

Your safe, clean, high-quality drinking water continues to meet and exceed all state and federal standards.



About this Report

The U.S. Environmental Protection Agency (EPA) requires public water suppliers to provide Water Quality Reports to their customers by July 1 of each year. These annual reports — also referred to as Consumer Confidence Reports (CCR) provide information on the quality of your local drinking water.

This 2020 report includes results of water quality testing conducted from January 1 through December 31, 2019, on water served by the Tualatin Valley Water District (TVWD) to City of Hillsboro customers living in the Butternut Creek neighborhood.

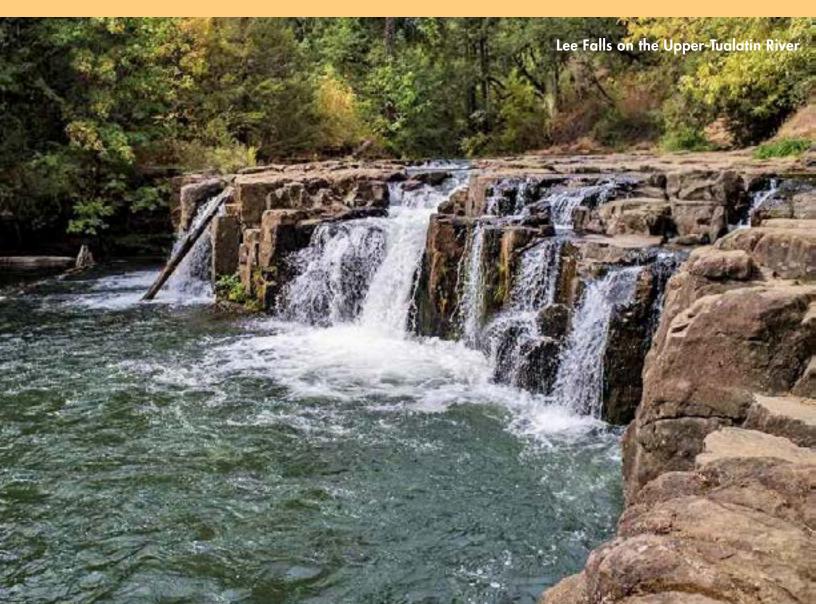
Questions?

Call: 503-615-6702

Email: Lindsay.McClure@Hillsboro-Oregon.gov

Visit: 150 East Main Street Hillsboro, Oregon 97123

Fax: 503-615-6595



Delivering High-Value, Reliable Water Service

Depending on your location in Hillsboro, the water provider is either the Hillsboro Water Department or TVWD. Both agencies work closely together to deliver high-value, reliable water service to customers.

Within the city of Hillsboro, TVWD serves water to:

- Butternut Creek neighborhood customers located south of SW Tualatin Valley Highway and north of SW Rosedale Road off SE Butternut Creek Parkway. After the City completes pipeline construction in South Hillsboro, Butternut Creek customers will be switched to receive water served by the Hillsboro Water Department.
- Customers located east of Cornelius Pass Road.

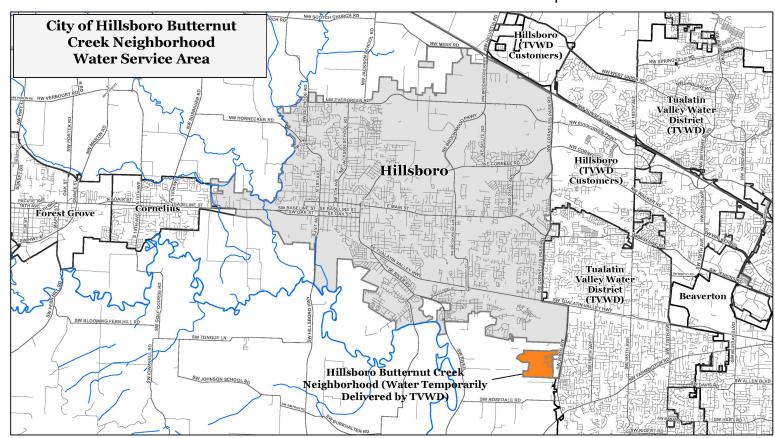
Before entering the water distribution system, fluoride is added to a portion of the water served by TVWD. TVWD uses sodium fluoride manufactured specifically for drinking water.

