

# The City of Maupin

Public Water System ID # 41-00510

## 2017 Annual Drinking Water Quality Report

Covering 2016 Water Quality Testing

### Introduction

This report explains that the drinking water provided by the City of Maupin is of the highest quality. Included is information on the sources of Maupin's drinking water, general water quality information, and specific results of analytical tests conducted on the City of Maupin's drinking water in 2016, (or in the case of testing not conducted every year, the most recent results).

### Where does our water come from?

The City of Maupin was founded in 1922 with Dufur Springs being named the ground water source for the community. Dufur Springs has been the city's source of drinking water for over 90 years. Over the years, Dufur springs has evolved from a water wheel and distribution by horse drawn carriages. To the presently constructed 3 individual spring boxes that are piped to a pump house, where chlorine is added to ensure quality of water. Our water is then pumped to Lower, Upper and East Maupin reservoirs and then gravity fed into our water distribution system.

Dufur Springs is a natural occurring spring that provides our drinking water. The sources of drinking water (both tap water and bottled water) can include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally-occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity. To help reduce some of these effects on our source of drinking water the City of Maupin has implemented a Well-Head Protection Program which is available to our customers through City Hall.

### Water Quality

The City of Maupin routinely monitors the source of our drinking water and the water in the distribution system according to State and Federal laws. In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Certain quantities of some substances are essential to good health, but excessive quantities can be hazardous. Similarly, small quantities of some substances may have no effect on people, but large quantities can be harmful. 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 US EPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons, such as cancer patients 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 for appropriate means to lessen the risk of infection by cryptosporidium and other micro-biological contaminants are available from the Safe Drinking Water Hotline (800-426-4791), or on the web at [www.epa.gov/safewater/ccr.html](http://www.epa.gov/safewater/ccr.html)

### Our Commitment to You

The City of Maupin is committed to bring safe quality drinking water to every connection in our system. Part of ensuring quality water we randomly sample drinking water around the city. In 2016, we met all state and federal required testing along with additional quality control tests to provide the best drinking water possible. Quality Control tests provide the Utilities Department Personnel with the analytical data to efficiently adjust, protect, repair and maintain the city's water and distribution system.

If you have any questions about our water system please feel free to call or stop by. We would also like to invite you to view this document online at the Maupin City website link at: <http://cityofmaupin.org/government/>

Thank You for helping us keep our drinking water safe for generations to come.

**Utilities Department 1-541-395-2684**

## What and Why we Test.

**Total Coliform:** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

**Fecal coliform/E.coli:** Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

**Nitrate:** Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

**TTHMs [Total Trihalomethanes]:** 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 systems, and may have an increased risk of getting cancer.

**Lead :** 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.

**Copper:** 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.

**Understanding reporting for Lead and Copper.** 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 customer's taps most likely to contain these substances based on when the house was built. The EPA determined that if the sample results exceeded the Action Level (AL), the City must take action in reducing the risk of leaching of lead and or copper. Our water is in compliance with Lead and Copper testing. Our water system is required to complete lead and copper every 3 years, we completed the Lead and Copper testing in the Summer 2015.

## Water Words Definitions and Terms

**Definitions:** In this report you may find terms and abbreviations that are not familiar to you. To help you better understand these terms we provide the following definitions

**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 a margin of safety.

**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.

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

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

**Maximum residual disinfectant level goal (MRDLG):** 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 contaminants.

**Maximum residual disinfectant level (MRDL):** 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.

**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, or one milligram per liter, corresponds to one minute in two years or a single penny in \$10,000. 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.

