OUR CITY. OUR FUTURE.

2021 Approved Budget and Business Plan

cambridge.ca/budget
Water Utility Budget

Summary

The water utility budget determines the City’s water and wastewater rates, paid on Cambridge water bills. The budget covers the daily costs of running the water and wastewater utilities, including the purchase of clean water and wastewater treatment from the Region of Waterloo.

The 2021 water utility budget includes gross expenditures of $70.9 million. The budget is balanced as required through provincial legislation, so that revenues equal expenses.

The average annual household water utility bill for 2021, including both water and sewer, is $1,190 based on an average consumption of 204 cubic meters. This represents a $0 or 0 per cent increase over 2020. The City continues to invest in its water and sewer networks, working towards sustainability of the City’s core infrastructure. The Region of Waterloo sets the cost for purchase and treatment of water and sewer. These cost get passed down to the City’s water bill and will remain unchanged in 2021.

Covid-19 pandemic has put significant economic pressure on our communities. Recognizing these challenging times, the City has prepared the 2021 water and wastewater budget with no annual increase, which is well below the forecasted revenue requirements increase of 3.9 per cent, as predicted in the long-range financial plan that was approved in 2019 in accordance with Ontario Regulation 453/07. Adjusting contribution to capital reserves, as well as efficiencies in inflow and infiltration allowed the City to achieve a water utility rate much lower than originally forecasted. Further details of the 2021 Water Utility Budget can be found in the Water Utility Budget Details section on pages 192 to 199.
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Comparison to Other Municipalities

The estimated annual water bill for Cambridge residents is slightly above the provincial average as calculated by BMA Management Consulting Inc. in their 2019 Municipal Study. At the time of writing this report, BMA Management Consulting Inc. has not published their 2020 Municipal Study, therefore the 2019 Municipal Study is the most recent available and referenced throughout this section.

ANNUAL WATER BILL FOR AVERAGE HOUSEHOLD (200 CUBIC METRE CONSUMPTION)

- 2019 Water Bill
- Avg. of Large Municipalities (>100,000 population) ($920)
- Provincial Avg. ($1,100)

[Bar chart showing annual water bill comparison for various municipalities, including Cambridge and its environs.]
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The ability to pay, as estimated using average household income, may vary for each community. This is an important check in determining the affordability of utility bills. BMA Management Consulting Inc. also factors in this affordability check in their 2019 Municipal Study. For the average residential household in Cambridge, the 2019 water bill represented 1.1 per cent of estimated income, which is in line with the provincial average.

<table>
<thead>
<tr>
<th>CITY</th>
<th>2019 EST. AVG. HOUSEHOLD INCOME</th>
<th>2019 AVERAGE RESIDENTIAL WATER BILL (200m³)</th>
<th>2019 WATER BILL AS % OF HOUSEHOLD INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge</td>
<td>$100,582</td>
<td>$1,132</td>
<td>1.1%</td>
</tr>
<tr>
<td>Waterloo</td>
<td>$117,592</td>
<td>$908</td>
<td>0.8%</td>
</tr>
<tr>
<td>Kitchener</td>
<td>$93,523</td>
<td>$1,098</td>
<td>1.2%</td>
</tr>
<tr>
<td>Average of all Ontario Municipalities</td>
<td>$105,849</td>
<td>$1,100</td>
<td>1.0%</td>
</tr>
<tr>
<td>Median of all Ontario Municipalities</td>
<td>$99,645</td>
<td>$1,061</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Expenses

Major components of the water utility budget can be summarized by the specified expense categories.
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**CONTRACT SERVICES**

Contract services represent 53 per cent of the water utility gross expenses. The largest cost in the water utility budget is the purchase of clean water and wastewater treatment from the Region of Waterloo. The Region has flatlined the water and wastewater treatment rate for 2021 due to current economic conditions. Of the average annual 2021 household water bill totaling $1,204 (based on estimated consumption of 204 cubic meters), 41 per cent directly relates to the purchase of these services from the Region.

Other contract services include meter reading and professional services in the sewer lateral maintenance program.

