

Annual Drinking Water Quality Consumer Confidence Report

City of Cascade Locks

For Calendar Year 2018

INTRODUCTION:

As part of the requirements of both the EPA and Oregon Department of Human Services, we are pleased to present this year's Annual Quality Water Report for the year ending 2018. Our constant goal is to provide a safe and dependable supply of drinking water.

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 (800-426-4791).

The City continued testing for Lead and Copper in September 2018. Test results continue to indicate that the water delivered to homes is corrosive. To address this issue, the City has hired Crestline Construction to install the corrosion control process estimated at \$1,070,000. It will be completed by October 2019. Copper is both an indicator of corrosive water and a contaminate that may cause health problems. It is not as dangerous as lead. The water delivered to your home does not contain high levels of copper or lead. The problem is caused by the interaction of the water with the plumbing in some homes. This is particularly true when water is left in a plumbing fixture (faucet) for an extended period of time. **Flushing your faucet before consumption lowers the copper levels and brings safe water from the City's distribution pipes into your home.**

The chart on the following page details the potential health effects on people who drink water that has reached or exceeded the action levels for that corrosive element. This information is found at Oregon OAR 333-061-0043(m).

Due to funding of the required construction project, the City of Cascade Locks missed the deadline of July 1, 2018 to complete the remedy for this contaminant which is a violation of OAR 333-061-0034. The City has received funding and is constructing the necessary capital improvements in our Corrosion Control Treatment Project. This which will allow the City to add soda ash to the water to adjust the pH level in the water to reduce the corrosiveness of the water. This project is on schedule and should be completed this fall. The deadline for completion is December 31, 2019.

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 Cascade Locks 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 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 <http://www.epa.gov/safewater/lead>.

Source:

Cascade Locks water supply comes from two wells located along the southwesterly bank of Herman Creek. The two wells draw water from the sandy gravels located 110 feet below Herman Creek. We are currently seeking funding from the USDA to drill a third well in the same aquifer. These sandy gravels are not impervious to drainage so the Well Head Area needs to be treated with respect and care. Source water assessments have been completed. You can view the assessment at yourwater.org.gov. The water system ID Number is 00172.

Table 40

Regulated Contaminant Information				
Contaminant (units)	MCL	MCLG	Major Sources in Drinking Water	Health Effects Language
Inorganic Contaminants				
Copper (ppm)	AL=1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Lead (ppb)	AL=15	0	Corrosion of household plumbing systems; Erosion of natural deposits.	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Disinfection Byproducts, Byproduct Precursors, and Disinfectant Residuals				
Total trihalomethanes (TTHMs)(ppb)	80	N/A	Byproduct of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer

Key:

AL=Action Level

MCL=Maximum Contaminant Level

MCLG=Maximum Contaminant Level Goal

MFL=million fibers per liter

mrem/year=millirems per year (a measure of radiation absorbed by the body)

NTU=Nephelometric Turbidity Units

pCi/l=picocuries per liter (a measure of radioactivity)

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

ppb=parts per billion, or micrograms per liter (ug/l)

ppt=parts per trillion, or nanograms per liter

ppq=parts per quadrillion, or picograms per liter

TT=Treatment Technique

Residual Maintenance:

The City chlorinates its water supply at the source to eliminate bacteria that may form within the water distribution system or bacteria that may come in contact with the drinking water due to a leak. On chlorinated systems, Federal law requires minimum 0.2 parts chlorine per million parts of water and allows a maximum of 4.0 parts chlorine per million parts of water. The water delivered from our wells has a very low potential for bacteria therefore we maintain a chlorine level between 0.3 and 0.7 ppm. The chlorine residual is monitored daily to assure quality control. The water may smell of chlorine at times. This is not due to increases in the chlorination process but rather changes in organic minerals from the groundwater over which we have no control. These minerals carry the odor of the chlorine. If you are sensitive to the smell of chlorine, water from your tap may be left in an open container for approximately 1 hour to allow the chlorine to evaporate. It may be stored safely in the refrigerator. Carbon filters are another way to eliminate the chlorine odor.

