

Report to Council



Date: June 15, 2020
To: Council
From: City Manager
Subject: Wastewater Utility Update and Utility Rates 2020 - 2022
Department: Utility Services

Recommendation:

THAT Council receives, for information, the report from the Wastewater Operations Department dated June 15, 2020, on the City wastewater utility and proposed wastewater utility rates for 2021 through 2022.

AND THAT Bylaw No. 12057 being amendment No. 37 to Sewerage System User Bylaw No. 3480 be forwarded to Council for reading consideration;

Purpose:

To provide Council with information on wastewater utility operations and to obtain approval for wastewater utility rates for 2020, 2021 and 2022.

Background:

The City of Kelowna provides wastewater collection and treatment services to approximately 70 per cent of its residents. All wastewater collected is treated at the City's state of the art biological nutrient removal (BNR) wastewater treatment facility before safely discharging to Okanagan Lake. Biosolids collected in the process are composted at a facility operated jointly with the City of Vernon and sold as "Ogogrow"; an unrestricted Class A compost product.

The wastewater utility manages more than \$750 million worth of assets. These assets include two wastewater treatment facilities, 49 lift stations, over 590 kilometers of wastewater mains and the equipment required to maintain these assets and provide a high level of service to our community.

On April 1, 2019 Council approved a 3% increase to wastewater utility rates effective May 2019. Historically staff would recommend that Council set rate adjustments for two years however at that time staff were still working with consultants to understand the cost impact of increasing capacity in wastewater solids (biosolids) management. Staff recommended at that time adjusting rates for May 2019 only and returning to Council in early 2020 to adjust rates in May 2020. The rates set in May 2019 will continue until Council adopts new rates.

While progress has been made in understanding the options and costs around increasing biosolids management capacity, the issue is complex and there remain a few options that can impact costs (and potential sources of revenue). This has delayed our ability to understand the impact on long term rates and delayed this rate adjustment report. Staff expect to be able to bring information on biosolids management options and related costs to Council and the community later this summer.

Staff are recommending that wastewater rates be adjusted on January 1, 2021 with no wastewater rate increase in 2020. This allows for a small financial reprieve for the community by delaying a rate increase and ensuring that the timing of rate adjustments for water and wastewater are aligned for administrative purposes and customer simplicity.

Discussion:

Energy Management

Energy management has been a long-standing key performance indicator (KPI) for the wastewater utility. In 2018, staff commissioned an energy audit at the wastewater treatment facility. The audit suggested several potential energy savings opportunities; three of these proposed changes were included in the 2019 budget and have been completed. Other suggestions from the report are under review for possible inclusion in the 2021 budget.

Lift Station Assessment

A lift station assessment was completed on 22 of the City's 49 lift stations in the spring of 2020. This assessment was based on the age of the lift stations and on their level of criticality. It will provide a road map for upgrades or replacement of these stations over the next 20 years. It is expected that five of the older stations will require some form of renewal over the next three years.

Biosolids Management

The City conducted a review and community engagement into the strategic options available to address growth in biosolids production and reported to Council on February 26, 2018 that biosolids digestion (before composting) was the recommended direction for biosolids management. Digestion is estimated to reduce the volume of biosolids that the City sends to the compost facility in Vernon by 40 to 50 per cent which is necessary as the compost facility is near capacity. Included in the conceptual plans are additional side stream processes to capture and reuse nutrients and biogas. Completion of the planning and analysis portion of this phase of the project is expected this summer after which Council will receive a more detailed report on the concepts, range of costs, and service level options available.

Innovation and Technology

Effluent reuse provides an opportunity for lower utility operating costs, reducing demand on the potable water system, and reducing effluent volume to the lake. Effluent is now being used to irrigate 100 per cent of the wastewater facility landscape. Staff will be exploring further opportunities to provide this irrigation source to other areas surrounding the wastewater facility.

The City has purchased "Smart Cover" technology to monitor sewer flow, levels, and gases such as hydrogen sulfide. This technology allows internet access for multiple users to monitor information and the ability to download data. These covers are portable and can be moved to different locations as needed. The utility is reducing costs and reducing further load on utility computer monitoring systems by implementing this technology.

Utility Rates

Staff have conducted a review of the City wastewater utility's operations, maintenance, and capital costs to determine financial revenue needs to support a sustainably funded utility. This analysis includes a pro-forma statement of revenues and expenditures that is a 10-year projection, based on present budget figures, future capital, and operating expenditures in all areas of the utility. The utility is fully self-funded.

There are several factors that drive rate adjustments higher than inflation. This trend may continue for the foreseeable future as we move towards fully funding all wastewater utility costs including asset depreciation. These factors are:

1. Assets are depreciating faster than they are being renewed. Our current renewal rate is adequate given the relatively young age of our assets, but renewal will need to increase in the longer term as the system ages. The current 10-year capital plan increases renewal on a stepwise basis beginning in 2025,
2. We can expect operating costs to rise as the average age of our infrastructure increases,
3. The construction cost inflation rate typically exceeds general consumer inflation.

The wastewater utility has healthy reserves to address planned infrastructure replacement over the 10-year capital planning horizon. However, there is a substantial demand on reserves to contribute to the significant cost of increasing capacity in biosolids management (digestion). For financial modelling some of the project will be funded by development as it is needed for growth. Staff will apply for project grants as the project proceeds.

Staff are proposing a three per cent rate increase beginning January 1, 2021 and a three per cent increase beginning January 1, 2022.

The proposed rate increase continues to keep the City wastewater utility rate for single family residential customers in a very competitive position and well below most municipalities in British Columbia (see Attachment 1). The 2021 rate increase will cost residential homes an additional **\$0.64 per month** for a total monthly fee of \$22.05. The City's benchmarking efforts, which compare our operations with other municipalities across Canada, continue to show that Kelowna provides some of the most cost-effective tertiary wastewater treatment in the country.

Conclusion:

The Wastewater Utility is providing efficient and cost-effective service for rate payers. Biosolids management is a key component to help keep the Utility functioning effectively and enable the Utility to continue to meet the needs of a growing community.

Wastewater rates need to be adjusted from the current rates established in May 2019 to ensure a sustainably funded wastewater utility.

Internal Circulation:

Divisional Director, Infrastructure
Infrastructure Engineering Manager
Utility Planning Manager
Financial Planning Manager
Controller
Revenue Supervisor

Communications Advisor

Financial/Budgetary Considerations:

The 2021 Financial Plan will incorporate the projected revenue for the 3 percent wastewater rate increase.

Considerations not applicable to this report:

Legal/Statutory Authority:

Legal/Statutory Procedural Requirements:

Existing Policy:

External Agency/Public Comments:

Communications Comments:

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