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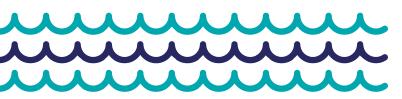
For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants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

# SOURCE WATER ASSESSMENT

Based on the information currently available on the hydrogeologic settings and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on the local level. This does not imply that the source water is contaminated nor does it mean that contamination is imminent. Rather, it simply states that land use activities or hydrogeologic conditions exist that make the source water susceptible to possible future contamination.

Further source water assessment documentation 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)

**ppq:** Parts per quadrillion or Picograms per liter (pg/L)
ppm x 1000 = ppb
ppb x 1000 = ppt
ppt x 1000 = ppq

# 2020
# WATER QUALITY REPORT

ADEQ
Arizona Department of Environmental Quality

*ESTA INFORMACIÓN SOBRE EL AGUA ES MUY IMPORTANTE.*

# ADEQ
## Arizona Department of Environmental Quality

## CONSUMER CONFIDENCE REPORT
## FOR CALENDAR YEAR 2020

# 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 COMES FROM 2 WEELS 300FEET DEEP*

# 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.

| PUBLIC WATER SYSTEM ID NUMBER | PUBLIC WATER SYSTEM NAME |
|---|---|
| AZ0414015 | City of Somerton |

| CONTACT NAME AND TITLE | PHONE NUMBER |
|---|---|
| Leo Lomeli / Water Plant Supervisor | (928) 722-7322 |

**E-MAIL ADDRESS**

leolomeli@somertonaz.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 **Sally Cavazos at 928-722-7322** for additional opportunity and meeting dates and times.

## WATER QUALITY DATA - REGULATED CONTAMINANTS

| Disinfectants | MCL Violation Y or N | Running Annual Average (RAA) | Range of All Samples (Low-High) | MRDL | MRDLG | Sample Month & Year | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Chlorine/Chloramine (ppm) | N | .0335 | 200 - 400 | 4 | 0 | Jan-Dec 2019 | Water additive used to control microbes |

| Disinfection By-Products | MCL Violation Y or N | Running Annual Average (RAA) OR Highest Level Detected | Range of All Samples (Low-High) | MCL | MCLG | Sample Month & Year | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Haloacetic Acids (HAA5)(ppb) | N | 0.002 | | 60 | N/A | Qrtly 2019 | Byproduct of drinking water disinfection |
| Total Trihalomethanes (TTHM)(ppb) | N | 0.035 | | 80 | N/A | Qrtly 2019 | Byproduct of drinking water disinfection |

*Lead Informational Statement: (Applies to All Water Systems, please do not remove even if your system did not detect any Lead)*
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. City of Somerton Public Works Department 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.

| Lead & Copper | MCL Violation Y or N | 90th Percentile | Number of Samples Exceeds AL | AL | ALG | Sample Month & Year | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Copper (ppb) | N | 0.042 | 0 | 1.3 | 1.3 | July 2019 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) | N | 0.0000 | 0 | 15 | 0 | July 2019 | Corrosion of household plumbing systems; erosion of natural deposits |

**Water Quality Data**

| 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 | 0 | 0 | 0 | human and fecal waste |
| Fecal Indicator (From GWR source) (Coliphage, enterococci and/or E. coli) | N | 0 | 0 | 0 | 0 | human and fecal waste |

