

Clause 8 in Report No. 12 of Committee of the Whole was adopted by the Council of The Regional Municipality of York at its meeting held on September 22, 2016, with the following amendment:

Add a further recommendation as follows:

4. Staff be authorized to consider a second inflow infiltration reduction project in Newmarket based on the same general principles set out in the first pilot project, provided that the first pilot project is completed OR it can be demonstrated that the second developer funded inflow infiltration reduction project does not impede the ability of the first pilot project to achieve the allocation needed to complete its development up to the maximum capacity stipulated in the project agreement.

and change recommendation 4 to recommendation 5.

8

Water and Wastewater Capacity Assignment to Support Approved Growth

Committee of the Whole recommends:

1. Receipt of the presentation by Erin Mahoney, Commissioner of Environmental Services and Valerie Shuttleworth, Chief Planner, Planning and Economic Development.
2. Adoption of the following recommendations contained in the report dated August 15, 2016 from the Commissioner of Environmental Services and Chief Planner:
 1. Council confirm assignment of water and wastewater servicing capacity for 71,838 people within the York Durham Sewage System service area to accommodate residential growth to the end of 2021, as outlined in Table 2, and subject to delivery of infrastructure trigger projects outlined in Attachment 2.
 2. Staff continue to collect formal annual capacity allocation information from each local municipality for the purposes of informing future capacity assignment reports.

3. Each local municipality continue to participate in the Region-wide capacity creating Long Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy, including providing annual plans or actions to reduce inflow and infiltration and water use.
 4. The Regional Clerk circulate this report to the Clerks of the local municipalities.
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Report dated August 15, 2016 from the Commissioner of Environmental Services and Chief Planner now follows:

1. Recommendations

It is recommended that:

1. Council confirm assignment of water and wastewater servicing capacity for 71,838 people within the York Durham Sewage System service area to accommodate residential growth to the end of 2021, as outlined in Table 2, and subject to delivery of infrastructure trigger projects outlined in Attachment 2.
2. Staff continue to collect formal annual capacity allocation information from each local municipality for the purposes of informing future capacity assignment reports.
3. Each local municipality continue to participate in the Region-wide capacity creating Long Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy, including providing annual plans or actions to reduce inflow and infiltration and water use.
4. The Regional Clerk circulate this report to the Clerks of the local municipalities.

2. Purpose

This report recommends an additional capacity assignment of 71,838 people to eight local municipalities serviced by the York Durham Sewage System to support forecasted growth to the end of 2021. It also provides an overview of the approach used in determining the proposed multi-year capacity assignment.

3. Background

2016 Capacity Assignment is for local municipalities serviced by York Durham Sewage System

Approximately 90 per cent of York Region's population is serviced by York Durham Sewage System (YDSS), which collects wastewater from eight local municipalities (except Georgina). Wastewater is conveyed for treatment to the Duffin Creek Plant co-owned by York Region and Durham Region. A portion of the wastewater in western part of City of Vaughan is conveyed to Peel Region for treatment, under a servicing agreement with the Region of Peel.

In addition to the YDSS service area, York Region owns and operates six water resource recovery facilities located in the communities of Keswick, Sutton, Mount Albert, Nobleton, Schomberg and Kleinburg as well as the Holland Landing Lagoons. Capacities of these facilities have been fully assigned to the respective local municipality. As such, the 2016 capacity assignment is only for areas serviced by YDSS.

In 2013, a total capacity of 43,371 people was assigned to eight local municipalities to accommodate growth to 2017 and beyond

In order for local municipal growth to occur, it is essential that water and wastewater servicing is available. The amount of servicing capacity, expressed in population, is "assigned" to local municipalities, and in turn, the local municipalities allocate that capacity to developers to support residential growth.

A total capacity assignment to local municipalities of 43,371 people within the York Durham Sewage System service area was approved by Council on June 27, 2013. The 2013 capacity assignment was intended to accommodate residential growth to 2017.

Trigger projects required to support 2013 Capacity Assignment have now been completed

Capacities assigned to local municipalities are generally for both water and wastewater. All infrastructure elements supporting water and wastewater conveyance and treatment capacities have to be in place prior to the use of assigned capacities. Where an existing system cannot support the capacity needed, trigger projects are identified and required to support the assigned capacities. Use of the assigned capacities are contingent upon completion of these trigger projects.

The capacity assignment in 2013 was contingent on the completion of a number of trigger projects, such as the Southeast Collector project. All of these trigger projects have now been completed.

The 2013 capacity assignment provided an outlook capacity of 50,722 people for next assignment

Besides assigning capacity, the 2013 capacity assignment also provided each local municipality with an outlook for the next capacity assignment in order to provide a better line-of-sight for planning and approving developments slated for beyond 2017. This “outlook” is an estimation of future capacity to be provided in the next round of capacity assignment. A total capacity assignment outlook of 50,722 people, within the York Durham Sewage System, was provided at that time. A detailed breakdown of the capacity assignment and capacity outlook provided in 2013 for each municipality is shown in Attachment 1.

Region-wide cumulative assignment to date exceeds 1.25 million people

Since 2013, Region staff has been working closely with local municipal staff to monitor the use of capacity within the YDSS. In most municipalities, residential growth has occurred at approximately the anticipated rate and a new assignment of servicing capacity is appropriate to support continued growth in the medium to long term.

To date, cumulative servicing capacity assigned to support Region-wide growth has reached 1,254,815 people as shown in Table 1.

