



2018 Drinking Water Report

YOUR DRINKING WATER

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act. This report is a snapshot of UAF's 2018 water quality. The U.S. Environmental Protection Agency (EPA) requires that public water systems issue an annual drinking water quality report to the users of the system. This annual report explains where the water comes from, what it contains, and the sampling and treatment that UAF performs to prevent health risks.

WHERE DOES MY DRINKING WATER COME FROM?

As of April 2016, UAF's drinking water is supplied by College Utilities Corporation (CUC.) This report provides information regarding UAF's treated water and distribution system. For information on CUC's water quality, please view their Consumer Confidence Report (CCR) at <https://www.akwater.com/cuc-ccr.pdf>

UAF met all Environmental Protection Agency/Alaska Department of Environmental Conservation sampling and regulatory limits. The results of this testing are provided in the Water Quality Data Table.

For information about our drinking water, please visit the <http://www.uaf.edu/fs/departments/utilities/water-plant/> For questions regarding this report, please contact Jennifer Campbell, Interim Associate Vice Chancellor for Facilities Services at 907-474-7000 or dispatch@fs.uaf.edu.

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Spanish- Este informe contiene informacion muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuniquese con alguien que pueda traducir la informacion.

Russian -Этот отчет содержит очень важную информацию о качестве вашей питьевой воды. Пожалуйста, прочтите этот отчет или свяжитесь с кем-то, кто может перевести информацию.

Japanese このレポートには、飲料水の水質に関する非常に重要な情報が含まれています。このレポートを読むか、情報を翻訳できる人に連絡してください。

Korean 이 보고서에는 음용수의 품질에 관한 매우 중요한 정보가 포함되어 있습니다. 이 보고서를 읽거나 정보를 번역할 수 있는 사람에게 연락하십시오.

MESSAGE FROM JENNIFER CAMPBELL,
Interim Associate Vice Chancellor for Facilities Services

In April 2016, UAF decommissioned its water treatment plant, and began purchasing water from College Utilities Corporation (CUC) and distributing it through the campus water system to all buildings on campus. Even though UAF purchases drinking water from CUC, our Utilities personnel still monitors and adjusts the water quality with additional treatment to prevent pipe corrosion and ensure that residual chlorine levels are at acceptable levels to keep the water safe for drinking.

Facilities Services is conscious of maintaining low levels of two water system disinfection by-products, trihalomethanes (TTHM) and haloacetic acids (HAA5). Both by-products are created when chlorine, added to the campus water system, interacts with organic compounds in the water. UAF is required to sample and analyze both by-products on a quarterly basis. The quarterly sample analysis and locational running annual average have not exceeded acceptable levels since July 2017.

UAF also samples for lead and copper on a bi-annual basis. This fiscal year we sampled in November 2018 and May 2019. The November sampling was greater than 0.015 mg/l for lead in one location, the first floor laundry-room common sink in Harwood Hall. We have no prior analysis showing exceedances of lead in Harwood Hall. Since the entire sampling did not exceed the EPA action level, which is defined as *the concentration of lead in more than 76 percent of tap water samples collected during any monitoring period conducted in accordance with §141.86 is greater than 0.015 mg/L (40 CFR 141.80(c))*, UAF remained in compliance with the regulation. However, we are committed to having all sample results under 0.015 mg/l. We have since taken additional samples in Harwood Hall, but as of the publication of this report, the lead and copper analysis results have not been received.

If you have any additional questions, please feel free to contact me at 907-474-7000 or by email at jlcampbell@alaska.edu. I encourage you to review the College Utilities Consumer Confidence Report at <https://www.akwater.com/cuc-ccr.pdf>

WATER QUALITY DATA TABLE INFORMATION

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The tables on pages 3 list the drinking water contaminants that were detected. All sources of drinking water contain some naturally occurring contaminants. Samples for this report were taken in 2018.

After April 8, 2016, UAF is required to monitor and report only for coliform, chlorine, TTHM and HAA5, and lead and copper as we are no longer treating our groundwater to be used as drinking water. Please see CUC's CCR for water quality data for the water they are supplying UAF at <https://www.akwater.com/cuc-ccr.pdf>.

