

2022 YORK REGION WATER AND WASTEWATER MASTER PLAN

York Region





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INTRODUCTION

York Region's 2022 Water and Wastewater Master Plan set out an infrastructure program to 2051. It included the Upper York Sewage Solution to manage additional wastewater flows from the towns of East Gwillimbury, Newmarket and Aurora. A proposed water reclamation centre in the Lake Simcoe watershed was an element of the Upper York solution and was included in the Upper York environmental assessment. The Water and Wastewater Master Plan was approved by Regional Council in May 2022.

In late 2022, the province passed Bill 23, the *More Homes Built Faster Act, 2022*. Passage of Bill 23 enacted the new *Supporting Growth and Housing in York and Durham Regions Act, 2022* (referred to elsewhere in this document as the *SGH Act*). The *SGH Act* deemed the Upper York Sewage Solution environmental assessment be withdrawn. It required York Region and Durham Region to "do everything in their powers" to enlarge, extend and improve the existing York Durham Sewage System to convey sewage from Aurora, East Gwillimbury and Newmarket to the Duffin Creek Water Pollution Control Plant (referred to elsewhere in this document as the Duffin Creek plant) as an alternative to the solution set out in the 2022 Master Plan. The Duffin Creek plant, located on Lake Ontario, is co-owned by York Region and Durham Region.

The SGH Act had two main impacts on the 2022 Water and Wastewater Master Plan:

- Wastewater plans had to be updated to reflect SGH Act direction to take flows south to the Duffin Creek plant
- Plans to draw additional drinking water from Lake Simcoe had to be deferred in favour of delivering it from Lake Ontario

In response to the legislation, York Region in October 2023 submitted the York Region Sewage Works report, a proposed approach to providing the required Lake Ontario-based solution for wastewater, to the Minister of the Environment, Conservation and Parks. Based on consultation with Indigenous communities and interested stakeholders, including residents, municipalities and agencies, the Region submitted a final report in March 2024. The final report, available at <u>york.ca/SewageWorks</u>, provides further details of the proposed approach, including a map.

1. INTRODUCTION

A letter from the Minister in April 2024 expressed satisfaction with the report, enabling 28 projects outlined in the report to advance to design, as the *SGH Act* exempted them from the environmental assessment process and incorporated an alternative consultation and approval process.

The 2022 Master Plan was then amended to reflect new servicing principles required by the *SGH Act* and laid out in the report, as well as new timelines needed to meet projected growth. This document explains the changes to wastewater and water projects in the Master Plan at a high level. It:

- Updates the servicing strategy and infrastructure plan to reflect approved York Region Sewage Works projects and other revisions
- Provides supporting information in the table starting on page 14 for projects with environmental assessment work
- Refines the scope of work to help inform the Region's Development Charges Bylaw update in 2026

Ontario municipalities set out their development charges at regular intervals through a bylaw supported by a background study. The Region's 2026 Region-wide Development Charges Bylaw and Background Study will reflect the updated cost estimates from the Water and Wastewater Master Plan amendment, as well as adjustments for inflation.



2 AMENDING THE MASTER PLAN

This section summarizes changes to the 2022 Water and Wastewater Master Plan required to meet the needs of growth out to 2051 in alignment with the *SGH Act* and other provincial guidance. It also provides an update on works completed from the 2022 plan, as well as those no longer required.

The table starting on <u>page 14</u> provides details of all projects in the Water and Wastewater Master Plan, including projects added since 2022, projects that have changed since 2022, and projects expected to continue as planned. This section and the maps on <u>pages 22</u> and <u>23</u> reflect project labels used in the table.

A. ENGAGEMENT

The York Region Sewage Works report, which was submitted to the Minister of the Environment, Conservation and Parks in March 2024 and which forms the basis for this amendment, was developed through engagement and consultation with interested parties and Indigenous communities.

The Minister's letter in April 2024 enabled the York Region Sewage Works project to move ahead subject to continued dialogue with the Ministry, continued engagement with impacted and interested Indigenous communities and regular progress reporting.

In October 2024 the Region posted a notice of amendment of the Water and Wastewater Master Plan on its website and provided a link for interested parties to sign up for updates on the amended plan. The Region conducted information sessions with local municipalities and developers in late 2024 to discuss the amended plan and get their feedback.

2. AMENDING THE MASTER PLAN

B. CHANGES TO WASTEWATER PROJECTS

To align with the *SGH Act* and Minister's letter of satisfaction with the York Region Sewage Works report, the Master Plan has been amended to provide an integrated plan for servicing growth in the towns of Aurora, Newmarket and East Gwillimbury by conveying wastewater south to the Duffin Creek plant on Lake Ontario. The amended servicing solution requires shorter timelines to meet projected growth than originally planned.

The plan reflects the York Region Sewage Works outlined in the March 2024 report to the Minister. It introduces new wastewater projects to be carried out in three phases, as described in Section i below. Section ii explains changes to scope and timing to align a number of projects already in the Master Plan with the amended approach.

i. York Region Sewage Works: new projects

New projects address the need to expand and improve the portion of the York Durham Sewage System north of Bloomington Road to convey increased sewage flows southward. This will involve three phases:

- **Phase 1:** delivering new sections of trunk sewer, and related sewer infrastructure, and upgrading two pumping stations (WW25)
- **Phase 2:** delivering further new trunk sewer sections and adding two new sewage pumping stations and related sewer infrastructure (WW26)
- **Phase 3:** delivering the final section of new trunk sewer and adding two new sewage pumping stations and related sewer infrastructure, and upgrading two pumping stations (WW27)

For more details, refer to the map on page 23 and table starting on page 21.

ii. Recalibrated projects

To convey and treat the increased flows, the following major projects included in the 2022 Master Plan have been recalibrated:

- Expanding the York Durham Sewage System. A gravity sewer in the original plan will be enlarged and the project will move ahead sooner than originally planned (WW5).
- Expanding and upgrading the Duffin Creek plant. Project scope has been expanded to treat a larger wastewater volume and timing has been advanced (WW12)

A smaller project associated with the sewage system expansion has also been updated.

For more details, refer to the map on page 23 and table starting on page 18.

iii. Projects no longer required or incorporated into new projects

The following projects have been replaced by the projects described in Section 2.b.i above:

- Constructing and subsequently expanding the Upper York Water Reclamation Centre and related infrastructure (WW21 and WW22)
- Building a new sewer to divert flows from the Newmarket pumping station to the Sharon trunk sewer (WW17)

For more details, refer to the map on page 23 and table starting on page 20.