Contacts:

If you have any questions about this report or concerns about your water quality, Please contact **Public Works at Cascade Locks City Hall, Phone# 541-374-8484. If you are concerned that your home may be of an age that copper or lead may be in your plumbing, please contact us. We can assist you in analysis.** The Cascade Locks City Council meets the 2nd and 4th Mondays of the month at 7:00 PM in City Hall. These meetings are open to the Public.

ANALYSIS /CONTAMINANTS

The City of Cascade Locks routinely monitors for contaminants in your drinking water according to Federal and State laws, which have established the maximum amount of contaminants allowed in drinking water. The table beginning on Page 5 shows the results of the monitoring for the period of January 1st to December 31st, 2018. As water travels over the land or underground, it can pick up trace amounts of substances or contaminants such as microbes, inorganic and organic chemicals, and even radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents.

Converting MCL Compliance Values For CCRs				
Contaminant	MCL in Compliance units (mg/L)	Multiply by	MCL CCR units	MCLG in CCR units
Inorganic Contaminants				
Copper	AL = 1.3	1,000	AL = 1.3 ppm	1.3
Lead	AL = 0.015	1,000	AL = 15 ppb	0
Disinfection Byproducts, Byproduct Precursors, and Disinfectant Residuals				
TTHMs (Total Trihalomethanes)	.080	1,000	80 ppb	NA

Key:
 AL=Action Level
 GWR=Ground Water Rule
 MCL=Maximum Contaminant Level
 MCLG=Maximum Contaminant Level Goal
 MFL=million fibers per liter
 mrem/year=Millirems per year (a measure of the radiation absorbed by the body)
 NTU=Nephelometric Turbidity Units
 pCi/l=picocuries per liter (a measure of radioactivity)
 ppm=parts per million or milligrams/liter (mg/l)
 ppb=parts per billion or micrograms/liter (ug/l)
 ppt=parts per trillion or nanograms/liter
 ppq=parts per quadrillion, or picograms/liter
 TT=Treatment Technique

Bottled drinking water is actually held to less rigid standards than tap water. *The presence of any contaminants does not necessarily pose a health risk.* Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 (800-426-4791).

Current Testing Requirements

The City of Cascade Locks is required to test for bacteriological contaminants twice each month and for nitrates annually. The Total Coliform Bacteria Rule requires water systems to meet a strict limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television, telephone or radio. Chlorination provides an important safeguard against bacteria. Organic, inorganic, volatile and synthetic compounds are tested at less frequent intervals. If there were any constituents in the detectable range during the last year's testing cycle, they will be listed below. Otherwise the lab tests came up with non-detectable level or testing parameters for a particular substance were completed on a previous year.

Further Information: If you would like to see the list of tests from this year or previous years, please contact us. If you are interested in more technical information about contaminants and potential health effects, they can be obtained through the following websites: <http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater> or <http://water.epa.gov/> or Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

(*NOTE Per Federal Requirements, the following definitions are common terms used in Lab Reports and included for your information.)

In the table below you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Milligrams per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Treatment Technique (TT) - (mandatory language) a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology. **MCL's (Maximum Contaminant Levels) are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.**

Maximum Contaminant Level Goal (MCLG) - (mandatory language) The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**2018 Cascade Locks Water Analysis
Microbiological Testing**

Cascade Locks had no Bacteria contamination detected in 2018 in any of its Water Samples.