TVWD does fluoridate the water being temporarily served to the Butternut Creek neighborhood. The Hillsboro Water Department serves water to:

 In-town customers located west of Cornelius Pass Road and south of Highway 26 (Sunset Highway). In-town customers are served water from the Joint Water Commission (JWC) Water Treatment Plant located in Forest Grove. Learn more at Hillsboro-Oregon.gov/ HillsboroCCR.

- Upper-system customers in western Washington County along Hillsboro's original water service line. Uppersystem customers are served water from both the JWC Water Treatment Plant, and the Cherry Grove Slow Sand Filter (SSF) Plant, located near the community of Cherry Grove. Learn more at Hillsboro-Oregon.gov/ CherryGroveCCR.
- Three wholesale customers: the cities of Cornelius and Gaston, and the L.A. Water Cooperative.

Fluoride is not added to the water served by the Hillsboro Water Department.



Developing a Reliable Supply for Tomorrow

The City of Hillsboro is partnering with TVWD and City of Beaverton to develop the mid-Willamette River at Wilsonville as an additional water supply source. Design and construction of the new Willamette Water Supply System (WWSS) is underway, and includes building:

- A modified water intake on the Willamette River at Wilsonville
- A state-of-the-art water filtration facility east of Sherwood
- Water supply tanks on Cooper Mountain
- More than 30 miles of largediameter transmission water pipeline traveling north

from Wilsonville, through Beaverton, and into Hillsboro

The entire WWSS will be built to modern seismic standards and designed to withstand the impacts of a large earthquake or other natural disaster. This will help restore service quickly after a catastrophic event.

The project is estimated to cost \$1.3 billion, and costs are shared by the three partners based on the amount of water received.

Affordability and cost control are top of mind while building the communities' next reliable water supply system. To proactively manage costs, the three agencies are leveraging partnerships, making smart design decisions, managing

risks, monitoring and projecting cash flow, and getting the best price and quality.

An additional cost control measure is securing long-terms loans. In 2019, the City of Hillsboro and TVWD secured the U.S. EPA's Water Infrastructure Finance and Innovation Act (WIFIA) loans to finance nearly half of the project cost — \$638 million. These loans will save the City of Hillsboro an estimated \$125.2 million, and TVWD an estimated \$138.4 million, compared to traditional financina.

For more information on Hillsboro's future additional water supply source, call 503-941-4570 or visit OurReliableWater.org



Everyday Actions to Protect Our Drinking Water Sources

Community members are encouraged to take an active role in protecting drinking water sources from contamination:

- Use and dispose of harmful materials properly. Do not pour hazardous waste down the drain, on the ground, or into catch basins. This could contaminate the soil, groundwater, or nearby surface water.
- Think twice about lawn and garden chemicals. Limit the use of pesticides or fertilizers, and always follow the label directions.
- Properly maintain septic systems. Malfunctioning septic systems release bacteria, viruses, and chemicals to local aquifers and waterways. Each household septic system should be inspected at least every three years, and typically pumped every three to five years.
- Dispose of medications properly. Take advantage of

pharmaceutical take-back collection programs that accept prescription or overthe-counter drugs. Do not flush or pour them down the sink, as they could enter rivers and lakes.

For additional ways to protect drinking water at the source, visit EPA.gov/ **SourceWaterProtection**

Butternut Creek Customer's Current Water Sources

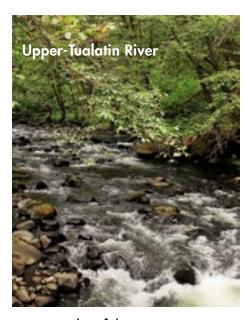
Customers living in the Butternut Creek neighborhood are being temporarily served drinking water from TVWD's distribution system, as the City of Hillsboro completes water pipeline construction in South Hillsboro.

TVWD has multiple quality water sources, including:

Joint Water Commission (JWC): About 28% of TVWD's water comes from the JWC, owned in partnership by the cities of Hillsboro, Forest Grove, and Beaverton, and TVWD. JWC water sources are the upper-Tualatin River and its tributaries. In the summer, the river level drops too low for community use, so customers rely upon water stored in the Barney and Scoggins (Hagg Lake) reservoirs. Water from these sources is treated at the JWC Water Treatment Plant located in Forest Grove. For more information, visit JWCWater.org.

