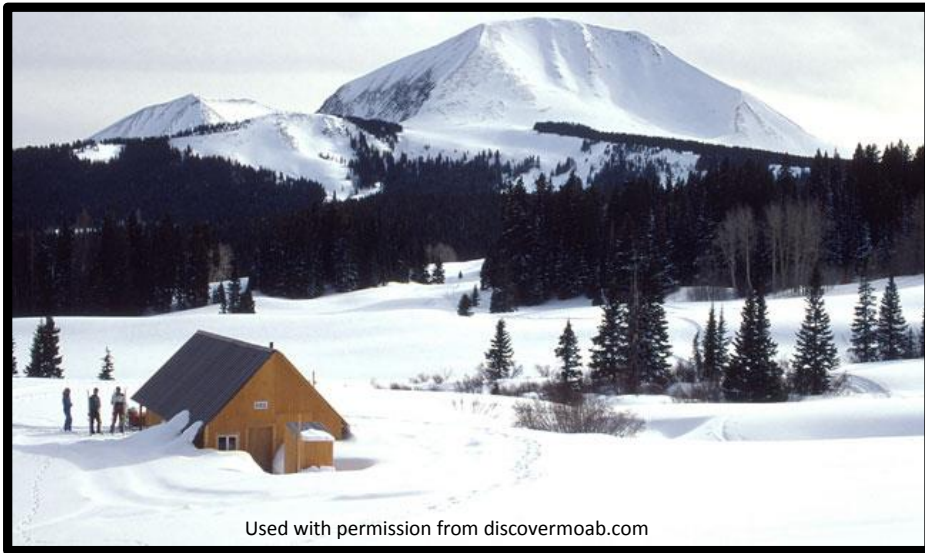




Grand Water & Sewer
Service Agency



Annual Report 2014

President's Message

Grand Water & Sewer Service Agency is pleased to present its Annual Report for the year 2014. It is hoped that this synopsis of the Agency's activities in 2014 will give all those interested a better understanding of the functions the Agency performs and the issues it faces.

The Board and Staff of the Agency appreciate the opportunity to serve the citizens of Spanish Valley.

Dan Pyatt

President

Board Members

GWSSA

Dan Pyatt, President

Gary Wilson, V. President

Brian Backus, Operating Comm.

Mike Holyoak, Operating Comm.

Pat Holyoak, Operating Comm.

Rex Tanner, Operating Comm.

Dale Weiss, Operating Comm.

Kyle Bailey

Leon Behunin

Jerry McNeely

Preston Paxman

Tom Stengel

SVWSID

Gary Wilson, Chairman

Tom Stengel, Vice Chair

Leon Behunin, Treasurer

Mike Holyoak, Clerk

Dale Weiss

GCSSWD

Gary Wilson, Chairman

Mike Holyoak, Vice Chair

Kyle Bailey

Pat Holyoak

Tom Stengel

GCWCD

Dan Pyatt, Chairman

Jerry McNeely, Vice Chair

Brian Backus

Preston Paxman

Rex Tanner

Project and Program Report

Interconnect Power Management

Staff continues to define a pumping plan that incorporates the interconnect pump and generator to minimize electrical demand charges.

Equipment Program

A total of 1234 hours of equipment time was used in 2014. Average vehicle mileage was 9,629.

Building Addition and Remodel

GWSSA received a 50% grant from the CIB to fund the addition of one service bay and remodel the outside of the building. Construction began in the winter of 2014 and will be completed in the spring of 2015.

Safety Program

The board approved a comprehensive written safety program in 2014.

Conservation Management Plan

The board approved the five year update to the Conservation Management Plan in December of 2014.

