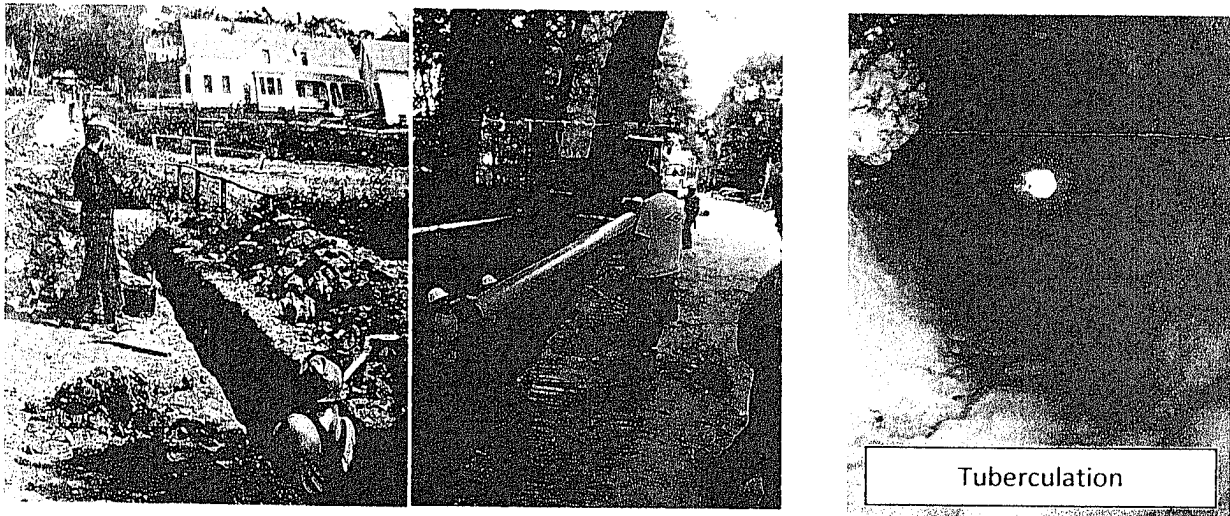
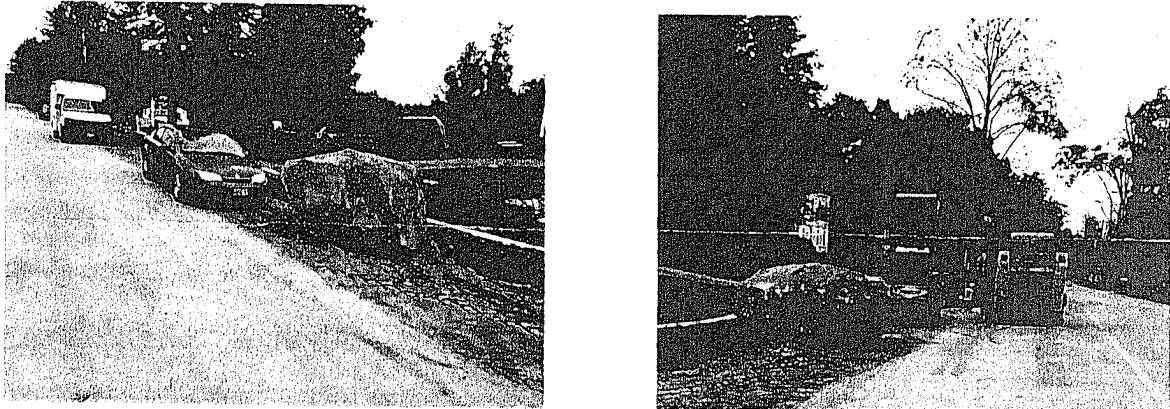


Alfred Water District 2018 Consumer Confidence Report

The District is pleased to announce that we have replaced the last of the 1911 cast iron main! Below you will find photos of how excavating was done in 1911 and of the work done in 2018 on Kennebunk Rd. The Black and White photo was taken in the town of Kennebunk when they installed their water system in 1911. In that era they dug the trench by hand and only wide enough for a man to work. Now we use excavators and wide trenches that are terraced on each side or when that is not feasible a trench box is used to keep trench from collapsing. In 1911 they installed cast iron mains that over time would get clogged with "Tuberculation" (example of this at far right). We now use "C900" PVC plastic main. It doesn't clog-up and is smooth inside so the flow rate for fire fighting is higher. The cast iron main was becoming a health hazard as the tuberculation was "eating-up" the chlorine, so any intrusion of ground water coming into the main around a leak could have contaminated the main with bacteria. We received many complaints over the years of rusty water in that area of town. The new main should reduce those complaints.



Right from the beginning of the project they hit ledge that had to be blasted. They also dug up large boulders (see photos below.)



We would like to thank all our customers, which were impacted by this project, for your patience with traffic interruptions and having temporary water lines strung out across lawns and driveways

We have two smaller projects still to be completed in the spring that will replace two undersized main in Mouse Lane and School Street.

More information regarding compliance and test conducted by the district are in the following pages.

