

Clause 5 in Report No. 11 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on June 28, 2018.

5

Servicing Capacity Assignment for Aurora, East Gwillimbury and
Newmarket

Committee of the Whole recommends adoption of the following recommendations contained in the report dated June 8, 2018 from the Commissioner of Environmental Services, Commissioner of Corporate Services and Chief Planner:

1. Council authorize staff to assign capacity of 10,500 persons to Aurora, Newmarket and East Gwillimbury based on the principles outlined in this report.
2. Council request each local municipality to continue to provide their annual capacity allocation information to the Region to inform future capacity assignment reports.
3. Council request each local municipality to continue participation in the Region-wide Long Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy.
4. The Regional Clerk circulate this report to the Clerks of the local municipalities.
5. The Regional Clerk circulate this report to the Ontario Minister of the Environment and Climate Change.

Report dated June 8, 2018 from the Commissioner of Environmental Services, Commissioner of Corporate Services and Chief Planner now follows:

1. Recommendations

It is recommended that:

1. Council authorize staff to assign capacity of 10,500 persons to Aurora, Newmarket and East Gwillimbury based on the principles outlined in this report.
2. Council request each local municipality to continue to provide their annual capacity allocation information to the Region to inform future capacity assignment reports.
3. Council request each local municipality to continue participation in the Region-wide Long Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy.
4. The Regional Clerk circulate this report to the Clerks of the local municipalities.
5. The Regional Clerk circulate this report to the Ontario Minister of the Environment and Climate Change.

2. Purpose

This report requests Council authorization for staff to assign 10,500 persons of water and wastewater servicing capacity to Aurora, Newmarket and East Gwillimbury to support forecasted growth due to delay in approval of Upper York Sewage Solutions Individual Environmental Assessment.

3. Background and Previous Council Direction

In 2016, a total capacity of 71,838 persons was assigned by Council to the eight local municipalities serviced by the York Durham Sewage System

Local municipal growth requires water and wastewater servicing. The amount of servicing capacity, expressed in persons, is assigned to local municipalities, and in turn, local municipalities allocate capacity to developers to support residential growth.

On [September 22, 2016](#) Council confirmed assignment of water and wastewater servicing capacity of 71,838 persons within the York Durham Sewage System

service area making the total capacity of 175,092 persons available to support growth to 2021.

Town of Georgina is not serviced by the York Durham Sewage System

The Town of Georgina is serviced by Lake Simcoe-based water, including water and wastewater treatment facilities, and is the only local municipality not serviced by the York Durham Sewage System. As identified in the 2016 capacity assignment report, the Keswick Water Resource Recovery Facility has capacity sufficient to support growth to 2036 within its service area.

Limited capacity was available in 2016 for the Towns of Aurora, East Gwillimbury and Newmarket

Upper York Sewage Solutions was anticipated to be approved by 2017 and commissioning of the Water Reclamation Centre scheduled for 2024. Uncertainty surrounding approval of the Upper York Sewage Solutions Individual Environmental Assessment (UYSS IEA) limited the Region's ability to assign capacity to Newmarket, Aurora and East Gwillimbury. Nevertheless, 1,000

persons and 1,500 persons capacity were assigned to Aurora and Newmarket, respectively. These assignments were subject to geographic constraints for Aurora and the approval of the UYSS IEA for Newmarket.

Region-wide water and wastewater capacity outlook will be reported in 2019

Work to provide a five-year water and wastewater capacity outlook for the next round of capacity assignment to facilitate growth beyond 2021 is underway. Staff will provide Council with the capacity outlook in (Q3) 2019.

The 2019 capacity outlook will take into consideration population and growth forecasts established through the Region's Municipal Comprehensive Review, short term forecast and each municipality's unused capacity.

Allocation of servicing assignment by local municipalities is guided by local servicing protocols

Local servicing protocols were developed through a series of Council reports in consultation and cooperation with local municipalities. The following list summarizes elements of local servicing protocols, established to address Regional and local municipal planning objectives.

- Detailed monitoring of servicing allocation to development
- Formal “use it or redistribute it” policies
- Determination of strategic priorities that best meet growth management objectives of local municipalities and the Region
- Phasing plans for community/secondary plan areas
- Clear, transparent and fair criteria for allocation
- Planning tools including Holding Zone provisions, conditions of approval and agreements to ensure development is implemented once servicing is available
- Linkage between land use planning approval process and infrastructure planning and delivery timing

4. Analysis and Implications

Aurora and Newmarket require additional capacity to support their growth needs to 2021

Table 1 summarizes available capacity at the end of 2017 and capacity required for Aurora, East Gwillimbury and Newmarket to accommodate growth to 2021. Estimated growth over the four years between the beginning of 2018 to 2021 is calculated from the short term forecast. These calculations are validated by both regional and local municipal staff. The short term forecast is based on the status of current development applications. In addition, local municipal and regional staff work closely to monitor capacity used each year.

