2018 Water Quality Report

informing you about water quality

Inside This Report

This report includes details about our water sources, what they contain, and other important information about the water we provide to our customers. This report provides information of water quality from 2017

We strive to provide high-quality customer service, information and technical support to our customers. We take great pride, and are committed to ensure the the highest quality water that meets or exceeds federal and state water quality standards. We accomplish this by staying current with new regulations, standards, treatment technologies, process control equipment, and providing ongoing training and education for our staff.

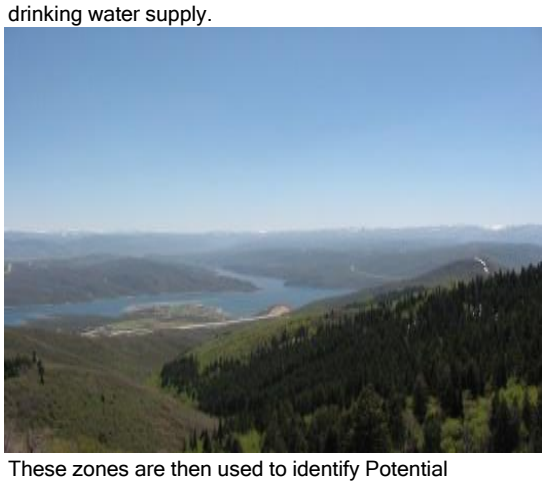
Where Your Water Comes From

The Jordanelle Special Service District services 1038 retail and 3 wholesale connections, for a total population served of 2388. Approximately 90 percent of the water delivered by the District comes from ground water that is conveyed through the Ontario No. 2 Drain Tunnel. This water is treated through the Keetley Water Treatment Plant.

The remaining 10 percent of water comes from ground-water sources located in deep underground aquifers. Wells located through-out the jordanelle basin pump water from these aquifers for delivery to your tap.

Source Protection

Jordanelle SSD provides water and sanitary sewer services to residents and developments around the Jordanelle Reservoir. Protection zones have been identified for the tunnel and wells in accordance with the State of Utah Drinking Water Regulations. These zones outline areas that contribute water to the drinking water supply.



These zones are then used to identify Potential Contamination Sources within zones.

Although the protection zones for the tunnel are large, potential contaminants within the zones are relatively minimal because the majority of the zones are covered by residential areas, Deer Valley Resort, and undeveloped areas. The identified potential contaminants include fuel storage, sewer systems, roads, and residential contaminants, such as pesticides and herbicides.

Management Strategies

Jordanelle has established several management strategies for the potential contaminants. These strategies include continual monitoring and clean up procedures. Jordanelle has also developed emergency procedures that would be taken if the drinking water source should become contaminated. These strategies have been prepared with the public health as the highest priority.

Health Information

The presence of contaminants does not necessarily indicate that water poses a health risk. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contam-inants. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water hotline at 1-800-426-4791. You may also visit their Web site at www.epa.gov/safewater.

Some people are more vulnerable to contaminants in drinking water than the general population. Immunocomp-romised individuals such as those undergoing chemother-apy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some elderly people and infants can be particularly at risk. These people should seek advice about drinking water from their health care provider.

District Board Meetings

Board meetings are scheduled the Second Tuesday of the month at 4:30pm (Some exceptions apply.) Board meet-ings will be held at the County Admin building, 25 N Main. The public is welcome. Please call the district office at (435) 654-9233 with any questions or comments regarding this report of the Jordanelle Special Service District.

Jordenelle Special Service District

Hours of operation are 7:00 a.m. to 5:00 p.m. Monday through Thursday; The Main office is located 5780 N. Old Hwy 40 Heber City

Billing & Service questions: **(435) 654-9233**
Water Quality questions: **(435) 333-0475**
Web Site: jssd.us

Pharmaceuticals in Drinking Water

When cleaning out your medicine cabinet, what do you do with your expired pills? Many people flush them down the toilet or toss them into the trash can. Although this seems convenient, these simple actions may be contaminating you water supply. Recent studies are generating a growing concern over pharmaceuticals and other personal products entering surface and ground water. Pharmaceuticals include chemicals such as counter medicines, cosmetics and other personal care products, as well as antibiotics and hormones used with livestock.