| Inorganic Chemichals (IOC) | MCL Violation Y or N | Running Annual Average (RAA) OR Highest Level Detected | Range of All Samples (Low-High) | MCL | MCLG | Sample Month & Year | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Antimony (ppb) | N | <1 | | 6 | 6 | May 2019 | Discharge from petroleum refineries; fire retardants; ceramics, electronics and solder |
| Arsenic [1](ppb) | N | 1.6 | | 10 | 0 | May 2019 | Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes |
| Barium (ppm) | N | 0.06 | | 2 | 2 | May 2019 | Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits |
| Beryllium (ppb) | N | <1 | | 4 | 4 | May 2019 | Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries |
| Cadmium (ppb) | N | <0.5 | | 5 | 5 | May 2019 | Corrosion of galvanized pipes; natural deposits; metal refineries; runoff from waste batteries and paints |
| Chromium (ppb) | N | <1 | | 100 | 100 | May 2019 | Discharge from steel and pulp mills; Erosion of natural deposits |
| Cyanide (ppb) | N | <25 | | 200 | 200 | May 2019 | Discharge from steel/metal factories; Discharge from plastic and fertilizer factories |
| Fluoride (ppm) | N | 0.29 | | 4 | 4 | May 2019 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Mercury (ppb) | N | <0.2 | | 2 | 2 | May 2019 | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland |
| Nitrate (ppm) | N | <0.05 | | 10 | 10 | May 2019 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Selenium (ppb) | N | <5 | | 50 | 50 | Nov 13 2020 | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines |
| Sodium (ppb) | N | 240 | | N/A | N/A | May 2019 | Erosion of natural deposits |
| Thallium (ppb) | N | <1 | | 2 | 0.5 | May 2019 | Leaching from ore-processing sites; discharge from electronics, glass, and drug factories |

1 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.
2 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) OR Highest Level Detected | Range of All Samples (Low-High) | MCL | MCLG | Sample Month & Year | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| 2,4-D (ppb) | N | <0.1 | | 70 | 70 | Jul 2019 | Runoff from herbicide used on row crops |
| 2,4,5-TP (a.k.a. Silvex) (ppb) | N | <0.2 | | 50 | 50 | Jul 2019 | Residue of banned herbicide |
| Alachlor (ppb) | N | <0.1 | | 2 | 0 | Jul 2019 | Runoff from herbicide used on row crops |
| Atrazine (ppb) | N | <0.05 | | 3 | 3 | Jul 2019 | Runoff from herbicide used on row crops |
| Benzo (a) pyrene (ppb) | N | <0.02 | | 200 | 0 | Jul 2019 | Leaching from linings of water storagetanks and distribution lines |
| Carbofuran (ppb) | N | <0.5 | | 40 | 40 | Jul 2019 | Leaching of soil fumigant used on rice and alfalfa |
| Chlordane (ppb) | N | <0.1 | | 2 | 0 | Jul 2019 | Residue of banned termiticide |
| Dalapon (ppb) | N | <1 | | 200 | 200 | Jul 2019 | Runoff from herbicide used on rights of way |
| Di (2-ethylhexyl) adipate (ppb) | N | <0.6 | | 400 | 400 | Jul 2019 | Discharge from chemical factories |
| Di (2-ethylhexyl) phthalate (ppb) | N | <0.6 | | 6 | 0 | Jul 2019 | Discharge from rubber and chemical factories |
| Dibromochloropropane (ppb) | N | <110 | | 200 | 0 | Jul 2019 | Discharge from rubber and chemical factories |
| Dinoseb (ppb) | N | <0.2 | | 7 | 0 | Jul 2019 | Discharge from rubber and chemical factories |
| Diquat (ppb) | N | <0.4 | | 6 | 0 | Jul 2019 | Discharge from rubber and chemical factories |
| Dioxin [a.k.a. 2,3,7,8-TCDD] (ppq) | N | <0.5 | | 6 | 0 | Aug 2019 | Discharge from rubber and chemical factories |
| Endothall (ppb) | N | <5 | | 6 | 0 | Aug 2019 | Discharge from rubber and chemical factories |
| Endrin (ppb) | N | <0.01 | | 6 | 0 | Aug 2019 | Discharge from rubber and chemical factories |
| Ethylene dibromide | N | <0.1 | | 6 | 0 | May 2019 | Discharge from rubber and chemical factories |
| Glyphosate (ppb) | N | <6 | | 6 | 0 | May 2019 | Discharge from rubber and chemical factories |
| Heptachlor (ppt) | N | <0.01 | | 6 | 0 | May 2019 | Discharge from rubber and chemical factories |
| Heptachlor epoxide (ppt) | N | <0.01 | | 6 | 0 | May 2019 | Discharge from rubber and chemical factories |
| Hexachlorobenzene (ppb) | N | <0.05 | | 1 | 0 | May 2019 | Discharge from metal refineries and agricultural chemical factories |
| Lindane (ppb) | N | <0.01 | | 200 | 200 | May 2019 | Runoff/leaching from insecticide used on cattle, lumber, gardens |
| Methoxychlor (ppb) | N | <0.05 | | 40 | 40 | May 2019 | Runoff/leaching from insecticide used on fruit, vegetables, alfalfa |
| Oxamyl (a.k.a. Vydate) (ppb) | N | <0.5 | | 200 | 200 | May 2019 | Runoff/leaching from insecticide used on apples, potatoes, and tomatoes |
| Pentachlorophenol (ppb) | N | <0.04 | | 1 | 1 | May 2019 | Discharge from wood preserving factories |
| Picloram (ppb) | N | <0.1 | | 500 | 500 | May 2019 | herbicide runoff |
| Simazine (ppb) | N | <0.05 | | 4 | 4 | May 2019 | herbicide runoff |
| Toxaphene (ppb) | N | <0.5 | | 3 | 0 | May 2019 | Runoff/leaching from insecticide used on cotton and cattle |

