



2025

Annual Water Quality Report

Consumer Confidence Report

City & Borough of Juneau
Engineering & Public Works
Utilities Division

Water Quality Reports / Consumer Confidence Reports (CCRs) provide the public with regular assurance of potable water quality standards as established and maintained by the US Environmental Protection Agency (USEPA) and the Alaska Department of Environmental Conservation (ADEC). The CBJ also conducts spot and routing monitoring of its water production and distribution systems for operational control and maintenance protocols.

155 Heritage Way, Juneau, Alaska 99801
Phone: (907) 586-0393 · Email: cbj.utility@juneau.gov
<https://juneau.org/water-quality-report>

A MESSAGE FROM THE DIRECTOR



Denise Koch, Engineering & Public Works Director

Juneau has delicious, pure, and plentiful drinking water. This is the result of both natural abundance and largely invisible infrastructure. There is a dedicated team of staff who treat and distribute that water to your tap daily – including holidays, weekends, and during severe weather. In addition, the Utility continues to replace critical aging infrastructure. This report highlights some of the construction projects that were completed during the last year to improve the reliability and resilience of the system.

– Denise Koch, Engineering & Public Works Director, 2026

Protect Your Water

Simple ways you can help safeguard Juneau's water



Sign Up for Paperless Billing

Help the Utility conserve resources by receiving your bill by email! Sign up at www.bit.ly/cbj-paperless.



Pick Up Pet Waste

Pet waste pollutes waterways with bacteria and excess nutrients. All pets must be leashed in the watershed areas.



Respectful Recreation

Camping, shooting, recreational mining (except gold panning) and any hazardous substances are prohibited within the watershed boundaries.



Report Suspicious Activity

Call the Utilities Division at (907) 586-0393 if you see suspicious activity in or around our water sources or reservoirs.



Sign Up for Automatic Payments!

You can set up automatic utility payments through Invoice Cloud. For more information or to sign up, please go to <https://juneau.org/engineering-public-works/utilities-division/faq>.

2025 ANNUAL WATER QUALITY REPORT

Your Water. Your Report.

Per the United States Environmental Protection Agency's (EPA) National Primary Drinking Water Regulations, all drinking water suppliers are required to provide the public with an annual statement describing the community's water supply and quality. The City & Borough of Juneau Utility protects the community's water by maintaining its purity through treatment and source-water monitoring and delivering it safely so it remains clean and great-tasting for residents, visitors, and businesses.

Juneau's drinking water comes from groundwater and surface water sources. The primary water source is the Last Chance Basin (LCB) wellfield located in the Gold Creek watershed; it provides roughly two-thirds of Juneau's water. Surface water, collected at the Salmon Creek (SC) Reservoir, comes from snowmelt and rainfall. This is Juneau's secondary water source and supplies about one-third of the drinking water demand.

 $\frac{2}{3}$ **Last Chance Basin (LCB)**

Primary water source · groundwater wellfield in the Gold Creek watershed

 $\frac{1}{3}$ **Salmon Creek (SC)**

Secondary water source · surface water from snowmelt & rainfall

Juneau's water requires very little treatment compared to the rest of the United States. Both sources are gently chlorinated to kill any disease causing microorganisms that may be present. As required by the EPA, all surface water is also run through an additional filtration unit.

The CBJ Utility conducts comprehensive and routine monitoring of its water supply for contaminants, including lead, which has adversely affected water systems in other communities. In the fall of 2022, the reservoir tanks underwent detailed inspection, and repairs were made to the cathodic protection systems to mitigate internal corrosion. Divers also removed accumulated sediment from the tank floors. These ongoing, proactive monitoring and maintenance activities enable CBJ to consistently provide water that meets or exceeds all EPA drinking water standards.