Table 1
Cumulative Servicing Capacity Assignment and Reserves as of Q4 2015

Service Area or Component	Population
York Durham Sewage System Service Area	1,152,855
Stand-Alone Systems (Outside Georgina)	29,667
Georgina System	56,500
Servicing Incentive Program	1,186
East Gwillimbury Sustainable Development Incentive Program	4,605*
Inflow and Infiltration Pilot Projects	10,002**
Total Servicing Capacity Assignment	1,254,815
Holland Landing Lagoons Reserve	4,148
Non Profit Housing Reserve	4,016
Total Servicing Capacity Assignment and Reserve	1,262,979

* Subject to meeting program requirements

** Includes capacity assigned to Aurora, Markham and Vaughan for works completed as per Inflow and Infiltration Reduction Pilot Project agreements

Georgina has adequate servicing capacity to support its growth

Georgina is serviced by Lake Simcoe-based water, including water and wastewater treatment facilities, and is the only local municipality not serviced by the YDSS. No new assignment is provided to Georgina in this report. To date, Georgina is assigned a total of 49,000 persons for the Keswick Water Resource Recovery Facility service area and 7,500 persons for the Sutton Water Resource Recovery Facility service area.

For Keswick, it is projected that the assigned capacity of 49,000 persons can support growth in the Keswick service area to 2036 and beyond. For Sutton, the existing water resource recovery facility is operating at less than 60 per cent of its capacity. Flow to the Sutton plant is monitored closely, and once flow reaches 70 per cent of the plant's capacity, consideration will be given to include the Sutton Water Resource Recovery Facility expansion in the ten year capital plan, subject to available funding at that time.

A Regional capacity reserve will continue 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 organizations. The reserve was topped up in the subsequent assignment, resulting in a total reserve of 4,016 persons.

To date, 1,988 persons of this reserve have been set aside for specific developments, including the Woodbridge Redevelopment project, anticipated for completion in 2019, and the Unionville Seniors Development, anticipated for completion in 2020. Given the remaining reserve and the time required from funding announcements to completions of multi-unit non-profit housing, the remaining reserve provides adequate supply to ensure new housing opportunities will have servicing available to 2021. The capacity reserve will continue to be monitored to ensure availability of servicing for non-profit housing and staff will report as necessary should additional capacity be required.

4. Analysis and Options

Key principles guide the 2016 Capacity Assignment process

To maintain a sustainable balance between growth management, capital delivery and financial sustainability, it is essential to establish key principles to guide distribution of capacity to the eight local municipalities serviced by the York Durham Sewage System.

Through consultation with local municipal staff, guiding principles for this capacity assignment are established as follows:

1. 2016 capacity assignment is targeted to support forecasted growth to the end of 2021
2. Support growth in Aurora, Newmarket and East Gwillimbury, recognizing that the Upper York Sewage Solutions (UYSS) project is currently slated for completion in 2024, with a report back to Council by 2019 on servicing capacity assignment for Aurora, Newmarket and East Gwillimbury based on capacity needs and capacity available at that time
3. Support growth in the Regional Centres and Corridors
4. Align with fiscal strategy

5. 2016 capacity assignment will at least match the “2013 capacity assignment outlook” as shown in Attachment 1 for King, Markham, Richmond Hill, Vaughan and Whitchurch-Stouffville. This approach is generally supported by local municipal staff, which allows them to continue their local planning based on the outlook provided in 2013.

Allocation of servicing assignment by local municipalities to individual developments will continue to be guided by local servicing protocols

A framework for providing servicing allocation has been established through a series of Council reports starting in 2005. Local municipalities have further refined this framework to address local objectives, resulting in local servicing protocols. Key elements of these local protocols include:

- 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
- Linking land use planning approval process with the infrastructure planning and delivery process timing

Local municipalities are encouraged to review their protocols from time to time to ensure strategic growth priorities and effective implementations are being achieved.

New short-term forecast enhances the capacity assignment method

Previously, capacity assignment provided to each local municipality was determined by examining a number of factors including historical levels of building activity and the Regional Official Plan forecast numbers. Since the last capacity assignment in 2013, York Region has been working closely with local municipal staff to develop a short-term residential growth forecast that has proven to be very successful at predicting accurate 3-year annual growth in each municipality (e.g. 2016, 2017 and 2018). The new short-term forecast is an important input into the capacity assignment calculation, as discussed in the following section.

Methodology for calculating capacity needs includes the short-term forecast, historical building activity, and Regional Official Plan forecasts

The first step in calculating capacity needs is to determine how much unused capacity each municipality has from the previous capacity assignment (Column A of Table 2). The Region, in collaboration with local municipal staff, monitors the capacity used each year.

The second step is to forecast the amount of residential growth to the end of 2021. The method used to determine capacity needs for this round of capacity assignment uses the new short-term residential forecast, in addition to historical building activities and the York Region Official Plan forecasts.

Lastly, the additional capacity needed by each municipality (Column B of Table 2) is the difference between the growth forecast and the unused capacity, and is adjusted to at least match the 2013 capacity assignment outlook for King, Markham, Richmond Hill, Vaughan and Whitchurch-Stouffville.

It is recommended that a total new capacity of 71,838 persons be assigned as shown in Table 2. With this proposed assignment, the total available capacity for growth to the end of 2021 is 175,092 persons. This proposed new capacity assignment of 71,838 persons is significantly higher than the outlook of 50,722 persons indicated back in 2013.

Table 2**Proposed New Capacity Assignment (In population)**

Local Municipality	(A) Unused Capacity at Year End 2015	(B) New Capacity Assignment	(A+B) Total Available for Growth to Year End 2021
Aurora	6,375	1,000 ¹	7,375 ³
East Gwillimbury	21,000 ⁴	0	21,000 ³
King (King City)	2,387	3,538	5,925
Markham	22,122	27,731	49,853
Newmarket	4,284	1,500 ²	5,784 ³
Richmond Hill	16,344	14,133	30,477
Vaughan	23,992	19,366	43,358
Whitchurch-Stouffville (Stouffville)	6,750	4,570	11,320
TOTAL	103,254	71,838	175,092

1. Capacity shall only be allocated to developments that do not connect to the Aurora Pumping Station.
2. Subject to completion of the Newmarket forcemain twinning.
3. Capacity Assignment to be reviewed by 2019.
4. Subject to meeting East Gwillimbury Sustainable Development Incentive Program requirements.

