2017

WATER QUALITY REPORT

Important Information About the Water You Drink

Website: www.OWD-Oregon.org

This annual report is intended to inform as well as to remind you, our customers, about the importance of your water quality. The Oceanside Water District (OWD) is committed to ensuring that your water meets the highest standards as regulated by The Environmental Protection Agency (EPA) and The Oregon Department of Health Services (ODHS). The following information was developed from water quality sampling conducted throughout the 2016-2017 year.

The Source of Your Water

Your tap water begins its journey high up on Mt. Meares, emanating from pristine, spring-fed, wetlands. Gradually this water flows down the mountainside west towards the Pacific Ocean and is known as the Short Creek watershed. As part of the greater Netarts Bay/Sand Lake/Neskowin Creek Watershed in the Wilson-Trask-Nestucca Sub-Basin, Short Creek water is collected in an impoundment pond where it settles out impurities collected along the way and is ready to be pumped to the treatment plant for processing.

Upon entering the treatment plant, the raw water is pre-filtered and sent through a membrane, ultrafiltration unit where impurities as small as 0.1 micron are removed. As a community water system, your water is required by the Clean Water Act to include microbial inactivation through the use of a small amount of Sodium Hypochlorite. This process along with careful monitoring, ensures that a safe, clean product is available for distribution to your home. Five reservoirs located throughout the district, store and offer a ready supply of over 900,000 gallons of purified water; meeting the needs and requirements of the District's communities.

The Coleman Creek water intake, shown here, came back on line in July of 2017 and is now fully serving the needs of the Cape Meares community. The intake was constructed by the Cape Meares Water Cooperative more than sixty years ago and is back to performing its original function. The use of this source of water has proven to be a great alternative to the potential landslide vulnerability that once plagued the water supply originating from Oceanside. The Cape Meares community is now poised for greater sustainability and any future growth.

Drinking Water Quality

The raw water drawn from Short Creek and Coleman Creek are carefully monitored for a number of issues: 1) Biological contaminants such as cryptosporidium, and coliform, 2) Turbidity and insoluble chemical contaminants mainly due to runoff from rainfall in the watershed or landslides, and 3) Organic and inorganic chemical pollutants due to both naturally occurring compounds in the soil, and man-made processes such as the use of herbicides to control weeds on the various logging roads throughout the watershed. Testing to insure against these problems is carried out by the OWD under the direction of the Oregon Health Authority (OHA). The most recent results are listed below and on the OHA's website at: https://yourwater.oregon.gov/chemlatest.php?pwsno=00585 .

For further information concerning our water and this analysis please contact the Oregon Department of Health Services and refer to the Source Water Assessment Report, Oceanside Water District, Oregon PWS#4100585 for Oceanside and PWS#4100882 for Cape Meares.

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. MCL's 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 one in-a-million chance of having the described health effect.

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

As we are now required to perform bi-annual lead and copper tests, we may be calling upon you to participate. If you would like to have your home tested, at no cost, please call us at 503-842-6462 and we will be glad to add you to the next round of testing. 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. Oceanside Water District 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 .

The following terms and acronyms are made part of this report and provided as a reference to help you, to better understand the information presented:

Parts per million (ppm) or Milligrams per liter (mg/I) - One part per million corresponds to one minute in two years.
Parts per billion (ppb) or Micrograms per liter - One part per billion corresponds to one minute in 2,000 years.
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 (AL) - The AL concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Maximum Contaminant Level (MCL) - The MCL is 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 MCLG is 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 (IT) - A required process intended to reduce the level of contaminant in drinking water.

The following test results are from OWD monitoring during the period of July 2016 to July 2017:

TEST RESULTS

Contaminant	Violation *YIN*	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria	N	None	Presence / Absence	0	A presence of coliform bacteria in 5% of monthly samples.	Naturally present in the environment.
Fecal coliform and *E. coli*	N	None	Presence /Absence	0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive.	Human and animal fecal waste.
Turbidity	N	0.07 (On Average)	NTU	0.30	0.30	Soil runoff; cloudiness of the water.

Microbiological Contaminants:

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

Fecal coliform/E.coli. The presence of Fecal Coliform/ E. coli bacteria in water indicates a contamination problem 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.

Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Contaminant	Violation *YIN*	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination

Inorganic Contaminants						
Arsenic Tested: 7/7/2016	N	ND	ppm	0.01	0.01	Erosion from natural deposits, runoff from orchards.
Copper Tested: 8/25/2016	N	Highest level recorded: 0.164ppm	ppm	0	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead Tested: 8/22/2016	N	Action Level: highest recorded level is 0.008ppm	ppb	0	15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) Tested: 6/29/2016	N	0.140	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Contaminant	Violation *YIN*	Level Detected		Unit Measurement	MCLG	MCL	Likely Source of Contamination
Volatile (VOC) & Synthetic (SOC) Organic Compounds							
Twenty-one (21) Regulated & Thirty-five (35) Unregulated VOCs Tested: 6/29/2016	N	ND		ppm	0	Various MCLs	Industrial discharge, plastics leachate, herbicide runoff.
Twenty-nine (29) Regulated & Thirteen (13) Unregulated SOCs Tested: 6/29/2016	N	ND		ppm	Various	MCLs	Industrial discharge, plastics leachate, herbicide runoff.
Disinfection By-Products							
TTHM (Trihalomethanes) Tested: 11 / 0 1 / 1 6	N	61		ppb	0	80	By-Product of drinking water chlorination
HAAS (HaloAcetic-Acids) Tested: 11/01/2016	N	46		ppb	0	60	By-Product of drinking water chlorination

TTHMs (Total Trihalomethanes) HAAS (HaloAcetic Acids) and VOCs (Volatile Organic Compounds): Some people who drink water containing TTHMs, HAA5s, or VOCs in excess of MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

TOCs (Total Organic Carbon) Used as a surrogate for Disinfection byproducts (DBP) formation potential.

Herbicide Pollution Risk Mitigation

In addition to the aforementioned testing, the OWD in conjunction with the Oceanside Clean Water Subcommittee, a group affiliated with the Oceanside Neighbor's Association, has been carefully developing a protocol for both testing and limiting herbicide exposure in the District's watershed. These herbicides are applied by the watershed owners as a means of keeping the logging roads for usable and free from vegetation. If your interested in joining or finding out more about the Oceanside Clean Water Subcommittee and what they are up to, you can do so by contacting Dr. Paul Newman at 503-815-1833.

Emergency Action Alert:

The District would like to remind its customers that living along the scenic Oregon Coast presents many unique dangers that could easily affect your water supply. The possibility of land and surf erosion, power outages, damaging winds, seismic activity, fire conditions and flooding potential are just some of the realities we are faced with. Any one of these hazards can significantly impact the District's ability to produce and deliver clean, potable water to your home. If such an emergency does present itself, the District will alert its customers as best it can by either posting a written warning at both the Oceanside Community Center and the Cape Meares Community Center, emailing out warning notices, or setting out message barricades. In severe cases, a **"Boil Water"** notice will be broadcasted over the local Tillamook radio station as well as being posted as previously described. Regardless of the emergency condition, the District asks its customers to use discretion in their use of water and to remain aware of any further notification.

Protecting Your Investment:

The District suggests that when leaving your home unattended for extended periods of time (five days or more), that you turn your water off at the meter. Please make sure that the district office has a current phone number on file of where you can be reached while you're away. If you would also like to be added to the District's emergency notice email list, please do so by contacting the district office with that information.

Each homeowner should have a shut-off valve on the customer-side of the meter (See picture). If one is not present, please call the District office to schedule an installation for a slight ($125.00) fee. Upon returning home it is best to allow the water to slowly recharge your pipes and remember to purge your plumbing system of the stagnant water and air through various faucets and spigots throughout your home before using your water.

Cross-Connection Control:

Do you have any of the following?

- Swimming Pool/Hot -tube
- Hydronic Home Heating
- Active Solar Unit
- Fire Sprinkler System
- Large Scale Water Feature
- Underground Lawn Irrigation System

If you do, you are required by the State of Oregon to install a cross-connection assembly for the protection of the entire water system. This assembly must be inspected annually by a certified inspector. As a service to our

customers, the OWD staff will, at your convenience and at no charge, help you determine if a back-flow prevention assembly is needed for your home.

In September all back-flow prevention device owners will be receiving a letter from the District. This letter will act as a reminder to have your back-flow device inspected and a copy of the results forwarded to OWD by the end of the calendar year. If the district does not receive these results a fine of $50/month will be assessed for the delinquency and the District will have the back-flow device inspected by the end of March.

The OWD staff are pleased to report that this District's drinking water meets or exceeds all federal and state requirements. If you have any questions or concerns about this report please contact the Oceanside Water District Operations Manager, Alan Tuckey (503) 842-6462. or Office Manager, Julie Johnson, at 503-842-0370. To learn more about your District and how it operates, please attend any regularly scheduled board meeting. Meetings of the OWD Board of Commissioners are open to the public and are held on the 3rd Tuesday of each month at 1:00 PM, alternating between the Oceanside Water Plant and the Cape Meares Community Center.