



**City of Hillsboro**  
 150 E. Main Street  
 Hillsboro, OR 97123

PRSR STD  
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 US POSTAGE  
**PAID**  
 Permit #25  
 HILLSBORO, OR

POSTAL CUSTOMER

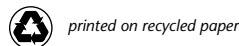
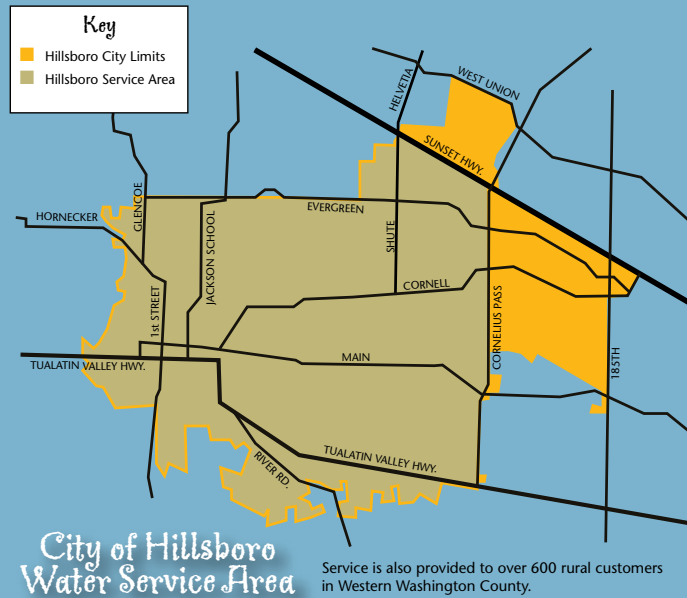
Health Protection information inside!

# your hometown TAP 2010

Este informe contiene información muy importante sobre su agua beber.  
 Tradúzcalo ó hable con alguien que lo entienda bien.

## Be Prepared!

In the event of a prolonged power outage, or a disaster such as an earthquake, water service may be disrupted or water rationing imposed. Be prepared by ensuring that you and your family have an ample supply of clean water. A recommended amount is one gallon per person per day, for at least 3 days. Remember to include water for your family pets.



## Community Participation

The City of Hillsboro Utilities Commission normally meets at 1:30 p.m., on the 2nd Tuesday of every month in the Civic Center at 150 E. Main Street, Room 207. Commission meetings are open to the public. Agendas are listed at [www.ci.hillsboro.or.us](http://www.ci.hillsboro.or.us), or call 503-615-6702.

# your hometown TAP



## 2010 Water Quality Report

Based on water quality data from the calendar year 2009

Providing Tualatin & Trask Basin drinking water to Hillsboro customers since 1940.

# public health

OUR #1

PRIORITY

## Commitment to Quality

Hillsboro Water is committed to providing drinking water of high quality and excellent value to the community it serves.



Since 1940, the City of Hillsboro's goal has been to provide safe and high quality drinking water to residents. Certified operators routinely collect and test water samples every step of the way – from source waters to your meter. Treatment Plants are maintained, evaluated and upgraded regularly to stay abreast of advancements in technology, health science and government regulations. Because of prudent long-term planning and operational efficiency, HW is able to provide high-quality drinking water to you at a reasonable cost. For more information about this report, or for any questions relating to your drinking water, please call **Tacy Steele**, Water Programs Coordinator, at **503-615-6732**.

## Where does my drinking water come from?

All of the water that runs through your tap is treated surface water, which means it comes out of a river or reservoir. Hillsboro's winter water source is the upper Tualatin River. In summer, the river level drops too low for municipal use, so Hillsboro relies upon water stored in Barney Reservoir and Hagg Lake to meet customer needs. Hillsboro's water is drawn out of the upper Tualatin River for filtration and treatment at either the Cherry Grove Slow Sand Filter Plant (SSF) or the Joint Water Commission (JWC) Treatment Plant. Both plants operate 24 hours per day, 365 days per year.

