



UTILITY ADVISORY BOARD AGENDA

May 08, 2025 at 5:15 PM

Water Utility Shop 2520 Barrett Ave./Zoom Webinar

<https://juneau.zoom.us/j/83013202186> or 1-253-215-8782 Meeting ID: 830 1320 2186

A. CALL TO ORDER

B. LAND ACKNOWLEDGEMENT

We would like to acknowledge that the City and Borough of Juneau is on Tlingit land, and wish to honor the indigenous people of this land. For more than ten thousand years, Alaska Native people have been and continue to be integral to the well-being of our community. We are grateful to be in this place, a part of this community, and to honor the culture, traditions, and resilience of the Tlingit people. *Gunalchéesh!*

C. ROLL CALL

D. APPROVAL OF AGENDA

E. APPROVAL OF MINUTES

1. April 10, 2025 - Regular Meeting

F. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

G. AGENDA TOPICS

2. 4/30 Assembly Finance Committee Meeting Results

3. Utility Update

4. UAB Annual Report Draft

H. NEXT MEETING DATE

5. June 12, 2025 @ 5:15 PM

I. SUPPLEMENTAL MATERIALS

6. 2024 UAB Annual Report

J. ADJOURNMENT

ADA accommodations available upon request: Please contact the Clerk's office 36 hours prior to any meeting so arrangements can be made for closed captioning or sign language interpreter services depending on the meeting format. The Clerk's office telephone number is 586-5278, e-mail: city.clerk@juneau.gov.

UTILITY ADVISORY BOARD MINUTES (DRAFT)



April 10, 2025 at 5:15 PM

Water Utility Shop 2520 Barrett Ave./Zoom Webinar

<https://juneau.zoom.us/j/83013202186> or 1-253-215-8782 Meeting ID: 830 1320 2186

A. CALL TO ORDER

Meeting called to order by Chair Campbell at 5:15 PM.

B. LAND ACKNOWLEDGEMENT

We would like to acknowledge that the City and Borough of Juneau is on Tlingit land, and wish to honor the indigenous people of this land. For more than ten thousand years, Alaska Native people have been and continue to be integral to the well-being of our community. We are grateful to be in this place, a part of this community, and to honor the culture, traditions, and resilience of the Tlingit people. *Gunalchéesh!*

C. ROLL CALL

UAB Members Present: Andrew Cambell (Chair), Stuart Cohen, Grant Ritter, Geoff Larson, Buffy Pederson

CBJ Staff Present: Brian McGuire, Utilities Superintendent; Chad Gubala, Utilities Production & Treatment Manager; Nathan Bodensadt, Administrative Coordinator

D. APPROVAL OF AGENDA

Approved without comment.

E. APPROVAL OF MINUTES

1. March 13, 2025 - Regular Meeting

Approved without comment.

F. AGENDA TOPICS

2. Utility Update

Mr. McGuire shared several utility updates. In wastewater operations, the crusher project for biosolids was awarded to Dawson Construction. A new Source Control Coordinator position was approved and classified by HR to manage industrial sewer discharges. The outdated thawing code from 2011 was successfully repealed at the 4/7/2025 Assembly meeting. The Juneau-Douglas Treatment Plant Clarifier project received funding approval at the 4/7/2025 meeting, with approximately \$1M allocated for this year and \$9M for next year, with construction expected to extend beyond the cruise ship season. The 2024 rate study will be discussed at the Assembly Finance Committee on April 30th. New 2025 cruise ship contracts will include monitoring requirements to assess pollutants of concern (including PFAS). These contracts are renewed annually.

Regarding water utilities, Mr. Gubala shared that planning is underway for the Salmon Creek outage scheduled to begin in April 2026. The utility plans to take a conservative approach to cruise ship water supply during the outage period, prioritizing community and fire protection needs. The department has improved its understanding of system performance based on the past year's experiences and is developing emergency water supply protocols.

3. Annual Report - Due May 31, 2025

Chair Andrew Campbell noted UAB member Janet Schempff's absence and her previous experience and interest in preparing the annual report. Mr. Larson confirmed the submission deadline of May 31st, with one more meeting scheduled before then. The board discussed reaching out to Janet to see if she would be willing to prepare the report again between meetings, and then review it at the May 8, 2025 meeting. The board agreed to maintain this item on the next meeting's agenda.

4. Discussion: Pyrolysis

The Board discussed the implementation of pyrolysis technology for biosolids management. Mr. Gubala provided a detailed overview of why pyrolysis was selected as the preferred technology over other options like plasma treatment. He explained that the primary objective was to reduce waste to components that could be disposed of locally, reducing/eliminating the current \$1.2-2.8 million annual cost of shipping biosolids to Arlington, Oregon.

Mr. Gubala addressed regulatory considerations, noting that EPA certification for PFAS treatment is complex due to the limited ability to quantify all PFAS variants (only about 80 of over 15,000 types can be measured). He highlighted that the selected pyrolysis technology has been successfully implemented in 14 different installations with EPA and state approval. The process generates valuable byproducts including carbon black and biochar, with potential for buyback agreements and financial incentives from vendors.

Mr. Cohen inquired about biosolid volumes and potential revenue from byproducts. Mr. Ritter and Cohen discussed the practicality of local use for these byproducts, noting that shipping costs could offset potential profits for distant sales.

Mr. Larson raised concerns about PFAS emission standards and project commitments. Mr. Gubala clarified that the current phase involves a \$2 million forgivable loan for design studies, with no obligation for the city to proceed with implementation. He explained that while exact PFAS safety standards are still being developed by EPA, the technology employs a layered approach including primary processing, secondary afterburner, and GAC scrubbing to manage PFAS compounds.

