

2016 Consumer Confidence Report

Water System Name: White Rocks Water System

Report Date: 06/8/2017

The Environmental Protection Agency (EPA) mandates that every water system serving at least 15 homes provide its consumers with an annual report on the quality of the water it serves. The purpose of the report is to alert consumers of potential health concerns and allow them to make informed choices regarding the water that they consume. The tables included in this report summarize results of drinking water testing performed between January 1, 2015 and December 31, 2015. Some of the results are from previous years because we are required to monitor for certain contaminants less than once per year.

Type of water source: Groundwater

Name & Location of sources: White Rocks Springs

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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.

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, that 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 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, the US Environmental Protection Agency (USEPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.

Tables 1, 2, and 3 list the drinking water contaminants that were detected during the most recent sampling for the constituent. We are pleased to inform you that no contaminants were above the Maximum Contaminant Levels (MCLs) set by the USEPA. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. We are required to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old. **Table 4 list the violations. We are working very hard to ensure no further violations or failure to monitor violations occur in 2016.**

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	None Detected	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0 results showed detection	No Detects - 2016	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	Year Sampled	90th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead	2015	3ppb	0	15 ppb	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper	2015	0.806 ppb	0	1.3 ppm	1,3ppm	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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. White Rocks Water System personnel are 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 drinking 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>.

** Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided below.*

TABLE 3 - REGULATED SUBSTANCES

Chemical or Constituent	Sample Year	Level Detected	Range	MCL	MCLG	Typical Source of Contaminant
Chlorine	2016	1	1-1	4 ppm	MRDL=4	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2011	1.3 ppb	1.3 - 1.3	60 ppb	n/a	Byproduct of drinking water disinfection.
TTHMs (Total Trihalomethanes)	2011	3.5 ppb	3.5 - 3.5	80 ppb	n/a	Byproduct of drinking water disinfection.
Gross alpha excluding radon and uranium	2015	0.49 pCi/L		15 pCi/L	0	Erosion of natural deposits
Inorganic Contaminants	Sample Year	Level Detected	Range	MCL	MCLG	Typical Source of Contaminant
Antimony	2014	3 ppb	3-3	6 ppb	6 ppb	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Asbestos	2015	0.2	0.2-0.2	7 MFL	7 MFL	Decay of asbestos cement water mains; Erosion of natural deposits.
Barium	2014	0.00013898 ppb		0.002 ppb	0.002 ppb	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	2009	0.171 ppm		4 ppm	4 ppm	Water additive which promotes strong teeth. Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2016	0.629 ppm	0.629-0.629	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	2014	1 ppb		50 ppb	50 ppb	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines.
Radium 228	2014	0.62 pCi/L		5 pCi/L	0	Erosion of natural deposits.

TABLE 4 - VIOLATIONS

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the the water delivered by the systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR REPORT	07/01/2013	06/30/2016	We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes
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Ground Water Rule			
The Ground Water Rule specifies the appropriate use of disinfection while addressing other components of ground water systems to ensure public health protection.			
Violation Type	Violation Begin	Violation End	Violation Explanation
FAILURE TO CONSULT, GWR	01/12/2014	2016	We failed to properly consult with our regulator about correcting a significant deficiency or positive source water sample in our water system.

Haloacetic Acids (HAA5)*			
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	08/01/2015	09/30/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Total Trihalomethanes (TTHM)			
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	08/01/2015	07/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the

Lead and Copper Rule*			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	1/01/2015	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2016	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

TERMS USED IN THIS REPORT:

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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 are set by the U.S. Environmental Protection Agency (USEPA).

Maximum residual disinfectant level or MRDL: 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.

