

# 2020 Water Quality Report

City of Hillsboro Water Department  
Upper-System Customers

Your safe, clean, high-quality drinking water continues to 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 Hillsboro Water Department to upper-system customers.

## Questions?

Call: 503-615-6702

Email: [Lindsay.McClure@Hillsboro-Oregon.gov](mailto:Lindsay.McClure@Hillsboro-Oregon.gov)

Visit: 150 East Main St.  
Hillsboro, Oregon 97123  
Fax: 503-615-6595

## Message from the City of Hillsboro Utilities Commission

To our valued customers:

Hillsboro's safe, high-quality drinking water is an essential resource we rely on each and every day.

Each time you turn on your tap, you can rest assured that every drop of your drinking water is kept clean and safe through source protection, treatment, testing, and strong, resilient infrastructure.

The City of Hillsboro Water Department's staff - scientists, engineers, water operators, operations crews, educators, and more - work diligently 365 days a year to safeguard our watershed, treat each drop of water to the highest standards, maintain essential water infrastructure, and monitor water quality, all to protect your health.

Around the world, concerns about the safety of public water supplies remain high, especially during the coronavirus pandemic. We want to reassure customers that Hillsboro's water continues to be safe to drink and use, and we are committed to taking all steps necessary to maintain reliable water service.

The City of Hillsboro Utilities Commission is proud to share the 2020 Drinking Water Quality Report.

Please take a moment to learn more about your drinking water, and the proactive steps Hillsboro Water Department is taking to guarantee customers will enjoy a clean and safe water supply for years to come.

Cheers!



**John Godsey**  
Utilities  
Commission  
Chair



**David Judah**  
Utilities  
Commissioner



**Deborah Raber**  
Utilities  
Commissioner



Cherry Grove Slow Sand Filter Plant

## Delivering High-Value, Reliable Water Service

Hillsboro Water Department delivers high-value, reliable water service to:

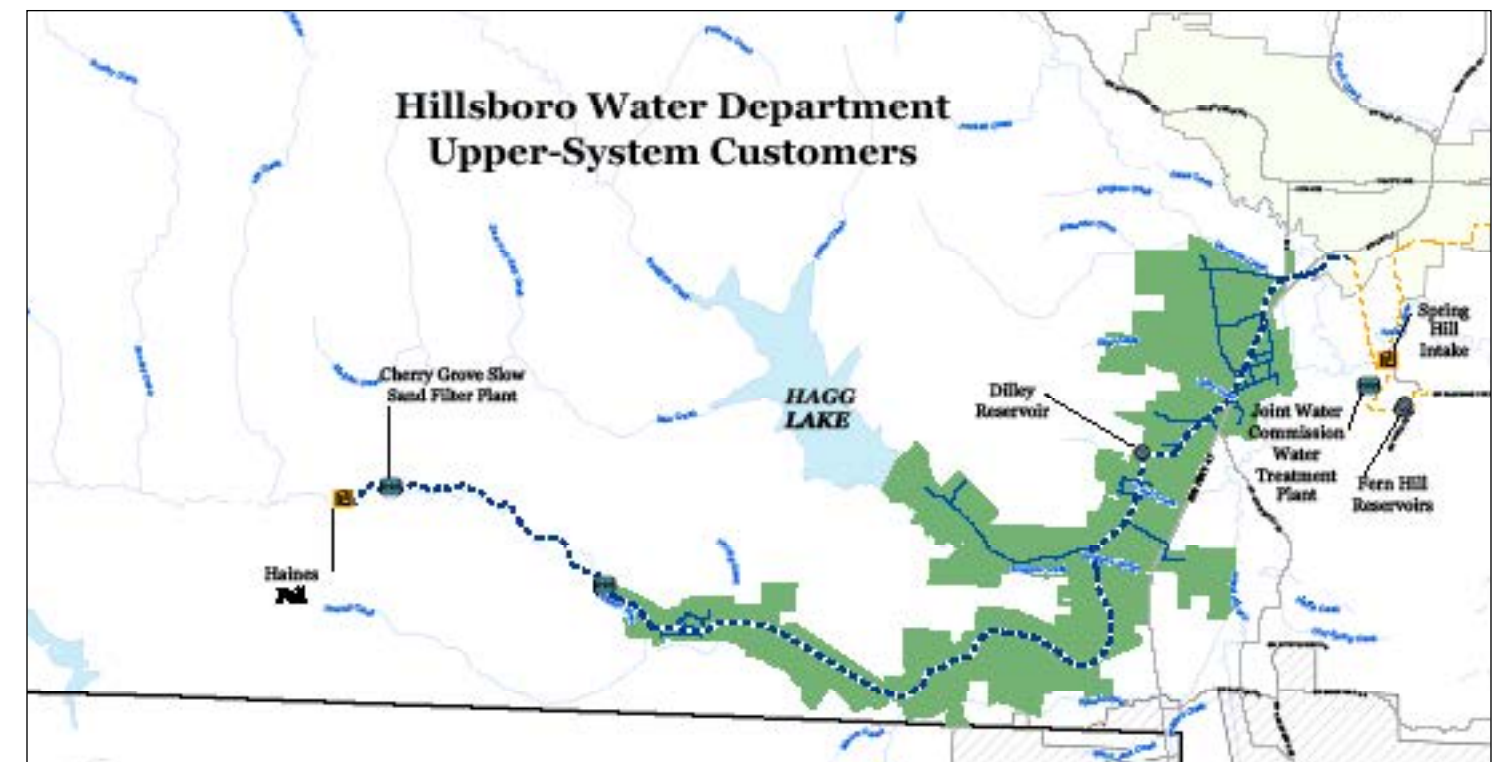
- **Upper-system customers** in western Washington County along Hillsboro's original water service line. Upper-system customers are served water from both the Joint Water Commission (JWC)