Mr. Ritter brought up broader waste management concerns, referencing a Southeast Conference report on municipal solid waste to energy possibilities for Southeast Alaska. He questioned why regional collaboration wasn't being pursued for a comprehensive waste solution.

Mr. Gubala emphasized that while a regional solution would be ideal, the current pyrolysis proposal addresses an immediate need to manage biosolids, particularly given the risk that the Oregon disposal facility that currently accepts biosolids might eventually refuse CBJ materials. The project represents a practical step forward while broader waste management solutions continue to be explored.

G. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

Ethan Roemeling introduced himself as a newly appointed member of the Utility Advisory Board, with his term beginning in June. He stated he was attending to familiarize himself with the board's current activities. Chair Campbell welcomed Mr. Roemeling.

H. NEXT MEETING DATE

5. May 8, 2025 @ 5:15 PM

I. SUPPLEMENTAL MATERIALS

J. ADJOURNMENT

Meeting adjourned at 6:11 PM.

ADA accommodations available upon request: Please contact the Clerk's office 36 hours prior to any meeting so arrangements can be made for closed captioning or sign language interpreter services depending on the meeting format. The Clerk's office telephone number is 586-5278, e-mail: city.clerk@juneau.gov.



City and Borough of Juneau
 City & Borough Manager's Office
 155 Heritage Way
 Juneau, Alaska 99801
 Telephone: 907-586-5240 | Facsimile: 907-586-5385

TO: Chair Woll and Assembly Finance Committee
 FROM: Katie Koester, City Manager
 DATE: April 22, 2025
 RE: Utility Rate Increases

CBJ began work on utility rate increases almost a year and a half ago with the scheduled 2% rate increase sunsetting in calendar year 26. In November of 2024, the Assembly Finance Committee was presented with a proposed rate increases upwards of 10% (percentage varied between debt and cash financing and water versus sewer enterprise). This was after the Assembly used a \$10M utility bond on the 2024 ballot to buy down rate increases by an additional 3%.

What has changed since November 2024?

For today's presentation, the consultants were able to lower needed rate increases by an average of 1% on the water side and 3% on the sewer side based on two new pieces of information: they now have FY2024 actuals (which have an increased contribution to fund balance than predicted) and they found an error in one of the inputs for a capital project that was double counted. I asked the consultants how much capital spend we would need to bring the utility rate increase down to 5%, which you see modeled for debt financing and cash in the presentation.

Debt vs. Cash

The debt scenarios provided seem like an obvious choice as strategically using debt puts significant downward pressure on rates under all the scenarios. However, keep in mind that this is principally because you are spreading those costs out over 20 years. Under the debt scenarios we will get to 2030 and be contributing approximately \$750,000 out of the operating budget to cover the debt service for the next 15 plus years. Another thing to keep in mind is that by buying down the rate increases you are either committed to having to come up with outside capital sources in the future or face an even more significant rate shock in 2030.

Potential other capital funding sources

Sales Tax.

The **temporary 3%**. One percent of this portion of our sales tax dollars goes to fund street rehabilitation. Concurrently, we use Utility funds to do the underground utility replacement. CBJ could use some of the street sales tax funds to fund the underground utility infrastructure (and indeed has the last and current budget cycle). This would result in delays to needed street rehabilitation projects. The temporary 3% is also used for operating and non-street capital projects. It is scheduled to go before the voters for renewal in October 2026.

The **temporary 1%** is also re-authorized every 5-years by the voters and consists of a list of capital projects over a 5-year period. The 1% collects, on average, \$13M annually. In the last (2019-2024) round of 1% funding the Utility combined received a total of \$15.5M in capital project funding. The 1% is up for re-authorization by the voters in October of 2027, making fiscal year 29 the first year we would collect towards projects listed in the next round.

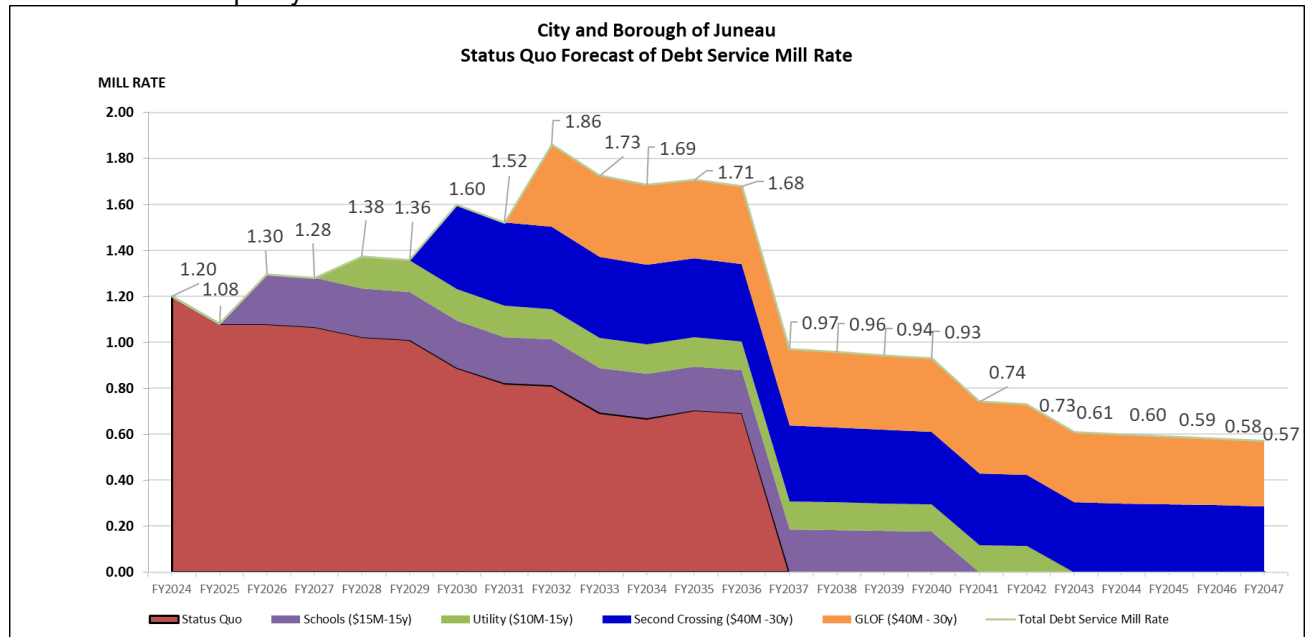
The Assembly Finance Committee has considered buying down rate increases through a bond. \$10 million in capital spend through general obligations bonds would look like using cash from the Utility's perspective because the debt service would live on the books of the general fund, not the Utility. A \$10M cash spend + debt would allow us to land on a 5% annual rate increase.

