City of St. Helens Water Department

2020 Water Quality Report

Water Quality

The City of St. Helens Water Department is providing this summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent.

City of St. Helens Water Department is committed to providing you with the safest and most reliable water supply. Informed customers are our best allies in maintaining safe drinking water. We are required by the Oregon State Health Division to take 15 routine water samples monthly from designated areas throughout the city, testing for microbiological contaminants in the drinking water. We have been continuing to upgrade and improve our water quality and service by installing new water mains and having a leak detection survey done to help reduce water loss.

Water Source

The St. Helens Water Department supplies the city with water from a water treatment facility located in Columbia City. There are two wells on the banks of the Columbia River in Columbia City that supply water to the treatment plant. There is also one Ground Well located near Scappoose Bay Marina. The Scappoose Bay well only operates during emergencies.

The water treatment facility is a membrane plant that works by running water through a series of synthetic filters that capture sediment, germs and organisms. These filter systems are fully computer-controlled for automatic backwashing and cleaning. There are no chemical additions, except for standard chlorine disinfection and acidity controls. The system requires very little daily hands-on operational duties aside from the computer-controlled monitoring of water quality. That differs from the traditional sand filtration or chemical treatment plants that require constant operational tasks to operate. The investment in systems, controls and the more expensive synthetic filters will be more than offset over the life of the plant by greatly reduced staff and maintenance requirements.

During the summer months when usage is higher, the City produces about 2 million gallons of water per day. This serves over 13,000 residents through over 5,000 service connections. During the fall and winter months, this usage falls to around 1.5 million gallons per day.

You can contact St. Helens City Hall at 503-397-6272 with questions or for information about the next opportunity for public participation in decisions about your drinking water.

How to Read This Table

This report is based upon the most recent tests conducted by the City of St. Helens Water Department. Testing frequency is determined by the Oregon Health Division. Terms used in the Water Quality Table and in other parts of this report are defined here.

- **Maximum Contaminant Level or 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.
- **Maximum Contaminant Level Goal or MCLG**: 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.
- **Treatment Technique or TT**: A required process intended to reduce the level of a contaminant in drinking water.
- **ppm**: Parts per million or milligrams per liter (mg/l).
- **ppb**: Parts per billion or micrograms per liter (ug/l)
- **NTU**: Nephelometric Turbidity Unit

The data presented in this report is from the most recent testing done in accordance with regulations. Test results can also be viewed on the Oregon Health Division's website at **https://yourwater.oregon.gov/** Our WS Number is 4100724.

Contaminant	Date Tested	Range Min. -Max.	Detected Level	Unit	MCL	MCLG	Violation	Major Sources
Nitrate	07/22/20	n/a	1.22	ppm	10.0	n/a	NO	Naturally occurring
TTHMs	Quarterly	0 – .0287	.0287	ppm	80	n/a	NO	Disinfection Byproduct
HAA5	Quarterly	0 - .0029	.0029	ppm	60	n/a	NO	Disinfection Byproduct
TOC	Quarterly	0 – .74	0.74	ppm	n/a	n/a	NO	Naturally occurring
Turbidity	Daily	.021 - .079	.079	NTU	TT = 0.3	n/a	NO	Soil Runoff, Sediment
Barium	10/24/12	n/a	.013	ppm	2.0	n/a	NO	Naturally occurring
Sodium	10/24/12	n/a	14.8	ppm	n/a	n/a	NO	Naturally occurring

Water Quality Table Footnotes

All contaminants tested were below the Maximum Contaminant Level and none were in violation.

Mandatory Testing

The contaminants we are currently required to monitor are listed below. Only the ones listed in the table above had detectable levels.

Microbiological Contaminants
Total Coliform Bacteria
Fecal Coliform
Turbidity

Radioactive Contaminants
Beta/photon emitters
Alpha emitters
Combined Radium

Inorganic Contaminants
Antimony
Arsenic
Barium
Beryllium
Cadmium
Copper
Cyanide
Fluoride
Lead
Mercury (inorganic)
Nickel
Nitrate (as Nitrogen)
Nitrite (as Nitrogen)
Selenium
Sodium
Thallium