The SSF Plant can treat up to three million gallons per day (MGD), providing water to Cherry Grove, the City of Gaston, the L.A. Water Co-op, Scoggins Valley and Dilley. After treatment, SSF water flows through an 18-inch line to Dilley; along the way water is fed to Hillsboro's county and wholesale customers.

The JWC plant is the second largest conventional treatment plant in Oregon and is capable of treating up to 75 MGD. It provides water to

Hillsboro, Forest Grove, Beaverton and the Tualatin Valley Water District. The City of Hillsboro typically uses 11 MGD of combined JWC and SSF plant capacities to meet customer needs, but summertime usage can push that demand up to almost 25 MGD, primarily due to outdoor watering habits.

The water is delivered to Hillsboro and beyond via two large transmission lines. There are approximately 250 miles of distribution lines in the city of Hillsboro that are fed by the transmission lines. These lines provide water to over 24,000 business and residential customers who live to the west of Cornelius Pass Road. The Tualatin Valley Water District serves Hillsboro residents living to the east of Cornelius Pass Road.

## 5 things we do to keep your drinking water safe:

- 1) System Monitoring:** Hillsboro uses telemetry (a remote computer system) to continuously monitor key points in the system and relay information back to the water treatment plant where operators are on duty 24 hours per day, 365 days per year.
- 2) System Testing:** Hillsboro has a sampling schedule and weekly samples are pulled and sent to an independent laboratory for coliform and E.coli testing. Testing for approximately 200 other substances takes place on a schedule as required by the Environmental Protection Agency's Safe Drinking Water Act.
- 3) Closed System:** Once your drinking water has been filtered, it enters a system that is completely enclosed and protected from outside exposure until it flows out a tap. Hillsboro has two enclosed tanks for water storage within its service limits.
- 4) Chlorine Residual:** Hillsboro maintains a chlorine residual throughout its system. A residual is a small amount of chlorine that is on-hand to kill any micro-organisms that come into contact with your drinking water after treatment.
- 5) Positive Pressure:** Water pipes are under continuous pressure, either from gravity or pumping. The pressure pushes the water to your tap and also ensures that harmful substances can't be sucked into the pipe.





## Drinking Water 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-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

*Contaminants that may be present in source water include:*

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban 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 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.

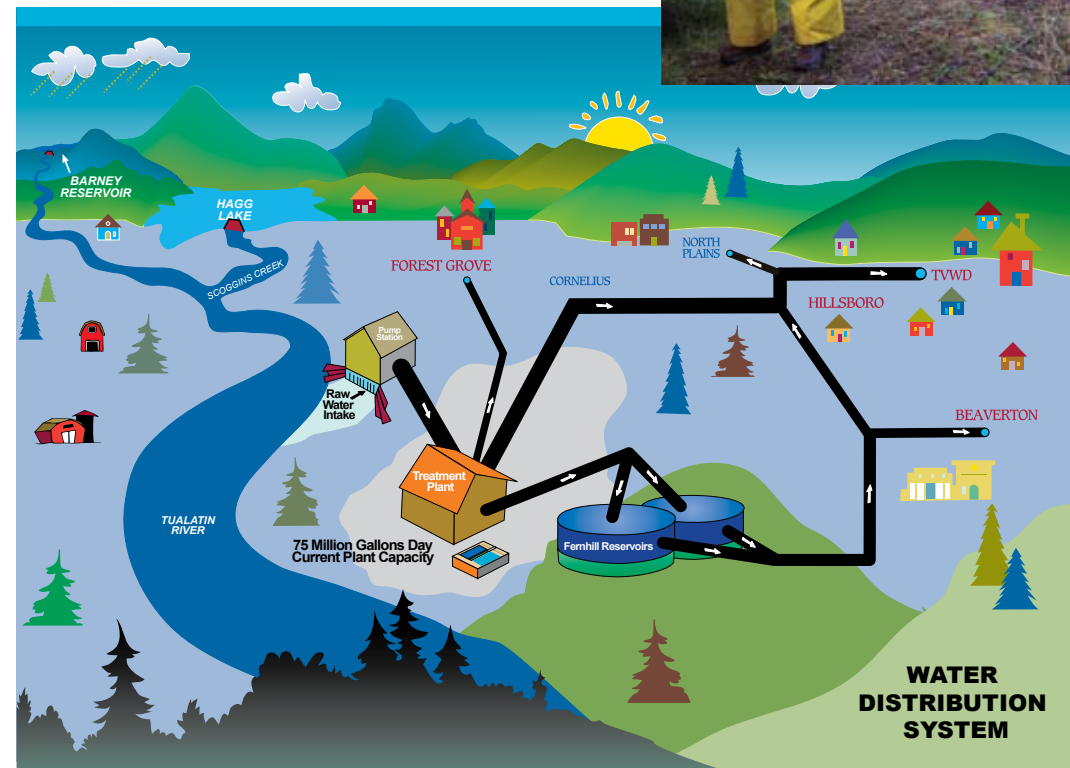
In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide protection for public health.