Portland Water Bureau: About 72% of TVWD's water is purchased from the City of Portland. Portland's primary source is water from the Bull Run Watershed in the Mt. Hood National Forest, 26 miles from Portland. In addition, the Columbia South Shore Well Field supplements the Bull Run supply with groundwater during routine maintenance, turbidity events, emergencies, and when Portland needs additional summer supply. For more information, visit PortlandOregon.gov/Water.

Aquifer Storage and Recovery (ASR): During the winter when



water is plentiful, TVWD stores treated drinking water underground in the aquifer surrounding the Grabhorn well on Cooper Mountain. During the hot summer months, the stored water is pumped from the aguifer to help meet peak water demands. The Grabhorn ASR well is capable of storing in excess of 300 million gallons of treated water. For more information, visit ASRForum.com.

Source Water Protection and Assessment

Surface water (streams, rivers, and lakes) or ground water (aquifers) can serve as sources of drinking water, referred to as source water. Protecting source water from contamination can reduce treatment costs, which also reduces risks to public health from exposures to contaminated water. Source water assessments provide water utilities, community governments and others with information needed to protect drinking water sources.

Tualatin Valley Water District:

In September and October of 2017, the Oregon Health Authority (OHA) completed a Water System Survey of TVWD. A System Survey is an on-site review of a water system's sources, treatment, storage facilities, distribution system, operation and maintenance procedures, monitoring, and management, for the purpose of evaluating the system's capability of providing safe water to the public. System facilities were found to be well operated and maintained by knowledgeable and competent staff with no significant deficiencies or rule violations. The next survey will take place in 2020.

Joint Water Commission:

In 2019, OHA and Oregon Department of Environmental Quality (DEQ) conducted an updated source water assessment for the upper-Tualatin River Watershed. The assessment identified potential contaminant sources that may affect the supply of water. Out of a total of 567 highrisk potential contaminant sources, 331 were identified within the eight-hour time-oftravel in the JWC Drinking Water Source Area (DWSA). Sources of potential watershed

contamination include agricultural/forest management applications, commercial land uses, residential/municipal land uses, and landslide and clear-cut forest areas. These existing potential sources of contamination could, if improperly managed or released, affect water quality in the watershed. The assessment found that 97% of the streams in the JWC DWSA have high soil erosion potential. Streambank stabilization and best management practices were recommended to mitigate the effects of erosion which contributes turbidity, nutrients, and pathogens in to the streams. Addressing this risk has been a focus of the JWC's Source Water Protection Program, which includes floodplain restoration and securing increased stream setbacks in timber harvests. To view the updated JWC-Cherry Grove Source Water Assessment Report, call 503-615-6702

or email Lindsay.McClure@ Hillsboro-Oregon.gov.

Portland Water Bureau: A

Source Water Assessment completed by the Portland Water Bureau in 2003 identifies the only contaminants of concern as naturally-occurring microbes such as Giardia, Cryptosporidium, fecal coliform bacteria, and total coliform bacteria. These organisms are found in virtually all freshwater ecosystems and may be present in the Bull Run supply at low levels. The Bull Run Watershed is an unfiltered drinking water source that is currently not treated for Cryptosporidium. However, the Portland Water Bureau is working to install drinking water filtration by September 2027. More information is available at 503-823-7525 or PortlandOregon.gov/Water/ SourceWaterAssessment.



Collecting and Testing Water Samples

To ensure drinking water served to Butternut Creek customers meets state and federal drinking water standards, TVWD, JWC, and the Portland Water Bureau regularly test water for approximately 200 regulated and unregulated contaminants by the U.S. Environmental Protection Agency (EPA).

Sampling is conducted at various locations, including at the water source, the water treatment plant,

Sampling is conducted at various locations, including at the water source, the water treatment plant, and distribution system. Results are submitted to the OHA's Drinking Water Program, the agency responsible for enforcing the U.S. EPA's SDWA.

Coliform Bacteria:

The water providers collect water samples throughout the service area to test for coliform bacteria. Most coliforms are not harmful, but they can be an indicator that other disease-causing organisms may be present. If testing indicates that a routine sample contains coliforms, a set of repeat samples are collected and analyzed to determine whether any disease-causing organisms are present.