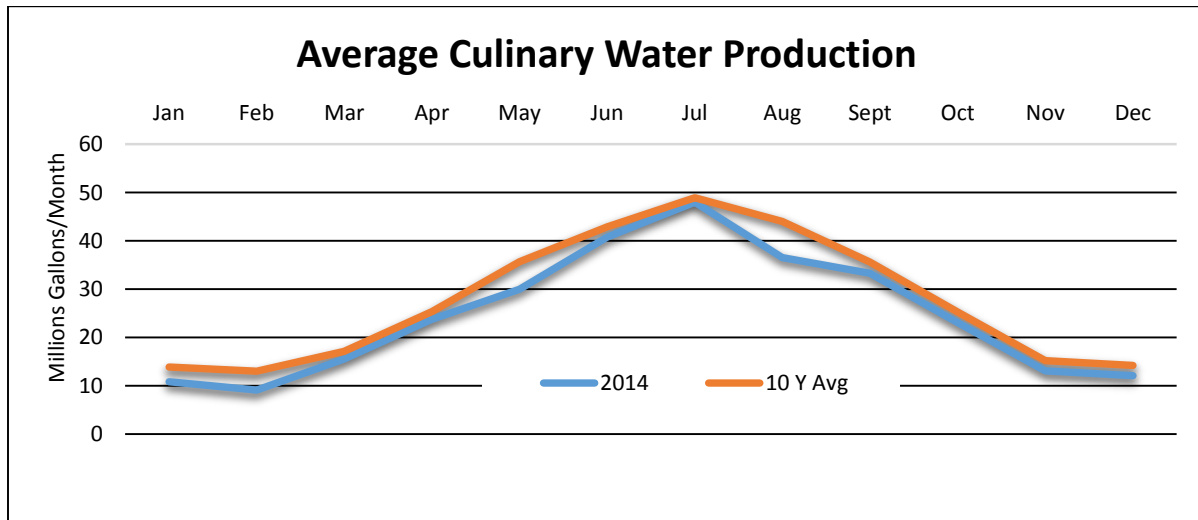
Operator Hours Tracking by Service

GWSSA purchased software in 2014 to aid in tracking operator and equipment hours. The data for 2014 is incomplete. Full reporting will resume in 2015. Operators completed 911 customer service orders in 2014. 65% water, 4% irrigation, 3% sewer, and 27% locate requests (blue stakes).

Culinary Water System

2014 Culinary Water Production

	Production 2013	Production 2014
January	17,085,000	10,801,000
February	15,196,000	9,068,000
March	18,487,000	15,555,000
April	25,521,000	23,769,000
May	37,679,000	30,001,000
June	49,056,000	40,805,000
July	52,129,000	48,018,000
August	38,312,000	36,532,000
September	26,620,000	33,261,000
October	22,594,000	23,076,000
November	12,194,000	13,044,000
December	10,968,000	12,098,000
TOTALS	325,841,000	296,028,000
Monthly Average	27,153,417	24,669,000



Culinary Water Power Cost

Water Produced 296,028,000 gal. or 908.475 AF

Power Costs \$0.24 per 1000 gal. or \$80.64 per AF

Historical Power costs per 1,000 gallons:

<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
\$0.21	\$0.20	\$0.23	\$0.24

Culinary Water System (Cont'd)

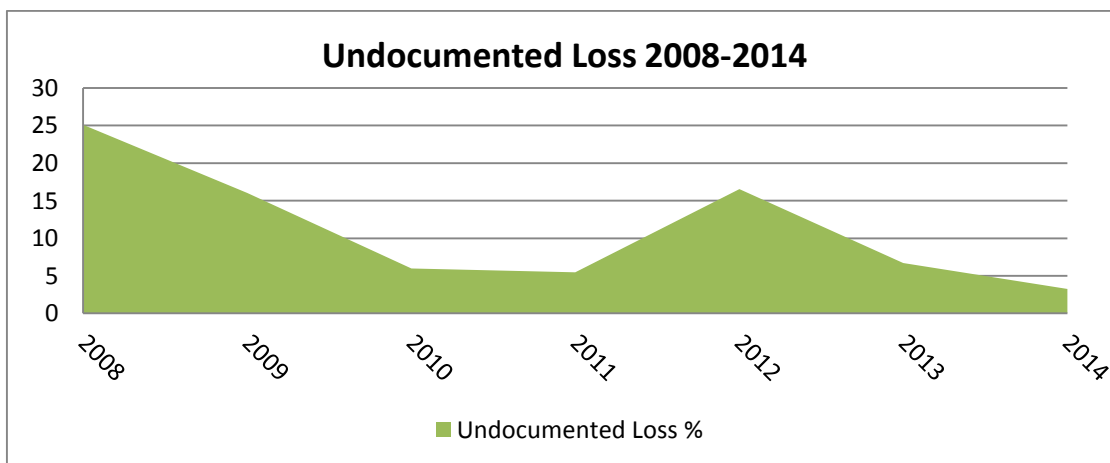
2014 Culinary Water Metered Use

Month	Gallons 2013	Gallons 2014
January	11,289,000	10,585,000
February	9,370,000	7,689,000
March	9,081,000	10,043,000
April	17,481,000	23,939,000
May	25,528,000	23,448,000
June	38,873,000	33,679,000
July	42,527,000	45,432,000
August	41,475,000	37,902,000
September	29,869,000	28,608,000
October	22,935,000	24,493,000
November	12,925,000	14,974,000
December	9,029,000	9,356,000
Total	270,382,000	270,148,000
Monthly Average	22,531,833	22,512,333

Water Audit

Water in Storage	4,000,000	gallons
2014 Production	296,028,000	gallons
2014 Lost water	21,880,000	gallons
Documented Loss	566,500	gallons
Undocumented Loss	21,313,500	gallons
% of Undocumented Loss	7.20%	

Lost water due to leakage, fire flows, un-metered use and meter malfunction.



