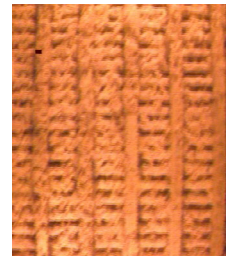


## Well Rehabilitation Program - Your Dollar at Work!

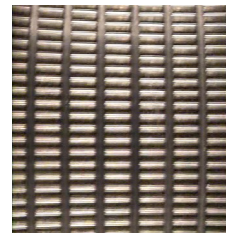
The City of Florence delivers water that is a clean, quality product. However, prior to the groundwater being treated the water is iron rich which requires a great deal of work to maintain the wells and the source water piping. Since the City added the additional \$1 per month to the utility bills, we have used these dedicated funds to complete much needed rehabilitation of the wells. Below are photos of the iron build up on the well head piping and photos of the well screens (these screens keep the sand from filling in the well bore) before and after cleaning.



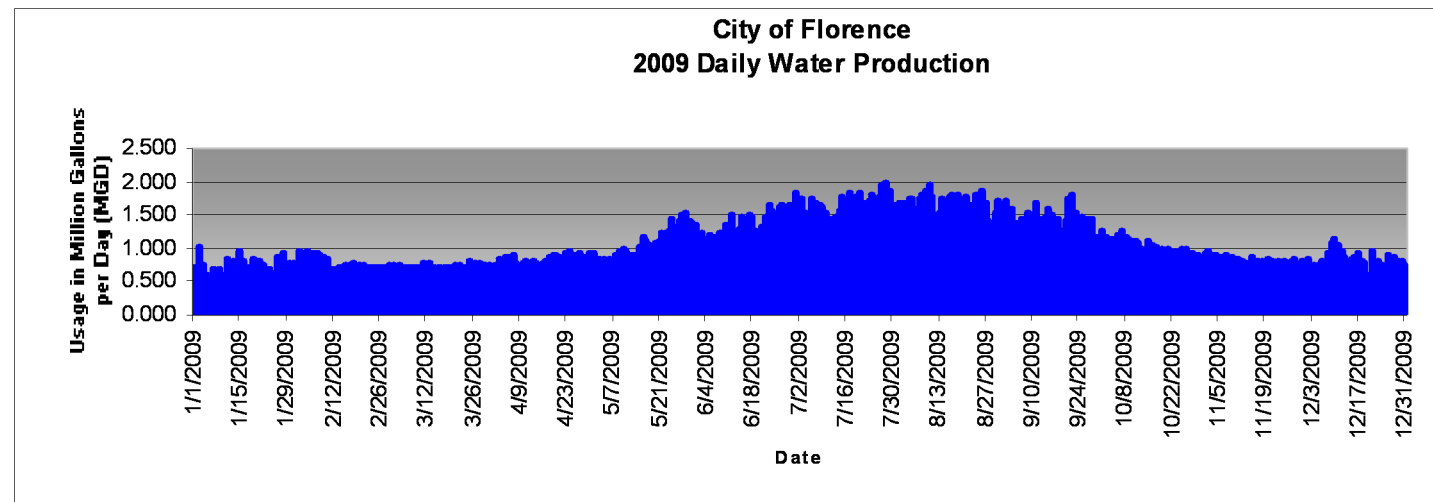
Photo of pipe fittings for well #4. During the fall of 2009, well #4 production rate fell to 40 gallons per minute (gpm). Our well water production goal is 200 gpm per well. The pipe opening is 6-inches in diameter and has been reduced to 1-inch in diameter from the iron deposits. The iron deposits are removed before reassembly of the fittings and placing the well back into service.



The photo to the left is a well screen before cleaning and hydropulsing. Hydropulsing is an impulse technology that uses a sonic wave to loosen impacted fine sediment, iron deposits and encrustations from the well bore wall and surrounding formations. Iron sediments have severely impacted the well production capability.



The photo to the left is of the well screen after cleaning and hydropulsing. The individual screen openings are now visible and water can now enter the well bore much easier.



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

## ??? Frequently Asked Questions ???

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

What is the water pressure at my house? 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.

# City of Florence 2009 Water Quality Report

## Letter From the Director

Our mission is to provide you with safe, reliable, cost-effective water and outstanding customer service in an environmentally sensitive manner. This report describes the ways we fulfill our mission and demonstrates our commitment to our customers.

