

# **Soos Creek Water and Sewer District**

## 2019 Water Quality Report

This publication is federally mandated in order to inform customers of the quality of their drinking water.

This report contains information and data for the year 2019

#### Where Does Our Water Come From?

Soos Creek Water and Sewer District (SCWSD) is proud to provide you with water that meets or exceeds all federal drinking water quality standards.

The Seattle Public Utilities (SPU) Cedar River Watershed supplies 100% of this high quality water. This surface water source is located in a remote and uninhabited area of the Cascade Mountains. Rain and snow runoff from the Cascades is held in lakes in the watershed. The Cedar River Watershed is publicly owned and SPU has an aggressive watershed plan to protect it. Agricultural and industrial activities are not allowed. Access to the watershed is restricted to appropriate staff and educational programs conducted by SPU staff.

This pristine water is screened, disinfected with chlorine, and fluoridated. A small amount of lime is also added to control corrosion to pipes. Ozonation (a form of oxygen used for dis-infection) improves taste, and ultraviolet light (UV) kills disease causing Giardia and Cryptosporidium in the water. The water is then piped and pumped into SCWSD reservoirs and distribution mains which brings the water to area homes and businesses.



## **Water Quality**

In order to ensure that tap water is safe to drink, the Dept. of Health (DOH) and the Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the WA State Dept. of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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 potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline (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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The Dept. of Health (DOH) conducted a source water assessment to determine potential contaminant sources. According to DOH, all surface waters in Washington are given a susceptibility rating of "high," regardless of whether contaminants have been detected or whether there are any sources of contaminants in the watershed. Information on the source water assessments is available from the DOH website, at <a href="http://www.doh.wa.gov/ehp/dw.default.htm">http://www.doh.wa.gov/ehp/dw.default.htm</a> Some potential natural sources of contamination include:

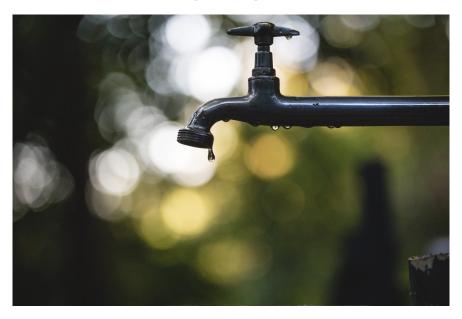
- · Microbial contaminants, such as viruses, bacteria, and protozoa from wildlife.
- · Inorganic contaminants, such as salts and metals, which are naturally occurring.
- · Organic contaminants, which result from chlorine combining with the naturally occurring organic matter.

#### **Water Supply Update**

As of June 9, 2020, Water consumption for the previous seven days averaged approximately 116 million gallons per day (mgd). That is lower than the 146 mgd consumed during the same period last year, and less than the average of 138 mgd used during the same period over the years 2010-2019.

Based on current conditions and forecasts, Seattle Public Utilities (SPU) anticipates the regional water system will have sufficient water supply for people and fish this summer. As always, SPU will continue to carefully monitor conditions daily and anticipate the return of the fall rains.

Using water wisely is something SPU and Soos Creek Water & Sewer District always asks its customers to do. For information about ways to save water, visit <a href="https://www.savingwater.org">www.savingwater.org</a>.



#### **Monitoring**

Seattle Public Utilities staff monitors the source water, treatment processes, and distribution system water quality 365 days a year. Different parameters are monitored and analyzed at varying frequencies - generally daily, monthly, quarterly, or annually, in accordance with Federal and State regulations. Some elements of the treatment process are monitored continuously. The data, contained in the tables below, reflect the 2019 compliance data for Seattle Public Utilities and Soos Creek Water and Sewer District. If sampling was not required in 2019, levels indicated are for the most recent monitoring conducted. Our 2019 routine water quality monitoring did not identify the presence of any contaminants at established levels of concern for the general consumers.

