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Oregon City, OR 97045-2935

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# your water quality REPORT

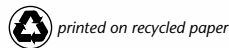
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Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

## Resources

- City of Oregon City: [www.orcity.org](http://www.orcity.org)
- City Hall (625 Center Street): 503.657.0891
- Oregon City Public Works: 503.657.8241
- Questions about your water bill: 503.657.8151
- Talk to Oregon City: [www.orcity.org/community/citizen-requests](http://www.orcity.org/community/citizen-requests)
- To report a water leak: 503.657.8241
- South Fork Water Board: [www.sfwb.org](http://www.sfwb.org)
- Clackamas River Water Providers: [www.clackamasproviders.org](http://www.clackamasproviders.org), 503.723.3511
- Clackamas River Basin Council: [www.clackamasriver.org](http://www.clackamasriver.org), 503.558.0550
- Greater Oregon City Watershed Council: [www.gocwc.org](http://www.gocwc.org), 503.427.0439
- Oregon Health Authority, Drinking Water Program: <http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/Pages/index.aspx>
- Oregon Department of Environmental Quality: [www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)
- Environmental Protection Agency: [www.epa.gov](http://www.epa.gov)
- EPA Safe Drinking Water Hotline: 1.800.426.4791
- Drinking water quality questions or concerns: Gail Johnson: 503.657.8241 x2107, [gjohnson@orcity.org](mailto:gjohnson@orcity.org)
- Stormwater questions or concerns: Eric Hand: 503.657.8241 x2102, [ehand@orcity.org](mailto:ehand@orcity.org)

Federal and State regulations require us to provide a drinking water quality report each year to Oregon City water customers. The cost to produce each report averages \$0.33 per copy. Mailing costs average \$0.30 per copy.



# 2011 water quality

REPORT



OREGON CITY

Based on water quality data from the calendar year 2010.

# WATER for life

**Welcome** to Oregon City's Annual Water Quality Report for 2011. The drinking water quality data presented is based on monitoring results from the calendar year 2010.

Water is one of our most valuable resources. Oregon City is committed to:

- **Protecting public health** – by providing clean, safe drinking water that complies with all state and federal regulations,
- **Protecting public safety** – by ensuring reliable, plentiful water for fire suppression, and
- **Protecting the environment** – by providing a safe and reliable stormwater system and implementing watershed protection and restoration actions that consistently promote surface water quality and stream health.

## Oregon City's Water Quality Program

is guided by federal regulations – the Clean Water Act (stormwater) and the Safe Drinking Water Act (drinking water).

The Federal Water Pollution Control Act of 1948 was the first major U.S. law to address water pollution. Growing public awareness and concern for controlling water pollution led to sweeping amendments in 1972. As amended in 1977, the law became commonly known as the **Clean Water Act (CWA)**.

Polluted stormwater runoff is a leading cause of impairment to the nearly 40 percent of surveyed U.S. water bodies which do not meet water quality standards. Over land or via storm sewer systems, polluted runoff is discharged, often untreated, directly into local water bodies. When left uncontrolled, this water pollution can result in the destruction of fish, wildlife, and aquatic life habitats; a loss in aesthetic value; and threats to public health due to contaminated food, drinking water supplies, and recreational waterways.



*Pervious Concrete*

*Rain Garden*

Mandated by Congress under the CWA and administered by the Environmental Protection Agency (EPA), the **National Pollutant Discharge Elimination System (NPDES)** Stormwater Program is a comprehensive two-phased national program for addressing the non-agricultural sources of stormwater discharges which adversely affect the quality of our nation's waters. The program uses the NPDES permitting mechanism to require the implementation of controls designed to prevent harmful pollutants from being washed by stormwater runoff into local water bodies. In Oregon the Department of Environmental Quality (DEQ) oversees stormwater compliance.

The **Safe Drinking Water Act (SDWA)** was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. SDWA authorizes the EPA to set national health-

## How Does A Rain Garden Work?

Stormwater from the roadway flows into the garden, which is meant to mimic the hydrologic action of a natural environment. Pollutants and sediments in the street runoff are filtered by the plants, gravel, and soil. Runoff volumes are reduced because the garden enhances infiltration into the soil.