Latest Chemical Results – PWS ID: 00172, City of Cascade Locks

Sample ID	Sample Date Received	Chemical	Source ID	Results		UOM	
				Current	MCL		
V8I040101-V	09/25/2018	10/09/2018	1,1,1-TRICHLOROETHANE	EP-A	ND	0.2000000	MG/L
V8I040101-V	09/25/2018	10/09/2018	1,1,2-TRICHLOROETHANE	EP-A	ND	0.0050000	MG/L
V8I040101-V	09/25/2018	10/09/2018	1,1-DICHLOROETHYLENE	EP-A	ND	0.0070000	MG/L
V8I040101-V	09/25/2018	10/09/2018	1,2,4-TRICHLOROBENZENE	EP-A	ND	0.0700000	MG/L
V8I040101-V	09/25/2018	10/09/2018	1,2-DICHLOROETHANE	EP-A	ND	0.0050000	MG/L
V8I040101-V	09/25/2018	10/09/2018	1,2-DICHLOROPROPANE	EP-A	ND	0.0050000	MG/L
V8I040101-V	09/25/2018	10/09/2018	BENZENE	EP-A	ND	0.0050000	MG/L
V8I040101-V	09/25/2018	10/09/2018	CARBON TETRACHLORIDE	EP-A	ND	0.0050000	MG/L
V8I040101-V	09/25/2018	10/09/2018	CHLOROBENZENE	EP-A	ND	0.1000000	MG/L
V8I040101-V	09/25/2018	10/09/2018	CIS-1,2-DICHLOROETHYLENE	EP-A	ND	0.0700000	MG/L
V8I040101-V	09/25/2018	10/09/2018	DICHLOROMETHANE	EP-A	ND	0.0050000	MG/L
V8I040101-V	09/25/2018	10/09/2018	ETHYLBENZENE	EP-A	ND	0.7000000	MG/L
V8I040101-V	09/25/2018	10/09/2018	O-DICHLOROBENZENE	EP-A	ND	0.6000000	MG/L
V8I040101-V	09/25/2018	10/09/2018	P-DICHLOROBENZENE	EP-A	ND	0.0750000	MG/L
V8I040101-V	09/25/2018	10/09/2018	STYRENE	EP-A	ND	0.1000000	MG/L
V8I040101-V	09/25/2018	10/09/2018	TETRACHLOROETHYLENE	EP-A	ND	0.0050000	MG/L
V8I040101-V	09/25/2018	10/09/2018	TOLUENE	EP-A	ND	1.0000000	MG/L
V8I040101-V	09/25/2018	10/09/2018	TRANS-1,2-DICHLOROETHYLENE	EP-A	ND	0.1000000	MG/L
V8I040101-V	09/25/2018	10/09/2018	TRICHLOROETHYLENE	EP-A	ND	0.0050000	MG/L
V8I040101-V	09/25/2018	10/09/2018	VINYL CHLORIDE	EP-A	ND	0.0020000	MG/L
V8I040101-V	09/25/2018	10/09/2018	XYLENES, TOTAL	EP-A	ND	10.000000	MG/L
V8I019702-D	09/12/2018	09/27/2018	TOTAL HALOACETIC ACIDS (HAA5)	DIST-A	ND	0.0600000	MG/L
V8I019702-D	09/12/2018	09/27/2018	TTHM	DIST-A	0.00340	0.0800000	MG/L
V8I019703-D	09/12/2018	09/27/2018	TOTAL HALOACETIC ACIDS (HAA5)	DIST-A	ND	0.0600000	MG/L
V8I019703-D	09/12/2018	09/27/2018	TTHM	DIST-A	0.00470	0.0800000	MG/L
V8I019701	09/12/2018	09/27/2018	ANTIMONY, TOTAL	EP-A	ND	0.0060000	MG/L
V8I019701	09/12/2018	09/27/2018	ARSENIC	EP-A	ND	0.0100000	MG/L
V8I019701	09/12/2018	09/27/2018	BARIUM	EP-A	ND	2.0000000	MG/L
V8I019701	09/12/2018	09/27/2018	BERYLLIUM, TOTAL	EP-A	ND	0.0040000	MG/L
V8I019701	09/12/2018	09/27/2018	CADMIUM	EP-A	ND	0.0050000	MG/L
V8I019701	09/12/2018	09/27/2018	CHROMIUM	EP-A	ND	0.1000000	MG/L
V8I019701	09/12/2018	09/27/2018	CYANIDE	EP-A	ND	0.2000000	MG/L
V8I019701	09/12/2018	09/27/2018	MERCURY	EP-A	ND	0.0020000	MG/L
V8I019701	09/12/2018	09/27/2018	NICKEL	EP-A	ND	0.1000000	MG/L
V8I019701	09/12/2018	09/27/2018	SELENIUM	EP-A	ND	0.0500000	MG/L
V8I019701	09/12/2018	09/27/2018	SODIUM	EP-A	ND		MG/L
V8I019701	09/12/2018	09/27/2018	THALLIUM, TOTAL	EP-A	ND	0.0020000	MG/L
V8I019701-I	09/12/2018	09/27/2018	FLUORIDE	EP-A	ND	4.0000000	MG/L
V8I019701-I	09/12/2018	09/27/2018	NITRATE	EP-A	ND	10.000000	MG/L
V8I019701-I	09/12/2018	09/27/2018	NITRATE-NITRITE	EP-A	ND	10.000000	MG/L
V8I019701-I	09/12/2018		NITRITE	EP-A	ND	1.0000000	MG/L
V8I019701-S	09/12/2018	09/27/2018	1,2-DIBROMO-3-CHLOROPROPANE	EP-A	ND	0.0002000	MG/L

