YORK REGION

Municipal Sewage Collection System

Wastewater Annual Performance Report

for the 2025 Calendar Year

Prepared pursuant to reporting requirements under
Consolidated Linear Infrastructure Environmental Compliance Approval (CLI ECA) #013-W601

Accessible formats or communication supports are available upon request.
Please contact AccessYork@york.ca or call 1-877-464-9675.

Photo: the Second Concession SPS
Credit: Jonathan Magill.

York Region

2025 ANNUAL PERFORMANCE REPORT | KESWICK SPS

FACILITY INFORMATION

Municipality Serviced: Town of Georgina

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Simcoe via Cook's Bay

FACILITY DESCRIPTION

The Keswick SPS is part of the Keswick Sewage Collection Sub-System. It receives flow from the local collection system. The SPS is connected to two forcemains. Flows are sent to the Keswick WRRF for treatment.

PROCESS OVERVIEW

The Keswick SPS is equipped with a two-celled wet well, a dry well, and four pumps. Each wet well is equipped with grinders to reduce solids to smaller sizes so they can pass through the system more effectively. Keswick SPS typically discharges through one forcemain to the Keswick WRRF but can discharge through two forcemains to the WRRF if required. Full wastewater treatment is received once the wastewater reaches the Keswick WRRF.

EMERGENCY POWER

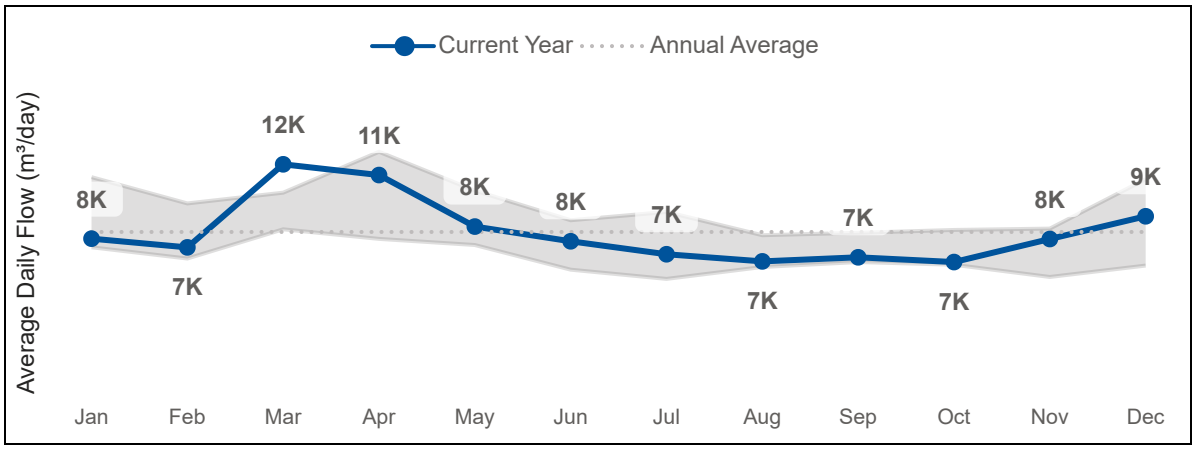
One standby diesel generator, two fuel storage tanks.

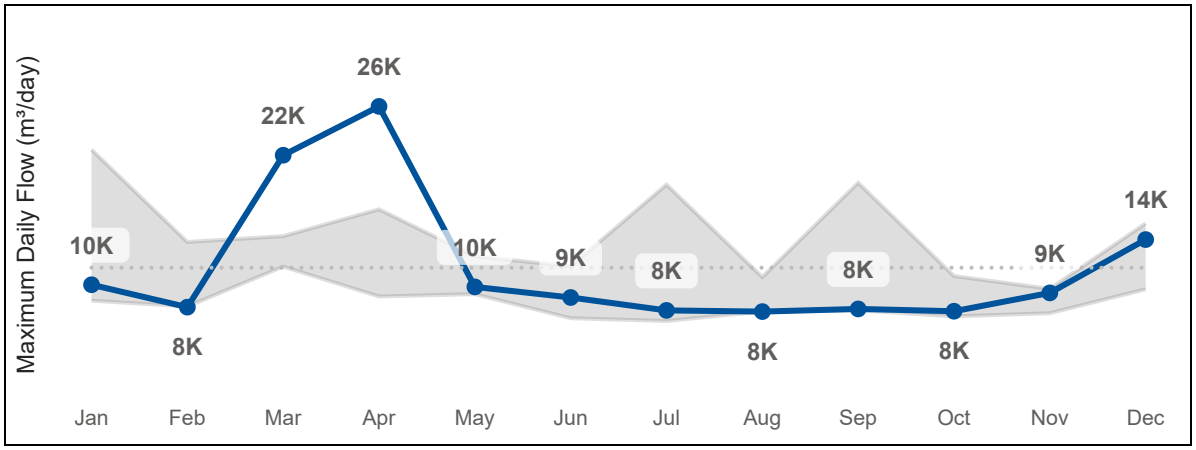
AIR MANAGEMENT

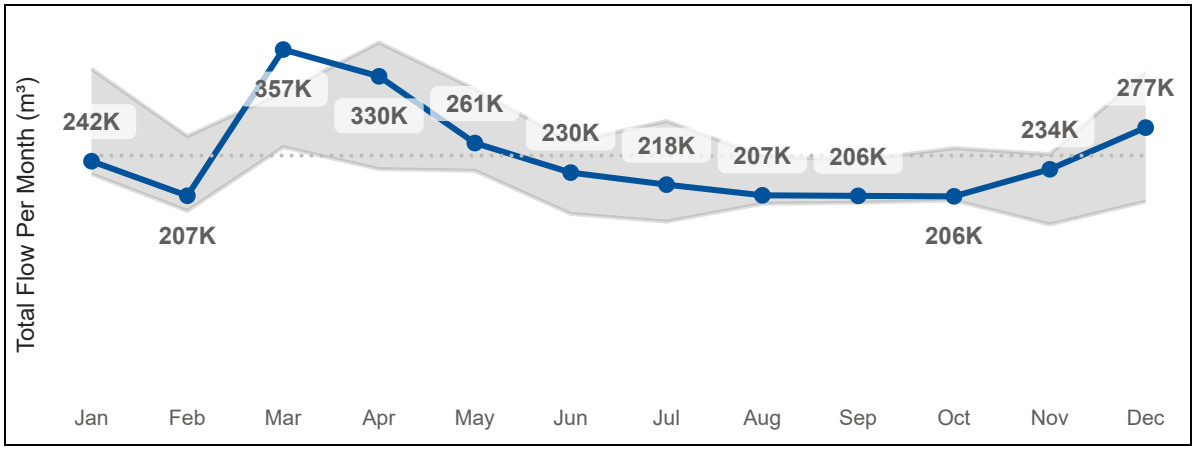
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
KESWICK SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | KESWICK GEORGINA NO.4 SPS

FACILITY INFORMATION

Municipality Serviced: Town of Georgina

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Simcoe via Cook's Bay

FACILITY DESCRIPTION

The Keswick Georgina No.4 SPS is part of the Keswick Collection Sewage Sub-System. It receives flow from the local collection system. The SPS is connected to two forcemains. Flows are sent to the Keswick WRRF for treatment.

PROCESS OVERVIEW

The Georgina No.4 SPS is equipped with a two-celled wet well, a dry well and three pumps. The inlet is equipped with a screen to remove large solids before flowing into the wet wells. The facility discharges to twinned forcemains, eventually converging to a gravity sewer which flows into the Keswick WRRF. Full wastewater treatment is received once the wastewater reaches the Keswick WRRF.

EMERGENCY POWER

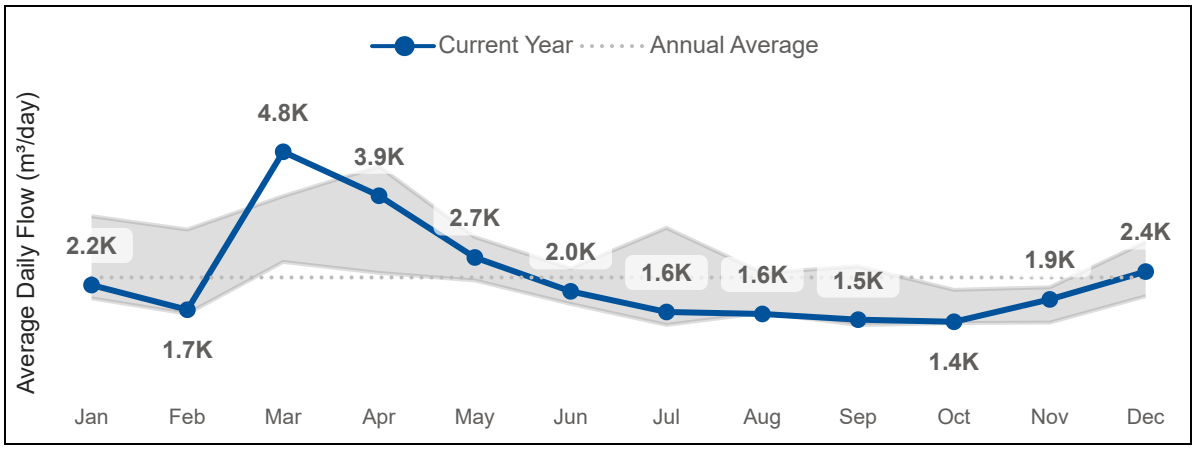
One standby diesel generator, two fuel storage tanks.

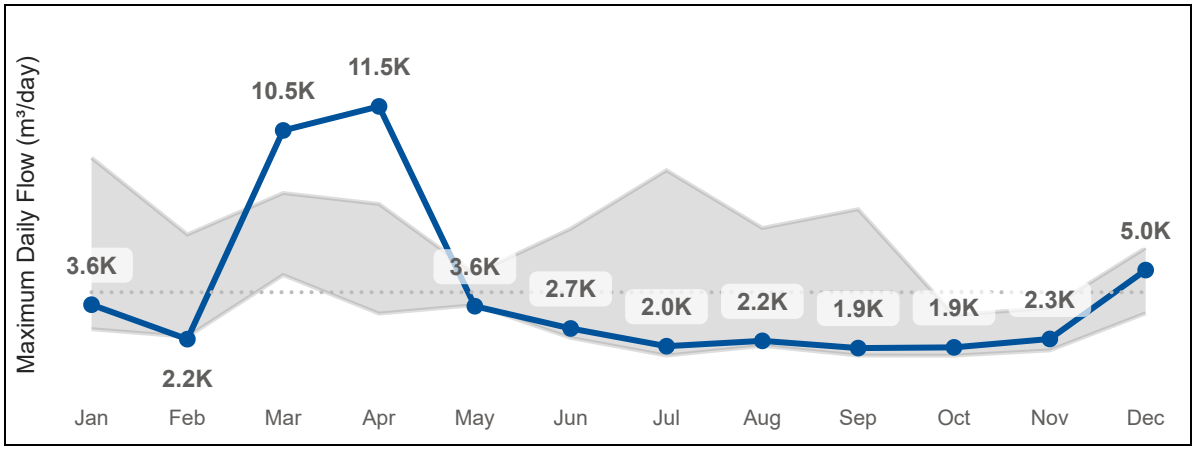
AIR MANAGEMENT

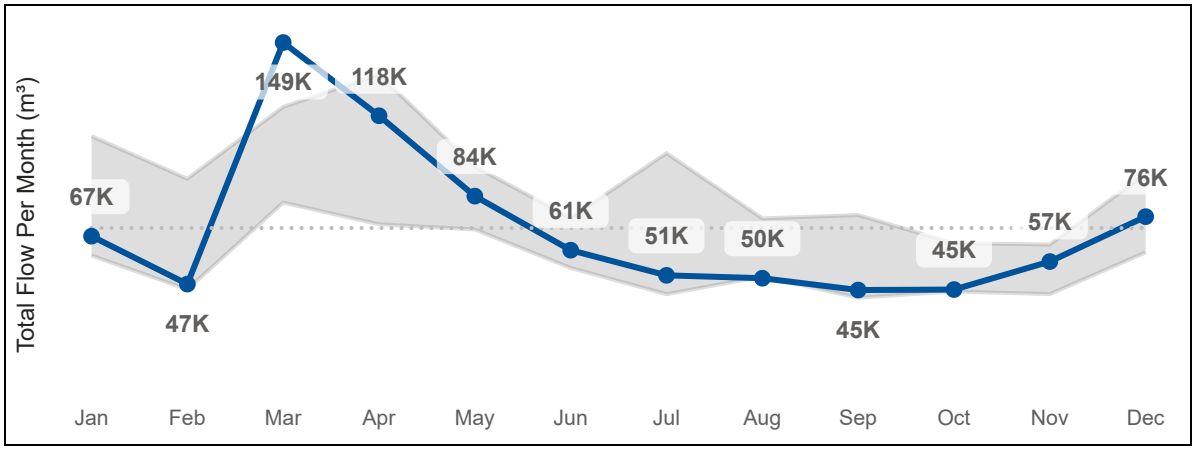
One on-site passive activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
GEORGINA NO. 4 SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | KESWICK JOE DALES SPS

FACILITY INFORMATION

Municipality Serviced: Town of Georgina

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Simcoe via Cook's Bay

FACILITY DESCRIPTION

The Keswick Joe Dales SPS is part of the Keswick Sewage Collection Sub-System. It receives flow from the local collection system. The SPS is connected to three forcemains. Flows are directed to the Keswick WRRF for treatment.

PROCESS OVERVIEW

The Keswick Joe Dales SPS is equipped with a two-celled wet well, a dry well and three pumps. One inlet directs flows to the wet well, equipped with a channel grinder to reduce solids to smaller sizes so they can pass through the system more effectively. An "inlet bypass" structure flows around the grinder and is equipped with a screen to remove solids before reaching the wet well. The forcemain on Joe Dales Drive connects to a local forcemain, which ultimately reaches the Keswick WRRF through the local collection system. The other two forcemains are twinned and carry wastewater to Keswick WRRF. Full wastewater treatment is received once the wastewater reaches the Keswick WRRF.

EMERGENCY POWER

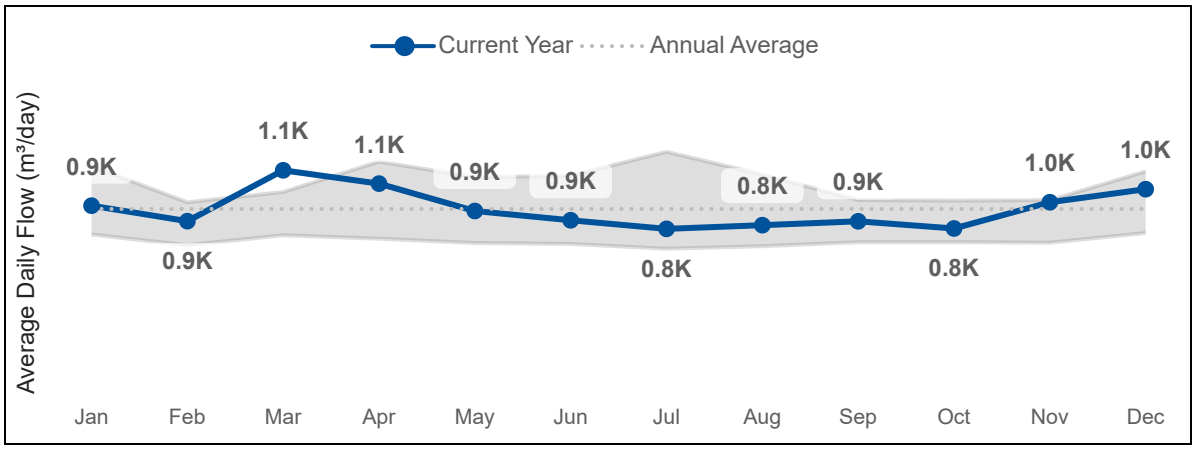
One standby diesel generator, two fuel storage tanks.