The only decisions that need to be made this budget cycle are whether you want to use capital funding to buy down the rate and what the Utility rate increase should be. If that capital funding is sales tax, general fund, or a future bond sale (the Utility does not need the capital infusion until FY28) the body can have that conversation during future budget cycles. However, if you want to put a bond before the voters this year, the

decision needs to be finalized before the end of July, which means introducing an ordinance no later than June 9th Regular Assembly Meeting. That all being said – if you can give guidance regarding your intent for future budget cycles (i.e. do you want to use the 1%) it will give the manager a helpful starting place.

Bonds – in general

Let's digress a little and talk about all potential bonds for the October 2025 ballot (School and Utility). CBJ has 10 years from when a bond is approved to issue bonds. Bond proceeds should be expended within 18-24 months of the bond issuance. Within limits, we can structure debt to achieve a desired debt service mill rate over time. The image below layers potential large bond projects over the next 30 years. Obviously, what we bond for will look very different, but it gives you an idea of the magnitude of projects that will put a demand on our debt service capacity in the future.



Recommended Rate Increase

The consultant has presented you a variety of different scenarios that have varying impact on the long-term fiscal health of the Utility and the cost of living for our citizens. As the consultant points out, all of these scenarios are based on a minimum capital spend and defer significant capital investment to after 2030. I have proposed 3 scenarios below that attempt to bring the extensive conversation on rate increases to a close. If the body is not able to make a recommendation tonight, staff will need what additional information is required for the body to make a recommendation and when you would like to have this topic before you again for action.

The lowest impact on ratepayers and CBJ general fund is scenario 4 which is an annual 5% increase over 5 years with strategic use of debt. Scenario 4 requires a capital investment of \$9.3M and borrowing \$7.3M from the DEC Revolving Loan Fund. Under this scenario, I would propose using \$1.4M in street sales tax funds in FY28 and asking the voters for authority to use \$8M in FY29-FY30 for the next round of 1% funding. The use of debt under scenario 4 amortizes the \$7.3M of debt over 20 years at 2.5% in the Utility operating budget.

Recommendation:

1. Move to approve Scenario 4 (debt + 5% rate increase) for introduction with direction on a plan for future capital funding assistance (bond, sales tax, general fund).
 - The alternative scenarios are endless. If the body would like to explore any of those, I can provide a worksheet to help through the decision points (1- cash or debt; 2- capital assistance; 3- percent rate increase) and bring back information on the impact that would have on the Utility.
2. Discuss appetite for Utility and School Bonds. Move introduction of a bond ordinance to the next regularly scheduled Assembly meeting.

Memorandum

Date: May 31, 2025

To: City and Borough of Juneau Assembly, Mayor, and Manager

From: Chair, Utility Advisory Board

Subject: Annual Report for the period May 2024 through April 2024

DRAFT – DRAFT – DRAFT – DRAFT – DRAFT – DRAFT – DRAFT

May 7, 2025

INTRODUCTION

This memorandum is the annual report of the CBJ Utility Advisory Board (UAB) for the period May 2024 through April 2025. In conformance with the enabling CBJ Resolution 2299 (adopted February 2005, Attachment A), the UAB considers the infrastructure, operations, and funding needs of the water and wastewater utilities; the Board’s annual reports are meant to inform decisions made by the Mayor, Manager, and Assembly concerning multiple aspects of water and wastewater in the Borough.

The UAB believes that financially and physically healthy water and wastewater utilities are necessary for our community to be resilient and to thrive. The infrastructures of CBJ water and wastewater utilities are aging, and increased capital investments are immediately required for necessary maintenance and upgrades so that the utilities can meet existing community and visitor needs and anticipate future demand. A brief history of user rates is included as Attachment B.

While the UAB depends upon CBJ staff for information and updates, the UAB independently reports its observations and makes its own recommendations to the Assembly and CBJ Manager. The UAB membership includes individuals with specific interests in water and wastewater related topics and issues; some members have served since the UAB was created, and provide continuity through shifting regulatory, fiscal, and staffing circumstances.

FINANCING THE UTILITIES

The UAB is concerned that that CBJ has an adequate supply of high-quality potable water to meet community needs and a wastewater infrastructure that is efficient and effective.

As housing and recreational development expand in the Borough, adequate wastewater plant capacity is a concern. Given the geography and land ownership in the Borough, developments are most likely to affect MWWTP plant, which, of all the CBJ wastewater treatment plants is closest to maximum capacity now.

Managing the increased amount of wastewater could include adding new assets (i.e. new plants or technologies at current plants) and/or reducing the current load on a plant by redirecting flow. This burden is in addition to meeting the deferred maintenance and upgrades needed now to ensure the water and wastewater systems are functioning as intended.

Utility funding, including infrequent user rate increases, has not provided a revenue stream that allows the utilities to operate and to have timely maintenance and upgrades.