The following projects are no longer listed as active projects in the table because they have been incorporated into the projects described in Section 2.b.i above

- Expanding the East Gwillimbury sewage pumping station (WW18)
- Building an East Queensville sewage pumping station and forcemain (WW20)
- Twinning the Yonge Street Sewer to increase capacity (WW15)

iv. North Markham trunk sewer extension

In response to Minister's Zoning Orders, the addition of four kilometres of sewer infrastructure along McCowan Road in north Markham has also been included in the amended Master Plan. This is identified as project WW8 on the map on page 23. Section 3.c.vi below outlines potential financial arrangements.

C. CHANGES TO WATER PROJECTS

High-level servicing strategies for water remain largely consistent with the 2022 Master Plan, with drinking water supply from existing sources and agreements with the City of Toronto and Peel Region remaining in place.

The water strategy was nonetheless reviewed as a result of the new wastewater solution requiring treatment in the Lake Ontario watershed. As originally planned, drinking water demand created by growth in Newmarket and East Gwillimbury would be met from Lake Simcoe, with wastewater to be treated at the new water reclamation centre in the same watershed.

The amended Water and Wastewater Master Plan will bring Lake Ontario-sourced drinking water through the York Water System to northern towns to align with the return of wastewater to the Duffin Creek plant on Lake Ontario. To achieve this, water projects have been expanded and their timing adjusted to align with the revised size and timing of wastewater projects:

- A watermain project along Bloomington Sideroad and Bayview Avenue was advanced and enlarged in alignment with changes to wastewater servicing (W14)
- The York East Water Servicing project will be delayed as it depends on the North Markham Water Servicing project, which will now go ahead after the Bayview-Bloomington watermain project (W13)

This recalibration will enhance system resiliency not just for Aurora, Newmarket and East Gwillimbury, but for Richmond Hill and Markham as well. The projects also leverage major investments now being made to upgrade treatment in the Yonge Street Aquifer system. For more details, refer to the map on page 22 and table starting on page 15.

2. AMENDING THE MASTER PLAN

As outlined on page 30 of the 2022 Water and Wastewater Master Plan, the Region in 2010 received approval from the Great Lakes states and provinces under an international agreement governing the Great Lakes-St. Lawrence basin to transfer up to 105 million litres of water a day from Lake Ontario to the Lake Simcoe/Lake Huron watershed with return flow to Lake Ontario. Under the amended master plan and as outlined in the York Region Sewage Works report in March 2024, Lake Ontario drinking water supply is projected to be within the current permitted transfer limits. The Region will continue to monitor flows for compliance.

The previously proposed projects to support an expanded Lake Simcoe solution, including a connection between Lake Simcoe and the north end of the York Water System, were retained but have been recalibrated and moved to later dates in the Master Plan to allow for further evaluation when long-term system needs are more certain. An expanded Lake Simcoe solution could accommodate unforeseen changes in such factors as growth forecasts and asset performance, while maintaining water quality and quantity.

D. 2022 MASTER PLAN PROJECTS COMPLETED BY 2025

v. Projects in the 2022 Master Plan that were completed by 2025:

- Constructing a gravity sewer from Richmond Hill Langstaff Gateway to the Richmond Hill wastewater collector (WW7)
- Optimizing the existing capacity of the Duffin Creek plant outfall (WW10)
- Building a new sewage pumping station and connecting sewer to the York Durham Sewage System as an interim servicing strategy (WW16)

For more details, refer to the map on page 23 and table starting on page 19.



3 IMPLEMENTATION

Infrastructure master plans are executed through 10-year capital plans set out each year in the York Region budget. This is a reminder of the importance of affordability and the need to balance capital spending priorities.

A. REGIONAL FISCAL STRATEGY

The goal of the budget is to keep the Region financially sustainable while providing expanded service to people and jobs as the Region grows and keeping existing assets in a state of good repair. This is achieved through the Regional Fiscal Strategy, which carefully manages the timing of capital investments, the funding of reserves for future needs, and the prudent use of borrowing.

The Fiscal Strategy informs the 10-year capital plan, requiring capital planning to take into account the Region's development charges collection forecast, actual versus projected growth, debt outlook and other factors affecting the Region's fiscal capacity.

B. IMPLEMENTATION RISKS

Risks that might affect implementation currently include:

Cost uncertainty. The construction industry remains volatile as high demand for materials and skilled labour, coupled with global supply chain disruptions, continue to drive up costs and make project planning unpredictable. Accuracy of cost estimates is highly dependent on how far a project has advanced. With progress through regular milestones – conceptual master plan, condition assessment, design and construction – and as more information is available, cost estimates and delivery schedules may have to be revised.

Resources. The amended master plan involves different projects from those originally envisioned and a shorter timeline. The Region will be challenged to deliver the plan without adding staff to accommodate the changes. In addition, contractors who are needed to deliver projects face growing challenges because of limited staffing resources, particularly in the skilled trades.

3. IMPLEMENTATION

Funding and financing. Development charges are fees collected when new development is built. These fees fund a significant share of the cost of growth-related infrastructure. As there is a timing gap between when the Region has to invest and build the growth-related infrastructure to when the related growth happens, the Region often finances these investments with debt that is repaid as development charges are collected. This creates a strong link between the development charges collections outlook and the debt forecast. However, the timing of development charges collections to fund such investments can take a longer period to recover due to statutory deductions to consider the benefits that the new infrastructure would provide to future growth, beyond the planning horizon of the development charges bylaw.

Two factors are currently putting pressure on the Region's debt forecast:

- The development charges collections forecast has been adjusted lower, largely reflecting slower-thanexpected construction activity in recent years and over the earlier years of the 10-year capital plan. This is despite the Region having made 80,000 units of water and wastewater capacity available to local municipalities to help drive development
- At the same time, growth-related spending in the capital plan has increased and been accelerated into earlier years. The change in servicing strategy outlined in this amendment has contributed to both a larger plan and its acceleration

The impact of these factors is a 10-year capital plan that the Region cannot finance on its own.