Water Treatment Plant located in Forest Grove, and the Cherry Grove Slow Sand Filter (SSF) Plant near the community of Cherry Grove.

- **In-town customers** located west of Cornelius Pass Road and south of Highway 26 (Sunset Highway). In-town customers are served

water from the JWC Water Treatment Plant. Learn more at [Hillsboro-Oregon.gov/HillsboroCCR](https://Hillsboro-Oregon.gov/HillsboroCCR).

- **Three wholesale customers:** the cities of Cornelius and Gaston, and the L.A. Water Cooperative.



# Hillsboro's Reliable Water Source: Upper-Tualatin River

The Hillsboro Water Department proudly serves high-quality drinking water to more than 87,000 customers in the City of Hillsboro (in-town customers) and in rural Washington County (upper-system customers).

Every drop of water that runs through customers' taps comes out of a river, or a dam and reservoir.

Hillsboro's winter water source is the upper-Tualatin River and its tributaries. The river stretches almost 80 miles from the Tillamook State Forest in Washington County to the Willamette River near West Linn. The Tualatin River has been Hillsboro's only winter water source for almost 80 years.

In the summer, the river level drops too low for community use, so Hillsboro customers rely upon water stored in two reservoirs to meet demand:

- **The Barney Reservoir** is located in the Trask River Watershed and holds 20,000 acre-feet of water at capacity, or which 14,886 acre-feet is available for drinking water. (An acre-foot is the amount that covers an acre with a foot of water.) Water is moved from the reservoir to the Tualatin River through a one-mile long pipeline.
- **The Scoggins Reservoir** — also known as Hagg Lake — is located near Gaston. The reservoir stores approximately 59,950 acre-feet of water when full, of which 13,500-acre feet is available for drinking water.



Upper-Tualatin River

## Treatment Process

Protection of public health is the Hillsboro Water Department's number one priority. Before reaching your tap, water is filtered, cleaned, and treated in an extensive process that produces some of the highest quality drinking water in the region. Water served to the Hillsboro Water Department's upper-system customers water is drawn out of the upper-Tualatin River for filtration and treatment at either the JWC Water Treatment Plant, or the Cherry Grove SSF Plant. Both plants operate 365-days per year, 24-hours per day.