### **2019 Water Quality Data**

^ Results from SCWSD Stage 2 Disinfection Byproducts Routine Monitoring in 2019

#### \* SCWSD service area

|                       |       | EPA's Allowable<br>Limits |      | Levels in Cedar Water |            |                                      |  |  |
|-----------------------|-------|---------------------------|------|-----------------------|------------|--------------------------------------|--|--|
| Detected Compounds    | Units | MCLG                      | MCL  | Average               | Range      | Typical Sources                      |  |  |
| Raw Water             |       |                           |      |                       |            |                                      |  |  |
| Total Organic Carbon  | ppm   | NA                        | TT   | 0.5                   | 0.3 to 0.8 | Naturally present in the environment |  |  |
| Finished Water        |       |                           |      |                       |            |                                      |  |  |
| Turbidity             | NTU   | NA                        | TT   | 0.3                   | 0.2 to 1.8 | Soil runoff                          |  |  |
| Arsenic               | ppb   | 0                         | 10   | 0.4                   | 0.4 to 0.6 | Erosion of natural deposits          |  |  |
| Barium                | ppb   | 2000                      | 2000 | 1.6                   | 1.4 to 1.9 | Erosion of natural deposits          |  |  |
| Nitrate               | ppm   | 10                        | 10   | ND                    | One sam-   | Erosion of natural deposits          |  |  |
|                       |       |                           |      |                       | ple        | ·                                    |  |  |
| Chromium              | ppb   | 100                       | 100  | 0.27                  | 0.25 to    | Erosion of natural deposits          |  |  |
|                       |       |                           |      |                       | 0.33       |                                      |  |  |
| Fluoride              | ppm   | 4                         | 4    | 0.7                   | 0.6 to 0.8 | Water additive, which promotes       |  |  |
|                       |       |                           |      |                       |            | strong teeth                         |  |  |
| Coliform, Total       | %     | 0                         | 5%   | *0 of 840             | Samples    | Naturally present in the environment |  |  |
| Total Trihalomethanes | ppb   | NA                        | 80   | 34 ^                  | 19.4 to    |                                      |  |  |
|                       |       |                           |      |                       | 41.6 ^     | By-products of drinking water chlo-  |  |  |
| Haloacetic Acids(5)   | ppb   | NA                        | 60   | 32 ^                  | 18.6 to    | rination                             |  |  |
|                       |       |                           |      |                       | 40.2 ^     |                                      |  |  |
| Chlorine              | ppm   | MRDLG                     | MRDL | Average = 1.02*       |            | Water additive used to control mi-   |  |  |
|                       |       | =4                        | = 4  | Range = 0.10 to       |            | crobes                               |  |  |
|                       |       |                           |      | 1.68*                 |            |                                      |  |  |

#### Definitions

**MCLG:** Maximum Contaminant Level Goal - 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.

**MCL:** *Maximum Contaminant Level* - 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.

**MRDL:** *Maximum Residual Disinfectant Level* - 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.

**MRDLG:** *Maximum Residual Disinfectant Level Goal* - 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.

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

**NTU:** Nephelometric Turbidity Unit - Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2019 is 5 NTU for at least 95% of the samples in a month.

NA: Not Applicable
ND: Not Detected

**ppm**: 1 part per million = 1 mg/L = 1 milligram per liter

**ppb:** 1 part per billion = 1 ug/L = 1 microgram per liter

1 ppm =1000 ppb

#### **Lead and Copper 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. SCWSD 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>

| Lead and copper monitoring results (Cedar Water Supply Area) |      |        |               |                 |   |  |  |  |
|--|------|--------|---------------|-----------------|---|--|--|--|
| Parameter and  |      | Action |               | Homes Exceeding |   |  |  |  |
| Units  | MCLG | Level+ | 2018 Results* | Action Level    | Source                                  |  |  |  |
| Lead, ppb  | 0    | 15     | 1.6           | 0 of 50         | Corrosion of household plumbing systems |  |  |  |
| Copper, ppm  | 1.3  | 1.3    | 0.07          | 0 of 50         |   |  |  |  |

<sup>\* 90</sup>th Percentile: i.e. 90 percent of the samples were less than the values shown.