Over time, the less-than-needed rate increases created a deficit of funding; at the request of the UAB, calculating this deficit (while taking into account inflation and past rate increases) is included in the 2024-2025 CBJ Utilities Rate Study.

RATE STUDY 2024

Funding the utilities was the primary focus of the UAB during the reporting period. Discussions were far ranging and exploratory and included practical aspects of operating and maintaining the utilities, staffing, questions to pursue with a rate study, the nature of wastes from difference types of users, the need for long term planning, and the critical need for immediate maintenance and upgrades to the water and wastewater infrastructure.

The 2024 Utilities Rate Study underlies the user rate increases and the search for additional revenue:

- The rate study includes a review of Capital Improvement Projects (CIPs). The Utility worked to rank and provide additional information on CIPs to determine what projects were critical, which were safety related, which were tied to deferred maintenance, etc. The consultants then mapped out different rates based on how to approach CIPs - to do them all, to focus on more important CIPs, or to effectively complete only the bare minimum CIPs.
- The rate study calculated a minimum fund balance for the Utility. This calculation includes enough funds to run the utility for 3 months, plus 2% of the replacement cost associated with facilities run by the Utility.

- FCS/Dowl determined that the current revenues would not be sufficient to cover the operating costs of the Utility very soon - for Wastewater, by 2026. This is for a variety of reasons, including significant inflation over the past few years.
- The consultants highlighted previous rate increases that were approved for less than initially proposed.
- Based on these observations and assumptions, FCS/DOWL indicated a minimum rate increase of 14% per year, beginning in 2025. This would work out to about \$20/month for both water and wastewater utilities. By 2030, a typical rate payer could pay over \$200/month.

EQUITABLE USER RATES

The UAB considered the characteristics of wastewater and appropriate user rates, especially for “high strength” users.

The UAB considered the equity of rates for resident and nonresident users, especially the users who pay for a wastewater discharge but do not pay into alternative forms of revenue that may or may not be directed towards the utility, including sales and property taxes.

The UAB notes that metered users pay a wastewater rate based on water meter readings, and the UAB concerned that some entities are discharging above the sewer code limits. The UAB is concerned, for example, that passenger planes that offload wastewater in Juneau, may not be included in the water meter reading.

The discussions considered the CBJ Code, which does not fully address all of the discharge scenarios and a rate structure based on the character of the waste.

GENERAL OBLIGATION BONDS (GO Bonds)

The UAB expressed support for projects selected by CBJ staff for funding with General Obligation Bonds (Go Bonds) and for using bonds as a funding source for the projects.

In an expression of the UAB’s support of using bonds to support utility projects, the UAB passed four motions:

- The UAB affirms its support of using GO Bonds to reduce annual rate increases linked to cost of living.
- The UAB supports the proposed \$20 million bond and the proposed CIP projects in conjunction with the 5 year rate increase.
- The UAB supports the proposed \$20 million bond for use in conjunction with the 5 year rate increase.

- If the \$20 million bond is not pursued, the UAB supports using the 10 million dollar bond in conjunction with the 5 year rate increase.

OTHER POTENTIAL FUNDING SOURCES

The UAB provided letters of support for Congressional Directed Spending that would benefit the MWWTP.

The UAB continues to follow proposed and approved uses for Marine Passenger Fees, and encourages staff to propose appropriate projects that could be funded by the passenger fees.

The UAB notes the CBJ water system is sized and constructed for fire suppression, which adds construction and maintenance costs to every water transmission line and reservoir project; the UAB supports utility funding via Sales Tax and Property tax.

OTHER ITEMS OF INTEREST TO BOARD MEMBERS

Over the course of the reporting period, the UAB and CBJ staff shared information and discussed topics of mutual interest; the Board took formal action with appropriate.

MENDENHALL RIVER FLOODING AND RISKS TO UTILITY INFRASTRUCTURE

Water and wastewater transmission lines and pumps are within areas that flooded in 2023 and 2024. In response to the 2023 glacier outburst flood, staff raised electrical panels above the anticipated flood height, and utilities were better prepared for the 2024 flood.

The MWWTP is immediately adjacent to Mendenhall River; the diffuser is buried in the river's bank and bed. The plant riverfront significantly eroded during the 2023 flood, but remained in good condition after the 2024 event.

During the 2024 event, six sewage lift stations did not operate; two of these were shut down when AEL&P turned off power to the affected areas. Fortunately, all six stations were returned to service the following morning.

SALMON CREEK PENSTOCK

AEL&P's Salmon Creek penstock replacement project has been delayed by a year, so the Salmon Creek water supply will be available for summer 2025. The water outage is now planned for April-June 2026. Water sales to cruise ships will be suspended during the outage.

WATER QUALITY

The CBJ is required to measure certain water quality parameters of the water system as well as the natural environment that receives discharges from wastewater treatment plants.

The 2023 Annual Water Quality Report: CBJ launched the annual Consumer Confidence Report (CCR) July 1, 2024 in an HTML format that is available from the CBJ website, juneau.org/water-quality-report. The report assures users that CBJ water is very clean and high quality.

Lead Service Line Inventory: The CBJ undertook a two-step inventory of lead service lines, starting with a household survey and then conducting physical surveys of residences that did not respond to the survey. The inventory is required by EPA and DEC as the first step in identifying specific risks to public health. To date, no problems have been identified.

Mendenhall River and Mendenhall Wetlands State Game Refuge: In the course of renewing permits for the MWWTP, changes in the water chemistry of Mendenhall Valley were detected. Recent sampling results indicate carbon is increasing, and that Mendenhall River now has levels of copper above the threshold for “impaired.” This status will affect what the plant is allowed to discharge to Mendenhall River, and complying with potential discharge limits may require a treatment plan and additional treatment.