Synthetic Organic Contaminants
2,4D
2,4,5-TP (Silvex)
Alachlor
Atrazine
Benzo(a)pyrene (PAH)
BHC-Gamma
Bi(2-ethylhexyl)adipate
Bi(2-ethylhexyl)phthalate
Carbofuran
Chlordane
Dalapon
1,2Dibromo-3-chloropropane
Dibromoethane
Dinoseb
Diquat
Endothall
Endrin
Ethylene Dibromide
Glyphosate
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorocyclopentadiene
Lasso
Hydroxycarbofuran
Lindane
Methoxychlor
Oxamyl
PCBs (Polychlorinated)
Pentachlorophenol
Picloram
Simazene
Toxaphene
3-Hydroxycarbofuran
Aldicarb
Aldicarb Sulfone
Aldicarb sulfoxide
Aldrin
Baygon
Butachlor
Carbaryl
Dicamba
Dieldrin
Methomyl
Metolachlor
Metribuzin
Propachlor

Volatile Organic Contaminants
Benzene
Carbon Tetrachloride
Chlorobenzene
O-Dichlorobenzene
P-Dichlorobenzene
1,1 – Dichloroethylene
1,2-Dichloroethane
Cis-1,2-Dichloroethylene
Dichloromethane
trans-1,2-Dichloroethylene
Ethylbenzene
HAA5
Styrene
Tetrachloroethylene
Trichloroethane 1,1,2
Trichloroethane 1,1,1
Trichloroethylene
TTHMs
TOC
Toluene
Vinyl Chloride
Xylenes
Dichloroethane 1,2
Dichloropropane 1,2
Trichlorobenzene 1,2,4
Dichloropropane 1,2

Lead and Copper Testing

Substance	Units	Goal	Action Level (AL)	90th Percentile	Homes Exceeding Action Level	Complies?	Source of Contaminate
Copper	ppm	1.3	1.3	0.373	0	YES	Corrosion of household plumbing
Lead	ppb	0	15.5	2.0	0	YES	Corrosion of household plumbing

The latest round of Lead & Copper testing was performed in 2019. 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 determined that the sample results did not exceed the Action Level (AL).

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. The City of St. Helens 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 water 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 or at www.epa.gov/safewater/lead.

Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts 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 Environmental Protection Agency's Safe Drinking Water Hotline at (800)426-4791.

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 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 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, stormwater runoff and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than is 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 are available from the Safe Drinking Water Hotline at (800)426-4791.

Water Service Information

For information on Water, Sewer and Storm Water Drainage Services, please contact Utility Customer Service Division at 275 Strand Street. Hours are Monday through Friday 8:30 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m.
Business Phone: 503-397-6272
Website http://www.ci.st-helens.or.us/utilities/

If you need to initiate water, sewer and storm water services in your name you can come down to City Hall or go to the above referenced website to download an application. Utility Services are broken down as follows effective 2/6/19:

Water - Customers inside the City shall pay $11.04 per month service charge for each water service meter in addition to the rate paid for water use. Customers outside the City shall pay $22.09 per month.

Sewer - Customers inside the City shall pay $16.08 per month service charge for each sewer connection in addition to the rate paid for water use. Customers outside the City shall pay $20.10 per month.

Storm Water - Drainage fee is charged on all inside City limits customers with a water or sewer connection. It is based on impervious surface for a property and covers the costs of maintaining infrastructure handling storm water runoff which limits flooding and contaminants flowing into rivers and streams. The monthly fee for a usual single family dwelling is $11.71 per month.

DELINQUENT ACCOUNTS – Upon failure to pay water charges due within the first ten days of a month, by the ***15th*** day of the month, the account shall be delinquent and a late charge of ***$25.00*** shall be added and by the ***20th*** day of the month, water service to the customer may be turned off.

RESTORATION CHARGE – A customer shall pay for restoration of water service when service has been ***discontinued*** because of non-payment. There is a ***$75.00*** fee to have service restored between 8am and 4pm and ***$150.00*** between 4pm and 8am to cover employee overtime.

OTHER WATER QUALITY INFORMATION –
Our backflow program helps prevent any potentially contaminated water from entering the City's water supply by having industrial, commercial or residential buildings install an approved backflow assembly. ***If you are considering installing a lawn sprinkler system, you are required to install an approved backflow assembly to help protect your drinking water and our water system.*** Contact our Building Department to find out more information at 503-397-6272.

If you have questions or need more information about your drinking water quality, supply or infrastructure, contact the City of St. Helens Public Works Department at 503-397-3532.