Storing unused or outdated prescriptions creates an opportunity for illicit users. One in five teens report intentionally misusing someone else's prescription drugs to get high. Nearly half say the get the medications from friends and relatives for free, often by raiding the medicine cabinet or by attending "pharming parties" where teens barter legal drugs and get high.

What Should I do with my Unused Medications?

The Heber City Police Dept. and Wasatch County Sheriff's Department have established proper unused/outdated drug disposal programs for the residents of Wasatch County. Bring your unused prescription and over the counter medications to the following locations:

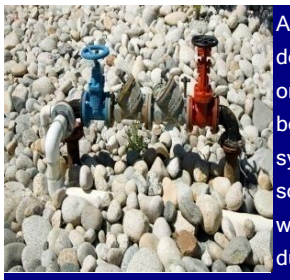
Heber City Police De p	***Wasatch Co Seriff's Dept.***
301 S. Main	31361 S. Highway 40
Heber City, UT 84(	Heber City, UT 84032
435-654-3040	435-654-3040
Hours:	Hours:
7:30 a.m. - 6 p.m.	7:30 a.m. - 6 p.m. M-F

Water Quality

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 also 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, livestock operations and wildlife. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas productions, mining or farming. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential use. 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 storm 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug administrations regulations establish limits for contaminant in bottled water that must provide the protection for the public health.

Cross Connection Information



A cross connection is defined as, "Any actual or potential connection between a potable water system and any other source or system through which it is possible to introduce into the public drinking water system any used water, industrial fluid, gas or substance other then the intended potable water". Cross connections and backflow incidences in the State of Utah have resulted in dangerous, highly contaminated water unexpectedly interring public drinking water systems.

Here are some examples of common potential cross connections:

- Water from the toilet tank can be drawn back into the home water supply if the flush valve does not have and anti-siphon device.
- If a swimming pool or hot tub is filled with a garden hose submerged in the water, pool water can be sucked up the hose into the home water supply.
- Insecticides, herbicides, or fertilizers attached to a garden hose can be pulled into the home water supply if there is a pressure drop in the main outside the home.
- If a sprinkler system lacks a proper back flow prevention device, dirty water from the lawn can be siphoned back through the sprinkler head into the home water supply.

If there is a cross connection that cannot be avoided, be sure to use a backflow prevention device to keep any contamination from getting into the potable water system. A hose bibb vacuum breaker for your outside faucet is a simple, inexpensive item that can be purchased at most home improvement stores. For additional information or questions, please call our cross connection department at 435-654-9233

Water Information Sites

www.jssd.us Jordanelle Special Service District

www.drinkingwater.utah.gov Utah Division of Drinking Water

www.epa.gov safewater. U.S. EPA office of Groundwater and Drinking Water

www.medicationdisposal.utah.gov

Cross Connection

http.abpa.org American Backflow Prevention Association

www.utabpa.org American Backflow Prevention Association Utah Chapter

Definitions

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

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in 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 allow for a margin of safety.

NE: Abbreviation for "None Established".

Pci/L: Picocuries per liter

ppm: parts per million (compare to 1 minute in 2 years or 1 penny in $10,000).

ppb: parts per billion (compare to 1 minute in 2,000 years on 1 penny in $10,000,000).

UR: "Unregulated at this time".

