

*City of Florence*  
Water Quality Report  
**2012**



1893—2013

*Celebrating 120 years of excellence*

# Letter From the Director Mike Miller

Once again the City of Florence is proud to present our annual water quality report. If this information looks familiar, it should. Florence has been mailing similar information to our customers for years. Why every year? It's the law. Drinking water regulations require us to produce and provide this information every year. Most of the language is also required — Congress and the EPA want to be sure every community knows what is in their drinking water.

This edition contains information concerning the City of Florence Water System, Identification (WSID) #4100299, and covers all testing completed from January through December 2012. We are pleased to tell you that our compliance with all state and federal drinking water standards remains exemplary. As always, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education all the while continuing to serve the needs of our water users.

Water plays an integral part in our everyday lives. In Florence, safe water is always accessible to drink, to wash our clothes, used for cooking, water our landscapes and a myriad of other purposes. In all of our activities we are reminded of the extraordinary value of this precious resource. You can rest assured that Florence Public Works employees are on-call 24 hours a day, 365 days a year to ensure that you always have access to safe Florence drinking water. We invite you to read this report and welcome comments. If you have any questions regarding water quality, please call us at 541-997-4106.

We encourage public interest and participation in decisions affecting our community's drinking water. Regular City Council meetings usually occur on the first and third Mondays of each month at 7pm at City Hall. City Hall is located at 250 Hwy 101. For information on meeting schedules and agendas contact 541-997-3437 or visit the City's website at [www.ci.florence.or.us](http://www.ci.florence.or.us)



# Did You Know...

In 2012, the City of Florence supplied water to approximately 8,475 consumers within the city's water service area. The water these customers received came from 12 dunal wells located just north of the City's water treatment plant at 2450 Willow Street. The well field is city owned and consists of approximately 80 acres of carefully managed land as recommended in the City's well head protection plan.

The City of Florence water system uses two filter systems in a series to remove the iron from the raw groundwater. Three biological filters and six greensand filters comprise our filter system and these filters can treat up to three (3) million gallons of water per day (3 mgd). The City's supply of raw groundwater contains dissolved iron in the range of 6-9 parts per million (ppm) before treatment. The water treatment plant, located at 24th and Willow oxidizes and removes all but 0.01 ppm through the treatment process. As water flows through the treatment plant, 90% of the iron is removed through the use of biological oxidation and filtration. Air is injected into the water to increase the level of dissolved oxygen and the naturally occurring iron bacteria assist in oxidation through various metabolic processes. The sand filters then separate the oxidized iron and bacteria from the water. The filtered water is then chlorinated to chemically oxidize the water and deactivate any residue bacteria. Potassium permanganate is added to the chlorinated water providing additional oxidation before the final filtration with greensand and anthracite coal. The color and odor of the water is removed with the iron and the final product is cool, wet, colorless, odorless and tastes great!

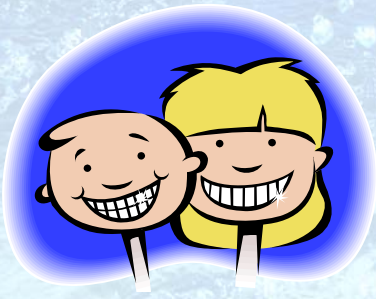
For more information, or to arrange a tour of the facility, please contact Matt Burdett or James Ledbetter at the Water Treatment Plant at 541-997-7370.

# Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Florence 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 2 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 Safe Drinking Water Website at <http://www.epa.gov/safewater/lead>.

# Drinking Water Fluoridation

The City of Florence has been adding fluoride to its water service since the early 1960's. The purpose of fluoridating the City's drinking water is to improve dental health for consumers of Florence water. According to the U. S. Center for Disease Control (CDC) and the U.S. Department of Health and Human Services, widespread use of fluoride has been a major factor in the decline in the prevalence and severity of tooth decay in the United States. When used appropriately, fluoride is both safe and effective in preventing tooth decay.<sup>1</sup>



<sup>1</sup> MMWR published by the Epidemiology Program Office, CDC and U.S. Department of Health and Human Services

# Water Quality Testing

Ongoing water quality testing continues to be one of the highest priorities for the City's drinking water program in its commitment to provide premium and safe drinking water to residents. The City collects nine microbiological samples per month in addition to samples required by the Oregon Health Department and the Environmental Protection Agency to ensure that the city's drinking water meets state and federal standards.



## Test Findings

The City of Florence routinely checks, as required by the EPA, 42 Volatile Organic Compounds, 42 Synthetic Organic Chemicals and 16 Inorganic Chemicals. The City also takes nine Bacterial Samples at multiple locations throughout the City every month. The charts on the following page show the results of our most recent testing. In addition, in 2011 the City tested 22 homes in representative areas throughout the City for lead and copper. We are pleased to report that none of the homes exceeded the Action Levels as determined by the EPA. For those citizens concerned about sodium levels, currently the sodium level in our water is 32.1 mg/L.

