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**Subject:** RE: Regional Council Decision - Water and Wastewater Master Plan Update Project Plan and Progress

**From:** Switzer, Barbara **On Behalf Of** Regional Clerk

**Sent:** Friday, April 3, 2020 3:26 PM

**Subject:** Regional Council Decision - Water and Wastewater Master Plan Update Project Plan and Progress

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On April 2, 2020 Regional Council made the following decision:

1. The Regional Clerk circulate this report to the Clerks of the local municipalities, conservation authorities (Toronto and Region and Lake Simcoe Region Conservation Authorities) and the Director of the Central Region Office, Ministry of the Environment, Conservation and Parks.

The original staff report is attached for your information.

Please contact Wendy Kemp, Acting Director, Infrastructure Asset Management at 1-877-464-9675 ext. 75141 if you have any questions with respect to this matter.

Regards,

**Christopher Raynor** | Regional Clerk, Regional Clerk's Office, Corporate Services

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# **The Regional Municipality of York**

Committee of the Whole  
Environmental Services  
March 12, 2020

Report of the Commissioner of Environmental Services

## **Water and Wastewater Master Plan Update Project Plan and Progress**

### **1. Recommendation**

The Regional Clerk circulate this report to the Clerks of the local municipalities, conservation authorities (Toronto and Region and Lake Simcoe Region Conservation Authorities) and the Director of the Central Region Office, Ministry of the Environment, Conservation and Parks.

### **2. Summary**

This report provides information on the project plan and current progress of the Water and Wastewater Master Plan Update (Master Plan Update).

Key Points:

- The Water and Wastewater Master Plan is a long term servicing plan that identifies infrastructure and programs required to support projected growth as envisioned in the Regional Official Plan
- The Master Plan Update is being advanced in coordination with the Municipal Comprehensive Review currently in progress
- The Master Plan Update commenced in Q3 2019 and is expected to be completed in 2021
- The first of three rounds of public engagement were successfully completed in October and November 2019 with a total of 878 online and in-person participants

### **3. Background**

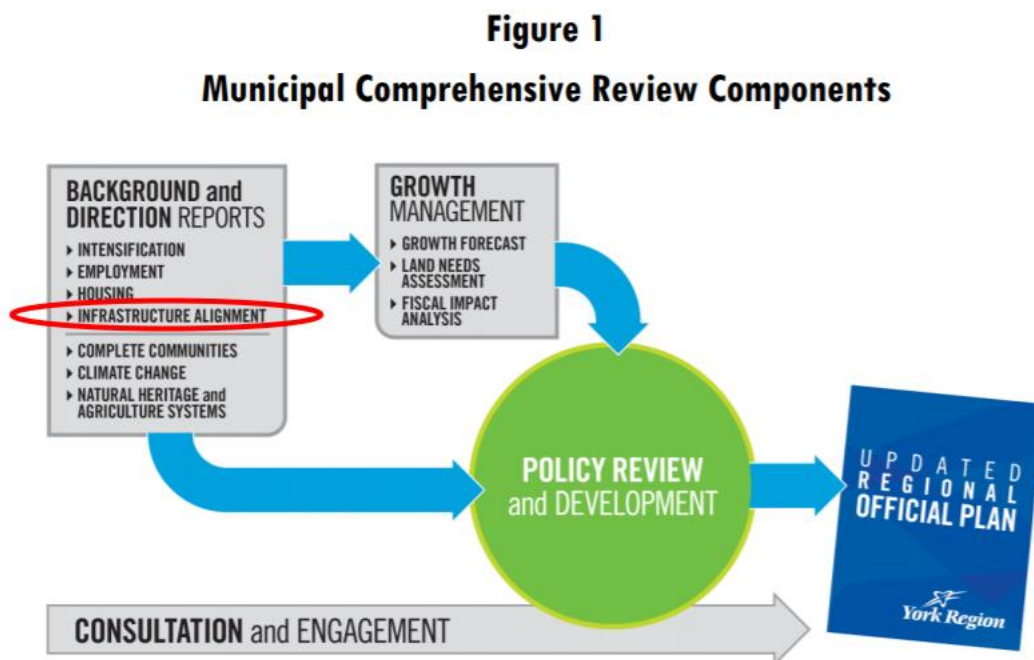
#### **The Water and Wastewater Master Plan Update outlines critical infrastructure to support growth as envisioned in the Regional Official Plan**

Master Plans develop the policy and strategy framework for water and wastewater servicing and serve as blueprints for future capital projects to support growth. The master planning process fulfills Phases 1 and 2 of the Municipal Class Environmental Assessment (MCEA) in identifying the need and justification for recommended projects and programs. The process includes consultations with the public and key stakeholders to receive feedback that will help

shape the Master Plan Update. The Region has undertaken regular updates to the Master Plan for over two decades to ensure that long-term strategies reflect evolving needs. The most recent update, [completed and endorsed by Council in 2016](#), recommended water and wastewater capital infrastructure projects totaling \$3.1 billion up to 2041 (in 2016 dollars). The Master Plan is now being recalibrated to reflect changes since 2016 including provincial policies, the Region's Strategic Plan and Fiscal Strategy, as well as the ongoing Municipal Comprehensive Review. This new work will review the infrastructure strategy recommended in the 2016 Master Plan and will identify any updates needed as a result of changes that have occurred over the last four years.