CLIMATE CHANGE RESILIENCY

Early in the reporting period, an EPA team worked with CBJ staff on a climate change resiliency review. The review included a three-day exercise that included risk assessment, a financial tool, and a decision making matrix to help the Utility identify ways to improve the resiliency of the CBJ water supply while getting the best value financially.

The team also discussed climate induced landscape failures that affect the Utility, which has been an ongoing theme in CBJ. In July, for example, the Last Chance Basin facility was manually operated by CBJ staff for about a week after a landslide. The Utility has since begun conversations about ways to protect the Last Chance Basin water supply so that the Water Utility can provide an uninterrupted supply of high-quality water.

The Utility is exploring additional water supply sources to serve the Borough, particularly on the west side of the distribution system, where even a seasonal water supply would be beneficial.

CYBERSECURITY

The visiting EPA team conferred with CBJ staff about cybersecurity risk, especially considering attacks against potable water supplies that are occurring across the United States. The EPA team conducted an audit of CBJ Utility cybersecurity, and Staff has taken steps to reduce the likelihood that a cyber-attack would be successful here.

FIRE SUPPRESSION AND WATER SUPPLY DURING WATER SYSTEM MAINTENANCE

Plans are underway to test pressure configurations for the water supply system. The Utility is developing a strategy to ensure adequate supply for both fire suppression and regular uses is provided to the water distribution system during the testing and related maintenance. Sales of water to cruise could be interrupted or suspended during testing and maintenance work.

ANTICIPATED WORK FOR 2025-2026

The health of CBJ water and wastewater utilities is critically important to residents, businesses, government entities, and visitors. The UAB recognizes the infrastructures of both utilities are aging and require increased capital and maintenance improvements to maintain current levels of service and to accommodate community expansion.

The UAB is interested in short- and long-term planning to ensure the water and wastewater utilities are truly sustainable and fully meet community needs. Changing weather, diminished snow packs, and sea level rise may seem like abstract threats, but the risks should be identified and understood as best as possible now, so that contingencies will be in place to ensure CBJ always provides an adequate supply of safe drinking water and water for industry, firefighting, and other uses. Short-term disruptions, including periodic Mendenhall River flooding, that pose risks to water and wastewater infrastructure bring normally unbudgeted costs to the utilities that must be borne somehow by the community.

The UAB expects to undertake the following during the coming year and to provide information and recommendations as appropriate:

- Continue to evaluate the mission of the utilities and the philosophy of utility administration, with the view that adequate services must be provided to all who require them while protecting the financial stability of the utilities themselves.
- Identify and evaluate CIPs, funding sources, operational, and maintenance expenses.
- Evaluate the effects of past and future utility user rate increases in the context of variable local, state and federal funding.
- Receive updates on CBJ initiatives and projects, including a comprehensive map of CBJ potable water systems; a strategy to disseminate information to water and wastewater utility users and the

general public; and initiatives, such as the Source Control Program, that will contribute to the future health of the wastewater utility.

- Consider the cost/benefit of accepting sewage / wastewater from visiting vessels.
- Consider the cost/benefit of selling water to visiting vessels, especially in the context of water shortages and potential emergencies.
- Consider the adverse effects of climate and weather, and the need to secure additional water sources and water rights.
- Consider energy conservation and cost cutting at CBJ utility facilities.
- Consider environmental disruptions and identify potential risks and appropriate responses.

BOARD MEMBER TERMS AND VANCANCIES

Six CBJ residents served on the UAB for the May 2024-April 2025 reporting period. In conformance to the enabling resolution, board members have varying expertise and viewpoints and have formed a collaborative culture that encourages curiosity, learning, and discussion.

Andrew Campbell	PE Registered engineer; General Contractor
Elizabeth Pederson	Accountant
Geoffrey Larson	Commercial Customer
Stuart Cohen	Residential Customer
Grant Ritter	Residential Customer
Janet Hall Schempf	General Public

Andrew Campbell served as Chair and Geoffrey Larson as Vice Chair. One board seat was vacant throughout the reporting period. Elizabeth Pederson’s term ends this month. Ethan Roemeling will begin his first UAB term in June.

BOARD MEETINGS

The UAB held seven regularly scheduled meetings and one special meeting during the reporting period.

The table below presents information about meeting dates and member attendance. In addition to these meetings, Chair Campbell presented the UAB’s 2023-2024 annual report to

the Human Resources Committee (August 2024) and _____; the UAB vice-chair attended one meeting of the CBJ Human Resources Committee.

Further, most UAB board members met in person, spoke by telephone, or sent emails to CBJ Assembly members about immediate and long-term funding for the utilities.

Attendance Chart – needs fixing

	Jul 7/11/2024	Aug 8/8/2024	Sep 9/12/2024	Nov 11/21/24*	Jan 1/9/2025	Feb 2/13/2025	Mar 3/13/2025	Apr 4/10/2025	Tot Attended
Campbell, Andrew	P	P	P	P	P	P	P	P	8
Cohen, Stuart	P	A	P	P	P	P	P	P	7
Schempf, Janet	P	P	P	P	P	P	A	A	6
Larson, Geoff	P	P	P	P	P	P	P	P	8
Pederson, Elizabeth	A	A	P	P	P	P	P	P	6
Ritter, Grant	P	P	A	P	P	P	P	P	7
Total Attendees:	5	4	5	6	6	6	5	5	

P = Present * Indicates a special meeting
A = Absent ** This chart does not include canceled meetings originally scheduled for
May 2024, June 2024, October 2024, November 2024, or December 2024.