SAFEGUARDING THE SUPPLY

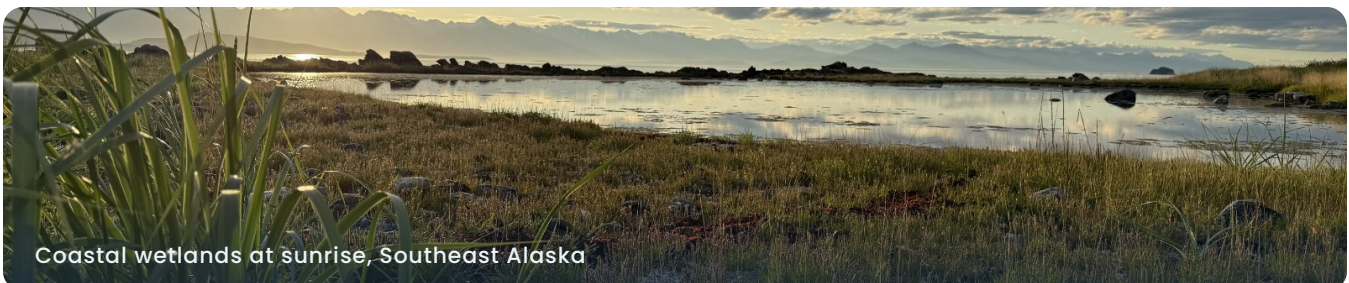
Protecting the Safety of CBJ's Drinking Water and Environment

The CBJ Utility is responsible for uninterrupted provision of safe potable drinking water and the treatment and safe disposal of CBJ's domestic and industrial waste products. Both the Water and Wastewater Divisions of the CBJ Utility are closely and carefully regulated primarily by the State of Alaska's Department of Environmental Conservation (DEC) and the U.S. Environmental Protection Agency (EPA). These State and Federal regulatory agencies responsible for oversight of the CBJ Utility provide comprehensive standards and guidance to our Utility that help us maintain the highest possible standards of public health and safety for our community.

In addition to the direction and assistance provided by our regulatory colleagues, the Utility also maintains its own stringent practices for further assuring safe drinking water and environmental protection for the CBJ. Known as Best Management Practices (BMPs), the CBJ Utility routinely adopts and maintains preventative and conservative approaches especially during times when our regulatory agencies are investigating and developing standards for new and/or emerging contaminants (e.g., PFAS, lead, micro-plastics, etc.). The Utility's BMPs, developed and maintained by our vigilant staff, add extra layers of protection and safety for our community's potable water and wastewater disposal practices.

Utility News

At the June 9, 2025 Assembly meeting, the Assembly voted to enact 5% rate increases for both the water and wastewater utility for FY26 – FY30 per Ordinance 2025-27. The first-rate increase took effect on August 1st, 2025. The second increase will take effect this year on July 1st, 2026.



Coastal wetlands at sunrise, Southeast Alaska

INVESTING IN THE SYSTEM

Utility Infrastructure Update

Maintaining vital water services requires continuous investment in aging infrastructure, and we are actively putting available funding to work to modernize and strengthen these systems for future generations.

\$10M+

Invested in FY26 water & wastewater improvements

\$15M+

Being deployed for major FY27 improvements

\$20M+

In future capital projects now in design

In FY26, we have successfully invested more than \$10 million in critical water and wastewater infrastructure improvements throughout the community. Completed projects include improvements at drinking water reservoirs, upgrades to the Outer Drive and West Juneau sewer lift stations, modernization of the Mendenhall Wastewater Treatment Plant's Supervisory Control and Data Acquisition (SCADA) system, and replacement of aging water and sewer mains in the Mendenhall Valley and other areas of Juneau.

Today, we are deploying more than \$15 million in additional funding towards major infrastructure improvements in FY27. These projects include drinking water well replacements at our primary water source, upgrade of a critical water pump station downtown, rehabilitation of the aging clarifier at the Juneau-Douglas Treatment Plant (JDTP), upgrades to solids and septage handling systems, construction of a new septage receiving station at JDTP, and installation of a biosolids crusher at the Mendenhall Wastewater Treatment Plant. These investments will improve system reliability, operational efficiency, and long-term treatment capacity.

Looking ahead to the next few years, more than \$20 million in future capital projects are currently in the design phase with more to come. Planned investments include replacement of aging water and sewer pipelines in downtown Juneau and along Glacier Highway to the hospital, as well as development of a local biosolids disposal solution at the Mendenhall Wastewater Treatment Plant. The pipeline replacement projects are being coordinated with upcoming Alaska Department of Transportation roadway improvements to maximize the value of public funds, minimize disruption to residents, and ensure efficient project delivery.

Together, these investments represent a comprehensive commitment to utilizing available funding strategically and responsibly to renew Juneau's critical water and wastewater infrastructure, protect public health, and provide reliable service for decades to come.