Thank You
Alfred Water District

PWSID ME0090020
ALFRED WATER DISTRICT
2018 Consumer Confidence Report

General Information

Water System Contact Name: Alfred Water District
Address: PO Box 803, 32 Waterboro Rd
City, State, Zip Code: Alfred, Maine, 04002
Telephone #: 207 432-3212 **Fax#:** 324-8126 **Email:** klsart82@yahoo.com

Report Covering Calendar Year: Jan 1 - Dec 31, 2018

Upcoming Regularly Scheduled Meeting(s): 2nd and 4th wednesday of each month

Source Water Information

Description of Water Source: Wells: 2

Two Shallow drilled gravel wells

Water Treatment & Filtration Information:

We filter out Iron and Manganese. We add Soda Ash and Chlorine to buffer and sanitize the water

Source Water Assessment:

The sources of drinking water include rivers, lakes, ponds, 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 human or animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments included geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance to see how likely our drinking water source is to being contaminated by human activities in the future. Assessment results are available at town offices and public water systems.

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

Running Annual Average (RAA): A 12 month rolling average of all monthly or quarterly samples at all locations. Calculation of the RAA may contain data from the previous year.

Locational Running Annual Average (LRAA): A 12 month rolling average of all monthly or quarterly samples at specific sampling locations. Calculation of the RAA may contain data from the previous year.

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

Units:

ppm = parts per million or milligrams per liter (mg/L).

ppb = parts per billion or micrograms per liter (µg/L).

pCi/L = picocuries per liter (a measure of radioactivity).

pos = positive samples.

MFL = million fibers per liter

Water Test Results

Contaminant	Date	Results	MCL	MCLG	Possible Sources of Contamination
-------------	------	---------	-----	------	-----------------------------------

Microbiological

COLIFORM (TCR) (1)	2018	0 pos	1 pos/mo or 5%	0 pos	Naturally present in the environment.
--------------------	------	-------	----------------	-------	---------------------------------------

Inorganics

CHROMIUM	4/21/2017	5 ppb	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
----------	-----------	-------	---------	---------	---

Lead/Copper

COPPER 90TH% VALUE (4)	1/1/2016 - 12/31/2018	0.183 ppm	AL = 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
LEAD 90TH% VALUE (4)	1/1/2016 - 12/31/2018	4 ppb	AL = 15 ppb	0 ppb	Corrosion of household plumbing systems.

Disinfectants and Disinfection Byproducts

TOTAL TRIHALOMETHANE (TTHM) (9)	6/1/2018	7 ppb	80 ppb	0 ppb	By-product of drinking water chlorination.
---------------------------------	----------	-------	--------	-------	--

Chlorine Residual (Add chlorine residual information)

CHLORINE RESIDUAL	Range (0.45 - 1.25 ppm)	MRDL=4 ppm	MRDLG=4 ppm	By-product of drinking water chlorination.
-------------------	-------------------------	------------	-------------	--

Notes:

- 1) Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take less than 40 samples per month.
- 2) E. Coli: E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.
- 3) Fluoride: For those systems that fluoridate, fluoride levels must be maintained between 0.5 to 1.2 ppm. The optimum level is 0.7 ppm.
- 4) Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level.
- 5) Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health provider.
- 6) Arsenic: While your drinking water may meet EPA's standard for Arsenic, if it contains between 5 to 10 ppb you should know that the standard balances the current understanding of arsenic's possible health effects against the costs of removing it from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Quarterly compliance is based on running annual average.
- 7) Gross Alpha: Action level over 5 pCi/L requires testing for Radium 226 and 228. Action level over 15 pCi/L requires testing for Uranium. Compliance is based on Gross Alpha results minus Uranium results = Net Gross Alpha.
- 8) Radon: The State of Maine adopted a Maximum Exposure Guideline (MEG) for Radon in drinking water at 4000 pCi/L, effective 1/1/07. If Radon exceeds the MEG in water, treatment is recommended. It is also advisable to test indoor air for Radon.
- 9) TTHM/HAA5: Total Trihalomethanes and Haloacetic Acids (TTHM and HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. Compliance is based on running annual average.

All other regulated drinking water contaminants were below detection levels.

Secondary Contaminants (You are not required to list detects for secondary contaminants, but this information, particularly sodium levels, might be useful to your customers. The decision to supply this information in your CCR is up to you.)

CHLORIDE	26 ppm	4/21/2017
SULFATE	16 ppm	4/21/2017
SODIUM	44 ppm	4/21/2017
MAGNESIUM	1.04 ppm	4/21/2017
MANGANESE	0.01 ppm	4/21/2017

Health Information

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.

Contaminants that may be present in source water include:

Microbial 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which 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, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban runoff, and septic systems.

Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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, 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 (1-800-426-4791) or at the following link:

<https://www.epa.gov/ccr/forms/contact-us-about-consumer-confidence-reports>

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. Alfred Water District 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 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 or at the following link:

<http://www.epa.gov/safewater/lead>

Violations

No Violations in 2018

Waiver Information (to be included in the CCR for systems that were granted a waiver)

In 2016, our system was granted a 'Synthetic Organics Waiver.' This is a three year exemption from the monitoring/reporting requirements for the following industrial chemical(s): TOXAPHENE/CHLORDANE/PCB, HERBICIDES, CARBAMATE PESTICIDES, SEMIVOLATILE ORGANICS. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source(s).