

Wylie Creek Estates Public Water System Consumer Confidence Report for 2020

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 a summary of last year's water quality. Its intent is to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Your drinking water quality meets all federal and state standards.

System Information

Your water system is regulated by the State of Montana as a community water system and is designated Public Water System (PWS) No. MT0003961. For questions or service problems, please contact Pete Adams at 406-580-1527 or call one of the HOA Board members. Water quality or service issues can also be brought to the HOA Board's attention at their regular monthly meeting. Please see the HOA web site for Board contact information and for meeting times and locations (<http://www.wyliecreekestates.com>).

Water Source

The Wylie Creek Estates PWS draws water from two wells. Both wells tap a semi-confined alluvial aquifer. These types of aquifers underlie much of the Gallatin Valley and generally produce high quality water.

The Wylie Creek Estates PWS wells are however potentially susceptible to being contaminated by several pollution sources including failing or overloaded septic systems and improper use or disposal of agricultural and household chemicals. A source water assessment report that provides more information is available on line at <http://deq.mt.gov/water/drinkingwater/sourcewater>

Water drawn from the wells is not filtered or treated in any manner before distribution.

Compliance with Drinking Water Regulations

Your drinking water quality meets all federal and state standards. No violations of any maximum contaminant levels or any other water quality standards occurred last year.

Water Quality Monitoring Results

The Wylie Creek Estates PWS follows a testing protocol established by the Montana Department of Environmental Quality (DEQ) to monitor the microbiological, chemical and radiological quality of the water supply. A listing of required tests and historical test results is available on line at <http://deq.mt.gov/water/drinkingwater/yourdrinkingwater> under the drinking water watch link

Results from the most recent water quality tests are summarized in Tables 1 and 2 below.

Educational Information

All sources of drinking water are subject to potential contamination from microbes, organic and inorganic chemicals or radioactive materials. 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 Safe Drinking Water Hotline (800-426-4791).

Drinking water sources for both tap water and bottled water may 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 materials and it can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in drinking water sources 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations also 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/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 (800-426-4791).

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. The Wylie Creek Estates community water system is responsible for providing high quality drinking water, but can not 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 the 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 your exposure is available for the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Regulation Definitions:

NSDWR: National Secondary Drinking Water Regulation is a non-mandatory water quality standard regarding contaminants that may cause cosmetic effects such as taste, odor or color

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water

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

Not-Detected (ND) - laboratory analysis indicates that the constituent is not present above reporting limits.

mg/L- milligram per liter, also equals one part per million (ppm)

ppb - one part per billion

pCi/L - picocuries per liter is a measure of the radioactivity in water

90th percentile – 90 percent of measured values are equal to or less than indicated value

**Table 1
Secondary Drinking Water Standards Test Results**

Contaminant	Last Tested	Result	NSDWR
pH	Oct. 2020	7.7	6.5-8.5
Calcium	Oct. 2020	77 mg/L	
Chloride	Oct. 2020	5 mg/L	250 mg/L
Fluoride	Oct. 2020	ND	2 mg/L
Iron	Oct. 2020	ND	0.3 mg/L
Magnesium	Oct. 2020	19 mg/L	
Manganese	Oct. 2020	not tested	0.05 mg/L
Potassium	Oct. 2020	6 mg/L	
Sodium	Oct. 2020	10 mg/L	<20 mg/L
Sulfate	Oct. 2020	20 mg/L	250 mg/L
Total Dissolved Solids	Oct. 2020	349 mg/L	500 mg/L
Zinc	Oct. 2020	not tested	5 mg/L
Alkalinity	Oct. 2020	263 mg/L	
Hardness	Oct. 2020	270 mg/L Or 15.8 grains/gal	

**Table 2
Primary Drinking Water Regulation Compliance**

Contaminant	Last Tested	Result	Violation	MCLG	MCL or Action Level	Likely Source
Total Coliform ¹⁾	monthly	Not detected	No	zero detects	1 detect/mo.	
Fecal Coliform ¹⁾	monthly	Not detected	No	zero detects	1 detect/mo.	
Nitrate & Nitrites	Oct. 2020	1.44 to 1.46 mg/L	No	10 mg/L N	>5 mg/L –action 10 mg/L –MCL	Runoff from fertilizer use; Leaks from septic tanks or sewage mains, leaching of septic drain fields
Copper – Range – 90 th percentile – # samples > action level	Sept. 2020	0.117 to 0.361 mg/L 0.268 mg/L 0	No	1.3 mg/L	1.3 mg/L	Corrosion of household plumbing and fixtures
Lead – Range – 90 th percentile – # samples > action level	Sept. 2017	ND to 0.003 mg/L 0.002 mg/L 0	No	0.0 mg/L	0.015 mg/L	Corrosion of household plumbing and fixtures
Inorganics • Fluoride • Arsenic • Barium • 8 other regulated elements	Oct. 2020	Not detected Not detected 0.09 mg/L Not detected	No No No No	4.0 mg/L 0.0 mg/L 2.0 mg/L Varies w/ contaminant	4.0 mg/L 0.01 mg/L 2.0 mg/L Varies w/ contaminant	Erosion of natural deposits Erosion of natural deposits Erosion of natural deposits
Volatile Organics ²⁾ • All regulated compounds	Oct. 2020	Not detected	No	Varies w/ contaminant	Varies w/ contaminant	
Synthetic Organics ²⁾ • All regulated compounds	Oct. 2019	Not detected	No	Varies w/ contaminant	Varies w/ contaminant	
Radiological • Radium 226 & 228 ³⁾ • Uranium ³⁾ • Gross alpha ³⁾ • Radon ⁴⁾	Dec. 2015 Dec. 2015 Dec. 2015 Mar. 2001	0.8 to 0.9 pCi/L 0.006 mg/L 3.4 to 3.5 pCi/L 909 pCi/L	No No No No	0 pCi/L 0 mg/L 0 pCi/L	5 pCi/L 0.03 mg/L 15 pCi/L Not regulated yet	Erosion of natural deposits Erosion of natural deposits Erosion of natural deposits Breakdown of naturally occurring uranium in ground

- 1) The presence of Total and Fecal coliform bacteria is tested for monthly. There were zero confirmed detections in 2019
- 2) A total of 101 different volatile and synthetic organic compounds are tested for. No contamination by any of these compounds was detected
- 3) Combined radium, uranium and gross alpha radiation were high enough to require monitoring every 6 years.
- 4) Radon levels in the water were high enough that indoor air tests to determine individual total radon exposure are recommended. Contact the Gallatin Co. Health Dept. for more information if desired.