V8I019701-S	09/12/2018	09/27/2018	2,4,5-TP	EP-A	ND	0.0500000	MG/L
V8I019701-S	09/12/2018	09/27/2018	2,4-D	EP-A	ND	0.0700000	MG/L
V8I019701-S	09/12/2018	09/27/2018	ATRAZINE	EP-A	ND	0.0030000	MG/L
V8I019701-S	09/12/2018	09/27/2018	BENZO(A)PYRENE	EP-A	ND	0.0002000	MG/L
V8I019701-S	09/12/2018	09/27/2018	BHC-GAMMA	EP-A	ND	0.0002000	MG/L
V8I019701-S	09/12/2018	09/27/2018	CARBOFURAN	EP-A	ND	0.0400000	MG/L
V8I019701-S	09/12/2018	09/27/2018	CHLORDANE	EP-A	ND	0.0020000	MG/L
V8I019701-S	09/12/2018	09/27/2018	DALAPON	EP-A	ND	0.2000000	MG/L
V8I019701-S	09/12/2018	09/27/2018	DI(2-ETHYLHEXYL) ADIPATE	EP-A	ND	0.4000000	MG/L
V8I019701-S	09/12/2018	09/27/2018	DI(2-ETHYLHEXYL) PHTHALATE	EP-A	ND	0.0060000	MG/L
V8I019701-S	09/12/2018	09/27/2018	DINOSEB	EP-A	ND	0.0070000	MG/L
V8I019701-S	09/12/2018	09/27/2018	DIQUAT	EP-A	ND	0.0200000	MG/L
V8I019701-S	09/12/2018	09/27/2018	ENDOTHALL	EP-A	ND	0.1000000	MG/L
V8I019701-S	09/12/2018	09/27/2018	ENDRIN	EP-A	ND	0.0020000	MG/L
V8I019701-S	09/12/2018	09/27/2018	ETHYLENE DIBROMIDE	EP-A	ND	0.0000500	MG/L
V8I019701-S	09/12/2018	09/27/2018	GLYPHOSATE	EP-A	ND	0.7000000	MG/L
V8I019701-S	09/12/2018	09/27/2018	HEPTACHLOR	EP-A	ND	0.0004000	MG/L
V8I019701-S	09/12/2018	09/27/2018	HEPTACHLOR EPOXIDE	EP-A	ND	0.0002000	MG/L
V8I019701-S	09/12/2018	09/27/2018	HEXACHLOROENZENE	EP-A	ND	0.0010000	MG/L
V8I019701-S	09/12/2018	09/27/2018	HEXACHLOROCYCLOPENTADIENE	EP-A	ND	0.0500000	MG/L
V8I019701-S	09/12/2018	09/27/2018	LASSO	EP-A	ND	0.0020000	MG/L
V8I019701-S	09/12/2018	09/27/2018	METHOXYCHLOR	EP-A	ND	0.0400000	MG/L
V8I019701-S	09/12/2018	09/27/2018	OXAMYL	EP-A	ND	0.2000000	MG/L
V8I019701-S	09/12/2018	09/27/2018	PENTACHLOROPHENOL	EP-A	ND	0.0010000	MG/L
V8I019701-S	09/12/2018	09/27/2018	PICLORAM	EP-A	ND	0.5000000	MG/L
V8I019701-S	09/12/2018	09/27/2018	SIMAZINE	EP-A	ND	0.0040000	MG/L
V8I019701-S	09/12/2018	09/27/2018	TOTAL POLYCHLORINATED BIPHENYLS (PCB)	EP-A	ND	0.0005000	MG/L
V8I019701-S	09/12/2018	09/27/2018	TOXAPHENE	EP-A	ND	0.0030000	MG/L
V8H061206	08/30/2018	09/14/2018	COPPER	DIST-A	0.13000	1.3000000	MG/L
V8H061206	08/30/2018	09/14/2018	LEAD	DIST-A	ND	0.0150000	MG/L
V8H061211	08/30/2018	09/14/2018	COPPER	DIST-A	1.10000	1.3000000	MG/L
V8H061211	08/30/2018	09/14/2018	LEAD	DIST-A	0.00250	0.0150000	MG/L
V8H061213	08/30/2018	09/14/2018	COPPER	DIST-A	0.66000	1.3000000	MG/L
V8H061213	08/30/2018	09/14/2018	LEAD	DIST-A	0.00240	0.0150000	MG/L
V8H061214	08/30/2018	09/14/2018	COPPER	DIST-A	1.30000	1.3000000	MG/L
V8H061214	08/30/2018	09/14/2018	LEAD	DIST-A	ND	0.0150000	MG/L
V8H061218	08/30/2018	09/14/2018	COPPER	DIST-A	0.91000	1.3000000	MG/L
V8H061218	08/30/2018	09/14/2018	LEAD	DIST-A	ND	0.0150000	MG/L
V8H061219	08/30/2018	09/14/2018	COPPER	DIST-A	0.09200	1.3000000	MG/L
V8H061219	08/30/2018	09/14/2018	LEAD	DIST-A	ND	0.0150000	MG/L
V8H061201	08/29/2018	09/14/2018	COPPER	DIST-A	0.83000	1.3000000	MG/L
V8H061201	08/29/2018	09/14/2018	LEAD	DIST-A	0.00110	0.0150000	MG/L
V8H061202	08/29/2018	09/14/2018	COPPER	DIST-A	0.18000	1.3000000	MG/L
V8H061202	08/29/2018	09/14/2018	LEAD	DIST-A	0.00130	0.0150000	MG/L
V8H061203	08/29/2018	09/14/2018	COPPER	DIST-A	1.00000	1.3000000	MG/L
V8H061203	08/29/2018	09/14/2018	LEAD	DIST-A	0.00140	0.0150000	MG/L
V8H061204	08/29/2018	09/14/2018	COPPER	DIST-A	1.10000	1.3000000	MG/L
V8H061204	08/29/2018	09/14/2018	LEAD	DIST-A	0.00130	0.0150000	MG/L
V8H061205	08/29/2018	09/14/2018	COPPER	DIST-A	0.39000	1.3000000	MG/L
V8H061205	08/29/2018	09/14/2018	LEAD	DIST-A	0.00400	0.0150000	MG/L
V8H061207	08/29/2018	09/14/2018	COPPER	DIST-A	0.09700	1.3000000	MG/L
V8H061207	08/29/2018	09/14/2018	LEAD	DIST-A	ND	0.0150000	MG/L