Cryptosporidium and Giardia:

• The JWC Water Treatment **Plant** has been periodically required to test for Cryptosporidium and Giardia in the raw water since 1980. Raw water levels are extremely low and the water treatment process is effective at removing pathogens. Cryptosporidium and Giardia are microscopic organisms that, when ingested, may cause gastrointestinal symptoms. There are no U.S. EPA mandated Maximum Contaminant Levels (MCL) required for either organisms. MCLs are U.S. EPA standards that set the legal limit on the amount of a substance allowed in public water systems under the SDWA. Due to the potential

health effects of these organisms, the JWC Water Treatment Plant filters and chlorinates every drop of drinking water. While testing of raw (or pre-treated) source water has detected small amounts of harmful organisms, the treatment process of filtration and disinfection prevents the organisms from causing public health issues.

• The Portland Water Bureau does not currently treat for Cryptosporidium, but is required to do so under the drinking water regulations. Portland is working to install a filtration system by 2027 under a compliance schedule with OHA. In the meantime, Portland Water Bureau is implementing interim measures such as watershed protection and additional monitoring to protect public health. Consultation with public health officials has concluded that at this time, customers do not need to take any additional precautions. The U.S. EPA has estimated that a small percentage of the population could experience gastrointestinal illness from Cryptosporidium and advises that customers who have compromised immune systems and receive their



drinking water from the Bull Run Watershed consult with their health care professional about the safety of drinking the tap water. For more information, visit PortlandOregon.gov/ Water/Crypto. The Portland Water Bureau tested for Giardia in the Bull Run Watershed. All detections were from pre-treated raw water. As part of Portland's compliance with the filtration avoidance criteria of the Surface Water Treatment Rule, water is tested for fecal coliform bacteria before disinfectant is added. This is measured in percent of samples with more than 20 fecal bateria colonies in 100 milliliters of water during any six-month period. Chlorine is added to the water to kill 99% of Giardia cysts.

Unregulated **Contaminant Monitoring Rule**

The 1996 SDWA amendments require that once every five years, the U.S. EPA issues a new list of no more than 30 unregulated contaminants to be monitored by public water systems. The fourth Unregulated Contaminant Monitoring Rule (UCMR 4) was published in the Federal Register on December 20, 2016. UCMR 4 requires monitoring for 30 chemical contaminants between 2018 and 2020 using analytical methods developed by U.S. EPA and consensus organizations. This monitoring provides a basis for future regulatory actions to protect public health.

UCMR 4 included 10 Cyanotoxin contaminants, two metals, eight pesticides, one manufacturing byproduct, three brominated haloacetic acid groups, three alcohols, three semivolatile chemicals, and two indicators. Samples were collected at entry points to and various sites within TVWD's distribution system.

The UCMR program provides the U.S. EPA and other interested parties with nationally representative data on the occurrence of particular contaminants in drinking water, the number of people potentially being exposed, and an estimate of the levels of that exposure. In accordance with the SDWA, the U.S. EPA will consider the occurrence data from UCMR 4 and other sources, along with the peer reviewed health effects assessments, to support a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation. For more information, call 1-800-426-4791 or visit EPS.gov/DWUCMR.



Contaminant Sources

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 present 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

In order to ensure that tap water is safe to drink, the U.S. 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 that 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 U.S. EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Cyanotoxin Monitoring in **Drinking Water**

Freshwater Harmful Algal Blooms (HABs) are a growing concern in the United States and worldwide. While the growth of algae in freshwaters — such as streams, lakes, and reservoirs – is natural and an important part of maintaining the ecosystem, when water bodies have high levels of nutrients or higher water temperatures, algae can grow rapidly and cause a HAB.

HABs can cause harm to animals, people, and the local ecology. A HAB can look like foam, scum, or mats on the surface of water, and can be different colors. HABs may also be undetectable by visual assessment, which is why water agencies regularly monitor streams and reservoirs for other indicators, such as nutrients, temperature, and algae pigments, in addition to visual assessments.

Some HABs may contain species of Cyanobacteria (also referred to as Blue Green Algae), which have the potential to produce

toxins, known as Cyanotoxins. Cyanotoxins can affect the function of the liver and nervous system at high enough levels in humans and animals.

In 2018, the OHA developed permanent rules requiring drinking water systems in Oregon using certain surface water sources — such as those prone to HABs — to routinely test for Cyanotoxins and notify the public about the test results.