UAF WATER QUALITY DATA TABLE

Contaminant	MCLG or MRDLG	MCL, TC+ or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants and Disinfectant By-Products								
There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants								
TTHMs [Total Trihalomethanes] (ppb) MCL	N/A	80	57.8 ¹	39.7	57.8	2018	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb) MCL	N/A	60	14.3 ¹	6.6	16.3	2018	No	By-product of drinking water chlorination
Chlorine as Cl ₂ (ppm) MRDLG, MRDL	4	4	0.16 ²	0.02	0.33	2018	No	Water addition to control microbes
Microbial Contaminants								
Coliform (Positive Samples) MCLG, TC+	0	1	0	0	N/A	N/A	No	Human and animal fecal waste
Contaminants	MCLG	AL	Your Water	# of Samples Exceeding AL	Sample Date	Action Required	Effects above AL	
Inorganic Contaminants - No MCL								
Lead - at consumer taps (ppb)	0	15	1 ³	36 samples, 1 sample exceeded the AL	2018	None	Corrosion of household plumbing systems; Erosion of natural deposits	
Copper- level at consumer taps (ppm)	1.3	1.3	0.2 ³	36 Samples, 0 exceeded the AL	2018	None	Corrosion of household plumbing systems; Erosion of natural deposits	

1. Highest running annual average
2. Average of all samples for 2018
3. The 90th percentile number of all samples taken
4. Residents were notified of the results



READING THE DATA TABLE

In this table you will find terms and abbreviations that might not be familiar to you. To help, we have provided the following information:

Page 5— Lead

Page 6— Secondary Contaminants

Page 7— Abbreviations/Definitions

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

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 pick up substances resulting from the presence of animals or human activity. CUC's drinking water source is from groundwater wells.

Contaminants that may be present in source water and examples of their sources include:

- Microbial: viruses, and bacteria that could come from septic systems, agricultural livestock operations and wildlife
- Inorganic: salts and metals which are naturally occurring or result from urban stormwater runoff or farming
- Pesticides and herbicides: agriculture and residential uses
- Organic chemicals: gas stations, septic systems
- Radioactive: naturally occurring

The presence of contaminants does not necessarily indicate that water poses a health risk.

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 establish limits for contaminants in bottled water which must provide the same protection for public health.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

For more information on sources of groundwater contamination, please visit :
<http://water.usgs.gov/edu/groundwater-contaminants.html>

For information on CUC's water quality, please view their report at <https://www.akwater.com/cuc-ccr.pdf>

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

SPECIAL PRECAUTIONS: 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, pregnant women, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. 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 Safe Drinking Water Hotline (800-426-4791).

Information on Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead is found in drinking water when distribution systems, lines into buildings, facility plumbing, lead solder and fixtures contain lead. The Safe Drinking Water Act Amendments of 1986 prohibit use of pipe solder or flux in public waste system that is not lead free.



UAF Utilities is responsible for providing high quality drinking water. We follow all required regulations when it comes to lead when we maintain and build additions to the drinking water distribution system and fixtures in our buildings. There are no known lead service lines in our distribution system. As documented in the water quality data table in this report, UAF drinking water is well below any action levels.

There is one step you can take if you are concerned about lead in your tap water. 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 at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Disinfection By-Products (TTHM and HAA5)

To protect drinking water from disease-causing organisms or pathogens, UAF adds chlorine as a disinfectant to the campus drinking water. Trihalomethanes (TTHMs) and haloacetic acids (HAA5) form in drinking water when chlorine, which is used to disinfect drinking water, reacts with natural organic material in the water. It's common for drinking water that is disinfected with chlorine, like ours, to contain some TTHM and HAA5.

The EPA sets limits on how much TTHM and HAA5 can be in drinking water based on a 4 quarter average called a Locational Running Annual Average (LRAA). For 2018, UAF did not exceed the LRAA for TTHM.

UAF's Drinking water comes from CUC. TTHM has dropped below regulatory levels during the 3rd quarter of 2017 and has remained below those level since then.

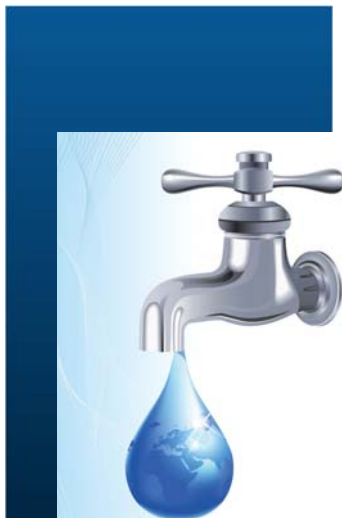
The LRAA for HAA5 has been below the limit since January 2016.