Aurora and Newmarket get interim servicing capacity, prior to Water Reclamation Centre

Capacity increase in Aurora, Newmarket and East Gwillimbury is contingent on completing the Upper York Sewage Solutions project. This project is comprised of YDSS improvement works (scheduled for completion in 2019) and construction of a new Water Reclamation Centre (scheduled for completion in 2024). The Individual Environmental Assessment for the UYSS is currently under review by the Ministry of the Environment and Climate Change, and approval from the Minister is expected in fall 2016.

The YDSS improvement works include twinning of the Newmarket forcemain, currently scheduled for completion in 2019. It is proposed that 1,500 persons be assigned to the Town of Newmarket, contingent on completing this forcemain twinning.

A small service area in the south end of Aurora, where wastewater flows directly to the Yonge Street trunk sewer at Bloomington Road, is not contingent on the capacity made available through implementation of the UYSS. This area is not

serviced by the Aurora Pumping Station, which is the subject of a specific capacity constraint to be addressed by the Upper York Sewage Solutions project. To ensure potential development in this area is not impacted, it is recommended that 1,000 persons capacity be assigned to the Town of Aurora for use in this area.

Staff will report back to Council by 2019 on servicing capacity for Aurora, Newmarket and East Gwillimbury

As the Water Reclamation Centre is not expected to be completed until 2024, it is proposed that staff report back to Council by 2019 to provide an overview on capacity use and need in Aurora, Newmarket and East Gwillimbury, and recommend possible servicing solutions to bridge any capacity gap.

In conjunction with this proposed report to Council, an updated system capacity review will be carried out immediately prior to the report. Additional capacity may be revealed through future capacity analysis at that time. As new homes are being occupied in East Gwillimbury, and actual flow can be physically measured, an opportunity will then be available to more precisely assess system capacity. This analysis is also critical to determine the effectiveness of the East Gwillimbury Sustainable Development Incentive Program shown in Table 1.

By 2019, staff will also provide a capacity outlook for the next capacity assignment

To assist local municipalities in managing and planning for longer term allocations, it is proposed that a five-year capacity outlook for next round of capacity assignment be submitted for Council approval by 2019. At that time, the outlook will take into consideration the adopted Official Plan growth distribution and the scope of works required for the Duffin Creek Outfall, as well as the unused capacity of each municipality.

The 2016 Capacity Assignment is not contingent on the Duffin Creek Outfall project

For some service areas, completion of trigger projects is necessary to support capacity assignment. These trigger projects are summarized in Attachment 2. The Region will communicate with local municipalities on the progress of these trigger projects and will advise when registration for ground related units, and issuance of building permits for high rise units, can proceed in accordance with the existing servicing approval protocol.

Based on updated analysis through the recently completed Water and Wastewater Master Plan Update, the Duffin Creek Outfall works previously identified in the 2013 capacity assignment as necessary to be implemented

before 2021 is not needed to support the proposed capacity assignment of 71,838 persons. This is mainly the result of reduced water consumption and inflow and infiltration in the YDSS. Completion of the Duffin Creek Outfall works is however required to support the next round of capacity assignment.

Some local service areas require additional infrastructure to support full build-out

In some localized service areas, there is capacity to support further growth, but additional infrastructure is required to support the full build-out of the area. While the distribution of allocation capacity is under the jurisdiction of local municipalities, it is important that allocation to these service areas by local municipalities does not exceed the available capacity. It is therefore recommended that local municipalities plan their allocation accordingly, track the number of registered units in these areas, and report to the Region on used capacity on an annual basis. These limitations are identified in Attachment 2.

A detailed description of service areas with limited residual capacities, and a map showing the location of these service areas are provided in Attachments 3 and 4 respectively.

Link to key Council-approved plans

One of the strategic objectives of the York Region Strategic Plan is to optimize critical infrastructure system capacity. The recommendations of this report optimize the capacity of the YDSS and prevent triggering any capital project prematurely by ensuring that capacity assignment is directed to where growth is going to occur.

The York Region Official Plan states that it is the policy of Council to ensure that the provision of water and wastewater servicing within communities be coordinated with land use planning approvals to achieve complete communities and to assist in the sequencing of growth within communities. In addition, it is the policy of Council to provide full municipal water and wastewater servicing to accommodate growth in the Urban Area.

The recommendations of this report will ensure that the provision of water and wastewater servicing are coordinated with land use planning approvals to achieve complete communities and will ensure that full municipal water and wastewater servicing is provided to accommodate growth in the Urban Area.

5. Financial Implications

Use of capacity assignment is instrumental to collection of development charges

Water and wastewater assets are costly to build, but designed to service long-term needs. The Region finances its growth-related water and wastewater projects by issuing debt, with the aim of repaying the debt from development charge revenues when future growth occurs. Over the past ten years, \$3.4 billion has been spent on water and wastewater growth capital infrastructure to unlock servicing capacity in York Region and another \$700 million is currently scheduled to be spent during the period from 2016 to 2021 to support the Regional capacity assignment process.

The approved ten-year capital plan aligned with the fiscal strategy and delivery of planned projects in the capital plan is contingent on development charge revenues meeting forecasts. The 2016 capacity assignment supports growth to 2021, which in turn generates the development charge revenue to help fund the Region's capital infrastructure investment needs.

6. Local Municipal Impact

Extensive local municipal consultation regarding the 2016 capacity assignment

Over the last several months, Regional staff have presented and discussed the 2016 capacity assignment with the local municipal CAO's, the Planning Commissioners and Directors, the Municipal Liaison Committee engineering representatives and local Treasurers. In addition, there have been numerous discussions with local staff who are directly involved with capacity allocation. There is a general understanding and acceptance of current servicing constraints, the new method for calculating capacity needs, and the proposed capacity assignment provided in Table 2.