Primary Drinking Water Standards (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water

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

Maximum residual disinfectant level goal or MRDLG:

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLs do not reflect the benefits of the use of disinfectants to control microbial contaminants

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided below.*

- The Environmental Protection Agency performs a sanitary survey at our water system every three years. A sanitary survey is defined as "an onsite inspection of the water source, facilities, equipment, operation, and maintenance of a public water system." In 2016, significant deficiencies were identified in our water system. Significant deficiencies, include, but are not limited to, defects in the design, operation, or maintenance, or a failure or malfunction of the water sources, treatment, storage, or distribution system that EPA determines to be causing or have the potential for causing the introduction of contamination into the water delivered to consumers. The following deficiencies were identified:
 1. Source of possible contamination in immediate area of spring SP101 which can impact water quality. During the current sanitary survey, livestock manure was observed in the vicinity of the Whiterocks spring SP101 area and manholes; this can potentially impact the water quality. Also, following the 2013 sanitary survey, inspections of the Whiterocks and Uriah Heeps spring systems were conducted by Indian Health Service and Ute Tribe utility representatives in May of 2014. This was in response to the significant deficiency citing unknown integrity of the spring collection system. The Report from these inspections was sent to EPA via email from Indian Health Service (see enclosed report entitled "A Summary of Follow-Up Inspections of the Whiterocks Water System (PWSID 084990003) and Uriah Heeps Water System (PWSID 084990002)"). As stated in this document: "There was evidence of livestock within the springs area. Recommend more secure fencing and gate to insure livestock remains a minimum of 100' from the collection laterals". Secure fencing is needed around the Whiterocks spring SP101 collection area to minimize livestock grazing from within at least 100 feet of the collection laterals and manholes.
 2. No emergency response plan (ERP). The Emergency Response Plan (ERP) must detail emergency operations procedures for possible foreseeable emergencies such as power outage, loss of water, equipment failure, development of unsafe conditions, and other emergency conditions. Templates, including instructions, for developing ERPs may be found on the USEPA Region 8 Drinking Water Online website: <http://www2.epa.gov/region8-waterops/reporting-forms-and-instructions-reporting-forms>. Select the "Emergency Response Plan Templates" link on the main page.

An emergency response plan for small Community Water Systems must be completed and a copy provided to the EPA.

UNCORRECTED SIGNIFICANT DEFICIENCIES FROM PRIOR SANITARY SURVEY

The following items were cited as significant deficiencies during the sanitary survey conducted on **June 19, 2013** and have not been corrected. Failure to correct these significant deficiencies is a violation of the National Primary Drinking Water Regulations at 40 CFR §141.404(a)(2); they must be corrected as soon as possible.

3. No certified operator at appropriate level. Certified drinking water operators are essential to providing safe drinking water and protecting public health of tribal communities. Regulations promulgated under the Safe Drinking Water Act require that public water systems be operated by qualified personnel. EPA Region 8 requires all community water systems and non-transient non-community water systems to have, or agree to obtain, a certified operator. The Whiterocks Water System has been classified as a Water Treatment Class 1 and Water Distribution Class 1 system. No operator employed by the system holds a current Water Treatment or Distribution certificate at these levels. Operators can be certified under any EPA approved program, which includes the EPA National Tribal Drinking Water Operator Certification Program and State operator certification programs. More Information about the EPA program can be found at <http://www2.epa.gov/region8waterops/training-and-certification-home>. To address this significant deficiency, submittal of an EPA-approved program's certificate or other documentation will be required to demonstrate that the operator has achieved the appropriate level of certification (Water Treatment 1 and Water Distribution 1). Alternatively, the system could employ a certified contract operator; documentation will be required to show the contractual agreement and the contract operator's certification level.
4. Spring SP101 Sedimentation Basin access hatches improperly constructed. The access hatches for the sedimentation basin must be fitted with solid watertight covers; the covers must overlap the framed openings and extend down around the frame at least two inches. Rubber gaskets were installed since the last survey, but the access hatches did not have shoebox lids.
5. Spring collection manhole improvements are needed. (see photos #2 and #3) The previous significant deficiency of unknown integrity of the Whiterocks Spring collection laterals/access manholes was partially addressed by submittal of the Inspection Report documenting inspections of the Whiterocks and Uriah Heeps spring systems, conducted by Indian Health Service and Ute Tribe utility representatives in May of 2014. The Report from these inspections was sent to EPA via email from Indian Health Service (see enclosed report entitled "A Summary of Follow-Up Inspections of the Whiterocks Water System (PWSID 084990003) and Uriah Heeps Water System (PWSID 084990002)"). As documented in that report and evidenced during the current sanitary survey, the manhole covers and manholes are still in need of repair. Additional repair work was identified in that report but not completed as of the date of this survey.
6. Gravity Tank ID: ST01 - White Rocks Storage Tank Unknown integrity of storage tank overflow and drain pipe. The sanitary surveyor was unable to evaluate the tank overflow and/or drain pipe, and the water system was not able to produce documentation of the condition of these components. The operators indicated that the overflow and drain combine below ground and discharge into a French Drain system. This underground French drain could not be located during the survey, and this design does not allow the operators to visually see overflow events, nor determine if the drain/overflow system is plugged. Structural integrity of the tank may be at risk if it cannot be drained or overflow properly. The system should evaluate modification of the exterior overflow pipe and the drain line to address this concern, as part of the corrective actions

