CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
UTILITIES DIVISION

Engineering & Public Works Department
155 South Seward Street
Juneau, Alaska 99801
Phone: 907-586-0393 | Fax: 907-463-2606

MEMORANDUM

DATE: **DRAFT** 7/10/2024 BY JANET HALL SCHEMPF
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 periodic rate 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. (In 2020, the utilities were 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).
- Water 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 MWWRP'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. LAST YEAR: For example, Mr. Larson gave a brief overview of a presentation he made 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. WHAT DID ANYBODY DO THIS REPORTING PERIOD? In another example, Ms. Schempf participates in events at the United Nations, 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, 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:
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- 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 Legislature funding requests and the MWWTP funding proposal.

CBJ staff to update this chart:

Legend: *P = Present* *A = Absent*	Jun	Jul	Sep	Nov	Dec	Jan	Feb	Mar	Apr	Totals		Term
	6/9/22	7/14/22	9/8/22	11/10/22	12/8/22	1/12/23	2/9/23	3/9/23	4/13/23	Attended	Absent	Ends
Campbell, Andrew	P	P	P	P	A	P	P	P	A	7	2	5/31/2024
Cohen, Stuart	P	P	P	P	P	P	P	P	P	9	0	5/31/2023
Schempf, Janet	P	P	P	P	P	P	P	P	P	9	0	5/31/2023
Larson, Geoff	P	P	P	P	P	P	P	P	P	9	0	5/31/2024
Pederson, Elizabeth	P	P	A	A	P	P	A	P	P	6	3	5/31/2025
Ritter, Grant	A	P	A	A	P	P	P	P	P	6	3	5/31/2023
Number of Attendees	5	6	4	4	5	6	5	6	5			

FURTHER INFORMATION ABOUT THE UTILITY ADVISORY BOARD AND STAFF SUPPORT

Engineering and Public Works staff who support the UAB include: Nathan, could you update this list? Thank you!

Katie Koester – Engineering & Public Works Director
Denise Koch – Deputy Director of Engineering & Public Works
Brian McGuire – Utilities Superintendent
Chad Gubala – Utilities Plant & Treatment Manager
Alan Steffert – Engineer II – Utilities
Joshua Midgett – Public Works Utilities Administrative Coordinator
Ty Yamaoka - Public Works Utilities Administrative Assistant
Breckan Hendricks – Engineering & Public Works Administrative Officer I
Nathan Bodenstadt – Pubic Works Utilities Administrative Coordinator
Laura Williams – Engineering Assistant II, Field Operations Supervisor, Water and Wastewater Division

Which URL should we include?

Utility Advisory Board website:

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

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

ATTACHMENT B

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. 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.