The JWC Water Treatment Plant:

- Operates 365-days per year, 24-hours per day
- Is the largest conventional water treatment plant in Oregon, capable of treating up to 85 Million Gallons per Day (MGD) of water
- Provides water to the Hillsboro Water Department's in-town, upper-system, and wholesale customers
- Provides water to JWC partner agencies, including the cities of Hillsboro, Forest Grove, and Beaverton, and the Tualatin Valley Water District (TVWD)
- Wholesales water to the City of North Plains

The Cherry Grove SSF Plant:

- Is capable of treating up to three MGD of water
- Provides water to the Hillsboro Water Department's upper-system customers, along with the JWC Water Treatment Plant
- Provides water to some of the Hillsboro Water Department's wholesale customers, the City of Gaston and the L.A. Water Cooperative

Before reaching the taps of Hillsboro's upper-system customers, water undergoes comprehensive

treatment overseen by state-licensed drinking water operators at the JWC Water Treatment and Cherry Grove SSF plants to make it safe to drink and use.

At the JWC Water Treatment Plant, the treatment process includes:

- Untreated water is drawn from the upper-Tualatin River at the Spring Hill Intake, near Forest Grove.
- Untreated water is then pumped to a mixing tank where chlorine and alum are added. The chlorine serves as a disinfectant. The alum causes small particles to rapidly "floc" or adhere to one another, making them heavy enough to settle out of the water in a sediment basin.
- After settling, polymer is added to remove turbidity (or the cloudiness of water).
- The water is then filtered through layers of fine carbon and silica sand. As suspended particles are removed, turbidity disappears and clear water emerges. Removing turbidity through filtration is an effective way to protect against Cryptosporidium.
- At this point, the lowest quantity necessary of chlorine is added. This kills harmful pathogens, such as bacteria and viruses, and keeps them from growing in Hillsboro's more than 300-miles of water pipelines.
- Caustic soda (sodium hydroxide) is added to adjust the final pH and alkalinity to reduce corrosion of lead.
- The treated or "finished" water is then temporarily stored in an underground water reservoir.
- Finally, finished water is pumped either to the Fernhill reservoirs or directly into the two large water transmission pipelines.

- From there, water travels into a network of storage reservoirs and distribution lines before safely arriving ready to drink at customers' taps.

Learn more about this treatment process at [JWCWater.org](https://www.jwcwater.org).

The Cherry Grove SSF Plant uses a simple and highly effective form of treatment called slow sand filtration. This filtration process is one of the world's oldest water treatment methods and employs a biological process to clean the water.

The Cherry Grove SSF Plant treatment process includes:

- Untreated river water is drawn from the upper-Tualatin River at the Haines Falls Intake, near the community Cherry Grove.
- After going through screens, water travels through a pipe to a settling pond to remove silt, and make the water clearer.
- Water is then piped to the slow sand filters for treatment. In the filters, water slowly percolates by gravity through a bed of fine sand.
- The top layer of the filters is where most treatment takes place. It is called the "Schmutzdecke" and is formed by a community of organisms that naturally live in the water. This layer traps contaminants and pathogens that could be in the water—including silt, bacteria, Cryptosporidium, and Giardia.
- After passing through the filters, the water is chlorinated and final pH is adjusted to reduce corrosion of lead before being sent to customers through the water distribution system.

## Source Water Assessment

Protecting the upper-Tualatin River Watershed is vital to ensure clean, safe drinking water now and for future generations. The JWC's goal of eliminating pollutants from entering waterways has benefits beyond our drinking water. For example, by reducing erosion and sediment inputs to the Tualatin River, salmon benefit with more available spawning habitat and lower risk of clogged gills from sediment suspended in the water.

In addition to drinking water quality, fish and wildlife, and vegetation benefits, committing resources to protecting the Watershed makes sense financially. The U.S. EPA estimates that every \$1 spent on source water protection activities saves \$27 in water treatment costs.

The JWC is active in the Watershed by monitoring water quality, and developing projects to reduce the risks of contamination.

In 2019, the JWC were awarded two competitive grants totaling approximately \$170,000. These funds will be used to further assess drinking water risks, and implement best management practices to improve water quality.