Drinking water, including bottled water, may be reasonably 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 EPA's Safe Drinking Water Hotline 1-800-426-4791 or by visiting their web site at [www.epa.gov/ow](http://www.epa.gov/ow).



# Water Quality Data

## Inorganics and Bacteria

| Parameter      | Units    | Goal MCLG | Allowed MCL | Detected in City's Water | Complies with State | Major Sources   |
|----------------|----------|-----------|-------------|--------------------------|---------------------|---|
| Fluoride       | ppm      | 4         | 4           | 0.70                     | Yes                 | Water additive which promotes strong teeth; erosion on natural deposits |
| Nitrate        | ppm      | 10        | 10          | 0                        | Yes                 | Erosion of natural deposits   |
| Nitrite        | ppm      | 1         | 1           | 0                        | Yes                 | Erosion of natural deposits   |
| Total Coliform | No units | 0         | 0           | 0                        | Yes                 | Naturally present in the environment                                    |

## By-Products of Drinking Water

|                       |     |     |    |      |     |                            |
|-----------------------|-----|-----|----|------|-----|----------------------------|
| Total Trihalomethanes | ppb | n/a | 80 | 25.3 | Yes | By-product of Chlorination |
|-----------------------|-----|-----|----|------|-----|----------------------------|

## Lead and Copper Sampling

| Parameter | Units | Goal MCLG | Allowed MCL — or Action Level | 90th Percentile | Complies with State | Major Sources                   |
|-----------|-------|-----------|-------------------------------|-----------------|---------------------|---------------------------------|
| Copper    | ppm   | 1.3       | 1.3                           | ND              | Yes                 | Corrosion of household plumbing |
| Lead      | ppb   | 0         | 15.0                          | 6               | Yes                 | Corrosion of household plumbing |

\*Based on 90% of homes tested being at or lower than the reporting limit. For lead and copper, a water supply is in compliance with the drinking water standards if 90% of the samples are less than or equal to the Action Level.

## Definitions

**ND:** None Detected

**Action Level:** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

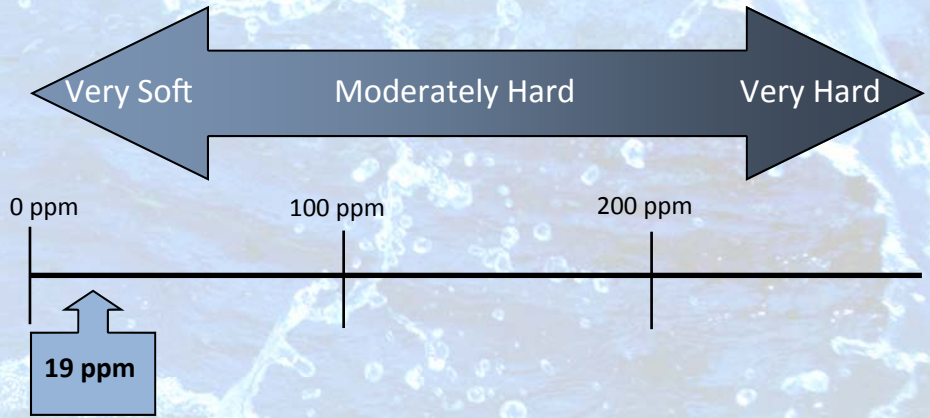
**Maximum Contaminant Level (MCL):** the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**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.

**Parts per Million (ppm) and Parts per Billion (ppb):** with increasing technology, contaminants can be detected in extremely small quantities. A part per million (ppm) means that one part of a particular contaminant is present for every million (1,000,000) parts of water. Similarly, parts per billion (ppb) indicate the amount of a contaminant per billion (1,000,000,000) parts of water.

# Is My Water Hard?

If substantial amounts of Calcium or Magnesium, both nontoxic minerals, are present in drinking water, the water is said to be hard. Hard water does not dissolve soap readily, so making a lather for washing and cleaning is difficult. Conversely, water containing little Calcium or Magnesium is called soft water. At 19 ppm, the City of Florence's water is considered very soft.