Consulting with and consistent reporting by local municipalities helps identify where servicing capacity is needed

All of the local municipalities have provided allocation tracking reports to the end of 2015. In addition, the Region has worked closely with municipal staff to determine how much capacity is needed in the future. This allows for an accurate picture of how much capacity is required from 2016 to 2021. It is essential for local municipalities to continue with local municipal year-end capacity reporting.

In addition, Region and local municipal staff will continue to work collaboratively to advance water conservation and inflow and infiltration reduction initiatives, which have collateral benefits to the capacity assignment process. Available water and wastewater capacity is essential for local municipalities to grow their communities and reach growth forecasts.

7. Conclusion

Water and wastewater capacity in the York Durham Sewage System was made available for local municipal allocation three years ago. Since that time, residential growth has occurred at approximately the estimated pace and therefore, local municipalities require more capacity for future growth.

Through the revised method, the amount of capacity needed by each municipality has been determined. It is recommended that Council approve the 2016 capacity assignment proposed in this report.

Regional staff will continue to monitor available capacity and growth, and report back to Council by 2019.

For more information on this report, please contact Stephen Fung, Director of Infrastructure Asset Management at ext. 73025 or Karen Whitney, Director of Community Planning and Development Services at ext. 71505.

The Senior Management Group has reviewed this report.

August 15, 2016

Attachments (4)

#6950009

Accessible formats or communication supports are available upon request

**2013 Water and Wastewater Capacity Assignment
and Proposed 2016 Capacity Assignment (in population)**

Local Municipality	2013 Capacity Assignment		2016 Capacity Assignment		
	2013 Capacity Assignment	Assignment Outlook to 2021	(A) Unused Capacity	(B) New Capacity Assignment	(A+B) Total Available for Growth to Year End 2021
Aurora	2,814	5,476	6,375	1,000 ¹	7,375 ³
East Gwillimbury	-	2,059	21,000	0	21,000 ³
King (King City)	1,385	3,538	2,387	3,538	5,925
Markham	15,858	11,628	22,122	27,731	49,853
Newmarket	3,561	349	4,284	1,500 ²	5,784 ³
Richmond Hill	7,327	14,133	16,344	14,133	30,477
Vaughan	10,544	10,022	23,992	19,366	43,358
Whitchurch-Stouffville (Stouffville)	1,882	3,517	6,750	4,570	11,320
TOTAL	43,371	50,722	103,254	71,838	175,092

1. Capacity shall only be allocated to developments that do not connect to the Aurora Pumping Station.
2. Subject to completion of the Newmarket forcemain twinning.
3. Capacity Assignment to be reviewed by 2019.

2016 Capacity Assignment Trigger Table

Local Municipality	Service Area	Trigger project and Description	Current Status	Expected Commissioning Date	Anticipated Presales Timing	Anticipated Registration Timing ⁽¹⁾
Newmarket ⁽²⁾	All Newmarket	Twinning of Newmarket Pump Station Forcemain	Detailed Design	2019	2019	2019
Area Specific Constraints						
Markham Richmond Hill	Pomona Creek Sewershed	Richmond Hill/Langstaff Gateway Regional Centre Servicing Project	Detailed Design	2025	Can proceed provided total combined allocation not exceeding 23,000 persons	
Vaughan	Jane Rutherford Sewershed	Northeast Vaughan Water and Wastewater Servicing Project	Class Environmental Assessment	2028	Can proceed provided total allocation not exceeding 48,000 persons	
	PD8 Service Area in Northeast Vaughan	PD8 pump addition to Maple pump station	Design	2018	Can proceed provided PD8 pump is installed and total sewage allocation not exceeding 48,000 persons in Jane Rutherford Sewershed	
Vaughan	Humber Pumping Station Sewershed	Humber Pumping station expansion	Detailed Design	2025	Can proceed provided total allocation not exceeding 20,000 persons	
		West Vaughan Sewer on Highway 27 and Rutherford Road	Detailed Design	2028		

- (1) Building permits for complex high rise is anticipated to occur up to 36 months (and other high density developments to occur 18 months) prior to expected project commissioning date, subject to certainty of project progress
- (2) Proposed 1,500 persons capacity for Newmarket is contingent on completion of Newmarket forcemain twinning project as part of Upper York Sewage Solutions. (UYSS). Timing of this project is subject to Upper York Sewage Solutions IEA Approval.

Service Areas with Capacity Dependent on Completion of Infrastructure Projects

Jane Rutherford Sewershed has residual capacity of 48,000 persons

The Northeast Vaughan Water and Wastewater Servicing project is scheduled for completion in 2028. This project is required for the full build-out of the Jane Rutherford Sewershed. Prior to completion of this project, an additional 48,000 residents can be serviced by the existing Regional Jane Rutherford Sewer. To ensure that allocation by the City of Vaughan to developments located within the Jane Rutherford Sewershed does not exceed 48,000 residents, the City is requested to track the number of registered units in the Jane Rutherford Sewershed and advise the Region on an annual basis.

Blocks 27, 34, 35 and 41 are located in the Jane Rutherford Sewershed. Staff have been working with the City of Vaughan and development industry to explore interim solutions that mitigate capacity constraints and permit more developments to proceed in these blocks prior to 2028. These solutions may include installation of a flow control and optimization system.

Based on information from the City staff, a total of 40,000 persons capacity may be required to meet other development needs in addition to Blocks 27, 34, 35 and 41 in the Jane Rutherford Sewershed. This suggests that approximately 8,000 persons capacity can be used for developments in these four Blocks. It should be noted that distribution of capacity to individual developments is under the jurisdiction of the City.