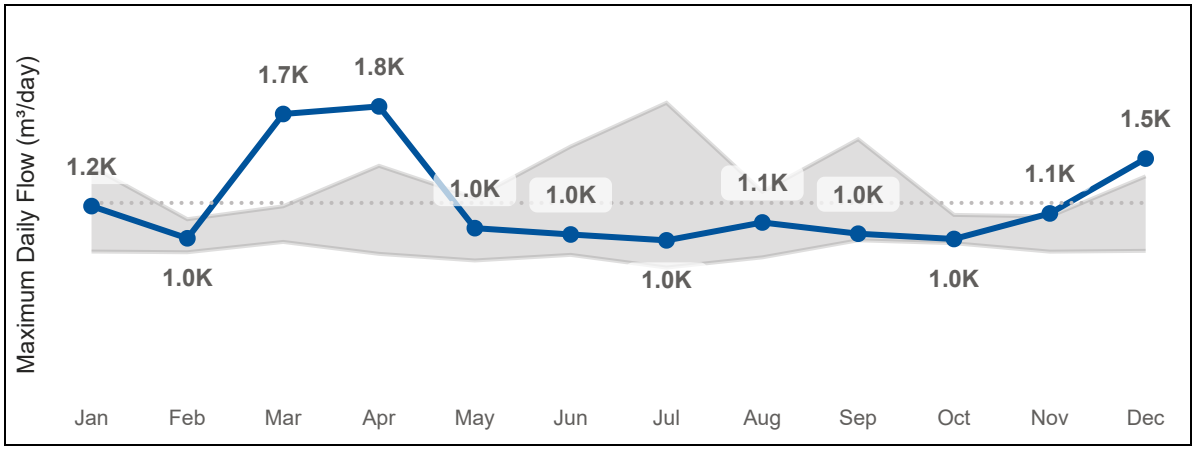
AIR MANAGEMENT

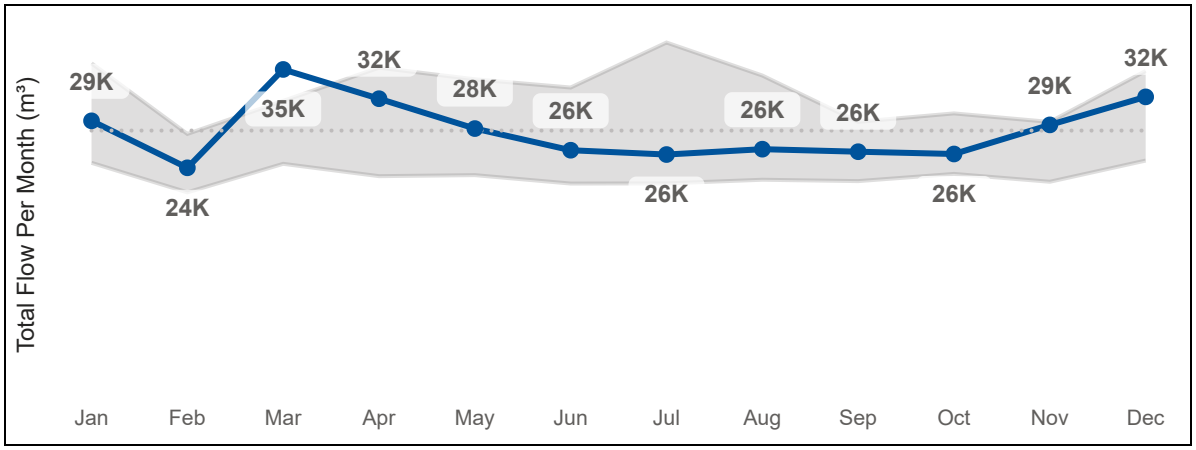
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
JOE DALES SPS

PUMPING STATION FLOW







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2025 ANNUAL PERFORMANCE REPORT | MOUNT ALBERT SPS

FACILITY INFORMATION

Municipality Serviced: Town of East Gwillimbury

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Simcoe via Mount Albert Creek and Vivian Creek

FACILITY DESCRIPTION

The Mount Albert SPS is part of the Mount Albert Collection Sewage Sub-System. The Station receives flow through local sewers and directs it through one forcemain to Mount Albert WRRF for treatment. A drain line can return flows to the wet well from the forcemain.

PROCESS OVERVIEW

The Mount Albert SPS is equipped with a wet well, a dry well and two pumps. The station discharges to one forcemain towards the Mount Albert WRRF for full wastewater treatment.

EMERGENCY POWER

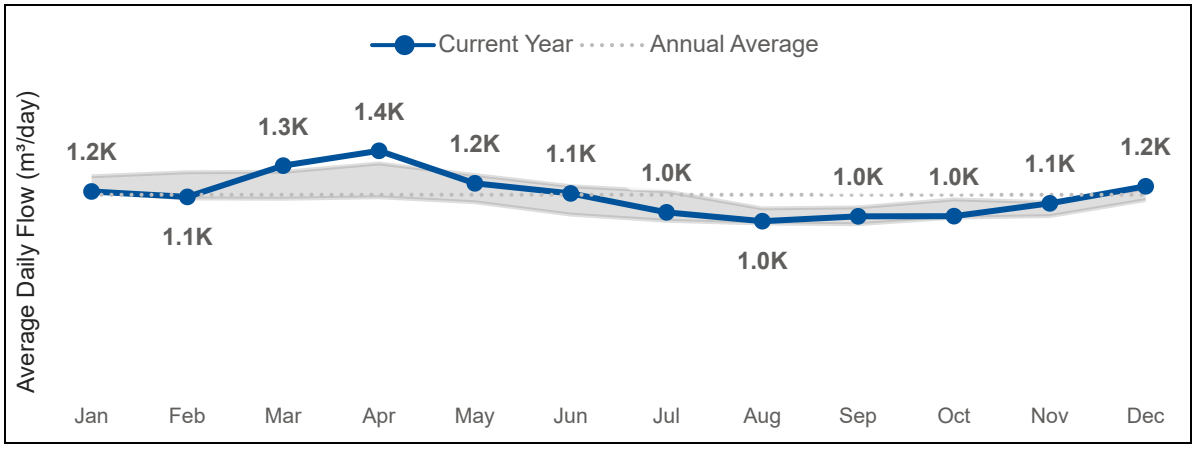
One standby diesel generator, one fuel storage tank.

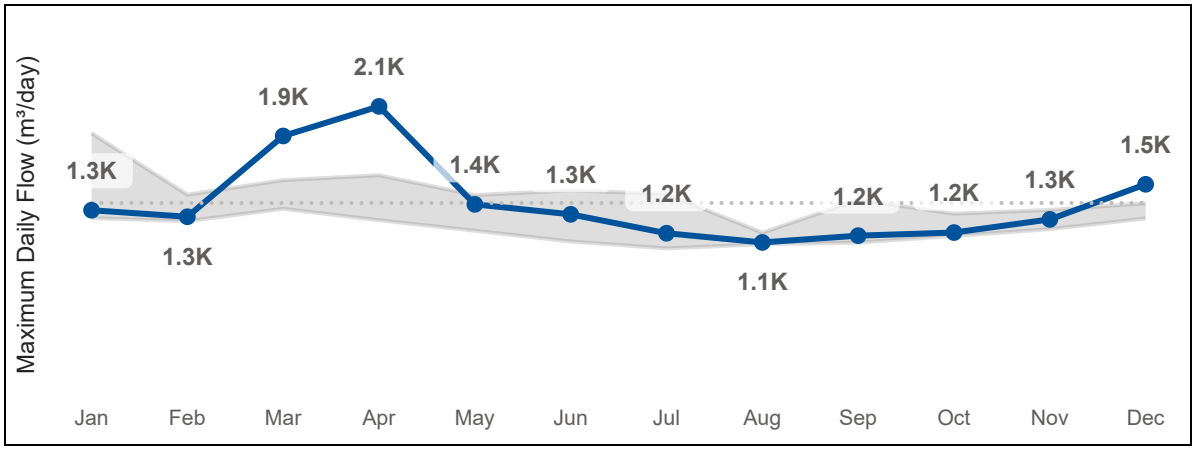
AIR MANAGEMENT

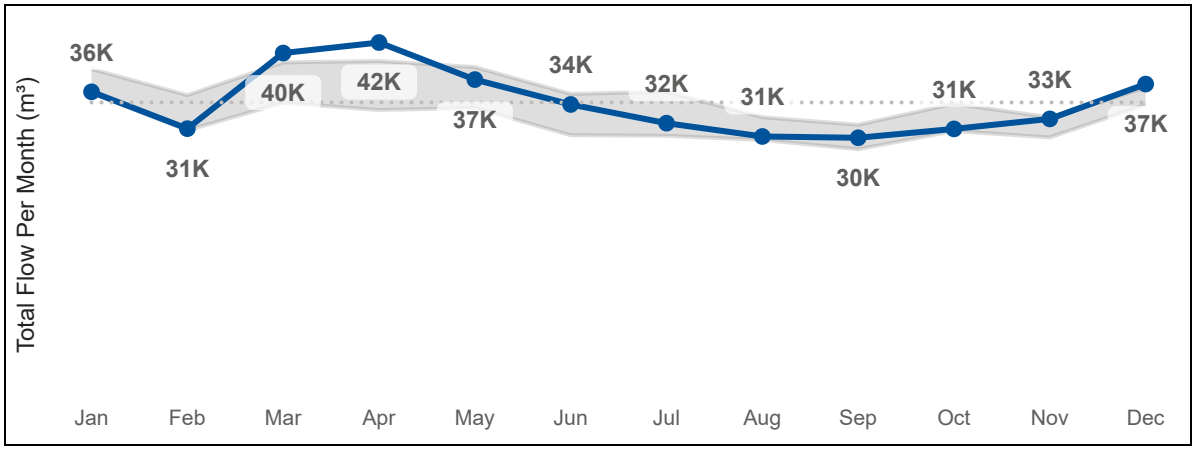
Not applicable at Mount Albert SPS.

2025 ANNUAL PERFORMANCE REPORT
MOUNT ALBERT SPS

PUMPING STATION FLOW







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2025 ANNUAL PERFORMANCE REPORT | NOBLETON JANET AVE SPS

FACILITY INFORMATION

Municipality Serviced: Township of King

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via the Humber River

FACILITY DESCRIPTION

The Nobleton Janet Avenue SPS is part of the Nobleton Sewage Collection Sub-System. It receives flows from the local collection system. Flows are sent to the Nobleton WRRF for treatment.

PROCESS OVERVIEW

The Nobleton Janet Avenue SPS is equipped with a three-chambered wet well, a dry well and three pumps. It discharges through one forcemain to the Nobleton WRRF. Full wastewater treatment is received once the wastewater reaches the Nobleton WRRF.

EMERGENCY POWER

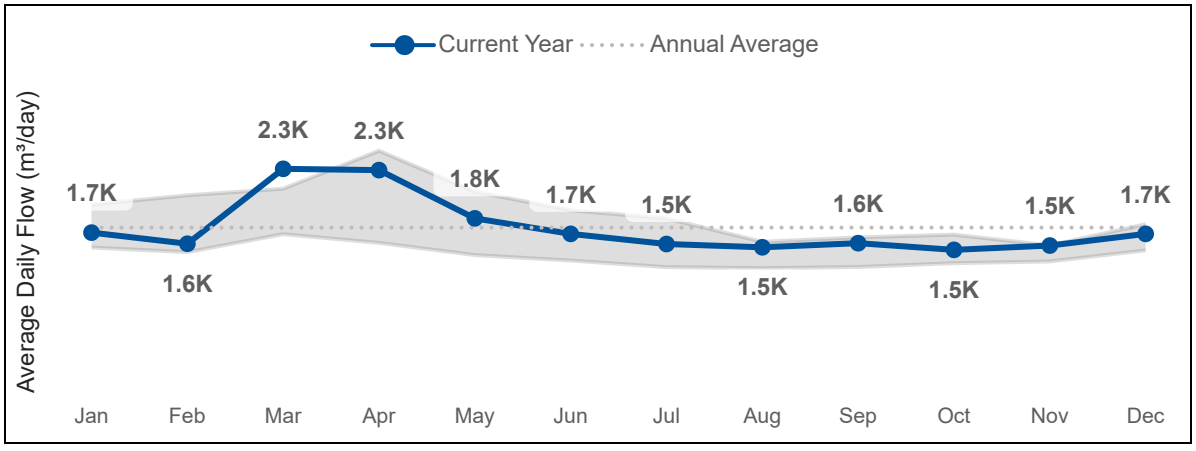
One standby diesel generator, one fuel storage tank.

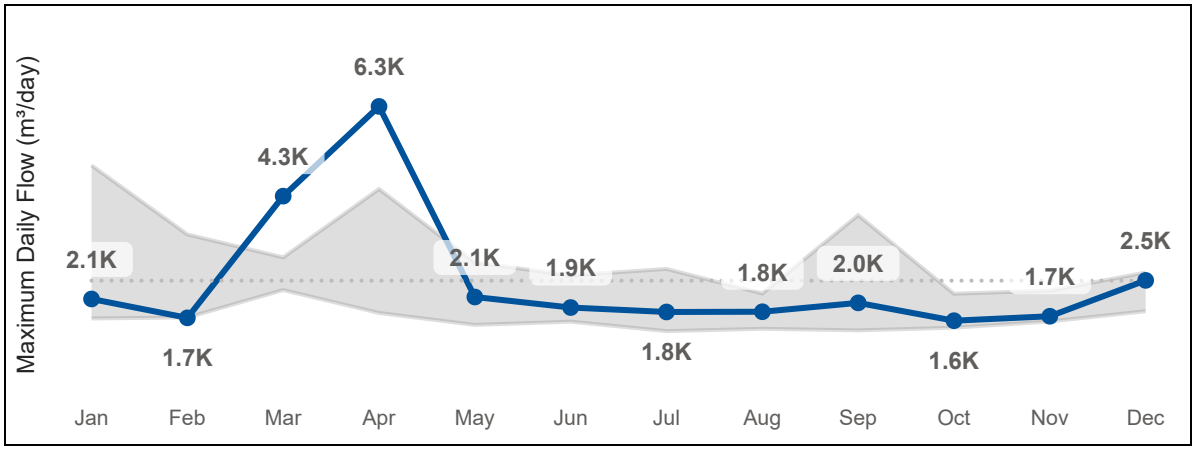
AIR MANAGEMENT

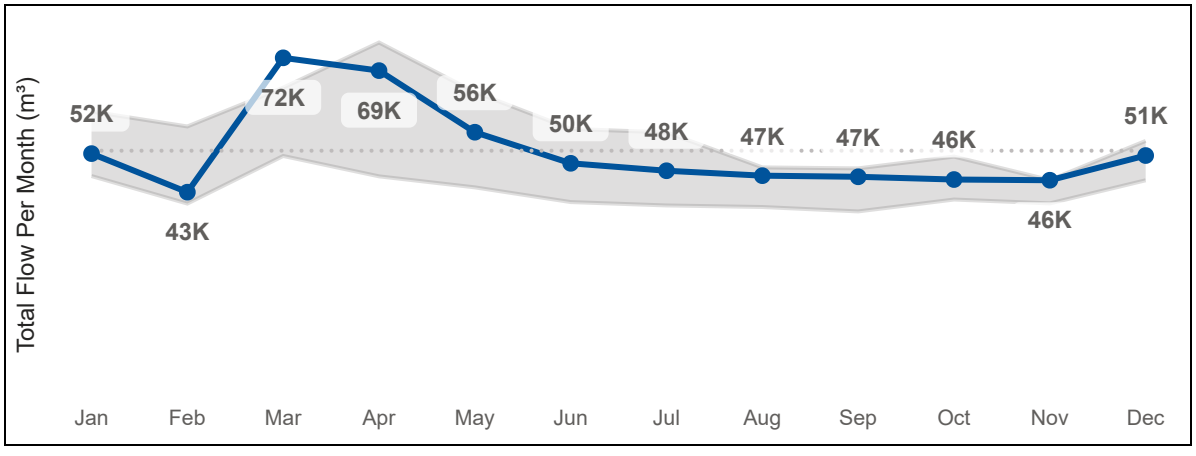
Not applicable at Nobleton SPS.

2025 ANNUAL PERFORMANCE REPORT
NOBLETON SPS

PUMPING STATION FLOW







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2025 ANNUAL PERFORMANCE REPORT | SCHOMBERG DR. KAY SPS

FACILITY INFORMATION

Municipality Serviced: Township of King

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Simcoe via the Schomberg River

FACILITY DESCRIPTION

The Schomberg Dr. Kay SPS is part of the Schomberg Sewage Collection Sub-System. It receives flow from the local collection system. Flows are sent to the Schomberg WRRF for treatment.

PROCESS OVERVIEW

The Schomberg Dr. Kay SPS is equipped with a circular wet well, two pumps, and a valve chamber to attach a portable pump during emergency situations. It discharges through one forcemain to the Schomberg WRRF for treatment.

EMERGENCY POWER

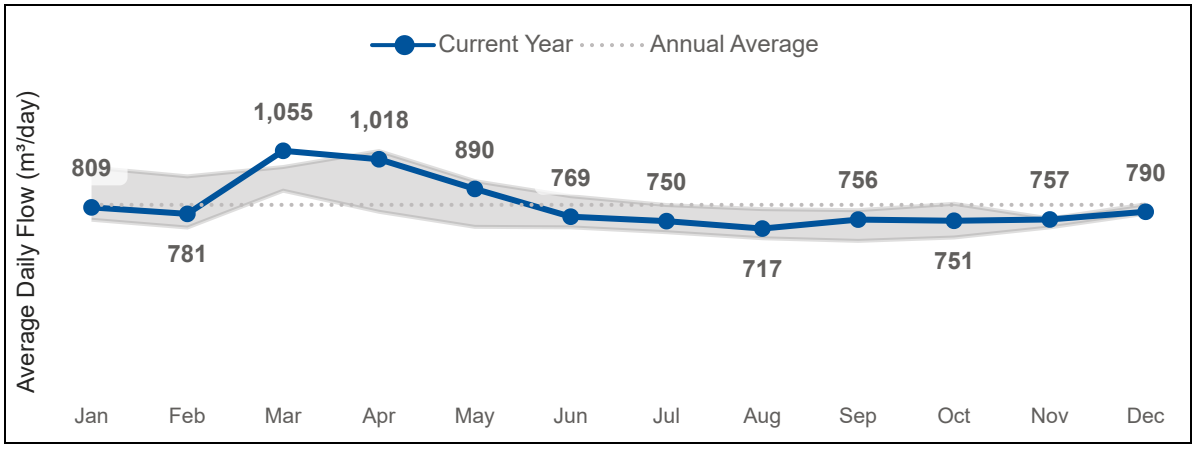
One standby diesel generator, one fuel storage tank.