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

NTU (Nephelometric Turbidity Units): A measure of water clarity. (ground water and surface water sources)

	Units	Results	Average	MCL	MCLG	Exceed MCL	Year Sampled	Likely Source(s)
INORGANIC CONTAMINANTS								
Antimony	mg/l	.0041-.0056	0.0047	0.006	0.006	No	2017	Discharge from petroleum refineries.
Arsenic	mg/l	0.0038	0.0038	0.01	0	No	2017	Erosion of natural deposits; runoff from orchards; runoff from glass factories.
Barium	mg/l	0.012	0.012	2.0	2.0	No	2017	Erosion of natural deposits.
Chromium	mg/l	N/D	n/a	0.10	0.10	No	2017	Erosion of natural deposits.
Fluoride	mg/l	0.3	0.3	4.0	4.0	No	2017	Erosion of natural deposits.
Mercury	mg/l	N/D	n/a	0.002	0.002	No	2017	Erosion of naturally-occurring deposits.
Nitrate	mg/l	0.2	n/a	10	10		2017	Run off from fertilizer use; leaching from septic tanks;natural runoff.
Selenium	mg/l	0.0039	0.0039	0.05	0.05	No	2017	Discharge from petroleum and metal refineries; erosion of natural deposits.
Sodium	mg/l	18.1	18.1	NE	NE	No	2017	Erosion of natural deposits.
Sulfate	mg/l	255	255	1000	NE	No	2017	Erosion of natural deposits.
TDS	mg/l	524	524	2000	NE	No	2017	Erosion of naturally-occurring deposits.
Thallium	mg/l	N/D	0	0.002	0.0005	No	2017	Discharge from electronics glass and leaching from ore processing sites.
Turbidity	NTU	.04-.06	0.08	0.5/5.0	TT	No	2017	Erosion of natural deposits.
ORGANIC MATERIAL								
TOC	ppm	ND-.5	0.041	TT	NE	No	2017	Naturally occurring.
VOCs								
Xylenes, Total	µg/L	ND	na	10000		No	2015	
PESTICIDES/PCBs/SOCs			0					
	µg/L	None Detected					2015	
LEAD and COPPER (Tested at the consumers tap value shown is the 90th percentile for compliance)								
Lead	ppm	N/D-.0012	0.00052	AL / 0.015	0.015	No	2016	Corrosion of household plumbing systems, naturally occurring deposits.
Copper	ppm	ND-.0482	0.022	AL / 1.3	1.3	No	2016	Corrosion of household plumbing systems, naturally occurring deposits.

	Units	Results	Average	MCL	MCLG	MCL	Year Sampled	LIKELY SOURCE(S)
RADIOLOGICAL								
Uranium	mg/l	0.8-4.3	2.4	0.03	NE	No	2012	Decay of natural and man-made deposits.
Gross-Alpha	pci/L	2.2	1.9	15	NE	No	2012	Erosion of natural deposits.
Gross-Beta	pci/L	2.3	3.9	50	NE	No	2012	Decay of natural and man-made deposits.
Radium 228	pci/L	0.31	0.31	5	NE	No	2012	Decay of natural and man-made deposits.
DISINFECTANTS/DISINFECTION BY-PRODUCTS								
Chlorine Residual	mg/L	.89-1.24	0.78	MRDL-4.0	NE	No	2017	Drinking water disinfectant
TTHM	µg/L	1.5	na	80.0	NE	No	2017	By-product of drinking water disinfection. MCL is based on a running annual average.
HAA5s	µg/L	N/D	na	60.0	NE		2017	By-product of drinking water disinfection.
MICROBIOLOGICAL								
Total Coliform	%Positive	None Detected		5%	0	No	2017	Human and animal fecal waste, naturally-occurring
Fecal Coliform (E.coli)	per month	None Detected			0	No	2017	in the environment. MCL is for monthly compliance.
UNREGULATED PARAMETERS - monitoring not required								
Alkalinity,total ($CaC0_3$)	mg/L	28-34	31	UR	NE	No	2017	Naturally occurring.
Calcium	mg/L	200-240	220	UR	NE	No	2017	Erosion of natural deposits.
Conductivity	µmhos/cm	640-770	720	UR	NE	No	2017	Naturally occurring.
Hardness, total	mg/L	290-330	310	UR	NE	No	2017	Naturally occurring.
pH	mg/L	7.39-8.22	7.81	UR	NE	No	2017	Naturally occurring.

We at Jordanelle SSD work around the clock to provide top quality water to every tap. We ask that all of our customers help us protect our waters sources, which are the heart of our community, our way of life and our childrens future.

Thank You