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 (800-426-4791).

## Microbials

Hillsboro operators collect samples from 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 appears to contain coliforms, a set of repeat samples is collected and analyzed to determine whether any disease-causing organisms are present. Though coliform (non-fecal) were detected once in 2009, follow-up testing determined that no disease-causing organisms were present.

*Cryptosporidium* and *Giardia* are microscopic organisms that, when ingested, may cause gastrointestinal symptoms. There are no EPA-mandated MCLs required for either *Giardia* or *Cryptosporidium*. However, because of the potential health effects of these organisms, the City of Hillsboro regularly tests for them in its water before and after treatment. Though very small amounts of these organisms were present in the pre-treatment samples, no *Cryptosporidium* or *Giardia* cysts were detected in the treated water.



During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants.

# SAMPLING RESULTS FOR 2009

This table shows only those contaminants that were detected and how much of the substance was present in the water. All of the substances listed are well under the Maximum Contaminant Level (MCL).

## REGULATED SUBSTANCES

| Substance<br>(Unit of Measure)                                 | Year<br>Sampled | MCL<br>(MRDL)               | MCLG<br>(MRDLG) | Hillsboro System           |                   | Upper System               |                   | Violation? | Typical Source                                    |
|--|-----------------|-----------------------------|-----------------|----------------------------|-------------------|----------------------------|-------------------|------------|---|
|  |                 |                             |                 | Highest Amount<br>Detected | Range<br>Low-High | Highest Amount<br>Detected | Range<br>Low-High |            |   |
| Chlorine (CL <sup>2</sup> )<br>(ppm)                           | 2009            | (4)                         | (4)             | 1.18                       | 0.40-1.18         | 1.44                       | 0.36-1.44         | No         | Water additive used to control microbes           |
| Nitrate (as Nitrogen)<br>(ppm)                                 | 2009            | 10                          | 10              | 0.6                        | ND-0.6            | 0.6                        | ND-0.6            | No         | Run-off from fertilizer; Erosion natural deposits |
| Total Coliform Bacteria (% positive samples)                   | 2009            | 5% monthly samples positive | 0               | 1%                         | NA                | ND                         | NA                | No         | Naturally present in environment                  |
| Turbidity (NTU)  | 2009            | TT                          | NA              | 0.1                        | 0.03-0.10         | .14                        | .06-.14           | No         | Soil Run-off                                      |
| Turbidity (NTU)<br>(Lowest monthly % of samples meeting limit) | 2009            | TT                          | NA              | 100%                       | NA                | 100%                       | NA                | No         | Soil Run-off                                      |

## DISINFECTION BY-PRODUCTS (DBP)

|  |      |    |    |      |           |      |           |    |                            |
|--|------|----|----|------|-----------|------|-----------|----|----------------------------|
| Haloacetic Acids [HAA] (ppb)           | 2009 | 60 | NA | 42.9 | 20.5-42.9 | 19.8 | 12.5-19.8 | No | By-product of chlorination |
| TTHMs (ppb)<br>[Total Trihalomethanes] | 2009 | 80 | NA | 40.1 | 20.8-40.1 | 19.9 | 9.9-19.9  | No | By-product of chlorination |

HAA's and TTHMs are measured quarterly at four Hillsboro sites for JWC and one site for the SSFP. Results are reported as a running annual average.