Uncertainty in growth forecasts. Infrastructure construction must be carefully aligned with expected growth. When actual growth differs from forecast, the Region can be left with untapped capacity, as has happened in some areas. Regional Council has endorsed pacing infrastructure investments to actual growth where possible.

Other priorities in the capital budget. All investments outlined in the 10-year capital plan, not just water and wastewater, affect the allocation of available funds and pacing of projects. Other critical work includes widening roads, paying the Region's portion of the Yonge North Subway Extension, adding electric buses and other vehicles to the Region's fleets, building community housing, and renewing existing assets. As noted above, all projects are subject to uncertainty around costs, especially in the current economic environment. Renewal projects face additional uncertainty as more data becomes available on condition of existing assets.

Regulatory and policy uncertainty. Policy shifts around development charges and land use planning at the provincial level have contributed to uncertainty around future project scope, timing and funding, while potential regulatory changes to address such emerging concerns as cyanobacteria, microplastics and per-and polyfluoroalkyl substances (PFAS) would further increase costs. In addition, Appendix A.7 of the 2022 Master Plan set out potential Great Lakes-based servicing solutions for a number of communities in the Greenbelt that at the time were restricted by a provincial growth plan from accessing such servicing. The Greenbelt restrictions were not included when the growth plan was later merged into the Provincial Policy Statement, and it is uncertain whether they will be incorporated into other provincial direction. Pending clearer provincial direction, infrastructure plans for the affected Greenbelt communities remain unchanged at the time of this amendment.

Climate change adaptation and mitigation. The increase in severe weather events and other climate phenomena translates into greater risks to vulnerable infrastructure. Retrofits and new requirements for growth-related infrastructure to increase resilience are likely to be needed, putting more pressure on the capital plan. Similarly, investments to mitigate climate impacts by reducing use of fossil fuels typically require increased capital spending.

3. IMPLEMENTATION

C. MANAGING AND MITIGATING RISKS

As the points above underscore, growth forecasts underpinning long-term plans are inherently uncertain, and water and wastewater servicing needs will undoubtedly change over the course of the Master Plan. At the same time, costs and budget pressures continue to escalate. This section discusses how the Region plans to manage and mitigate risks.

i. Adaptive management

The Region will work to adapt its approaches and plans as needed and, to the extent possible, avoid locking in costly long-term solutions that may be unsuitable as conditions change.

It will also draw on approaches being developed nationally and globally to support adaptation in managing climate risks. These new approaches focus on long-term planning that lays out potential scenarios and identifies strategies that are either effective in all scenarios or can adapt to changing circumstances.

ii. Coordinating and monitoring

Ongoing discussion with the existing Capacity Working Group, which brings together local municipalities and other stakeholders, will continue to provide insights into land use planning and development approvals. Monitoring development pace and system capacity in coordination with Regional partners clarifies growth patterns and helps to phase projects more efficiently and effectively. An important goal for the Region is to work with local municipalities on a consolidated growth forecast to ensure continuing alignment between its capital plans and their needs.

As annual budgets are developed, the Region's staff will update capital spending plans and monitor actual growth and development charge collections against forecast. That information will inform the 10-year capital plan so that it continues to align with the Regional Fiscal Strategy. If the outlook is positive, the capital plan can be sustained or even increased. Conversely, higher costs and/or lower than expected revenues would call for the pacing of projects to be adjusted, with priorities set using a risk-based framework.

iii. Planning and procurement

The Region is investigating a portfolio approach to planning major works that involves coordinating projects that require similar activities and construction resources (for example, tunneling). The goal is to secure the needed resources and deploy them efficiently across the portfolio. This could also increase interest on the part of bidders by providing greater certainty about work volume and sequencing in an individual contract.

The Region is also exploring greater knowledge-sharing during the design phase of projects. In this model, Regional staff would engage early with the construction industry to leverage their knowledge with the goal of enhancing infrastructure constructability.

Public Works staff are also working with the Region's Procurement Office on broader efforts to attract and secure bidders on capital projects. This will include posting a quarterly bid forecast and hosting a Project Fair in early 2025 to outline and promote upcoming projects.

iv. Making better use of existing infrastructure and tapping unused capacity

The Region constantly pursues innovative solutions to help unlock existing capacity at a relatively low cost. These include reducing including inflow and infiltration into wastewater systems, encouraging water conservation, offering demand management programs, and optimizing and maintaining systems to allow "infrastretching" (greater use of infrastructure than originally planned without significant impacts on service levels).

The Region is also addressing water and wastewater unused capacity in some areas, which occurs when infrastructure has been put in place but the development it is intended to service has not moved ahead. As noted, an estimated 80,000 households of existing capacity was available to developments in 2023 and the majority have not advanced to construction at the end of 2024. Leveraging the unused capacity, especially to meet housing targets, would make better use of existing infrastructure and create fiscal room for future projects. The Region is working on a developer-focused strategy aimed at unlocking this unused capacity.

v. Climate change response

The Region is using machine learning to analyze inflows and infiltration to understand changing weather patterns, which will be key to addressing climate impacts cost-effectively. This data will also inform a review of current engineering design standards and operational practices.

vi. Developer financing

As noted, the current 10-year capital plan includes major costs over the next 10 years for phases 1, 2 and 3 of projects outlined in the York Region Sewage Works report. If the Region financed all of this work on its own, the additional borrowing would cause debt levels to rise beyond sustainable levels. The Region is therefore asking developers to share the risk of advancing phases 2 and 3 by providing project financing until development charges are received.

In addition, the four-kilometre extension of sewer infrastructure along McCowan Road in north Markham required by Minister's Zoning Orders, described in Section 2.b.iv, will require additional funding as it is not included in current capital plan or Development Charges Bylaw. Owners of development lands in the area have committed to funding the required environmental assessment and to working with the Region and affected municipalities on a prepaid development charge agreement for any needed works the assessment identifies.

A benefit of such approaches is that when developers provide financing, infrastructure investments can move ahead in line with their timing for housing construction. Wider use of developer financing may help to better align the building of infrastructure with the development it will serve. This would help reduce the risk of localized overcapacity, which is discussed in the previous section.



vii. Advocacy

The Region continues to advocate with the provincial and federal governments for:

Funding for growth-driven water and wastewater investments. While population growth is largely shaped by provincial and federal policies, it can't be achieved without building more housing – which in turn must be serviced by municipal water mains, sewers and other costly infrastructure. Municipalities, which have limited debt capacity, are challenged to finance these investments on their own and need predictable long-term funding solutions, including provincial and federal support, to help pay for these large infrastructure investments.