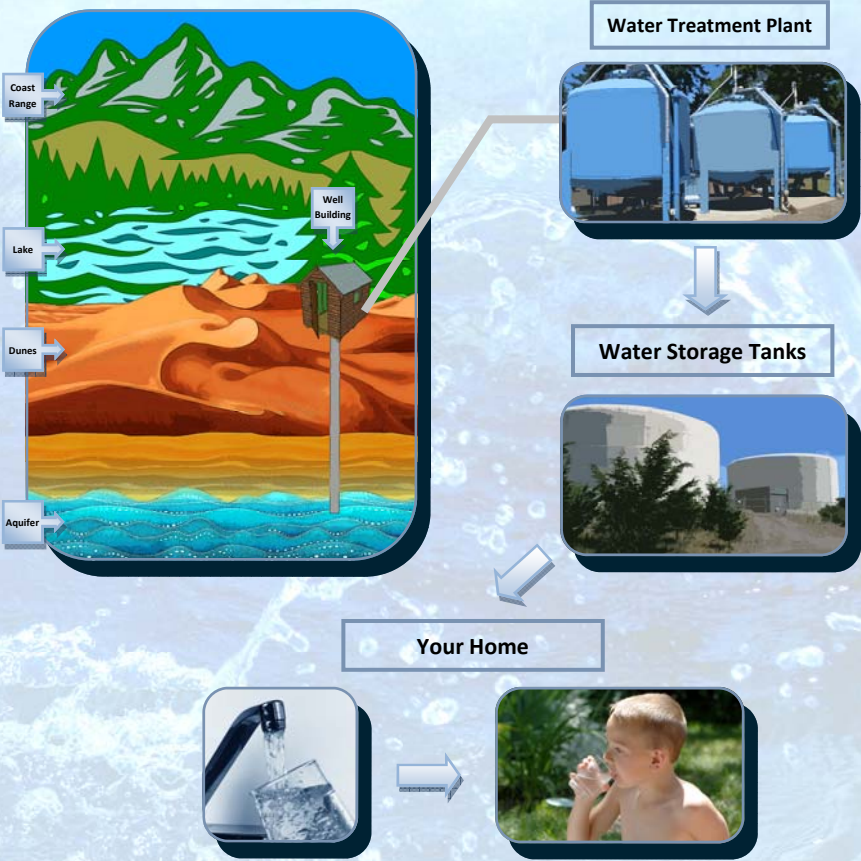


## Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk from infections. These people should seek advice from their health care providers about their drinking water.

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 1-800-426-4791. Please call their office if you have questions.

# Florence Dunal Aquifer Water System



The City of Florence is proud of the high quality of our water supply, which meets or exceeds all state and federal water quality requirements. If you have any questions regarding your water quality or about information presented in this report, please call us at the Water Treatment Plant 541-997-7370 or the Public Works Department 541-997-4106 or visit our website at [www.ci.florence.or.us](http://www.ci.florence.or.us). This report contains important information about your community's water system. Have it translated or speak to a friend that understands it well. Este informe contiene información muy importante. Tradúscalo o hable con un amigo quien lo entienda bien.



# Water Conservation Tips



## Evaluate your water habits.

Have a family discussion about water use and ways to cut down. Do you leave the water running while brushing your teeth? Do you take long showers? There are simple things you and other family members can do to start saving water today!



## Look for leaks.

Most leaks are easy to detect and repair. For sinks, check faucets and pipes for dripping water. For toilets, add food coloring to the tank water and check the bowl in 15 minutes. (don't flush.) If there's color in the toilet bowl, it means there is a leak.



## Install water-saving devices.

Cut your water use by installing water-efficient or low-flow showerheads and faucets.



## Don't use your toilet to dispose of trash.

Every time the toilet is flushed, 5 to 7 gallons of water is wasted.



## Wash dishes and clothes wisely.

Automatic dishwashers or clothes washers should be fully loaded for optimum water conservation. Limit use of the garbage disposal. Replace old clothes washers with energy efficient, water-saving front loaders.



## Be efficient in the shower and bath.

Keep showers short (try to shorten the time you shower by at least a few minutes. Shut off water while soaping up and shampooing.

# Frequently Asked Questions

**Q: If water is cloudy when it comes out of the tap but then clears up, is it safe to drink?**

**A: Yes, it is safe to drink.**  
Cloudiness is usually dissolved air that is being released. The air is under pressure from the water system. When it comes out of the tap, the pressure is removed and bubbles form.

**Q: What is the water pressure at my house?**

**A: Most homes receive water at a pressure of 40-80 pounds per square inch (psi), but the minimum standard is 20 psi. Low water pressure is often a symptom of restricted water flow. This is usually a build-up in older, galvanized, household plumbing.**

## Contact Information

**City of Florence Public Works**  
989 Spruce St.  
Florence, OR 97439  
541-997-4106

**Water Treatment Plant**  
2450 Willow St.  
Florence, OR 97439  
541-997-7370

[www.ci.florence.or.us](http://www.ci.florence.or.us)