TIPS FOR USING WATER WISELY

Here are some great ways to use water wisely and keep your water bills as low as they can be:

Check for leaks and fix them as soon as you can – follow our step-by-step videos at www.savingwater.org or call 206-684-SAVE (7283) to learn more.

Get a $100 rebate for replacing old toilets with Premium toilets. The average home can save up to $200 on your water bills, depending on household size and existing toilets. Premium toilets use 1.1 gallons of water per flush (or less) compared to older toilets that use up to 5 gallons per flush. Not only do these toilets save water with every flush, they are proven to perform by independent laboratory testing.

Use less water in your garden by putting a thick layer of mulch around your plants.

Visit www.savingwater.org for gardening tips, videos and classes.

For advice in your garden: call the Garden Hotline at (206) 633-0224 or help@gardenhotline.org.

TELL US WHAT YOU THINK ABOUT USING WATER WISELY!

Go to www.savingwater.org and take our survey and enter to win a free home water and energy saving kit!

DO YOU HAVE A LEAK?

Here's what you can do to prevent or reduce leaks, which could save a lot of money on your water bill!

- ⇨ Replace worn toilet flappers.
- ⇨ Replace worn washers and gaskets in faucets, showerheads and hoses.
- ⇨ Keep an eye out for unusually damp or green patches in your yard - these could be a sign of an underground leak.
- ⇨ Check irrigation systems each spring for freeze damage and broken parts.

Visit www.savingwater.org or call 206-684-7283 for more ways to use water wisely.

CONSERVATION AND SALMON

The Saving Water Partnership (SWP), which is made up of KCWD90 and 18 water utility partners, has set a six-year conservation goal: "Reduce per capita use from current levels so that the SWP's total average annual retail water use is less than 105 million gallons per day (mgd) from 2013 through 2018 despite forecasted population growth." For 2018, the Saving Water Partnership met this goal, using 96.5 mgd.

Conserving Water Helps Salmon

May and June signal the start of summer, 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. Your actions can save money on your water bill and protect salmon and their freshwater habitat. And if you want to see salmon in the streams, look for the Salmon SEEson campaign this fall for the latest on when and where the fish will be. Thank you for using water wisely!

REQUIRED ADDITIONAL HEALTH INFORMATION

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) 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 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 Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791.

The sources of drinking water (both tap 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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

King County Water District No. 90

2019 WATER QUALITY REPORT

FOR THE YEAR 2018

OUR OFFICE IS LOCATED AT:
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PURPOSE OF THIS REPORT

King County Water District No. 90 (KCWD90) is committed to providing residents with a safe and reliable supply of high quality drinking water. Seattle Public Utility (SPU) and private laboratories test our water using sophisticated equipment and state of the art procedures. We are proud to report that the water provided by KCWD90 meets or exceeds established state and federal requirements for appearance, safety and water quality standards.

SYSTEM OVERVIEW

KCWD90 serves mostly residential area, east of Renton. KCWD90 purchases approximately 75% of its water from SPU's treated Cedar River Supply (chlorination, fluoridation, UV, and ozone). The remaining 25% of supply is produced from our own wells. Wellfield treatment includes disinfection, oxidation/filtration for manganese removal and fluoridation. The Washington Department of Health (DOH) has determined the District's Wellfield is rated as "low susceptibility" for contamination. This is due in part to the fact that the District's ground water source is in a confined aquifer.

In 2018, KCWD90 distributed 643 million gallons of water to its customers. Of this amount, approximately 9.36%, or about 60 million gallons, is considered "lost water" or Distribution System Leakage (DSL). Lost water is a combination of unseen leaks, under registering meters and/or possible water theft. The District takes pride in delivering you safe drinking water. To get that water to your homes the water needs to be treated, pumped, and stored for use. Then it needs to travel through 131 miles of water main to get to our customers. This is all done for less than a cost of a penny per gallon.

LEAD AND COPPER TESTING
KCWD90 2016 Lead and Copper Monitoring Results

Parameter and Units	MCLG	Action Level+	90th Percentile*	Homes Exceeding Action Level	Source
Lead, ppb	0	15	1.93	0 of 30	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.074	0 of 30	

* 90th Percentile: Out of every 10 homes sampled, 9 were at or below this level. + The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow. Next round of Lead and Copper Testing is scheduled for summer of 2019.

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. KCWD90 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 running 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 (800) 426-4791 or at http://www.epa.gov/safewater/lead. Lastly, remember that drinking water is typically only a minor contributor to overall exposure to lead. Other sources, including paint, soil, and food also contribute.