Adjacent to the rain garden, notice Oregon City's first pervious concrete sidewalk. Traditional concrete results in total stormwater runoff and does not allow for any infiltration.

based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. EPA, states, and water systems then work together to make sure that these standards are met. In Oregon, the Oregon Health Authority, Public Health Division, Drinking Water Program (DWP), oversees drinking water compliance.

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

**Drinking water comes from a variety of sources such as rivers, lakes, and wells. Contamination can occur in source water, but not all contaminants pose a risk to public health. People with certain health conditions may need to take extra precautions.**

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.

*Don't let the pond in your neighborhood look like this!*

Abundant green growth covering the water is algae! Algae in a pond or slow moving waterway can be an indication that fertilizers have been washed off lawns and traveled into the storm drain.

## Monitoring for Unregulated Contaminants in Drinking Water

Substance/Contaminant (Unit of Measure)	MCL	Oregon City Measurement	Sample Date	Major Sources in Drinking Water
<b>UNREGULATED CONTAMINANTS*</b>				
Sodium (ppm)	20**	8.9	2/23/10	Erosion of natural deposits; added during treatment (soda ash)
Bromodichloromethane (ppb)	—	1.8	8/3/10	By-product of chlorine disinfection, combined with organic matter
Chloroform (ppb)	—	12.2	8/3/10	By-product of chlorine disinfection, combined with organic matter

\* Monitoring for unregulated contaminants helps the EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants in the future.

\*\* Recommended maximum level.

## Important Information from the EPA

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 EPA's Safe Drinking Water Hotline at 1.800.426.4791.

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.**

# Results of Monitoring for Regulated Contaminants in Drinking Water

Substance/Contaminant (Unit of Measure)	MCL (MRDL)	MCLG (MRDLG)	Oregon City Measurement or Average (Range)	Sample Date	Major Sources in Drinking Water	Violation?
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## DISINFECTANT RESIDUAL, DISINFECTION BY-PRODUCTS, AND BY-PRODUCT PRECURSORS

Chlorine (ppm)	(4)	(4)	0.81 (0.27 - 1.26)	2010	Water additive used to control microbes	No
Haloacetic Acids (ppb)	60	N/A	33.5 (28.7 - 39.7)	2010	By-product of disinfection with chlorine, combined with organic matter	No
Total Trihalomethanes (ppb)	80	N/A	35.5 (26.3 - 45.5)	2010	By-product of disinfection with chlorine, combined with organic matter	No
Total Organic Carbon* Raw Water (ppm)	TT	-	1.02 (N/D - 1.53)	2010	Naturally present in the environment	No
Finish Water (ppm)	TT	-	0.70 (0.56 - 0.97)	2010	Naturally present in the environment	No

## MICROBIOLOGICAL CONTAMINANTS

Total Coliform Bacteria (presence/absence)	1 positive monthly sample	0	0	2010 (30 samples each month)	Naturally present in the environment	No
Turbidity ** (NTU)	TT=0.3 in 95% of samples	-	(0.02 - 0.10)	2010	Soil runoff	No

## SECONDARY STANDARDS\*\*\*

Chloride (ppm)	250	-	7	2/23/10	Erosion of natural deposits	No
Zinc (ppm)	5	-	0.06	2/23/10	Erosion of natural deposits	No

\*Total Organic Carbon (TOC) has no health effects, however TOC provides a medium for the formation of disinfection by-products.

\*\*Turbidity is a measure of cloudiness caused by suspended particles in the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. Turbidity is monitored continuously, every 2 hours during treatment plant operation. 100% of samples tested were below the treatment technique level of 0.3 NTU.

\*\*\* These are recommended maximum levels. Secondary standards are guidelines for contaminants that may cause aesthetic effects in drinking water.

## Definitions

**AL:** Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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 contamination.

**N/A:** Not Applicable because no maximum contaminant level goal has been set for disinfection by-products.

**N/D:** None Detected.

**NTU:** Nephelometric Turbidity Unit. A measurement of the water turbidity. Turbidity greater than 5 NTU is noticeable to the average person.

**ppb:** Parts per billion. A measure of the concentration of a substance in a given volume of water. One part per billion corresponds to one penny in \$10,000,000.

**ppm:** Parts per million. A measure of the concentration of a substance in a given volume of water. One part per million corresponds to one penny in \$10,000.