At the end of 2017, Newmarket had 5,017 persons capacity available, however, only 3,517 persons can currently be allocated to development. The remaining 1,500 persons of capacity remains contingent on commissioning the Newmarket forcemain, currently scheduled for 2021.

Table 1
Capacity Required for Growth to 2021 in Aurora, East Gwillimbury and Newmarket

Municipality	2016 Unused Capacity	Used Capacity 2016	Used Capacity 2017	Unused Capacity at Year-end 2017	2018 – 2021 Growth as per Short Term Forecast	Additional Capacity Required to Year-end 2021
Aurora	7,375	2,480	206	4,689	6,180	1,491
East Gwillimbury	20,925	5,307	4,270	11,348	9,040	0 ⁽¹⁾
Newmarket	4,284 ⁽²⁾	173	594	3,517	5,048	1,531
Total						3,022

1. All but 106 persons capacity is assigned through a developer pre-paid DC agreement.
2. This figure excludes the 1,500 persons capacity from the 2016 capacity assignment since it will not be available until 2021, after commissioning of the forcemain twinning.

Interim solutions are required to address the shortfall in capacity given the delay in approval of Upper York Sewage Solutions Individual Environmental Assessment.

Interim solutions can provide capacity to temporarily address the constraints and increase system resiliency

Some capacity can be released through a number of solutions to relieve immediate constraints created by the timing of the Upper York Sewage Solutions Individual Environmental Assessment. Proposed servicing options are summarized in Table 2.

Table 2
Proposed Sources of Capacity (population)

Interim Servicing Option	Servicing Capacity (persons)	Timing (Class EA Schedule)
Newmarket Forcemain Twinning (committed)	1,500	2021 Commissioning (Approved)
Bayview Pumping Station Modifications or Aurora Pumping Station Upgrades	7,000	2021 Commissioning (Schedule A+ Pre-approved)
New Pumping Station (near Yonge Street and Henderson Avenue) and Forcemain	4,500	2022 Commissioning (Schedule B)
YDSS Reserve	4,000	Interim Borrowing As Required

In March, 2018, the Ontario Minister of Natural Resources and Forestry signed a declaration order, allowing the construction of the forcemain twinning in Newmarket to proceed prior to approval of the Upper York Sewage Solutions Individual Environmental Assessment. Construction of the forcemain is planned to begin in 2019, with commissioning expected in 2021.

Construction of the proposed infrastructure, including the Newmarket Forcemain Twinning, provides needed capacity to address the current constraints and allows additional operational flexibility, helping to mitigate system risks during planned or unplanned maintenance and unusual operating circumstances.

Regional staff have consulted with staff from each of the local municipalities about these servicing opportunities.

A total capacity of 11,500 persons can be made available through interim servicing projects

Staff completed feasibility studies to identify solutions that can be implemented to support growth in Aurora, Newmarket and East Gwillimbury until the Upper York Sewage Solutions Individual Environment Assessment is approved and associated infrastructure is constructed.

The recommendations to provide interim servicing focused on diverting wastewater generated in different service areas located in Aurora and Newmarket to downstream of the Aurora Pumping Station.

Capacity of 7,000 persons can be made available through modifications to the Town of Newmarket's Bayview Pumping Station or upgrades to the Region's Aurora Pumping Station. This work falls under Schedule A+ of the Municipal Class Environmental Assessment and is considered pre-approved. Refinement of the solutions begins with the design of the work to commence in (Q2) 2018. Commissioning is currently scheduled to be complete in 2021.

Additional capacity of 4,500 persons can be made available through construction of a new pumping station located near the intersection of Yonge Street and Henderson Avenue in Aurora. This scope of work falls under Schedule B of the Municipal Class Environmental Assessment. Consultants have been prequalified and selection of a design consultant is underway. This work is expected to be complete in 2022.

Additional information on these two projects is provided in Attachment 1.

A Regional reserve of 1,963 persons remains available to support non-profit housing projects

In 2008, Council established a capacity reserve to ensure that opportunities were realized to build multi-unit non-profit housing owned by York Region (Housing York Inc.), or other non-profit housing organizations. There is an adequate supply of servicing (1,963 persons) to ensure new housing opportunities will have servicing available to 2021. Staff will continue to monitor the capacity reserve to ensure availability of servicing for non-profit housing in the York Durham Sewer System.

