



MOUNTAIN REGIONAL WATER
SPECIAL SERVICE DISTRICT

Quality - Reliability - Sustainability

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2018 WATER QUALITY REPORT

CONTACT US



Questions? We're here to help!

If you have questions on billing, service, water quality, or anything else, please reach out to us.

Monday-Friday, 8:30 a.m. to 5:00 p.m.
6421 North Business Park Loop Road, Suite A
Park City, UT 84098
435-940-1916

Board meetings are open to the public and are typically held on the second Thursday of the month at 6:00 p.m. For details and notice of the meetings, visit our website www.mtregional.org

2018 WATER QUALITY REPORT

We are happy to present to you our annual water quality report. The goal of this report is to provide you with information about where your water comes from, the quality of your water and our compliance with state and federal drinking water standards. It is also an opportunity to provide you with the most current and relevant information related to common water quality topics.

Mountain Regional Water is a pro-active and transparent public water utility, focused on quality, reliability, fiscal responsibility, customer service, and environmental sustainability. Providing safe and reliable water service to our customers that meet or exceed all state and federal requirements is our top priority.

CONSERVE H2O

NO WATERING ALLOWED

Between 10 AM and 6 PM

In our high elevation climate, it is not necessary to water every day. To preserve our precious water resources, the District does not allow for outside watering between the times of 10 AM and 6 PM. Furthermore, homes or businesses with odd numbered addresses are to water only on odd numbered days, and even numbered addresses water on even numbered days. During drought or water shortage conditions, you will be informed of further watering restrictions as necessary.



Water Festival Poster Contest Winner!
Ilyan Manriquez- 4th Grade
Soaring Wings Montessori School

1 Message from the GM



Dear Valued Customer,

All of us here at Mountain Regional Water are committed to providing the highest water quality and level of service possible to our customers. I hope the following report provides you with an improved understanding of your water and our efforts to ensure that it is safe for your use when it reaches your tap.

Since our formation in the year 2000, we have been committed to going above and beyond the minimum drinking water regulations set by the EPA and Utah's Division of Drinking Water. Our staff assisted in the formation of the Northern Utah Water Quality Alliance whose mission is to hold all participating entities to higher drinking water standards than mandated by regulation. Consistent with this mission, Mountain Regional Water employees are out in your neighborhoods on a daily basis performing water quality tests and gathering information so that we understand the fingerprint of your water at your tap and can ensure its safety.

We at Mountain Regional Water believe in what we do, we are stewards to this community and are your neighbors. If there is anything we can do to help you, please don't hesitate to contact us.

I wish you a very happy and healthy 2019.

Very respectfully,

A handwritten signature in blue ink, appearing to read "Scott Morrison".

Scott Morrison
General Manager



Where your Water Comes From

Nearly half of your drinking water originates from clean groundwater sources. The District pumps this water from wells and springs up into many storage tanks. The other half comes from surface water which is pumped from the Lost Canyon Intake* (Rockport Reservoir) on the Weber River and is then treated at our Signal Hill Water Treatment Plant located in Promontory. All of this clean water is stored to meet your peak day demands and emergency fire protection needs, and is then fed through over one hundred miles of pipelines to all of the District's customers. The peak day usage for the District in 2018 was 5.8 million gallons.

*The Lost Canyon Intake also delivers water to the Park City Municipal Quinns Junction Water Treatment Plant

