Providing safe, reliable, affordable, and sustainable service.

Sandra Avenue 627
2024 Water Quality Report

We are pleased to present your 2024 Annual Water Quality Report.

This report is designed to update you about the quality of water and services we deliver to you every day, but most importantly, this report shows your drinking water source meets all primary state and federal regulations.

On page 3, you'll find the most recent water quality results through the monitoring period ending December 31, 2024.

If you would like to receive more information about current water quality issues, make comments, or ask questions, please contact our Planning and Compliance Department at PUDPlanning@thurstonpud.org or call our office at (360) 357-8783, Option 3 between 8 a.m. and 4 p.m. Monday through Friday.

How To Contact Us...

Office Address:
1230 Ruddell Road SE
Lacey, WA 98503

Phone Number (s):
(360) 357-8783 or 1 (866) 357-8783

Email:
PUDCustomerService@thurstonpud.org

Website:
www.thurstonpud.org

Conservation Saving Water Can Be Simple

Water is a precious, limited resource. When we each do our part in conservation, using only as much water as we need, we help ensure enough water remains available to meet the needs of wildlife and our growing community.

Want to learn more about saving water indoors and out?

- Check out our website at https://www.thurstonpud.org/water-systems.htm, you will find water-saving tips and practices to utilize at home.
- Our monthly newsletters also feature conservation articles year-round, read the current and historical newsletters on our website at https://www.thurstonpud.org/newsletters.htm.

Get Involved

Commission meetings are held the second and fourth Tuesday of every month. The meetings start at 5:00p.m. and are open to the public.
Check out our website at *www.thurstonpud.org*

Water Use Efficiency Annual Report

Thurston PUD is required to send you a Water Use Efficiency Report on an annual basis. To comply with this State law, Thurston PUD approved a new conservation goal in October 2020 for your water system. The goal is as follows:

REDUCE AND/OR MAINTAIN THE ANNUAL AVERAGE DEMAND PER CONNECTION, FOR ALL GROUP A SYSTEMS, TO NO MORE THAN 250 GALLONS PER DAY.

The Sandra Avenue water system is fully metered and the total water produced for 2024 was 813,500 gallons. The system had less than one gallon per minute leak loss for the year. In 2024, the average household used 137 gallons per day meeting the PUD's current conservation goal.

A copy of the report filed with the State is available on our website. To receive a copy by mail, please call our office at (360) 357-8783.

LEAD AND DRINKING WATER *What you need to know*

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. Thurston PUD is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

To help reduce potential exposure to lead, for any drinking water tap that has not been used for 6 hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from the EPA's Safe Drinking Water Hotline at 1-800-426-4791 or online at http://www.epa.gov/safewater/lead.

CROSS-CONNECTION CONTROL *Protecting the Water You Drink from Backflow*

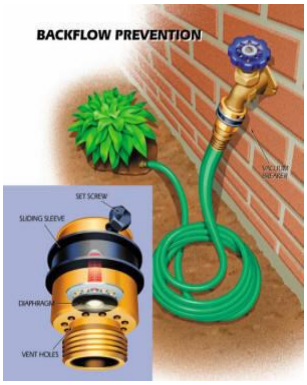
Thurston PUD, in accordance with WAC 246-290-490, administers a cross-connection control program that helps protect your drinking water by preventing contaminants from entering your water system through inspections, public education, and requiring physical devices called backflow prevention assemblies. Backflow prevention assemblies allow water to travel one-way into a customer-owned piping system, such as an irrigation or fire suppression system, and does not allow water to flow back into the community water supply if a back-siphonage or backpressure condition exists.

Thurston PUD staff members currently track and manage over 1,300 backflow assemblies as part of the cross-connection control program. Each assembly is required to be tested annually to ensure they are functioning properly to help safeguard the water that you, your family, and your neighbors utilize everyday. Requiring a backflow assembly on an underground irrigation system that is connected to the drinking water supply is one way we help to prevent contaminants from entering your community water system.

A garden hose can create a cross-connection! The end of a garden hose can be connected to or come into contact with many potential contaminants. Never submerge hoses in buckets, spas, animal watering troughs or any other receiving vessel. A hose bibb vacuum breaker (see illustration) is an inexpensive, easy to install device designed to help prevent backflow through your garden hoses. They are available at most hardware stores and only cost approximately $7 each.

Two ways to help keep your water safe from cross-connections:

1. Fill out a new cross-connection survey form (www.thurstonpud.com) every time you add anything to your system.
2. Send in your required annual test results for any backflow device you have installed on your irrigation system.



If you are not sure if your underground irrigation system has a backflow assembly installed, or if you have any other questions about Thurston PUD's cross-connection control program and requirements, please contact the Planning & Compliance Team at backflow@thurstonpud.org or (360) 357-8783, Option 3.