Compliance with Safe Drinking Water Act

2014 saw no violations of the Safe Drinking Water Act.

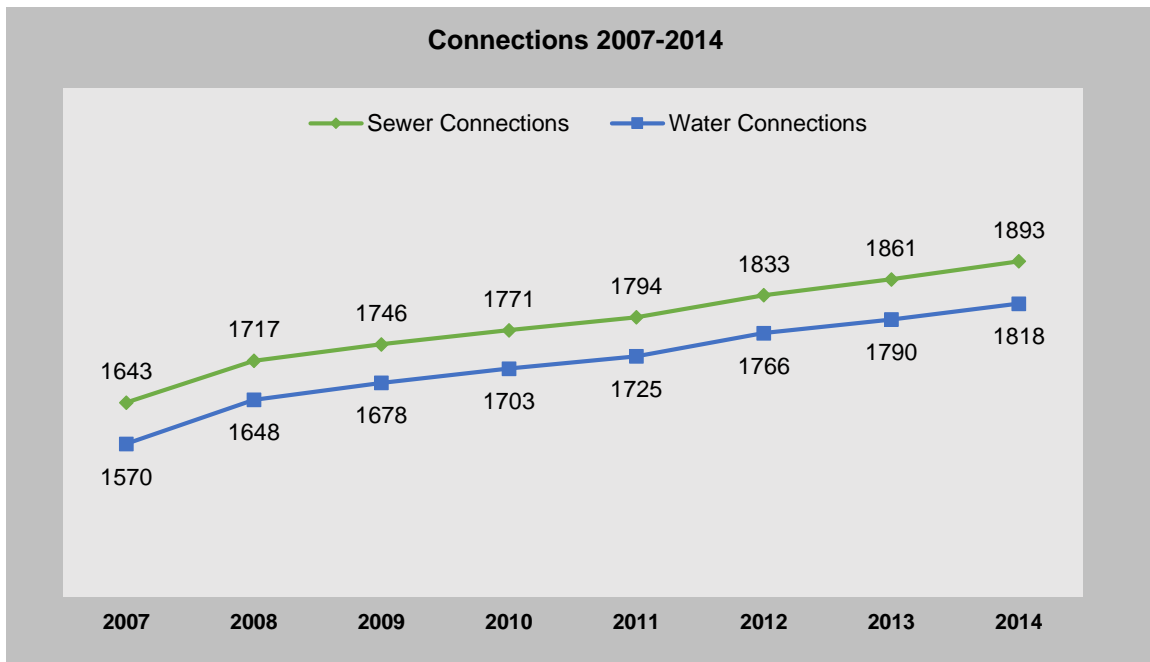
Consumer Confidence Report

The 2014 Consumer Confidence Report is included in *Appendix A*.

Culinary Water System (Cont'd)

System Growth

	Water	Sewer
New Residential Connections	24	28
New Commercial Connections	0	0
New MDU Connections	1	1
Total Residential Connections	1687	1755
Total Commercial Connections	118	125
Total MDU Connections	13	13
Total 2014 Connections	1818	1893
Average Active Connections/Month	1717	1806
Average % of Connections Active	94%	95%
2014 System Percent Growth	1.56%	1.72%



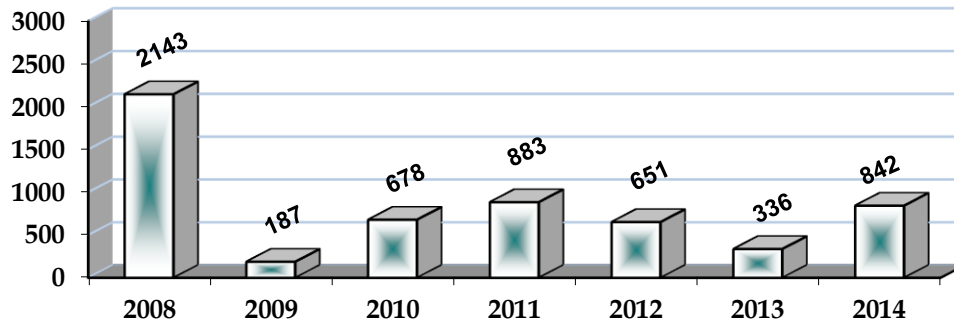
Ken's Lake Irrigation System

Estimate of 2014 Ken's Lake Seepage

Amount in storage at end of 2013	982 AF
Amount diverted to Ken's Lake	3142 AF
Amount delivered to Irrigation pipeline	1858 AF
Evaporation Estimate	200 AF
Amount in storage at end of 2014	1248 AF
Estimated seepage	842 AF