V8H061208	08/29/2018	09/14/2018	COPPER	DIST-A	0.92000	1.3000000	MG/L
V8H061208	08/29/2018	09/14/2018	LEAD	DIST-A	0.00140	0.0150000	MG/L
V8H061209	08/29/2018	09/14/2018	COPPER	DIST-A	0.96000	1.3000000	MG/L
V8H061209	08/29/2018	09/14/2018	LEAD	DIST-A	0.00110	0.0150000	MG/L
V8H061210	08/29/2018	09/14/2018	COPPER	DIST-A	0.27000	1.3000000	MG/L
V8H061210	08/29/2018	09/14/2018	LEAD	DIST-A	ND	0.0150000	MG/L
V8H061212	08/29/2018	09/14/2018	COPPER	DIST-A	1.10000	1.3000000	MG/L
V8H061212	08/29/2018	09/14/2018	LEAD	DIST-A	0.00150	0.0150000	MG/L
V8H061215	08/29/2018	09/14/2018	COPPER	DIST-A	0.66000	1.3000000	MG/L
V8H061215	08/29/2018	09/14/2018	LEAD	DIST-A	0.00120	0.0150000	MG/L
V8H061216	08/29/2018	09/14/2018	COPPER	DIST-A	1.30000	1.3000000	MG/L
V8H061216	08/29/2018	09/14/2018	LEAD	DIST-A	0.00340	0.0150000	MG/L
V8H061217	08/29/2018	09/14/2018	COPPER	DIST-A	1.10000	1.3000000	MG/L
V8H061217	08/29/2018	09/14/2018	LEAD	DIST-A	0.00150	0.0150000	MG/L
V8H061220	08/29/2018	09/14/2018	COPPER	DIST-A	0.68000	1.3000000	MG/L