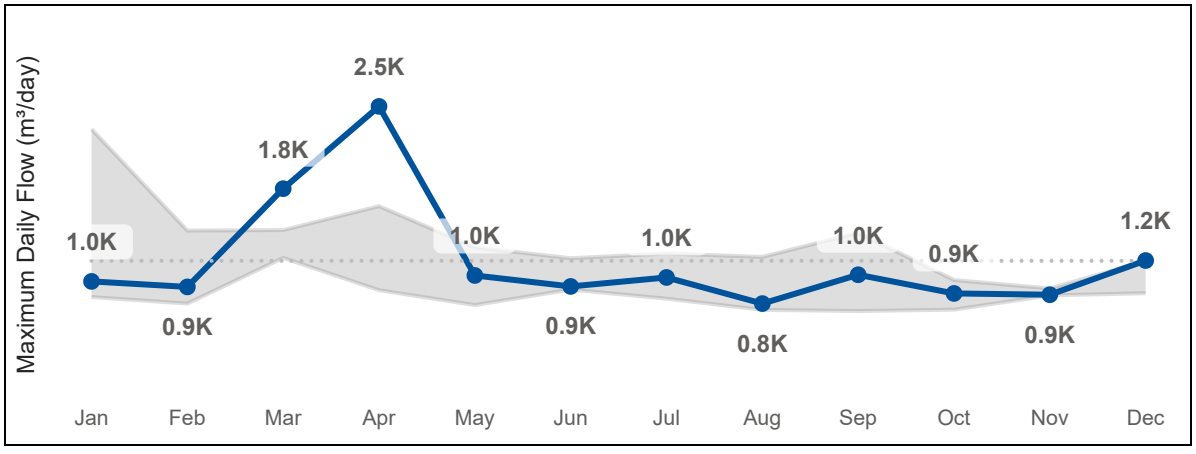
AIR MANAGEMENT

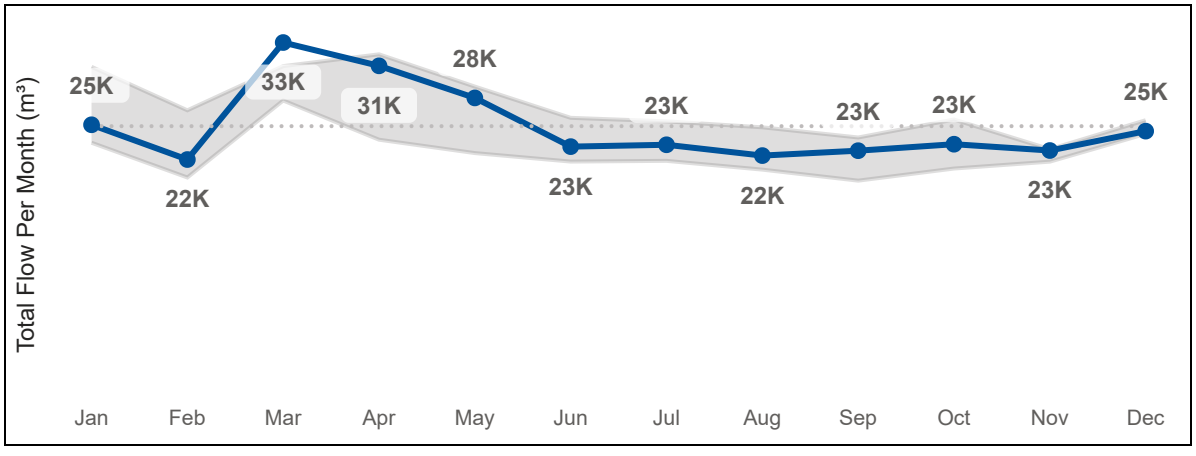
Not applicable at Dr. Kay SPS.

2025 ANNUAL PERFORMANCE REPORT
DR. KAY SPS

PUMPING STATION FLOW







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2025 ANNUAL PERFORMANCE REPORT | SUTTON HIGH ST SPS

FACILITY INFORMATION

Municipality Serviced: Town of Georgina

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Simcoe via the Black River

FACILITY DESCRIPTION

The Sutton High Street SPS is part of the Sutton Sewage Collection Sub-System. It receives flow from the local collection system. Flows are sent to the Sutton WRRF for treatment.

PROCESS OVERVIEW

The High Street SPS is equipped with a wet well and two pumps. It discharges through one forcemain to the Sutton WRRF. Full wastewater treatment is received once the wastewater reaches the Sutton WRRF.

EMERGENCY POWER

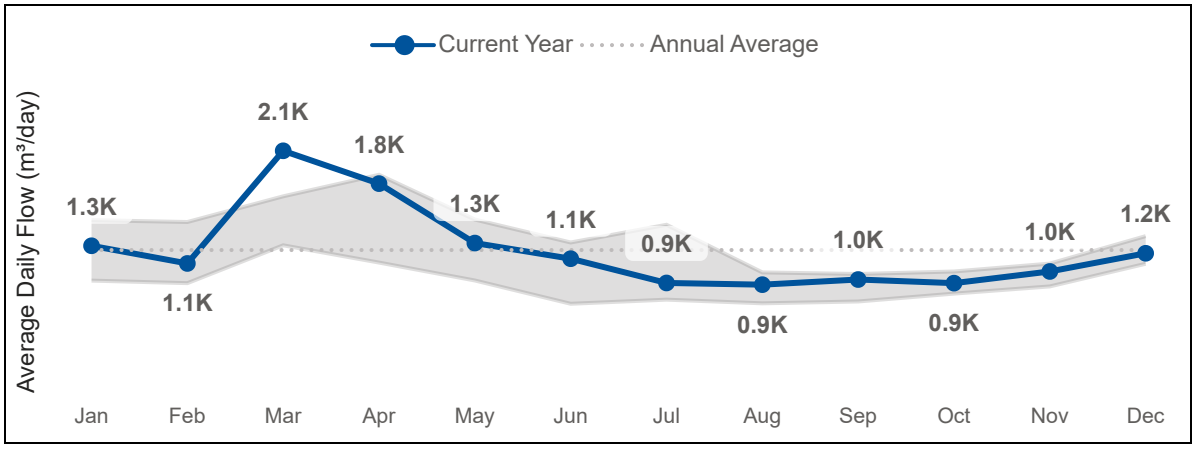
One standby diesel generator, one fuel storage tank.

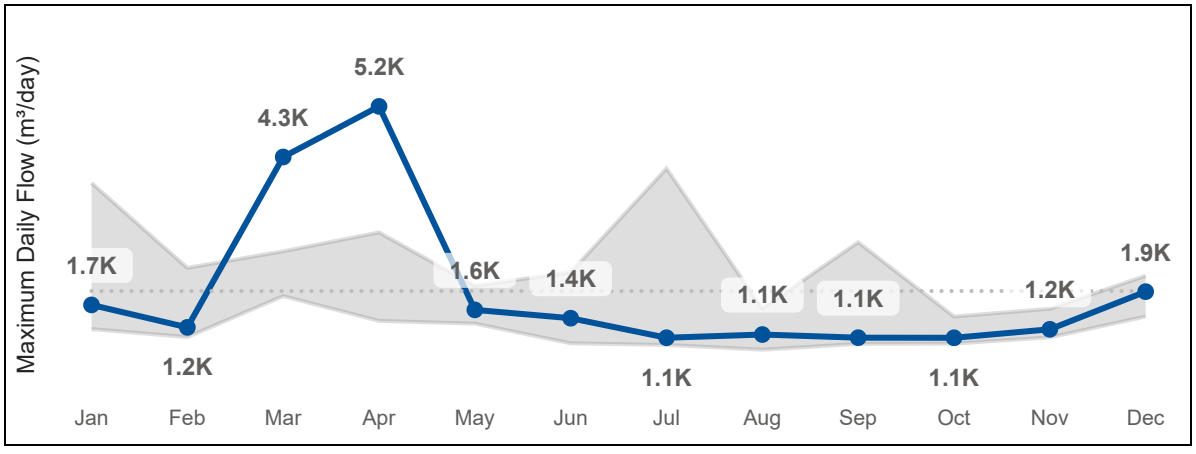
AIR MANAGEMENT

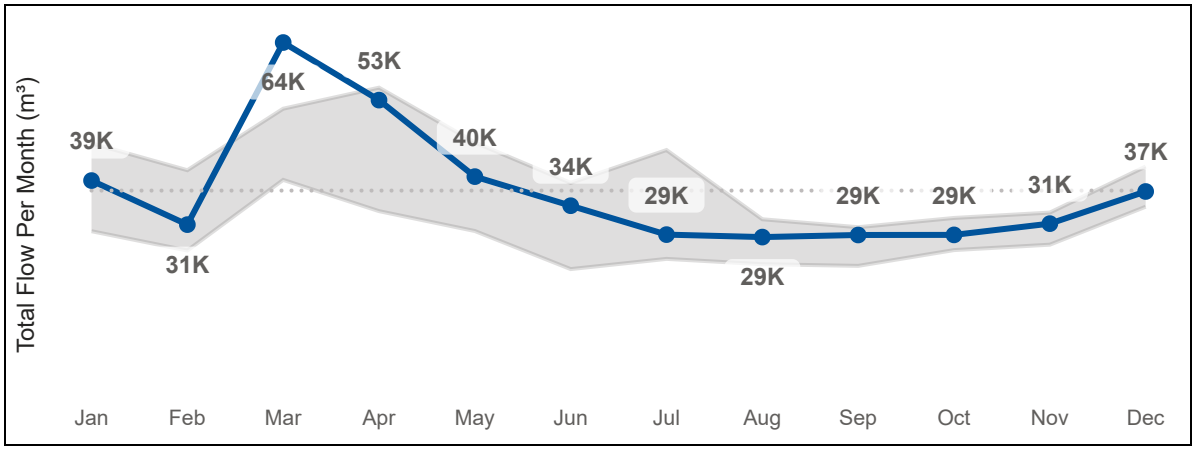
One on-site activated carbon adsorption unit (passive drum scrubber system).

2025 ANNUAL PERFORMANCE REPORT
HIGH STREET SPS

PUMPING STATION FLOW







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2025 ANNUAL PERFORMANCE REPORT | SUTTON SOUTH RIVER SPS

FACILITY INFORMATION

Municipality Serviced: Town of Georgina

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Simcoe via the Black River

FACILITY DESCRIPTION

The Sutton South River SPS is part of the Sutton Sewage Collection Sub-System. This small station is sited outdoors, comprising of a chamber at ground level with an adjacent electrical panel to control the equipment. It receives flow from the local collection system and directs it to Woodriver Bend SPS. Flow is not monitored at this location. Flows are sent through the Woodriver Bend SPS to the Sutton WRRF for treatment.

PROCESS OVERVIEW

The South River SPS is equipped with a circular wet well and two submersible pumps. It discharges through one forcemain to the Woodriver Bend SPS. Full wastewater treatment is received once the wastewater reaches the Sutton WRRF.

EMERGENCY POWER

An uninterruptible power supply (UPS) temporarily powers the equipment. The facility can also be connected to a portable generator.

AIR MANAGEMENT

Not applicable at South River SPS.

2025 ANNUAL PERFORMANCE REPORT | SUTTON WOODRIVER BEND SPS

FACILITY INFORMATION

Municipality Serviced: Town of Georgina (Sutton)

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Simcoe via the Black River.

FACILITY DESCRIPTION

The Sutton Woodriver Bend SPS is part of the Sutton Sewage Collection Sub-System. It receives flow from the local collection system and from the upstream South River SPS. Flows are sent to the Sutton WRRF for treatment.

PROCESS OVERVIEW

The Woodriver Bend SPS is equipped with a wet well and two submersible pumps. The station discharges through one forcemain to the Sutton WRRF. Full wastewater treatment is received once the wastewater reaches the Sutton WRRF.

EMERGENCY POWER

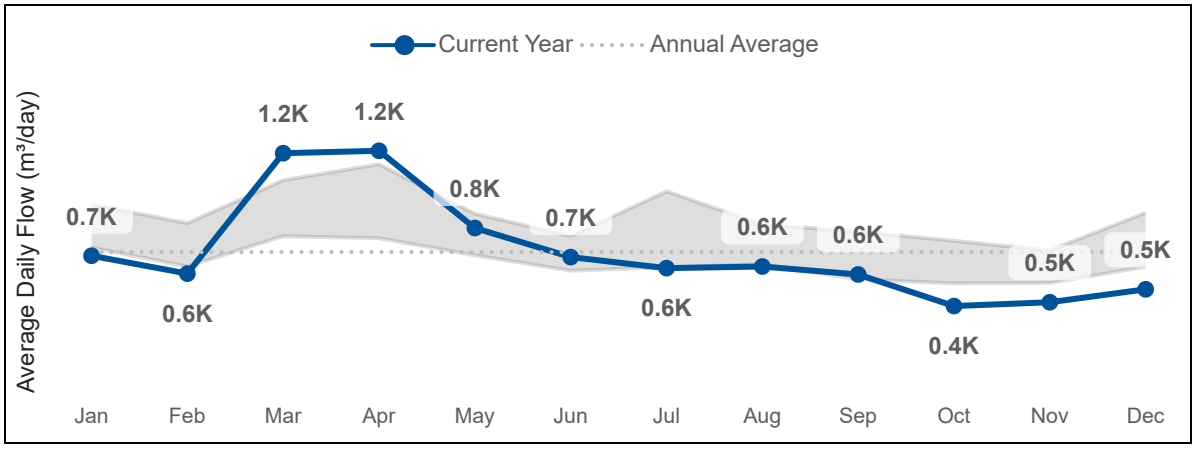
One standby natural gas generator.

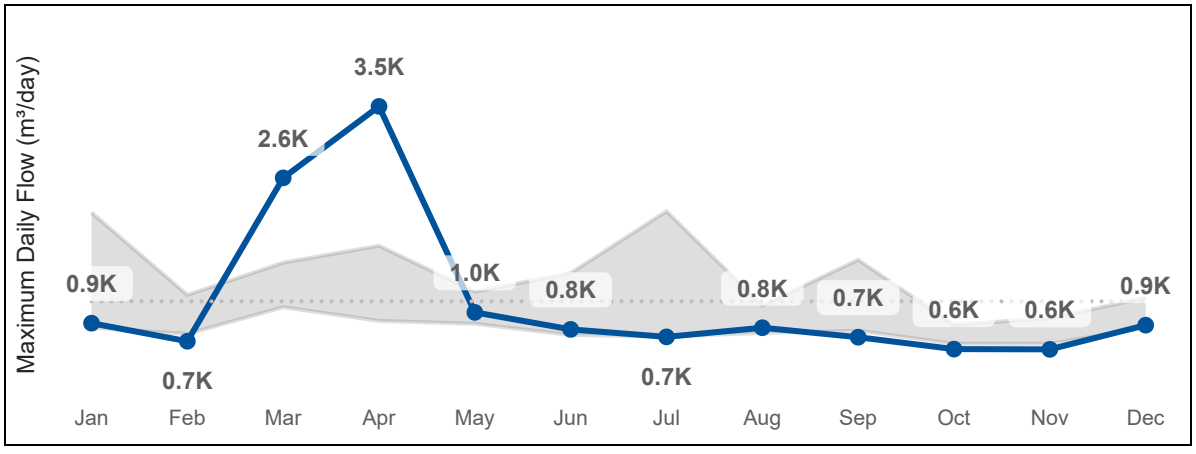
AIR MANAGEMENT

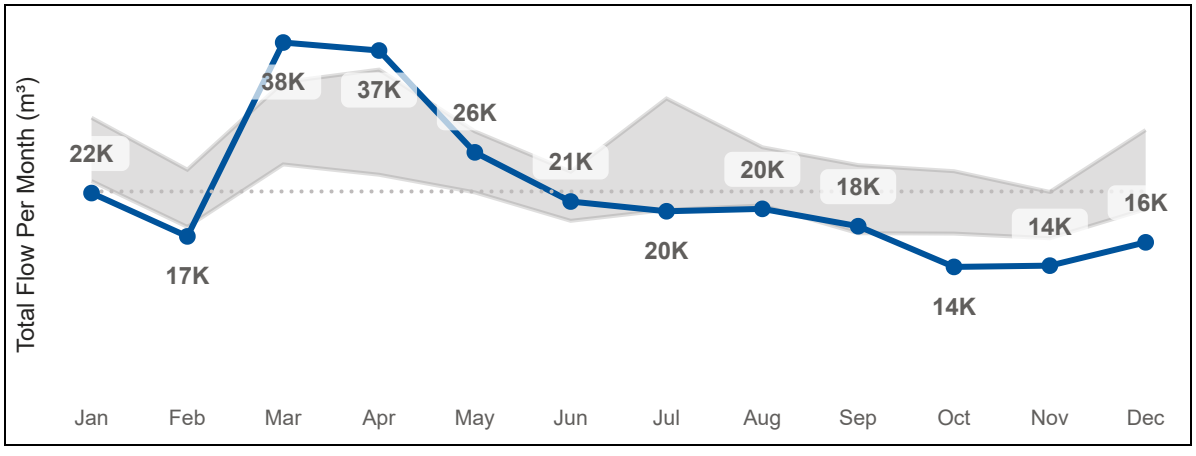
One on-site activated carbon adsorption unit (passive drum scrubber system).