Groundwater

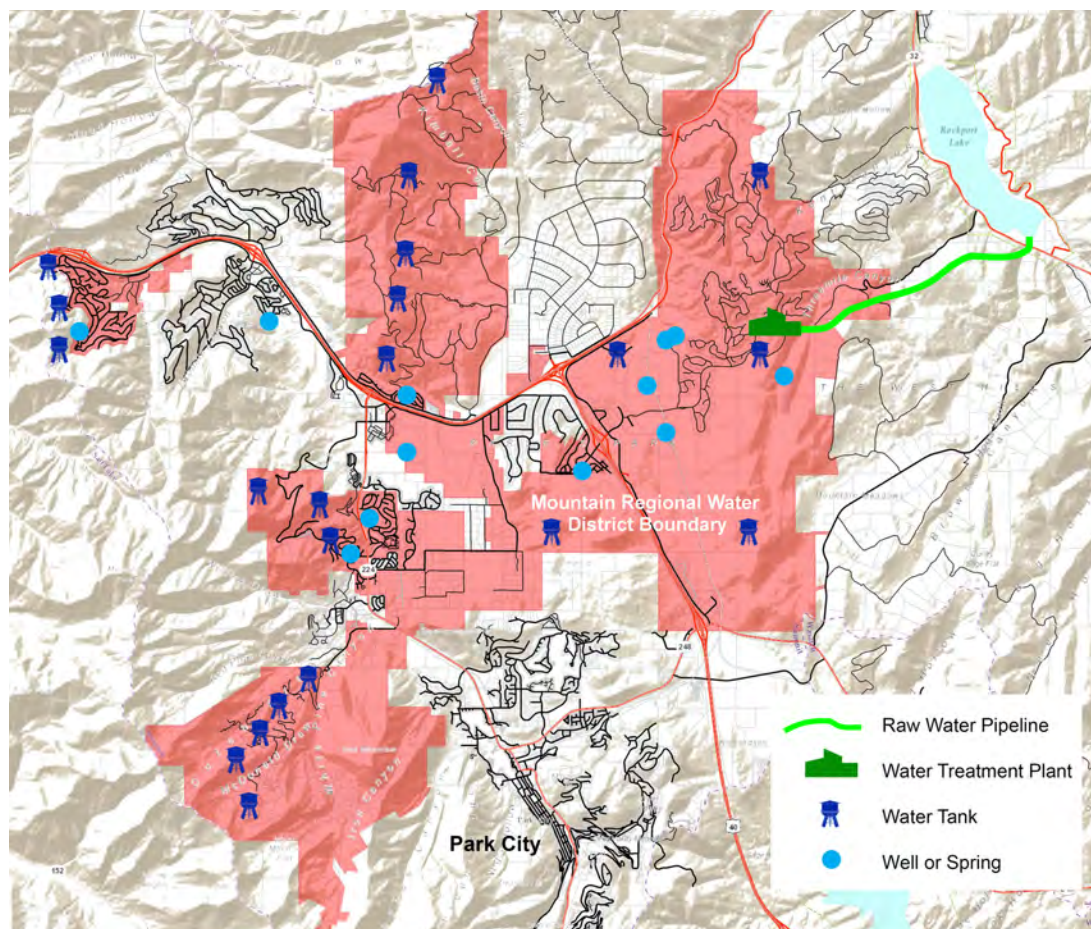
- Atkinson Well 2
- Jailhouse Well
- Silver Creek Well 10
- Starpoint Well 15B
- 3 Mile Well
- Blackhawk Well 2R
- Gorgoza Well 6
- Nugget Well
- Spring Creek Spring
- Silver Springs Well 1
- Summit Park Well 2
- Summit Park Well 7
- Bison Bluffs Well

Surface Water Treatment

The Signal Hill Treatment Plant treats surface water from the Weber River using chemical pre-treatment, microfiltration to physically remove surface water contaminants, granular activated carbon to control taste and odor, and disinfection to provide continuous treatment throughout our distribution system to your tap.

Local Water Systems

We have interconnections to neighboring public water systems where water is intermingled with Summit Water Distribution Company, Gorgoza Mutual Water Company, and Pine Meadow Mutual Water. We also have emergency interconnections with High Valley Water Company, Summit County Service Area #3, and Community Water Company. All of these connections offer redundancy and safety for water customers in the Snyderville Basin.



Source Protection

Source Protection Plans are available for your review upon request. They contain information about source protection zones, potential contamination sources, and management and protection strategies. Our sources have been determined to have a high level of protection from potential contamination sources such as horse pastures, septic tanks, chemical or fuel storage, pesticides, and potential hazardous material accidents.



