

Proposed Rate Increases -- CBJ Water Utility and Wastewater Utility

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Why is the Assembly considering a rate increase for water and wastewater (sewer) service?

Simply stated, the current rates do not cover the cost of providing the services. Water rates have remained the same since 1991. Wastewater rates have been modified in the last few years to pay for some federally mandated improvements for the Utility, but the rate charged is not sufficient to cover ongoing maintenance to an aging infrastructure and the upgrades required to comply with environmental laws.

Both Utilities have operated as “enterprise funds” for decades. Entities operating as enterprise funds—including the Airport, the Hospital, and Harbors—provide goods and services to the public on a continuing basis. In general, those services are to be financed through user charges, although acquisition and improvement of facilities has sometimes been financed through existing cash resources, bonding, and/or state and federal grants. The goal, however, for all of these entities is self-sustainability: they are operated and financed in a manner similar to private businesses and revenues collected are to cover the cost of services. The problem for the Water and Wastewater Utilities has been that user fees have not kept up with costs, and the CBJ has been “robbing Peter to pay Paul” for too long.

If the Assembly approves Ordinance 2003-43 on October 13, 2003, what will happen to my monthly water and sewer bills?

On December 1, 2003, bills for both Utilities—water and sewer—would increase at the same percentage for all customers, both residential and commercial. The table below presents current and proposed charges for customers using the flat monthly rate. A table at the end of this document presents more detailed information.

Service	Existing	Proposed	Percent Increase
Water: Monthly Flat Rate for Residential or Commercial	\$19	\$22.61	19%
Wastewater: Monthly Flat Rate for Residential or Commercial	\$39.50	\$54.91	39%

How did the CBJ come up with the proposed new rates?

Faced with major infrastructure repairs and concerned that utility payments were not covering the true cost of delivering services, the CBJ spent over a year systematically analyzing expenses and revenues. Managers believed that an independent, comprehensive financial review of cost of service and rate structures was needed to ensure the financial health, stability, and sustainability of each of the Utilities.

A June 2002 financial capacity report conducted by Boise State University—commissioned because the Alaska Department of Environmental Conservation needed to assess the financial risk of releasing additional federal loan funds to the utilities for major repairs—concluded that the CBJ has historically collected insufficient revenues to meet total expenses. Subsequently, CBJ contracted with an independent financial consulting firm, Financial Consulting Solutions Group, Inc., to conduct a comprehensive review of the each Utility’s revenue requirements and to develop new rate design alternatives to meet revenue needs.

To develop the annual revenue requirement for each Utility, the rate study analysts included baseline operating costs as well as payments on debt service required for the major infrastructure repairs expected over the next 10 years; assumed annual inflation of 3 percent; a zero percent customer growth for the first three years; and interest earning of reserve funds at 4 percent. The analysis assumes funding system replacement through partial depreciation expenses less debt principal payment. Both Utilities propose to phase into depreciation funding over a 20-year period and to use this revenue for major infrastructure repairs needed for sustainability of the systems.

Three alternative rate designs were prepared: (1) cost of service rates, (2) across-the-board rates, (3) across-the-board by cost-of-service rates. The consultant and staff recommended the across-the-board increase to the Assembly. Under this alternative, the required revenue is recovered equally from each customer class in proportion to the existing rate structure components (no shift between the current base rate and volume rate components).

The rate study also projects that to make the Utilities viable for the next decade, rate increases will be necessary in 2007, 2009, and 2011. Managers will annually assess revenues and expenses and will make recommendations regarding the need for such adjustments as the years progress. Any future utility rate increases would require Assembly approval, including a public hearing.

The proposed rate structure alternatives were considered by the Assembly Committee of the Whole at their meetings on August 18, 2003 and September 3, 2003. The Committee supported the recommendations of staff to proceed with the across-the-board rate increase.

A decision on these proposed rate increases, including whether to implement the increases all at once or phased in over 2 or 3 years, is expected to be made by the Assembly at its October 13, 2003 meeting. The meeting begins at 7:00 p.m. in the Assembly Chambers at City Hall.

Water Utility Facts

- Juneau's water comes from the Last Chance Basin on Gold Creek and also from the Salmon Creek Reservoir.
- The existing water system consists of 170 miles of water mains, 1,350 fire hydrants, 5 wells, 9 reservoirs and 9 pump stations.
- Juneau uses approximately 3 million gallons of water per day. Treated water is piped to approximately 8,700 customers, serving over 90 percent of households in the Borough.
- Since the last rate increase in 1991, "city water" service has been expanded to include customers in the Lena Loop and Tee Harbor areas and now also serves an additional 300 metered commercial accounts.
- Also since 1991, the Utility has constructed three new reservoirs and pump stations; replaced significant portions of the aging distribution system in downtown Juneau; and increased the production capacity of the Last Chance Basin Well fields.
- A 1999 national study conducted by an independent company, National Utility Services, showed Juneau's water rates below the national average. At that time, the average cost in the United States for a cubic meter, or about 250 gallons, of water was 52 cents. The cost for this same amount of water in Juneau was 44 cents. The new rates will raise Juneau's cost to 52 cents, meeting the 1999 national average.