2025 ANNUAL PERFORMANCE REPORT
WOODRIVER BEND SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS 2ND CONCESSION SPS

FACILITY INFORMATION

Municipality Serviced: Town of East Gwillimbury

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP (Durham Region)

FACILITY DESCRIPTION

The 2nd Concession SPS is part of the York-Durham Sewage System (YDSS). Two sewer mains enter the facility. Forcemains exit the facility to push the wastewater from the station along one of two possible paths: normal operation directs flows south to the YDSS towards the Newmarket SPS, ultimately headed for treatment at the Duffin Creek WPCP, which discharges to Lake Ontario. Two additional forcemains, which are not currently in use, are intended to accommodate future growth.

PROCESS OVERVIEW

The 2nd Concession SPS is equipped with a two-celled wet well and two pumps (with two spaces for future pumps). A channel grinder reduces the solids to smaller sizes so they can pass through the system more effectively. Two inlet bypass channels are each equipped with screens to remove large solids prior to reaching the wet wells. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

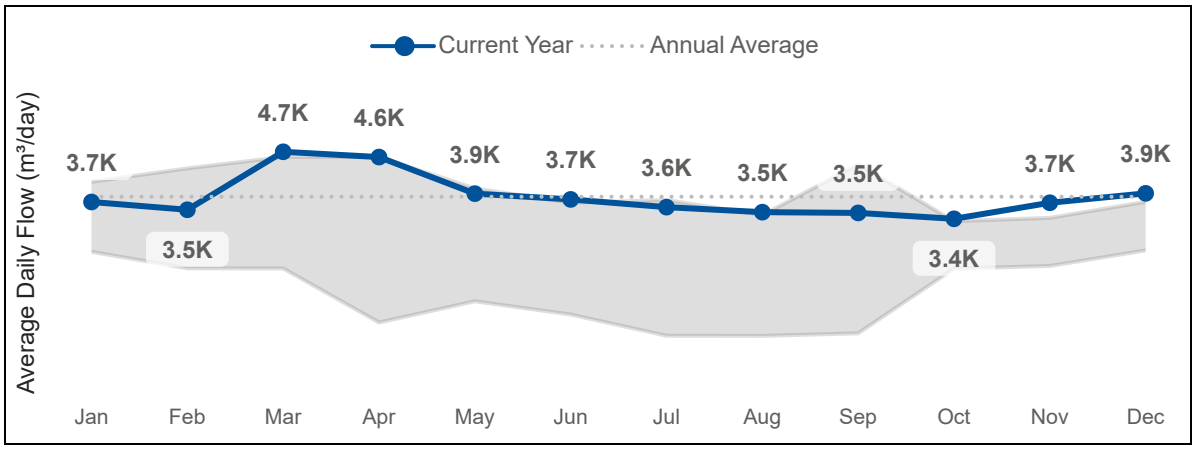
One standby diesel generator, two outdoor fuel storage tanks and one indoor fuel day tank.

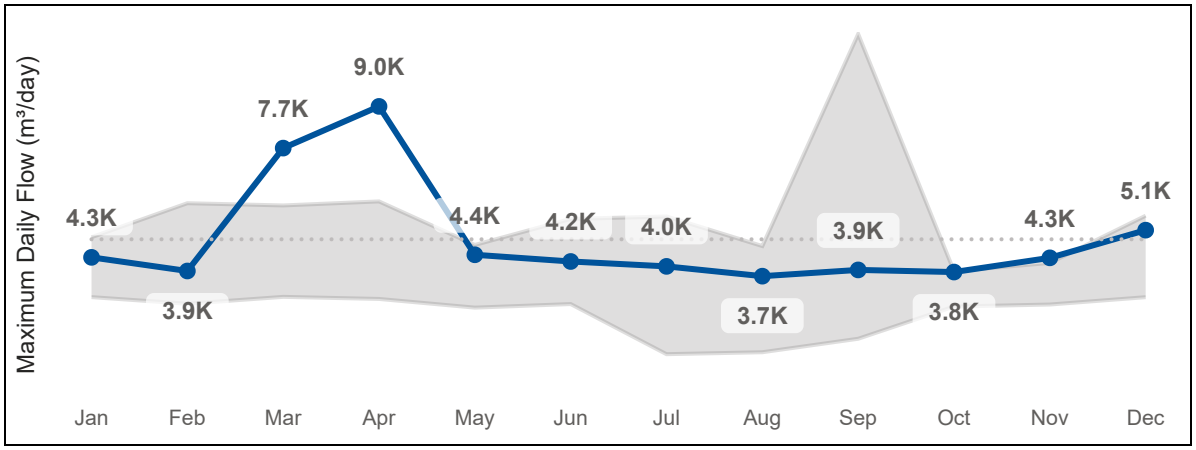
AIR MANAGEMENT

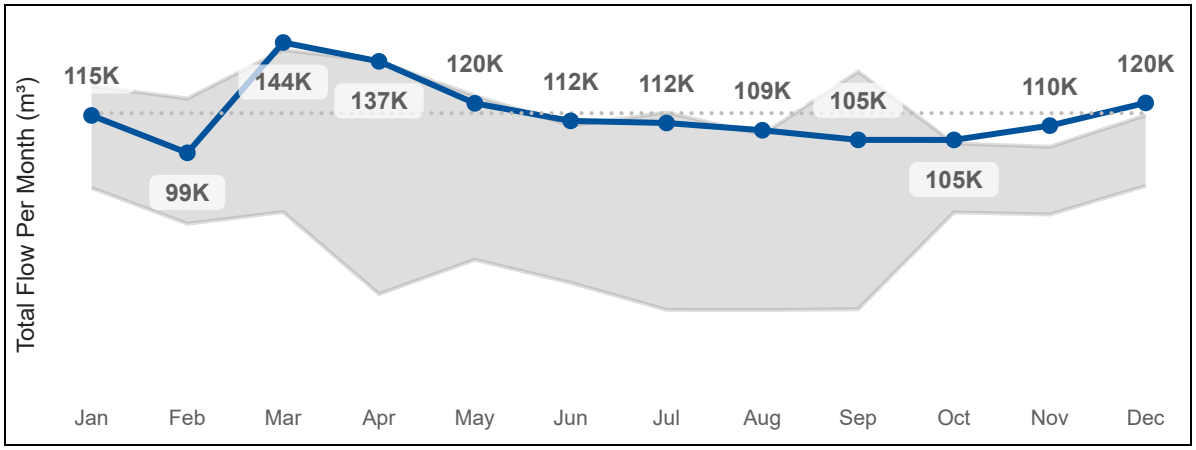
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
2ND CONCESSION SPS

PUMPING STATION FLOW







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2025 ANNUAL PERFORMANCE REPORT | YDSS AURORA SPS

FACILITY INFORMATION

Municipality Serviced: Town of Aurora

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP

FACILITY DESCRIPTION

The Aurora SPS is part of the York-Durham Sewage System (YDSS). It is downstream of the Newmarket and Bogart Creek SPSs. Two sewers enter the facility, one from the north (from Newmarket), and one from the west. A hauled wastewater receiving facility allows for monitored delivery from registered haulers. Two forcemains convey wastewater from the station along the YDSS.

PROCESS OVERVIEW

The Aurora SPS is equipped with a wet well and six pumps. Two inlet channels are each equipped with screens to remove large solids. An underground equalization tank provides buffering capacity for high flows. The equalization tank comprises two cells with six pumps, and it can operate as its own SPS to further mitigate high flows. This operating mode is known as the Aurora Interim Sewage Servicing Solution (ISSS). Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

The onsite hauled waste receiving facility accepts sewage from registered haulers to convey it through the YDSS. Sludge from the Region's Water Resource Recovery Facilities is also hauled to the Aurora SPS. This action is authorized in the ECAs for the Region's facilities. Quality and quantity are monitored to ensure there are no impacts to the system. Sludge and hauled waste are directed to the Duffin Creek WPCP for treatment.

EMERGENCY POWER

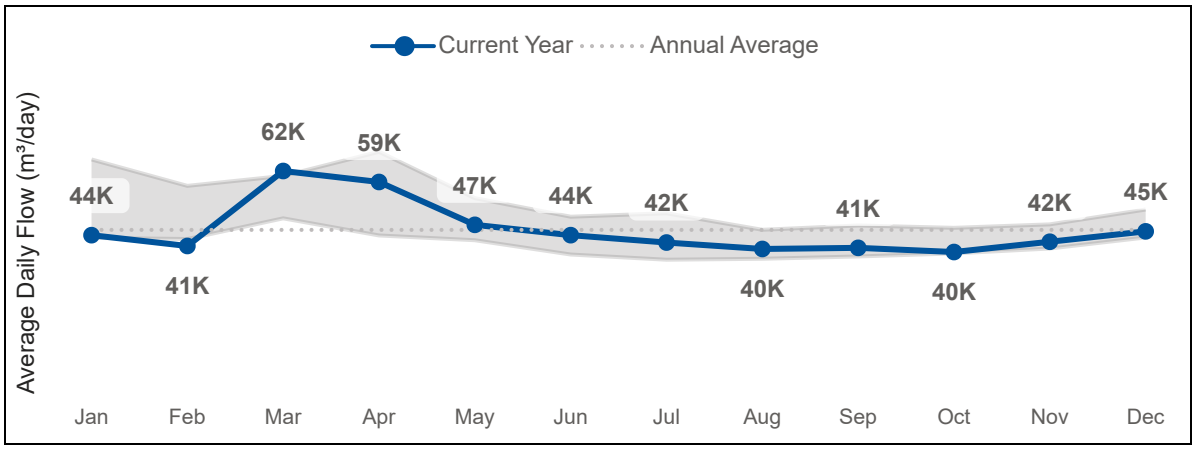
Three standby diesel generators and two outdoor fuel storage tanks.

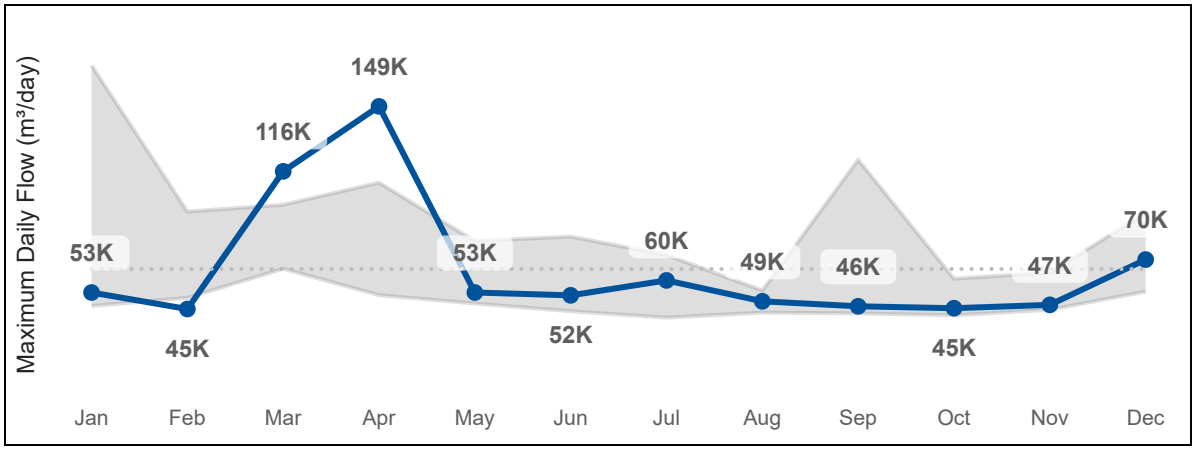
AIR MANAGEMENT & CONDITIONING CHEMICALS

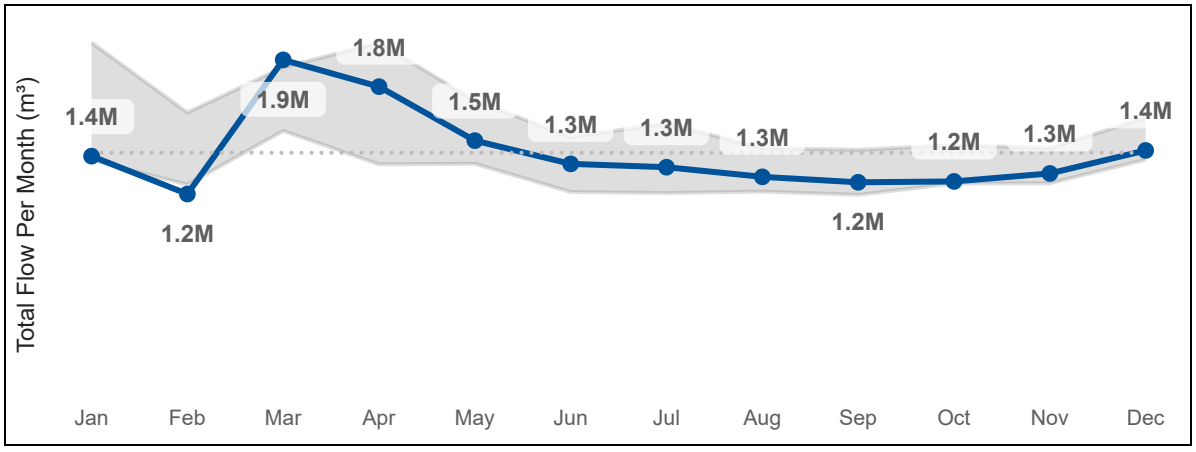
One on-site activated carbon adsorption unit control odours from the equalization tank. Hydrogen peroxide is added to the wet well to reduce hydrogen sulfide and odours, in conjunction with iron salts added at the upstream Newmarket SPS.

2025 ANNUAL PERFORMANCE REPORT
AURORA SPS

PUMPING STATION FLOW







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2025 ANNUAL PERFORMANCE REPORT | YDSS AURORA HENDERSON SPS

FACILITY INFORMATION

Municipality Serviced: Town of Aurora

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario

FACILITY DESCRIPTION

The Aurora Henderson SPS is part of the York-Durham Sewage System (YDSS). It was commissioned in 2023. The station receives flow from the local collection system and discharges through twinned forcemains. Flows are sent to the Duffin Creek WPCP for treatment.

PROCESS OVERVIEW

The Aurora Henderson SPS is equipped with a two-celled wet well and 4 submersible pumps. The inlet flows into the wet well. An “inlet bypass” structure is equipped with a screen to remove solids before reaching the wet well. Flows are discharged through twinned forcemains. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

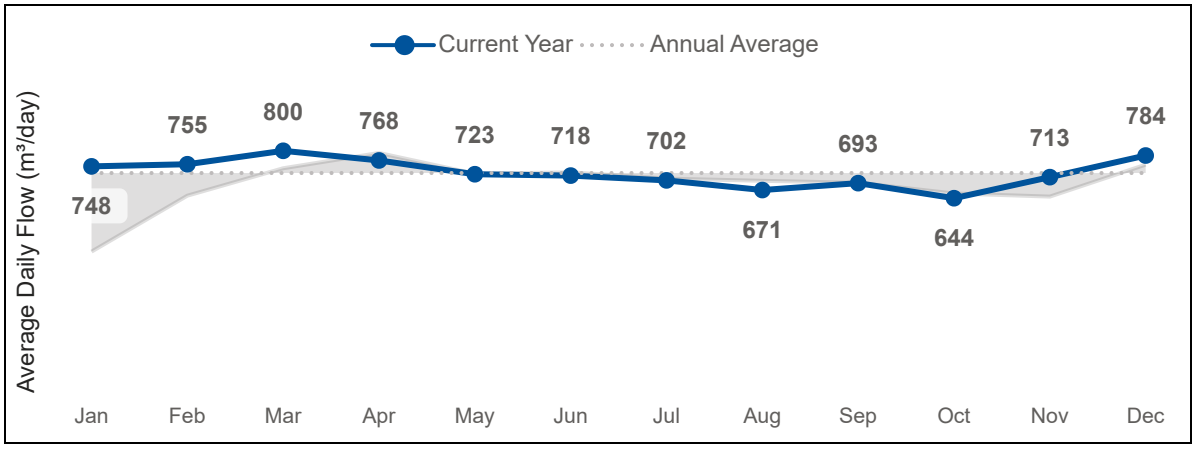
One standby natural gas generator.