The Region is also advancing installation of an additional pump in the South Maple Water Pumping Station for completion in 2018. This would permit high elevation areas (Water Pressure District 8) in the subject Blocks to proceed subject to the wastewater capacity limit as discussed above.

Humber Pumping Station Sewershed has residual capacity of 20,000 persons

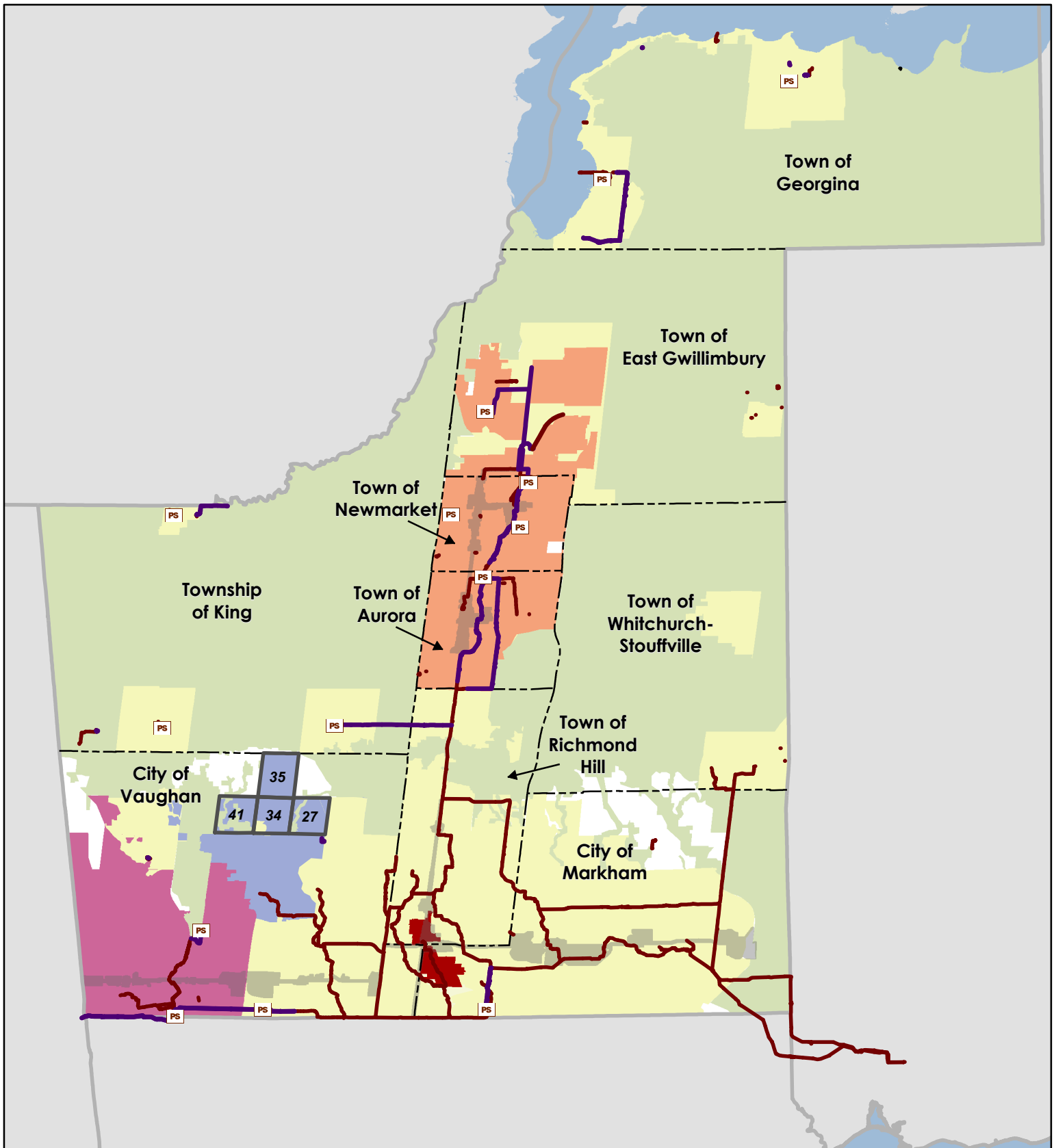
With the recent electrical upgrade works completed at the existing Humber Pumping Station, the Humber Sewershed can accommodate an additional 20,000 residents. To ensure that allocation to developments by the City of Vaughan does not exceed 20,000 residents in the Humber Pumping Station Sewershed, the City is requested to track the number of registered units going forward and advise the Region on an annual basis. Required infrastructure to increase capacity beyond 20,000 residents includes

expansion of the Humber Pumping Station scheduled for completion in 2025, followed by the construction of a sanitary sewer on Highway 27 and Rutherford Road, scheduled for completion in 2028. Region staff is working with City of Vaughan staff to mitigate the impact of the timing of construction of the sanitary sewer on Highway 27 through an interim servicing solution study. This study is underway and is expected to be completed by early 2017. Results of this study will inform potential solutions to mitigate impact of the timing of said projects. Any additional Regional solutions will be subject to the fiscal strategy and budget approval.

Pomona Creek Sewershed has a residual capacity of 23,000 persons

The Class Environmental Assessment for servicing build-out of the Richmond Hill and Langstaff Gateway Urban Growth Centre was completed in 2015. Implementation of the recommended works is planned for 2025. Currently the subject land is serviced by the existing Pomona Creek Sewer, which has a residual capacity of 23,000 people matching the available 9,000 units transportation capacity limit prior to Yonge subway completion.

It is recommended that the first 2,000 units be reserved for Richmond Hill based on existing planning permissions and the remaining 7,000 units be shared between Markham and Richmond Hill based on development readiness through a Regional process. Full details of the capacity sharing protocol as well as the road improvement works required to support the 9,000 units will be discussed as part of a future report to Council addressing the Regional Centres and Corridors progress.