ANNUAL WATER QUALITY REPORT: Sandra Ave 627 - ID 54591W

Your water comes from two 55 foot deep groundwater wells. The system is approved for 16 connections.

Source	*Susceptibility Rating*	*Treatment*	*Description*
S01 AFM956 and S02 AFM957	High	Filtration	Treatment for corrosion control consists of a limestone contactor tank which water flows through and dissolves calcium carbonate, increasing the pH of the water reducing corrosion by-products from household plumbing such as lead and copper.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2024 calendar year and PFAS found in 2022. 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. Some of the data, though representative of the water quality, is more than one year old. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

We test for Primary and Secondary Contaminants both regulated and unregulated, as required by the EPA and the State Department of Health. The regulated and unregulated analysis (contaminants) tests are commonly referred to as Inorganic Chemical (IOC), Volatile Organic Chemical (VOC) and Synthetic Organic Chemical (SOC) tests.

Required Testing (last testing date):

Monthly Bacteriological
Annual Nitrate
Inorganic Contaminants – 2018
Volatile Organic Contaminants – 2022
Radionuclide – 2021
Lead & Copper – 2024
Herbicide and/or Pesticide – 2016
PFAS – 2023

PRIMARY CONTAMINANTS

Microbiological	*MCLG*	*MCL*	*Your Water*	*Compliant(Y/N)*	*Typical Sources*
Total Coliform Bacteria	N/A	TT	0	Y	Naturally present in the environment.
Inorganic Contaminants	***MCLG***	***MCL***	***Your Water***	***Compliant(Y/N)***	***Typical Sources***
Nitrate (ppm)	10	10	2.34	Y	Runoff from fertilizer use
State Regulated	***SRL***	***SMCL***	***Your Water***	***Compliant(Y/N)***	***Typical Sources***
Sodium (ppm)*	5	N/A	8.0	Y	Geology, natural weathering.
Lead and Copper Taken at Customer Taps	***AL***	***No. of Homes Sampled***	***90th Percentile Value***	***No. of Homes Exceeding AL***	***Typical Sources***
Lead (ppb)	15	5	1.7	0	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	1.3	5	0.11	0	

While there is no published MCL for sodium, waters with sodium levels in excess of 20 mg/l may be a concern to individuals suffering from hypertension or monitoring their sodium intake.

PFAS **(Per- and polyfluoroalkyl substances)**		
PFAS Contaminant	**Detected Level (ppt) S01 & S02***	**MCL (ppt)**
PFOA - perfluorooctanoic acid	Non-Detect	4
PFOS - perfluorooctane sulfonic acid	3.2	4
PFNA - perfluorononanoic acid	Non-Detect	10
PFHxS - perfluorohexane sulfonic acid	Non-Detect	10
HFPO-DA (GenX chemicals)	Non-Detect	10
Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS	Non-Detect	Hazard Index of 1
Typical sources of PFAS: Run-off or leaching from firefighting foam, industrial discharge, and landfills; wastewater treatment plants		

Please see the Department of Health, Office of Drinking Water's website for more information on PFAS at https://doh.wa.gov/community-and-environment/contaminants/pfas.

Terms and Abbreviations Used:

ppm - parts per million **ppb** - parts per billion **ppt** - parts per trillion
N/A - Not Applicable **ND** - None Detected **TT -** Treatment Technique

Contaminant: A substance that impairs the quality of potable water and may create a hazard to public health.

MCLG (Maximum Contaminant Level Goal): the level of a contaminant in drinking water below which there is no know or expected risk to health. MCLGs allow for a margin of safety.

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.

SRL (State Reporting Level): The minimum reportable detection of an analyte as established by Washington State Department of Health. If the test result is less than the SRL, the contaminant is considered not detected.

SMCL (Secondary Maximum Contaminant Level): These standards are developed as guidelines to protect the aesthetic qualities of drinking water and are not health based.

AL (Action Level): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

Some Contaminants Are Reasonably Expected To Be Found In Drinking Water

To ensure that tap water is safe to drink, the Department of Health and EPA prescribe regulations that limit the number of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington Department of Agriculture regulations establish limits for contaminates in bottled water that must provide the same protection for public health.

Drinking water, including bottled drinking water, may be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) includes 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.

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, or 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 by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

Source Protection Information

The Washington State Department of Health Office of Drinking Water has compiled Source Water Assessment Program (SWAP) data for all community water systems in Washington. A source water assessment includes:

- A delineation (definition) of the source water protection area.
- An inventory of potential sources of contamination, and
- A susceptibility determination (how susceptible the source is to contamination).

SWAP data for your system is available online at **https://fortress.wa.gov/doh/swap/**

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health

Vulnerable Populations

Some people may be more vulnerable to contamination 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/ CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791).