Frequently Asked Questions About Our Water

What test results are included in this report?

Mountain Regional Water routinely monitors regulated and unregulated contaminants in drinking water. All monitoring data included in this report are from required testing in 2018. If a known, health-contaminant is not listed in this report, it was not detected in our water.

Do you add fluoride to the water?

No. We do not add fluoride to our water. Trace amounts of fluoride detected in our water listed in this report are from naturally occurring fluoride in our groundwater.

Do you add chlorine to the water?

Yes. The addition of chlorine is required for all systems serving filtered surface water and a detectable amount of chlorine residual must be detected in all points in the distribution system. It has been demonstrated that carrying a chlorine residual throughout your system protects against contamination, acting as a continual water treatment agent in our distribution process. Chlorine residuals are tested daily in our system.

Do you test for bacteria in the water?

Yes. We routinely test for bacteria throughout all service areas of our water system above and beyond what is required by state and federal regulations. We did not have any positive bacteriological samples in 2018.

How hard is my water?

Water hardness is tested throughout our system. The typical range is 15-25 grains per gallon of water, or an average of approximately 300 mg/l of hardness as CaCO₃, which is considered hard. Hard water is high in dissolved minerals, largely calcium and magnesium, and is common throughout Utah.

How can I get my water tested?

We ensure the water delivered to your meter meets state and federal drinking water standards. If you have water quality concerns at your home, please contact us for lab testing information.

ENSURING SAFE TAP WATER

Our Treatment Process

Mountain Regional Water's Signal Hill Treatment Plant is located in Promontory and treats water from the Lost Canyon intake on the Weber River. Water treatment is a complicated process that involves continuous oversight and monitoring to ensure that the water delivered to your tap is safe to drink. Our surface water treatment plant utilizes a multi-barrier approach and state-of-the-art water treatment technology to ensure it routinely meets and surpasses all Federal and State requirements.

Coagulation and Flocculation

Coagulation is a chemical process that includes the addition of coagulants to the water as it enters the plant. Coagulation allows the particulates to bind together and form larger particles. As these coagulated particles are gently mixed, they collide and clump together forming larger flocs, easing the removal through sedimentation and filtration.

Clarification (Sedimentation)

Water flows into the clarifier basin containing plate settlers. As water passes upward through the plates, solids and floc settle from the water and slide to the bottom of the basin, while the clean water passes out the top of the clarifier and is sent to the membrane filters for further particulate removal.

Microfiltration

Microfiltration is a physical filtration process where water is passed through the small pores of a membrane to separate microorganisms and suspended particles from the water. Microfiltration membranes present a physical means of separation and has proven effective at removing sediment, algae, large bacteria and protozoa such as Giardia.

Activated Carbon Filtration

Granular Activated Carbon Filtration is used to adsorb organic compounds, removing them from the water and improving taste and odor.

Disinfection

Disinfection is the final stage in our water treatment process. Chlorine is added to the water before it enters the distribution system and is effective at killing viruses, bacteria and even Giardia. It also provides continuous treatment as water is delivered throughout our system to your tap. We provide additional points of disinfection throughout our system to maintain an adequate residual for the continuous disinfection process.



Jar Testing



Pall Membrane Filters



Granular Activated Carbon



Chlorine Generation System

3 Protecting Water in your Home

HOW YOU AFFECT YOUR WATER QUALITY

Mountain Regional Water delivers water to your point of connection that is clean and safe, meeting and often surpassing all State and Federal requirements.

However, you can unintentionally cause contamination to your water in your home. Here are a few things you can do to ensure the clean, safe drinking water delivered by Mountain Regional Water is not impaired by your home plumbing system.



Filters and Purifiers

All types of water filters and purifiers in your home need to be properly maintained and monitored. Neglected devices may not work as intended, can become a home for microbial growth, or can shed filter material into your home's tap water. Even the filter in the door of your refrigerator needs to be properly maintained to avoid degrading your water quality.