Service Areas with Capacity Dependent on Completion of Infrastructure Projects

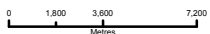
Water and Wastewater Capacity Assignment to Support Approved Growth
 September 8, 2016

Produced by:
 Infrastructure Asset Management,
 Environmental Services Department
 The Regional Municipality of York
 August 2016

Data: © Queen's Printer for Ontario 2003-2016

Legend

- Humber Sewershed
- Aurora / Newmarket / East Gwillimbury
- Jane Rutherford Sewershed
- Pomona Creek Sewershed
- Service Area
- Greenbelt
- PS Pumping Station
- Wastewater Force Main
- Wastewater Gravity Main
- Regional Centre and Corridor





2016 Servicing Capacity Assignment

Presentation to Committee of the Whole

Erin Mahoney

Commissioner, Environmental Services

Valerie Shuttleworth

Chief Planner, Planning and Economic Development

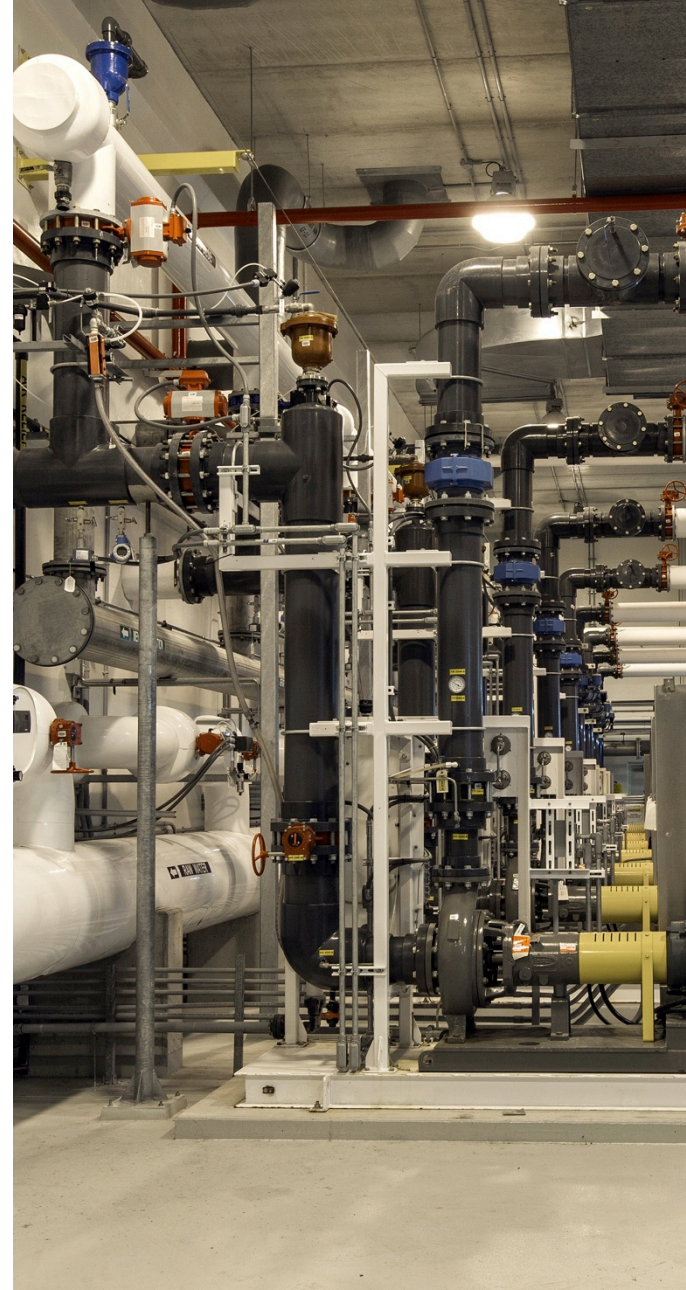
September 8, 2016

Presentation Outline

1. 2016 Capacity Assignment
2. Past and Future Capacity Assignments
3. Key Principles of 2016 Capacity Assignment
4. Servicing Areas with Capacity Dependent on Completion of Infrastructure projects
5. The methodology and the new capacity assignment
6. Consultation with Stakeholders
7. Summary and Recommendations