**TT:** Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.

# The Multiple Barrier Approach

to compliance with the Safe Drinking Water Act includes risk prevention, risk management, monitoring and compliance, and individual action.

The programs and requirements of the SDWA form a Multiple Barrier Approach that helps prevent contamination of drinking water from source to tap. There are four parts to this approach:

**1. RISK PREVENTION** – focuses on protecting the drinking water source. It is far more cost-effective to prevent contamination than to remove or inactivate the contamination during treatment.

Oregon City's drinking water source is the lower Clackamas River. The Clackamas River flows west from its headwaters on Ollalie Butte, just south of Mt. Hood, until it joins the Willamette River near Oregon City. The watershed covers almost 1000 square miles, most of it located within Clackamas County.

In compliance with the 1996 Amendments to the SDWA, a source water assessment for South Fork Water Board (Oregon City and West Linn) was completed in late 2002. The delineated drinking water protection area is occupied by a wide variety of land uses: residential/municipal, agricultural/forest, and commercial/industrial. A total of 1,127 potential contaminant sources were identified within this area that could, if improperly managed or released, impact the water quality in the watershed.

View the entire Source Water Assessment on the Oregon City website: [www.orcity.org/sites/default/files/SWAR.pdf](http://www.orcity.org/sites/default/files/SWAR.pdf).

The water providers in the Clackamas River Basin have been working together on various water resource issues for more than a decade, spending approximately \$1million dollars over the past ten years on watershed-related projects. The group funded a major portion of the watershed assessment and jointly funded, with the US Geologic Service (USGS), the first pesticide study in the basin.

In 2010, the Clackamas River Water Providers (CRWP) completed a **Drinking Water Protection Plan for the Clackamas River**. The purpose of this Plan is to provide the CRWP with a road map of potential strategies and programs to implement over the next decade, and beyond, to preserve the Clackamas River as a high quality drinking water source. By using a proactive approach to addressing water quality issues, and potential drinking water impacts, the CRWP strives to keep water treatment requirements as low as possible, while ensuring optimum water quality for our communities.

For more information about the programs CRWP is implementing, or to download a copy of the plan, please go to [www.clackamasproviders.org](http://www.clackamasproviders.org).

Find additional watershed information from:

Clackamas River Basin Council: [www.clackamasriver.org](http://www.clackamasriver.org) or **503.558.0550**

Greater Oregon City Watershed Council: [www.gocwc.org](http://www.gocwc.org) or **503.427.0439**

**2. RISK MANAGEMENT** – focuses on the protection provided by water treatment. This includes appropriate security arrangements and comprehensive plans for emergency response.

Water from the Clackamas River is turned into safe drinking water for Oregon City customers through a process called conventional treatment. This happens at the South Fork Water Board (SFWB) Treatment Plant, located in the Park Place area of Oregon City.

The basic steps to the treatment process are:

- **Coagulation** – adding chemicals (alum and polymers) to the water that causes very small suspended particles to attract one another and form larger particles.
- **Flocculation** – gently stirring the water to bring the suspended particles together so they will form larger clumps, called floc.
- **Sedimentation** – the velocity of the water is reduced allowing gravity to settle out the floc.
- **Filtration** – any remaining particles not settled out earlier are removed as the water flows through filters made up of sand and anthracite coal.
- **Corrosion Control** – adding soda ash in order to increase the pH of the water, making it less likely to deteriorate piping material and plumbing fixtures.
- **Disinfection** – adding sodium hypochlorite (a liquid form of chlorine that is similar to household bleach) to kill any disease-causing organisms in the water. It is important to have a small amount of chlorine remain in the water as it travels throughout the distribution system. This is called a chlorine residual.

You can learn more about SFWB and the water treatment process by visiting their website at [www.sfwb.org](http://www.sfwb.org).

**3. MONITORING AND COMPLIANCE** – proactively testing for contaminants during treatment and throughout the distribution system. It includes operating and maintaining the distribution system to effectively prevent contamination of the treated water as it flows to customers' taps.

Oregon City's drinking water is tested for more than 90 contaminants, as required by federal and state regulation. SFWB is responsible for all analysis of the raw and finish water at the treatment plant. The Water Quality section of Oregon City Public Works performs sampling for all distribution system requirements.

