

## Consumer Confidence Water Quality Report 2015

17<sup>th</sup> Annual Water Quality Report – June 2015

# Your Drinking Water

## Drinking Water Quality Report

College Utilities Corporation (CUC) is proud of the fine drinking water it provides. This annual water quality report shows the source of our water, lists the results of our 2014 tests, and contains important information about water and health.

CUC will notify you immediately if there is any reason for concern about our water.

**We are happy to report to you that we have met or surpassed established water quality standards.**

## Source Water Assessment

The Alaska Department of Environmental Conservation (ADEC) Source Water Assessment program has been implemented to make public water system operators, as well as the public it serves, aware of the potential contamination to the source of their drinking water at the wellhead and for the watershed. Informed customers are our best allies in maintaining safe drinking water. The assessment was performed in 2003 and included a vulnerability ranking. This ranking is based on a prioritized list of the Possible Contaminating Activities (PCAs) identified. PCAs at the top of CUC's source water (well water) vulnerability ranking include: industrial activities, businesses, fuel storage tanks, sewer lines, residential areas, landfill, airport, class V injection wells, and ADEC recognized contaminated sites. Due to these PCAs in our area, CUC received a high to very high vulnerability ranking. If contaminant levels above the allowable limits are ever detected in the source and/or distribution water, you will receive notification of the results.

Some contaminants that could be found in our source water are removed during the routine process of treating the water prior to distribution.

CUC performs many required tests on the water it provides to its customers through the distribution system. Regular monitoring of the distribution system is how the safety of public drinking water is measured. We are also required to perform tests on our source water, also known as well water.

In addition to the required testing, CUC takes extra samples from both the distribution system and source water to insure the safety of the water we supply to our customers. This sampling includes general water quality tests such as pH, total dissolved solids, conductivity, turbidity, hardness, alkalinity, salinity, and bacteriological analysis. These weekly tests, as well as extra quarterly analysis for organic chemicals, help to insure that, should an unforeseen activity affect our wells, we would know right away and be able to protect our customers from any potential contaminant.

If each of us does our part to protect our water resources, we can ensure that future generations will have ample supplies of high quality water. A complete copy of the source water assessment document can be obtained by contacting College Utilities' customer service department at 479-3118.

## Attention Property Owners and Managers

This report is available to all water customers on our web-site at [www.akwater.com/cuc-ccr.pdf](http://www.akwater.com/cuc-ccr.pdf) or at our administrative office located at 3691 Cameron Street.

Certain residents and tenants may not receive notice of this report if the property owner or manager is receiving the water bill. While not required by law, property owners and managers, as well as business owners, are encouraged to provide this information to their tenants. This report should be photocopied and distributed, or posted in a prominent place at the facility.

## Where Does Our Water Come From?

We operate three wells, 70 to 90 feet deep, which pump an average of 3.5 million gallons per day. These wells tap the huge aquifer that lies beneath the Tanana Valley. Since our water is supplied from deep wells we avoid the kinds of contaminants that may come from surface waters.

## Water Testing and Your Health

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. 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. More information about contaminants and potential health effects can be obtained by calling Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

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 surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminates that may be present in source water include:



- a. Microbiological contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- b. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- c. Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- d. Organic chemical contaminants, including synthetic and volatile organics, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- e. 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. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immunocompromised persons such as persons undergoing chemotherapy, persons who have undergone organ transplants, persons 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* are available from the Safe Drinking Water Hotline (1-800-426-4791).

## How to Read the Water Quality Tables

- **AL:** Action Level or the concentration which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **MCL:** Maximum Contaminant Level or the highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **MCLG:** Maximum Contaminant Level Goal or the level of 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 or the highest level of a disinfectant allowed in the distribution system.
- **MRDLG:** Maximum Residual Disinfectant Level Goal or the level of a disinfectant in the distribution system below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.
- **NA:** Not applicable.
- **NTU:** A Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **ppm:** Parts per million, or milligrams per liter (mg/L). The same as one minute in two years or one penny in \$10,000.
- **ppb:** Parts per billion, or micrograms per liter (µg/L). The same as one minute in 2,000 years or one penny in \$10,000,000.
- **The "<" symbol:** A symbol which means 'less than'. A result of "< 2.0" means that the contaminant was not detected above the reportable level of 2.0.

## Testing Our Water

The ADEC and US EPA require CUC to test the drinking water we distribute regularly to make sure that it meets State and Federal requirements. CUC collects numerous water samples from locations throughout the community to monitor the quality of water as it travels to your tap.

