Water Quality

ANNUAL REPORT 2014

Kahler Glen
Golf and Ski Resort

Water quality is essential and Kahler Glen Water System takes pride in ensuring that our customers have the highest quality water possible.

Water Quality Report 2014

KAHLER GLEN WATER SYSTEM

WATER QUALITY DATA RESULTS

This report describes the quality of Kahler Glen drinking water, the source and the programs that protect our water quality. This publication complies with the federal law which requires community water systems to provide water quality information to customers every year. EPA prescribes regulations that limit the amount of certain contaminants in water provided by community water systems and the table on the following pages lists the contaminants which were found in the Kahler Glen Water System.

While most of the content is required by regulation, we have also included information that responds to typical questions customers ask about the system. We support the public's right to know the results of our water quality monitoring. We also recognize that a report dominated by technical information is not inviting reading to most people. We've made an effort to provide the information in a clear and useful format.

Safe drinking water is essential to our community. Providing safe drinking water is a complex business. For those of you who are not interested in all the details we provide; here is a summary:

WHERE DOES YOUR WATER COME FROM?

The Kahler Glen Water System is a groundwater source tapped by a well drilled over 125 feet deep. This source provides water to the community of Kahler Glen and is located near Lake Wenatchee. Kahler Glen has 2 pumping Stations that distributes water to 2 storage reservoirs. This source has an excellent water quality and quantity.

Kahler Glen Well Source

BACKFLOW PREVENTION & HAZARDS AT HOME

Kahler Glen water system works hard to protect your drinking water from contamination. This effort begins where your water is collected and continues through the entire distribution process.

How many times have you put a garden hose in a bucket of soapy water to wash the car, sprayed insecticide with a garden hose sprayer or attached a hand spray attachment to the kitchen faucet to wash your hair or the dog? These seemingly harmless actions create cross connections that could endanger the health and safety of you, your family and your neighbors.

The danger comes when the hose comes in contact with a harmful substance. If the pressure in the water main drops while the hose is submerged in contaminated water, then the water (and whatever is in it) could be siphoned back into your pipes and the drinking water supply. Water pressure drops are not uncommon. They can occur when hydrants are opened to fight fires or during repairs to a broken water main. Fortunately, you can install different types of backflow assemblies for protection. This will help prevent this occurrence from happening and keep your water safe from these contaminants.

SPECIAL INFORMATION AVAILABLE

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 contacting the Environmental Protection Agency (EPA). Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as people with cancer undergoing chemotherapy, those having received an organ transplant, individuals infected with HIV/AIDS or having other immune system disorders, as well as some elderly and infants, can be at particular risk for infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency (EPA)/Centers for Disease Control & Prevention (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) or EPA's Web site at http://www.epa.gov/safewater.

CONTAMINANTS THAT MAY BE PRESENT IN THE WATER BEFORE WE TREAT IT 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 storm water 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, urban storm water runoff and residential uses.

• Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems.

• Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

CUSTOMER VIEWS WELCOME

Kahler Glen Water System board members meet on 2nd Saturday every month, at the Kahler Glen athletic club building, at 10:00 a.m. These meetings are open to the public.

HOW HARD IS MY WATER?

Hard water has a high concentration of calcium and magnesium ions. These minerals are commonly present in all natural water sources. The water industry in general considers water with a hardness greater than 7 grains per gallon to be hard.

Some people soften their water as a personal preference but water does not have to be softened to make it safe or usable.

Kahler Glen's water hardness is: 40 mg/l or 2.34 grains

REDUCING WATER USAGE

Check all faucets for drips. Replace worn and leaking washers, gaskets, pipes or defective fixtures.

Check for leaks on outside faucets, and make sure the valve closes properly.

Check toilets for leaks—they are the most common! Check the overflow of the tank to make sure no water is running over (float level may be set too high) The flapper valve in the bottom of the tank is also a location of a possible leaking toilet. To check for a flapper valve leak, put a small amount of food coloring in the toilet tank after it has filled. Do not flush the toilet for at least an hour, or overnight if possible. If the food coloring shows up in the bowl without flushing, you probably have a leaking flapper or plunger ball valve.

Size of leak	Amount of water lost (Gallons)	
Diameter	Per day	Per year
1/16" 	822	300,030
1/8" 	2,850	1,040,250
1/4" 	11,400	4,161000
1/2" 	45,600	16,644,00

2014 WATER QUALITY DATA RESULTS

SUBSTANCE	HIGHEST LEVEL ALLOWED (MCL*)	HIGHEST LEVEL DETECTED	VIOLATION (YES / NO)	POTENTIAL SOURCES
REGULATED AT THE PUMPHOUSE				
Arsenic (ppb)	5	ND	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	0.026	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	0.19	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrite (ppm)	1	.07	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate (ppm)	10	0.08	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Iron (ppb)	300	9.7	No	Erosion of natural deposits
Sulfate (ppm)	250	1.0	No	Erosion of natural deposits; mine drainage wastes
Conductivity (umhos/cm 25 deg.)	700 umhos/cm 25 deg.	93 umhos/cm 25 deg.	No	Presence of ions; on their total concentration, mobility and on the temperature of measurement
Turbidity (NTU)	1	ND	No	Soil run-off
Total Dissolved Solid (ppm)	500	80	No	Matter suspended or dissolved in water
Hardness (mg/l)	Not Regulated	40 (mg/l)	Not Regulated	High concentration of calcium and magnesium ions.
Radium 228	5	.52	No	Erosion of natural deposits
Haloacetic Acids (HAA5) (ppb)	60	ND	No	By-product of drinking water chlorination
(TTHM) Total Trihalomethanes	80	ND	No	By-product of drinking water disinfection
Total Coliform	0 Positive Samples	0	No	Naturally present in the environment
REGULATED AT THE CUSTOMER'S TAP				
Copper (ppm)	(AL) 1.3	.48	No	Erosion of natural deposits; Leaching from wood and corrosion of household plumbing
Lead (ppb)	(AL) 15	.001	No	Corrosion of household plumbing systems; Erosion of natural deposits

DEFINITIONS:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ppm or mg/l: parts of contaminant per million parts of water or milligrams per liter.

ppb: parts of contaminant per billion parts of water or milligrams per liter.

Non-detect (ND): Means LESS than a number. It also indicates that the compound was not detected in the sample at or above the concentration indicates.

WATER CONSERVATION

In 2010, Kahler Glen developed water use efficiency goals to comply with Washington's Water Use Effi¬ciency Rule for the water system. To achieve these goals, the Kahler Glen water system has implemented several water use efficiency measures. These include programs such as installation of service water meters, Xeriscape (drought-tolerant) land¬scaping and future customer leak detection and notifica¬tion. Goals established for the Kahler Glen water system are summarized as follows:

1. Work on maintaining a 3-year residential average day demand at less than 350 gallons per connection per day. This goal should be able to be met once water meters are installed.
2. Reduce any distribution system leakage by 2015 with leak detection.