Balanced approaches to **regulation**. Approaches to water and wastewater regulatory standards and compliance should be informed by evidence and risk-based, so that the needs of public health, environmental protection and municipal financial capacity are in balance. The process should also take into account the time and resources needed to achieve compliance.

Greater **policy certainty**. The Region continues to advocate for ongoing clarity in provincial and federal policy direction, as disruption or delays at the municipal level are costly and time-consuming for staff, developers, contractors and other interested parties. The goal should be leveraging the expertise and resources of each partner appropriately to meet agreed-upon goals, making and communicating decisions in a timely fashion, and providing municipalities with the stability needed to plan and implement their programs cost-effectively.

Table 4.1 Growth-related Water Projects

		Estimated	Dianned	Environmental			Muni	cipality partia	ally or fully se	rviced by this	project		
MP ID	Project description	expenditures 2025-2051 (000's)	Planned implementation timeframe		Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
W1	Toronto Water Supply - Cost-Shared Works Continue implementation of Toronto cost-shared capital projects for the gradual increase of water supply to York Region in accordance with Servicing Agreement.	\$54,900	2025-2051	Various	Х	Х		х	х	х	х	Х	Х
W2	Peel Water Supply - Cost-Shared Works Continue implementation of Peel cost-shared capital projects for the gradual increase of water supply to York Region in accordance with Servicing Agreement.	\$14,900	2025-2051	Various	Х	Х		х		х	Х	Х	
W3	East Woodbridge Pumping Station Decommissioning Decommission East Woodbridge Pumping Station subject to the outcome of a repurposing study.	\$1,260	2032-2041	Schedule A+*									
W4	 West Vaughan Water Servicing Phase 1: Introduce a pressure district interconnection in the Woodbridge service area before the expansion of storage capacity - Phase 2. Phase 2: Expand storage capacity in Woodbridge and Kleinburg service areas to support growth in western parts of Vaughan. 	\$25,020	2025-2041	Schedule A* Schedule B								x	
W5	York Peel Feedermain Upgrade Install pressure reducing valves along connection points to the York-Peel Feedermain to maintain acceptable pressures within Pressure District 6 distribution system as flows from Peel supply increase to meet demands in the overall York Water System.	\$5,010	2025-2031	Schedule A*	х	х		х		х	х	x	
W6	Northeast Vaughan Water Servicing Phase 1: Construct a Pressure District 8 pumping station, a Pressure District 8 elevated tank and a Pressure District 9 pumping station along with connecting watermains to service growth in northeast Vaughan in accordance with the completed Class Environmental Assessment study. Phase 2: Construct a new Pressure District 8 elevated tank as demands increase in northeast Vaughan.	\$108,040	2025-2031	Class EA completed in 2019								Х	
W7	 Vaughan Storage Expansion Phase 1: Construct the first phase of a Pressure District 6 reservoir to support growth in the York Water System. Phase 2: Construct a Pressure District 9 elevated tank and connecting watermain to accommodate growth in northeast Vaughan and construct the second phase of the Pressure District 6 reservoir as demands in the overall York Water System increase. 	\$61,020	2032-2051	Schedule B								Х	

Table 4.1 Growth-related Water Projects (continued)

		Estimated	Planned	Environmental			Muni	cipality parti	ally or fully se	rviced by this	project		
MP ID	Project description	expenditures 2025-2051 (000's)	implementation timeframe		Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
W8	Nobleton Water Servicing Implement works to increase Nobleton well supply capacity in accordance with the completed Class Environmental Assessment study.	\$26,950	2025-2041	Class EA completed in 2021				x					
W9	North Richmond Hill Pumping Station Decommissioning Decommission North Richmond Hill Pressure District 8 Pumping Station subject to the outcome of a repurposing study.	\$1,480	2025-2041	Schedule A+*									
W10	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Water Servicing Install water system connections to Pressure District 6 to service the proposed urban growth centre in accordance with the completed Class Environmental Assessment study.	\$2,830	2025-2031	Class EA Completed 2015					x		x		
W11	North Markham Water Servicing Implement Pressure District 7 infrastructure to support Markham urban expansion and facilitate the introduction of York East Water Servicing project (W13). Subject to the Class EA outcome, this project is expected to be completed as follows: Phase 1: Construct a new storage facility and connecting watermain. Phase 2: Construct a new pumping station and connecting watermain.	\$150,350	2032-2041	Schedule B in Progress					х				
W12	Stouffville Water Servicing Phase 1: Optimize Stouffville Zone 2 booster pumping station capacity before introduction of a new storage facility (Phase 2). Phase 2: Construct a new elevated tank and connecting watermain to support growth in Stouffville Zone 2 service area.	\$15,330	2032-2051	Schedule B									Х
W13	York East Water Servicing Phase 1: Construct a new pumping station at the Pressure District 7 reservoir site (W11), an Aurora Central reservoir and associated watermains to bring additional Lake Ontario supply to the north water system as demand increases. Phase 2: Construct a new pumping station at the Aurora Central reservoir site and associated watermain to accommodate growth in the eastern parts of the north system as demand increases.	\$148,530	2042-2051	Schedule B	х	X				Х			
W14	Bloomington - Bayview Watermain Construct a new watermain to bring additional Lake Ontario supply to accommodate growth in Aurora, Newmarket and East Gwillimbury while connecting critical facilities in Aurora Central.	\$101,200	2025-2031	Schedule B	Х	x				Х			

Table 4.1 Growth-related Water Projects (continued)