The JWC - and providers who receive water from the JWC tested for Cyanotoxins in 2018 and 2019 in accordance with OHA requirements. Neither the JWC, nor any agencies serving JWC water, detected any Cyanotoxins in the drinking water during either the 2018 or 2019 testing.

Testing will be required again in 2020. For more information, visit JWCWater.org/Water-Quality/ Testing-Results.



Vulnerable Populations

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 Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (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.

The U.S. EPA and the 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 Drinking Water Hotline at 1-800-426-4791.



Drinking Water and Lead

In compliance with federal requirements, TVWD, along with water source providers, takes actions to reduce customers' exposure to lead and copper in drinking water. These include corrosion control, source water treatment, and public education.

Household plumbing is the main source of lead in drinking water. This is usually from lead solder used in homes built or plumbed with copper pipes before 1985. Lead can also be found in brass plumbing fixtures and components. Lead can enter drinking water when service lines, pipes in the home and other plumbing fixtures, or solder that contain lead corrode.

Water providers test for lead and copper directly at customer's taps instead of in the distribution system on a required schedule set by the OHA. Testing ensures water consumed by customers and their families meet safe drinking water standards. Results from past lead and copper testing are available on the State's website at YourWater.Oregon.gov.

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.

TVWD 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 at 1-800-426-4791 or at EPA. gov/Safewater/Lead.

may wish to have your water tested.

Water Treatment Plant Enhancement Project Complete

To meet current growing water demands, a multiyear project to seismically strengthen and increase drinking water production at the JWC Water Treatment Plant was recently completed.

The plant is now better able to:

- Withstand an earthquake
- Rapidly recover from disruptions to service
- Treat and produce up to 85 million gallons per day of exceptionally high-quality drinking water

The plant was first put into

production in 1974-76 by the cities of Hillsboro and Forest Grove. Over the years, the plant was expanded to accommodate the addition of City of Beaverton and TVWD, and population growth. Learn more at JWCWater.org.



10 Resources for Customers

Lead-in-Water Test Kits: Since you cannot see, taste, or smell lead dissolved in water, testing is a sure way of telling whether there are harmful quantities of lead in your drinking water. Customers in the Hillsboro Water Department's service area — including residents, licensed childcare facilities, and nonprofit organizations — can request a free lead-inwater testing kit at 503-615-6702 or Hillsboro-Oregon.gov/Lead.

Water Efficiency Rebates: The Hillsboro Water Department offers cash rebates to customers for purchasing and installing water-efficient toilets (\$75), washing machines (\$50), and weather-based irrigation controllers (up to \$200). To learn more, call 503-615-6702 or visit Hillsboro-Oregon.gov/Rebates.

Backflow Prevention Device Testing: To help maintain safe, clean drinking water, residential property owners served by the Hillsboro Water Department are required to have their backflow prevention devices tested each year. Visit Hillsboro-Oregon.gov/Backflow for steps to take to ensure compliance.

City Utility Bill: There are several convenient ways to pay your utility bill, including online, phone, drop box, and by mail. Find the best method that works for you at Hillsboro-Oregon.gov/PayBill.

Leak Resource: Toilet leaks are very common and can waste hundreds of gallons of water in a month. Request free toilet leak detection tablets by calling 503-615-6702 or emailing Water-Department@ Hillsboro-Oregon.gov.

High-Efficiency Showerheads and Kitchen and Bathroom Aerators: Request these free devices — which can help save about one gallon of water per minute — by calling 503-615-6702 or emailing Water-Department@Hillsboro-Oregon.gov.

Home Water Audits: The Hillsboro
Water Department offers free residential
home water audits to help identify usage
habits, pinpoint leaks, and implement simple
conservation measures to help cut water usage
by as much as 30%. Call 503-615-6702 or visit
Hillsboro-Oregon.gov/HomeWaterAudit to
schedule an audit.

Watering Schedules: It is important to adjust your watering schedules throughout the irrigation season. Find out how much to water each week this summer by signing up at ConserveH2O.org/Weekly-Watering-Number to receive your personalized Weekly Watering Number.

Garden Resources: Visit
HillsboroGardening.org/GardenResources for tips to design and install a
water-wise garden, and irrigation methods and
equipment to help water your landscape more
efficiently.

