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# Annual Drinking Water Quality Report Kapowsin Water District

## 2019

Este informe contiene informacion muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuniquese con alguien que pueda traducir la informacion.



We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.



At Valley Water District we vigilantly safeguard and routinely monitor your drinking water. **This report is a snapshot of water quality monitoring for the period of January through December 2019.** In 2019, two of the homes sampled for copper exceeded drinking water standards. A change in source water or treatment may be required to correct the issue. (See the section labeled "Violations and Exceedances" below testing results chart for copper in this report for more details.)



The source for this system is a water collection system that gathers water from a series of natural surface water features located over 1 mile northwest of the Kapowsin system. The water is then gravity fed into a storage tank and eventually pumped through a filtration system. As the receiver of record, Pierce County continues to work toward obtaining a new water source and evaluating other options to ensure a clean, safe and reliable water system.



Employing water conservation strategies, taking steps to minimize the use of pesticides and fertilizers, and disposing of household chemicals properly are all ways that you can do your part to positively impact the quality of your drinking water. Please visit our office or log on to our website for great water saving tips and related information.



Read this report at your leisure. It is designed to help you understand how we continually strive to protect water resources, improve the water treatment process, and provide you with safe, dependable drinking water.

### How can I get involved?

The Kapowsin system is currently in receivership by Pierce County. Day to day operation of the water system is being conducted by Valley Water District. If you have questions about the information in this report or any concern regarding water quality and the services we deliver every day you may contact Valley Water District at 253-841-9698 or Pierce County at 253-798-6169.

Sean Vance, District Manager ~ Brian Thompson, Field Supervisor ~ Email: [service@valleywaterdistrict.com](mailto:service@valleywaterdistrict.com)

## Why are there contaminants in my drinking water?

The sources of drinking water (both tap water 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity such as the following:

**Microbial Contaminants**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic Contaminants**, such as salts and metals, 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** may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radioactive Contaminants** can be naturally occurring or be the result of oil and gas production and mining activities.

## Do I need to take special precautions?

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit 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 which must provide the same protection for public health.

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline at 800-426-4791.

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 and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 800-426-4791.

Visit [www.wateruseitwisely.com](http://www.wateruseitwisely.com) for great water saving tips!

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels.

Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

**2019 ~ Kapowsin Water System ~ 2019**

| Contaminants  | MCLG<br>or<br>MRDLG | MCL,<br>TT, or<br>MRDL | Your<br>Water | Range |      | Sample<br>Date | Violation | Typical Source  |
|---|---------------------|------------------------|---------------|-------|------|----------------|-----------|---|
|   |                     |                        |               | Low   | High |                |           |   |
| <b>Disinfectants &amp; Disinfection By-Products</b>   |                     |                        |               |       |      |                |           |   |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) |                     |                        |               |       |      |                |           |   |
| Haloacetic Acids (HAA5)<br>(ppb)  | NA                  | 60                     | 1             | NA    |      | 2018           | No        | By-product of drinking water chlorination   |
| TTHMs [Total<br>Trihalomethanes] (ppb)  | NA                  | 80                     | 4.57          | NA    |      | 2018           | No        | By-product of drinking water disinfection   |
| <b>Inorganic Contaminants</b>   |                     |                        |               |       |      |                |           |   |
| Asbestos (MFL)  | 7                   | 7                      | .117          | NA    |      | 2019           | No        | Decay of asbestos cement water remains;<br>Erosion of natural deposits                            |
| Nitrate [measured as<br>Nitrogen] (ppm)   | 10                  | 10                     | 3.8           | NA    |      | 2019           | No        | Runoff from fertilizer use; Leaching from<br>septic tanks, sewage; Erosion of natural<br>deposits |

