The Water We Drink

City of Scappoose 2016 Water Quality Report

On July 15, 1999 the Oregon Health Division adopted the Federal Regulations for Consumer Confidence Reports. These rules apply to all community water systems. We are required by these rules to report annually on the condition of our water supply and we are happy to do so. For the calendar year of January through December, 2016, we have one violation to report. The department was late in sending in the monthly Surface Water report for the month of February. The report was received and the department was back in compliance in April. Our drinking water is safe and meets or exceeds all Federal and State requirements. Some customers have inquired about the mineral content of our water and the resulting white residual on

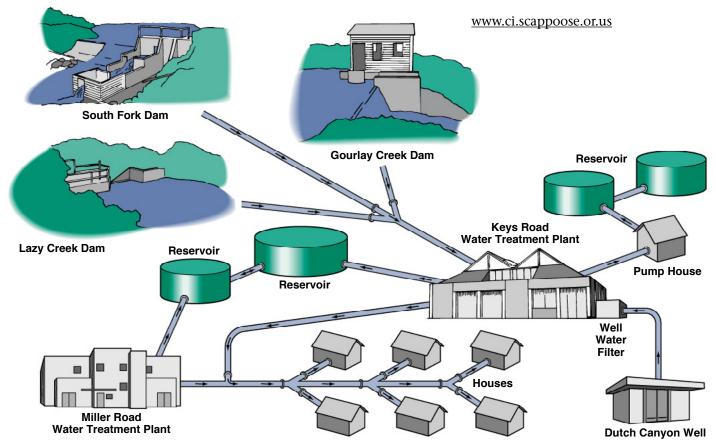
fixtures. This is attributable to dissolved minerals. This does not pose a health threat, nor is it easily removed from our water.

If you have any questions about this report or about your water quality, please contact Darryl Sykes at 503-543-7146. A copy of this report is available on the city's website. If you want to learn more about your water utility, please attend any of our regularly scheduled City Council meetings on the first and third Mondays of the month at 7:00 p.m. at City Hall.

Este informe contiene información importante. El recipiente debe de tenerlo traducido en caso de necesidad.

Supply Facts

The City of Scappoose has several sources for its drinking water. The water from the Dutch Canyon Well and surface water from South Fork Scappoose Creek, Gourlay Creek, and Lazy Creek is filtered at the Keys Road water treatment plant. The Miller Road treatment plant uses three wells located on that property. We still encourage citizens to conserve water and limit non-essential use. For ideas you can use to help, please review the Water Conservation Plan on our website at



Water Facts

Fluoride Treatment

The citizens of Scappoose approved Measure 5-231 in 2013 which requires the City to add fluoride to our water in an effort to improve the dental health of our citizens. Known for its cavity-fighting benefits, fluoride is of special interest to parents with young children. In 2011 the US Public Health Service revised the recommendation from a range of 0.7 to 1.2 ppm in drinking water to 0.7 ppm maximum. *Please contact your dental care provider for additional fluoride information*.

Recent Improvements

All three of the wells at Miller Road were rehabilitated in the summer of 2016 using a combination of hydropulsing and acid wash which are commonly used techniques in the rehabilitation of groundwater wells. As a result of this work, the total output from the Miller Road wells was increased by 120 gallons per minute.

In 2016 the department received a grant from the Infrastructure Finance Authority for \$20,000 which paid for leak detection work that was performed on the City's water distribution system. The department solicited bids for the work and over a two week period two leak detection specialists surveyed 42.6 miles of the City's distribution system finding 28 leaks for a total of 91 gallons per minute lost from the water system. Public works staff has repaired a majority of these leaks and expects to have the rest completed by the end of the year.

The City applied for and received a permit from the State Regulatory agencies for in-stream work for silt removal and repairs to two of the City's diversion dams. This work was completed last August.

Columbia Alert Network

The City of Scappoose Water Department will use the Columbia Alert Network (CAN) to notify customers in the case of a water emergency. These may include mandatory water restrictions or other notices limiting water use. Home phones will be called for notification. If you would like your cell phone to be called, you may register the number at:

www.columbia911.com

Future Developments

The distribution system, consisting of underground water lines, valves, and fire hydrants, continues to grow as new homes and businesses locate in Scappoose. We have 2,480 water service meters currently and expect to add about 150 new services this year. To speed the meter reading process, the City has been installing radio-read meters in all new installations. Work continues to replace old manual-read meters still in the system. There were 447 meters replaced last year. It is the City's goal to have all meters in the system upgraded to radio-read meters within 1–2 years.