You can see our most recent test results in the data tables included in this report. We are required to report only those substances that were present at detectable levels.

View all testing results and compliance records by visiting SDWIS Data Online website at: <http://170.104.63.9/inventory.php>. Search by water system ID number:  
Oregon City – OR4101511

South Fork Water Board – OR4100591

Oregon City Water Division has several programs in place to ensure your drinking water maintains its high quality. Storage reservoirs are cleaned on a routine basis. Aging water lines in the system are prioritized for replacement. There is an on-going water main flushing program that also incorporates valve exercising and fire hydrant maintenance. Dead-end water mains are flushed annually. The goal of our Cross Connection / Backflow Prevention Program (CC/BPP) is to eliminate the possibility of contamination due to backflow conditions. Best management practices guide everyday maintenance activities as well as emergency response actions.

#### **4. INDIVIDUAL ACTION** – *keeping customers informed and encouraging participation in activities that protect our drinking water from source to tap.*

Providing this annual water quality report is one aspect of this barrier. As a water customer you have the right to know what is in your drinking water and where that water comes from. Understanding more about your drinking water will help you make informed choices. By knowing more about the process, and challenges, of providing safe, reliable drinking water, you can gain a greater appreciation for this valuable resource.

Oregon City water customers play a big part in helping to keep our drinking water safe by complying with the CC/BPP. Simple steps will prevent any accidental contamination. If you use a spray attachment on a garden hose when applying herbicides, pesticides, or when washing windows, always remove the spray attachment from the hose when your job is done. Never submerge the end of the hose in buckets, pools, tubs, or sinks.

Most modern water-using fixtures and appliances such as sinks, toilets, and clothes washers have built-in backflow prevention features. Some, however, require installation of a backflow prevention device to comply with plumbing code and to protect the cross connection from backflow conditions. Examples include landscape irrigation and fire sprinkler systems, boilers, solar collectors, and spas or swimming pools that are directly connected to the plumbing system.

Check all directly plumbed water-using equipment in your home or business to ensure no unprotected cross connections exist. For more information about Oregon City's CC/BPP go to [www.oregoncity.org/publicworks/cross-connection-backflow-prevention-program.htm](http://www.oregoncity.org/publicworks/cross-connection-backflow-prevention-program.htm).

Street sweeping removes pollutants and sediments from the roadways to reduce the amount of pollution entering our streams and rivers. You can help by ensuring trees are trimmed to allow proper clearance.



## *Compliance with the Clean Water Act*

**Oregon City's Stormwater Management Plan provides direction as we work to improve water quality. Each of us can take steps to reduce stormwater pollution!**

There are 22 major drainage basins mapped within Oregon City's boundaries, with outfalls into both the Clackamas and Willamette Rivers. The Stormwater Division of Oregon City Public Works is responsible for the City's Surface Water Management Program. One goal of this program is to reduce pollution caused by urban stormwater runoff.

In an urban setting, historic and natural drainage patterns are impacted by the presence of impervious surfaces such as buildings, streets, parking lots, and sidewalks. When it rains, sediment, oil, grease, toxic chemicals and heavy metals from motor vehicles, pesticides and fertilizers from lawns, and bacteria from pet waste can run off city streets, untreated, into our wetlands, streams, and rivers if stormwater is not managed properly.

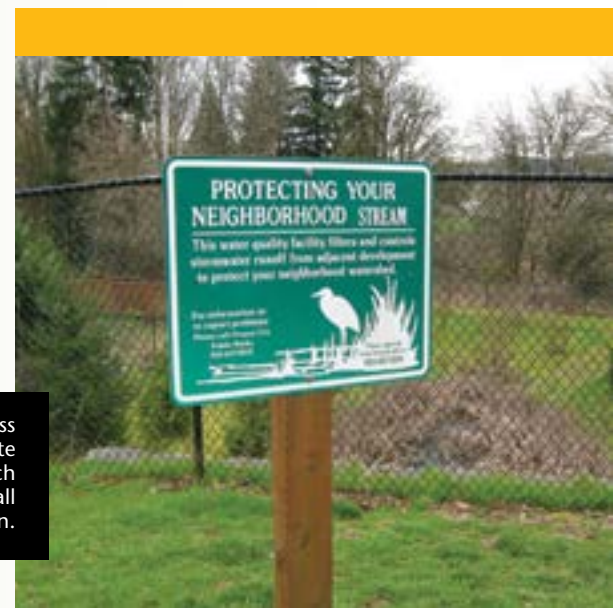
In the early 1990s municipalities with populations greater than 100,000 were required to obtain an NPDES permit for their stormwater discharges. Oregon City is one of 13 co-permittees on the Clackamas County urban area permit. Coordinating efforts with nearby agencies helps stretch limited resources in the effort to meet permit objectives.