Also in 2019, the Oregon Health Authority (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 high-risk potential contaminant sources, 331 were identified within the eight-hour time-of-travel 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](mailto:Lindsay.McClure@Hillsboro-Oregon.gov).



## Collecting and Testing Water Samples

The Hillsboro Water Department is committed to protecting public health and providing customers with safe drinking water. To ensure your drinking water meets or exceeds state and federal drinking water standards, each month hundreds of water samples are collected and then tested by a state-certified laboratory.

- **Coliform Bacteria:** The Hillsboro Water Department collects 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 Safe Drinking Water Act.)

Due to the potential health effects of these organisms, the water treatment plant filters and chlorinates every drop of drinking water delivered to Hillsboro Water Department customers. 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.

## Everyday Actions to Protect Our Drinking Water Source

Community members served water by the Hillsboro Water Department are encouraged to take an active role in protecting the upper-Tualatin River 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 over-the-counter drugs. Do not flush or pour them down the sink, as they could enter rivers and lakes.

For additional ways to protect your drinking water at the source, visit [EPA.gov/SourceWaterProtection](http://EPA.gov/SourceWaterProtection).

## Unregulated Contaminant Monitoring Rule

Every five years since 1996, the U.S. EPA — through its Unregulated Contaminant Monitoring Rule (UCMR) — requires water utilities across the country to test for a list of substances that are suspected of being in drinking water, but are not currently regulated under the Safe Drinking Water Act. Utilities report their test results to the U.S. EPA, which uses the information to learn more about the presence of these substances and decide whether they should

be regulated in the future to protect public health.

The Hillsboro Water Department has complied with the fourth round of the U.S. EPA's UCMR.

A full list of contaminants tested and their results are available upon request. The unregulated contaminants that were detected in Hillsboro sampling are listed in the "2019 Sampling Results" table, along with their level of detection.

For more information, call 503-615-6702 or email [Sarah.Stalder@Hillsboro-Oregon.gov](mailto:Sarah.Stalder@Hillsboro-Oregon.gov).



Scoggins Dam (Hagg Lake)

## 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. In 2019, the JWC tested for Cyanotoxins to comply with OHA's new rule. Neither the JWC, nor any agencies serving JWC water, detected any Cyanotoxins in drinking water during testing.

Testing for both the JWC and Cherry Grove SSF plants will be conducted in 2020. For more information on Cyanotoxins and testing requirements, call 503-615-6702 or visit [JWCWater.org/Water-Quality/Testing-Results](http://JWCWater.org/Water-Quality/Testing-Results).



Barney Reservoir



## 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

Water served by the Hillsboro Water Department is tested regularly to ensure every drop meets all federal and state safe drinking water standards, including those for lead and copper.

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.

In the Hillsboro Water Department's water distribution system, there are no known lead service lines or infrastructure components. In addition, the Hillsboro Water Department provides treatment protection to minimize leaching. All water delivered to homes and businesses in the Hillsboro Water Department's service area has gone through optimized treatment for corrosion control. A form of soda is used to raise the pH and reduce the corrosiveness of the water to reduce the potential for lead to leach from private plumbing fixtures.

Water providers, including the Hillsboro Water Department, test for lead and copper directly



at customers' 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.

Testing last occurred in 2018. Lead and copper were not detected above the action level (15 ppb for lead, 1,300 ppb for copper) in either source water or private households. Results from past testing are available on the State's website at [YourWater.Oregon.gov](https://www.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.

The Hillsboro Water Department 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. The Hillsboro Water Department provides free lead testing to residential and non-profit customers, as well as childcare facilities. Learn more at [Hillsboro-Oregon.gov/Lead](https://www.hillsboro-oregon.gov/Lead).

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](https://www.epa.gov/Safewater/Lead).

## Water is a Smart Investment

The Hillsboro Water Department strives to ensure equity and affordability for all customers by carefully managing drinking water rates and System Development Charges (SDCs).

Water rates and SDCs are typically adjusted annually so all customers — including residential, commercial, and industrial users — pay their fair share based on how they use the City's water system and how much water they use.

The Hillsboro Water Department finances major water infrastructure investments over time, so people and businesses moving to our community in the future will pay their share of costs through water rates and SDCs.