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

## Test Results

Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminant Testing</b>						
1. Total coliform Bacteria January thru December 2016( monthly Testing in Distribution System)	N	ND	Absence/Presence	0	presence of coliform bacteria in 5% of monthly samples	Naturally Present in the Environment
2. Fecal Coliform and E.coli January thru December 2016 ( monthly Testing in Distribution System)	N	ND	Absence/Presence	0	a routine sample and repeat sample if total coliform positive, and one fecal coliform or E.coli positive	Human or animal fecal waste
<b>Source Water Assessment Microbiological Contaminant Testing *</b>						
1. Total coliform Bacteria 2016 Assessment Testing (at the Ground Water Source) **	N	Present	Absence/Presence	0	Assessment Testing of <u>Source</u> Water	Naturally Present in the Environment
2. Fecal Coliform and E.coli 2016 Assessment Testing (at the Ground Water Source)***	N	Absent	Absence/Presence	0	Confirmation Testing triggered chlorine maintenance and additional <u>Source</u> assessment testing	Human or animal fecal waste
<p>* In August, 2015 the Oregon State Public Health Authority required that Maupin sample the source water i.e. Dufur Springs for fecal- indicator. The Ground Water Assessment is a required test of Microbiological Contaminant Testing in the city's source water ( this is a test of the source water i.e. Spring Boxes prior to any treatment and before it enters the distribution system). These test are required by the Oregon Public Health Authority, this is a mandatory test to identify any or potential hazards in the source water.</p> <p>** We were notified on October 7th, 2015, of an E.coli positive sample in the Source Water Springs Boxes. This triggered additional sampling of our source water.</p> <p>*** The confirmation test required by the State confirmed that E.coli is present in the source water. To ensure public health the state mandated disinfection by the means of chlorine disinfection by maintaining a minimum chlorine residual of 0.30 mg/L prior to first customer tap and submittal of a Monthly Residual Maintenance Report.</p> <p style="text-align: center;"><b>Source Water Update</b></p> <p>In the past, the source water that was pumped required by the state to be lightly dosed with chlorine for aesthetics and water distribution system requirements. Prior to October 2015 the City maintained a chlorine residual between 0.05 and 0.30 mg/L. In October 2015 the City was required by the state to start maintaining a chlorine residual of no less than 0.30 milligrams per liter (mg/L) by chlorination prior to the first customer tap in distribution system. The City of Maupin is working with the State to collect additional testing of the City's Source Water to determine if our source water is under the influence of surface water i.e. rain and snow events. If you have any question regarding our source water please contact Public Works Department at 1-541-395-2698</p>						
<b>Radioactive Contaminants</b>						
Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Alpha emitter 08/29/11	N	3.00	pCi/l	0	15	Erosion of Natural deposits
<b>Inorganic Contaminants</b>						
3. Nitrate (as Nitrogen) 8/18/16	N	0.76	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Asbestos 12/16/2014	N	ND	MFL	7	7	Decay of asbestos cement water mains; Erosion of natural deposits.
<b>Volatile Organic Contaminants</b>						
4. TTHM ( Total Trihalomethanes) 8/18/16	N	ND	ppb	0	80	By-product of Drinking Water Chlorination

Household Lead & Copper Contaminants						
Contaminant	Units	Goal	Action Level (AL)	90 <sup>th</sup> Percentile	Homes Exceeding Action Level	Complies ?
5. Copper 9/30/15	ppm	< 1.3	1.3	0.01	0	Yes
6. Lead 9/30/15	ppb	0	15	0.003	0	Yes

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Maupin is responsible for providing high quality drinking water, but cannot control the variety of material used in your 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 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, testing methods, and steps you can take to minimize exposure is available from the Safe Water Drinking Hotline or at <http://www.epa.gov.safewater/lead>."

**Summery of Test Results**

The City tested for Total Haloacetic Acids (HAA5) and for Arsenic in 2016, Combined Uranium in 2012, twelve Inorganic contaminants in 2008, and 51 additional Inorganic, Synthetic Organic, and Volatile Organic contaminants in 2011, and all level results were Non-Detects (ND). A listing of **ALL** past and current tests can be requested at Maupin City Hall or viewed online at Oregon Health Authority at <https://yourwater.oregon.gov/inventory.php> and click on WS ID Look Up and enter our WS ID # 00510 into the WS ID search window.

As you can see by the above test results, our 2016 water quality testing yielded no violations of state or federal water quality standards. We are fortunate that our water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels. MCLs (Maximum Contaminant Levels) are set at very stringent levels.

To illustrate the possible health effects described for many regulated constituents, a person would have to drink two 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. Test results show that Maupin’s water is in compliance with all applicable standards. The City of Maupin’s water system routinely monitors for constituents in your drinking water according to Federal and State laws. The previous tables and lists show the results of our 2016 monitoring (or in the case of monitoring not done every year, the most recent results). OHA has reduced our monitoring frequency on many contaminants due to our monitoring history. We are pleased to report that our drinking water is safe, and meets federal and state requirements.

***We want our valued customers to be informed about their water utility.***

If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery. Since this is a municipal utility, the ultimate authority rests with the City Council. The Council holds regularly scheduled meetings on the **fourth** Wednesday of each month at 6:30 p.m. located at the City Park Community Building (unless other wise posted). In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements to your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We would like to encourage customers to be active members in our community so that we can continue to provide future generations with a clean and reliable source of safe drinking water.

**Billing Alert**

Some of our customers may have been contacted over the phone by unknown persons who are impersonating City Employees to solicit money for Overdue Water Bills. We want to ensure our customers that the City of Maupin **WILL NOT and CANNOT** collect money over the phone or at your service address. If you receive a shut off notice you must make payments in person via cash or check at City Hall located at 408 Deschutes Ave, Maupin Oregon 97037 or Mailed to City Hall PO Box 308 Maupin, OR 97037.

Utility Billing questions can be addressed by calling 1-541-395-2698.