## **The Master Plan Update is carried out in conjunction with the Region's Municipal Comprehensive Review**

The Master Plan Update will identify the preferred servicing solution and associated infrastructure needs to support projected growth as set out in the Provincial Growth Plan and Regional Official Plan. This will occur in conjunction with the Region's Municipal Comprehensive Review as illustrated in Figure 1. Staged infrastructure needs will be identified in five-year intervals to the year 2041.



As part of the Master Plan Update process, capital and life cycle costs of water and wastewater infrastructure required to support growth contemplated through the Municipal Comprehensive Review will be identified. This work will inform a fiscal impact analysis to assess cost implications of future growth.

## **The Master Plan provides input to the next Development Charges Bylaw Update**

With completion of the Master Plan Update expected in mid-year 2021, updated water and wastewater infrastructure costs supporting the Region's future growth will be developed. This

will inform the Development Charge Background Study as part of the Development Charge Bylaw Update process, expected to occur in 2022. The infrastructure strategy identified through the Master Plan Update is also an input to the upcoming Water/Wastewater User Rate Study (Water and Wastewater Financial Sustainability Plan).

## 4. Analysis

### **Master Plan Update will build on findings and principles of the 2016 Master Plan**

Since the 1990s, the Region has prepared Master Plans approximately every five years. Similar to previous Master Plans, the main purpose of the Master Plan Update is to achieve two key objectives:

- Develop a cost-effective, resilient water and wastewater infrastructure plan to service future growth to 2041 and beyond
- Develop an integrated, long-term strategy to provide sustainable water and wastewater services

Building on the servicing strategy set out in the previous Master Plan, the Master Plan Update will review and recalibrate the cost, need and timing of projects. It will also continue to apply the three guiding principles for infrastructure planning as outlined in the 2016 Plan, as listed below:

- Integration – Take a coordinated, holistic approach to water resource and growth management
- Innovation – Practice and explore new concepts and ideas to promote cost efficiency and environmental sustainability
- Infra-stretching – Maximize the useful life and capacity of built infrastructure to defer and/or minimize capital investment

These guiding principles will be used in developing and evaluating servicing alternatives and recommendations in the Master Plan Update.

### **Moving beyond the last Master Plan Update, this update will integrate several key considerations to shape the updated servicing strategy**

Since the 2016 Master Plan, the Region's circumstances and needs have continued to evolve, including continued growth, increased pressures on available resources, changing customer expectations, climate change impacts and updated regulatory requirements. To adapt to these changing needs, the Master Plan Update will integrate key considerations to inform and guide development of the servicing strategy, as illustrated in Figure 2 and further described below.

**Figure 2**  
**Master Plan Update Reflects Changing Needs**



Align Growth and Infrastructure Needs with Fiscal Strategy

To create fiscal room for the next generation of infrastructure projects, the Master Plan will work in collaboration with the Municipal Comprehensive Review to develop population projections that align growth within existing and planned infrastructure projects.

Advance Long-Term Sustainability

Since 2016, key sustainability initiatives have been updated or are planned to be updated, including the Energy Conservation and Demand Management Plan (updated in 2019), Long Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy (both planned to be updated in 2021). Updates to these initiatives will be integrated in the long-term servicing strategy to support responsible resource management, sustainable service delivery and maximized use of existing infrastructure through demand management.

Plan for Resilient and Robust Water and Wastewater Services

Resilient communities and robust services are key priorities set out by the province in the Growth Plan and asset management regulation for municipal infrastructure, which include planning for climate change. Master planning provides an opportunity to integrate:

- new infrastructure to support growth
- asset renewal needs informed by condition assessments
- considerations for infrastructure resilience to manage the impact of climate change in alignment with the York Region Climate Change Action Plan (also on this Council's agenda)

Underpinning and influencing all of these evolving needs are changes in regulatory requirements that affect servicing. Staff recognize the importance of remaining adaptive to regulatory changes. Potential changes in the near- to medium-term include provincial policy changes that affect population and employment forecasts and updates to drinking water quality guidelines as science advances. The Master Plan Update will ensure that infrastructure planning remains responsive to ongoing regulatory changes by continuing to work closely with regulators.