Emergency Preparedness: Prepare yourself and family by building a supply of water that will meet your family's needs during an emergency. Determine your water needs, and plan for water storage and treatment with tips from Ready.gov/Water.

Definitions: Water Quality Terms

Some of the terms and abbreviations contained in this report and table are unique to the water industry and may not be familiar to customers. They are explained below.

Action Level (AL):

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Barium and Fluoride:

Metals that are found in the earth's crust. They can dissolve into water that contacts these natural deposits. At the levels found in Portland's drinking water, they are unlikely to contribute to adverse health effects.

Contaminant:

Potentially harmful physical, biological, chemical, or radiological substance.

Disinfection Byproducts (DBP):

Formed when disinfectants used in a water treatment react with bromide and/or natural organic matter present in the source water.

Fecal Coliform Bacteria:

Presence in source water indicates that water may be contaminated with animal wastes. The Portland Water Bureau uses chlorine to kill these bacteria.

Haloacetic Acids (HAAs):

A combination of chemicals that are tested for that make up the Disinfection Byproduct (DBP) Rule.

Maximum Contaminant Level (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 (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.

Maximum Residual Disinfectant Level (MRDL):

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG):

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 contamination.

mg/L:

Measurement of density.

Nephelometric Turbidity Units (NTU):

Measurement of the clarity, or turbidity of water. Turbidity in excess of five (5) NTU is just noticeable to the average person.

Nitrate: Measured as nitrogen, nitrate can support microbial growth, such as bacteria and algae. Nitrate levels exceeding the standards can contribute to health problems. At the levels found in Portland's drinking water, nitrate is unlikely to contribute to adverse health effects.

Non-detected (ND):

Not detected at or above the Maximum Contaminant Level (MCL).

Parts Per Billion (ppb):

Equivalent to micrograms per liter. One ppb is comparable to one drop of water in 55,000 gallons.

Parts per Million (ppm) or Milligrams per Liter (mg/L):

Equivalent to milligrams per liter. One ppm is comparable to one drop of water in 55 gallons.

pH:

Used to indicate the alkalinity or acidity of a substance as ranked on a scale from 1.0 to 14.0. Acidity increases as the pH gets lower.

Sodium:

An essential nutrient. There is no drinking water standard for sodium. At the levels found in drinking water, it is unlikely to contribute to adverse health effects.

Treatment Technique (TT):

A required process intended to reduce the level of a contaminant in drinking water.

Trihalomethanes and Haloacetic Acids:

Regulated disinfection byproducts that have been detected in Portland's water. Adding ammonia to chlorine results in a more stable disinfectant and helps to minimize the formation of disinfection byproducts.

Turbidity:

A measure of suspended material in water. In the water field, a turbidity measurement — expressed in Nephalometric Turbidity Units (NTU) — is used to indicate clarity of water.

Public Participation Opportunities

Monthly Public Meeting:

The City of Hillsboro Utilities Commission – responsible for establishing and approving water rates – meets the second Tuesday each month at 1:30 pm in Hillsboro Civic Center Conference Room 113 located at 150 E Main Street, Hillsboro, Oregon 97123. Public attendance and input are encouraged. Agenda packets are posted in advance at Hillsboro-Oregon.gov/CommitteesBoards, under the "Utilities Commission" section.

Information and Questions:

For information about public participation opportunities,

contact Lindsay McClure at 503-615-6702 or Lindsay.McClure@ Hillsboro-Oregon.gov.

Contact Information

City of Hillsboro Utility Bill: 503-681-6163

Water quality and pressure: 503-615-6702

Water conservation and rebates:

503-615-6737

per 503-615-6723

Hillsboro's future additional water source: 503-941-4563

Lead-in-water information: 503-615-6702

Water emergency: 503-615-6700

After-hours water emergency (pager): 503-615-6775

Email: Water-Department@ Hillsboro-Oregon.gov

Regional Collaboration

Along with 20 other local water providers, TVWD, Portland Water Bureau, and the Hillsboro Water Department are members of the Regional Water Providers Consortium. The Consortium provides leadership in the planning, management, stewardship, and resiliency of drinking water in the Portland metropolitan region. Learn more at RegionalH2O.org.