Backflow Prevention Devices

Water entering your home is susceptible to backflow contamination, which means water from your plumbing system can reverse its flow back into the water distribution system. Hoses, sprinkler systems, and other water systems are all potential sources of backflow contamination. Backflow prevention devices should be installed on any potential hazard.

Water Softeners

Our water hardness can range from 15 to 25 grains per gallon. It is important to check the settings on your water softener to ensure you are treating your water properly. Excess salt from softeners is tough on your wallet and bad for down stream aquatic life and water users.

Water Heaters

It's important to monitor the temperature setting on your water heater to prevent a burn hazard. Also, water that is only lukewarm creates the perfect breeding ground for bacteria to grow. We recommend our customers follow current plumbing code and install expansion tanks on their water heaters to protect against pressure build up in your home plumbing system.

Unused Rooms and Properties

If you have a kitchen, bathroom or vacation home that rarely gets used, you should run water through the faucets on a frequent basis to prevent stagnant water in pipes and fixtures from forming microbial growth.



Annually, millions of gallons of water can pass through a backflow prevention assembly. Assemblies can be subjected to summer heat and freezing in winter. Water chemistry can affect the performance of an assembly, for example, hard water can form deposits on moving parts. Small debris, such as sand particles can foul check valves and prevent moving parts from operating correctly. Additionally, friction from moving water can wear components over time. For these reasons, backflow prevention assemblies must be tested and maintained to assure they will properly protect your drinking water. The backflow prevention assembly test only takes a few minutes and assures that each part of the assembly is operating correctly.

Frequently asked questions about our Backflow Program

Why do I have to test my backflow?

The CROSS CONNECTION CONTROL PROGRAM of UTAH along with Mountain Regional Water Rules and Regulations requires an annual test to ensure compliance with existing applicable minimum health and safety standards.

I tested my backflow, why do I keep receiving notices?

You will continue to receive notices until you submit a test report for the current year. Your backflow technician will provide you with a copy of the backflow test. You must submit your test to the Mountain Regional Water office.

How do I submit a test report?

Please email reports to: backflow@mtregional.org or mail to PO BOX 982320 Park City, UT 84098 you can also drop it off at our office. 6421 N. Business Park Loop Rd Suite A Park City, UT 84098

How do I find a certified backflow technician?

The Division of Drinking Water keeps a current list of certified backflow technicians. The link to the website is: https://deq.utah.gov/legacy/programs/drinking-water/backflow-program/docs/quarterly/backflow_technicians_by_city.pdf

Asking a neighbor or your HOA for recommendations and references is also a good idea.

We are here to help!

For further questions about our backflow program and backflow testing, please contact :



Stacy Blonquist
Backflow Administrator

Outstanding Service by a Water Operator
Award Winner 2018
Rural Water Association of Utah

Weber River E.Coli Monitoring for Enhanced Treatment of *Cryptosporidium*:

In compliance with EPA's Enhanced Surface Water Treatment Rule, Mountain Regional Water collected and analyzed raw water samples taken from the Weber River, before being treated at the Signal Hill Treatment Plant, for the presence of E.Coli from October 2017 through October 2018. The E.Coli annual mean of the untreated water was 154 E. Coli/100 ml. The removal of bacteria, such as E.Coli, from our drinking water is accomplished at our Signal Hill Treatment plant and verified through continuous distribution system sampling. We are currently in the next phase of compliance with this rule, which requires us to monitor for *Cryptosporidium* twice per month for 12 months.

We are committed to providing protection against *Cryptosporidium* and other microorganisms. Our treatment plant utilizes a multi-barrier approach consisting of pre-treatment, microfiltration, granular activated carbon filtration and disinfection. We currently meet EPA's requirements for removal of *Cryptosporidium* and welcome additional information on our source water quality, obtained through this testing, to further enhance our treatment process and improve protection.