These investments include:

- Upgrading, repairing, and replacing parts of the current water system
- Strengthening and expanding water infrastructure at the JWC Water Treatment Plant

Learn how water is a smart investment at [Hillsboro-Oregon.gov/Water](https://www.hillsboro-oregon.gov/Water).

## Water Treatment Plant Enhancement Project Complete

To meet current growing water demands, a multi-year 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 1976 by the cities of Hillsboro and Forest Grove. Over the years, the plant was expanded to accommodate

## Water Transmission Line Planning for Resiliency and Reliability

After being treated at the Cherry Grove SSF Plant, drinking water travels more than 14-miles through an 18-inch diameter water transmission line before being delivered to upper-system, City of Gaston, and L.A. Water Cooperative customers.

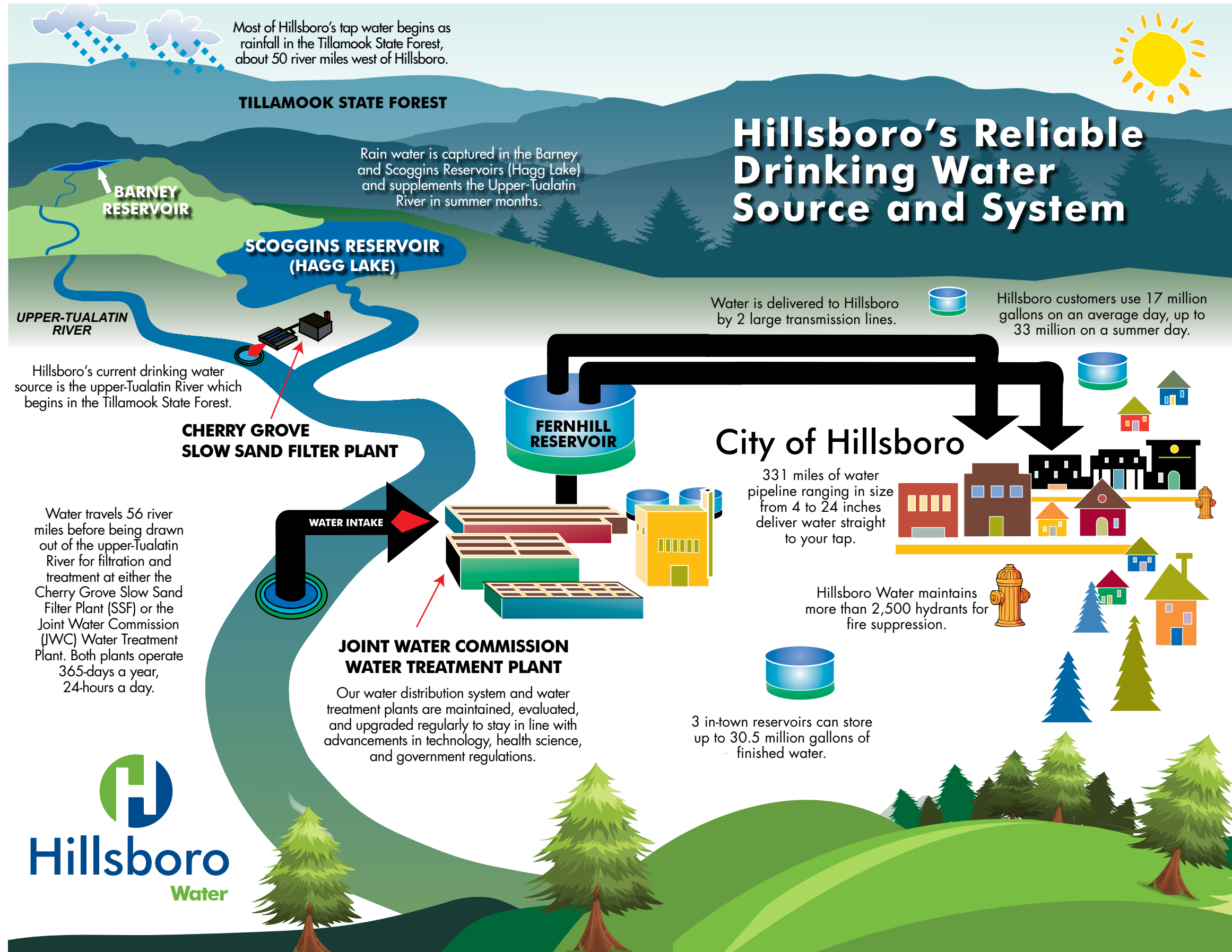
The aging steel transmission line is 80 years old, and requires repair and maintenance. As part of the Hillsboro Water Department's master planning process, a planning study is now underway to determine whether to upgrade and replace various segments of the existing transmission main, or construct a new waterline.