For additional information on TTHM and HAA5 <https://safewater.zendesk.com/hc/en-us/categories/201454937> For information on CUC's water quality, please view their report at <https://www.akwater.com/cuc-ccr.pdf>



UAF Photo by Sarah Manriquez

Secondary Contaminants



EPA has established National Secondary Drinking Water Regulations (NSDWRs) that set non-mandatory water quality standards for 15 contaminants (secondary contaminants). EPA does not enforce these "Secondary Maximum Contaminant Levels" or "SMCLs." They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. Excess iron can leave water with a rusty color and metallic taste. Manganese can cause darker discoloration (black to brown) as well as a bitter metallic taste. Water's pH balance can also affect the feel and taste of the water. Low pH can cause the water to have a bitter metallic taste, while a higher pH can result in a slippery feel and soda taste. These contaminants are not health threatening at the SMCL. Public water systems only need to test for them on a voluntary basis.

Secondary standards are set to give public water systems some guidance on removing these chemicals to levels that are below what most people will find to be noticeable. For information on CUC's water please go to: <https://www.akwater.com/cuc-ccr.pdf> . For more information on these contaminants visit: <http://water.epa.gov/drink/contaminants/secondarystandards.cfm>

Chlorine

According to the Centers for Disease Control, American drinking water supplies are among the safest in the world. Disinfection of drinking water has played a critical role . In the U.S., the first continuous use of chlorine for disinfection of drinking water took place in 1908 in the water supply for Jersey City, New Jersey. The results included a dramatic decline in the local typhoid fever rate, which was, at that time, approximately 100 cases per 100,000 people.

The CDC describes chlorination as the process of adding chlorine to drinking water to disinfect it and kill germs. Current studies indicate that using or drinking water with small amounts of chlorine does not cause harmful health effects. Chlorine levels up to 4 ppm are considered safe in drinking water and provide a residual protection against recontamination. UAF water is well below this level with an average of 0.16 ppm.

If you have health concerns regarding chlorine in your drinking water, please contact your health provider for guidance.

Abbreviations		Definitions
AL	Action Level	The concentration of lead /copper in more than 10 percent of tap water samples collected during any monitoring period conducted in accordance with §141.86 is greater than 0.015 mg/L (40 CFR 141.80(c))
TC+	Total Coliform Positive	N/A
CCR	Consumer Confidence Report	N/A
CDC	Centers for Disease Control	N/A
CUC	College Utilities Corporation	N/A
EPA	Environmental Protection Agency	N/A
HAA5	Haloacetic Acids	N/A
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 and taking cost into consideration. MCLs are enforceable standards.
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 and are non-enforceable public health goals.
MRDL	Maximum Residual Disinfectant Level	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of 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 risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
N/A	Not Applicable	N/A
NSDWRs	National Secondary Drinking Water Regulations	N/A
	positive samples	Results from sampling that contain the pollutant/chemical of interest. In this report this would be coliform.
ppb	ppb: parts per billion, or micrograms per liter (µg/L)	N/A
ppm	ppm: parts per million, or milligrams per liter (mg/L)	N/A
SMCL	Secondary Maximum Contaminates	N/A
TTHMs	Total Trihalomethanes	N/A

CONTACT INFORMATION

QUESTIONS ABOUT THIS REPORT OR THE DRINKING WATER SYSTEM

Jennifer Campbell, Associate Vice Chancellor for Facilities Services 907-474-7000

QUESTIONS ABOUT HEALTH EFFECTS

Safe Drinking Water Hotline 800-426-4791

LINKS WITH ADDITIONAL INFORMATION

UAF Water Plant Website <http://www.uaf.edu/fs/departments/utilities/water-plant/> College Utilities <https://www.akwater.com/cuc-ccr.pdf>

EPA Information on Lead <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

EPA Information on Secondary Contaminants <https://www.epa.gov/dwstandardsregulations/secondary-drinking-water-standards-guidance-nuisance-chemicals>

USGS Info on Groundwater Contaminants
<http://water.usgs.gov/edu/groundwater-contaminants.html>

COLLEGE UTILITIES CORPORATION CONSUMER CONFIDENCE REPORT

<https://www.akwater.com/cuc-ccr.pdf>