| Volatile Organic Chemicals (VOC) | MCL Violation Y or N | Running Annual Average (RAA) OR Highest Level Detected | Range of All Samples (Low-High) | MCL | MCLG | Sample Month & Year | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Benzene (ppb) | N | <0.5 | | 5 | 0 | May 2019 | Discharge from factories; leaching from gas storage tans and landfills |
| Carbon tetrachloride (ppb) | N | <0.5 | | 5 | 0 | May 2019 | Discharge from chemical plants and other industrial activities |
| Chlorobenzene (ppb) | N | <0.5 | | 100 | 100 | May 2019 | Discharge from chemical and agricultural chemical factories |
| o-Dichlorobenzene (ppb) | N | <0.5 | | 600 | 600 | May 2019 | Discharge from industrial chemical factories |
| p-Dichlorobenzene (ppb) | N | <0.5 | | 75 | 75 | May 2019 | Discharge from industrial chemical factories |
| 1,2-Dichloropane (ppb) | N | <0.5 | | 5 | 0 | May 2019 | Discharge from industrial chemical factories |
| 1,1-Dichloroethylene (ppb) | N | <0.5 | | 7 | 7 | May 2019 | Discharge from industrial chemical factories |
| cis-1,2-Dichloroethylene (ppb) | N | <0.5 | | 70 | 70 | May 2019 | Discharge from industrial chemical factories |
| trans-1,2-Dichloroethylene (ppb) | N | <0.5 | | 100 | 100 | May 2019 | Discharge from industrial chemical factories |
| Dichloromethane (ppb) | N | <0.5 | | 5 | 0 | May 2019 | Discharge from pharmaceutical and chemical factories |
| 1,2-Dichloropropene (ppb) | N | <0.5 | | 5 | 0 | May 2019 | Discharge from industrial chemical factories |
| Ethylbenzene (ppb) | N | <0.5 | | 700 | 700 | May 2019 | Discharge from petroleum refineries |
| Styrene (ppb) | N | <0.5 | | 100 | 100 | May 2019 | Discharge from rubber and chemical factories; Leaching from landfills |
| Tetrachlorethylene (ppb) | N | <0.5 | | 5 | 0 | May 2019 | Discharge from factories and dry cleaners |
| 1,2,4-Trichlorobenzene (ppb) | N | <0.5 | | 70 | 70 | May 2019 | Discharge from textile-finishing factories |
| 1,1,1-Trichloroethane (ppb) | N | <0.5 | | 200 | 200 | May 2019 | Discharge from metal degreasing sites and other factories |
| 1,1,2-Trichloroethane (ppb) | N | <0.5 | | 5 | 3 | May 2019 | Discharge from industrial chemical factories |
| Trichloroethylene (ppb) | N | <0.5 | | 5 | 0 | May 2019 | Discharge from metal degreasing sites and other factories |
| Toluene (ppb) | N | <0.5 | | 1 | 1 | May 2019 | Discharge from petroleum factories |
| Vinyl Chloride (ppb) | N | <0.3 | | 2 | 0 | May 2019 | Leaching from PVC piping; discharge from chemical factories |
| Xylenes (ppm) | N | <0.0005 | | 10 | 10 | May 2019 | Discharge from petroleum or chemical factories |