

# Consumer Confidence Report for Calendar Year 2017

Este informe contiene informactión muy importante sobre el aqua usted bebe.

Tradúscalo ó hable con alguien que lo entienda bien.

Public Water System ID Number	Public Water System Name					
AZ04-01013	Town of Springerville					
Contact Name and Title		Phone Number	E-mail Address			
Tim Rasmussen- Public Works Director		928-333-5016	trasmussen@springervilleaz.gov			

We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please contact <u>Tim Rasmussen</u> at 928-333-5016 for additional opportunity and meeting dates and times.

### **Drinking Water Sources**

The sources of drinking water (both tap 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 can pickup substances resulting from the presence of animals or from human activity.

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.

Our water source(s): Ground Water

## **Drinking Water Contaminants**

**Microbial Contaminants**: Such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife

**Inorganic Contaminants**: Such as salts and metals that 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**: Such as agriculture, urban storm water runoff, and residential uses that may come from a variety of sources

**Organic Chemical Contaminants**: Such as synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

**Radioactive Contaminants**: That can be naturally occurring or be the result of oil and gas production and mining activities.

## **Vulnerable Population**

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. Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised 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.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

#### **Source Water Assessment**

This PWS did not receive a SWAP because the PWS was either inactive at the time or the PWS did not exist. Further source water assessment information can be obtained by contacting ADEQ.

#### **Definitions**

**Treatment Technique (TT)**: A required process intended to reduce the level of a contaminant in drinking water

**Level 1 Assessment**: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria was present

**Level 2 Assessment**: A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria was present

**Action Level (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment, or other requirements

**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

Maximum Residual Disinfectant Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur

**Minimum Reporting Limit (MRL)**: The smallest measured concentration of a substance that can be reliably measured by a given analytical method

**Millirems per year (MREM)**: A measure of radiation absorbed by the body

**Not Applicable (NA)**: Sampling was not completed by regulation or was not required

Not Detected (ND or <): Not detectable at reporting limit

**Nephelometric Turbidity Units (NTU)**: A measure of water clarity

Million fibers per liter (MFL)

**Picocuries per liter (pCi/L)**: Measure of the radioactivity in water

**ppm**: Parts per million or Milligrams per liter (mg/L) **ppb**: Parts per billion or Micrograms per liter (μg/L)

**ppt**: Parts per trillion or Nanograms per liter (ng/L)

ppm x 1000 = ppb ppb x 1000 = ppt

**ppq**: Parts per quadrillion or Picograms per liter (pg/L)

ppt x 1000 ppt ppt x 1000 = ppq

## **Lead Informational Statement:**

Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. **Town of Springerville** 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. 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 www.epa.gov/safewater/lead.

#### Water Quality Data - Regulated Contaminants

Microbiological (RTCR)	TT Violation Y or N	Number of Positive Samples	Positive Sample(s) Month & Year	MCL	MCLG	Likely Source of Contamination	
E. Coli	N	0	N/A	0	0	Human and	d animal fecal waste
Fecal Indicator (coliphage, enterococci and/or E. coli)	N	0	N/A	0	0	Human and	d animal fecal waste
Lead & Copper	MCL Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Month & Year	Likely Source of Contamination
Copper (ppm)	N	0.033	0.023 - 0.43	1.3	1.3	Aug 2016	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	2.5	ND - 3.2	15	0	Aug 2016	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	MCL Violation Y or N	Running Annual Average (RAA)	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alpha Emitters (pCi/L) (This is Gross Alpha 4000)	N	8.9	7.8- 10	15	0	2017	Erosion of natural deposits
Combined Radium-226 & -228 (pCi/L)	N	4.7	2.8- 6.1	5	0	2017	Erosion of natural deposits
Uranium (ug/L)	N	ND	ND	30	0	2017	Erosion of natural deposits
Inorganic Chemicals (IOC)	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Antimony (ppb)	N	ND	ND	6	6	Apr 2016	Discharge from petroleum refineries; fire retardants;

							ceramics, electronics and solder
Arsenic¹ (ppb)	N	4.8	4.8	10	0	Apr 2016	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Asbestos (MFL)	N	ND	ND	7	7	Apr 2016	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	N	0.42	0.42	2	2	Apr 2016	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	N	ND	ND	4	4	Apr 2016	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	N	ND	ND	5	5	Apr 2016	Corrosion of galvanized pipes; natural deposits; metal refineries; runoff from waste batteries and paints
Chromium (ppb)	N	ND	ND	100	100	Apr 2016	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb)	N	ND	ND	200	200	Apr 2016	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	N	0.71	0.71	4	4	Apr 2016	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (ppb)	N	ND	ND	2	2	Apr 2016	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland.
Nitrate <sup>2</sup> (ppm)	N	ND	ND	10	10	Apr 2016	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	N	ND	ND	1	1	Apr 2016	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	N	ND	ND	50	50	Apr 2016	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	N	90	90	N/A	N/A	Apr 2016	Erosion of natural deposits
Thallium (ppb)	N	ND	ND	2	0.5	Apr 2016	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

<sup>&</sup>lt;sup>1</sup> Arsenic is a mineral known to cause cancer in humans at high concentration and is linked to other health effects, such as skin damage and circulatory problems. If arsenic is less than or equal to the MCL, your drinking water meets EPA's standards. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water, and continues to research the health effects of low levels of arsenic.

