Providing safe, reliable, affordable, and sustainable service.

Boots & Saddles 662
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 Boots & Saddles water system is fully metered and the total water produced for 2024 was 3,267,488 gallons. The system had a less than one gallon per minute leak loss for the year. In 2024, the average household used 216 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*

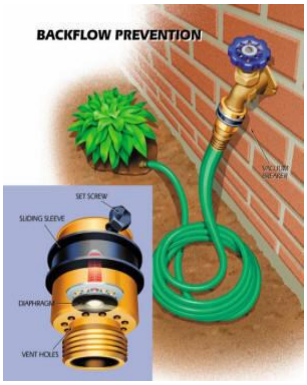
Thurston PUD, in accordance with WAC 246-290-490, administers a cross-connection control program that helps protect your drinking water by preventing contaminants from entering your water system through inspections, public education, and requiring physical devices called backflow prevention assemblies. 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: Boots & Saddles 662 - ID 077304

Your water comes from a single 255 foot deep groundwater well and includes a 34,000 gallon concrete reservoir. The system is approved for 51 connections.

Source	*Susceptibility Rating*	*Treatment*
S01 ACM781	Moderate	None

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2024 calendar year. 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 – 2020
Volatile Organic Contaminants – 2023
Radionuclide – 2023
Lead & Copper – 2024
Herbicide and/or Pesticide – 2021
PFAS – 2021 **None Detected**
Iron & Manganese - 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	<0.20	Y	Runoff from fertilizer use
Secondary Contaminants	***SRL***	***SMCL***	***Your Water***	***Compliant(Y/N)***	***Typical Sources***
Iron (ppm)	0.1	0.30	3.42	Y	Leaching from natural deposits
Manganese (ppm)	0.001	0.05	0.16	Y	Leaching from natural deposits
State Regulated	***SRL***	***SMCL***	***Your Water***	***Compliant(Y/N)***	***Typical Sources***
Sodium (ppm)*	5	N/A	6.0	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	20	1	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	1.3	5	0.34	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.*

See the next page for additional important information on lead in your drinking water.

Elevated levels of lead were found in some homes of your water system. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

Thurston PUD is focused on protecting the health of every household in our community; however, lead in drinking water most often comes from water distribution lines or household plumbing rather than from the water system source. **There are no known sources of lead in the water distribution system.** You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Plumbing sources can include lead pipes, lead solder, faucets, valves, and other components made of brass.

This does not mean that every property has lead in the drinking water. It does mean that you should understand how to reduce your exposure to lead through water. Keep in mind that drinking water is not the only potential source of lead exposure, since lead can be found in air, soil, and paint. For more information on all sources of lead, visit https://www.epa.gov/lead.

Steps You Can Take to Reduce Your Exposure to Lead in Your Water - Before drinking tap water, flush your pipes for several minutes, use cold water, clean your aerator, or you can use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

What is Being Done? - We are required to develop and implement a program to minimize how corrosive our water is to help reduce the levels of lead in customer's taps.
We are required to:

1) Conduct a public education program.
2) Prepare an engineering report to evaluate our water to determine what our next steps should be and what type of treatment might work best.

We may be required to:

3) Install corrosion control treatment (treating the water to make it less likely that lead will dissolve into the water) or

We also plan to take the following steps:

- We are conducting additional lead and/or water quality monitoring of our water system supply.
- We are increasing our lead monitoring to determine the extent of the situation.

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).