Cryptosporidium is a naturally occurring, microscopic organism that may enter the lakes and rivers from the fecal matter of humans or domestic and wild animals. When healthy adults are exposed to *Cryptosporidium* through the food or water they ingest, it can cause diarrhea, fever, and stomach pains. For individuals with compromised immune systems, exposure to *Cryptosporidium* may pose a more serious health threat.



Signal Hill Treatment Plant

2018 Water Quality Results— we routinely monitor for contaminants in our drinking water in accordance with EPA and Utah's DDW. The following table shows the detected contaminants for the period of January 1st-December 31st, 2018, or the most recent testing that complies with the regulation.

Regulated Contaminant	Violation Y/N	Level Detected ND/ Low-High	Unit Measurement	Ideal Goal (MCLG/ MCLRD)	Max Allowed (MCL/ MCLR)	Year Sampled	Likely Source of Contamination
Regulated at the Source: Inorganics, metals, pesticides, radiological and volatile organic compounds							
Arsenic	N	.7—2.1	ppb	0	10	2018	Erosion of natural deposits and runoff from orchards
Barium	N	.092— .248	ppm	2	2	2018	Erosion of natural deposits; discharge of drilling wastes and metal refineries
Cyanide	N	ND—2	ppb	200	200	2018	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	N	.1— .2	ppm	4	4	2018	Erosion of natural deposits, water additive and discharge from fertilizer and aluminum factories
Nitrate	N	ND— .8	ppm	10	10	2018	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	ND— .6	ppb	50	50	2018	Discharge from petroleum and metal refineries; erosion of natural deposits
Sodium	N	11.2—15.3	ppm	n/a	n/a	2018	Erosion of natural deposits and run-off from road deicing
Sulfate	N	7—12	ppm	n/a	1,000	2018	Erosion of natural deposits; runoff from landfills and crops
TDS (Total Dissolved Solids)	N	172—224	ppm	n/a	2,000	2018	Erosion of natural deposits
Turbidity Groundwater	N	.16—3.8	NTU	n/a	5	2018	Soil runoff
Turbidity Filtered Surface Water	N	.002— .233	NTU	n/a	.3	2018	Soil runoff
Chloroform	N	ND— .7	ppb	n/a	n/a	2018	By-product of disinfection
Gross Alpha	N	ND—2.3	pCi/l	0	15	2018	Decay of natural and man-made deposits
Gross Beta	N	ND— 7	pCi/l	0	50	2018	Decay of natural and man-made deposits
Radium- 228	N	ND— .51	pCi/l	0	5	2018	Decay of natural and man-made deposits
Regulated in the Distribution System: Disinfection By-Products and Chlorine Residuals							
Total Trihalomethanes (TTHMs)	N	3.8—27.1	ppb	n/a	80	2018	By-product of disinfection
Total Haloacetic Acid (HAAs)	N	ND—26.3	ppb	n/a	60	2018	By-product of disinfection
Chlorine Residual	N	.1—1 .2	ppm	MRDLG=4	MRDL=4	2018	Water additive for controlling microbial growth
Regulated at the Customer's Tap: Lead and Copper							
Lead A. 90 th percentile B. # of homes that exceed AL	N	A. 3.1 B. 0	ppb	0	AL=15	2016	Corrosion of household plumbing.
Copper A. 90 th percentile B. # of homes that exceed AL	N	A. .224 B. 0	ppm	0	AL=1.3	2016	Corrosion of household plumbing.

Definitions and Abbreviations

Level Detected: For water systems that have multiple sources of water, the Utah DDW has given systems the option of listing test results in one table. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

MCLG: Maximum Contaminant Level Goal— The level of a contaminant in drinking water below which there is no known or expected health risks. MGLGs allow for a margin of safety.

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.

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.

MRDLG: Maximum residual disinfectant level goal— The level of a disinfectant in drinking water 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.