More Information

CITY HALL (Utility Billing) – Hours 8:30 am – 5:00 pm Mon. – Fri. Phone 503-397-6272 Website www.ci.st-helens.or.us

PUBLIC WORKS SHOP (Maintenance Issues) – Hours 8:00 am – 4:30 pm Mon. – Fri. Phone 503-397-3532

AFTER HOURS EMERGENCY PHONE – 503-397-1521

REMEMBER - Water meters are ***City property*** and should not be tampered with. If you have a water or sewer emergency (such as a broken pipe or leak), call Public Works or the After Hours Emergency number. Someone is on call 24 hours a day, 7 days a week.

WATER CONSERVATION – Here are some helpful water conservation tips for your household:

Indoors
* Install low flow shower heads and aerators on the faucets.
* Don't let the water run while brushing your teeth.
* Fix any leaky plumbing or faucets.
* Flush only when necessary. Don't use your toilet as a garbage can.
* Keep a container of drinking water in the refrigerator instead of letting the faucet run until the water is cool.

Outdoors
* If the soil is moist, don't water. Allow the lawn to dry out between waterings. This will promote deeper root growth.
* Don't water on windy days. The wind will carry the spray away.
* Don't water during the hottest part of the day. Water in the mornings and evenings when the temperature is cooler.
* Remove weeds to prevent plant competition and cut down the amount of water needed.
* Use nozzles on hoses when washing your car instead of letting the water run.

WATER HEATER INFORMATION – The water system from the meter to your residence is a closed system. This means there is a check valve by the meter that does not allow water to flow back into the system from the service line. Your water heater should have a T/P valve to relieve excessive water temperature or pressure. We recommend that you inspect your T/P valve annually.

To do this, place a pan under the water outlet and lift the lever to verify good flow. Be careful – the water is very hot. If water drips from the pipe after operating the valve, trip it several times to get a better seal. If it continues to drip, the valve needs to be replaced.

Also, a licensed plumber can inspect, repair or replace your T/P valve to ensure your safety. A thermal expansion tank and pressure-relief toilet ball cock assembly can provide additional protection.

UNREGULATED CONTAMINANT MONITORING - In 2020, the City monitored for Unregulated Contaminants for the Environmental Protection Agency (EPA) as part of a nation-wide study. Unregulated Contaminants are those that don't yet have a drinking water standard set by the EPA. The purpose of monitoring for these substances is to help the EPA decide whether the contaminants should have a standard.

Levels that are "<" are below the MRL (Minimum Reporting Level) set by the EPA. The MRL is considered the minimum amount that can be accurately detected by laboratory testing. Anything below the MRL is considered to be too small of an amount to be accurately detected and reported by a laboratory.

Since these substances are currently unregulated, the EPA has not set MCLs (Maximum Contaminant Levels) for them.

Aanalyte Name	Detected ppb	MRL ppb
Alpha-hexachlorocyclohexane	N/D	0.01
Chlorpyrifos	N/D	0.03
Dimethipin	N/D	0.2
Ethoprop	N/D	0.03
Oxyfluorfen	N/D	0.05
Profenofos	N/D	0.3
Tebuconazole	N/D	0.2
Total Permethrin	N/D	0.04
Tribufos	N/D	0.07
Butylated Hydroxyanisole	N/D	0.03
O-toluidine	N/D	0.007
Quinoline	N/D	0.02
1-Butanol	N/D	2.0
2-Methoxyethanol	N/D	0.4
2-Propen-1-ol	N/D	0.5
Germanium	N/D	0.3
Manganese	12.6	0.4
Dichloroacetic Acid	0.7	0.2
Monochloroacetic Acid	N/D	2.0
Trichloroacetic Acid	1.4	0.5
Monobromoacetic Acid	N/D	0.3
Dibromoacetic Acid	N/D	0.3
Bromochloroacetic Acid	0.4	0.3
Bromodichloroacetic Acid	1.2	0.5
Chlorodibromoacetic Acid	0.6	0.3
Tribromoacetic Acid	N/D	2.0
Bromide	20.0	20.0
HAA6BR	2.2	
HAA9	4.3	
Anatoxin-a	<0.03	0.03
Cylindrospermopsin	<0.09	0.09
Total Microcystins	<0.03	0.03

Do You Have an Emergency Water Supply?