You can view Oregon City's annual NPDES Municipal Stormwater Permit Reports at: [www.oregoncity.org/publicworks/npdes-documents-page](http://www.oregoncity.org/publicworks/npdes-documents-page)

Oregon City's NPDES permit includes a **Stormwater Management Plan (SWMP)**. This plan provides direction for activities that aim to reduce water pollution. Best management practices include:

- ensuring compliance with municipal codes, design standards, & construction standards
- routine cleaning of storm pipes, catch basins, and roadside ditches
- managing construction sites for proper grading and erosion control
- detecting and removing illicit discharges to the stormwater system
- conducting public education about pollution prevention

Want to help raise awareness about the proper disposal of waste materials? Participate in our Catch Basin Stenciling Program. Call 503.657.8241 for more information.



## Individual Action and Compliance with the Clean Water Act

**Each of us contributes to stormwater pollution.** Each of us can help reduce stormwater pollution. *Here are some easy ways:*

- **Lawn care** – be mindful of when, and how much, fertilizer and other chemicals you apply. Excess phosphorus contributes to algae growth in ponds and streams. Herbicides and pesticides do not differentiate between native plants/beneficial insects and weeds/pests. Consider going organic.
- **Vehicle care** – consider washing your vehicle on your lawn or take it to a commercial car wash. Grime isn't good for your vehicle, but it is worse for local streams. If you do vehicle maintenance yourself, recycle the used oil. If you have other hazardous materials that are no longer needed, take them to Metro for proper disposal. Get details at: [www.oregonmetro.gov/index.cfm/go/by.web/id=644](http://www.oregonmetro.gov/index.cfm/go/by.web/id=644).
- **Scoop the poop** – be a responsible pet owner. DNA studies have shown that canine waste is the third largest contributor to bacterial contamination of streams in urban areas.
- **Manage yard debris** – Keep grass clippings, leaves, etc. out of the street and away from areas where rainwater runoff tends to collect. Compost deliveries and yard debris should be stored away from curb lines, driveways, or natural drainage ways. These items add to sediments and nutrients that adversely affect the natural biology of a stream.

Learn much more by visiting the following websites:

[www.cleanriversandstreams.org](http://www.cleanriversandstreams.org) or [www.epa.gov/healthywatersheds](http://www.epa.gov/healthywatersheds)



*These newly planted trees and shrubs will grow quickly and soon provide shade.*

One challenge Oregon City faces is lowering the temperature of the stormwater that ultimately flows into the Clackamas and Willamette Rivers.

A cost-effective and relatively simple method to lower water temperature is to provide shade by restoring native riparian vegetation along the edges of streams.

## Frequently Asked Questions About Drinking Water

**I can taste and smell chlorine in the water. Why?** You may be sensitive to the taste and smell of the disinfectant. The amount of sodium hypochlorite varies throughout the distribution system, but it generally measures less than 1 part per million (ppm). This is well below the maximum residual disinfectant level, set by EPA, of 4 ppm. To read suggestions for minimizing the taste and odor of chlorine visit: [www.orcity.org/publicworks/drinking-water-faqs](http://www.orcity.org/publicworks/drinking-water-faqs).

**Is there fluoride in my drinking water?** No fluoride is added to Oregon City's drinking water. Naturally-occurring fluoride in the Clackamas River is less than 0.5 ppm (the detection limit for fluoride analysis).

Check with your dentist to see if supplemental fluoride is recommended for your family.

**Is Oregon City's water hard or soft?** Oregon City water is very soft. It averages about 25 parts per million, or about 1.5 grains per gallon.