CONCLUSIONS ON WATER QUALITY

This report includes investigative samples for Lead & Copper. Cascade Locks did have two samples that equaled the maximum contaminant level for copper at individual residences. It is important to note that these levels are detected after water has set in the pipes for over 6 hours. The water delivered from the system has not had any violations in contaminants. In 2017 we did have several samples exceed the action level for Copper. We did not have any samples that exceeded the action level for Lead. The following chart shows the violation history for the year. All violations have been returned to compliance.

Violation History								
Violation Number	Auto-RTC?	Monitoring Period Begin	Monitoring Period End	Facility ID	Analyte Group	Violation Type - Analyte Count <i>Show analytes for all violations</i>	Enforcement Action - Date <i>Show history</i>	Points
900592035	N	Jan 01, 2018	Dec 31, 2018	SRC-AA	GWR	Source Assessment Sample - Late/Nonreporting - 1		1
900592034	N	Jan 01, 2018	Dec 31, 2018	SRC-AB	GWR	Source Assessment Sample - Late/Nonreporting - 1		1
900592033	Y	Dec 01, 2018	Dec 31, 2018		TCR	Routine Coliform - Did Not Report ANY - 1	Returned To Compliance - Jan 10, 2019	1
900592032	Y	Jan 01, 2018	Jun 30, 2018	DIST-A	LCR	LCR Late/Nonreporting - 1 Show analyte	Returned To Compliance - Sep 14, 2018	1
900592031	Y	May 01, 2018	May 31, 2018		TCR	Routine Coliform - Did Not Report ANY - 1	Returned To Compliance - Jun 15, 2018	1

WATER SYSTEM IMPROVEMENTS

The City has completed its Water System Master Plan and obtained funding from USDA for needed improvements. The failing water mains on WaNaPa have been replaced. The aging reservoir on Harvey Lane has been replaced. Dry Creek Reservoir and almost 6000 feet of concrete-asbestos pipe have been isolated and are no longer part of the water system. If approved by the USDA RD this summer, the drilling of a new well will be completed by the end of December 2019. The Corrosion Control Treatment Project will be done by October 2019.