## LEAD AND COPPER TESTING

| Substance<br>(Unit of Measure) | Year<br>Sampled | Action<br>Level | MCLG | Amount<br>Detected<br>90th %tile | Sites<br>Above<br>Action Level | Amount<br>Detected<br>90th %tile | Sites<br>Above<br>Action Level | Violation | Typical Source   |
|--------------------------------|-----------------|-----------------|------|----------------------------------|--------------------------------|----------------------------------|--------------------------------|-----------|--|
| Copper (ppm)                   | 2009            | 1.3             | 1.3  | 0.06                             | 0                              | 0.34                             | 0                              | No        | Corrosion household plumbing; Erosion of natural deposits; leaching wood preservatives |
| Lead                           | 2009            | 15              | 0    | 0                                | 0                              | 14                               | 0                              | No        |  |

TAP WATER SAMPLES WERE COLLECTED FROM SAMPLE SITES THROUGHOUT THE COMMUNITY.

- **AL = Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **MCL = Maximum Contaminant Level:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **MCLG = Maximum Contaminant Level Goal:** 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.

- **MRDL = Maximum Residual Disinfectant Level:** 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.
- **MRDLG = Maximum Residual Disinfectant Level Goal:** 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 contaminants.
- **ND = Not Detected**
- **NTU = Nephelometric Turbidity Units** - Measurement of the clarity, or turbidity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

- **ppb = Parts Per Billion** - One part substance per billion parts water (or micrograms per liter).
- **ppm = Parts Per Million** - One part substance per million parts water (or milligrams per liter).
- **TT = Treatment Technique** - A required process intended to reduce the level of a contaminant in drinking water.
- **Turbidity** - Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the plant filtration system.

## Information about Lead & Copper

While there is no MCL for lead or copper, the federal government identifies “action levels” that trigger certain actions by the water provider. The action level is based on the 90th percentile. This means that 90 percent of the samples must meet or be under the defined action level. The action level for copper is 1.3 ppm and the action level for lead is 15 ppb.

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. Hillsboro Water 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 thirty seconds to two minutes before using water for drinking or cooking.

If you are concerned about lead in your drinking 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 Lead Line at **(503) 988-4000** or [www.leadline.org](http://www.leadline.org), or the Safe Drinking Water Hotline at **(800) 426-4791** or at <http://www.epa.gov/safewater/lead>.

In compliance with federal requirements, the District, along with our water source providers, has taken actions to reduce our customers’ exposure to lead and copper in drinking water. These include corrosion control, source water treatment, and public education. Other ways to reduce lead and copper include:

**1) Use only cold, fresh water** for drinking, cooking and preparing baby formula. Lead dissolves more easily into hot water so it should not be used.

**2) Do not boil water to remove lead or copper.** Boiling will only increase concentration of the elements already in the water.

**3) Test your water for lead.** Call the Lead Line at (503) 988-4000 to find out how to get a FREE lead in water test.

**4) Consider buying low-lead fixtures.** New brass faucets, fittings, and valves, may contribute to lead in

your drinking water. Federal law currently allows end-use brass fixtures, such as faucets, to contain up to 8% lead. These fixtures are labeled as “lead free.” When buying new fixtures, consumers should seek out those with the lowest lead content.