BUILDING RESILIENCE

Glacial Lake Outburst Flood (GLOF)

Over the past several years, CBJ Utility's aging infrastructure has been impacted by Glacial Lake Outburst Flood (GLOF) events. Following each flood, we have taken steps to repair damage and improve the resilience of our water and wastewater systems.

On the water system, flooding events recently eroded the supports for the aging 16-inch ductile iron water main along Back Loop Road, leaving the pipe vulnerable to damage. The supports were repaired to restore and protect service.

On the wastewater system, several lift stations in flooded areas were submerged and required repairs before operations could resume. These facilities have since been modified to reduce the risk of damage during future flood events.

In 2023, severe erosion along the Mendenhall River washed away part of the riverbank at the Mendenhall Wastewater Treatment Plant, resulting in the loss of a portion of the plant property. Since then, the riverbank has been rebuilt and reinforced with rock armor. In 2026, additional armoring was installed, along with HESCO barriers placed on top of the reinforced bank for added protection.

Other measures to maintain reliable service include sandbagging vulnerable access points at the treatment plant and conducting regular inspections of the river outfall pipe.

Despite these challenges, we remain committed to protecting our infrastructure, improving system resilience, and providing reliable water and wastewater services to the community.



Glacial outwash in the Mendenhall watershed — source of recent outburst floods

MONITORING & COMPLIANCE

Drinking Water Monitoring & Test Results

LCB — Last Chance Basin (primary, groundwater) **SC** — Salmon Creek (secondary, surface water)

Measured Before Treatment							
Contaminant	Units	MCL	MCLG	LCB	SC	Date Sampled	Major Sources / Notes
Turbidity	NTU	0.3	0	N/A	0.11 avg 0.022 max	Continuous	Turbidity data is recorded post filtration
Arsenic	mg/L	0.01	0	<0.001	<0.001	2022*	Erosion of Natural Deposits
Barium	mg/L	2	2	0.047	0.024	2022*	Erosion of Natural Deposits
Fluoride	mg/L	4	4	<0.1	<0.1	2022*	Naturally present in the environment (CBJ has not added fluoride since Jan. 2007)
Nitrate (as Nitrogen)	mg/L	10	10	0.20	<0.1	2025*	Fertilizer runoff; sewage leaching; erosion of natural deposits
Selenium	mg/L	0.05	0.05	<0.002	<0.002	2022*	Erosion of natural deposits
Alpha Particles	pCi/L	15	0	<0.380	0.810	2025*	Erosion of natural deposits
Radium 226	pCi/L	5	0	0.030	<0.240	2025*	Erosion of natural deposits
Radium 228	pCi/L	5	0	0.270	0.170	2025*	Erosion of natural deposits

*Sampled in the year shown; under ADEC-approved monitoring schedules some parameters are tested less often than annually. Values are measured at the source, before treatment. Every detected result is within EPA and ADEC maximum contaminant levels (MCLs).

MONITORING & COMPLIANCE

Drinking Water Monitoring & Test Results

Measured in the Distribution System						
Contaminant	Units	MCL	MCLG	Level Detected	Sampling Frequency	Major Sources
Total Coliform Bacteria	count	1 positive sample per month	0	No Violation	Weekly	Runoff from organic material
Haloacetic Acids (HAAS)	mg/L	0.06	N/A	0.00234 avg ND-0.0082	Quarterly	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	mg/L	0.08	N/A	0.00384 avg 0.00071- 0.0117	Quarterly	By-product of drinking water disinfection
Chlorine	mg/L	MRDL = 4	MRDL = 4	0.50 avg	Continuous	Disinfectant used to control microbes
Copper	mg/L	AL = 1.3	1.3	90th Percentile = 0.390	2025*	Corrosion of household plumbing systems, erosion of natural deposits
Lead	mg/L	AL = 0.015	0	90th Percentile = 0.0005	2025*	Corrosion of household plumbing systems, erosion of natural deposits

*Summary of the most recent water quality test results for the CBJ water system. ADEC and EPA limit the amount of certain contaminants in drinking water to ensure the safety of public health. Juneau's treated drinking water met all State and Federal standards for public health. Some data, though representative, is more than a year old. Per State requirements, some contaminants are monitored less than once per year due to infrequent concentration shifts.