**FUND TRANSFERS**

A portion of water utility bills is used to support major rehabilitation and replacement of water and wastewater infrastructure, represented by the fund transfers expense category and 17 per cent of gross expenses. These transfers are based on the water and wastewater long-range financial plan, with the principle of full sustainability in accordance with O. Reg. 453/07. The transfers are used for the water and wastewater capital investment plan in the City’s capital budget.
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INTERNAL RECOVERIES

Internal recoveries represent 7 per cent of water utility expenses. These expenses are the corporate overhead recovery from the tax-supported operating budget. Recovery amounts are based on direct costs and funding percentages established as part of the long-range water and wastewater financial plan. A portion of certain divisions directly support water utilities, and this portion is recovered from the water bills through these internal recoveries. These programs include:

- Asset Management & Project Management
- Financial Services
- Engineering Services
- Public Works
- Planning
- Building Services
- Forestry
- General corporate overhead for administration

DEBT CHARGES

The City’s debt policy balances several considerations when determining whether projects should be funded from a pay-as-you-go approach versus debt financing. These considerations include:

- The opportunity cost of using cash that could be deployed elsewhere
- The need to manage and protect asset replacement funds over time
- The cost of capital
- Whether or not benefits will accrue to future taxpayers, which favours spreading out the repayment terms through debt financing
- The useful life of the investment

As per this debt policy, rate-supported debt charges will be limited to 15 per cent of the City’s rate-supported revenues. The water utility debt payments for 2021 from previously approved capital projects total $2,604,500.
In February of 2018, Council approved a smart water meter project to install or retrofit smart meters in homes throughout the city. The new smart meters will utilize an advanced metering infrastructure (AMI) system to provide remote meter reading, data analysis and alerts for possible leak or flow problems. This real-time data will help ensure bill accuracy, and allow City staff and residents the ability to detect potential water leak issues in a timely manner to manage unnecessary water costs. Debt will be used to pay for the upfront project costs, and debt repayments will be covered by anticipated savings from reduced water loss and wastewater inflow and infiltration. As such, there is no impact from the project on the water utility bill. Annual debt repayments of $1.3 million for the AMI project are included in the 2021 budget.

**OTHER COSTS**

Other costs in the water utility operating budget include:

- Salaries and benefits (9 per cent of water utility expenses)
- Materials and supplies (8 per cent of water utility expenses)
- Rents and financial expenses (0.7 per cent of water utility expenses)
- Utilities (0.4 per cent of water utility expenses)

These costs are primarily to support the ongoing maintenance and repairs of the City's water and wastewater infrastructure.
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Revenues

The water utility budget is funded through the following sources:

- User fees;
- Penalties and interest; and
- Transfers from reserve funds.

User fees represent 98.8 per cent of the funding, paid through the water utility bill and other fees charged on a cost recovery basis for services. Interest is charged on overdue payments, making up 0.2 per cent of funding.

Transfers from reserve funds represent 1 per cent of the total funding. The budget includes a transfer of $0.3 million from the water capital reserve fund to cover the cost of the meter maintenance program. A portion of the water bill is used towards this reserve fund for sustainable planning on the City’s water meter assets.
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Staff Complement Changes

The 2021 water utility operating budget includes a total staffing complement of 97.34 full-time equivalents (FTEs). The table below highlights the changes in FTEs from 2020.

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>2020 BUDGET RESTATED</th>
<th>2021 REALLOCATION OF STAFF</th>
<th>2021 GROWTH &amp; CAPITAL IMPACTS</th>
<th>2021 TOTAL FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>56.36</td>
<td>1.00</td>
<td></td>
<td>57.36</td>
</tr>
<tr>
<td>Sewer</td>
<td>40.98</td>
<td>(1.00)</td>
<td></td>
<td>39.98</td>
</tr>
<tr>
<td>Total FTE</td>
<td>97.34</td>
<td>0.00</td>
<td></td>
<td>97.34</td>
</tr>
</tbody>
</table>

The 2021 water utility budget includes no net increases to FTE complement. During 2020, there was 1.0 FTE that was reallocated from Sewer to Water to better address the needs of the water utility operations.
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Water Utility Budget Forecast

In accordance with provincial legislation, the City completed an update to its water and wastewater long-range financial plan in 2019. This update reviewed the sustainability of the City’s water and wastewater infrastructure, and set the target for annual revenue increases of 3.9 percent over the next 10 years. Since the completion of the long-range financial plan, the City has identified efficiencies through continuous improvement during the budget review, as well as lower than forecasted Regional water and sewer treatment rates, and are projecting water utility increases that are below the targets set in the long-range financial plan.

The 2021 and projected water utility rate increases for 2022, 2023, and 2024 are shown on the following graph as a dotted line.