## Source Water Assessment

The Department of Environmental Quality (DEQ) and the Oregon Department of Human Services (DHS) completed a source water assessment that identified the surface areas supplying water to the Tualatin River intakes. They also inventoried the potential contaminant sources that may affect the water supply. A total of 306 potential contaminant sources were identified and 295 of those sources are located in sensitive areas. Sensitive areas include places with high soil permeability, high soil erosion potential, high run-off potential, and areas within 1,000 feet of a river or stream. Potential sources of watershed contamination include the following: agricultural/forest management applications, commercial land uses, residential/municipal land uses, and landslide and clear-cut forest areas. These are the existing potential sources of contamination that could, if improperly managed or released, affect the water quality in the watershed. The JWC-Cherry Grove Source Water Assessment Report provides additional details on the methodology and results of this assessment. The full report is available for review at the Hillsboro Water Department, 150 East Main Street, Hillsboro, or call 503-615-6702 for more information.



## Unregulated Contaminant Monitoring Rule

HW has complied with the EPA's unregulated contaminant monitoring rule (UCMR) and results are available upon request from the Resource Division. No unregulated contaminants have been detected through the rigorous monitoring process. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For more information, please call Kristel Fesler at **(503) 615-6735**.



## Reporting of Compliance Data Violations

Both the Hillsboro and Upper water systems completed all required sampling in 2009. However, there was one reporting violation for Disinfection Byproducts (DBPs) in the Hillsboro (1513) system and two reporting violations (one for DBPs and one for small system monitoring) in the Upper (985) system. All sampling was completed for both systems and there were no water quality violations. The violations were due to the sample results being provided to the State just after the required reporting period deadline. The results for both DBPs and small system monitoring have since been submitted to the State as required and HW has added accountability checks to its reporting system, which should prevent this type of reporting oversight in the future.

## Frequently Asked Questions

- **Does Hillsboro put fluoride in the water?** The City of Hillsboro does not fluoridate its water supply. Check with your dentist to see if supplemental fluoride is recommended for your family.
- **Is Hillsboro's water hard or soft?** Hillsboro does not use any well water in its supply, so the water is very soft, about 2-3 grains per gallon.
- **What is the pH of our drinking water?** Hillsboro's water is buffered to reduce pipe corrosion and protect against lead and copper exposure. The normal pH range for your drinking water is 7.7 to 7.9.



## Important Health Information

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 HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at **1.800.426.4791**.

## What's Happenin' at Hillsboro Water?

**Website Development:** Customers have requested detailed, accessible information about their local drinking water supply and quality issues on the internet. Hillsboro Water is responding by developing a comprehensive website – [www.hillsborowater.org](http://www.hillsborowater.org) – that will provide information and solicit input from Hillsboro customers on supply issues, conservation and other activities. Development is underway so watch for a launch announcement with your utility bill in the Fall.

**Pix on the Plaza:** Last August HW began sponsoring summer movie nights on the Civic Center Plaza. The events were so popular, they will host 4 evenings of family entertainment again this year. Movies will be shown on a big outdoor screen on August 19th and 26th, September 2nd, and 10th. Please check the Argus or our website for film picks and other details in August.

**WaterSense™ Rebates:** HW has almost completed a study assessing possible rebates on tools and appliances bearing the WaterSense™ label. WaterSense™ is the EPA's water-wise equivalent to the Energy Star™ label. The study was partially funded by a state conservation grant. New rebates will be announced sometime before January 2011.

**Emergency Water Distribution Program:** The region has acquired several emergency water distribution systems, one of which will be sited at Hillsboro Stadium. In an emergency that results in a water shortage, a station would be set up for drinking water distribution at the Stadium. Staff will practice setting up and operating the system this summer to ready themselves for future emergencies.

**Dairy Creek Demonstration Garden:** Hillsboro has its first water-wise demonstration garden, located at Dairy Creek Park. Local high school students organized the project and planted the garden with help from City of Hillsboro and local contributors. The garden is designed to inspire local residents to make water-wise choices in their own gardens.

### "Make a Splash" Summer Reading

**Program:** HW is partnering with the Library this summer to remind Hillsboro residents that "*Reading Makes a Splash.*" HW will donate a nickel to the Hillsboro Library for every book read this summer on any water subject. The money will be used for the purchase of water educational supplies for both Main and Shute Park Libraries.