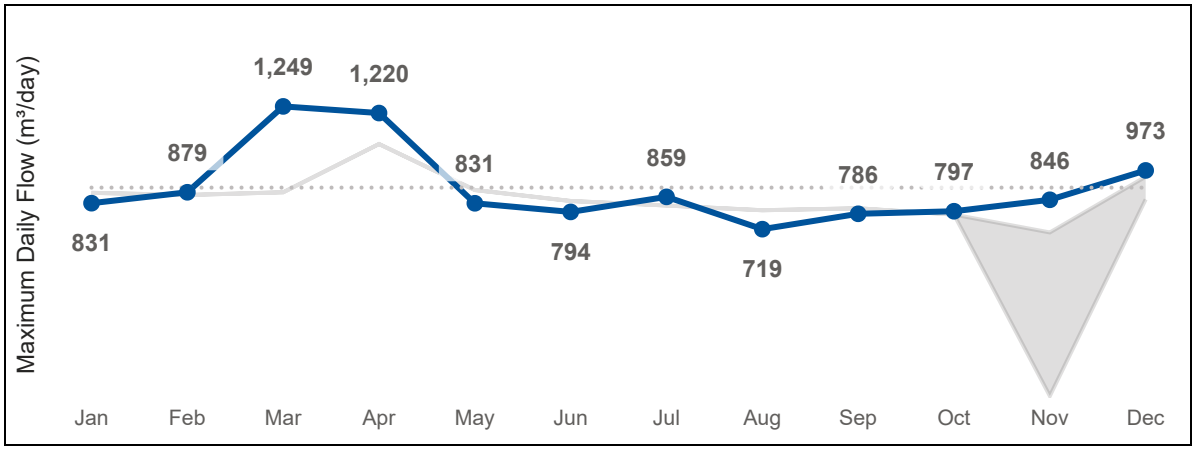
AIR MANAGEMENT

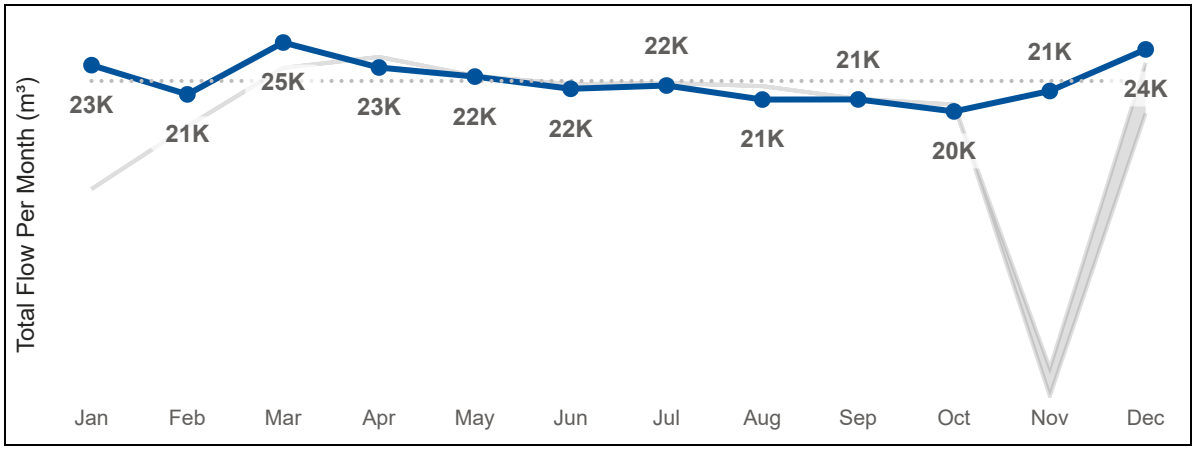
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
AURORA HENDERSON SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS HOLLAND LANDING SPS

FACILITY INFORMATION

Municipality Serviced: Town of East Gwillimbury

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP (Durham Region) (continuous) and Lake Simcoe via Holland Landing Lagoons (intermittent)

FACILITY DESCRIPTION

The Holland Landing SPS is part of the York-Durham Sewage System (YDSS). One sewer enters the facility. Two forcemains exit the facility, “North” and “South”. Normal operation uses the South forcemain to direct flows to the YDSS. The North forcemain can direct flows to the Holland Landing Lagoons in an emergency to buffer high flows in the system. Wastewater is treated at the Duffin Creek WPCP via the YDSS.

PROCESS OVERVIEW

The Holland Landing SPS is equipped with a two-celled wet well and three pumps (with one space for a future pump). A channel grinder reduces the solids to smaller sizes so they can pass through the system more effectively. Two inlet bypass channels are each equipped with screens to remove large solids prior to reaching the wet wells. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

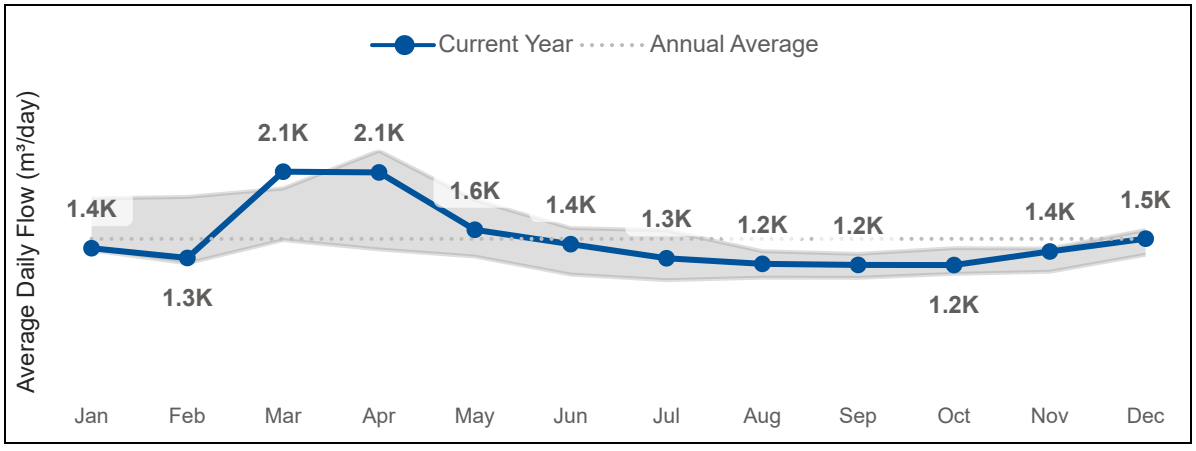
One standby diesel generator, two outdoor fuel storage tanks and one indoor fuel day tank.

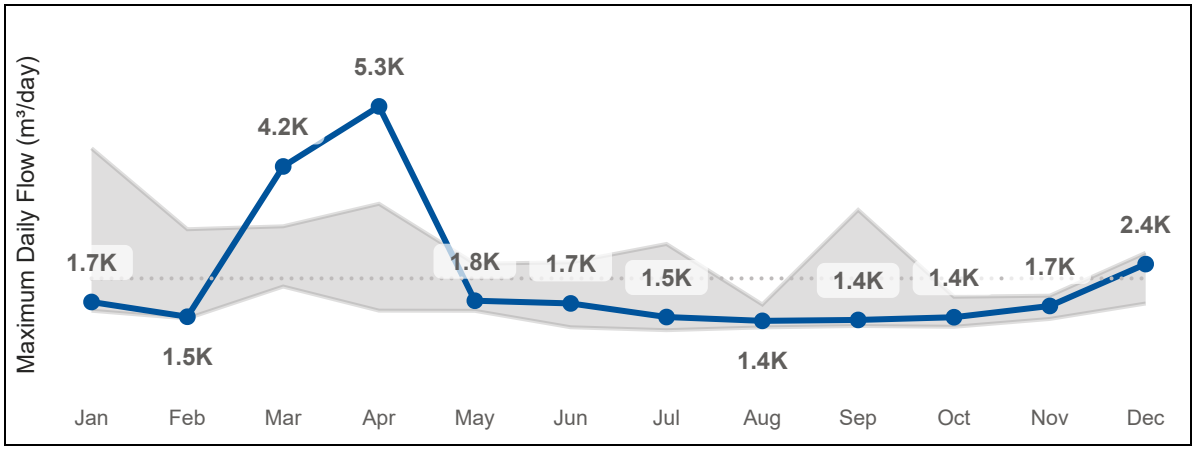
AIR MANAGEMENT

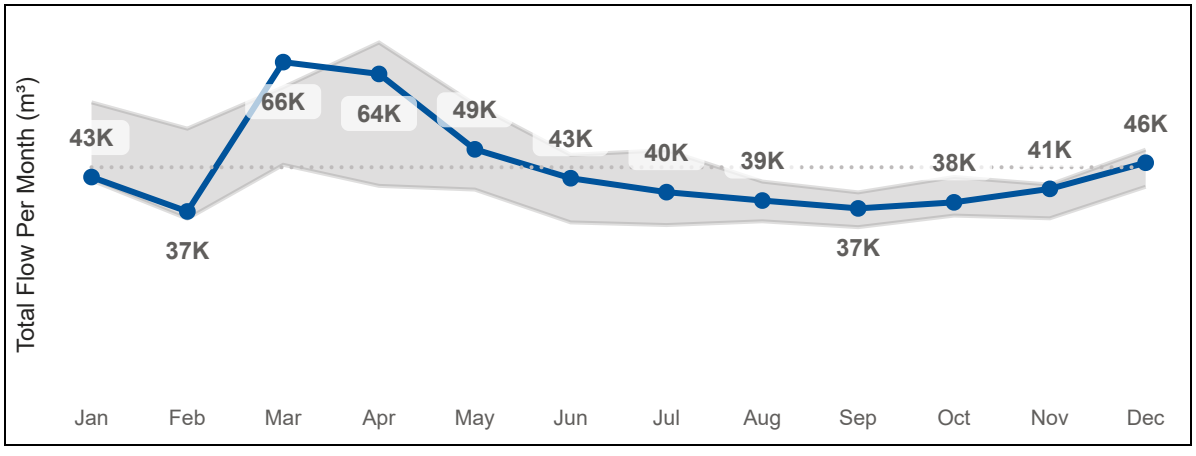
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
HOLLAND LANDING SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS KING CITY SPS

FACILITY INFORMATION

Municipality Serviced: Township of King

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP

FACILITY DESCRIPTION

The King City SPS is part of the York-Durham Sewage System (YDSS). It receives flows from the local collection system. Flows are sent to the Duffin Creek WPCP for treatment.

PROCESS OVERVIEW

The King City SPS is equipped with a two-celled wet well, a dry well and three pumps. It discharges through one forcemain to the YDSS. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

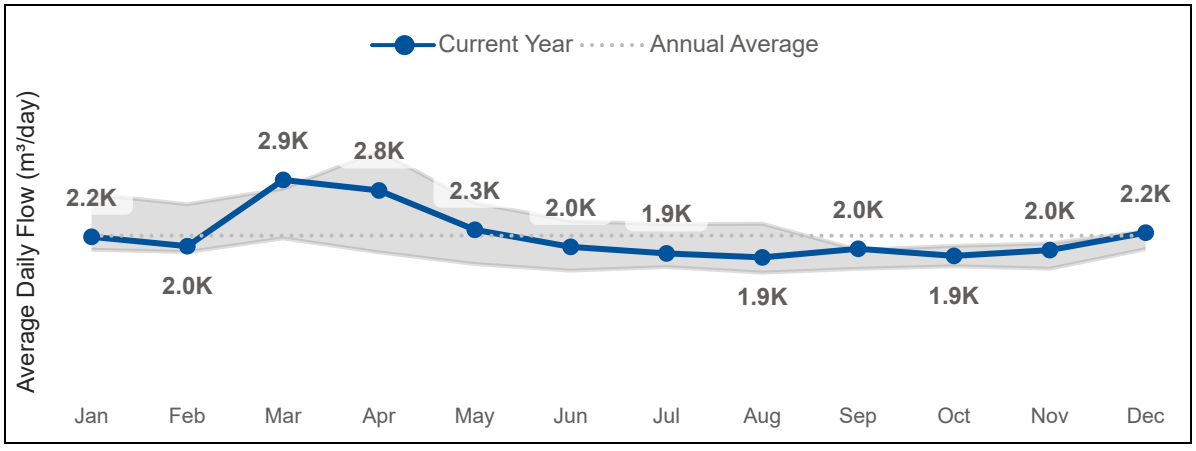
One standby diesel generator, one fuel storage tank.

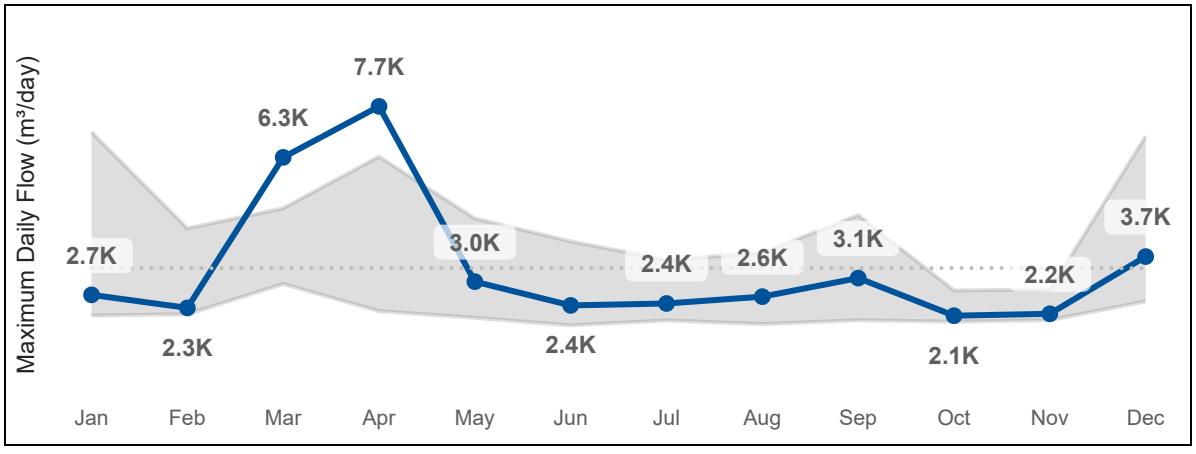
AIR MANAGEMENT

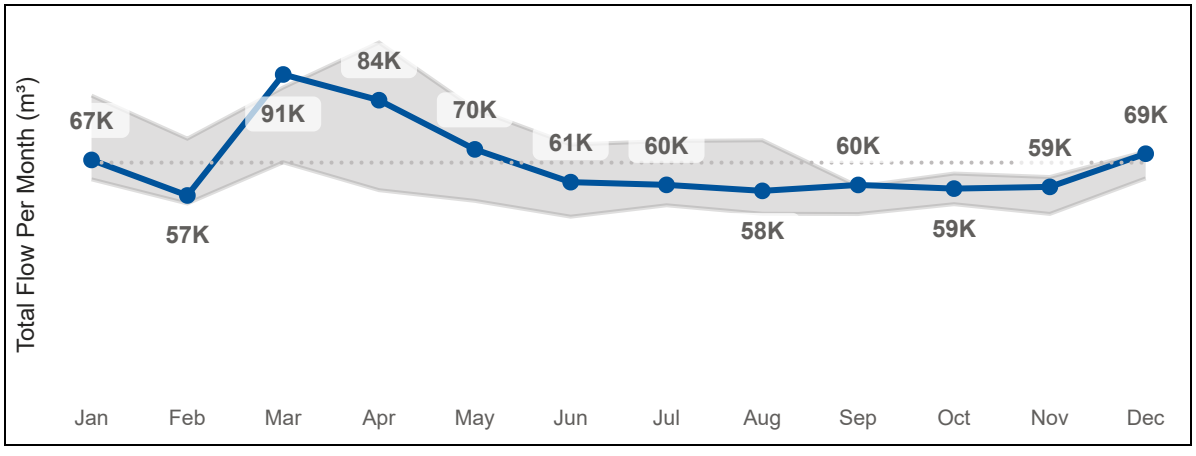
Not applicable at King City SPS.

2025 ANNUAL PERFORMANCE REPORT
KING CITY SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS MARKHAM LESLIE SPS

FACILITY INFORMATION

Municipality Serviced: City of Markham

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP

FACILITY DESCRIPTION

The Leslie SPS is part of the York-Durham Sewage System (YDSS). Two forcemains convey wastewater from the station along the Southeast Collector portion of the YDSS, ultimately received for treatment at the Duffin Creek WPCP which discharges to Lake Ontario. A small wastewater unloading facility is also found at this station, however it is not currently in use.

PROCESS OVERVIEW

The Leslie SPS is equipped with a two-celled wet well and six pumps. Two inlet channels, each equipped with a screen, remove large solids. Surge arrestor tanks and valves on the station discharge headers protect the system from flow surges affecting the facility. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

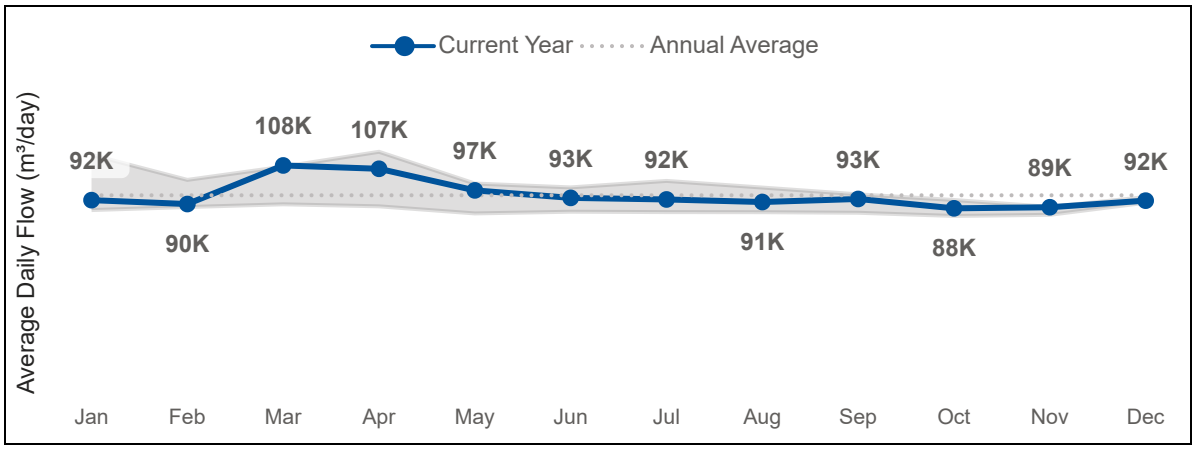
Three standby diesel generators and one outdoor fuel storage tank. An additional underground diesel storage tank is not currently in use because it is not required.