Assignment of 10,500 persons capacity will provide Aurora, Newmarket and East Gwillimbury temporary relief of the capacity constraint

Since the infrastructure associated with the interim projects provide solutions to local constraints, it is reasonable to assign the full capacity of the projects at this time. This assignment of 10,500 persons capacity will provide Aurora, East Gwillimbury and Newmarket growth to 2023. The remaining 1,000 persons capacity will be reserved for Centres and Corridors once the actual capacity provided by the interim solutions is confirmed.

Proposed capacity assignment for each municipality is summarized in Table 3. The methodology used to calculate capacity needs considered remaining capacity in each municipality and anticipated capacity needs based on the short-term residential forecast.

When assigning capacity, staff will apply appropriate measures (e.g. planning holding provisions) to ensure the availability of capacity is coordinated with the timing of development, allowing development to proceed without increasing the risk on the wastewater system. Staff have also confirmed that requisite water supply is available for the proposed residential assignment, however, as part of the development review process, site specific constraints, based on the industrial or commercial use, will be identified.

Table 3
Proposed Capacity Assignment (population)

Local Municipality	Servicing Capacity (persons)
Aurora	4,933
East Gwillimbury	2,727
Newmarket	2,840 ⁽¹⁾
Total	10,500

1. Capacity previously assigned to Newmarket (1,500 persons) subject to twinning of Newmarket forcemain is not included in these figures.

Staff will continue to monitor capacity available to local municipalities

Staff will continue to monitor the consumption of capacity and pace of growth across the Region. If the need for additional capacity is identified through short term forecasting, staff will work with local municipal staff to address additional capacity needs as they arise. Work may include evaluating opportunities such as developer-funded inflow and infiltration reduction projects, Regional or Local Municipal inflow and infiltration reductions, or additional Local Municipal and Regional infrastructure solutions, depending on the circumstances.

5. Financial Considerations

Funding for two interim solution projects has been included in the approved Environmental Services Ten-year Capital Plan

In 2016, the Region committed to provide interim solutions to bridge the capacity gap for the three constrained municipalities. Two infrastructure projects have been developed and \$15 million in funding has been re-allocated in the approved Environmental Services Ten-year Capital Plan. Implementing these projects will help to mitigate the delay of the infrastructure associated with the Upper York Sewage Solutions Individual Environmental Assessment.

6. Local Municipal Impact

All nine local municipalities have been consulted on the interim capacity proposed for constrained municipalities

Staff have presented and discussed the content of this report with local municipal staff, including CAOs, Planning Commissioners and Directors as well as planning and engineering staff.

Continued delay of the Upper York Sewage Solutions approval impairs planned growth and economic development

The Upper York Sewage Solutions project is a critical component of the Region's future wastewater infrastructure, accommodating planned employment and residential growth within Aurora, Newmarket and East Gwillimbury. Continued delay in approval of the Upper York Sewage Solutions project will impact the local municipalities' ability to meet the growth targets set out in their official plans and economic development opportunities.

7. Conclusion

To accommodate growth while awaiting Provincial approval of the Upper York Sewage Solutions Individual Environmental Assessment, two interim solution projects are included in approved Environmental Services Ten-year Capital Plan. Completion of these projects allows the Region to assign capacity of 10,500 persons to support growth in Aurora, East Gwillimbury and Newmarket to 2023.

A remaining 1,000 persons capacity will be reserved for Centres and Corridors once the actual capacity provided by the interim solutions is confirmed.

Staff will continue to monitor servicing capacity and the status of the Upper York Sewage Solutions Individual Environmental Assessment and provide an update capacity outlook for the next capacity assignment report in 2019.

For more information on this report, please contact James Steele, Director, Infrastructure Asset Management, extension 73018 or Karen Whitney, Director, Community Planning and Development Services, extension 71505.

The Senior Management Group has reviewed this report.

June 8, 2018

Attachment (1)