2019 Sampling Results

REGULATED SUBSTANCES

Substance

Customers served water by the Joint Water Commission and Portland Water Bureau

Unit of Measure Year Sampled

Substance	Offin of Medsore	rear Jampiea	MCL (MKDL)	MCLO (MRDLO)	Detected	High	Detected	High	Violation	Typical Source
Chlorine	ppm	2019	4	4	1.31	0.08 - 1.31	1.13 ¹	2.3 - 2.5	No	Additive controls microbes
Nitrate (as Nitrogen)	ppm	2019	10	10	0.32	0.04 - 0.32	0.054	<0.010 - 0.054	No	Agricultural runoff
Barium	ppm	2019	2	2	0.005	0.0041 - 0.005	0.0135	0.00082 - 0.0135	No	Erosion of natural deposits
MICROBIOLOGICAL TESTIN	IG & TREATMENT CO	NSIDERATIONS								
E. coli	Presence or Absence	2019	0	0	0	0	0	0	No	Human and animal fecal waste
Giardia ²	#/L	2019	Π	NA	NA	NA	0.08	0 - 0.08	No	Animal wastes
Fecal Coliform Bacteria ²	% > 20 colonies/ 100mL in 6 months	2019	10%	NA	NA	NA	0	0%	No	Animal wastes
Total Organic Carbons	ppm	2019	П	NA	1.29	0.46 - 1.29	1.30	<0.30 - 1.30	No	Naturally present in environment
Turbidity	NTU	2019	Π	NA	0.13	0.02 - 0.13	1.32	0.19 - 1.32	No	Soil runoff
Turbidity	Percent	2019	Π	NA	100%	100%	NA	NA	No	Soil runoff
(Lowest monthly percentage o	f samples meeting limit	of 0.3 NTU for JW	/C)							
DISINFECTION BY-PRODUC	CTS (DBP)									
Substance	Unit of Measure	Year Sampled	Action Level (AL)	MCLG (MRDLG)	Amount	Amount Detected		Range Low - High		Typical Source
Total Trihalomethanes	ppb	2019	80	NA	46	46.7		39.8 - 46.7		By-product of chlorination
Haloacetic Acid	ppb	2019	60	NA	28	28.0		16.8 - 28.0		By-product of chlorination
LEAD AND COPPER TESTIN	G									
Substance	Unit of Measure	Year Sampled	Action Level (AL)	MCLG (MRDLG)	Amount Detecte	Amount Detected 90th Percentile		Sites Above AL		Typical Source
Lead	ppb	2019	15	0	0.0	0.000		0		Corrosion of plumbing
Copper	ppm	2019	1.3	1.3	0.	0.112		0		Erosion natural deposits
OTHER ITEMS OF INTEREST										
Substance	Year	Range (ppm)		Substance	Year	Range (ppm)				Range (ppm)
Aluminum	2019	ND - 0.03		Orthophosphate	2019	ND - 0.13		Fluoride:		<0.025 - 0.140
Ammonia	2019	ND - 0.53		Silica	2019	4.2 - 20.3		Hardness:		6.8-110 ppm = 0.4 - 6.4 grains per gallon
Calcium	2019	1. <i>7</i> - 19		Sodium	2019	2.8 - 16.0		рН:		6.9 - 9.2 (normal range)
Chloride	2019	2.9 - 6.9		Sulfate	2019	1.4 - 13.0				
	2017									
Magnesium	2019	0.65 - 8.8		Manganese	2019	ND - 0.06				

MCLG (MRDLG)

MCL (MRDL)

Portland Water Bureau

Amount

Range Low- Violation

Typical Source

JWC Water Treatment Plant

Amount

Range Low-

During the past year, hundreds of water samples have been taken in order to determine the presence of any biological, inorganic, volatile organic, or synthetic organic contaminants. The table shows only contaminants that were detected and are considered a risk to health if over the Maximum Contaminant Level (MCL). A more detailed list of sampling completed in 2019 is available on the Joint Water Commission website at JWCWater.org.

¹ Locational Running Annual Average reported from TVWD.

² Because the JWC Water Treatment Plant filters its raw water supply before treatment, it is not required to sample for Giardia or Fecal Coliform Bacteria on a regular basis.



Hillsboro Water Department

150 East Main Street, Hillsboro, OR 97123

Hillsboro-Oregon.gov/Water

503-615-6702