Mendenhall wetlands along the Gastineau Channel

READING THE TABLES

Abbreviations

ADEC: Alaska Department of Environmental Conservation

AL: Action Level: The concentration of a contaminant which, if exceeded, triggers additional treatment or other requirements

CBJ: City and Borough of Juneau

EPA: U.S. Environmental Protection Agency

FDA: U.S Food & Drug Administration

LCB: CBJ's Last Chance Basin, Water Source

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the CMLGs as feasible using treatment technology

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known of expected risk to health. MCLGs allow for a margin of safety.

MGD: Million Gallons per Day

mg/L: Milligram per Liter – Or parts per million

MRDL: Maximum Residual Disinfectant Level – The highest level of a disinfectant allowed in drinking water.

N/A: Not Applicable

ND: None Detected at specified level

NTU: Nephelometric Turbidity Unit – The unit of measure for turbidity, or the light scatter created by particles suspended in water.

pCi/L: Pico Curies per Liter

PPB: Parts per Billion

SC: CBJ's Salmon Creek, Water Source

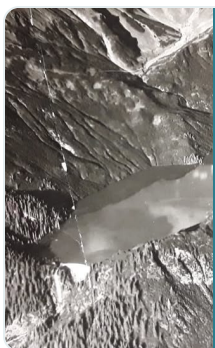
DID YOU KNOW?

Fun Facts

- A running toilet can waste significant water—up to 50,000 gallons in a month. For that amount, current charges would be about \$1,003.58 for combined water and sewer service, or \$210.48 for water-only customers. If you've received a high-usage alert, please reach out to Meters at x0601.



- CBJ has nearly 1500 fire hydrants. During Snowmeggedon last year, there were only six Water employees working to uncover these fire hydrants and keep Juneau's Water infrastructure operating.



- The Salmon Creek Dam, completed in 1914, is a National Historic Civil Engineering Landmark — and was the world's first constant-angle arch dam. Over 100 similar dams have since been built around the world, and it still helps supply roughly one-third of Juneau's drinking water today.

Salmon Creek Dam, 1920s · U.S. Navy photo

- Letting your faucet run for five minutes while washing dishes can waste 10 gallons of water and uses enough energy to power a 60-watt light bulb for 18 hours.


Faucet
5 min




10 gallons
wasted




60W bulb
18 hours

- Only 3-3.5% of the earth's water is fresh, and only around 1% is available for use. Juneau's water is derived from high-quality natural resources but still requires treatment to eliminate bacteria and other naturally occurring substances.

- The Tongass National Forest – which surrounds Juneau and helps protect its source watersheds – is the largest national forest in the United States at approximately 16.7 million acres, an area larger than 10 U.S. states (USFS).

Source: Environmental Protection Agency. "Statistics and Facts." Water Stats, accessed 6/12/2026, <https://www.epa.gov/watersense/statistics-and-facts>

ACTION REQUIRED FOR PROPERTY OWNERS

Lead Service Line Inventory Program

(Also referred to as the Water Service Line Material Survey)

The City and Borough of Juneau (CBJ) is performing a Lead Service Line Survey for all buildings served by the CBJ water utility. The United States Environmental Protection Agency's (USEPA) Safe Drinking Water Act requires that public water systems – like the CBJ water utility – perform these surveys to identify where lead service lines exist in water systems. The City and Borough of Juneau (CBJ) has contracted Geosyntec Consultants to perform the survey. Each property owner in the CBJ is responsible for completing the survey for each parcel of property owned. If you are a property owner in Juneau attached to the public water supply and have not yet submitted a service line survey, we ask that you act promptly and do so by visiting:

<https://go.geosyntec.co/cbj-water-service-line-material-survey>

If you have questions or concerns, contact us at 907-586-0393 (option 0) or at cbj.utility@juneau.gov.

UNDERSTANDING WATER QUALITY

Potential Water Contaminants

CBJ's drinking water is regularly tested and required to provide the results annually to the public – ensuring that is clean, pure, and delicious. All drinking water may be reasonably expected to contain small amounts of certain dissolved substances and small particulates, such as iron or nitrogen. These substances often enter the source water naturally; as water travels over land or through the ground, it dissolves occurring minerals and may pick up other substances from the presence of animals or human activity.