This future water infrastructure upgrade will enable continued delivery of reliable, safe, and high-quality drinking water to upper-system and wholesale customers, for many years to come. Additionally, it will help first responders better protect the community in the event of an emergency.



the addition of City of Beaverton and TWWD, and population growth. Learn more at [JWCWater.org](https://www.jwcwater.org).

# Hillsboro's Reliable Drinking Water Source and System



## Five Ways to be Water-Wise Outdoors

During warm summer months, Hillsboro community members often spend time outdoors tending to lawns, growing gardens, and washing cars — all activities that can significantly increase water use. Here are some simple ways to be water-efficient outdoors:

- 1** Adjust sprinklers so they water your lawn and garden, not the street or sidewalk.
- 2** Water before 10 am or after 6 pm when temperatures are cooler to minimize evaporation.
- 3** Install a weather-based irrigation controller. Hillsboro Water Department offers up to \$200 rebate for an installed controller. Learn more at [Hillsboro-Oregon.gov/Rebates](https://Hillsboro-Oregon.gov/Rebates).
- 4** Inspect your overall irrigation system for leaks and broken or blocked lines. A well-maintained system will save you money, water, and time.
- 5** Set it, but don't forget it! Whether you have a manual or automatic system, be sure 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](https://ConserveH2O.org/Weekly-Watering-Number) to receive your personalized Weekly Watering Number.

## Five Ways to Use Water Efficiently Indoors

Indoor, unlike outdoor water use, is largely the same year-round. That is good news, because it means a few water-saving measures can save a lot on indoor water consumption.

- 1** Regularly check for and repair water leaks. Even small leaks can waste hundreds to thousands of gallons of water a month. Learn how to be a “leak detective” at [RegionalH2O.org/Indoor-Leak-Detection-Repair](https://RegionalH2O.org/Indoor-Leak-Detection-Repair).
- 2** Take shorter showers. Each minute you shave off your shower time saves up to 2.5 gallons of water.
- 3** Install a high-efficiency showerhead and bathroom and kitchen aerators (available for free on the first floor of the Hillsboro Civic Center) and you could save an about one gallon of water per minute.
- 4** Scrape instead of pre-rinsing dishes. Save yourself up to 20 gallons of water a month by scraping food off your dishes instead of pre-rinsing them.
- 5** Replace an older toilet with a WaterSense-labeled high-efficiency toilet. Older toilets can use up to four times more water per flush. In addition, Hillsboro Water Department offer rebates to help you save money when you upgrade to water-efficient toilets and washing machines. Learn more at [Hillsboro-Oregon.gov/Rebates](https://Hillsboro-Oregon.gov/Rebates).

## 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.

### 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.

### 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.

### 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.

### Treatment Technique (TT):

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

### Turbidity:

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



# 10 Resources for Hillsboro Water Customers

**1 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. Hillsboro Water Department customers — including residents, licensed childcare facilities, and nonprofit organizations — can request a free lead-in-water testing kit at 503-615-6702 or online at [Hillsboro-Oregon.gov/Lead](https://www.hillsboro-oregon.gov/Lead).

**2 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](https://www.hillsboro-oregon.gov/Rebates).

**3 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](https://www.hillsboro-oregon.gov/Backflow) for steps to take to ensure compliance.

**4 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](https://www.hillsboro-oregon.gov/PayBill).

**5 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](mailto:Water-Department@Hillsboro-Oregon.gov).

**6 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](mailto:Water-Department@Hillsboro-Oregon.gov).

**7 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%. To schedule an audit, call 503-615-6702 or visit [Hillsboro-Oregon.gov/HomeWaterAudit](https://www.hillsboro-oregon.gov/HomeWaterAudit).