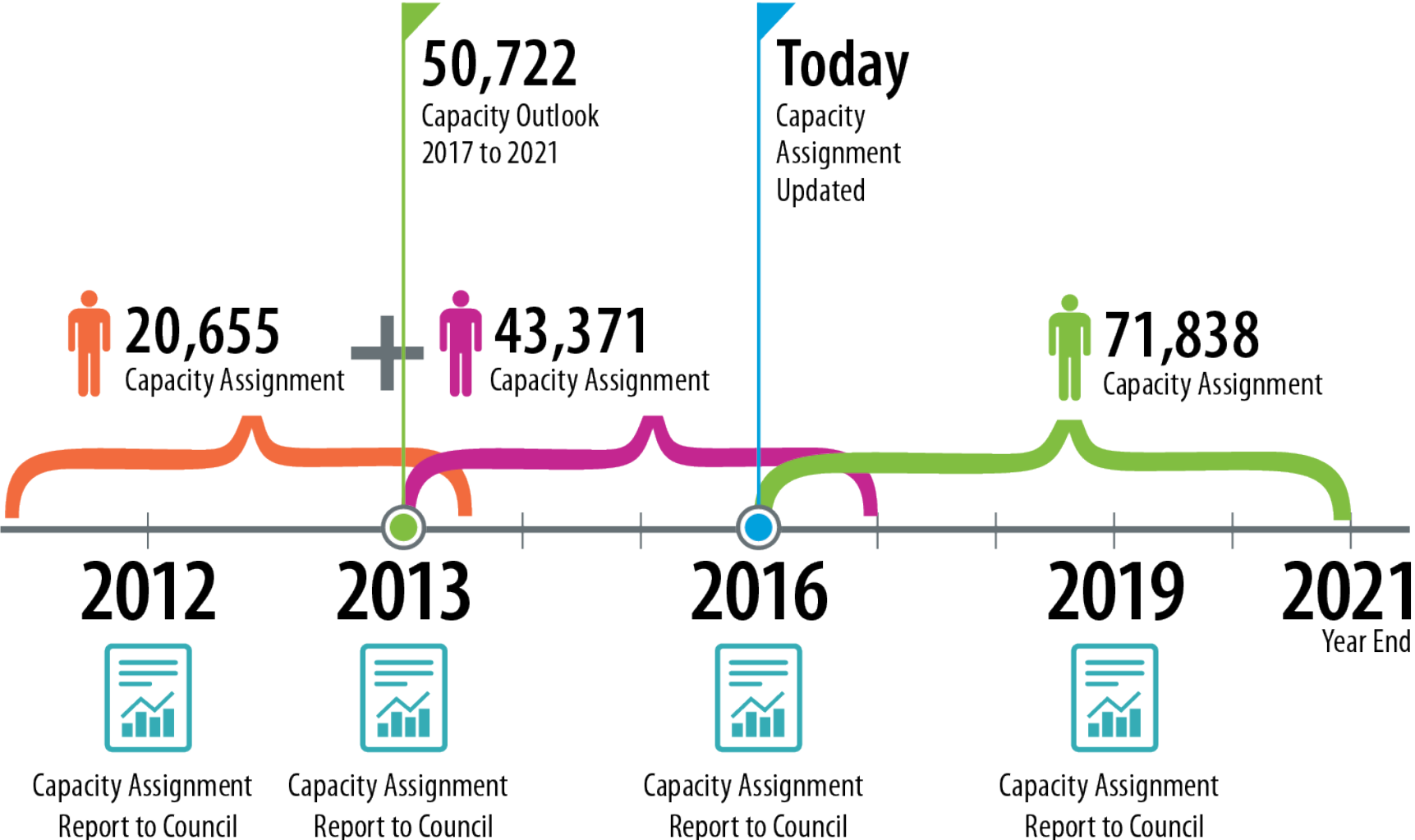
2016 Capacity Assignment

- Accommodate and support continued growth with assignment of 71,838 persons to support growth to 2021 and beyond.
- Continue **collaboration** with local municipalities to monitor capacity used and update short term forecast



\$5B in Regional Infrastructure investment supports Regional growth.

Past and Future Capacity Assignments



Regional capacity assignment to 2021 = 71,838 persons

Key Principles

2016 Capacity Assignment

- Assign capacity to support growth to end of 2021
- At least match 2013 Capacity Assignment outlook for YDSS area not reliant on UYSS
- Support growth in Aurora, East Gwillimbury and Newmarket recognizing timing of UYSS
- Support Centres and Corridors
- Align with fiscal strategy