		Estimated	Dianned	Environmontol			Muni	cipality parti	ally or fully se	rviced by this	project	· · · · · ·	
MP ID	Project description	expenditures 2025-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
W15	Aurora East Booster Pumping Station Upgrades Increase capacity of Aurora East Booster Pumping Station including pipe upgrades to support growth in Aurora, Newmarket and East Gwillimbury.	\$12,300	2025-2031	Schedule A*	Х	х				x			
W16	Orchard Heights Reservoir Inlet Upgrade Phase 1: Increase Orchard Heights Pumping Station capacity to support growth and operational needs in Aurora and Newmarket water systems. Phase 2: Upsize Orchard Heights Reservoir inlet piping to facilitate increase of Lake Ontario supply into Aurora, Newmarket and East Gwillimbury as demand increases.	\$3,790	2025-2041	Schedule A*	х	X				x			
W17	Eagle to Kirby Pumping Station Watermain Construct a watermain connecting the existing Yonge Street watermain to Glenway Reservoirs to facilitate filling and utilization of available storage capacity in Newmarket Central as demand increases.	\$11,950	2025-2031	Schedule A+*		х				х			
W18	Newmarket West Water Servicing Increase Kirby Pumping Station capacity and construct a new storage facility along with associated watermains to service growth in the Newmarket West Pressure District.	\$40,180	2025-2031	Schedule B		х				x			
W19	Yonge Street Watermain Construct a watermain on Yonge Street from Gladman Road to Green Lane to accommodate intensification along Yonge Street corridor and allow interconnection of Newmarket Central and Holland Landing Pressure Districts.	\$46,130	2042-2051	Schedule A+*		х				x			
W20	 Green Lane Leslie Street Watermain Phase 1: Construct a watermain on Green Lane from Yonge Street to Leslie Street to accommodate growth in Newmarket and East Gwillimbury. Phase 2: Construct a watermain on Leslie Street from Mulock Drive to Green Lane to bring additional Lake Ontario supply to eastern parts of Newmarket and East Gwillimbury. 	\$35,400	2025-2041	Schedule A+*		Х				Х			
W21	East Gwillimbury Water Servicing Phase 1: Construct a watermain on Woodbine Avenue from Mount Albert Road to Queensville Sideroad to accommodate employment growth along Woodbine Avenue corridor in East Gwillimbury. Phase 2: Construct a watermain on Queensville Sideroad from Second Concession to Leslie Street to accommodate growth in East Gwillimbury.	\$35,010	2032-2051	Schedule A+*		Х							

Table 4.1 Growth-related Water Projects (continued)

		Estimated	Planned	Environmental			Muni	cipality parti	ally or fully se	rviced by this	project		
MP ID	Project description	expenditures 2025-2051 (000's)	implementation timeframe		Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
W22	Queensville Elevated Tank No. 2 Construct a new elevated tank and watermain along Leslie Street from Green Lane to the new storage facility to accommodate growth in eastern parts of Newmarket and East Gwillimbury.	\$35,580	2042-2051	Schedule B		х				x			
W23	Holland Landing Storage Expansion Construct a new elevated tank and connecting watermain in Holland Landing Pressure District to accommodate growth in East Gwillimbury while allowing replacement of the existing Holland Landing East Elevated Tank.	\$10,340	2032-2041	Schedule B		х							
W24	West Park Heights Pumping Station and Watermain Construct a new pumping station, assumed to be located adjacent to the existing West Park Heights Reservoir in Keswick, and associated watermain to allow integration of York and Georgina Water Systems.	\$47,950	2042-2051	Schedule C		x	х						
W25	Georgina Water System Upgrades Expand Georgina Water Treatment Plant to its ultimate permitted capacity of 50 million litres per day and upgrade Georgina Water System disinfection system to allow integration with York Water System (W24).	\$21,810	2042-2051	Class EA completed 1998		Х	Х						

	Demand management and supporting programs												
Program	Water For Tomorrow Program	\$26,540	2025 - 2051	N/A	Х	Х	Х	Х	Х	Х	Х	Х	X
Program	Water Master Plan Update	\$7,990	2025 - 2051	N/A	Х	Х	Х	X	Х	Х	Х	Х	X
Program	Water System Capacity Assessment	\$66,190	2025 - 2051	N/A	Х	Х	Х	X	Х	Х	Х	Х	X

Table 5.1 Growth-related Wastewater Projects

		Estimated expenditures	Diannad	Environment-			Muni	cipality parti	ally or fully se	rviced by this	project		
MP ID	Project description	expenditures 2025-2051 (000's)	Planned implementation timeframe	al Assess- ment (EA) Process	Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
WW1	Peel System Cost-Shared Works Continue implementation of Peel cost-shared projects for diversion of York sewage flows to Peel wastewater system in accordance with Servicing Agreement.	\$5,270	2025-2051	N/A								Х	
WW2	 West Vaughan Sewage Servicing Phase 1: Increase Humber Sewage Pumping Station capacity along with construction of a gravity sewer along Highway 27, Highway 7 and connecting to the Humber Sewage Pumping Station. Phase 2: Construct a gravity sewer from the Kleinburg Water Resource Recovery Facility to the north end of West Vaughan Sewage Servicing - Phase 1 gravity sewer to service growth in Vaughan while allowing the decommissioning of Kleinburg Water Resource Recovery Facility. 	\$529,530	2025-2041	Class EA Completed 2013								Х	
WW3	 Northeast Vaughan Wastewater Servicing Phase 1: Construct a gravity sewer along Keele Street from south of Rutherford Road, east crossing Langstaff Road and then south connecting to the existing York Durham Sewage System. Phase 2: Construct a gravity sewer along Jane Street from Teston Road to just south of Rutherford Road and other upgrades to convey flows generated in northeast Vaughan areas to the existing Langstaff Collector and York Durham Sewage System. 	\$136,350	2025-2031	Class EA completed 2019								х	
WW4	York Durham Sewage System Conveyance Optimization Install a flow gate at the Bathurst Collector to optimize the capacity of York Durham Sewage System by attenuating flows during wet weather conditions.	\$4,650	2025-2031	Schedule A*					х		х	х	
WW5	York Durham Sewage System Expansion (South) Continue to expand York Durham Sewage System to support long term growth including: A new gravity sewer parallel to the existing Markham Collector as identified in the approved York Region Sewage Works Project Report. A new relief sewer to divert flows from the Central Collector sewershed to the proposed Richmond Hill Langstaff sewer to accommodate growth in the Richmond Hill Langstaff sewershed and, Twinning of a section of existing Steeles Collector Sewer as sewage flows increase in the Leslie Street Sewage Pumping Station Drainage Area.	\$668,670	2032-2051	Markham Collector Exempted Central Collector relief sewer Schedule B Steeles Collector Twinning Schedule B					Х		Х	Х	
WW6	 Leslie Street Sewage Pumping Station and Forcemain Phase 1: Increase Leslie Street Sewage Pumping Station capacity to accommodate growth in the Leslie Street Sewage Pumping Station Drainage Area. Phase 2: Construct a new forcemain from the station to the York Durham Sewage System. 	\$65,250	2032-2051	Schedule A+*					Х		Х	Х	

*Projects identified as Schedule A and Schedule A+ are exempt from the *Environmental Assessment Act*.