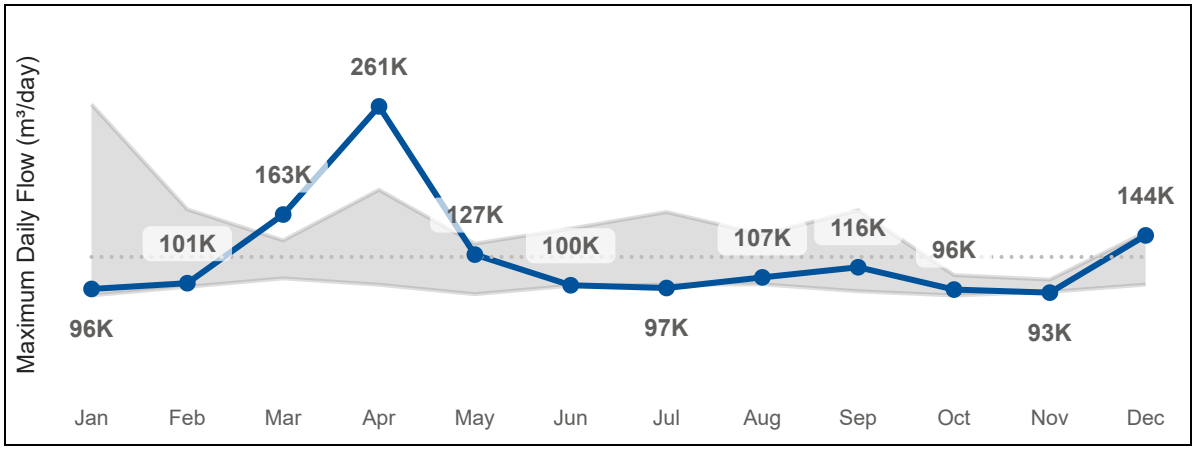
AIR MANAGEMENT

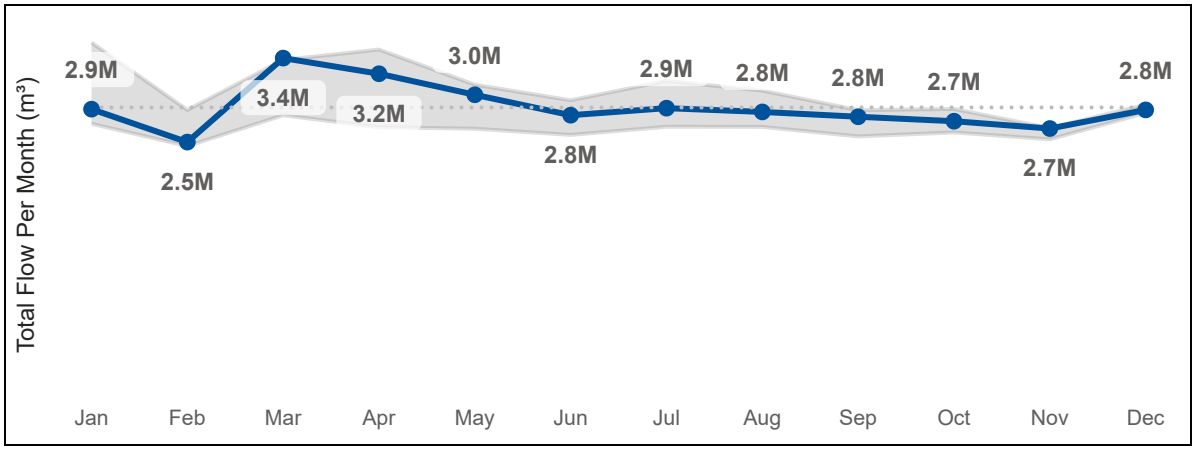
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
LESLIE SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS NEWMARKET SPS

FACILITY INFORMATION

Municipality Serviced: Town of Newmarket

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP

FACILITY DESCRIPTION

The Newmarket SPS is part of the York-Durham Sewage System (YDSS). The Newmarket SPS receives and transfers wastewater from the Town of East Gwillimbury and the Town of Newmarket through the Green Lane SPS. An underground equalization tank at the Newmarket SPS helps to control flows.

PROCESS OVERVIEW

The Newmarket SPS is equipped with a two-celled wet well, four pumps, and an equalization tank. Two screened inlet channels remove large solids and then flow to the wet wells. The wet wells can discharge via two paths: to the underground equalization tank or back into the system towards the downstream Aurora SPS. The equalization tank returns flows to the inlet of the SPS in a controlled manner. In normal operation, the Newmarket SPS discharges from the wet wells through one of the two forcemains towards the Aurora SPS. Only one forcemain is used at a time. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

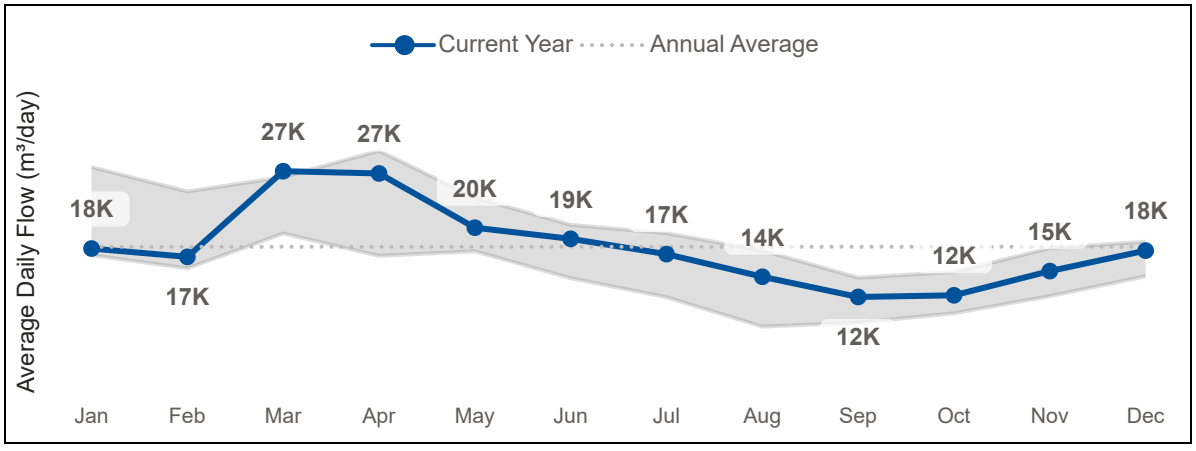
One standby diesel generator and one outdoor fuel storage tank.

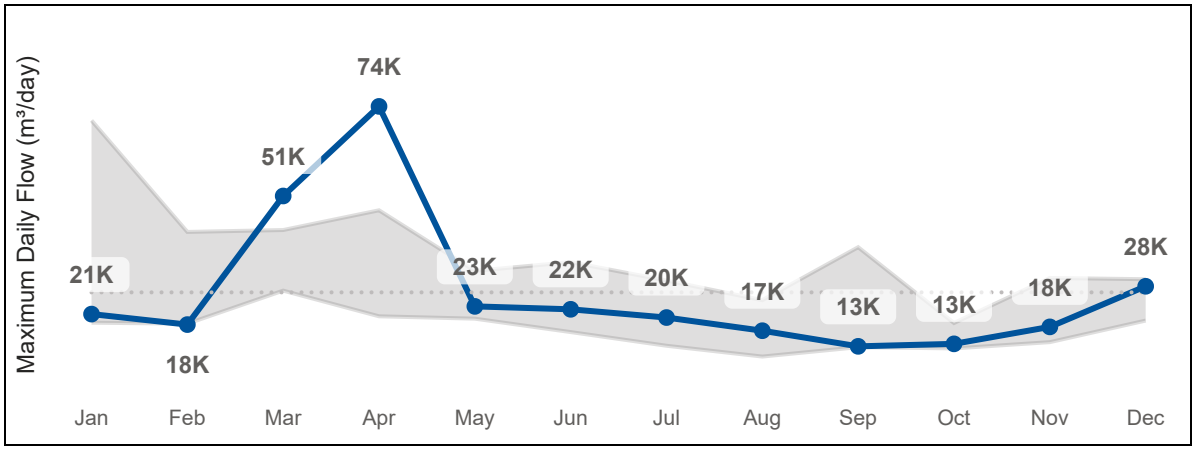
AIR MANAGEMENT & CONDITIONING CHEMICALS

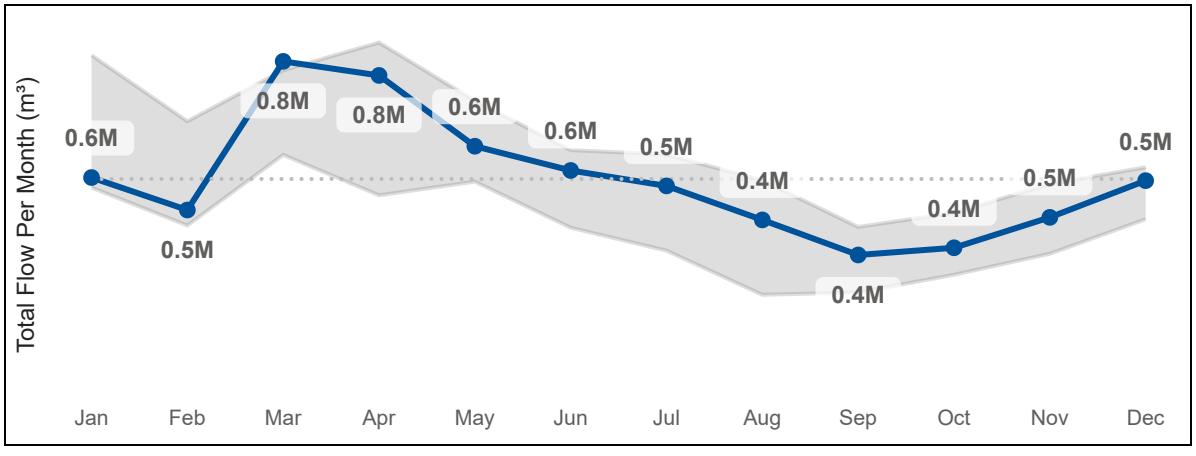
One on-site activated carbon adsorption unit controls emissions from the equalization tank. In addition, iron salts (ferrous chloride) minimize hydrogen sulfide in the downstream sewer to mitigate odour and corrosion. This conditioning is paired with secondary conditioning at the downstream Aurora SPS to continue controlling corrosion and odour.

2025 ANNUAL PERFORMANCE REPORT
NEWMARKET SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS NEWMARKET BOGART CREEK SPS

FACILITY INFORMATION

Municipality Serviced: Town of Newmarket

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP

FACILITY DESCRIPTION

The Bogart Creek SPS receives wastewater from the Town of Newmarket, via influent sewers. It is part of the York-Durham Sewage System (YDSS).

PROCESS OVERVIEW

The Bogart Creek SPS is equipped with a two-celled wet well and four pumps. One inlet splits into two channels and directs flows to the wet well. One channel is equipped with a channel grinder to reduce solids to smaller sizes so they can pass through the system more effectively and the other equipped with a screen to remove solids. Flows are conveyed south through twinned forcemains to the Aurora SPS. Twinned forcemains provide redundancy in sewage systems, which improves the reliability of the sewage system and allows for maintenance and repairs on one forcemain while the other operates. Only one forcemain is used at a time. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

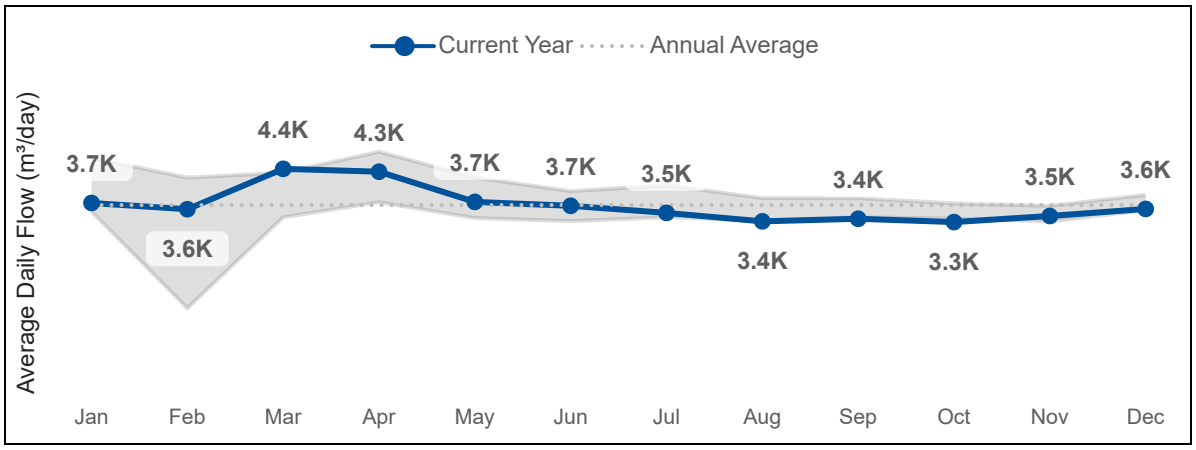
One standby diesel generator and one fuel tank.

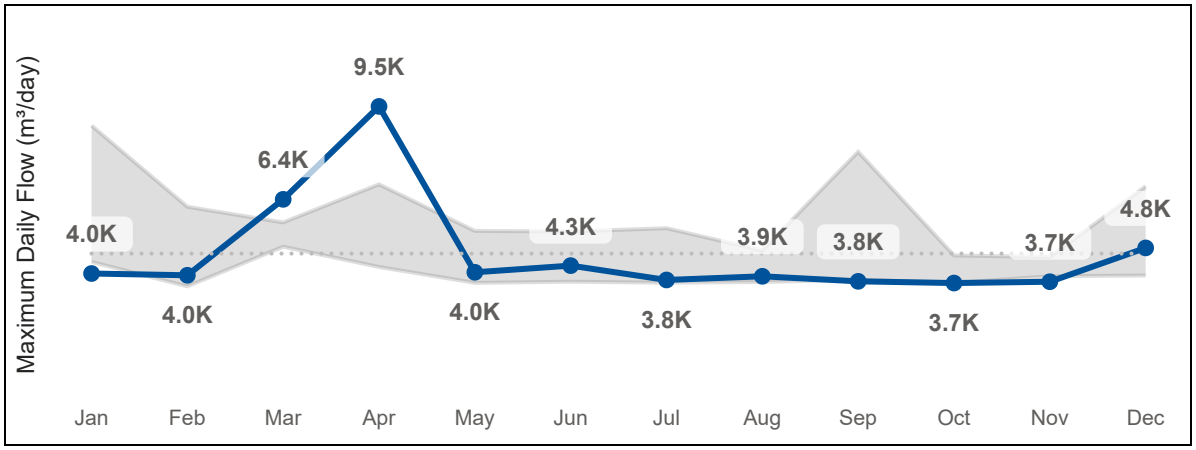
AIR MANAGEMENT

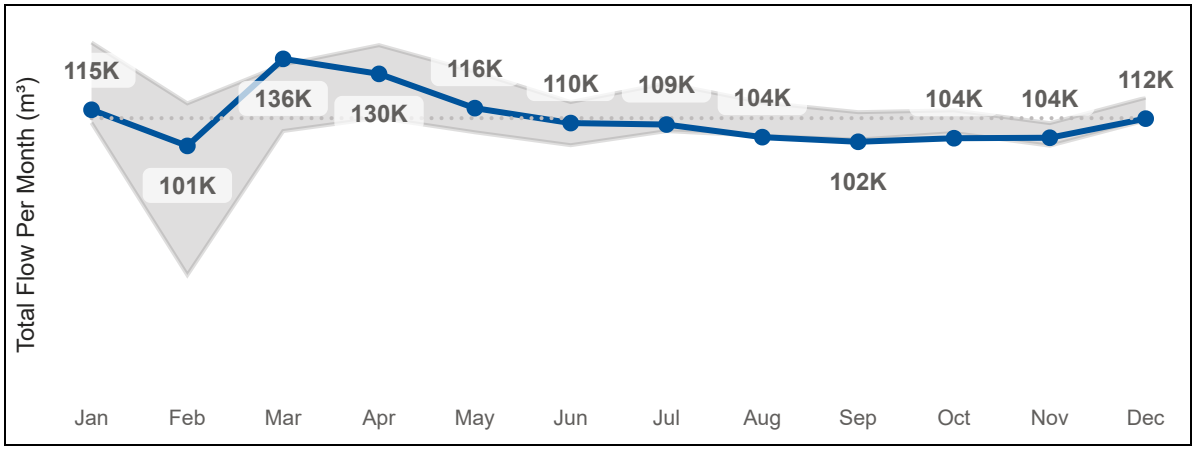
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
BOGART CREEK SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS NEWMARKET GREEN LANE SPS

FACILITY INFORMATION

Municipality Serviced: Town of Newmarket

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP

FACILITY DESCRIPTION

The Green Lane SPS is part of the York-Durham Sewage System (YDSS). It is managed operationally as a sub-station of the Newmarket SPS. The Green Lane SPS discharges to the adjacent Newmarket SPS through one forcemain. The pair of Sewage Pumping Stations receive and transfer wastewater from the Town of East Gwillimbury and the Town of Newmarket.

