

This Annual Water Quality Report has been developed to keep you informed about the ACSA's water quality. The Service Authority is committed to supplying safe water that meets or exceeds state and federal regulations and achieves the highest standards of customer satisfaction. Please take a few minutes to read this report.

We are proud to report the water provided by ACSA to our Estaline Valley customers met all federal and state standards for

This report includes details about where your water comes from, what it contains, and how it compares to standards set by

About Your Water.....

drinking water for 2015.

regulatory agencies.

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### **Did You Know?**

The Augusta County Service Authority (ACSA) is aware of the significant concern over lead in drinking water supplies. ACSA drinking water supplies have been and continue to be in full compliance with all drinking water requirements including lead and copper standards. We perform hundreds of water quality tests per year to meet EPA and Virginia Department of Health standards

### Where Does Your Water Come From?

The sources of the Estaline Valley Water System's drinking water include two springs and four wells, which are owned by the Town of Craigsville. The Service Authority purchases water from the Town of Craigsville for this system.

# How Is Your Water Treated?

Filtration treatment is provided for the two springs. Chlorine is added to both the spring and well water to kill any diseasecausing organisms.

The treated water is distributed through pipes and is delivered to your home.

### Water Saving Tip

Take short showers. A 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.



# Who's Most Vulnerable?

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 about drinking water from their health care providers. EPA\*/CDC\* guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

- \* Environmental Protection Agency
- \* Centers for Disease Control



## Source Water Assessment

A source water assessment has been completed by the Virginia Department of Health. More specific information may be obtained by contacting the Augusta County Service Authority at (540) 245-5670.



ACSA is committed to providing you with information about your water supply, because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

- ACSA (540) 245-5681 or www.acsawater.com with links to American Water Works Association (AWWA) and Water Environment Federation (WEF)
- More information is available at <u>waterdata.usgs.gov</u> and <u>www.epa.gov/safewater</u>
- Safe Drinking Water Hotline (800) 426-4791
- Virginia State Health Department (Lexington) (540) 463-7136 www.vdh.state.va.us/odw
- Monthly Board Meetings are held the Monday preceding the second Wednesday of every month at the Augusta County Government Center in Verona. Meetings start at 1:30 p.m.

#### Additional Water Quality Parameters

	Detected	Suggested		
Parameter	Level	Limit		
Alkalinity	70 ppm	No Standard		
	<5 Color			
Color	Units (CU)	15 CU		
Hardness	89 ppm*	No Standard		
Sodium	0.8 ppm	No Standard		
Manganese	<0.01 ppm	0.05 ppm		
Iron	<0.05 ppm	0.3 ppm		

\*This water is considered moderately hard. (equivalent to 5.2 grains per gallon)

### Substances Expected To Be In Drinking Water

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 land's surface or through the ground, it dissolves naturally occurring minerals and radioactive material, and can be polluted by animals or human activity.

Contaminants that may be present in source water include:

- Microbiological contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic waste water discharges, oil and gas production, mining, or farming.

- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive materials, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791) or the Virginia State Health Department (540-463-7136).

### E. coli Information

Inadequately protected or inadequately treated water may contain disease-causing organisms. Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea. cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the

elderly, and people with severely compromised immune systems.

Craigsville had eight routine raw water (prior to treatment) samples collected during the year 2015 that indicated presence of E. coli bacteria. The VDH required additional raw water samples to be collected to assess raw water quality. These additional samples were satisfactory. The Town of Craigsville also provides disinfection and filtration treatment to the raw water. Please note that no E. coli bacteria were detected in the treated water served to you. This indicates that disinfection appears to be properly functioning and is eliminating the E. coli bacteria.

### Lead Contaminants

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. The Augusta County Service Authority 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 15 to 30 seconds or until it becomes cold or reaches a steady temperature 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 to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at http://www.epa.gov/safewater/lead.

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. This table lists only the regulated contaminants which had some level of detection in 2015. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

			Treat	ed Water Qua	lity Roundup			
	Highest	Level		Ideal Goals		Date Most		
	Allowed	d (EPA's	Highest Level	(EPA's	Meets EPA	Recent Testing		
Substance	MCL*)		Detected	MCLGs*)	Standards	Completed	Possible Sources	
			Regul	lated at the Tr	eatment Plant			
							Decay of natural and	
Beta Emitters**	50 pCi/	L	1.3 pCi/L	0 pCi/	✓	May 2014	manmade deposits	
Barium	2 ppm		0.062 ppm	2 ppm	✓	May 2015	Erosion of natural deposits	
							Runoff from fertilizer use;	
Nitrate plus Nitrite			1				leaching from sewage;	
as Nitrogen	10 ppm	ı	0.07 ppm	10 ppm	✓	May 2015	erosion of natural deposits	
			Max: 0.078 NTU					
Turbidity	TT = 0.	3 NTU	100% ***	N/A	✓	Daily, 2015	Soil runoff	
			8 routine "raw water"					
			samples collected prior					
			to disinfection			July, August,		
			treatment were positive			September, October &	Human and animal	
E. coli Bacteria	0		for E. coli bacteria	0	✓	November 2015	fecal wastes	
				lated at the Ci	istomers' Tap			
			3 ppb					
			None of the 5					
Lead**	15 ppb Action		samples collected					
(90th Percentile)	e) Level (AL)		exceeded the AL	0 ppb	✓	July 2014	Customer plumbing	
			0.18 ppm				and service connection	
			None of the 5					
Copper**	1.3 ppm Action		samples collected					
(90th Percentile)	Level (AL)		exceeded the AL	1.3 ppm	✓	July 2014		
			Regula	ted in the Dist	ribution System		<u> </u>	
Total Trihalomethanes (		80 ppb	10.9 ppb	0 ppb	✓	August 2015	By-product of drinking water	
Haloacetic Acids (HAA)		60 ppb	3 ppb	0 ppb	✓	August 2015	chlorination	
*Definitions:					'	•		

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

[AL] ACQUIRT LEVEL 1 THE CONCURRANCE OF SETTING THE CONCURRANCE OF SETTING CONCURRANCE OF S treatment technology

(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. (MRDL) Maximum Residual Disinfectant Level - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. (MRDLG) Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

(NTU) Nephelometric Turbidity Unit - A measure of the clarity of water. Turbidity in excess of 5 NTU

is just noticeable to the average person.

pCi/L - Picocuries per liter is a measure of the radioactivity in water

ppb - one part per billion, example is a single penny in \$10,000,000. ppm - one part per million, example is a single penny in \$10,000.

(TT) Treatment Technique - A required process intended to reduce the level of a contaminant in

<sup>\*\*</sup> Data presented in this table are the most recent testing performed in accordance with state and federal regulations. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old

<sup>\*\*\*</sup> Percent (%) represents the lowest monthly percentage samples which met the turbidity limits. Compliance for turbidity is based on the level being less than or equal to 0.3 NTU in 95% of the measurements taken each month. Turbidity has no known health effects; however, it can interfere with disinfection and provides a medium for bacterial growth.