CITY OF Saint Paul ALASKA

2022 Drinking Water Quality Consumer Report

City of Saint Paul Water Utility

Water System Operator: City of Saint Paul, Alaska
Water System Name: Saint Paul Aquifer
Public Water System #: 260286
Population Served: 300-400
Number of Connections: 194

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Phone #: (907) 546-3100
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Date of Distribution: June 25, 2023
For Calendar Year: 2022

Where Our Water Comes From

The City of Saint Paul Water Utility has prepared this report to explain where your tap water comes from, what it contains, and how it measures up to state and federal standards.

The water system is supplied by groundwater and is obtained from seven domestic water wells. These wells are in the water shed located between Telegraph Hill and the base of Kaminista Ridge.

Completed water source assessments are given to the local water system operator and the Alaska Resources Library & Information Services (ARLIS) located at 3211 Providence Drive, Room 111 Anchorage, AK 99508.

Drinking Water Standards and Testing

To ensure that tap water is safe to drink, the Alaska Department of Environmental Conservation has regulations specific to the State of Alaska, based on EPA prescribed regulations, which limit the amount of certain contaminants in water provided by public water systems.

The rules also require testing the water in the distribution system. We are scheduled to test every month for coliform bacteria and other contaminates based on the schedule established by ADEC. If a contaminant is detected, then additional testing is done to determine the cause. Monitoring for certain contaminants is performed less frequently because the amount present does not change frequently. For this reason, some of the data can be more than a year old.

Contaminants That May be Present in Source Water

There are many contaminants that may be present in a water source; drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. A contaminant is any substance that may pose a potential health concern if present

in very large quantities. The highest amount allowable in drinking water is known as the Maximum Contaminant Level. This limit is the standard for safe drinking water and is set by federal and/or state health agencies. The regulations require testing tap water for many different categories of contaminants, either regulated or unregulated. The following is a list of substances that have been found in Saint Paul Island's water and their possible sources. **In all cases, the amounts present pose no health concern.**

Some substances tested for are:

- Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, and wildlife.
- Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, are byproducts of gas stations, storm water runoffs, fuel spills and septic systems.
- Lead, which may come from corrosion of household plumbing systems or erosion of natural deposits. 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 material and components associated with service lines and home plumbing. The City 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.

SDG	Test	Received Date	Final Report Date	Result	MDL	MCL
ARS3-22-00227	Coliform	01/26/2022	02/08/2022			
ARS3-22-01142	Rejected	06/10/2022	09/06/2022	-	-	-
ARS3-22-01551	Coliform E coli.	08/10/2022	08/22/2022	Absent Absent	1 1	1 1
ARS3-22-01672	Coliform E coli.	08/29/2022	08/30/2022	Absent Absent	1 1	1 1
ARS3-22-01672	Coliform E coli.	08/29/2022	08/30/2022	Absent Absent	1 1	1 1
ARS3-22-01672	Coliform E coli.	08/29/2022	08/30/2022	Absent Absent	1 1	1 1
ARS3-22-01887	TTHM & HAA5	09/27/2022	10/12/2022			
ARS3-22-01887	TTHM & HAA5	09/27/2022	10/12/2022			
ARS3-22-01887	Trip Blank	09/27/2022	10/12/2022			
ARS3-22-01888	Coliform E coli.	09/27/2022	10/09/2022	Absent Absent	1 1	1 1
ARS3-22-02067	Coliform E coli.	10/25/2022	11/04/2022	Absent Absent	1 1	1 1

Glossary of Terminology

AL	Action Level: The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.
EPA	Environmental Protection Agency: Protects people and the environment from significant health risks, sponsors and conducts research, and develops and enforces environmental regulations.
MCL	Maximum Contaminant Level: 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: 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.
MDL	Method Detection Limit: The minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results.
PPB	Parts Per Billion: Or micrograms per liter. For example, if the measurement reads 10 ppb of a contaminant there would be 10 parts of the substance in a billion parts of water.
PPM	Parts Per Million or milligrams per liter.

The presence of contaminants does not necessarily indicate that water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals 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, or to try to lower the risk of infection, call for info from the Safe Drinking Water Hotline.

Detected Regulated/Unregulated Contaminants for Which Monitoring is Required

Our water system had a sanitary survey in 2022. During this survey 13 deficiencies were identified. 2 were resolved at the end of 2022. 11 remain open with due dates for corrective actions by 9/30/2023. An action plan has been submitted and the Saint Paul water system is currently on target to correct all deficiencies.

