Quality on Tap Report 2017

Town of West Yellowstone – PWSID MT#0003136 - P.O. Box 1570 – West Yellowstone, MT 59758
(406) 646-7609 – jpatterson@townofwestyellowstone.com

Is my water safe?
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. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Last year, we conducted tests for over 80 contaminants. We only detected 11 of those contaminants, and found only 1 at a level higher than the EPA allows. As we informed you at the time, our water temporarily exceeded drinking water standards. (For more information see the section labeled Violations at the end of the report.)

Do I need to take special precautions?
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 (800-426-4791). 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 (800-426-4791).

Where does my water come from?
Our water source is groundwater from Whiskey Springs. It is one of the most pristine groundwater sources in the country. The spring is located five miles southwest of West Yellowstone. The water source is currently producing over 3000 gallons per minute and is gravity fed to a one million gallon storage tank. Whiskey Springs is without question "Quality on Tap".

Source water assessment and its availability
We have a source water protection plan that is available from our office providing more information, such as potential sources of contamination. This plan was completed in order to protect our pristine water supply from future contamination. It is available for viewing and input during normal office hours. We are pleased to report our drinking water meets federal and state requirements.

Why are there contaminants in my drinking water?
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 (800-426-4791). Our water source does contain fluoride and is monitored monthly and published annually in the local newspaper. The recommended level for drinking water is not to exceed 2 mg/L. Our water contains 2.19 – 3.60 mg/L and the maximum contaminant level set by the EPA is 4 mg/L.

How can I get involved?
This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact James Patterson at (406) 646-7609. We want our valued customers to be informed about their water utility.
If you want to learn more, please attend any of our regularly scheduled town council meetings. They are held on the first and third Tuesday each month at the Povah Community Center at 7 p.m.

Monitoring and reporting of compliance data violations
The Town of West Yellowstone received a Groundwater Rule Violation on June 19, 2017 for failure to monitor a trigger source sample for Total Coliform after 2 routine samples tested present for Total Coliform bacteria in May. A sample was collected from the source on May 17, 2017, but it was labelled as a routine sample. 2 trigger source samples were collected on July 20, 2017 to bring the system back into compliance.
The Town of West Yellowstone received a routine monitoring violation for failure to monitor Arsenic from the Railroad Well source during the April 1 through June 30, 2017 monitoring period. A sample was collected from the Well 2 Emergency Backup well for Arsenic on May 5, 2017, and this data was accepted by Montana DEQ to bring the system into compliance. The Railroad Well water source is not utilized at all times. Health effects are unknown.
The Town of West Yellowstone received a routine monitoring violation for failure to monitor the Railroad Well source for Arsenic during the July 1 through September 30, 2017 monitoring period. A sample was collected on November 9, 2017 to bring the system into compliance. Health affects for the late sampling are unknown.
The Town of West Yellowstone received a routine monitoring violation for failure to monitor Gross Alpha, Combined Radiums, and Regulated SOC's from the Well 2 Emergency Backup well during the July 1 through September 30, 2017 monitoring period. This well was only activated temporarily, and is currently inactive. Samples were collected on November 9 to bring the system into

compliance. Health effects of the late sampling are unknown.
The Town of West Yellowstone received a Groundwater Rule Violation on December 15, 2017 for failure to monitor a trigger source sample for Total Coliform after 1 routine sample tested present for Total Coliform bacteria in November. 4 trigger source samples were collected on January 4, 2018 to bring the system back into compliance.
On July 20, 2017 the Town of West Yellowstone received a violation for failure to send a copy of the 2016 Consumer Confidence Report with verification of distribution to consumers to the Montana DEQ by the July 1 deadline. A copy of the CCR along with verification of distribution to consumers was sent to Montana DEQ after the July 1 deadline. Compliance for this violation was achieved on August 3, 2017.

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. Town of West Yellowstone 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 or at http://www.epa.gov/safewater/lead.

Additional Information for Arsenic
While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the period of January 1st to December 31st, 2017. The presence of contaminants 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 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 change frequently.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Inorganic Contaminants								
Antimony (ppb)	6	6	.378	NA	NA	2017	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic (ppb)	0	10	2.79	1.82	2.79	2017	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	.00101	NA	NA	2016	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	3.60	2.19	3.60	2017	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	.179	.110	.179	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	2.59	2.59	2.59	2016	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Microbiological Contaminants								
Total Coliform (TCR) (positive samples/month)	0	1	7	NA	NA	2017	Yes	Naturally present in the environment
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	1.8	NA	NA	2017	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	2.8	NA	NA	2017	No	Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	.258	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Lead - action level at consumer taps (ppb)	0	15	3.00	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Violations and Exceedances

Total Coliform (TCR)

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

In May 2017, 2 of the 10 routine monthly Total Coliform samples tested present for Total Coliform, but Absent for E.Coli. On May 11, 2 repeat samples were collected for Total Coliform and were absent for Total Coliform and E. Coli. A Level II Assessment was performed on May 11 with personnel from the Montana DEQ to identify any sanitary defects within the system. On May 17 one Well Source sample was collected for Total Coliform and tested absent for Total Coliform and E. Coli.

In August 2017, 2 of the 10 routine monthly Total Coliform samples and 1 routine Well Source sample tested present for Total Coliform, but Absent for E.Coli. On August 14, 3 repeat samples were collected and 1 tested present for Total Coliform, but absent for E. Coli. On August 15, 4 repeat samples and 2 trigger source samples were collected for Total Coliform. 2 of the repeat samples tested present for Total Coliform, but absent for E. Coli. On August 15, a Level II Assessment was performed with personnel from Montana DEQ to identify any potential sanitary defects within the system. On August 22, 3 repeat samples and 3 trigger source samples were collected for Total Coliform, and 1 trigger source sample tested present for Total Coliform, but absent for E. Coli.

In November 2017, 1 of the 10 routine monthly Total Coliform samples tested present for Total Coliform, but absent for E. Coli. On December 4, 3 repeat samples were collected in response to the November present Total Coliform sample. All 3 repeat samples were absent for Total Coliform and E. Coli.

In December 2017, 1 of the 10 routine monthly Total Coliform samples tested present for Total Coliform, but absent for E. Coli. On December 26, 3 repeat samples were collected and 1 tested present for Total Coliform, but absent for E. Coli. 2 source samples were collected with the routine samples on December 13 and were absent for Total Coliform and E. Coli.

Unit Descriptions

Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions

Term	Definition
MCLG	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	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	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.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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