

Water Quality Data for City of Roy

The table below lists all the drinking water substances that were detected in your water. The presence of these substances in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1, 2017 – December 31, 2017.

Inorganic elements	MCL	MCLG	Your Water System	Sample Date	Violation	Typical Source of Contaminant
Nitrate (ppm)	10	10	2.7, <0.2	2017	No	Erosion of natural deposits.
Lead & Copper	AL⁵	In 2017, 10 Lead and Copper samples were taken and 0 samples exceed the AL				
Copper (ppm)	1.3	1.3	0.10	2017	No	Corrosion of household plumbing systems
Lead (ppb)	15	0	1	2017	No	
Disinfectant By-products	MCL	MCLG				
TTHMs (ppb) <i>Total trihalomethanes</i>	80	N/A	8.3	2017		By-product of drinking water disinfection.
HAA5 (ppb) <i>Total Haloacetic Acids</i>	60	N/A	3.2	2017		

Terms and Abbreviations used above:

- **Maximum Contaminant Level Goal (MCLG):** 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.
- **Maximum Contaminant Level (MCL):** 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.
- **Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **ppm:** parts per million or milligrams per liter **ppb:** parts per billion **N/A:** not available

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, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants*, which are naturally occurring.

In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children.

To help reduce potential exposure to lead, for any drinking water tap that has not been used for 6 hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline at 1-800-426-4791 or online at <http://www.epa.gov/safewater/lead>.

Backflow and Cross Connections

Definition of Backflow: The flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water supply (your local water system) from any source or sources other than the intended source. Back siphonage is the flowing back of used, contaminated, or polluted water from a plumbing fixture, irrigation system or vessel into a potable water supply due to a negative pressure in the supply piping.

Examples of Contamination from Cross-connections:

- In 1993, an Oregon homeowner installed an irrigation system using water pumped from a decorative pond in an area near an old septic drain field. When the pond's pump failed, the homeowner connected a hose from the home's drinking water system to the irrigation piping. When the pump was brought back online, **it forced pond water through the hose connection, through the home, and into the city's potable water system.**
- In 1982, a Michigan resident was spraying his garden with pesticides using a common hose and sprayer attachment. While he was applying the pesticide, the public water system needed to shut down temporarily. The homeowner noticed a drop-in pressure and within a few moments, the pesticide disappeared from the container: **Back siphonage had drawn the pesticide into the hose, through the house plumbing, and into the public drinking water system.**

To Prevent Cross-connections and backflow incidents: Install atmospheric vacuum breakers (AVB) on all outside hose bibs. You can get AVB's at any hardware store with a cost around \$5.00 apiece, see example below.

Two ways to help keep your water safe from cross-connections:

1. Fill out a new cross-connection survey form you add anything to your system.
2. Send in your required annual test results for any backflow device you have installed on your irrigation system.



Atmospheric Vacuum Breaker (AVB)