Assignment reflects local municipal need for multi-year planning



Service Areas

with Capacity Dependent on
Completion of Infrastructure Projects

 **AURORA,
EAST GWILLIMBURY
AND NEWMARKET**


34,159
Residual Capacity
*Upper York Sewage
Solutions 2024*

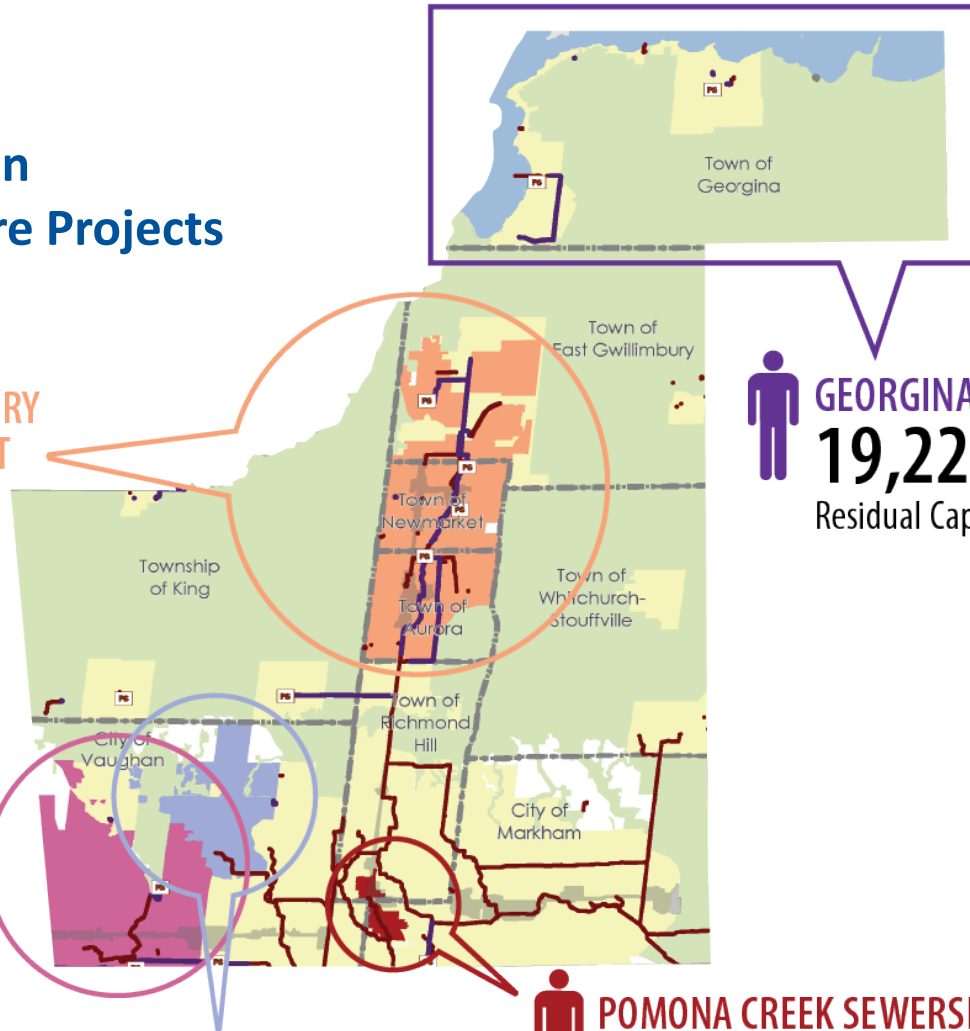
 **GEORGINA**
19,221
Residual Capacity

 **HUMBER SEWERSHED**
20,000

Residual Capacity
*Humber Pumping Station 2025
West Vaughan Sewer 2028*

 **JANE RUTHERFORD SEWERSHED**
48,000 Residual Capacity
North East Vaughan Project 2028

 **POMONA CREEK SEWERSHED**
23,000
*Yonge Subway Completion
Yonge St. and Highway 7
Regional Centre Servicing 2025*



The 2016 Capacity Assignment is not contingent on the Duffin Creek Outfall project

Calculating Required Capacity

Forecasted GROWTH — **Remaining CAPACITY** = **New CAPACITY**



Combined short-term and MCR forecasts



Unused capacity determined by the Capacity Monitoring Program

New CAPACITY + **Remaining CAPACITY** = **Total CAPACITY**



Until year end 2021

New capacity assignment is a result of extensive local municipal consultation

New Capacity Assignment

Municipality	New 2016 Capacity Assignment
King (King City)	3,538
Markham	27,731
Richmond Hill	14,133
Vaughan	19,366
Whitchurch-Stouffville (Stouffville)	4,570
Aurora	1,000
East Gwillimbury	---
Newmarket	1,500

Overall 2016 capacity assignment provides ~30% more capacity than the 2013 Outlook

Total Capacity for Growth

Municipality	Remaining Unused Capacity	New 2016 Capacity Assignment	Total Capacity for Growth to 2021
King (King City)	2,387	3,538	5,925
Markham	22,122	27,731	49,853
Richmond Hill	16,344	14,133	30,477
Vaughan	23,992	19,366	43,358
Whitchurch-Stouffville (Stouffville)	6,750	4,570	11,320
Aurora	6,375	1,000	7,375
East Gwillimbury	21,000	---	21,000
Newmarket	4,284	1,500	5,784
YDSS TOTAL	103,254	71,838	175,092
Georgina (non-YDSS)	19,221	---	19,221

The total capacity ensures local municipal growth to year end 2021

Consultation with Stakeholders



- Understood/Agreed with
 - Principles of Capacity Assignment
 - Approach on growth forecast
 - Assigned Capacity
- Local Municipal Staff Requests
 - Additional 5 year outlook to assist with planning to 2026
 - Aurora requested additional allocation
- Commitment from the Region
 - Report back to Council by 2019 on:
 - Servicing capacity for Aurora, Newmarket and East Gwillimbury
 - Outlook to 2026

Outcomes of consultation = agreed in principle with direction of assignment

Summary

- Accommodate and support continued growth with assignment of 71,838 persons to support growth to 2021 and beyond.
- Continue collaboration with local municipalities to monitor capacity used and update short term forecast
- Aurora and Newmarket get interim servicing capacity, prior to Water Reclamation Centre
- Report back to Council by 2019 on servicing capacity assignment for Aurora, Newmarket and East Gwillimbury, and five year outlook for all municipalities



Recommendations

1. That Council confirm assignment of water and wastewater servicing capacity for 71,838 people within the York Durham Sewage System service area.
2. That Staff continue to collect formal annual capacity allocation information from each local municipality.
3. That each local municipality continue to participate in the Region-wide Long Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy.
4. That the Regional Clerk circulate this report to the Clerks of the local municipalities.





Estimating Annual Population Growth

Municipality	Based on Regional Official Plan Forecast	Based on last 5 years Building Permits Historical	Based on last 10 years Building Permits Historical	Based on Short Term Forecast
Aurora	880	517	837	1,545
Newmarket	640	1,101	1,366	1,262
East Gwillimbury (Queensville, Holland Landing, Sharon)	2,680	395	397	2,260
King (King City)	580	921	470	581
Markham	6,500	8,665	8,710	7,908
Richmond Hill	2,900	3,434	4,190	3,850
Vaughan	6,260	8,056	7,766	6,397
Whitchurch-Stouffville (Stouffville)	1,280	2,145	1,971	1,628
YDSS TOTAL	21,720	25,234	25,707	25,431
Georgina	1,020	515	530	1,031
Region Total	22,740	25,749	26,237	26,462

Estimating Population Growth (2016-2021)

	A	B	C	D
Municipality	Based on Regional Official Plan Forecast	Based on last 5 years Building Permits Historical	Based on last 10 years Building Permits Historical	Based on Short Term Forecast
Aurora	5,280	3,102	5,022	9,273
Newmarket	3,840	6,606	8,196	7,572
East Gwillimbury (Queensville, Holland Landing, Sharon)	16,080	2,370	2,382	13,559
King (King City)	3,480	5,526	2,820	3,488
Markham	39,000	51,990	52,260	47,445
Richmond Hill	17,400	20,604	25,140	23,097
Vaughan	37,560	48,336	46,596	38,380
Whitchurch-Stouffville (Stouffville)	7,680	12,870	11,826	9,770
YDSS TOTAL	130,320	151,404	154,242	152,585
Georgina	6,120	3,090	3,180	6,186
Region Total	136,440	154,494	157,422	158,771

Aurora South Applications

