



CENTRAL UTAH WATER
CONSERVANCY DISTRICT

Ashley Valley Water Treatment Plant Consumer Confidence Report 2022



About Our Water Treatment Plant

The AVWTP is located on Doc's Bench Hill just north of Vernal and has the capacity to treat 20 million gallons of water per day. The plant produces its drinking water from a blend of Ashley Springs and Red Fleet Reservoir water. Waters from both sources are each unique and present their own challenges to treatment, however, the treatment processes and staff at the AVWTP are more than capable of producing high quality drinking water.



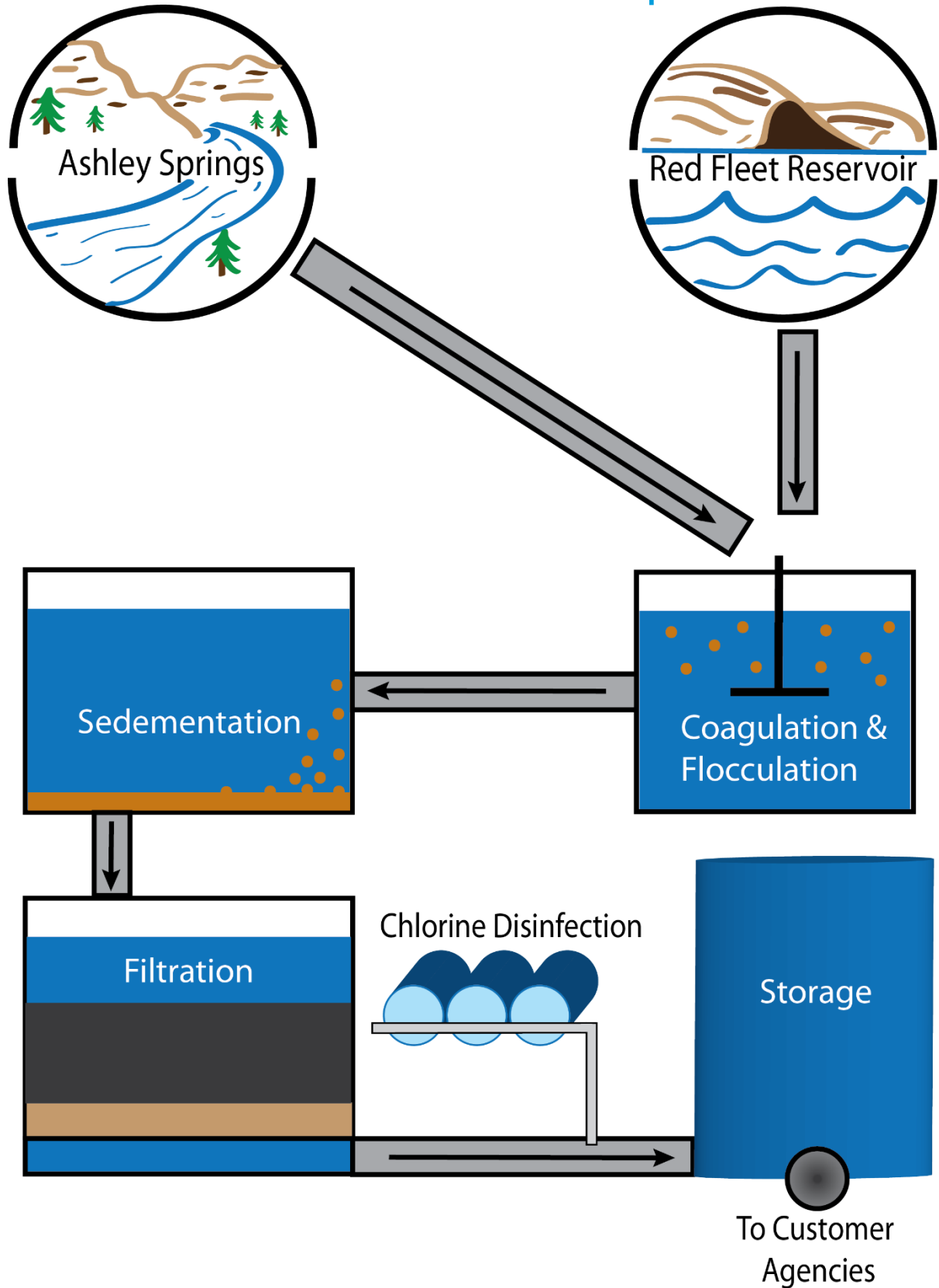
The treatment process begins with the addition of coagulants that capture impurities and neutralize their charge. After coagulation, the impurity-bound particles continue to combine, which form large particles—or floc—that are visible to the naked eye. Floc particles are then removed during the sedimentation process. After sedimentation, the water is filtered through anthracite and sand filters before it is sent to customer agencies for distribution. We chlorinate our water to inactivate viruses and bacteria that are present in raw water.