<sup>&</sup>lt;sup>2</sup> **Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome." Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Synthetic Organic Chemicals (SOC)	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
2,4-D (ppb)	N	ND	ND	70	70	Apr 2016	Runoff from herbicide used on row crops
2,4,5-TP (a.k.a. Silvex) (ppb)	N	ND	ND	50	50	Apr 2016	Residue of banned herbicide
Alachlor (ppb)	N	ND	ND	2	0	Apr 2016	Runoff from herbicide used on row crops
Atrazine (ppb)	N	ND	ND	3	3	Apr 2016	Runoff from herbicide used on row crops
Benzo (a) pyrene (PAH) (ppt)	N	ND	ND	200	0	Apr 2016	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	N	ND	ND	40	40	Apr 2016	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	N	ND	ND	2	0	Apr	Residue of banned termiticide

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N	ND	ND	200	200	Apr	Runoff from herbicide used on rights of way
N	ND	ND	400	400	Apr 2016	Discharge from chemical factories
N	ND	ND	6	0	Apr 2016	Discharge from rubber and chemical factories
N	ND	ND	200	0	Apr 2016	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
N	ND	ND	7	7	Apr 2016	Runoff from herbicide used on soybeans and vegetables
N	ND	ND	20	20	Apr 2016	Runoff from herbicide use
N	ND	ND	30	0	Apr 2016	Emissions from waste incineration and other combustion; discharge from chemical factories
N	ND	ND	100	100	Apr 2016	Runoff from herbicide use
N	ND	ND	2	2	Apr 2016	Residue of banned insecticide
N	ND	ND	TT	0	Apr 2016	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
N	ND	ND	50	0	Apr 2016	Discharge from petroleum refineries
N	ND	ND	700	700	Apr 2016	Runoff from herbicide use
N	ND	ND	400	0	Apr 2016	Residue of banned termiticide
N	ND	ND	200	0	Apr 2016	Breakdown of heptachlor
N	ND	ND	1	0	Apr 2016	Discharge from metal refineries and agricultural chemical factories
N	ND	ND	50	50	Apr 2016	Discharge from chemical factories
N	ND	ND	200	200	Apr 2016	Runoff/leaching from insecticide used on cattle, lumber, gardens
N	ND	ND	40	40	Apr 2016	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa,
N	ND	ND	200	200	Apr 2016	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
N	ND	ND	1	0	2016	Discharge from wood preserving factories
N	ND	ND	500	500	2016	Herbicide runoff
N	ND	ND	4	4	Apr 2016	Herbicide runoff
N	ND	ND	3	0	Apr 2016	Runoff/leaching from insecticide used on cotton and cattle
MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
N	ND	ND	5	0	Apr 2016	Discharge from factories; leaching from gas storage tanks and landfills
N	ND	ND	5	0	Apr 2016	Discharge from chemical plants and other industrial activities
N	ND	ND	100	100	Apr 2016	Discharge from chemical and agricultural chemical factories
N	ND	ND	600	600	Apr 2016	Discharge from industrial chemical factories
N	ND	ND	75	75	Apr 2016	Discharge from industrial chemical factories
N	ND	ND	5	0	2016	Discharge from industrial chemical factories
N Town	ND	ND	7	7	Apr 2016	Discharge from industrial chemical factories
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cis-1,2-Dichloroethylene (ppb)	N	ND	ND	70	70	Apr 2016	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	N	ND	ND	100	100	Apr 2016	Discharge from industrial chemical factories
Dichloromethane (ppb)	N	ND	ND	5	0	Apr 2016	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	N	ND	ND	5	0	Apr 2016	Discharge from industrial chemical factories
Ethylbenzene (ppb)	N	ND	ND	700	700	Apr 2016	Discharge from petroleum refineries
Styrene (ppb)	N	ND	ND	100	100	Apr 2016	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)	N	ND	ND	5	0	Apr 2016	Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene (ppb)	N	ND	ND	70	70	Apr 2016	Discharge from textile- finishing factories
1,1,1-Trichloroethane (ppb)	N	ND	ND	200	200	Apr 2016	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	N	ND	ND	5	3	Apr 2016	Discharge from industrial chemical factories
Trichloroethylene (ppb)	N	ND	ND	5	0	Apr 2016	Discharge from metal degreasing sites and other factories
Toluene (ppm)	N	ND	ND	1	1	Apr 2016	Discharge from petroleum factories
Vinyl Chloride (ppb)	N	ND	ND	2	0	Apr 2016	Leaching from PVC piping; discharge from chemical factories
Xylenes (ppm)	N	ND	ND	10	10	Apr 2016	Discharge from petroleum or chemical factories

**Violation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement)** 

Violation Type	Explanation, Health Effects	Time Period	Corrective Actions
No violations in 2017			