**What is the pH of Oregon City's tap water?** 7.8 is the average pH of the water in the distribution system.

**Sometimes the water coming out of the faucet isn't clear. Why?** If your home or business has old galvanized pipes, they can give water a reddish-brown to yellow appearance. It is most noticeable if the water has been sitting in the pipes for an extended period of time. Iron is the cause of this color. Discolored water rarely causes health problems. Letting the water run for a few minutes usually clears the discoloration.

Occasionally maintenance or firefighting activities can result in customers receiving discolored water, even when using best management practices to prevent it. Again, flushing the plumbing in your home is needed to replace the discolored water. For directions on how best to flush out discolored water visit: [www.orcity.org/publicworks/drinking-water-faqs](http://www.orcity.org/publicworks/drinking-water-faqs). If discoloration occurs, and the water does not clear after complete flushing, contact Oregon City Public Works at 503.657.8241 to report the problem. We will clear things up as soon as possible.

**Be Prepared for an Emergency** 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. *Get more information:* [www.redcross.org](http://www.redcross.org) or [www.co.clackamas.or.us/emergency](http://www.co.clackamas.or.us/emergency).

**Become More Involved** You are encouraged to participate in City decisions that may affect water quality. City Commission meetings are held at City Hall, 625 Center St., the first and third Wednesday of each month, at 7:00 pm. Find meeting agenda information or watch archived videos of public meetings at [www.orcity.org](http://www.orcity.org).

## Monitoring for Lead & Copper

EPA requires testing for lead and copper at customers' taps most likely to contain these substances. Targeted homes were constructed between 1983 and 1987 and installed with copper piping using lead-based solder. These are referred to as "Tier 1" homes. Oregon City and West Linn report lead/copper testing as a single entity. One round of sampling (30 samples total) was completed in 2010. **We thank our "Tier 1" customers for their assistance with this important program!**

**None of the homes tested in Oregon City exceeded the Action Level for lead or copper.**

Substance (Unit of Measure)	AL	MCLG	90th* Percentile	Sample Date	Violation?	Major Source
Copper (ppm)	1.3	1.3	N/D**	6/4 - 11/10	No	Corrosion of household plumbing
Lead (ppb)	15	0	8	Round 15		

\* The 90th percentile is the highest result found in 90% of the samples when they are listed in order from the lowest to the highest results.

\*\* ND (None Detected) means results were below the laboratory reporting limit for copper, which is 0.05 ppm.



One type of water quality facility is a WET POND. This is a permanent pool of standing water that allows pollutants to settle out. Biological activity can then reduce the amount of pollutants. Each new storm brings in new water that partially displaces the existing water without disturbing the deposited sediments.

## Important Information About Lead

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. South Fork Water Board and Oregon City are 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 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**Replacement of aging components in the drinking water distribution system is necessary to maintain good water quality and system reliability.**

## 2010 Distribution System Improvement Projects

Project Name	Ductile Iron Pipe (Length in Feet)						
	Pipe Diameter	4"	6"	8"	12"	14"	16"
East St/Linn Av	360			1515	2300		
Monroe St/Jackson St							
Blanchard St/4th Av-5th Pl			700				
Warner Milne Road: Beavercreek to Molalla		90	1280	20	20	840	
Kamm St & Warner St	350	320					
Jefferson St	260	30					
Eastborne Dr & Chippendale Ln		54	2293				
<b>Total (Length in Feet)</b>	<b>970</b>	<b>494</b>	<b>5788</b>	<b>2320</b>	<b>20</b>	<b>840</b>	

Like most cities across the nation, Oregon City has aging infrastructure. In order to continue providing reliable, high quality water to our customers, a percentage of water system revenue funds capital improvement projects. *These investments allow us:*

- to replace old cast iron pipe with ductile iron pipe. Cast iron pipe tends to corrode over time. This corrosion builds up on the pipe interior, reducing the effective diameter and capacity of the pipe. It also contributes to discolored water that, while being safe to drink, is aesthetically unpleasing.
- to ensure reliability by replacing older, smaller diameter piping with larger diameter piping that improves fire flow as well as water quality.
- to "loop" sections of pipeline whenever possible. Eliminating dead-end lines improves water circulation so water quality and fire flow are enhanced.