

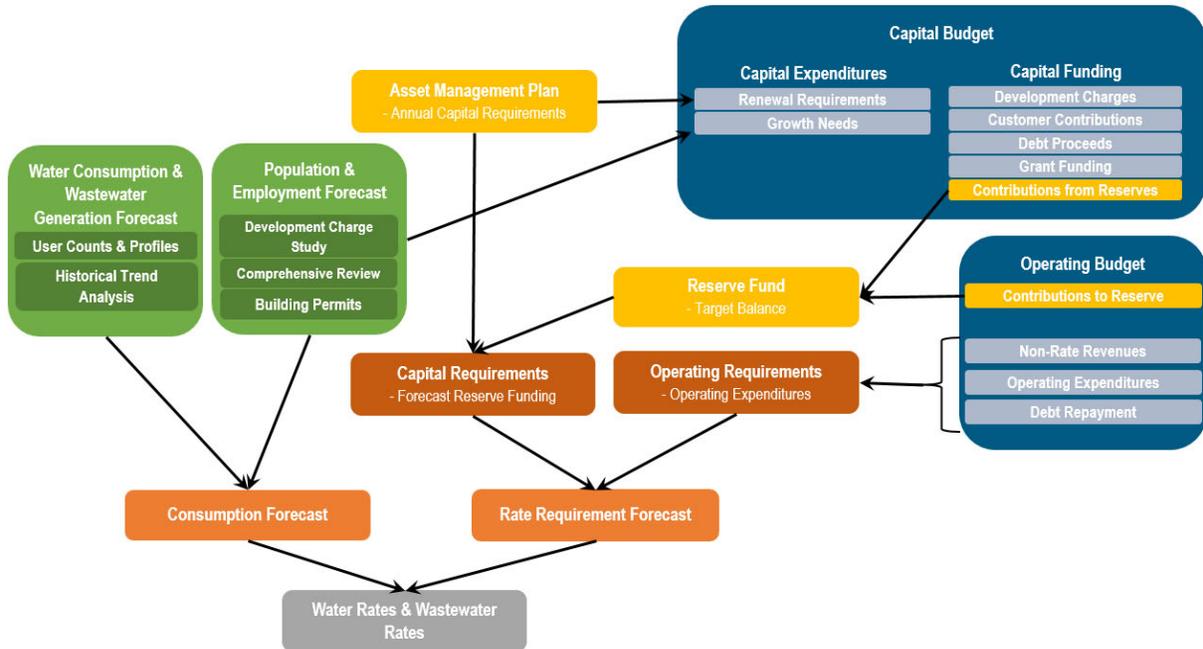
## Summary | 2021 to 2024 Water and Wastewater Rates

### Context

The County provides municipal water services to 21 communities, of which 11 are also provided wastewater services.

Figure 1 illustrates the general methodology used in determining the life cycle cost recovery water and wastewater rate forecast, including financing of operations, capital and reserves.

Figure 1: Water and Wastewater Rates Calculation Methodology



## Water Rates & Wastewater Rates

The combination of a humpback rate for consumption and a fixed charge for all connections is proposed to be maintained due to the significance of fixed costs of the systems relative to consumption. The consumption rate under the humpback system provides three increasing blocks and a fourth declining block. A base increase of 2% was assumed for all the consumption. Each of the system's fixed charges were reviewed and calculated on a full cost basis.

The rates were set as a measure to ensure sustainability of each system, including the ability to fund annual operating and maintenance costs, annual reserve contribution requirements and sustainable reserve balances over short- and long-terms.

Consideration was given for systems where significant increases would be required to meet the annual reserve contribution amount and/or sustainable reserve balances. For these systems, the rate increases were set to narrow the gap, while also increasing at a moderate cost for users.

The water and wastewater rates have been calculated to promote customer control and water conservation measures. Both water and wastewater rates are calculated based on the amount of water consumed by each individual user.

## Consumption Requirement Forecast

The water and wastewater rates have been structured to promote customer control and water conservation measures. Wastewater rates are calculated based on the amount of water consumed by each individual user.

Growth in the customer base has been included in the calculations which has been extrapolated from *2019 Development Charge Study, Phase 1 Comprehensive Review Report from Hemson April 2020*, actual building permits issued for each community, and historical connections.

Actual billed consumption has declined over the period, as anticipated. The data period used for analyzing consumption rates for Woodstock, Ingersoll and Tillsonburg was 2012 to 2019. For all other communities limited data was available as the meter installation project was completed during 2017, therefore full year consumption data was only available for 2018 and 2019. This conservation trend has been included in the assumptions for the 2020 study, and is consistent with other trends across the North America.