YORK REGION | WATER AND WASTEWATER MASTER PLAN AMENDMENT | THE INFRASTRUCTURE PLAN

5. AMENDED LONG TERM WASTEWATER INFRASTRUCTURE PLAN

Table 5.1 Growth-related Wastewater Projects (continued)

		Estimated	Planned	Environmental			Muni	cipality parti	ally or fully se	rviced by this _l	project		
MP ID	Project description	expenditures 2025-2051 (000's)	implementation timeframe		Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
WW7	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Wastewater Servicing (under warranty) Construct a gravity sewer to convey flows from Richmond Hill - Langstaff Gateway Regional Urban Centre to the Richmond Hill Collector as recommended by the completed Class Environmental Assessment.	\$5	N/A	Class EA Completed 2015					х		х		
WW8	 North Markham Trunk Sewer Delivery of wastewater works to accommodate growth in the North Markham Expansion Area subject to the outcome of the Class Environmental Assessment study in progress: Phase 1: Construct a gravity sewer assumed to run along McCowan Road from Major Mackenzie Drive to 16th Avenue. Phase 2: Extension of McCowan gravity sewer from Major Mackenzie Drive to 19th Avenue. 	\$168,396	2032-2051	Schedule B					х				Х
WW9	Primary Trunk Sewer Construct a gravity sewer from the terminus of the Southeast Collector at Valley Farm Road to the Duffin Creek Water Pollution Control Plant as recommended by the York Region Sewage Works Project Report.	\$550,610	2025-2031	Exempted	Х	х		х	х	х	х	х	Х
WW10	Duffin Creek Water Pollution Control Plant Outfall Effluent Strategy (COMPLETE) Delivery of works to optimize the existing Duffin Creek Water Pollution Control Plant outfall capacity in accordance with the approved Class Environmental Assessment Study.	\$0	N/A	Class EA completed 2019	Х	x		х	х	x	х	х	Х
WW11	Duffin Creek Water Pollution Control Plant Stage 1 and 2 Chlorine Chamber Expansion Construct a new chlorine contact chamber to increase the Duffin Creek Water Pollution Control Plant disinfection capacity to accommodate growth.	\$21,070	2025-2031	Schedule A*	Х	x		х	х	x	х	х	х
WW12	Duffin Creek Water Pollution Control Plant Growth Expansions Delivery of works to optimize and expand Duffin Creek Water Pollution Control Plant capacity including a new outfall in accordance with approved York Sewage Project Report.	\$1,003,950	2025-2041	Exempted	х	x		x	х	x	х	х	х
WW13	Nobleton Wastewater Servicing Implement works to increase capacity of the Nobleton wastewater system in accordance with completed Class Environmental Assessment study.	\$56,670	2025-2041	Class EA completed 2021				Х					

Table 4.2 Growth-related Wastewater Projects (continued)

		Estimated	Planned	Environmental			Muni	cipality partia	ally or fully se	rviced by this	project		
MP ID	Project description	expenditures 2025-2051 (000's)	implementation timeframe		Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
WW14	King City Wastewater System Upgrades Phase 1: Optimize King City Sewage Pumping Station capacity to accommodate interim growth in King City. Phase 2: Increase King City sewage pumping capacity along with construction of a forcemain to accommodate long term growth in King City.	\$47,880	2025-2051	Schedule B				Х					
WW15	Yonge Street Sewer Twinning Increase conveyance capacity of Yonge Street Sewer to accommodate growth and allow rehabilitation of existing sewer. NO LONGER REQUIRED	\$0	N/A										
WW16	York Durham Sewage System Interim Servicing Implement servicing strategies including Henderson Pumping Station and Upgrades to Aurora Sewage Pumping Station to accommodate interim growth in Aurora, East Gwillimbury and Newmarket.	\$1.5	2025-2031	Class EA Completed 2019	Х	Х				Х			
WW17	Newmarket Diversion Sewer Construct a new sewer to divert flows from the Newmarket Pumping Station to the Sharon Trunk Sewer as flows increase due to growth. NO LONGER REQUIRED	\$0	N/A	N/A									
WW18	East Gwillimbury Sewage Pumping Station Expansions Increase capacity of West Queensville, Second Concession and Holland Landing Sewage Pumping Stations to service growth in East Gwillimbury. INCORPORATED INTO NEW PROJECTS	\$0	N/A	N/A									
WW19	Holland Landing Lagoon Decommissioning Decommission Holland Landing Lagoons in the Town of East Gwillimbury.	\$1,100	2025-2031	Schedule A+*		Х							
WW20	East Queensville Sewage Pumping Station and Forcemain Construct a new sewage pumping station just south of Queensville Sideroad and west of Highway 404 along with forcemain connecting to the West Queensville Sewage Pumping Station to service growth in parts of Queensville. INCORPORATED INTO NEW PROJECTS	\$0	N/A	N/A									

Table 4.2 Growth-related Wastewater Projects (continued)