For the second year in a row, the City of Florence received first place in the Pacific NW Section (PNWS) of the American Water Works Association (AWWA) Excellence in Communications Award for small utilities for our 2008 Water Quality Report. Florence was recognized for producing an effective and informative report that reflected a commitment to informing consumers about their drinking water. The PNWS AWWA includes water systems from Oregon, Washington and Idaho.

During 2009, the City of Florence Water Division saw some changes. In July 2009, the City hired Dan Graber, PE to head up the Water Division. Dan has been busy getting up to speed on our operations and assessing the production and treatment of the water.

The \$1 per month well rehabilitation program continues to provide the necessary funds to rehabilitate the wells. In the first year of the program we were able to rehabilitate wells #2, #3 and #7. At the time of writing this report, we have started to rehabilitate wells #4 and #1. Without this fee the City would not be able to meet our summer water supply needs.

As a water supplier, the City of Florence is required to provide an annual Consumer Confidence Report (also known as a Water Quality Report) which informs our customers of the location of our water sources, the programs implemented to maintain the quality of the water, and the water analyses undertaken to ensure that the water delivered to you our customers is safe and of the highest quality. This report provides you with water quality data for the calendar year starting from January 1, 2009 to December 31, 2009.

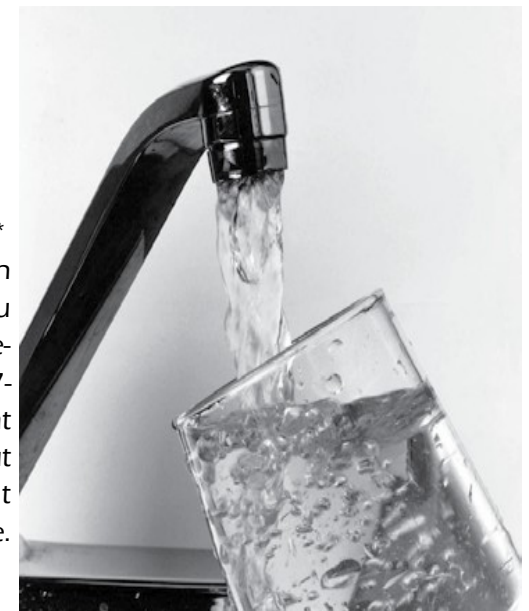
Water is one of the earth's most precious resources. The City is committed to providing outreach programs to spread the message regarding the value of water and ways to conserve it. As we venture towards the future, you can be assured that the City of Florence will continue to exert the utmost effort to provide the highest level of service and quality of service. I invite you to read this report and welcome comments. If you have any questions regarding water quality, please call us at 541-997-4106.

Sincerely,

Mike Miller  
Public Works Director

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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.



Issued June 2010

## Did You Know.....

In 2009, the City of Florence supplied water to approximately 9,410 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 water from the 12 wells is treated using a biological iron removal process. This process greatly reduces the need for chemical removal of iron and replaces the chemicals with an aeration procedure. This aeration procedure has been used extensively in Europe but is relatively new in the United States. We are fortunate to use this environmentally friendly approach in treating our drinking water supply.

After the water is treated, it is stored at our two 2.0 million gallon tanks located off of 35th St between Highway 101 and Rhododendron Drive and the 500,000 gallon reservoir at 31st Street off of Munsel Lake Road. Our total water storage is 4.5 million gallons. Ultimately, the water may travel through many miles of the City's water lines before it reaches your home.

For more information, or to arrange a tour of the facility, please contact Dan Graber, PE at the Water Treatment Plant, phone 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.

A wide range of water quality data is reported by the City of Florence to the Oregon Department of Human Services. Florence's test results and water system information can be found on the Oregon Department of Human Services Web site at [www.oregon.gov/dhs/ph/dwp/index.shtml](http://www.oregon.gov/dhs/ph/dwp/index.shtml).

## Our 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 below show the results of our most recent testing. In addition, the City tested 24 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).

Inorganics and Bacteria						
Parameter	Units	Goal MCLG	Allowed MCL	Detected in the City's Water	Complies with State	Major Sources
Fluoride	ppm	4	4	1.0	Yes	Water additive which promotes strong teeth; erosion of 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 Chlorination						
Total Trihalomethanes	ppb	n/a	80	27.1	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	ND	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.