discussed below.

Each item that could not be inspected during the sanitary survey must be inspected and the structure/condition must be compared to the enclosed Tech Tips for Drinking Water Storage Facilities (Drains and Overflows) to determine if corrective action is needed. Tank inspectors can be third-party professionals or appropriately trained in-house staff.

In order to correct this significant deficiency you must provide EPA with the following documentation:

- A completed copy of the Unknown Integrity Checklist.
- A copy of the inspection report. The inspection report must describe the condition of each specified tank component and include photographs.
- The date that any corrective actions needed to address deficiencies with the tank components will be completed. EPA will review the inspection report and may require additional corrective actions.

7. Whiterocks Spring is potentially ground water under the direct influence of surface water (GWUDISW).

The Surface Water Treatment Rule requires that each ground water source be assessed to determine if it is influenced by surface water. Surface water can contain pathogens from fecal material, including *Cryptosporidium*, *Giardia*, bacteria, and viruses. If a ground water source is determined to be ground water under the direct influence of surface water (GWUDISW), in order to continue using the source for drinking water, the system must either provide filtration and disinfection, or disinfect and meet the filtration avoidance criteria (40 CFR Section 141.70).

Therefore, please complete any required structural improvements to the Whiterocks spring system to minimize surface water intrusion, as identified by the Significant Deficiencies above, then complete the new round of a minimum of two raw water microscopic particulate analyses (MPAs) at the spring. The purpose of the MPAs is to verify whether surface water bio-indicators are present. The MPAs must be collected during at least two "wet seasons" during the time when the spring is most susceptible to surface water influence (typically when a heavy rain or snow event occurs in spring or fall). A third MPA may be required if the previous two MPA results come back at moderate risk. EPA representatives will assist you in the sampling and analysis.

If the final results of the MPAs indicate the system is not GWUDISW, the system will not be required to meet the Surface Water Treatment Rule requirements; however, the negative determination will be revisited during the next sanitary survey and/or when any technical assistance is provided to the facility, as conditions may change. If the final results of the MPAs indicate the system is GWUDISW, the system will be required to meet the Surface Water Treatment Rule requirements within 18 months of designation.

Alternatively, public water systems may also choose to properly abandon the spring as a source of drinking water and identify an alternative source of water, which may be either a protected groundwater source or a connection to another water system.

Consumer Confidence Reporting is the result of the 1996 Safe Drinking Water Act. EPA requires community water systems to prepare and provide to their customers annual reports on the quality of water delivered by their systems.

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 EPA's Safe Drinking Water Hotline: 1-800-426-4791.

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/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from:

This notice is being sent to you by White Rocks Water System. EPA Water System ID#: 084990003. Below is information included within this report or information that may be obtained by contacting our office at 435-722-5176.

More information about the hotline is available on the following web site – EPA.gov