We are required to sample for Total Coliform every month and take a chlorine residual at the same time/same place. The City was out of compliance, as seen by the table above, samples missing in 2022 in the months of February, March, April, May, June, July, November, and December. All violations generated were returned to compliance with the next Total coliform sample that was taken. We have since only missed 1 month of Total Coliform samples and are currently compliant with regulations.

Total coliform bacteria is often considered an indicator there may be something more serious contaminating a drinking water system, specifically E. coli bacteria. Total coliform bacteria are colorless, odorless, and tasteless and the only way it can be detected in drinking water is through submitting a sample for laboratory testing.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is no convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Haloacetic Acids (HAA5) (ppb)	NA	60	13.7	10	13.7	2020	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	77.4	42	77.4	2020	No	By-product of drinking water disinfection
Inorganic Contaminants								
Nitrate [measured as Nitrogen] (ppm)	10	10	1.42	NA	NA	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Our system was due to sample for Volatile Organic Chemicals between 2020 and 2022. The City was out of compliance in reporting, and this generated violations. The system was sampled in February of 2023. There were no contaminants in the results of detectable levels. There are no known health effects.

Local Water News

The total water pumped from the City's watershed/wellfield in 2022 was 91,336,450 gallons. In 2022, due to an undetected water break and necessary repair causing pressure to drop below 20 psi, a Boil Water Notice was put into effect from August 26 through August 30. The notice was rescinded once three sample tests returned negative for contaminants. While the City was out of compliance periodically in 2022 – due to a variety of reasons to include alignment of the 30hr testing window with plane schedules and cancelations, miscommunication, and locations not available due to Covid restrictions – our water operators are diligent, further their education online and continue to send samples for testing as often as possible.

Remember that Saint Paul is an island, and while our water supply is adequate, clean, and safe, it takes all of us to keep it that way. Please protect our water resource by protecting the environment, using water wisely and disposing of wastes properly. If needed, report oil and hazardous substance spills to 1-800-478-9300.

2023 PFAS

Shannon & Wilson, Inc. collected water samples from the following water system source wells: North Well,

Fredereka Well 2, and Fredereka Well 5 to evaluate the presence of per- and polyfluoroalkyl substances (PFAS) in ground water near the airport.

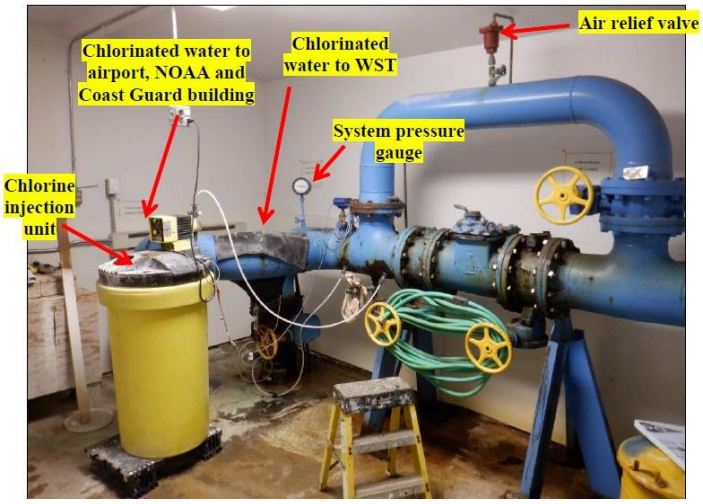
PFAS are a group of manmade chemicals used for a wide variety of residential, commercial, and industrial uses. PFAS are considered emerging environmental contaminants and the health effects are not well known. PFAS are used in many consumer products ranging from fabric waterproofing compounds, non-stick cookware, stain resistant carpeting, some food packaging, and firefighting foams.

A potential source of PFAS in groundwater near the airport is the use of a fire-fighting foam called aqueous film forming foam (AFFF). Airport firefighters used the foam to extinguish petroleum fires during training exercises and emergency events.

The "Results of 2023 PFAS Water Supply Well Sampling, Saint Paul Island Airport" full report from Shannon & Wilson, Inc. is available on the City's website at www.stpaulak.com/#news

Well	Result	Concentration	Unit
North Well	Absent	-	-
Fredereka Well 2	Present	1.2	ng/L
Fredereka Well 5	Present	1.83	ng/L

Inside the water treatment plan



For More Information: Drinking Water Protection Program – 907-269-7549
EPA's Safe Drinking Water Hotline – 1-800-426-4791

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