WELL CLEANING

The City undertook a special cleaning and iron removal for Well #1 in 2016 in an attempt to lower the PH of the water supply and improve water quality thus reducing copper levels. During this work we also upgraded the pump in Well#1 to provide longer service and more stable flows. This has proven very beneficial to our system.

CROSS CONNECTION

A very real concern to the safety of our Public Water Source is cross connection. This occurs when a contaminated source becomes hooked to the water supply. It can be as simple as a hose or faucet connection or as major as a fire

hydrant or contaminated well. If the contaminated supply flows into the Public Water System, a cross connection has occurred. The other form of cross connection is when a loss of pressure occurs in the system due to a leak or fire and water is drawn back into the system through sprinklers, ponds, laundromats, medical equipment etc. These threats can be eliminated with proper piping and back-flow prevention devices. The City has a Cross Connection Program that requires annual testing of backflow devices. The City is also exploring the use of a Cross Connection Firm to keep our testing and records up-to-date. Please contact us for further information.

WATER CONSERVATION

While the water system improvements are close to completion, it is important to recognize that the City does have a severe leakage problem and that our customers' services are also in need of maintenance between the meter and the home. Please repair any leaks as soon as possible. Feel free to contact us if you feel there is a leak we should be notified about. Water is a very valuable resource and Cascade Locks asks that you please do your part in conserving water by utilizing low volume sprinklers, water misters, and flow control devices. Please don't hesitate to inquire if you have any question on how to minimize the impact on this precious resource.

Thank You for taking the time to read this report. The safety of our water supply, distribution and fire protection systems is vital to our community. It is our continuing goal to provide the highest possible quality of drinking water for Cascade Locks and protect our customers' and citizens' water supply both now and in the future.

Gordon Zimmerman
City Administrator
July 1, 2019

Special Notes:

Lead & Copper- Lead & Copper tests were done in 2015, 2016, 2017 and 2018. Elevated Lead and Copper are typically encountered on a house by house basis and due to interior plumbing within the residence. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Make it a practice to flush your tap for 30 seconds or more before drinking tap water. Additional information is available from Hood River County Health Department 541-386-1115 and the Safe Drinking Water Hotline (1-800-426-4791).

333-061-0043(3)(f) Lead and copper: the 90th percentile value of the most recent round of sampling and the number of sampling sites exceeding the action level and the lead-specific information as prescribed in subsection (4)(c) of this rule... (i) The likely source(s) of detected contaminants to the best of the operator's knowledge. Specific information regarding contaminants may be available in sanitary surveys and source water assessments, and should be used when available to the operator. If the operator lacks specific information on the likely source, the report must include one or more of the typical sources for that contaminant listed in Table 40 which are most applicable to the system. Table 40 is on page 5.

Nitrates in drinking water at levels above 10 ppm are a health risk for infants of less than six months of age. In sampling already completed for 2018 the City had no nitrates detected in the water supply. Non-City water users are reminded that high nitrate levels (over 10 mg/l) in drinking water can cause blue baby syndrome. If you are a non-City water user caring for an infant and have concerns on your water supply, you should seek the advice from the Hood River County Health at 541-386-1115.

Asbestos in drinking water is a concern if the fibers are detected within a certain filament length that would allow the particles to be inhaled during showers, etc. Disposal and repairs on asbestos pipe represent a hazard to the Utility Workers who need special training to handle these situations. **Asbestos particles were not detected in Cascade Locks water supply when last tested in 2013. No detection means we do not have to retest for 9 years. The City has abandoned all asbestos water pipes with the current 2018 Water System Improvement Project.**