2020 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 2020 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 http://www.akwater.com/cuc-ccc

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 Kellie Fritze, Associate Vice Chancellor for Facilities at 907-474-7000 or UAF-fsdispatch@alaska.edu.

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

Russian - Этот отчет содержит очень важную информацию о качстве 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 번역 할 수 있는 사람에게 연락하십시오.
Currently, UAF purchases water from College Utilities Corporation (CUC) and distributes it through the campus water system to all buildings on campus. Even though UAF purchases drinking water from CUC, our Utilities personnel still monitor and adjust the water quality with additional treatment to prevent pipe corrosion, and to 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 remained within acceptable levels since July 2017.

UAF also samples for lead and copper on a bi-annual basis. All sample results continue to be below Maximum Contaminant Levels (MCL).

If you have any additional questions, please feel free to contact me at 907-474-7000 or by email at kfritze@alaska.edu. I encourage you to review the College Utilities Consumer Confidence Report at http://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 2020.

Since April 8, 2016, when UAF switched from using ground water to CUC water for all campus drinking water needs, we are only required to monitor and report for coliform, chlorine, TTHM and HAA5, lead and copper. Please see CUC’s CCR for water quality data for the water they are supplying UAF at http://www.akwater.com/cuc-CCR.pdf.
## UAF WATER QUALITY DATA TABLE

### Disinfectants & Disinfection By-Products
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)

<table>
<thead>
<tr>
<th>Contaminants</th>
<th>MCLG or MRDLG</th>
<th>MCL, TT, or MRDL</th>
<th>Detect In Your Water</th>
<th>Range Low</th>
<th>Range High</th>
<th>Sample Date</th>
<th>Violation</th>
<th>Typical Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine (as Cl2) (ppm)</td>
<td>4</td>
<td>4</td>
<td>.285</td>
<td>.01</td>
<td>.56</td>
<td>2020</td>
<td>No</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>Haloacetic Acids (HAA5) (ppb)</td>
<td>NA</td>
<td>60</td>
<td>16.28</td>
<td>0</td>
<td>35</td>
<td>2020</td>
<td>No</td>
<td>By-product of drinking water chlorination</td>
</tr>
<tr>
<td>TTHMs [Total Trihalomethanes] (ppb)</td>
<td>NA</td>
<td>80</td>
<td>57.18</td>
<td>39.2</td>
<td>87.8</td>
<td>2020</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>

### Microbiological Contaminants

<table>
<thead>
<tr>
<th>Contaminants</th>
<th>MCLG</th>
<th>AL</th>
<th>Detect In Your Water</th>
<th>Sample Date</th>
<th># Samples Exceeding AL</th>
<th>Exceeds AL</th>
<th>Typical Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform (RTCR)</td>
<td>NA</td>
<td>TT</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>2020</td>
<td>No</td>
</tr>
</tbody>
</table>

### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Contaminants</th>
<th>MCLG</th>
<th>AL</th>
<th>Detect In Your Water</th>
<th>Sample Date</th>
<th># Samples Exceeding AL</th>
<th>Exceeds AL</th>
<th>Typical Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper - action level at consumer taps (ppm)</td>
<td>1.3</td>
<td>1.3</td>
<td>.3</td>
<td>2020</td>
<td>0</td>
<td>No</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
</tr>
<tr>
<td>Lead - action level at consumer taps (ppb)</td>
<td>0</td>
<td>15</td>
<td>1.9</td>
<td>2020</td>
<td>0</td>
<td>No</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
</tr>
</tbody>
</table>

**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 storm-water 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 http://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).
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 2020, UAF did not exceed the LRAA for TTHM.

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

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

Additional information on TTHM and HAA5 is located at https://www.epa.gov/dwreginfo/stage-1-and-stage-2-disinfectants-and-disinfection-byproducts-rules

For information on CUC’s water quality, please view their report at http://www.akwater.com/cuc-ccr.pdf
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: http://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 0.29 ppm.

If you have health concerns regarding chlorine in your drinking water, please contact your health provider for guidance.
<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>Action Level</td>
</tr>
<tr>
<td>TC+</td>
<td>Total Coliform Positive</td>
</tr>
<tr>
<td>CCR</td>
<td>Consumer Confidence Report</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control</td>
</tr>
<tr>
<td>CUC</td>
<td>College Utilities Corporation</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>HAA5</td>
<td>Haloacetic Acids</td>
</tr>
<tr>
<td>MCL</td>
<td>Maximum Contaminant Level</td>
</tr>
<tr>
<td>MCLG</td>
<td>Maximum Contaminant Level Goal</td>
</tr>
<tr>
<td>MRDL</td>
<td>Maximum Residual Disinfectant Level</td>
</tr>
<tr>
<td>MRDLG</td>
<td>Maximum Residual Disinfectant Level Goal</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>NSDWRs</td>
<td>National Secondary Drinking Water Regulations</td>
</tr>
<tr>
<td>N/A</td>
<td>positive samples</td>
</tr>
<tr>
<td>ppb</td>
<td>ppb: parts per billion, or micrograms per liter (µg/L)</td>
</tr>
<tr>
<td>ppm</td>
<td>ppm: parts per million, or milligrams per liter (mg/L)</td>
</tr>
<tr>
<td>SMCL</td>
<td>Secondary Maximum Contaminates</td>
</tr>
<tr>
<td>TTHMs</td>
<td>Total Trihalomethanes</td>
</tr>
</tbody>
</table>
CONTACT INFORMATION

QUESTIONS ABOUT THIS REPORT OR THE DRINKING WATER SYSTEM
Kellie Fritze, Associate Vice Chancellor for Facilities
907-474-7000

QUESTIONS ABOUT HEALTH EFFECTS
Safe Drinking Water Hotline 800-426-4791

LINKS WITH ADDITIONAL INFORMATION
UAF Water Plant Website http://www.ua.edu/fs/departments/utilities/water-plant/

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