PROCESS OVERVIEW

The Green Lane SPS comprises one wet well and two pumps. It flows directly to Newmarket SPS. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

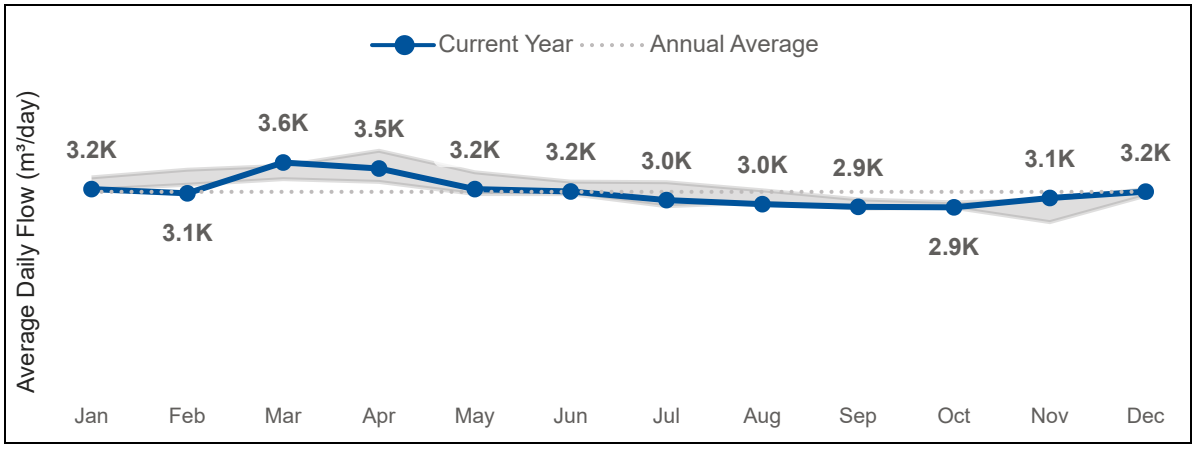
An Uninterruptable Power Supply provides some backup power for essential equipment. The facility will also flow by gravity to the Newmarket SPS without power.

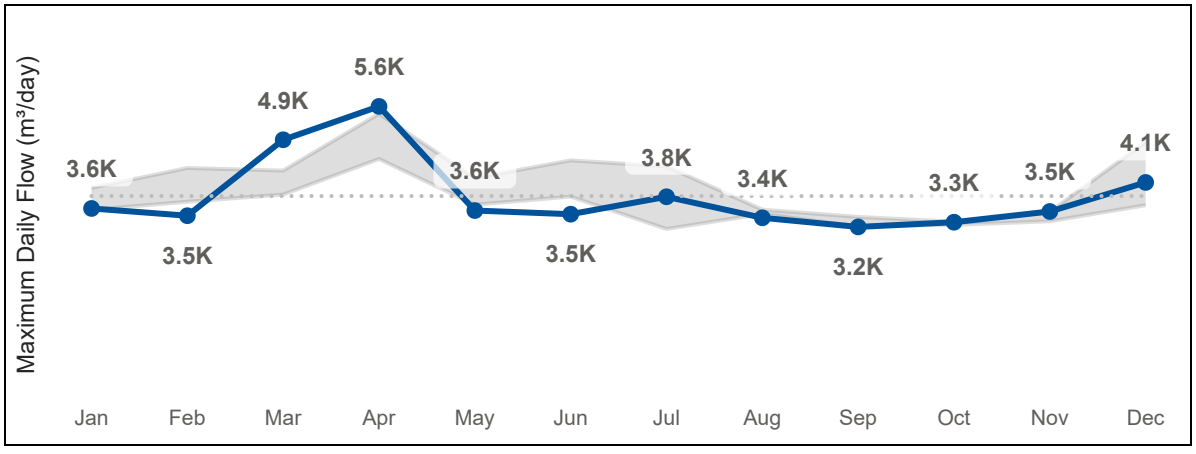
AIR MANAGEMENT

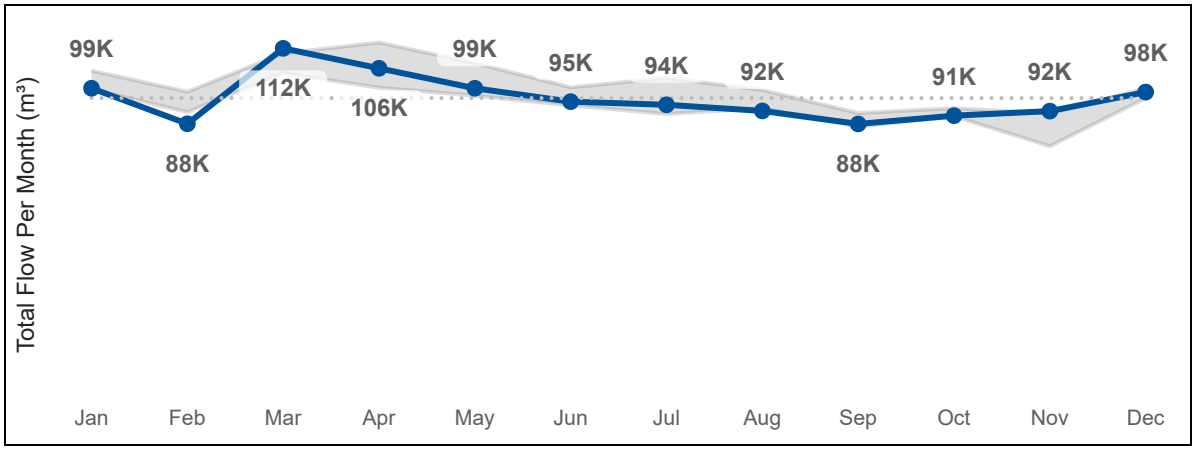
Not applicable at Green Lane SPS.

2025 ANNUAL PERFORMANCE REPORT
GREEN LANE SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS QUEENSVILLE WEST SPS

FACILITY INFORMATION

Municipality Serviced: Town of East Gwillimbury

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP (Durham Region)

FACILITY DESCRIPTION

The Queensville West SPS is part of the York-Durham Sewage System (YDSS). One sewer enters the facility. Two forcemains exit the facility. In normal operation, one of the forcemains pushes the wastewater south from the station to the YDSS. The second forcemain, not currently in use, travels north.

PROCESS OVERVIEW

The Queensville West SPS is equipped with a two-celled wet well and two pumps (with two spaces for future pumps). A channel grinder reduces the solids to smaller sizes so they can pass through the system more effectively. Two inlet bypass channels are each equipped with screens to remove large solids prior to reaching the wet wells. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

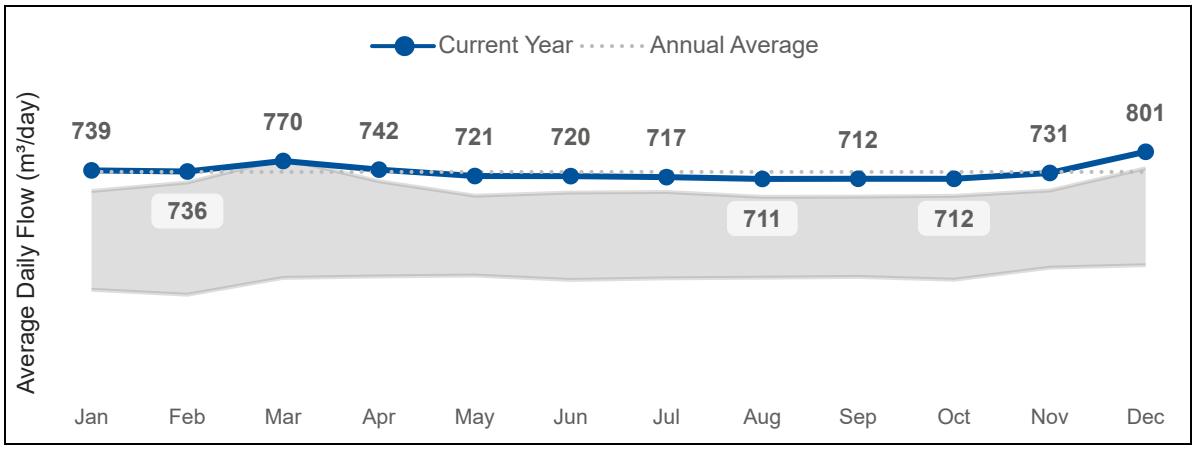
One standby diesel generator, two outdoor fuel storage tanks and one indoor fuel day tank.

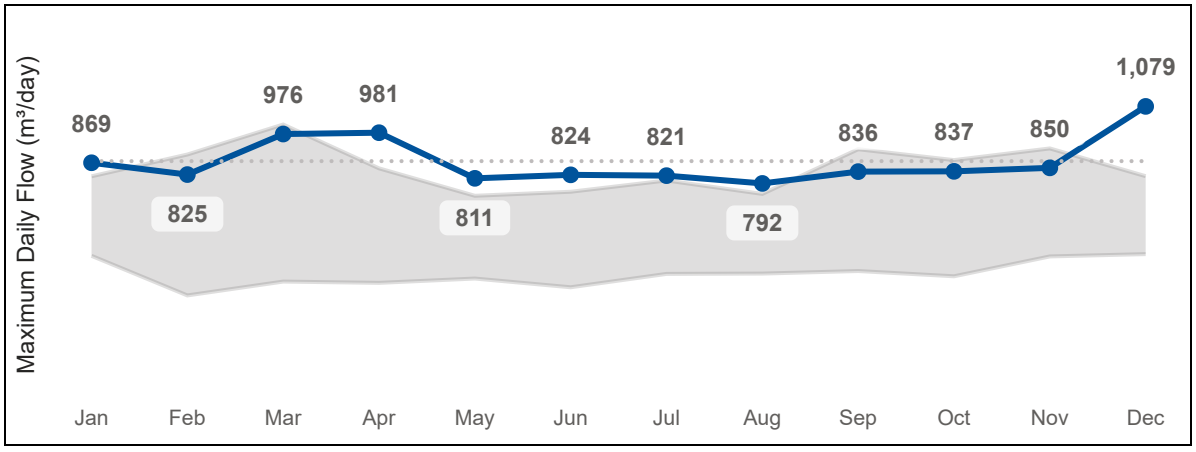
AIR MANAGEMENT

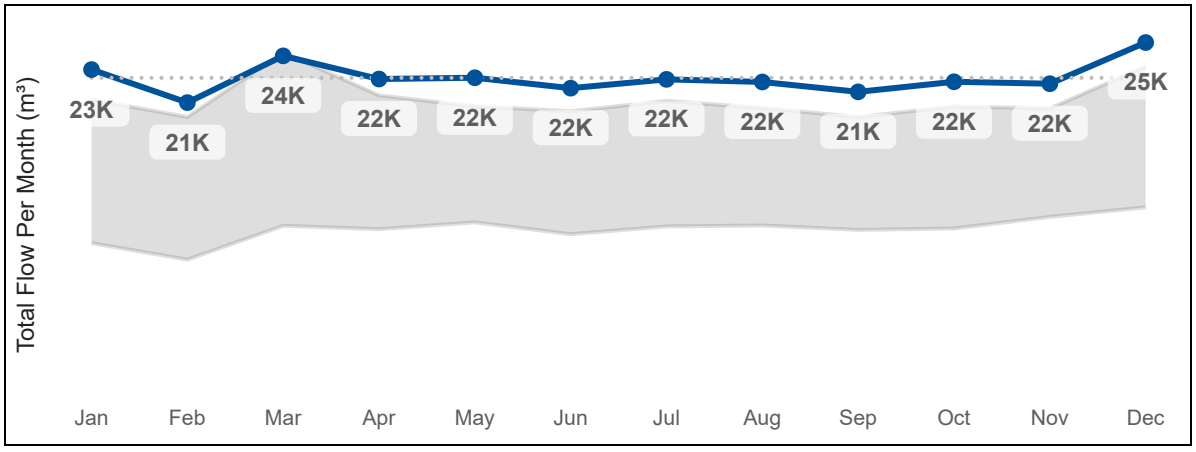
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
QUEENSVILLE WEST SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS VAUGHAN BLACK CREEK SPS

FACILITY INFORMATION

Municipality Serviced: Vaughan

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP

FACILITY DESCRIPTION

The Vaughan Black Creek SPS is part of the York-Durham Sewage System (YDSS). It receives flows from the local collection system and the Humber SPS. Flows are sent to the Duffin Creek WPCP for treatment.

PROCESS OVERVIEW

The Vaughan Black Creek SPS is equipped with a two-celled wet well, a dry well, and five pumps. Screens on the inlet and the “inlet bypass” channels remove solids before flows reach the wet well. It discharges to the YDSS through one forcemain. Full wastewater treatment is received once the wastewater reaches the Duffin Creek WPCP.

EMERGENCY POWER

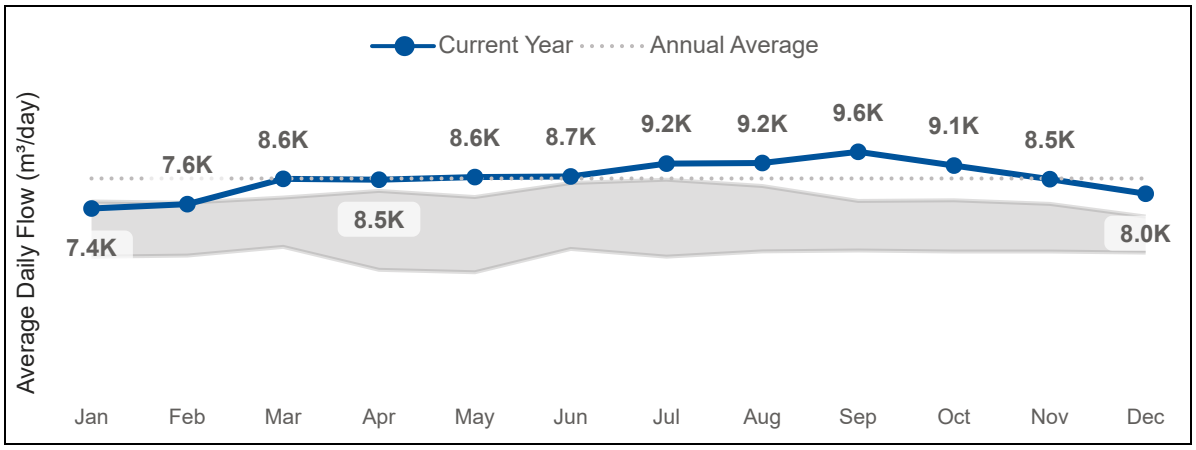
Two standby diesel generators, one outdoor fuel storage tank.