Our Customers

Uintah Water Conservancy District | Vernal City | Ashley Valley
Water & Sewer Improvement District | Jensen Water
Improvement District | Maeser Water Improvement District



Your Water from Source to Tap



Partnership for Safe Water

AVWTP is regulated by the Environmental Protection Agency (EPA) and the Utah Division of Drinking Water. Together, these agencies have established limits on the contaminants that may be present in drinking water. Here at the AVWTP, we take these rules and regulations very seriously. We routinely monitor for regulated as well as unregulated contaminants beyond requirement to ensure that we are delivering the safest drinking water possible. Additionally, we diligently monitor water quality in the watershed and are continually conducting our own research and development to ensure that our processes are optimized.

Because of our passion for water quality, we have joined together with other like-minded water utilities, both locally and nationally, to hold ourselves to a higher standard. Together, we set goals that are stricter than regulations and collaborate to achieve these goals.

On February 12, 1997, the AVWTP joined The Partnership for Safe Water, an alliance comprised of more than six drinking water organizations such as the AWWA and the USEPA and over 200 utilities. The goal of the Partnership for Safe Water is to implement voluntary programs of excellence and preserve public health by setting standards where regulation may not exist.

Additionally, the AVWTP is one of the founding members of the Utah Eastern Water Quality Alliance. Formed in 1998, this alliance is comprised of several utilities based in the Eastern region of Utah as well as members from the Utah Division of Drinking Water and State Department of Health. The goal of the alliance is to work with other like-minded utilities to hold ourselves to a higher standard than regulation—on a local level.

The Eastern Alliance meets quarterly to discuss process improvement projects, water quality issues, regulations, peer-mentoring, and other topics. We are proud to collaborate with this group in a setting that is unprecedented in any other state.



Watershed Protection

Watersheds are defined as geographical divisions which collect a unifying flow of both surface and groundwater into one basin, river, reservoir etc. The tributaries in the Ashley Valley provide water to the Colorado River Basin. Human activities within the watershed such as recreating, and mining can have an impact on water quality in the watershed.



We are actively partnering with other agencies and municipalities in the Ashley Valley to identify potential sources of contamination to Ashley Springs and Red Fleet Reservoir in order to better manage them. We have developed specific source water protection plans for both Ashley Springs and Red Fleet. They can be found on the following website:

<https://cuwcd.com/resources.html>

For any questions about the plan, please contact our Finished Water Quality and Treatment Manager:

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By Protecting our watershed, we are protecting our drinking water.



Message from the EPA

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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.

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 may 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, 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 and Center 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 Drinking Water Hotline (800.426.4791).