The table below shows substances that are regulated by the US EPA and ADEC and that were detected in our finished drinking water. CUC tests for many other substances, but because they were not detected, they are not reported here.

The State requires CUC to monitor for certain contaminants less than once a year because concentrations of these contaminants are not expected to vary significantly from year to year.



### Detected Contaminant Table

Contaminant	Tested	Units	MCLG	MCL	Result	Range	Violation	Typical Sources
<b>Inorganic Compounds</b>								
Arsenic	2011	ppb	0	10	0.707	NA	No	Erosion of natural deposits
Barium	2011	ppm	2	2	0.048	NA	No	Erosion of natural deposits
Chromium (total)	2011	ppb	100	100	1.11	NA	No	Erosion of natural deposits
Fluoride <sup>1</sup>	2011	ppm	4	4	0.44	NA	No	Erosion of natural deposits
Nickel	2011	ppb	100	100	1.69	NA	No	Erosion of natural deposits
<b>Disinfection By-Products</b>								
Haloacetic Acids	2014	ppb	0	60	36.9 <sup>2</sup>	22.4 - 45.5	No	By-product of water chlorination
Total Trihalomethanes	2014	ppb	0	80	67.3 <sup>2</sup>	40.4 - 70.8	No	By-product of water chlorination
<b>Disinfectants</b>								
Free Chlorine	2014	ppm	MRDLG 4	MRDL 4	0.23 <sup>3</sup>	0.0 - 2.14	No	Additive to control bacterial growth
<b>Unregulated Compounds<sup>4</sup></b>								
1,1-Dichloroethane	2013	ppb	NA	NA	0.03	< 0.03 - 0.03	NA	Used as a solvent
Chlorate	2013	ppb	NA	NA	403	370 - 430	NA	By-product of water chlorination
Hexavalent Chromium	2013	ppb	NA	NA	0.05	0.04 - 0.07	NA	Erosion of natural deposits
Strontium	2013	ppb	NA	NA	238	230 - 250	NA	Erosion of natural deposits
Vanadium	2013	ppb	NA	NA	0.2	0.2 - 0.2	NA	Erosion of natural deposits
<b>Lead and Copper</b>								
Lead	2013	ppb	0	AL 15	<2.0	30 samples; 0 exceeded AL	No	Erosion of natural deposits; plumbing corrosion
Copper	2013	ppm	1.3	AL 1.3	0.11	30 samples; 0 exceeded AL	No	Erosion of natural deposits; plumbing corrosion

Data in this report is from the most recent testing done in accordance with regulations and presented as required by 40 CFR 141.153 and 141.154.

1. The addition of fluoride was halted on 6/15/2011 by City Ordinance No. 5849.
2. Reported as the highest locational running annual average.
3. Reported as the highest system-wide running annual average.
4. Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by the EPA. The purpose of monitoring for these contaminants is to help the EPA decide whether the contaminants should have a standard.

## Other Monitoring

In addition to the ADEC and EPA mandated sampling, our water system voluntarily tests for numerous additional substances to make certain your water is of the highest quality.

Substance	Frequency	MCL	Recent Results	Compare to MCL
Alkalinity	Daily	No Limit	124 ppm as CaCO <sub>3</sub>	-
Hardness	Daily	No Limit	119 ppm as CaCO <sub>3</sub>	-
Turbidity	Daily	1 NTU	0.08 NTU	13 times better
Iron	Monthly Average	300 ppb	10 ppb	30 times better
pH	Daily	6.5 - 8.5 standard units	8.4 standard units	within range
Manganese	Monthly Average	50 ppb	20 ppb	2.5 times better
Dissolved Solids	Monthly Average	500 ppm	265 ppm	2 times better

## Want to Learn More About Your Water Company?

Visit our website at [www.akwater.com](http://www.akwater.com) to learn about conservation and other helpful information about our utility. We're happy to answer any other questions about College Utilities and our water quality.

Call customer service at 479-3118.



## Experiencing a Problem? Call the Utility First! 479-3118

Call the utility at our 24 hour number 479-3118 before you call the plumber. Customers experiencing problems with their service line should always call the utility first. We can tell you if there is a problem in your area that may be affecting your service, or we can send out a crew to check our mains and determine where the problem is located.

## Additional Health Information for Lead in Drinking Water

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.

College Utilities 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 two 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 (1-800-426-4791) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



Have a question about your water system?

Contact College Utilities Corporation  
PO Box 80370 Fairbanks, AK 99708

Phone: 479-3118

Email: [usainfo@akwater.com](mailto:usainfo@akwater.com)