The City is moving forward with drilling a higher-yield production well at the Dutch Canyon site. We anticipate having it on line by the end of 2017. We are also working to identify an additional well site near the Miller Road treatment plant to further expand the City's water supply.

The City is currently working with an engineering firm that is on contract to update both the City's Water Master Plan and its Water Management and Conservation Plan as required by the State. The water master plan is a comprehensive study of the city's water sources, storage, treatment, and delivery systems. Once completed, this will allow the City to plan its capital improvements and operate its facilities in the most efficient way possible to serve our customers.

Other work that is planned in the coming year include painting the Miller Road treatment plant, ongoing water line replacements, valve replacements and general maintenance.

Water Conservation and Management Plan

In 2012 the City completed their water conservation and management plan (WMCP). The purpose of this plan is to define the City of Scappoose' current and future water resource needs and the management of its existing resources through conservation and, during times of water shortage, curtailment.

In Oregon, water conservation is now considered a critical element in the State's water resource inventory. As such, municipal water suppliers are required to have a current, Water Resource Department (WRD) approved, WMCP or complete one within three years of approval of extension of water rights. The WMCP is a mechanism for utilities to demonstrate that they have minimized their needs and are developing resources in an environmentally responsible manner. This WMCP is designed to meet the regulatory requirements outlined by Oregon Administrative Rules (OAR) 690-086.

This WMCP describes the City's:

- •Source of supply reliability and capacity
- •Current and future estimated population and water demands
- Existing water rights inventory
- •Current and planned Water Conservation Program
- •The City's Water Curtailment Plan

A summary of this report can be found on our website:

www.ci.scappoose.or.us

Backflow Prevention Device

The City of Scappoose requires a backflow prevention device on any water service that may be connected to a well, a sprinkler system, or other connection that may result in the pollution of the City's drinking water. There is an annual testing requirement for all backflow devices.

Lead and Copper Testing

The Date Tested, shown below, is the most recent sampling and is in compliance with regulations.

Substance	Date nce Tested U		Goal	Action Level (AL)	90th Percentile	Homes Exceeding Action Level	Complies?	Source of Contaminate
Copper	2014	ppm	1.3	1.3	0.123	0	Yes	Corrosion of
Lead	2014	ppb	0	15.5	0	0	Yes	household plumbing

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. EPA requires testing for lead and copper at customers' taps most likely to contain these substances based on when the house was built. The EPA determined that the sample results did not exceed the Action Level (AL) at the locations we are required to test.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Scappoose is responsible for providing high quality drinking

water, but cannot control the variety of materials used in individual users' plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap water 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. 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

Contaminants

As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. The City of Scappoose routinely monitors for numerous contaminants in your drinking water according to Federal and State laws. The monitoring period being reported on here extends from January 1 through December 31, 2016.

This report is based upon the most recent tests conducted by the City of Scappoose Water Department. Testing frequency is determined by the Oregon Health Division. The Water Quality Table (below) lists the contaminant detects as required by the EPA, and although there were contaminant detects, all were below the Maximum Contaminant Level (MCL). Complete test results can be viewed at the website of Oregon Public Health, (http://170.104.63.9/). The Scappoose Water System ID number is 4100792. Terms used in the table below and in other parts of this report are defined here.

- Maximum Contaminant Level or 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 or 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.
- Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

Key to Water Quality Table

- Maximum Contaminant Level

MCLG - Maximum Contaminant Level Goal

- Treatment Technique TT

 Action Level AL

pCi/L – pico Cureies per liter

– parts per million or milligrams per liter (mg/l) ppm

- parts per billion or micrograms per liter (ug/l)

ppb NTU - Nephelometric Turbidity Unit

None Detected

Contaminant	Date Tested	Detected Range Min. – Max.	Detected Level	Unit	MCL	MCLG	Meets Regs?	Major Sources
TTHMs ¹	2016	.01420257	0.0257	ppm	0.080	n/a	Yes	Disinfection Byproduct
HAA5 ¹	2016	.00150082	0.0082	ppm	0.060	n/a	Yes	Disinfection Byproduct
Turbidity ²	2016	.0228	n/a	NTU	TT = 95% of samples < 0.3 NTU	n/a	Yes	Soil Runoff, Sediment
Sodium	11/30/16	n/a	21.5	ppm	n/a	n/a	Yes	Chlorination with Sodium Hypochlorite
Gross Alpha ³	3/6/13	n/a	2.4	pCi/L	15	0	Yes	Erosion of natural deposits
Fluoride ⁴	2016	.1 – 1.2	1.2	ppm	2	2	Yes	Added to promote dental health
Nitrate	2016	ND344	0.344	ppm	10	10	Yes	Runoff from fertilizer use; Leaking septic tanks; Erosion from natural deposits