CBJ UTILITY ADVISORY BOARD SUPPORT STAFF

Engineering and Public Works staff who support the UAB as of May 2025 include:

Denise Koch – Engineering & Public Works Director
Brian McGuire – Utilities Superintendent
Chad Gubala – Utilities Plant & Treatment Manager
Alan Steffert – Engineer II – Utilities
Nathan Bodensadt – Public Works Utilities Administrative Coordinator
Amanda Hatch – Public Works Utilities Administrative Assistant

UTILITY ADVISORY BOARD WEBSITE

UAB meeting agendas, minutes, and supplemental information may be found online, at juneau.org/engineering-public-works/utilities-division/utility-advisory-board and juneau-ak.municodemeetings.com/

UAB material is archived at juneau.org/engineering-public-works/utilities-division/utility-advisory-board-archive.

**Engineering & Public Works Department**

155 South Seward Street

Juneau, Alaska 99801

Phone: 907-586-0393 | Fax: 907-463-2606

MEMORANDUM

DATE: 7/12/2024
TO: City and Borough of Juneau Assembly and Manager
FROM: Utility Advisory Board
SUBJECT: Annual Report for the period May 2023 through April 2024

INTRODUCTION

This memorandum is the annual report of the CBJ Utility Advisory Board (UAB) for the period May 2023 through April 2024. The UAB considers infrastructure, operations, and funding needs of the water and wastewater utilities; annual reports are meant to advise the Mayor, Manager, and Assembly on utility issues, in accordance with the enabling CBJ Resolution 2299, adopted February 2005 (Attachment A).

The UAB believes financially, and physically healthy water and wastewater utilities are necessary for our community to be resilient and to thrive. The UAB recognizes that the infrastructures of CBJ water and wastewater utilities are aging; the UAB believes increased capital investments are required now for necessary maintenance and upgrades so that the utilities can continue to meet community and visitor needs. A brief history of user rates is included as Attachment B.

While the UAB depends upon CBJ staff for information and updates, the Board independently reports its observations and makes its own recommendations to the Assembly and CBJ Manager. Board membership is comprised of individuals with specific interests in water and wastewater related topics and issues; some members have served since inception of the UAB and provide continuity in shifting fiscal and staffing environments.

FINANCING THE UTILITIES

The UAB began the reporting period with a presentation of the Board's 2022-2023 annual report to the HRC. HRC members had the opportunity to pose questions to the UAB representative; they asked about anticipated user rates for the utilities.

5-YEAR RATE PLANS

5-Year Rate Plans: The CBJ is in the third 5-year plan of a strategy recommended to the Assembly by the UAB for funding maintenance and operational needs of the utilities. The UAB favors a 5-year plan over annual

plans because small funding adjustments are too easily overlooked, thus requiring difficult increases.

FUTURE ANNUAL RATE INCREASES AND OPERATIONAL COST INFLATION ESTIMATES

The UAB and CBJ staff use the *Utilities Dashboard* to consider the effects of various revenue and funding scenarios. This tool was created in 2014 to catalogue the Water and Wastewater Utility enterprise funds; it is populated with actual and projected revenue and expenses, and users can calculate Future Annual Rate Increases and Operational Cost Inflation estimates based on data input.

The tool's adjustable elements can be manipulated to show *Ending Fund Balance* under different funding scenarios. While each scenario may have varying inputs, the goal of using the tool is consistent: projecting an *Ending Fund Balance* that provides operating costs for a minimum of four months.

The UAB understands these constraints for funding the water and wastewater utilities:

- **Sales Tax**: 1% Sales Tax is not available to the utilities during the period FY25-FY29.
- **Marine Passenger Fee**: The potential of funding utility work with these fees is uncertain. (For FY 2024, the wastewater utility was granted \$950k to upgrade the Outer Drive wastewater lift station that transmits waste from cruise ships toward the Juneau-Douglas Wastewater Treatment Plant.)
- **CIP Funding**: Marine_Passenger Fees and Sales Tax must be applied to Capital Improvement Plan (CIP) spending.
- **Property Tax**: CBJ Property Tax revenue does not fund the utilities.
- **Regulatory Compliance and Deferred Maintenance**: CIP spending needs are greater now than in past years, due to meeting regulatory requirements and resolving deferred maintenance.
- **Insufficient Water Rate Revenue**: The UAB promoted an 8% increase/year for FY20-FY24, which the manager's office lowered to a 4% per year ask of the Assembly. The Assembly adopted an increase of 4% for FY20 and a 2% increase every year for the following 4 years (FY21-FY25).
- **Utility Cost Escalation**: CBJ Engineering is projecting 7%-10% inflation for the 6-year CIP plan; operational cost inflation is expected to be about the same.
- **Wastewater Infrastructure**: Fiscal planning must include near-term improvements to the Mendenhall Wastewater Treatment Plant (MWWTP), as well as eventual replacement of the plant.

LEGISLATIVE FUNDING PRIORITIES

CBJ has a process for nomination and prioritization of large, visionary projects to a "wish list" that would be funded by state or federal money. CBJ staff presented three project concepts to the UAB for consideration and action. The UAB unanimously selected two projects for presentation to the Assembly: one project to install filter equipment at the MWWTP to reduce the amount of Fats, Oils, and Grease (FOG) and grit entering the treatment stream, and a second project to install micro-screens at the same plant to remove fine suspended solids that contribute to biological oxygen demand (BOD).

CLIMATE POLLUTION REDUCTION GRANT: MWWTP ELECTRIC BOILER

CBJ staff prepared an application for submittal to the EPA's Climate Pollution Reduction Grants program. If successful, this grant would partially fund purchase of an electronic boiler to replace aging boilers at the MWWTP. The boiler is already included in the Capital Improvement Plan (CIP). Replacing the existing boilers, which are near the end of their useful lives, with an electronic boiler would reduce the MWWTP's gas emissions. The UAB provided a letter of support for the application.

OTHER ITEMS OF INTEREST TO BOARD MEMBERS

During the reporting period, the UAB and staff shared information and discussed topics of mutual interest; the Board took formal action when appropriate.