| <b>Source Water Test Results</b> |              |               |           |                |   |
|----------------------------------|--------------|---------------|-----------|----------------|---|
| Contaminants                     | State<br>MCL | Your<br>Water | Violation | Sample<br>Year | Explanation and Comment   |
| Cyanide, Free                    | .2 mg/L      | .05 mg/L      | No        | 2018           | Cyanide is produced by the decomposition of some plants, can be present in some foods such as green almonds and improperly prepared cassava, and can be produced by some microorganisms.  |
| Nitrate                          | 10 mg/L      | 3.24 mg/L     | No        | 2018           | Nitrate is a chemical found in most fertilizers, manure, and liquid waste discharged from septic tanks. Natural bacteria in soil can convert nitrogen into nitrate. Rain or irrigation water can carry nitrate down through the soil into groundwater.  |
| Nitrite-N                        | 1 mg/L       | .1 mg/L       | No        | 2018           | Nitrites come from fertilizers through run-off water, sewage, and mineral deposits.   |
| Selenium                         | .05 mg/L     | .002 mg/L     | No        | 2018           | Selenium is a metal found in natural deposits as ores containing other elements. The greatest use of selenium compounds is in electronic and photocopier components, but they are also widely used in glass, pigments, rubber, metal alloys, textiles, petroleum, medical therapeutic agents, and photographic emulsions. |
| Sodium                           | 5 mg/L       | 6.64 mg/L     | No        | 2018           | Sodium is the sixth most abundant element on Earth and is widely distributed in soils, plants, water, and foods. Most of the world has significant deposits of sodium-containing minerals.  |
| Total Dissolved Solids           | 500 mg/L     | 160 mg/L      | No        | 2018           | Total dissolved solids (TDS) is a measure of the combined total of organic and inorganic substances contained in a liquid. This includes anything present in water other than the pure H2O molecules.   |
| Total Nitrate/Nitrite            | 10 mg/L      | 3.24 mg/L     | No        | 2018           | Nitrate-nitrogen in groundwater may result from point sources such as sewage disposal systems and livestock facilities, non-point sources such as fertilized cropland, parks, golf courses, lawns, and gardens, or naturally occurring sources of nitro   |

| Contaminants                                 | MCLG | AL  | Your Water | Sample Date | # Samples Exceeding AL | Exceeds AL | Typical Source  |
|--|------|-----|------------|-------------|------------------------|------------|---|
| <b>Inorganic Contaminants</b>                |      |     |            |             |                        |            |   |
| Copper - action level at consumer taps (ppm) | 1.3  | 1.3 | 1.46       | 2019        | 2                      | Yes        | Corrosion of household plumbing systems;<br>Erosion of natural deposits |
| Lead - action level at consumer taps (ppb)   | 0    | 15  | 1          | 2019        | 0                      | No         | Corrosion of household plumbing systems;<br>Erosion of natural deposits |

| Violations and Exceedances   |
|--|
| <p><b>Copper - action level at consumer taps</b></p> <p>Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. Lead and Copper samples are required to be collected every 3 years. The most recent round of samples was gathered in October 2019. The results of the samples indicated a slightly elevated level of copper. After examining data from copper samples gathered in years past there was sufficient evidence to indicate that elevated copper has been an ongoing issue and not unique to this sample set. It was determined that the best long term solution is to seek an alternate source of water rather than adding additional treatment to the existing water source. <b>Pierce County is currently working with an engineering firm to design a new groundwater source for the Kapowsin system.</b></p> |

| Unit Descriptions                    |  |
|--------------------------------------|--|
| Term                                 | Definition   |
| MFL                                  | million fibers per liter, used to measure asbestos concentration   |
| NA                                   | Not Applicable   |
| ND                                   | Not Detected   |
| NR                                   | Monitoring not required; but recommended   |
| ppb                                  | parts per billion, or micrograms per liter (µg/L)  |
| ppm                                  | parts per million, or milligrams per liter (mg/L)  |
| Important Drinking Water Definitions |  |
| Term                                 | Definition   |
| AL                                   | Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.  |
| 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.   |
| 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.   |
| MNR                                  | Monitored Not Regulated  |
| MPL                                  | State Assigned Maximum Permissible Level   |
| 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 Disinfection 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.   |
| Variations & Exemptions              | State or EPA permission not to meet an MCL or a treatment technique under certain conditions.  |

## Additional Information for Lead

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. Valley Water District 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- ◆ Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- ◆ Pick up after your pets.
- ◆ If you have your own septic system, properly maintain your system to reduce leaching to water sources.
- ◆ Dispose of chemicals properly; take used motor oil to a recycling center.
- ◆ Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.

## Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- ◆ Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- ◆ Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- ◆ Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- ◆ Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- ◆ Water plants only when necessary.
- ◆ Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- ◆ Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- ◆ Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- ◆ Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.