www.water.epa.gov

Safe Drinking Water Hotline
(800)-426-4791

AVWTP Finished Water

	UNITS	2022 AVERAGE	2022 RANGE	MONITORING CRITERIA		LIKELY SOURCE(S) / COMMENTS Unless noted otherwise, the data presented in this table are from testing conducted in 2022.
				MCL	MCLG	
MICROBIOLOGICAL						
Total Coliform	% positive per month	0	0	5%	0	Coliforms are naturally present in the environment; as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste.
<i>Escherichia coli</i> (<i>E. Coli</i>)	% positive per month	0	0	TT	TT	Fecal coliforms and E. coli only come from human and animal fecal waste.
Turbidity (surface water)	NTU	0.04	0.02-0.08	95% <0.3	NA	Naturally occurring and soil runoff
PESTICIDES/PCBs/SOCs						
All Parameters	µg/L	ND	ND	Varies	Varies	Various sources 2016 data
DISINFECTANTS/DISINFECTION BY-PRODUCTS						
Chlorine	mg/L	1.22	0.67-1.74	4	NE	Drinking water disinfectant.
Total TTHMs	µg/L	15.0	4.3-45.0	80	NE	By-product of drinking water disinfection.
HAA5s	µg/L	14.7	ND-51.8	60	NE	By-product of drinking water disinfection.
ORGANIC MATERIAL						
Total Organic Carbon	mg/L	1.57	0.47-3.16	TT	NE	Naturally occurring.
VOC						
Bromodichloromethane	µg/L	2.3	1.0-4.6	NE	0	By-product of drinking water disinfection.
Chloroform	µg/L	12.4	2.3-40.4	NE	70	By-product of drinking water disinfection.
Dibromochloromethane	µg/L	0.3	ND-1.1	NE	60	By-product of drinking water disinfection.
RADIOLOGICAL						
Alpha, gross	pCi/L	0.2	0.2	15	0	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation. 2019 data.
Radium 228	pCi/L	ND	ND	5	0	Erosion of natural deposits. 2019 data.

Beta, gross	pCi/L	ND	ND	50 (4 mrem/yr)	0	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation. 2019 data.
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	UNITS	2022 AVERAGE	2022 RANGE	MONITORING CRITERIA		LIKELY SOURCE(S) / COMENTS Unless noted otherwise, the data presented in this table are from testing conducted in 2022.
				MCL	MCLG	
PRIMARY INORGANICS						
Barium	µg/L	85	85	2000	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. 2019 data.
Selenium	µg/L	0.5	0.5	50	50	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines. 2019 data.
Nitrate	µg/L	ND	ND	10	10	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits.
SECONDARY INORGANICS						
pH		7.97	7.37-8.46	SS = 6.5- 8.5	NE	Naturally occurring.
Sulfate	mg/L	4	4	SS = 250	NE	Naturally occurring. 2019 data.
Total Dissolved Solids	mg/L	159	93-365	SS = 500	NE	Naturally occurring.
UNREGULATED PARAMETERS						
Alkalinity	mg/L	92	68-145	UR	NE	Naturally occurring.
Conductivity	µmhos/cm	241	130-492	UR	NE	Naturally occurring.
Total Hardness	mg/L	91	53-190	UR	NE	Naturally occurring.
	grains/ gallon	5.3	3.1-11.1	UR	NE	Naturally occurring.

Water Quality Data Acronyms

- **1/cm:** Reciprocal centimeters
- **AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.
- **CFU/100 mL:** Colony-forming units per 100 milliliters.
- **CU:** Color unit
- **EPA:** Environmental Protection Agency
- **FDA:** Food and Drug Administration
- **HAA5s:** Haloacetic acids.
- **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.
- **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.
- **MRDL (Maximum Residual Disinfectant Level):** The maximum residual allowable for chlorine added to drinking water for disinfection purposes.
- **mg/L:** milligrams per liter, or parts per million (like 1 minute in 2 years)
- **MPN/mL:** Most probable number per milliliter
- **NA:** Not applicable.
- **ND:** None detected.
- **NE:** None established.
- **ng/L:** Nanograms per liter, or parts per trillion (like 1 minute in 2 million years).
- **NTU (Nephelometric Turbidity Units):**
A measure of water clarity.
- **pCi/L:** Picocuries per liter.
- **Range:** Values shown are a range of measured values. Single values indicate a single measured value.
- **TT (Treatment Technique):** A required treatment process intended to reduce the level of a contaminant in drinking water.
- **TTHMs:** Total trihalomethanes.
- **TDS:** Total dissolved solids.
- **TOC:** Total organic carbon.
- **TON:** Threshold odor number.
- **TSS:** Total suspended solids.
- **µmhos/cm:** Microhms per centimeter.
- **µg/L:** Micrograms per liter, or parts per billion (like 1 minute in 2,000 years).
- **UR:** Unregulated at this time.
- **UV-254:** Ultraviolet light measured at a wavelength of 254 nm.

For More Information

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Photograph by Rob Hall

Other Resources



Division of Drinking Water
195 North 1950 West
Salt Lake City, Utah 84114
801-536-4200
www.drinkingwater.utah.gov



Safe Drinking Water Hotline
1-800-426-4791
www.water.epa.gov