

# YOUR DRINKING WATER CONSUMER CONFIDENCE REPORT FOR CALENDAR YEAR 2016

### **General Water System Information**

Questions regarding the City's water supply, treatment and quality control may be directed to: Mike Walker, Public Works Director at 503-489-2162, <a href="mailto:mwalker@ci.sandy.or.us">mwalker@ci.sandy.or.us</a>. The City actively seeks public participation in decisions affecting your drinking water. City Council meetings are held at 7:00 PM on the first and third Mondays of each month at Sandy City Hall, 39250 Pioneer Blvd. Sandy, OR 97055. Agendas for upcoming City Council meetings and minutes of past Council meetings may be found on our website: www.ci.sandy.or.us.

#### **Water Source Information**

The City of Sandy has three water sources. During the spring, fall and winter approximately 50% of the City's supply is purchased from the Portland Water Bureau. The remainder of our supply comes from Brownell Springs and Alder Creek. During the summer, when demand increases each source provides approximately one-third of the total supply.

#### **Definitions Useful in Interpreting This Report**

*Disinfection By-products* - compounds formed by a reaction between the chlorine used to disinfect the water and any organic material remaining in the water or the piping system.

*None-Detected (ND)* - laboratory analysis indicates that the constituent is not present at or above the detection limit of the equipment and analysis method.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million

Parts per billion (ppb) – one part per billion

*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.

Maximum Contaminant Level - The "Maximum Allowed" (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. 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 70 years to have a one-in-a-million chance of having the described health effect.

*Maximum Contaminant Level Goal* - The "Goal" (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.

*Turbidity* - is the measure of "cloudiness" or suspended particles in water. Particles that create turbidity can provide a growth medium for bacteria and hinder the effectiveness of treatment methods and disinfection processes.

## The following table covers analyses of your drinking water performed in calendar year 2016 - January 1, 2016 through December 31, 2016.

Disinfection By-Products – (All Sources)										
CONTAMINANT		Al	AXIMUM MOUNT TECTED	MAXIMUM CONTAMINANT LEVEL (MCL)		MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)	SOURCE OF CONTAMINATION			
Total Trihalomethanes (TTHM) mg/l		0.653 mg/l		0.080 mg/l		N/A	Reaction between chlorine and organic matter in water			
Total Haloacetic Acids (HAA5) mg/l		0.0853 mg/l		0.060 mg/l		N/A	Reaction between chlorine and organic matter in water			
Lead and Copper – (All Sources)										
	MAXIN	AXIMUM MAXIMU		UM	MAXIMIM CONTAMINANT					

CONTAMINANT	MAXIMUM AMOUNT DETECTED	MAXIMUM CONTAMINANT LEVEL (MCL)	MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)	SOURCE OF CONTAMINATION
Lead	0.048 mg/l	0.015 mg/l	() mg/l	Corrosion of household plumbing
Copper	0.057 mg/l	1.35 mg/l	1.3 mg/l	Corrosion of household plumbing

Alder Creek Source							
CONTAMINANT	MAXIMUM AMOUNT DETECTED	MAXIMUM CONTAMINANT LEVEL (MCL)	MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)	SOURCE OF CONTAMINATION			
Turbidity*	0.94 NTU	0.3 NTU in 95% of samples; 1.0 NTU at any one time	< 0.3 NTU	Soil erosion and stream sediments			
Total Organic Carbon (TOC)	1.24 mg/l	N/A	N/A	Naturally present in the environment			
Alkalinity	22.0 mg/l	N/A	N/A	on vironinion			
<b>Brownell Springs</b>	Source						
Turbidity*	0.56 NTU	0.3 NTU in 95% of samples; 1.0 NTU at any one time	< 0.3 NTU	Soil erosion and stream sediments			
Alkalinity ppm	48.0 mg/l	N/A	N/A	Naturally present in the environment			
Portland Water B	Bureau Source						
Turbidity*	0.94 NTU	Cannot exceed 5 NTU more than 2 times in 12 months	N/A - Unfiltered Source	Soil erosion and stream sediments			
Nitrates ppm	0.16 mg/l	N/A	N/A				
Arsenic	0.84 ppb	10 ppb	0 ppb				
Barium	0.00938 mg/l	2 mg/l	2 mg/l	Naturally present in the			
Copper	Copper 0.00205 ppb		N/A	environment			
Fluoride	0.18 mg/l	4 mg/l	4 mg/l				
Lead	0.12 ppb	N/A	0 ppb				

<sup>\*</sup>Turbidity is monitored at all water sources on a round-the-clock basis in order to determine the effectiveness of treatment and to comply with regulatory requirements.

It is important to point out that the City monitors for many other contaminants than those listed in this table, (over 65 at each source in 2016). Only contaminants that are <u>detected</u> are listed in this table. In addition to these analyses, the City collects a minimum of eight samples every month from the distribution system, (the pipes that deliver water to your home) to test for coliform contamination.

#### Water Quality Violations

The City had three water quality violations in calendar year 2016. We exceeded the long term running annual average (LRAA) for Total Haleoacetic Acids, (HAA5) in the first and fourth quarter of 2016. We did not meet the minimum chlorine contact time requirement on one day in August at our Alder Creek source.

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.

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).