WATER TASTING COMPETITION

CBJ took second place at an American Water Works Water Tasting Competition, placing just behind the Northern Utilities.

MENDENHALL RIVER FLOODING AND RISK TO UTILITIES INFRASTRUCTURE

The MWWTP is immediately adjacent to Mendenhall River; the diffuser is buried in the river's bank and bed. During the August glacier outburst flood, some of the rock protecting the diffuser shifted, a portion of the vehicle parking area washed away, and the perimeter fence was undermined.

Elsewhere in the flooded areas, some lift stations were inundated. Because the potential for additional glacier outburst flooding is high, a project to raise electrical panels above the flood height will be included in the CIP.

OUTREACH AND EDUCATION

The UAB reviewed the staff proposal for a FOG awareness mail-out to the community just before Thanksgiving; the UAB encourages this sort of outreach and education. Staff informed the UAB about an anticipated household survey about lead service lines, which is related to the EPA Lead Line Removal Rule.

Due to their community connections and engagement, individual board members have opportunities to make presentations or attend events hosted by others. For example, during the 2022-2023 reporting period, Mr. Larson gave a presentation to a Governor's conference about using spent grain to replace fossil fuel. Mr. Larson posits that Juneau could be a test case using bio solids to supplement fossil fuel to heat the bio solids dryer. In another example, Ms. Schempf participates in events at the United Nations in New York City, especially those concerning climate change and the water and sanitation needs of rural and isolated communities.

CBJ SOURCE CONTROL INITIATIVE: FOG AND I&I

The UAB remains concerned about fats, oils, and grease (FOG) and inflow and infiltration (I&I) that enter the wastewater collection system and pass through the wastewater treatment plants. Not only do these components compromise the wastewater collection system and the treatment plants, they also can create noncompliance with regulatory permits.

During the reporting period, staff updated the UAB on an existing Compliance Order by Consent (COBC), the objective of which is to stop the periodic noncompliance in CBJ's wastewater effluent discharge. While one of the COBC requirements is that the CBJ establish an *industrial* wastewater source control program, the UAB notes that sources of FOG are community wide and include *residential housing*.

In related UAB action, the UAB submitted a Letter of Support for Federal Funding for *MWWTP FOG Compliance Directed Spending* (CDS) for the Fats, Oils, and Grease (FOGs) project.

SALMON CREEK PENSTOCK

A representative of Alaska Electric Light and Power (AEL&P) presented an overview of a proposal to replace the hand riveted Salmon Creek Penstock with welded steel pipe that meets modern engineering and construction standards, and requested a letter of support for an application for grant funding that would partially cover the project costs.

The 100-year-old penstock provides water for an AEL&P powerhouse, water for the city, and water for a DIPAC fish hatchery. The new penstock would have the same basic alignment as the existing, including replacement water crossings. The replacement project would be completed from the bottom up, finishing at the dam.

The UAB asked questions about how the project might affect water system users. AEL&P explained to the UAB that AEL&P plans to provide uninterrupted water supply to the DIPAC fish hatchery. Because of this commitment, the penstock project will be constructed during the months of April, May, and June of each year for three years (2025, 2026, and 2027), instead of during just one year. (As a precaution, CBJ staff later formulated a plan to provide water to the community during the construction intervals.)

The UAB provided a letter of support for the grant application.

ANTICIPATED WORK FOR 2024-2005

The health of CBJ water and wastewater utilities is critically important to residents, businesses, government entities, and visitors. The UAB recognizes the infrastructures of both utilities are aging and require increased capital and maintenance improvements to maintain current levels of service.

The UAB is interested in short- and long-term planning to ensure the water and wastewater utilities are truly sustainable. Changing weather, diminished snow packs, and sea level rise may seem like distant threats, but the risks should be identified and understood as best as possible now, so that contingencies will be in place to ensure CBJ always provides an adequate supply of safe drinking water and water for industry, firefighting, and other uses. Short-term disruptions, including periodic Mendenhall River flooding, that pose risks to water and wastewater infrastructure bring normally unbudgeted costs to the utilities that must be borne somehow by the community.

The UAB expects to undertake the following during the coming year and to provide information and recommendations as appropriate:

- Continue to evaluate the mission of the utilities and the philosophy of utility administration with the view that adequate services must be provided to all who require them while protecting the financial stability of the utilities themselves.
- Identify and evaluate CIPs, funding sources, operational, and maintenance expenses.
- Evaluate the effects of past and future utility user rate increases in the context of variable local, state and federal funding.
- Receive updates on CBJ initiatives and projects, including a comprehensive map of CBJ potable water systems; a strategy to disseminate information to water and wastewater utility users and the general public; and initiatives, such as the Source Control Program, that will contribute to the future health of the wastewater utility.
- Consider the cost/benefit of accepting sewage / wastewater from visiting vessels.
- Consider the cost/benefit of selling water to visiting vessels, especially in the context of water shortages and potential emergencies.
- Consider the adverse effects of climate and weather, and the need to secure additional water sources and water rights.
- Consider energy conservation and cost cutting at CBJ utility facilities.
- Consider environmental disruptions and identify potential risks and appropriate responses.

BOARD MEMBERSHIP AND TERMS

Six CBJ residents served on the UAB for the May 2023-April 2024 reporting period. In conformance to the enabling resolution, board members have varying expertise and viewpoints and have formed a collaborative culture that encourages curiosity, learning, and discussion.

Andrew Campbell	PE Registered engineer; General Contractor
Elizabeth Pederson	Accountant
Geoffrey Larson	Commercial Customer
Stuart Cohen	Residential Customer
Grant Ritter	Residential Customer
Janet Hall Schempf	General Public

Andrew Campbell served as Chair and Geoffrey Larson as Vice Chair. One board seat was vacant throughout the reporting period. Two members completed their terms May 31, 2024.

