RUTH WATER DISTRICT Consumer Confidence Report – 2023 Covering Calendar Year – 2022

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are continually being made to improve their water systems. To learn more, please attend any of the regularly scheduled meetings. For more information, please contact KURT CARSON at 775-235-7701.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from:

Source Name	Source Water Type					
We receive our water from an intertie with Ely Water						
System.	-					

We treat your water to remove several contaminants and we add disinfectant to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. For results of the source water assessment, please contact us.

Message from EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as those 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).

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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 before we treat it include:

<u>Microbial contaminants</u>, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. <u>Inorganic contaminants</u>, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

<u>Pesticides and herbicides</u> may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>*Radioactive contaminants*</u> can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial

processes and petroleum production, may also come from gas stations, urban storm water run-off, and septic systems.

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. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of 1 sample per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

Water Quality Data

The tables below list all the drinking water contaminants that were detected during the 2022 calendar year. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless noted, the data presented in this table is from testing done January 1- December 31, 2022. The state requires us 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, is more than one year old. The bottom line is that the water that is provided to you is safe.



<u>Maximum Contaminant Level Goal (MCLG)</u>: the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

<u>Maximum Contaminant Level (MCL)</u>: the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

<u>Action Level (AL)</u>: the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

<u>**Treatment Technique (TT)</u>**: a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.</u>

<u>Maximum Residual Disinfectant Level (MRDL</u>): 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Non-Detects (ND): laboratory analysis indicates that the constituent is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.

<u>Millirems per Year (mrem/yr)</u>: measure of radiation absorbed by the body.

<u>Million Fibers per Liter (MFL)</u>: million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

<u>Nephelometric Turbidity Unit (NTU)</u>: nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Water Quality Data Testing Results for RUTH WATER DISTRICT

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of March, 1	Treatment Technique Trigger	0	Naturally present in the
	sample(s) returned as positive			environment

Disinfection By-Products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
TTHM	2022	8	3.47-7.57	ppb	80	0	By-product of drinking water
							chlorination

Lead and Copper	Date	90 ^{тн} Ре	ercentile	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2022	0.086	0-0.13	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
LEAD	2022	2	0-2.4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	7/7/2022	3.1	3.1	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
BARIUM	5/12/2022	0.098	0.098	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
DI(2-ETHYLHEXYL) PHTHALATE	3/10/2022	1.8	0 - 1.8	ppb	6	0	Discharge from rubber and chemical factories
NITRATE	5/12/2022	3.9	0.34 - 3.9	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
NITRATE-NITRITE	5/12/2022	3.9	1.8 - 3.9	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
PICLORAM	3/10/2022	0.32	0 - 0.32	ppb	500	500	Herbicide runoff

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	9/10/2020	0.7	0 - 0.7	pCi/L	5	0	Erosion of natural deposits
COMBINED URANIUM	11/8/2018	2.4	0 - 2.4	μg/L	30	0	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U	10/8/2020	4	0 - 4	pCi/L	15	0	Decay of natural and man-made deposits
RADIUM-226	9/10/2020	0.7	0 - 0.7	pCi/L	5	0	Erosion of natural deposits

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
CHLORIDE	5/12/2022	32	15 - 32	MG/L	400		0
IRON	11/18/2022	1	0 - 1	MG/L	0.6		0
MAGNESIUM	5/12/2022	25	16 - 25	MG/L	150		0
PH	7/7/2022	8.15	7.51 - 8.15	PH	8.5		0
SODIUM	7/7/2022	15	6.4 - 15	MG/L	200	20	0
SULFATE	7/7/2022	30	30	MG/L	500	-	0
TDS	7/28/2022	400	210 - 400	MG/L	1000		0

Health Information About Water Quality

Your water meets the EPA's standard for Lead. If present at elevated levels, however, this contaminant 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. Your Water System 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 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.

Violations

During the 2022 calendar year, ELY MUNICIPAL WATER DEPARTMENT is required to include an explanation of the violation(s) in the table below and the steps taken to resolve the violation(s) with this report.

Туре	Category	Analyte	Compliance Period
State MCL Exceedance	SMCL	IRON	10/1/2022-12/31/2022

Health Information About the Above Violation(s)

The results of the analyses of water samples collected during the second half of 2022 indicate that iron was at or above the Secondary Maximum Contaminant Level (SMCL) of 0.6 mg/L. The detected concentration was 1.0 mg/L. Based on the sample results; the Bureau of Safe Drinking Water (BSDW) has issued a violation for exceedance of the SMCL for iron in the 4th quarter of 2022. Continued monitoring for this contaminant is required. Public notification and corrective action are also required.

Iron is mostly an aesthetic issue. Noticeable effects related to iron concentrations above the SMCL include rusty watercolor; sediment; metallic taste; and reddish or orange staining of plumbing fixtures. Gastrointestinal irritation, in some individuals, can be caused by high Iron levels.

Health Information About the Current Corrective Actions)

The Ruth water system is supplied by a single source, a pipeline that pumps water from Ely across a **mountainous access road and the Robinson Nevada Mine to the Ruth system and storage tank. The need for a** reliable permanent water source has been a finding from previous surveys and continues to be a significant issue for the town of Ruth. System staff, the contracted engineer, and BSDW staff discussed some possible options during the survey, but cost and reliability are questions with the alternatives discussed. In order to expand the mine pit, Robinson Nevada Mine drilled a well for the town of Ruth to provide the town with a permanent reliable source. The water quality from the well did not meet regulatory requirements so the project has been abandoned and the pipeline has been relocated so that Ruth may continue to receive drinking water. However, the system is still reliant solely on the pipeline. Under the current operating plan, three pumps that are owned by Ruth on the Ely side of the mountain must run continuously in winter to keep water from freezing in the pipeline. The pipeline is well maintained but some segments are old and lie near the ground surface. Most repairs and maintenance to the line require access permission from Robinson Nevada. Provide a plan to permanently resolve the need for a redundant source, giving activities and completion dates.