

## Algona Water Utility – 2018 Water Quality Report

Este reporte examina la calidad del agua de la ciudad. En resumen, el agua de la ciudad es segura.

The Algona Water Utility is providing you with our 2018 Water Quality Report. This report is a summary of information about drinking water quality. Included are details about where Algona water comes from, what it contains, and how it compares to standards set by Environmental Protection Agency.

Since 1996 the City of Algona has purchased its water from the City of Auburn. Auburn's water comes from a combination of deep wells and springs. Coal Creek Springs, Auburn's largest and second oldest supply source, developed for water supply in 1925. The springs are located south of the White River and are surrounded by a 220-acre resource protection area. West Hill Springs, Auburn's oldest supply, is located in the West Hill of Auburn and was purchased by the City in 1907. Although West Hill Springs is one of the smallest sources, it remains an important economical source of supply, which does not require pumping for use by customers. Auburn has sufficient supply sources to meet Algona's demands, even if any one well or spring is out of service for maintenance or repair. Currently the only treatment provided to the water supply is chlorination. Chlorine is added to the water supply to minimize the potential for any microbial growth within the water supply system.

### Required Health Information from The EPA

#### Health Issues

Some people may be more vulnerable to contaminants in drinking water than the general population (contaminants are something in drinking water other than water). Immune-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. Environmental Protection Agency (EPA)/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Water Drinking Hotline (800-426-4791).

#### Contaminants and Regulations

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not mean the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water for 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 minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal or from human activity. Microbial contaminants, such as viruses and bacteria, may come from septic systems, livestock, and wildlife. Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban stormwater runoff, septic systems, or fertilizer use. Pesticides and herbicides may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. Radioactive contaminants 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 Administration regulations set limits for contaminants in bottled water that are intended to provide similar protection for public health.

### Conserving Our Valuable Water Resource

In cooperation with all the other water utilities in the region, we encourage our customers to use water wisely.

#### Cross Connection Control Program - Protecting Our Water System from Contamination

A cross connection is a connection between water pipes and a source of contamination. Examples of cross connections include hose ends submerged in pools, hot tubs or buckets, irrigation systems and most hose-end spray applicators. Although the conditions are rare cross connections can be dangerous because they provide opportunities for contaminated fluids to be pulled back into the water system. To protect our water supply, avoid using hose-end sprayers, maintain an air gap by keeping the hose end above the water surface when filling containers, and install a backflow assembly on irrigation systems. Backflow assemblies require a plumbing permit, must be inspected by a cross connection specialist, and must be tested by a certified tester when installed, and yearly thereafter. For more information or a list of certified testers, call the Public Works at 253-833-2741.

### Water Quality Data Table

The table below lists all of the drinking water contaminants that were detected during 2018 (unless otherwise noted). The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

**Important Drinking Water Definitions:**

**MCLG:** Maximum Contaminant Level Goal: 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.

**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.

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

Inorganic Chemicals - IOC's		Source Water Sample Results					
			Range of Level Detected	Highest Level Detected	SRL	Trigger	MCL
<b>EPA Regulated</b>							
Arsenic	(mg/L)		<0.001 - 0.0016	0.0016	0.001	0.01	0.01
Nitrate-N	(mg/L)		0.36 - 3.33	3.33	0.2	5	10
<b>EPA Regulated (Secondary)</b>							
Manganese	(mg/L)		<0.01 - 0.02	0.02	0.01		0.05
Chloride	(mg/L)		2.8 - 7.4	7.4	20		250
Sulfate	(mg/L)		6.4 - 14.4	14.4	50		250
<b>State Regulated</b>							
Sodium	(mg/L)		<5 - 10.5	10.5	5		
Hardness	(mg/L)		55 - 120	120	10		
Conductivity	(umhos/cm)		89.2 - 178.6	178.6	70		700
Turbidity	(NTU)		<0.1 - 1.12	1.12	0.1		
<b>State Unregulated</b>							
Copper	(mg/L)		<0.02 - 0.079	0.079	0.02		

2018 Lead and Copper Distribution System Monitoring				
	Copper Range	Copper 90th Percentile	Lead Range	Lead 90th Percentile
mg/L	<0.02 - 1.72	0.096	<0.001 - 0.005	0.001

2018 Disinfectant Byproducts		
	Range	Compliance
Trihalomethanes	6.69 - 15.14 ug/L	≤ 80 ug/L
Haloacetic acids	ND - 6.9 ug/L	≤ 60 ug/L
<b>EPA Unregulated</b>		
Bromochloroacetic Acid	ND - 4.0 ug/L	NA

2018 Chlorine Residual	
Average Value	0.57 mg/L
Range	0.30 - 0.78 mg/L

Units Description:

**ND:** Not detected  
**ppm:** parts per million, or milligrams per liter (mg/l)  
**ppb:** parts per billion, or micrograms per liter (µg/l)  
**NA:** Not applicable

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**MFL:** million fibers per liter, used to measure asbestos concentration  
**% Positive samples / month:** Percent of samples taken monthly that were positive

**Table Notes:**

\* **Copper.** The water from Auburn's sources does not contain measurable levels of copper. However, copper can leach into the water from plumbing systems. In 2002 Auburn completed construction of two corrosion control facilities to adjust the pH of Auburn's water and minimize leaching of copper from our customer's plumbing. Monitoring in 2012 indicated that Auburn's water was in compliance with State and Federal regulations.  
**\*\*Lead.** The water from Auburn does not contain measurable levels of lead. However, lead can leach into the water from plumbing systems. Algona's testing showed that the 90<sup>th</sup> percentile was .40. One samples in ten exceeded the action level. This means the city will need to continue to do monitoring and testing.

For additional information contact Jimmy Griess, Public Works Director at 253-833-2741.