng/L	NO
(PFMBA)Perfluoro-4-methoxybutanoic acid	ND	2	n/a	ng/L	NO
(PFMPA)Perfluoro-3-methoxypropanoic acid	ND	2	n/a	ng/L	NO
(PFPeA)Perfluoropentanoic acid	ND	2	n/a	ng/L	NO
(PFPeS)Perfluoropentanesulfonic acid	ND	2	n/a	ng/L	NO
(PFEESA)Perfluoro(2-ethoxyethane)sulfonic acid	ND	2	n/a	ng/L	NO

Term	Definition
μg/L	Microgram per liter
MCL	Maximum Contaminant Level: 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.
MCLG	Maximum Contaminant Level Goal: 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.
mg/L	Milligrams per liter
MRDLG	Maximum residual disinfection level goal. 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.
NA	Not Applicable
ND	Not Detected
SRL	State Reporting Level. Indicate the minimum reporting level required by the Washington Department of Health (DOH)

Frequently Asked Questions

How can I get more involved in decisions affecting my drinking water? City Council Meetings are held at 6:30 p.m. at the Pacific City Hall on the second and fourth Mondays of each month and you have an opportunity to speak during the public comment segment.

Is bottled water cleaner and safer than tap water? Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminates. The presence of contamination 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.

Who regulates bottled water? The Federal Food and Drug Administration regulates contaminants in bottled water and is responsible for providing the same levels of public health protection.

Why is chlorine added to my water? Pursuant to state and federal laws, very small amounts of chlorine are added to your water as a disinfecting agent to protect you from disease-causing micro-organisms. If you are bothered by the chlorine taste, keep a pitcher of tap water in the refrigerator. The chlorine will dissipate rapidly if the water is allowed to sit for a time. You may also use a carbon filtration unit.

Is fluoride added to our drinking water? The City of Pacific does not add fluoride to its drinking water supply.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

此报告包含有关您的饮用水的重要信息。请人帮您翻译出来,或请看懂此报告的人将内容说给您听。

В этом сообщении содержится важная информация о воде, которую вы пьёте. Попросите кого-нибудь перевести для вас это сообщение или поговорите с человеком, который понимает его содержание.

Tài liệu này có tin tức quan trọng về nước uống của quý vị. Hãy nhờ người dịch cho quý vị, hoặc hỏi người nào hiểu tài liệu này.

이 보고서에는 귀하의 식수에 대한 중요한 내용이 실려있습니다. 그러므로 이 보고서를 이해할 수 있는 사람한테 번역해 달라고 부탁하시기 바랍니다.

Drinking Water Quality Report

For the City of Pacific

City of Pacific 100 3rd Avenue SE Pacific, WA 98047 PRSRT STD US POSTAGE PAID DATABAR

ECRWSS Postal Customer

A Message from Our Sewer Department

Even if the package says "flushable", products such as wipes and feminine hygiene products should be put in the trash can and not down the commode. They don't dissolve well - or at all - in water. If a scrap of undissolved material gets caught on a nick or bend in a pipe, it can buildup to create a blockage that could cause a sewer back up in a home or neighborhood. They also clog pipes and machinery at sewer lift stations forcing messy and costly repairs. Here's a list of other items NOT to flush:

Bandages

Cat litter

Cigarette butts

Cotton balls or swabs

Condoms

Dental Floss

Diapers

Dryer sheets

Facial tissues

Feminine hygiene products

Hair

Paper towels

Toilet bowl scrubber pads

Wipes

Wrappers