Wastewater Utility Facts

Very few of us gives much thought to what happens to the wastewater that leaves our bathrooms, kitchens, and utility rooms every day. We flush the toilet, everything seems to simply "go away," the bowl reemerges sparkling clean, and that's about as far as it goes. Not so for the employees of the CBJ wastewater utility: they spend their days, and sometimes nights, thinking and working to make sure the rest of us can take that service for granted.

Turns out that the work to make all "go away," is quite complicated, technical, exacting, and, in part because of our location and our concern for the environment, expensive.

Juneau's wastewater is discharged into water bodies very sensitive to contaminants. Federal and state regulations for allowable discharges vary depending on many factors, and, in part because of the location of the outfalls of Juneau's three treatment facilities, Juneau's wastewater must be cleaned to among the highest standards in the state. The Mendenhall Valley Treatment Plant delivers treated effluent to the Mendenhall River, which then flows directly into the Mendenhall Game Refuge. The Juneau Douglas Treatment Plant, located on the Rock Dump, delivers treated effluent to the Gastineau Channel, flowing directly in front of downtown Juneau and Douglas. The Auke Bay Treatment Plant delivers treated effluent into Auke Bay.

- The existing Wastewater Utility serves approximately 80-percent of Juneau's residents (over 7,500 customers) through 130 miles of sewer pipe.
- The Wastewater Utility collects and treats approximately 1.3 billion gallons of sanitary sewer annually. How much is that? Enough to cover a football field with 225 feet of water or enough to fill the Juneau Federal Building four and a half times over!

What happens to the contents of your toilet bowl when it leaves your home? Here's the basics of how Juneau's wastewater treatment system turns wastewater into clean water, steam, and ash.

- The wastewater travels through a series of pipes, lifted and/or pushed by one or more of the 39 lift stations located throughout the system.
- Raw wastewater makes it to one of the three treatment plants, where it is treated by mechanical, biological, and chemical means. The now-cleaned water, or effluent, is discharged into the receiving waters described above.
- The more solid material remaining is sent through a "belt filter press," a system of porous belts and rollers that squeeze out much of the water.
- The resulting "sludge cake," now the consistency of a child's mud pie, is trucked to the incinerator at the Juneau-Douglas Treatment Plant on the Rock Dump.
- The incinerator heats the sludge cake to about 1350 degrees Fahrenheit, burning virtually all of the organic matter. After wet scrubbing of the exhaust gases to remove ash and other products of combustion, the incinerator stack discharges a plume of steam containing tiny amounts of particulates and combustion gases.

Sample Monthly Water Utility Customer Bills			
Customer Class	Existing Rate	Proposed Rate	Percent Increase
Flat Residential	\$19	\$22.61	19%
Metered Residential			
10,000 gallons	\$23.50	\$27.95	19%
50,000 gallons	\$93.50	\$111.15	19%
100,000 gallons	\$181	\$215.15	19%
Flat Commercial	\$19	\$22.61	19%
Metered Commercial			
10,000 gallons	\$24	\$28	19%
50,000 gallons	\$94	\$111	19%
150,000 gallons	\$269	\$320	19%
Large Commercial			
800,000 gallons	\$400	\$476	19%
1,200,000 gallons	\$600	\$714	19%
1,600,000 gallons	\$800	\$952	19%
Bulk Water			
1,000,000 gallons	\$1,756	\$2,090	19%
2,000,000 gallons	\$3,506	\$4,172	19%
3,000,000 gallons	\$5,256	\$6,255	19%
Sample Monthly Wastewater Utility Customer Bills			
Flat Residential	\$39.50	\$54.91	39%
Metered Residential			
10,000 gallons	\$71	\$99	39%
50,000 gallons	\$281	\$391	39%
100,000 gallons	\$543	\$756	39%
Flat Commercial	\$39.50	\$54.91	39%
Metered Commercial (Domestic Strength)			
10,000 gallons	\$71	\$99	39%
50,000 gallons	\$281	\$391	39%
150,000 gallons	\$806	\$1,121	39%
Metered Commercial (High Strength)			
800,000 gallons	\$71	\$99	39%
1,200,000 gallons	\$281	\$391	39%
1,600,000 gallons	\$806	\$1,121	39%
Septage Hauling			
1,000 gallons	\$15.00	\$20.85	39%