If an earthquake, winter storm, or other disaster strikes our community, you might not have access to food, water and electricity for days or even weeks. Disaster strikes at a moments notice, many times without warning, you probably will not have the opportunity to shop or search for the supplies you and your family
will need. Every household should assemble a disaster supplies kit and keep it up to date.
In an emergency, having a supply of clean water is a top priority, for drinking, food preparation and hygiene. Are you ready today for an emergency situation tomorrow?

PREPARE AND STORE AN EMERGENCY SUPPLY OF WATER

The CDC, EPA, FEMA and Red Cross recommend that the safest and most reliable emergency supply of water is commercially bottled water. Keep bottled water in its original container, and do not open it until you need to use it. Store bottled water intended for drinking and cooking in the original sealed container, in a cool place, out of direct sunlight, and observe the expiration or “use by” date, generally 6 months.

If you are preparing your own containers of water… it is recommended to purchase food-grade water storage containers from surplus or camping supplies stores to use for water storage. If you decide to re-use storage containers, choose two-liter plastic soft drink bottles – not plastic jugs or cardboard containers that have had milk or fruit juice in them. The reason is that, milk protein and fruit sugars cannot be adequately removed from these containers and provide and environment of bacterial growth when water is stored in them.

Activities that do require boiled water: **	**Activities that do not require boiled water:**
Drinking	Showering
Washing food served without cooking/baking	Tub Bathing
Adding water to food without cooking/baking	Dish washing or rinsing*
Ice Making	Laundering
Cleaning food contact surfaces	General cleaning, mopping
Gargling	Hand washing
Eye washing	Pet watering
Taking water with medications	Pet bathing
Tooth Brushing	

*Cleaned dishes and utensils should be rinsed in water that contains 1 tablespoon of household (non-scented) bleach per gallon of water (100-200 ppm chlorine) and allowed to air dry before use.

** Water used for activities that require boiling should be brought to a rolling boil for a minimum of 1 minute **before** adding pasta, vegetables, oatmeal etc.

Preparing Containers: Thoroughly clean the bottles with dishwashing soap and hot water, and rinse completely so there is no residual soap. Additionally, for plastic soft drink bottles sanitize the bottles by adding a solution of 1 teaspoon of non-scented liquid household chlorine bleach to a quart of water. Swish the sanitizing solution in the bottle so that it touches all surfaces. After sanitizing the bottle, thoroughly rinse out the sanitizing solution with clean water.

Filling Water Containers: Fill the bottle to the top with regular tap water. If the water you are using comes from a well or water source that is not treated with chorine, add two drops of **non-scented** liquid household chlorine bleach to each gallon of water. Tightly close the container using the original cap. Be careful not to contaminate the cap by touching the inside of it with your fingers. Write the date on the outside of the container so that you know when you filled it. Store in a cool, dark place. Replace your personally stored water every six months. Repeat cleaning and sanitizing the container or bottle before refilling.

Treating water: There are many ways to treat water, though none are perfect. **Boiling** is the safest method of treating water. In a large pot or kettle, bring water to a rolling boil for 1 full minute, keeping in mind that some water will evaporate. Let the water cool before drinking. Boiled water will taste better if you put oxygen back into it by pouring the water back and forth between two clean containers.

Chlorination: You can use household liquid bleach to kill microorganisms. Use **ONLY unscented**, regular household liquid bleach that contains 5.25 to 6.0% sodium hypochlorite. Because the strength of bleach decreases with time, use bleach from a newly opened or unopened bottle. **DOSE:** Add 16 drops (1/8 teaspoon) of bleach per gallon of water, stir and let stand for 30 minutes. The water should have a slight bleach odor. If it doesn't, then repeat the dosage and let stand another 15 minutes. If it still does not smell of bleach, discard the water and find another source of water.

Other preparedness materials are available at www.fema.gov, www.redcross.org, as well as www.ready.gov. We have also included on the City of St. Helens web site (www.ci.st-helens.or.us) on the Water Filtration Plant link, more emergency preparedness information, such as preparing emergency kits, to assist you and your family prepare for unexpected disasters.

OUR EMPLOYEES

The City of St. Helens is always committed to bringing you quality drinking water. Our Water Distribution Operators and Water Filtration Plant Operators are State Certified and receive annual training to keep their knowledge and certifications current. The Oregon Health Division performs a survey on our water system and recordkeeping every five years and they have the City of St. Helens listed as an Outstanding Performer!