### **Master Plan Update is targeted for completion mid-year 2021**

The Master Plan Update is scheduled for completion in Q2/Q3 2021. Major recommendations for new infrastructure will be finalized in Q1 2021 for timely input to the Development Charge Bylaw Update process. Key project milestones including public consultations and planned reports to Council are shown in Table 1.

**Table 1**  
**Key Milestones of the Master Plan Update**

Timing	Milestone	Status
2019	Notice of Study Commencement	Complete
	Open House 1 – Introduction to the Master Plan	Complete
2020	Council Report on Project Plan and Progress	Complete
	Assess Current Servicing Needs and Changes since previous Master Plan Update	In progress
	Open House 2 – Alternative Servicing Strategies	Planned Q4
2021	Council Report on Progress	Planned Q1
	Open House 3 – Recommended Solution	Planned Q1
	Council Endorsement of Master Plan and Notice of Study Completion	Planned Q2/Q3

## **First round of Master Plan Public Open Houses successfully completed in Q4 2019 with 878 online and in-person participants**

In October and November 2019, York Region hosted the first of three rounds of Public Open Houses for the Master Plan Update. This first round of Public Open Houses introduced the project and provided information about the planned process for the Master Plan Update.

Staff from the Planning and Economic Development branch of Corporate Services that are involved in the Regional Official Plan Review and local municipalities participated in the events. This provided attendees a more fulsome understanding of the two-tier system in place to deliver safe and reliable servicing from infrastructure and community planning to eventual construction and operation. Open House events were well received and provided an opportunity for residents to learn about and engage with staff on the Master Plan project.

Open Houses were hosted in three locations across the Region and attendance at the open houses included a broad representation of residents, landowners, development industry representatives, and other stakeholders. To extend the reach of the project's engagement, an interactive Online Open House was created and advertised on [York.ca](http://York.ca) as an alternative means for residents and stakeholders to participate.

A total of 165 people from across York Region attended the events in-person, and the [online Open House](#) was viewed 713 times. Participants were generally supportive of the Master Plan Update process.

Feedback collected indicated:

- Participants appreciated the opportunity to learn about York Region's water and wastewater services, including sources of water supply, where wastewater goes and how it is treated
- Long-term sustainability of water and wastewater servicing, and responsible resource management for future generations is a priority for residents
- Strong interest in future infrastructure details including location, timing and implications to potential developments

Feedback received will inform the next phases of the Master Plan Update.

## **5. Financial**

Costs to prepare the Master Plan Update are included in the Environmental Services approved 2020 budget. The Master Plan will be carried out in conjunction with the Municipal Comprehensive Review (Official Plan Review and Update). A fiscal impact analysis will be carried out as part of the process to plan for growth and the associated preferred servicing alternative.

It is expected that the long-term infrastructure plan for the preferred servicing strategy will be finalized in Q2 2021. This will provide input to the background study required for the next Development Charge Bylaw Update planned to be completed in 2022.

## **6. Local Impact**

A key input to the Master Plan is the growth management exercise undertaken through the Municipal Comprehensive Review, which integrates Local Official Plans and Secondary Plans. These projections balance growth-related needs across the Region through an iterative and collaborative process. In consultation with local municipalities, the Master Plan Update will detail a sustainable, reliable servicing strategy to support growth as envisioned in the Regional Official Plan Update. This servicing strategy will form the basis for updating the Region's future capital works program, and in turn, the capacity assignment program to support growth in the nine local municipalities.

Involvement of each local municipality throughout the course of the Water and Wastewater Master Plan Update is key to achieving successful outcomes with our shared water and wastewater systems (see Attachment 1). Coordination of the Region's Master Plan with local municipalities' master plans will support more integrated planning of Regional and local capital works and programs.

The Region's servicing partners, Region of Durham, Region of Peel and City of Toronto, have been informed of the project and will be engaged as it progresses.

## **7. Conclusion**

The Master Plan Update supports the Region's Municipal Comprehensive Review process to update the Region's Official Plan in alignment with the provincial growth target for York Region and provides input to the planned Development Charge Bylaw Update in 2022. The Master Plan Update will follow the principles of integration, infra-stretching and innovation to guide its decision-making process. Completion of the York Region Water and Wastewater Master Plan Update is expected in Q2/Q3 2021.