**8 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](https://www.conserveh2o.org/Weekly-Watering-Number) to receive your personalized Weekly Watering Number.

**9 Garden Resources:** Visit [HillsboroGardening.org/Garden-Resources](https://www.hillsborogardening.org/Garden-Resources) for tips to design and install a water-wise garden, and irrigation methods and equipment to help water your landscape more efficiently.

**10 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](https://www.ready.gov/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](https://www.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](mailto: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

Backflow prevention:  
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](mailto:Water-Department@Hillsboro-Oregon.gov)

## Regional Collaboration

Along with 22 other local water providers, Hillsboro Water Department is a proud member 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](https://www.regionalh2o.org).



# 2019 Sampling Results

Customers served water from the JWC and Cherry Grove SSF plants

REGULATED SUBSTANCES					JWC Water Treatment Plant		Slow Sand Filter Plant		Violation	Typical Source	
Substance	Unit of Measure	Year Sampled	MCL (MRDL)	MCLG (MRDLG)	Amount Detected	Range Low-High	Amount Detected	Range Low-High			
Chlorine	ppm	2019	4	4	1.31	0.08 - 1.31	1.74	1.16 - 1.74	No	Additive controls microbes	
Nitrate (as Nitrogen)	ppm	2019	10	10	0.32	0.04 - 0.32	0.06	0.06	No	Agricultural runoff	
Barium	ppm	2019	2	2	0.005	0.0041 - 0.005	0.001	ND - 0.001	No	Erosion of natural deposits	
MICROBIOLOGICAL TESTING & TREATMENT CONSIDERATIONS											
E. coli	Presence or Absence	2019	0	0					No	Human and animal fecal waste	
Total Organic Carbons	ppm	2019	TT	NA	1.29	0.46 - 1.29	0.84	0.33 - 0.84	No	Naturally present in environment	
Turbidity	NTU	2019	TT	NA	0.13	0.02 - 0.13	0.46	0.05 - 0.47	No	Soil runoff	
Turbidity	Percent	2019	TT	NA	100%	100%	100%	100%	No	Soil runoff	
(Lowest monthly percentage of samples meeting limit of 0.3 NTU for JWC and 1 NTU for SSFP)											
DISINFECTION BY-PRODUCTS (DBP)											
Total Trihalomethanes	ppb	2019	80	NA					No	By-product of chlorination	
Haloacetic Acid	ppb	2019	60	NA					No	By-product of chlorination	
LEAD AND COPPER TESTING											
Substance	Unit of Measure	Year Sampled	Action Level (AL)	MCLG (MRDLG)	Amount Detected 90th Percentile	Sites Above AL	Amount Detected 90th Percentile	Sites Above AL	Violation	Typical Source	
Lead	ppb	2018	15	0					No	Corrosion of plumbing	
Copper	ppm	2018	1.3	1.3					No	Erosion natural deposits	
OTHER ITEMS OF INTEREST											
Substance	Year	Range (ppm)	Substance	Year	Range (ppm)	Substance	Year	Range (ppm)	Substance	Year	Range (ppm)
Aluminum	2019	ND - 0.02	Orthophosphate	2019	ND - 0.01	Fluoride:	2019	ND - 0.01	Hillsboro does not Fluoridate		
Ammonia	2019	ND - 0.01	Silica	2019	15.4 - 18.4	Hardness:	2019	15.4 - 18.4	18.9-34.2 ppm = 1.1 - 2 grains per gallon		
Calcium	2019	4.91 - 8.9	Sodium	2019	2.8 - 11.2	pH:	2019	2.8 - 11.2	(Normal range): 6.9 - 7.9		
Chloride	2019	3.5 - 6.9	Sulfate	2019	1.4 - 13.0		2019	1.4 - 13.0			
Magnesium	2019	1.61 - 2.90	Manganese	2019	ND		2019	ND			
Iron	2019	ND									

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](http://JWCWater.org).



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