		Estimated	Diamod	Fruitzanmantal			Muni	cipality partia	ally or fully se	rviced by this	project		
MP ID	Project description	expenditures 2025-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
WW21	Upper York Water Reclamation Centre Construct a new Water Reclamation Centre in East Gwillimbury to accommodate growth and allow decommissioning of Holland Landing Lagoons as recommended in the Individual Class Environmental Assessment completed in 2014 (pending approval). This project will provide an overall benefit to the Lake Simcoe watershed through the integral phosphorus offsetting program component of Upper York Sewage Solutions. NO LONGER REQUIRED	\$0	N/A	N/A									
WW22	Upper York Servicing Infrastructure Expansions 1 and 2 Expand the Water Reclamation Centre subject to a future Class Environmental Study to accommodate growth in East Gwillimbury and Newmarket. NO LONGER REQUIRED	\$0	N/A	N/A									
WW23	Keswick Wastewater Servicing Increase capacity of Keswick Water Resource Recovery Facility as recommended in the completed Class Environmental Assessment.	\$34,270	2032-2041	Class EA completed 2006			x						
WW24	Sutton Wastewater Servicing Increase capacity of Sutton Water Resource Recovery Facility as recommended by the completed Class Environmental Assessment study along with expansion of High Street and Woodriver Bend Sewage Pumping Stations.	\$61,640	2032-2041	Class EA completed 2010			x						
WW25	North YDSS Expansion Phase 1 - NEW Enlarge and improve the York Durham Sewage System to convey sewage flows from Aurora, Newmarket and East Gwillimbury for treatment at Duffin Creek Plant in accordance with York Sewage Project Report. Phase 1 works includes the delivery of Leslie Street Trunk Sewer Phase 1 - from Bloomington Road to 19th Avenue, Bloomington Interceptor Sewer, Aurora Sewage Pumping Station Gravity Sewer Twinning, 2nd Concession Gravity Sewers and Newmarket Sewage Pumping Station upgrades.	\$896,300	2025-2031	Exempted	Х	Х				x			
WW26	North YDSS Expansion Phase 2 - NEW Enlarge and improve the York Durham Sewage System to convey sewage flows from Aurora, Newmarket and East Gwillimbury for treatment at Duffin Creek Plant in accordance with York Sewage Project Report. Phase 2 works includes the delivery of Leslie Street Trunk Sewer Phase 2 - from St. Johns Sideroad to Bloomington Road, new Aurora East Sewage Pumping Station with gravity sewer and forcemain, as well as the new Queensville East Sewage Pumping Station with connecting forcemain.	\$940,480	2025-2031	Exempted	Х	Х				x			
WW27	North YDSS Expansion Phase 3 - NEW Enlarge and improve the York Durham Sewage System to convey sewage flows from Aurora, Newmarket and East Gwillimbury for treatment at Duffin Creek Plant in accordance with York Sewage Project Report. Phase 3 works includes delivery of the new Newmarket East Sewage Pumping Station and connecting forcemains, 2nd Concession, Holland Landing and Queensville West Sewage Pumping Station upgrades, new Mulock Sewage Pumping Station with connecting forcemains, and Leslie Street Trunk Sewer Phase 3.	\$802,220	2032-2041	Exempted	Х	Х				Х			

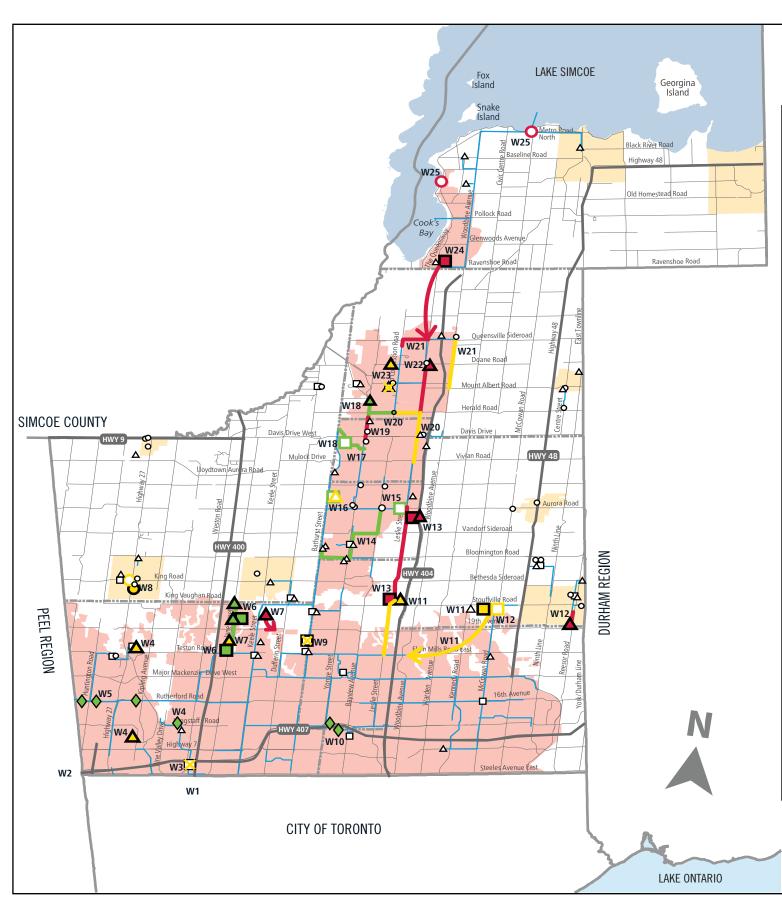
5. AMENDED LONG TERM WASTEWATER INFRASTRUCTURE PLAN

Table 4.2 Growth-related Wastewater Projects (continued)

		Estimated	Planned	Environmental			Munio	cipality partia	lly or fully se	viced by this p	rogram		
Program	Demand management and supporting programs	expenditures 2025-2051 (000's)	implementation timeframe		Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch- Stouffville
Program	Inflow and Infiltration Reduction	\$95,110	2025 - 2051	N/A	Х	Х	x	х	Х	Х	Х	Х	Х
Program	Wastewater Master Plan Update	\$7,990	2025 - 2051	N/A	Х	Х	X	x	Х	x	Х	Х	Х
Program	Wastewater System Capacity Studies	\$71,280	2025 - 2051	N/A	Х	Х	x	x	Х	х	х	Х	Х
Program	North YDSS Expansion Program Management	\$17,500	2025 - 2041	N/A	Х	Х				х			

6. AMENDED LONG TERM WATER INFRASTRUCTURE PLAN

WATER	
WAIER	PROJECTS
W1	Toronto Water Supply - Cost-Shared Works
W2	Peel Water Supply - Cost-Shared Works
W3	East Woodbridge Pumping Station Decommissioning 🔀
W4	West Vaughan Water Servicing 🖗 🛆
W5	York Peel Feedermain Upgrade ♦ ♦ 🔶
W6	Northeast Vaughan Water Servicing
W7	Vaughan Storage Expansion \triangle \blacktriangle ————
W8	Nobleton Water Servicing 🔾 🔾
W9	North Richmond Hill Pumping Station Decommissioning 🔀
W10	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Water Servicing � �
W11	North Markham Water Servicing \Box \triangle
W12	Stouffville Water Servicing 🗖 🛦
W13	York East Water Servicing 📕 📥 ———— 📕
W14	Bloomington - Bayview Watermain
W15	Aurora East Booster Pumping Station Upgrades $lacksquare$
W16	Orchard Heights Reservoir Inlet Upgrade 🛆 🗖
W17	Eagle to Kirby Pumping Station Watermain
W18	Newmarket West Water Servicing 🗖 🔺 ———
W19	Yonge Street Watermain
W20	Green Lane Leslie Street Watermain
W21	East Gwillimbury Water Servicing
W22	Queensville Elevated Tank No. 2 🔺 ———
W23	Holland Landing Storage Expansion $ {igsta }^{$
W24	West Park Heights Pumping Station and Watermain