KCWD90 takes any potential lead exposure very seriously. Your water starts its journey as rainfall or snowpack with no detectable lead. Eventually, the water reaches your home or business through a pipe called a service line. Unlike some of the cities you may have heard about in the news, KCWD90 **does not** have any lead service lines. While lead levels in the District are generally considered safe, it is possible to find elevated levels of lead and copper in some home tap samples. These elevated levels usually come from corrosion of lead components in a home's plumbing. Corrosion is a chemical process that can release lead by eating away at the plumbing system. By treating our water, the District in conjunction with Seattle Public Utilities (SPU) successfully reduces corrosion. We purchase 75% of our water from SPU and 25% comes from our own wells. Both of these sources of water are lead free. In addition, the District benefits from the Corrosion Control Efforts of SPU.

Here is some of what SPU does to ensure the water system is less corrosive to lead plumbing:

- Developed a corrosion optimization program in 2003. This process reduces the potential for contaminants to leach into the water, which is possible in homes with lead solder.
- Continuously monitor water chemistry at all treatment facilities and collect routine samples throughout the distribution system to ensure it maintains water pH at a less-corrosive level.
- Monitor water quality indicators at distribution system locations and report results monthly to the Washington Department of Health (DOH).

DEFINITIONS

ACTION LEVEL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. Action levels apply to Lead and Copper testing.

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 2018 is 5 NTU.

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*

Water quality data for non-regulated parameters, such as pH, alkalinity, hardness, and conductivity, are provided on our website at http://www.seattle.gov/util/MyServices/Water/Water_Quality/WaterQualityAnalyses/index.htm

2018 RESULTS			EPA's Allowable Limits		Levels in Cedar Water		Levels in KCWD No.90 Wellfield Water		
	Detected Compounds	Units	MCLG	MCL	Average	Range	Average	Range	Typical Sources
Raw Water	Total Organic Carbon	ppm	NA	TT	0.9	0.4 to 2.1	N/A	N/A	Naturally present in the environment
Finished Water	Arsenic	ppb	0	10	0.4	0.4 to 0.6	N/A	N/A	Erosion of natural deposits
	Barium	ppb	2000	2000	1.5	1.3 to 1.6	N/A	N/A	Erosion of natural deposits
	Chlorine	ppm	MRDLG =4	MRDL = 4	Average = 1.04	Range = 0.51 to 1.66	1.15	.79 to 1.51	Water additive used to control microbes
	Chromium	ppb	100	100	0.27	0.25 to 0.33	N/A	N/A	Erosion of natural deposits
	Fluoride	ppm	4	4	0.7	0.4 to 0.8	0.69	0.10 to 0.83	Water additive, which promotes strong teeth
	Haloacetic Acids(5)	ppb	NA	60	N/A	N/A	24.9	22 to 25	By-products of drinking water chlorination
	Manganese	ppm	0.05	0.05	N/A	N/A	0.015	0.003 to 0.04	Naturally present in the environment
	Nitrate	ppm	10	10	ND	(one sample)	ND	(one sample)	Erosion of natural deposits
	Total Trihalomethanes	ppb	NA	80	N/A	N/A	23.6	20 to 26	By-products of drinking water chlorination
	Turbidity	NTU	NA	TT	0.3	0.2 to 2.3	N/A	N/A	Soil runoff

SENSITIVE PEOPLE

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, may be particularly at risk from infections. If there is concern, these people should seek advice about drinking water from their health care providers. EPA and the Center for Disease Control (CDC) provide guidelines on appropriate means to reduce the risk of infection by Cryptosporidium and other microbial contaminants. For this information please call the Safe Drinking Water Hotline (800) 426-4791.

In 2018, KCWD90 participated in the forth round of Unregulated Contaminant Monitoring Rule (UCMR-4). The 1996 Safe Drinking Water Act (SDWA) requires that once every five years the EPA issues a new list of unregulated contaminants to be monitored by public water systems. The UCMR-4 establishes 30 new chemical contaminants be monitored between 2018 and 2020. This monitoring provides a basis for FUTURE regulatory actions to protect public health. In 2018, KCWD90 tested water for Microcystins, Anatoxin –A and Cylindrospermopsin. All contaminants monitored are by products of Blue-Green Algae growth that can produce Cyanotoxins, such as those listed above. All tests came back "Not Detect" for these contaminants in 2018. For more information go to www.epa.gov