#8547018

Accessible formats or communication supports are available upon request

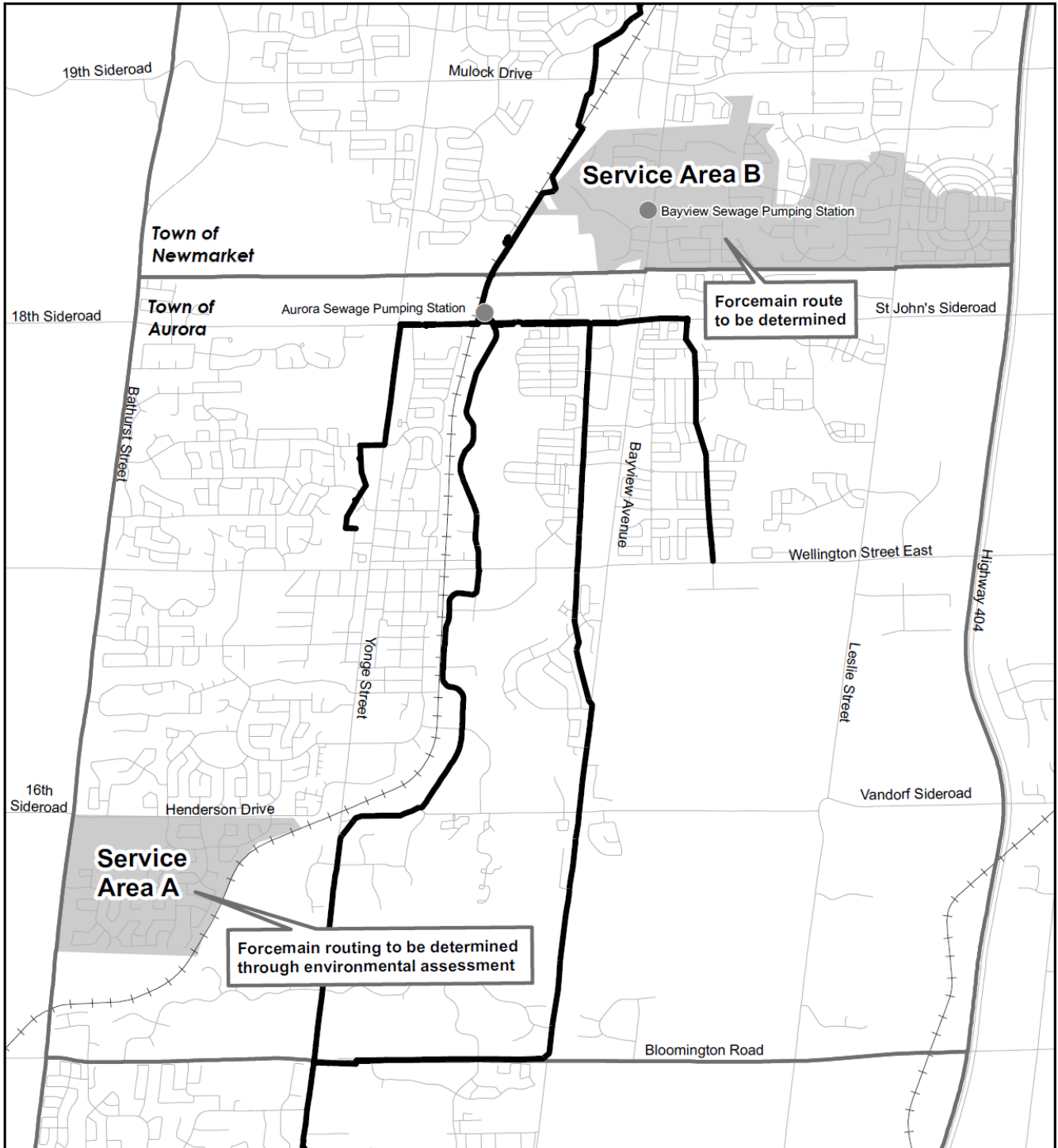
FEASIBILITY STUDY RECOMMENDATIONS

Recommendations from a Feasibility Study provided interim servicing based on diversion of wastewater around the Aurora Pumping Station and included two projects. Service areas for these projects are shown in the figure on the following page.

The first project involves the evaluation of two options to recover capacity at Aurora Pumping Station, equivalent to approximately 7,000 persons. Work required for either option falls under Schedule A+ of the Municipal Class Environmental Assessment and is, therefore, pre-approved. Once the option is selected, design and construction can proceed immediately with commissioning scheduled for 2021.

- One option includes modifications to the Town of Newmarket's Bayview Pumping Station and construction of a new forcemain to divert flows from a specific catchment (Service Area B) downstream of the Region's Aurora Pumping Station.
- The second option includes modifications to the Region's Aurora Pumping Station and construction of a new forcemain diverting wastewater stored in the equalization tank around the pumping station.

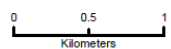
The second project consists of a new sewage pumping station to divert flows from the South Aurora service area (Service Area A) to downstream of Aurora Pumping Station. The work required for this project falls under Schedule B of the Municipal Class Environmental Assessment which has begun. If implemented, this alternative will result in the recovery of a service population of approximately 4,500 persons at Aurora SPS, and could be in service by 2022.



Service Areas Included in Feasibility Study

Servicing Capacity Assignment for Aurora,
East Gwillimbury and Newmarket

May 15th, 2018



Produced by:
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The Regional Municipality of York, June 2018
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Legend

- Service Area
- Existing Forcemain
- Pumping Station