The presence of dissolved substances in potable water does not indicate that the water poses a health risk unless that substance exceeds a carefully regulated level and becomes a contaminant. The EPA limits the amounts of contaminants in public water systems to ensure that water is safe to drink. The CBJ regularly delivers water to our community that is free from harmful contamination and is always safe.

UNDERSTANDING WATER QUALITY

SOURCE WATER PROTECTION

A Source Water Assessment was performed for CBJ watersheds to identify the potential for contamination. LCB received a "Medium" susceptibility designation common to groundwater sources. SC reservoir received a "Very High" susceptibility designation (due to potential exposure by wildlife and recreational uses) common for surface water sources. These ratings do not directly reflect the quality of the drinking water; they provide the Water Utility with information as to how prone the water sources are to possible contamination.

Copies of the Source Water Assessments for LCB and SC are available from the ADEC Drinking Water Program at (866) 956-7656, or the Alaska Resource Library at (907) 272-7547.

CONTAMINANTS THAT MAY BE PRESENT IN DRINKING WATER SOURCES

Microbial Contaminants are viruses and bacteria that may come from local wildlife or human activity and could affect source watersheds. The most common examples of these include: giardia, cryptosporidium, salmonella, campylobacter, Escherichia coli (E.coli), Hepatitis A, and Norwalk-type viruses. Inorganic Contaminants can include a combination of metals, salts, compounds, particles, and mineral complexes which do not contain carbon.

Inorganic Contaminants include natural or man-made elements or compounds that can contaminate water or be concentrated in the water cycle. Some of the most common contaminants include carbon dioxide and other gases, salts like chloride, sodium, calcium, potassium, iron, and manganese. Inorganic contaminants commonly create a salty or bitter taste, discoloration, or even chemical scale/corrosion.

Organic Contaminants in drinking source waters are comprised of Synthetic Organic Compounds (SOCs) and Natural Organic Matter (NOM). SOCs are man-made chemicals typically from the petroleum, plastics, chemical, pharmaceutical, and agricultural industries. NOM is often due to trace organic compounds from decomposing plant and animal material in the environment. These include a variety of acids, proteins, algae, and microorganisms. Excepting the rare instance of harmful algal blooms, NOM is generally not a health threat.

Radionuclide Contaminants found in public drinking water sources occur naturally. Radioactive radium and uranium are found in small amounts in almost all rock and soil, and can dissolve in water. Radon, a radioactive gas, created through the decay of radium, can also naturally occur in groundwater. If it is not removed, radon in water will increase the risks of kidney damage and cancer.

UNDERSTANDING WATER QUALITY

Contaminants of Special Concern are determined through continual monitoring by the USEPA and currently include Lead and PFAS.

PFAS, or Per- and Polyfluoroalkyl Substances, are persistent synthetic compounds used in a variety of industrial and consumer product applications including non-stick cookware and firefighting foams. PFAS poses a significant threat to human and ecosystem health and the allowable limits in drinking water have recently been further restricted by the EPA to 2 parts per trillion (2 ng/l). There is currently no detectable PFAS in Juneau's source water.

Lead is a toxic metal that is persistent in the environment and can accumulate in the body over time. The USEPA has set the maximum contaminant level goal for lead in drinking water at zero because lead can be harmful to human health even at low exposure levels. The most common sources of lead in drinking water are lead pipes, faucets, and plumbing fixtures. Certain pipes that carry drinking water from the water source to the home may contain lead. Household plumbing fixtures, welding solder, and pipe fittings made prior to 1986 may also contain lead. There is currently no detectable lead in Juneau's source water.

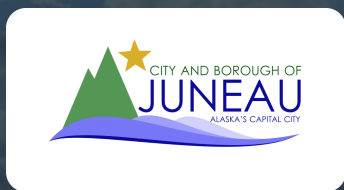
For more information about contaminants in drinking water sources and potential health effects, contact the EPA's Safe Drinking Water Hotline (1-800-426-4791) or visit water.epa.gov/drink/contaminants.

Exemptions and Waivers

The CBJ water system operates under waivers for synthetic organic chemicals and reduced asbestos monitoring as authorized by ADEC.

For More Information

Thank you for reading this report and helping us protect Juneau's water supply. If you have any questions, comments, or would like more information please contact Brian McGuire, CBJ Utilities Superintendent, at (907) 586-0393 or the ADEC at (907) 465-5066.



CONTACT

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