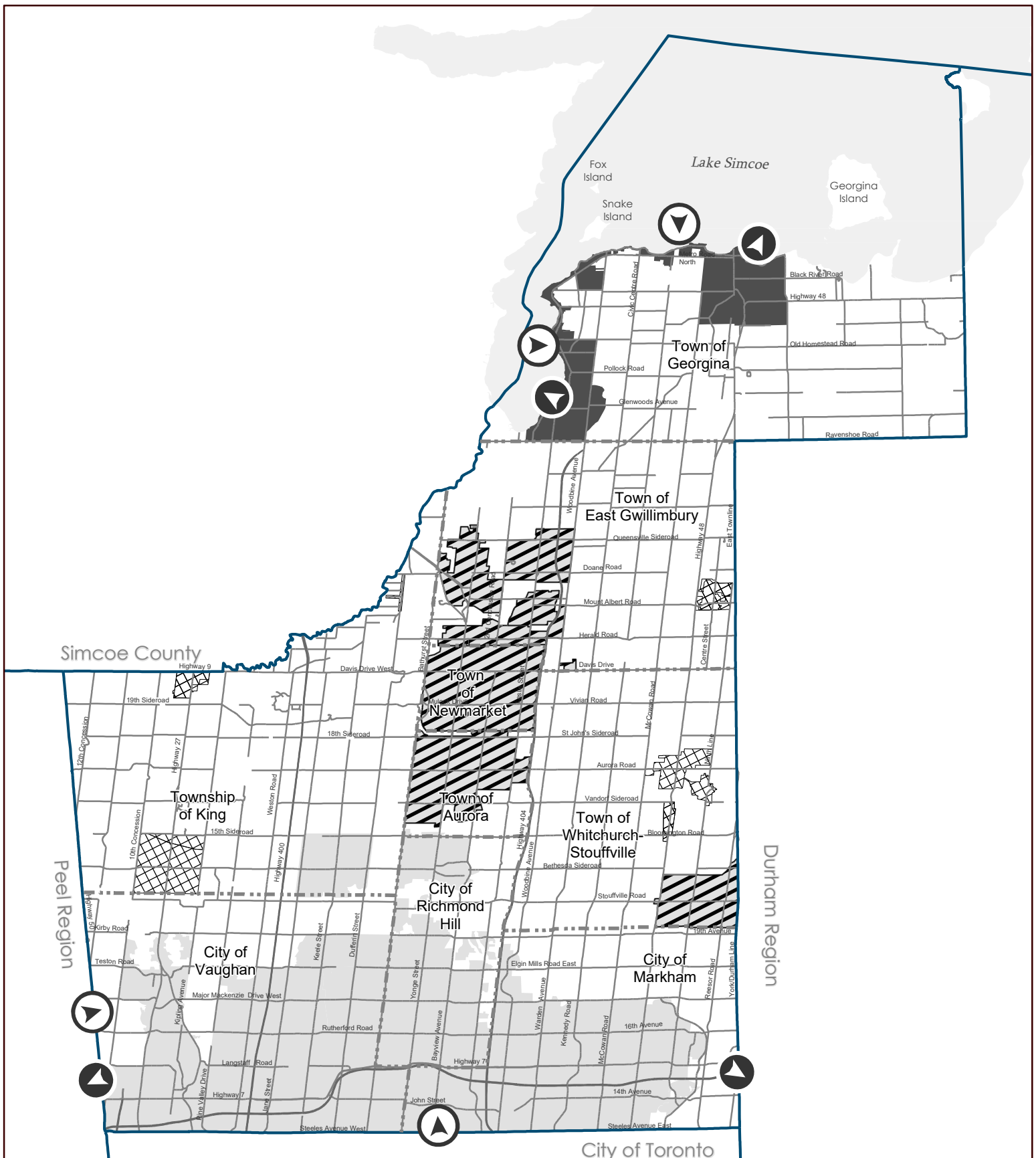
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For more information on this report, please contact Wendy Kemp, Acting Director, Infrastructure Asset Management at 1-877-464-9675 ext. 75141. Accessible formats or communication supports are available upon request.

Recommended by: **Erin Mahoney, M. Eng.**  
Commissioner of Environmental Services

Approved for Submission: **Bruce Macgregor**  
Chief Administrative Officer

February 27, 2020  
Attachments (1)  
#10381470

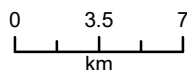


# Overview of System Water Sources and Wastewater Flows

## Water and Wastewater Master Plan Update

### Project Plan and Progress

March 12, 2020



Produced by:  
The Regional Municipality of York  
IAM Branch, Environmental Services Department  
February 2020  
Data: Queen's Printer for Ontario 2003-2020

- Lake Ontario
- Lake Ontario and Groundwater
- Lake Simcoe
- Groundwater
- Drinking Water Source
- Transfer of Treated Wastewater