BOARD MEETINGS

The UAB held four regularly scheduled meetings, one rescheduled regular meeting, and one special meeting during the reporting period. The table below presents information about meeting dates and member attendance.

In addition to these meetings, the UAB vice-chair attended one meeting of the CBJ Human Resources Committee, and most UAB board members met in person, spoke by telephone, or sent emails to CBJ Assembly members concerning State Legislative funding requests and the MWWTP funding proposal.

<i>Legend:</i> <i>P = Present</i> <i>A = Absent</i>	May	Sep	Dec	Dec*	Feb	Mar	Totals**		Term
	5/11/23	9/14/23	12/14/23	12/18/23	2/1/24	3/14/24	Attended	Absent	Ends
Campbell, Andrew	P	A	P	P	P	P	5	1	5/31/2024
Cohen, Stuart	P	P	P	P	P	P	6	0	5/31/2026
Schempf, Janet	P	P	P	P	P	P	6	0	5/31/2026
Larson, Geoff	P	P	P	P	A	P	5	1	5/31/2024
Pederson, Elizabeth	P	A	P	A	P	A	3	3	5/31/2025
Ritter, Grant	P	P	P	A	A	P	4	2	5/31/2026
Number of Attendees	6	4	6	4	4	5			

*This was a special meeting.

**This chart does not include canceled meetings: June 2023, July 2023, August 2023, October 2023, November 2023, January 2024, April 2024.

CBJ UTILITY ADVISORY SUPPORT STAFF

Engineering and Public Works staff who support the UAB as of July 2024 include:

Denise Koch – Engineering & Public Works Director
 Brian McGuire – Utilities Superintendent
 Chad Gubala – Utilities Plant & Treatment Manager
 Alan Steffert – Engineer II – Utilities
 Breckan Hendricks – Engineering & Public Works Administrative Officer I
 Nathan Bodensadt – Public Works Utilities Administrative Coordinator
 Amanda Hatch – Public Works Utilities Administrative Assistant

UTILITY ADVISORY BOARD WEBSITE

UAB meeting agendas, minutes, and supplemental information may be found online, at:

<https://juneau.org/engineering-public-works/utilities-division/utility-advisory-board>

ATTACHMENT A**UTILITY ADVISORY BOARD PURPOSE**

CBJ Resolution 2299 identifies the UAB's primary responsibilities concerning the status of water and wastewater utility topics:

- (a) Review and make recommendations to the Assembly and Manager on all matters pertaining to the operation of the water system and the wastewater system, to the end that the consuming public is provided with the best possible service consistent with good utility management and cost containment;
- (b) Review annual budgets and funding plans and make recommendations for the efficient and economical operation of the water system and the wastewater system including bond issues, staffing, fiscal matters, and public relations;
- (c) Make recommendations on long-range planning for system expansion replacement, and priorities to meet future needs of the water and wastewater systems;
- (d) Make recommendations on water and wastewater utility rates to ensure that the rates are equitable and sufficient to pay for operation, maintenance, debt reduction, system replacement, and utility reserves necessary to ensure sustainable public utilities;
- (e) Make recommendations on measures to increase the efficiency and cost effectiveness of the water and wastewater utility operations; and
- (f) Perform such other duties and functions related to the utilities as the Assembly or Manager may request

UTILITIES RATE HISTORY

In 2017, the CBJ Assembly proposed a ballot measure for a 1% sales tax that ultimately passed with 77 percent of votes in favor of renewal. The Assembly proposed this ballot measure to “focus on addressing the deferred maintenance needs of the public utilities and facilities” and specifically identified \$15.5 million of need for water and wastewater infrastructure, maintenance, and improvement. In 2019, the Assembly passed ordinance Serial No. 2019-31 and 2019-44 which raised both the water and wastewater utility rates over the course of five years:

4% Effective 1/1/2020
2% Effective 7/1/2021
2% Effective 7/1/2022
2% Effective 7/1/2023
2% Effective 7/1/2024

The rate increases are supported by the findings of a rate study completed in December, 2013 by FCS. Rates had not been increased since 2011, and FCS proposed three different five-year rate plans to address the system reinvestment, which was in arrears. The three proposed options to address the lack of system reinvestment were labeled “Low” (which would fund system reinvestment 35%), “Middle” (would fund 68%), and “Top” (would fully fund system reinvestment 100%). The assembly chose the “Middle” five-year option for funding 68% of system reinvestment. While this option would not fully fund system reinvestment, it does improve the level of maintenance and replacement costs that had been historically deferred. One reason the Assembly chose this option was that other funding sources were anticipated, including the State of Alaska, which had a history of granting municipalities money for water and wastewater needs. Subsequently, the Assembly passed Ordinance 2014 36(b)(am) which increased water 6.5% and wastewater 8% for each of the next five years.

An older rate study (completed in 2003) recommended an immediate rate increase of 19% for water and 39% for wastewater, and further recommended additional specific rate increases over the next 10 years. Customer rates for the two utilities did not increase during the years 1991 to 2003 (thirteen years), which led to precarious financial positions for both utilities. During which time the wastewater lost utility money which has yet to be made up as referenced in the 2003 and 2013 rate study. This deficiency has yet to be made up. Infrastructure maintenance was deprioritized, and the utilities did not have the ability to perform necessary repairs and upgrades. In Ordinance 2003-43 on October 2003, the Assembly approved the 19% and 39% increases, and due to “rate shock” to customers, the Mayor empaneled a seven-member Ad Hoc Utility Advisory Board (UAB) in February 2004. This group was tasked with advising the Mayor and Assembly on Water and Wastewater utility issues, including rates, and with making recommendations regarding the advisability of a permanent Advisory Board.