- 1 Although there is no collective MCLG for this contaminant group, there are individual MCGLs for some of the individual contaminents:
 - Trihalomethanes (TTHMs): bromidichloromethane (zero); bromoform (zero); dibromochloromethane (0.06 ppm); chloroform (0.07 ppm)
 - Haloacetic acids (HAA5): dichloroacitic acid (zero); trichloroacetic acid (0.02 ppm); monochloroacetic acid (0.07 ppm). Bromoacetic acid and dibromoacetic acid are regulated with this group but have no MCLGs.
- 2 Turbidity has no health effects but can interfere with disinfection and provide a medium for microbial growth. "TT" means a treatment technique is required if the limit is exceeded.
- 3 Date Tested is the most recent sampling and is in compliance with regulations.
- 4 Fluoride is added to the City drinking water and has been since 1999 per City measure 5-231.

Unregulated Contaminants

Unregulated Contaminants Monitoring Regulation (UCMR3)

In 2013-2014 our water system sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't have a drinking water standard set by the Environmental Protection Agency (EPA). The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know the results of this data. The monitoring includes 30 contaminants (28 chemicals and 2 viruses). For general information on UCMR3, go to:

http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/

or contact the Safe Drinking Water Hotline at: (800) 426-4791

or at:

http://water.epa.gov/drink/contact.cfm

UCMR3 Results for 2013-2014

The Water Quality Table (below) lists the unregulated contaminant detects as required by EPA. A list of all unregulated contaminants that were tested for can be found on the City's website. www.ci.scappoose.or.us

Contaminant	Date Tested	Detected Range Min. – Max.	Average Detects	Unit	MCL	MCLG	Meets Regs?	Major Sources
Manganese	2013–2014	1.152 – 2.790	1.850	ppb	n/a¹	n/a¹	n/a¹	Manganese is naturally occurring in many surface and ground water sources and in soils that may erode into these waters. However, human activities are also responsible for much of the manganese contamination in water in some areas.
Strontium	2013–2014	44.000 - 88.235	55.528	ppb	n/a¹	n/a¹	n/a¹	Naturally occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.
Vanadium	2013–2014	0.552 – 2.727	1.623	ppb	n/a¹	n/a¹	n/a¹	Naturally occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst as vanadium pentoxide which is a chemical intermediate and a catalyst.
Chromium-6	2013–2014	0.031 - 0.049	0.038	ppb	n/a¹	n/a¹	n/a¹	Naturally occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation.
Chlorate	2013–2014	66 – 166	78.709	ppb	n/a¹	n/a¹	n/a¹	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide.

^{1 -} Unregulated contaminants are those that don't yet have a drinking water standard set by the Environmental Protection Agency (EPA).



Service Facts

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals, or radioactive substances. All 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 the 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 at 1-800-426-4791.

Special Notice for Immuno-Compromised Persons

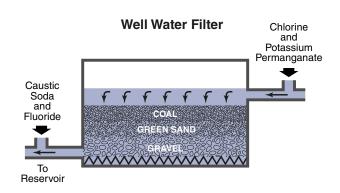
Some people may be more vulnerable to contaminants in drinking water than the general population.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office if you have questions. We can be reached by one of the following methods:

Phone: 503-543-7146 FAX: 503-543-2688

E-mail: darrylsykes@cityofscappoose.org



Another source of information is the State of Oregon Drinking Water Program. Their website is:

https://yourwater.oregon.gov/

Go to the Data Online section and search for the City of Scappoose. Our water system ID number is 4100792.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. An example of these types of improvements include construction of the Miller Road treatment plant and the two million gallon reservoir. Thank you for understanding.

We at the City of Scappoose work hard to provide top quality water to every tap. Please help us protect our water sources. Together we can ensure unspoiled drinking water for all our children.