Ken's Lake Irrigation System (Cont'd)

Estimated Seepage in AF 2008-2014



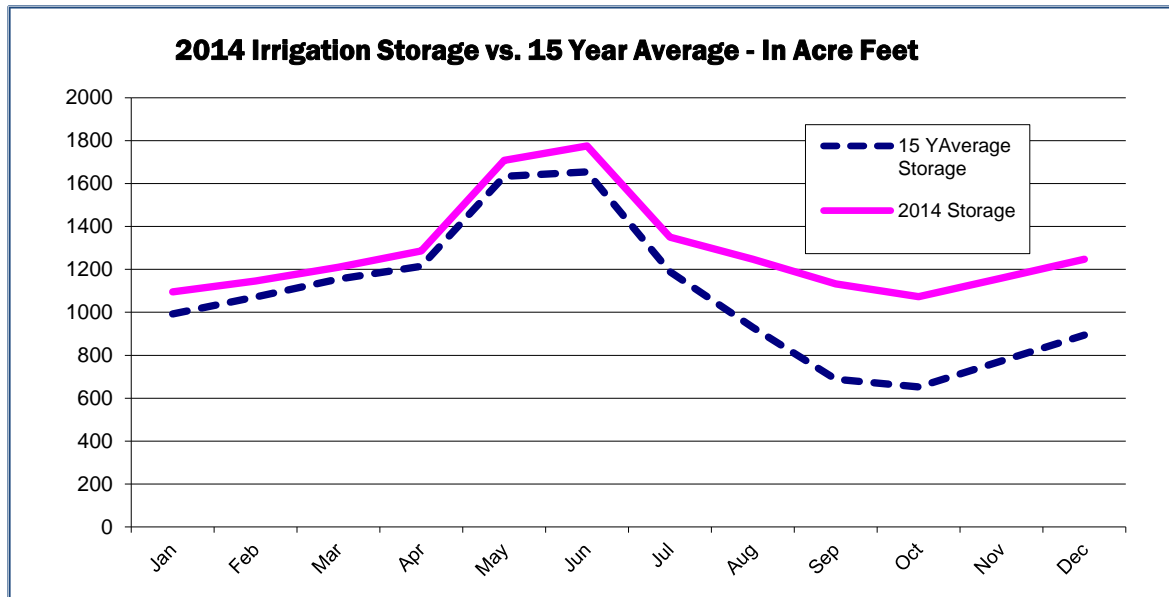
Ken's Lake Water Diverted

2014 Water Diverted Through Sheley Tunnel			
Month	15 Year Average	Diverted 2014	% of Average
	AF	AF	
January	189	128	68%
February	163	90	55%
March	219	115	52%
April	461	297	64%
May	1031	757	73%
June	816	599	73%
July	413	242	59%
August	241	228	95%
September	181	190	105%
October	235	215	91%
November	197	149	75%
December	163	132	81%
Total	4308	3142	73%

Ken's Lake Storage

Ken's Lake Storage Vs. 15 year Average				
Month	Average	2014 Storage	% of Average	% of Capacity
	AF	AF		
January	993	1095	110%	42%
February	1072	1146	107%	44%
March	1155	1210	105%	46%
April	1214	1286	106%	49%
May	1634	1708	105%	65%
June	1654	1775	107%	68%
July	1190	1350	113%	52%
August	930	1248	134%	48%
September	688	1133	165%	43%
October	652	1073	165%	41%
November	773	1159	150%	44%
December	894	1248	140%	48%
Total Capacity is 2610 AF				

Ken's Lake Irrigation System (Cont'd)



Review of Water Management and Conservation Plan

An updated Conservation Plan was submitted in 2014. The following five-year goals were identified:

- Goal #1 – Reduce Spanish Valley’s per capita use by ten percent (10%).
- Goal #2 – Maintain a financially viable water system.
- Goal #3 – Implement and maintain a more aggressive consumer education program.
- Goal #4 – Reduce culinary water system losses.
- Goal #5 – Collect data on non-resident population water use

Goal #1 Use per Capita – Population estimate: 3750

Year	Annual Water Produced	Per Capita Daily Use
State Average		240 gpcd
2013	325,841,000 gal.	238 gpcd
2014	296,028,000 gal.	216 gpcd
GWSSA goal #1 – 10% reduction		214 gpcd

Water saved 2013 to 2014 – 29,813,000 gallons or 91.35 AF
 Estimated electricity savings - \$2527.00

Goal #2 – Maintain a financially viable water system

Water rates are reviewed annually to ensure financial viability. A new rate for commercial hydrant use was implemented in 2014 of \$5.50 per thousand gallons. Residential water rates are designed to encourage conservation in an ascending block system and remained unchanged in 2014.