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

PPM: Parts per million or mg/l— one part per million corresponds to one minute in two years

PPB: Parts per billion or ug/l corresponds to one minute in 2,000 years

ND: Not detected

N/A: The measurement does not apply

NTU: Nephelometric Turbidity Unit— water clarity measurement

PCI/l: Picocuries per liter— radioactivity measurement



IMPORTANT HEALTH INFORMATION

All sources of 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.

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 from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline, (800) 426-4791, or <http://water.epa.gov/drink/hotline>.

LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead enters drinking water primarily from materials and components associated with service lines and home plumbing. Mountain Regional Water is committed to providing high quality drinking water but cannot control the variety of materials used in premise 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>

Mountain Regional Water tests water inside homes within its distribution system considered at risk for lead and copper contamination, per EPA requirements (results shown on page 7). Our water sources have no detectable amounts of lead or copper and we have no known lead service lines in our system. However, homes built before 1987 may have internal plumbing containing lead pipes or solder. Lead was banned from use on domestic plumbing in 1986. In 1996, the EPA expanded the regulation to include plumbing fixtures and fittings (endpoint devices). We routinely test water quality parameters to ensure that we fulfill our responsibility of delivering water to your tap that is not corrosive. If you are concerned about lead in your water, you may wish to have it tested.



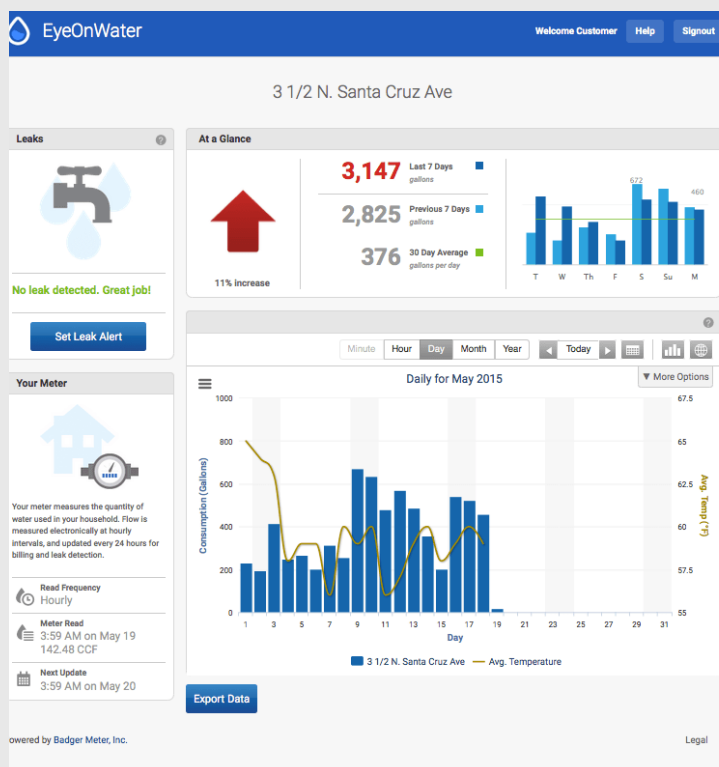
WATER METER IMPROVEMENTS

Mountain Regional Water

is delighted to announce that we are installing new water meters throughout the District. This will allow our customers to better monitor their water usage activity and receive valuable leak alert notifications. Connecting to the EyeOnWater portal will empower our customers with a greater understanding and control of the water that they use. The ability to reach the EyeOnWater portal is not just available to our customers on a monthly basis but on a daily, even hourly basis.

The data on EyeOnWater is updated daily with hourly or sub-hourly usage information and can be accessed whenever internet access is available. Check out your portal on a PC or through the EyeOnWater application on your mobile device.

How it can look for you:



We are happy to walk you through reaching your EyeOnWater portal. Call us anytime our office is open for business, Monday - Friday 8:30 am - 5:00 pm or visit our website at: www.mtregional.org/eye-on-water



Anna Peacock
Customer Service