#### **Additional Sampling**

Soos Creek Water & Sewer District's Unregulated Contaminants Monitoring Rule 4 (UCMR4) Sampling Data

#### **Results**

UCMR4 data is reported to let you know about new contaminants that may be regulated in the future. The EPA requires us to monitor contaminants that do not have defined health-based standards. The EPA uses this information to determine the occurrence of contaminants in drinking water systems, which may lead to future regulations. The contaminants monitored were selected through a data-driven process that considered adverse health effects (potency and severity) and occurrence (prevalence and magnitude), but additional health information is needed to know whether the contaminants pose a health risk. For more information about the program, visit <a href="EPA's Website">EPA's Website</a> at <a href="https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule">https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule</a>

| Analyte                       | Range        | Average |
|-------------------------------|--------------|---------|
| Manganese, ppb                | 1.3 to 1.3   | 1.3     |
| Bromochloroacetic acid, ppb   | ND to 0.57   | 0.45    |
| Bromodichloroacetic acid, ppb | 0.75 to 0.86 | 0.80    |
| Dichloroacetic acid, ppb      | 4.2 to 10    | 8.33    |
| Tricloroacetic acid, ppb      | 10 to 14     | 12.63   |
| ND = No Detection             |              |         |

<sup>+</sup> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

#### **Regional Water Conservation Program**

The Saving Water Partnership (SWP) which is made up of Soos Creek Water & Sewer District (SCWSD) and 17 water utility partners, has set a ten-year conservation goal: keep the total average annual retail water use of SWP members under 110 mgd through 2028, despite forecasted population growth, by reducing per capita water use. For 2019, the Saving Water Partnership met the goal, using 94.0 mgd.

SCWSD purchased 1.4 billion gallons of water in 2019. Of this, approximately 37 million gallons was lost to distribution system leakage (DSL). Expressed as a percentage of water supplied to SCWSD's service area, the DSL loss rate was 2.6%.

The Washington State Department of Health's Water Use Efficiency Rule requires a 10% or less DSL based on a 3-year rolling average. SCWSD is in compliance with this standard.

#### **Highlights of the Regional Water Conservation Program in 2019**

In 2019, the Regional Water Conservation Program offered customers many ways to conserve, supported by the program website, 206-684-SAVE hotline, and Language Line.

The youth education program continues to be popular with teachers and students. The SWP conducted 525 inclassroom presentations, in all member service areas, for more than 12,500 K-12 grade students. Topics included water conservation, the water cycle, the salmon life cycle, and water-wise gardening.

The Savvy Gardener program grew in attendance, presenting 12 gardening classes hosted by several SWP members. Survey results from class participants show that of the 65 respondents, 52 started 86 new practices that expected to reduce water use in the landscape. The classes were designed to inspire, create, and maintain healthy, sustainable, water-efficient landscape.

The SWP doubled event outreach in 2019, providing materials to 26 community festivals and events attended by approximately 113,000 customers. Outreach in 2019 included a collaboration between SWP, ACT Theatre, and the 5<sup>th</sup> Avenue Theater to bring water conservation education to over 40,000 audience members of the musical Urin-Town, which incorporated water and sewer utilities in its storyline.

#### Rebates were available for:

- Single family residential customers: Premium 1.1 gpf (or less) toilets, and WaterSense Irrigation timers.
- Multifamily property owners: Premium 1.1 gpf (or less) toilets, and irrigation system upgrades.
- Business customers: Premium and WaterSense toilets and urinals, commercial laundry, food steamers, cooling and refrigeration systems, medical equipment, irrigation systems, process water improvements, and other water use technologies.

For more information, see the 2019 Regional Water Conservation Program Annual Report, available on-line at www.savingwater.org.

## **Conserving Water Helps Salmon**

Summer is here, and peak water use season – the time when rain stops and people use more water in their yards and gardens. It's especially important to conserve water in summer and fall, when stream flows are lowest. Please do your part to protect salmon and their freshwater habitat by using water wisely.

Visit <u>www.savingwater.org</u> for information on rebates, tips for using water wisely, videos on fixing leaks and efficient landscaping practices, and more.