Residential Water Rate

- 0-8,000 gallons = \$0.60/1 kgal
- 8,001-15,000 gallons = \$1.40/1 kgal
- 15,001 and up = \$2.00/1 kgal

Review of Water Management and Conservation Plan (Cont'd)

Goal #3 – Consumer education

Educational flyers are available at the Agency office. These flyers, suggesting practices for indoor and outdoor water conservation, are offered to all new customers at time of application for water service. More educational materials and message delivery options are in development.

The Agency's website – www.grandwater.org is an excellent source of conservation information and provides links to water professionals statewide. The conservation education information is updated seasonally. The Agency directs customers to the website via messages on the monthly billings.

Goal #4 – Reduce system losses

The water audit is located in the **Culinary Water System** portion of this report. The audit indicates undocumented lost water on the system of 7.2%. 2013 water loss was 15.5%. GWSSA repaired a major leak and upgraded its metering equipment for greater accuracy in 2014.

Goal #5 – Collect data on non-resident population water use

GWSSA staff will attempt to isolate non-resident water use from the resident population's water use. Isolating the amount of water used by our residents (counted in the census) will provide information and insight to aid in targeting educational efforts and future considerations.

Outdoor watering restrictions

Watering during the heat of the day between 10:00 a.m. and 6:00 p.m. is recognized as inefficient use of outside water. The Agency shall ask all users to restrict outside watering during that time period. Water users shall be informed periodically by use of mailings, billing messages, brochures, and/or news media.



Appendix A

2014 Annual Drinking Water Quality Report

Grand Water & Sewer Service Agency

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources have been determined to be from groundwater. Our water sources are George White Well #4, George White Well #5, Chapman Well and the Spanish Valley Well. The wells draw water from the Glen Canyon Aquifer.

The Drinking Water Source Protection Plan for Grand Water & Sewer Service Agency (GWSSA) is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. Our sources have been determined to have a low level of susceptibility from potential contamination from sources such as septic tanks, roads, residential or industrial development. We have also developed management strategies to further protect our sources from contamination. Please contact us if you have questions or concerns about our source protection plan.

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

This report shows our water quality and what it means to you our customer. If you have any questions about this report or concerning your water utility, please contact Mark Sovine at 435-259-8121. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first and third Thursday of each month at 7:00 p.m. at the GWSSA office. Copies of this report are available at the GWSSA office or at www.grandwater.org. Copies will be mailed to customers upon request.

GWSSA routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2014. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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

ND/Low - High - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

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

Maximum Contaminant Level (MCL) - The “Maximum Allowed” (MCL) is 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.

Maximum Contaminant Level Goal (MCLG) - The “Goal” (MCLG) is 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.

Date- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates may seem outdated.

TEST RESULTS

Contaminant	Violation Y/N	Level Detected ND/Low- High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
Microbiological Contaminants							
Turbidity for Ground Water	N	< 1	NTU	N/A	5	2012	Soil runoff
Inorganic Contaminants							
Arsenic	N	ND-2	ppb	0	10	2012	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes

Barium	N	ND-43	ppb	2000	2000	2012	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	N	ND-4	ppb	100	100	2012	Discharge from steel and pulp mills; erosion of natural deposits
Copper a. 90% results b. # of sites that exceed the AL	N	a. 88 b.0	ppb	1300	AL=1300	2011	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	N	186-300	ppb	4000	4000	2012	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead a. 90% results b. # of sites that exceed the AL	N	a. 1 b.0	ppb	0	AL=15	2011	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N	300-500	ppb	10000	10000	2013	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	1-5	ppb	50	50	2012	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	13-18	ppm	None set by EPA	None set by EPA	2012	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills
Sulfate	N	57-87	ppm	1000	1000	2012	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
TDS (Total Dissolved solids)	N	200-252	ppm	2000	2000	2012	Erosion of natural deposits
Chlorine	N	73	ppb	4000	4000	2013	Water additive used to control microbes
Radioactive Contaminants							
Alpha emitters	N	ND	pCi/l	0	15	2012	Erosion of natural deposits
Radium 228	N	ND	pCi/l	0	5	2012	Erosion of natural deposits

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. GWSSA 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 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>.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS Safe at these levels.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All 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 the water poses a health risk. 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.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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).

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