LONG TERM WATER
INFRASTRUCTURE PLAN

New Infrastructure

Projects 2025 - 2031
Projects 2032 - 2041
Projects 2042 - 2051

Infrastructure Expansion

□∆◊੦	Projects 2025 - 2031
□△◊Ο	Projects 2032 - 2041
□∆◊੦	Projects 2042 - 2051
X	Decommission
\checkmark	Alignment to be Determined

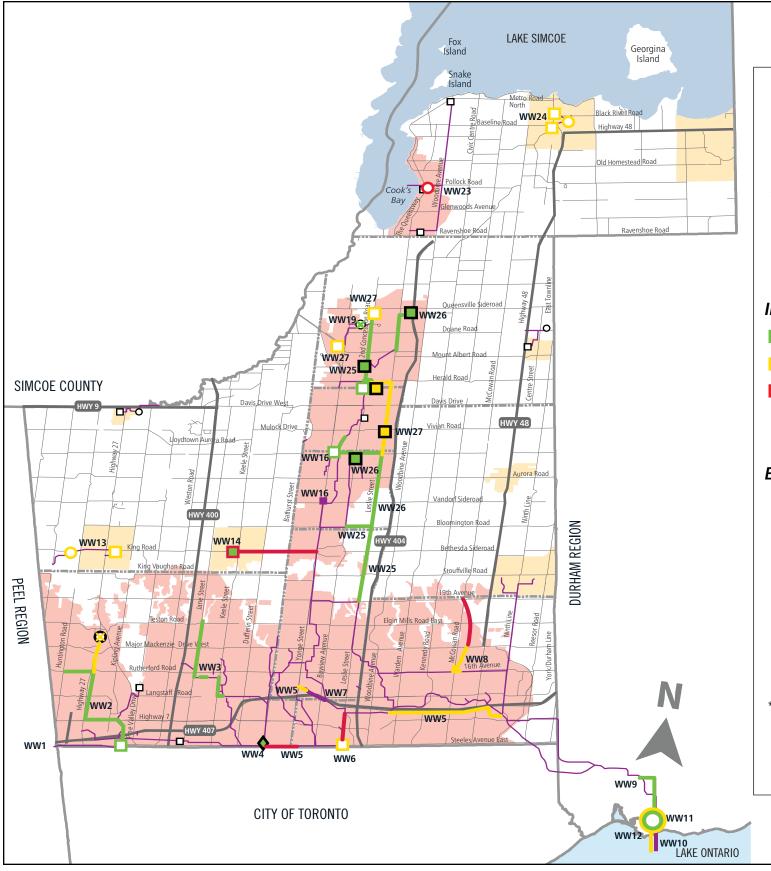
Existing Infrastructure

	Pumping Station	
Δ	Equalization Tank	
0	Water Resource Recovery Facility	
♦	Flow Control Gate	
	Exisiting Watermain	
	Urban Area*	
	Towns and Villages*	
*This reflects the Approved Regional Official Plan.		
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7. AMENDED LONG TERM WASTEWATER INFRASTRUCTURE PLAN

WW1		
	Peel System Cost-Shared Works	
WW2	West Vaughan Sewage Servicing	
WW3	Northeast Vaughan Wastewater Servicing	
WW4	York Durham Sewage System Conveyance Optimization $igoplus$	
WW5	York Durham Sewage System Expansion	
WW6	Leslie Street Sewage Pumping Station and Forcemain	
WW7	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Wastewater Servicing	
WW8	North Markham Trunk Sewer	
WW9	Primary Trunk Sewer	
WW10	Duffin Creek Water Pollution Control Plant Outfall Effluent Strategy	
WW11	Duffin Creek Water Pollution Control Plant Stage 1 and 2 Chlorine Chamber Expansion O	
WW12	Duffin Creek Water Pollution Control Plant Growth Expansions O	
WW13	Nobleton Wastewater Servicing 🔾 🗖	
WW14	King City Wastewater System Upgrades 🔲 ———	
WW15	Yonge Street Sewer Twinning NO LONGER REQUIRED	
WW16	York Durham Sewage System Interim Servicing 🗖 🔳 ——	
WW17	Newmarket Diversion Sewer NO LONGER REQUIRED	
WW18	East Gwillimbury Sewage Pumping Station Expansions INCORPORATED INTO NEW PROJECTS	
WW19	Holland Landing Lagoon Decommissioning 🛛 🔇	
WW20	East Queensville Sewage Pumping Station and Forcemain INCORPORATED INTO NEW PROJECTS	
WW21	Upper York Water Reclamation Centre NO LONGER REQUIRED	
WW22	Upper York Servicing Infrastructure Expansions 1 and 2 NO LONGER REQUIRED	
WW23	Keswick Wastewater Servicing O	
WW24	Sutton Wastewater Servicing	
WW25	NEW North YDSS Expansion Phase 1	
WW26	NEW North YDSS Expansion Phase 2	
WW27	NEW North YDSS Expansion Phase 3	



LONG TERM WASTEWATER INFRASTRUCTURE PLAN

New Infrastructure

Projects 2025 - 2031 Projects 2032 - 2041 Projects 2042 - 2051

Infrastructure Expansion

	Projects 2025 - 2031
	Projects 2032 - 2041
□△◊Ο	Projects 2042 - 2051
×	Decommission
~	Alignment to be Determined

Existing Infrastructure

	Pumping Station Equalization Tank
ο	Water Resource Recovery Facility
♦	Flow Control Gate
	Wastewater Main
	Urban Area*
	Towns and Villages*

*This reflects the Approved Regional Official Plan.

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AMENDMENT TO THE 2022 York Region WATER AND WASTEWATER MASTER PLAN



JANUARY 2025