YOUR DRINKING WATER CONSUMER CONFIDENCE REPORT FOR CALENDAR YEAR 2018

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, mwalker@ci.sandy.or.us . 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 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
PicoCuries per liter (piC/l) – one trillionth of a Curie (a measure of the decay of Radium)
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.

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 visiting the Environmental Protection Agency's Safe Drinking Water Hotline site: https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline

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 site: https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline

The following tables summarize analyses of your drinking water performed in calendar year 2018 - January 1, 2018 through December 31, 2018.

Disinfection By-Products (Distribution System - All Sources)				
CONTAMINANT	**MAXIMUM AMOUNT DETECTED**	**MAXIMUM CONTAMINANT LEVEL (MCL)**	**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)**	**SOURCE OF CONTAMINATION**
Total Trihalomethanes (TTHM) mg/l	0.0394 mg/l	0.080 mg/l	N/A	Reaction between chlorine and organics in source water
Total Haloacetic Acids (HAA5) mg/l	0.0686 mg/l	0.060 mg/l	N/A	Reaction between chlorine and organic carbon in water

Lead and Copper (All Sources - detected in household plumbing)				
CONTAMINANT	**MAXIMUM AMOUNT DETECTED**	**MAXIMUM CONTAMINANT LEVEL (MCL)**	**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)**	**SOURCE OF CONTAMINATION**
Lead	0.189 mg/l	0.015 mg/l	0 mg/l	Corrosion of household plumbing
Copper	0.435 mg/l	1.35 mg/l	1.3 mg/l	Corrosion of household plumbing

Alder Creek Source (EP-A)				
CONTAMINANT	**MAXIMUM AMOUNT DETECTED**	**MAXIMUM CONTAMINANT LEVEL (MCL)**	**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)**	**SOURCE OF CONTAMINATION**
Turbidity*	0.31 NTU	0.3 NTU in 95% of samples; 1.0 NTU at any one time	< 0.3 NTU	Soil erosion and stream sediments
Nitrate	0.26 mg/l	10.0 mg/l	N/A	Naturally present in the environment
Total Organic Carbon (TOC)	1.15 mg/l	N/A	N/A	Naturally present in the environment
Alkalinity	27.0 mg/l	N/A	N/A	
Brownell Springs Source (EP-B)				
Turbidity*	0.21 NTU	0.3 NTU in 95% of samples; 1.0 NTU at any one time	< 0.3 NTU	Soil erosion and stream sediments
Portland Water Bureau Source (EP-C)				
Turbidity*	1.01 NTU	Cannot exceed 5 NTU more than 2 times in 12 months	N/A - Unfiltered Source	Soil erosion and stream sediments
Nitrate	0.45 mg/l	N/A	N/A	Naturally present in the environment
Arsenic (ppb)	1.31 ppb	10 ppb	0 ppb	
Barium	0.01240 mg/l	2 mg/l	2 mg/l	
Copper	0.00071 ppm	N/A	N/A	
Fluoride	0.150 mg/l	4 mg/l	4 mg/l	
Lead (ppb)	0.05 ppb	N/A	0 ppb	
Radon piC/l	50 piC/l	N/A	N/A	Found in Natural Deposits
Sodium (ppm)	3.3 ppm	N/A	N/A	Found in Natural Deposits

*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. When turbidity from the Portland source approaches 1 NTU we stop taking water from that source.

It is important to point out that we monitor for many contaminants other than those listed in this table, (over 133 from all sources in 2018). Only contaminants that are detected are listed in this table. In addition to these analyses, the City collects a minimum of ten 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 two water quality violations in calendar year 2018. We exceeded the long term running annual average (LRAA) for Total Haleoacetic Acids, (HAA5) at three sites in the 1st quarter of 2018 and at one site the 2nd quarter. The LRAA was below the limit at all sites in all subsequent quarters in 2018.