## Rate Requirement Forecast

### Operating Requirements

The water and wastewater operation and maintenance costs used in the analysis are based on the County's approved 2020 operating budget. The operating expenses ensure sufficient funding of ongoing annual operating costs for the system to meet the system's required service level. Net debt repayment is based on anticipated debenture payments, including principal and interest, net of revenues recovered to meet debt obligations.

### Capital Requirements

In most cases, the capital replacement is the target asset management plan reserve contribution level; however, the contribution to reserve may vary based on the system's ability to meet full cost recovery for the next 10 years.

### Asset Management Plan

In 2017, the County adopted an Asset Management Plan (AMP) update which provided important information regarding existing asset replacement values, condition and needs for existing asset rehabilitation and replacement.

Annual investment requirements from this report were incorporated into the reserve contributions to ensure the financial sustainability of each system in the long term. Provisions for infrastructure replacement are calculated for each asset individually based on remaining useful life and replacement costs. Each system's infrastructure has varying age and useful lives, and the County's long-term capital plan alone may not be appropriate for forecasting the future infrastructure replacement requirements of assets with a life span over 10 years. The aggregate of all individual provisions form the required annual contribution to a reserve.

The County is currently undergoing an extensive Asset Management Plan update which will determine those costs on a 10-year forecast basis.

No inflation has been applied to the annual investment requirements as it is effectively covered through annual interest income allocations on reserve balances.

## Reserve Fund

Oxford County's long term capital plan projects the timing and amounts for various projects ranging from infrastructure renewal to new capacity for development and growth for the next 10 years. The rate modeling includes all system infrastructure projects and all sources of funding including CSAP, development charges, developer and resident contributions.

Each water and wastewater system has a reserve to fund system capital projects, unplanned deficits, and emergency expenditures in the operating system. Each reserve earns interest based on the County's average monthly interest rate earned on its current bank deposit balances. Annual system surpluses and the annual capital investment reserve contributions are allocated to the reserve. When the assets require rehabilitation or are due for replacement, the source of funds are essentially limited to reserves or debentures. Reserve and debenture system requirements were analyzed to meet the long term capital requirements and ensure the system remains financially sustainable.

## Other Fee Considerations

### Community Servicing Assistance Program (CSAP)

The CSAP program fee was suspended effective April 1, 2017 and the suspension is to continue for the duration of this rate study period.

### Source Water Protection

This evolving program is now transitioning to long term monitoring and maintenance, beyond 2020. As such, the 2020 rate study reviewed the sufficiency of the funding and has determined that this charge is no longer needed, and will be removed from your bill starting January 1, 2021.

### Tillsonburg Sewer Property Tax Levy

The Town of Tillsonburg has historically levied an annual sewer charge of approximately \$400,000. The elimination of the Tillsonburg sewer property tax levy has been approved. Elimination of the levy will ensure the revenue is tied exclusively to consumption/access to water and wastewater services, consistent with the user pay lifecycle costing model required for water systems.

## Flat Rate Customers

Defined in the previous By-Law, is a special circumstance flat rate fee that allows for some customers to pay a special flat rate for various reasons. Staff have revisited the fee to establish underlying calculation, and the flat rate fee will be set at the system's fixed charge plus volumetric rate equal to 15m<sup>3</sup> per month.

## Penalty Flat Rate Customers

In 2016, a non-participating penalty flat rate fee was introduced to encourage both mandatory connection and installation of water meters. At the time, the fee was set at \$100 or \$200 per month depending of number of services. This number has been inflated each year since. At the time, the County was undertaking a project to install water meters for those flat rate customers. This fee was successful at encouraging metered service, as there are only 50 flat rate customers remaining. This fee also applies to customers who fail to comply with requests for access to water meters for maintenance and repair needs. As part of the ongoing rates review, this fee has been reviewed and the penalty rate fee will be set at double the monthly flat rate fee (as defined in the previous section).

## Construction Water

When new construction takes place, developers are able to use water directly from distribution mains and laterals prior to the installation of a water meter and ERT. There is no fee set up to collect revenues from these properties that are consuming water. Historically, City of Woodstock's developments have been charged a construction water fee. In an effort of fairness and equity, this fee has been now been set to the fixed rate that matches the pipe size for development and consumption equal to 15m<sup>3</sup> per month for each system.

## Unfinanced Capital

The Embro and Innerkip systems include an unfunded capital cost relating to planned future development at the time the infrastructure was built. Developer contributions are taken into consideration to ensure that the existing customers of each system pay only the capital portion for their own services. As of December 31, 2019, the unfunded balance of these systems were \$2.32 million and \$1.58 million respectively. Under both scenarios, as development revenues are collected, payments will be allocated against this unfinanced capital balance.