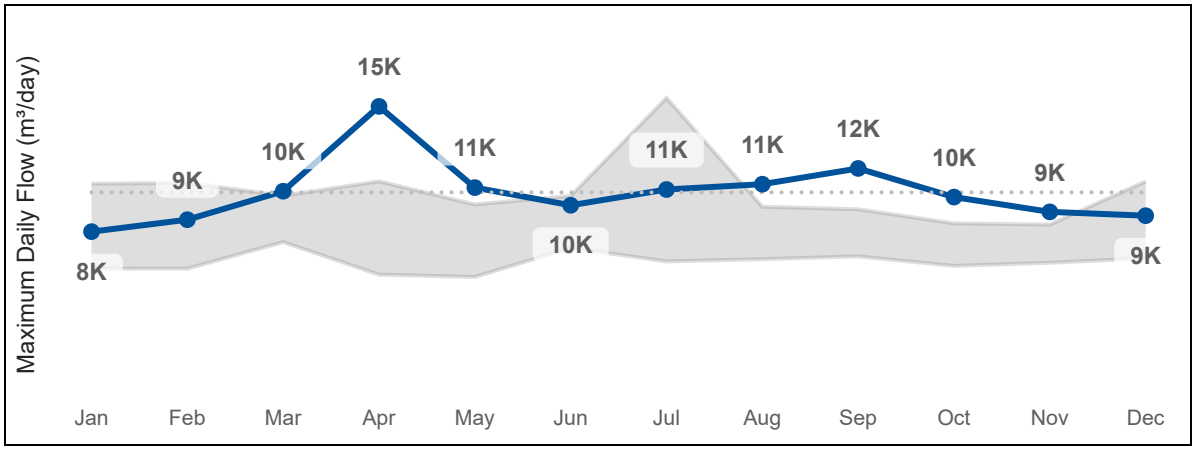
AIR MANAGEMENT

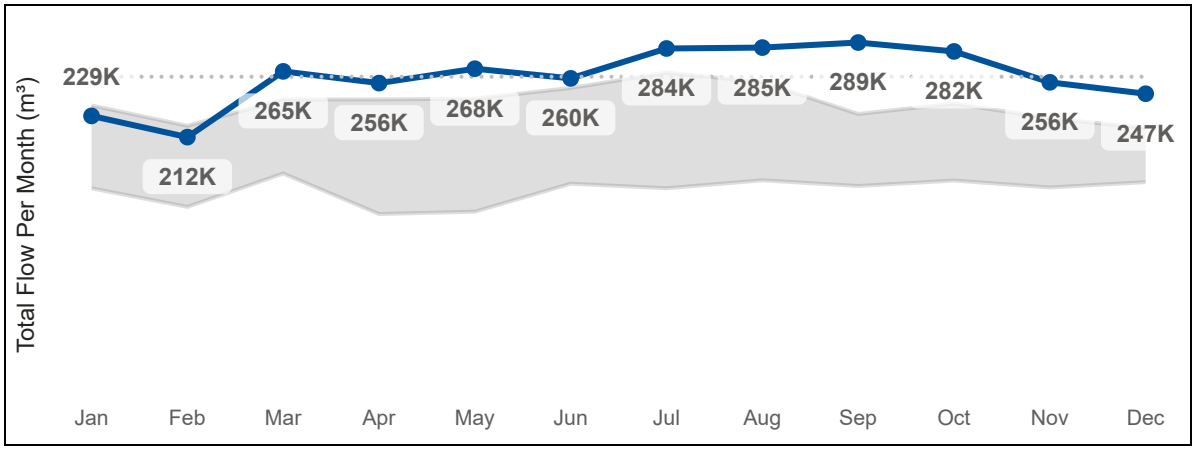
One on-site activated carbon adsorption unit.

2025 ANNUAL PERFORMANCE REPORT
BLACK CREEK SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS VAUGHAN HUMBER SPS

FACILITY INFORMATION

Municipality Serviced: City of Vaughan

Facility Classification: Wastewater Collection III

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP (Durham Region) and G.E. Booth Wastewater Treatment Facility (Peel Region)

FACILITY DESCRIPTION

The Humber SPS is part of the York-Durham Sewage System (YDSS) and has four discharge forcemains. It receives flows from the local collection system and Pine Valley SPS. Flows can be directed to either the G.E. Booth Wastewater Treatment Facility or through the Black Creek SPS to Duffin Creek WPCP for treatment. The proportion of flow directed to either treatment facility is determined based on operational needs in the system.

PROCESS OVERVIEW

The Humber SPS is equipped with a two-celled wet well, a dry well, and five pumps. Screens on the influent channel remove large solids. Four surge relief valves protect the system from flow surges. Two forcemains convey wastewater westward from the station towards Peel Region, to be received for treatment at the G.E. Booth Wastewater Treatment Facility. Two forcemains convey wastewater northward from the station towards the YDSS, ultimately received for treatment at the Duffin Creek WPCP.

EMERGENCY POWER

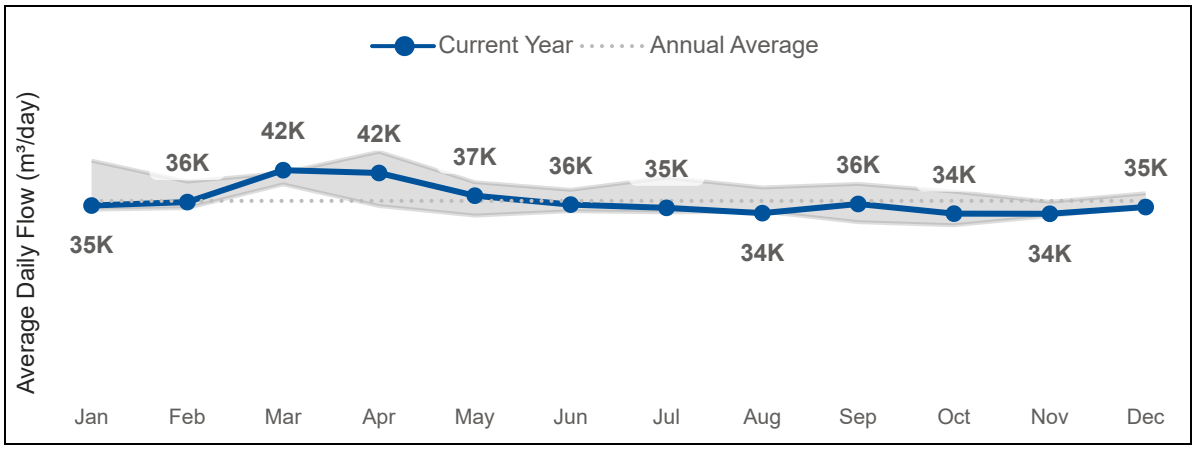
One standby diesel generator, one outdoor fuel storage tank.

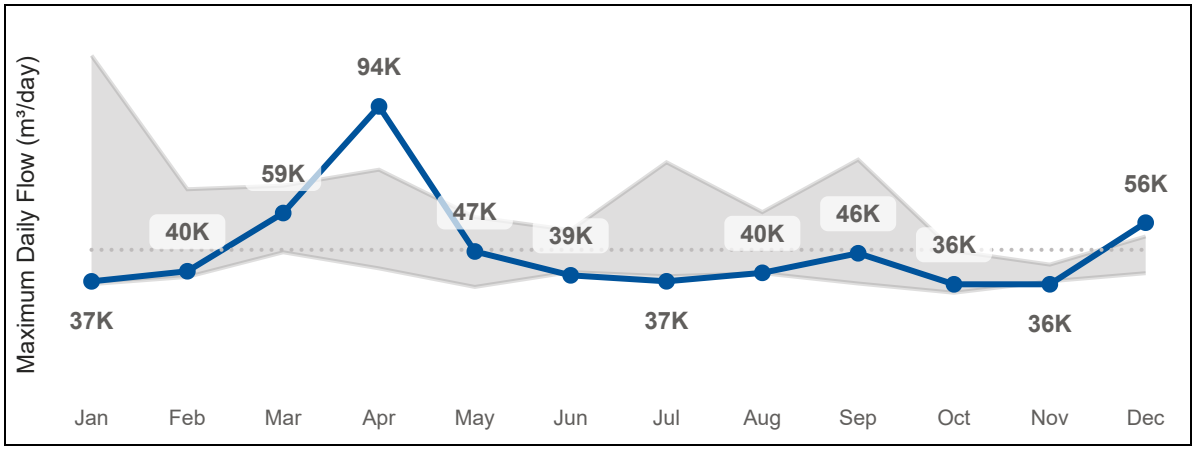
AIR MANAGEMENT

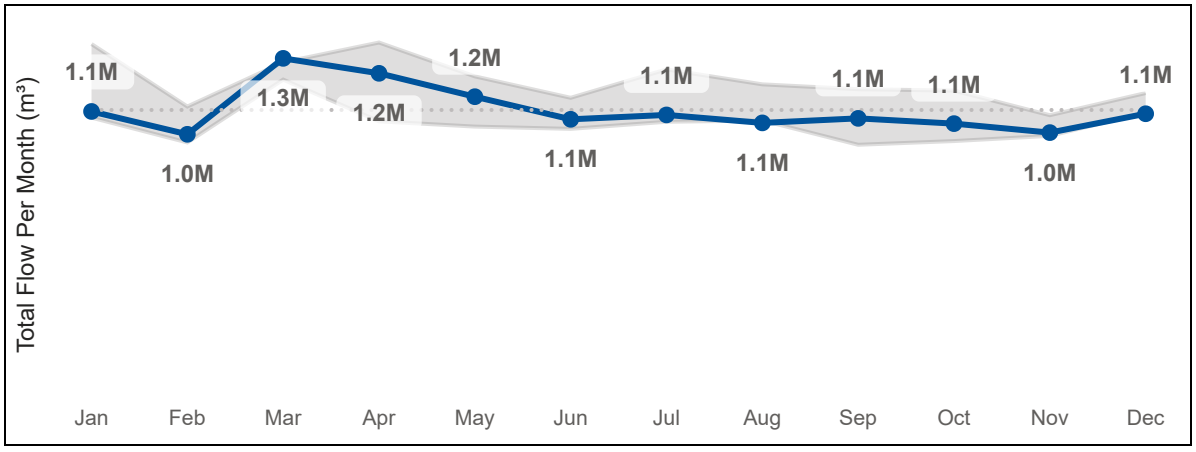
Under construction at Humber SPS.

2025 ANNUAL PERFORMANCE REPORT
HUMBER SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

2025 ANNUAL PERFORMANCE REPORT | YDSS VAUGHAN PINE VALLEY SPS

FACILITY INFORMATION

Municipality Serviced: Vaughan

Facility Classification: Wastewater Collection II

System Classification: Separate Sewer System

Receiving Water Bodies: Lake Ontario via Duffin Creek WPCP (Durham Region) and G.E. Booth Wastewater Treatment Facility (Peel Region)

FACILITY DESCRIPTION

The Vaughan Pine Valley SPS is part of the York-Durham Sewage System (YDSS). It receives flow from the local collection system and directs it to Humber SPS. The ultimate destination can be either Duffin Creek WPCP or GE Booth Wastewater Treatment Facility.

PROCESS OVERVIEW

The Vaughan Pine Valley SPS is equipped with a two-celled wet well and three pumps. The inlet is equipped with a grinder to reduce solids to smaller sizes so they can pass through the system more effectively. An “inlet bypass” structure flows around the grinder and is equipped with a screen to remove solids before reaching the wet well. It discharges through one forcemain to the Humber SPS. Full wastewater treatment is received once the wastewater reaches Duffin Creek WPCP or GE Booth Wastewater Treatment Facility.

EMERGENCY POWER

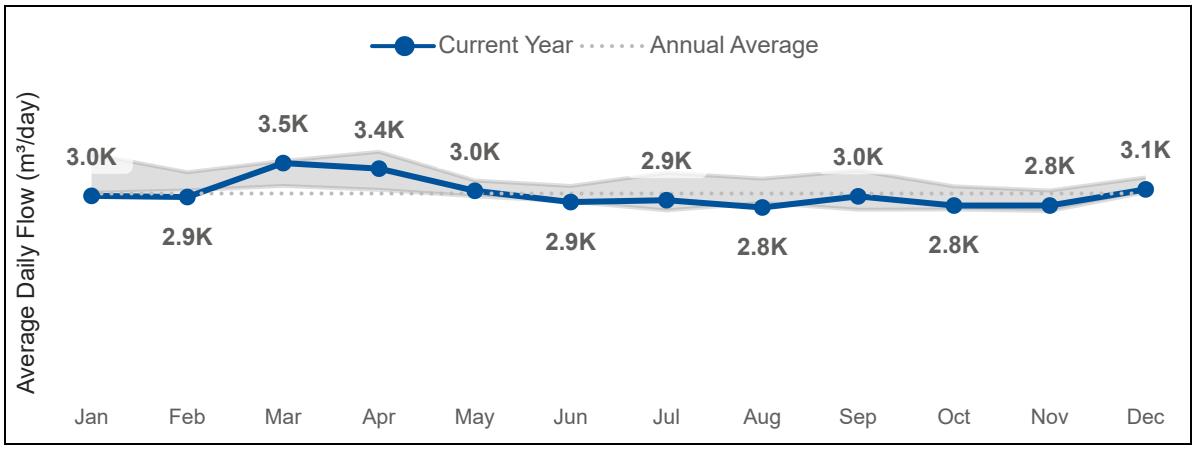
One standby diesel generator, two fuel storage tanks.

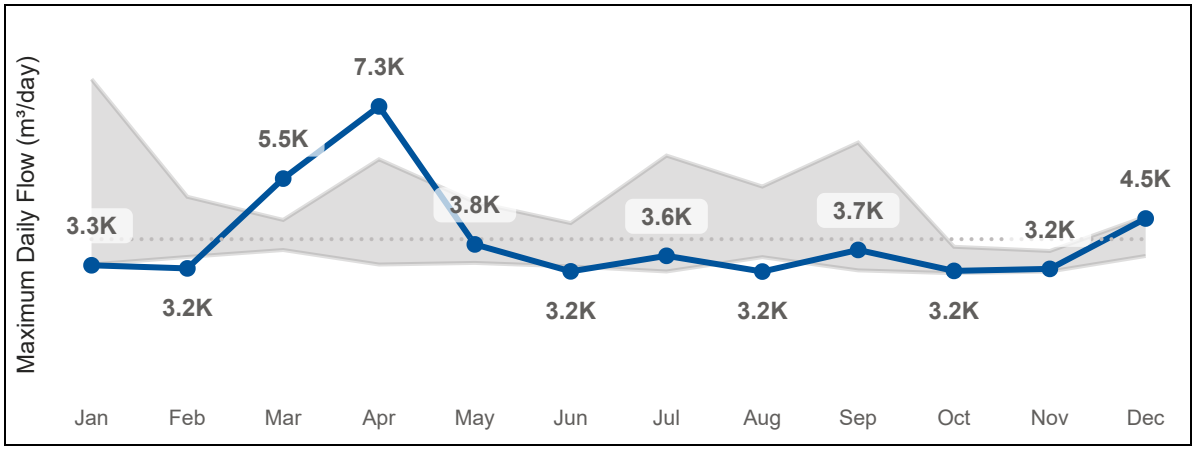
AIR MANAGEMENT

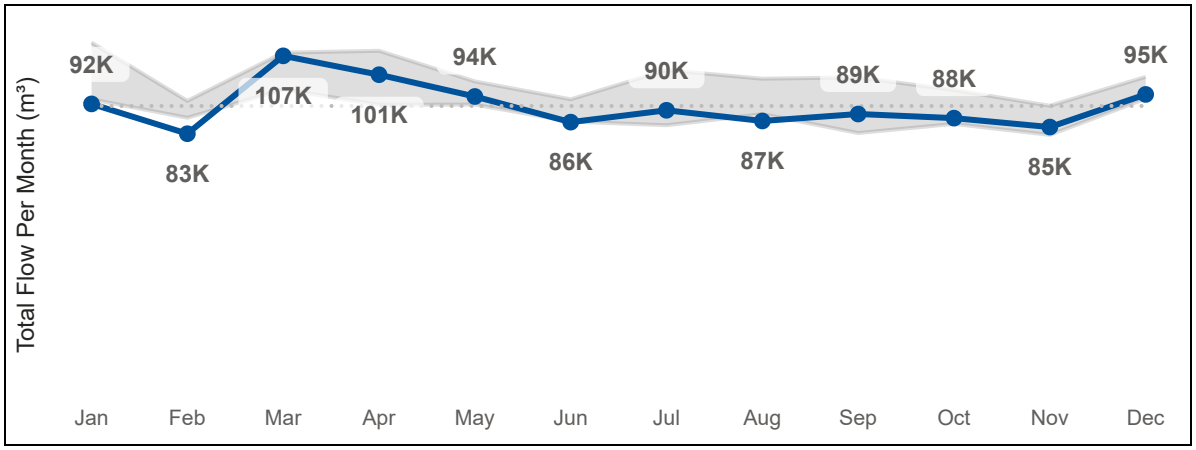
One on-site activated carbon absorption unit.

2025 ANNUAL PERFORMANCE REPORT
PINE VALLEY SPS

PUMPING STATION FLOW







*Historical value (gray shaded area) based on previous 5 years of data, where available.

BACKGROUND

Wastewater systems have two main parts: one part collects wastewater from homes and buildings, and the other part cleans it before it goes back into nature. The collection system (sometimes called a linear system) has pipes and pumping stations that carry wastewater to a treatment facility. Treatment facilities recover nutrients and harmful materials from the water so it can be safely returned to the environment. Collection systems include:

- **Pipes:** gravity sewers and forcemains. Wastewater flows by gravity in sewers, and it flows under pressure in forcemains. Some municipalities have “combined” or “partially separated” gravity sewers which combine flows from both stormwater and wastewater. York Region does not have combined sewers and only has “separated” sewers. The Region’s sewers are less influenced by wet weather events because they are not designed to convey wastewater and stormwater in the same pipe. Some water can still enter the sewers from maintenance hole covers and leaking infrastructure – this is referred to as “Inflow and Infiltration”, or I&I. More information about how the Region manages I&I is described in condition 4.6.9 of this report.
- **Sewage Pumping Stations (SPS):** most SPS remove some solids from wastewater to prevent blocked or damaged pumps and sewers and to minimize the potential for corrosion and odour. Removing solids also reduces the amount of treatment needed at the treatment facilities. SPS send flows back to the system under pressure through forcemains. Some SPS condition the wastewater to improve downstream performance, such as adding iron salts to prevent corrosion and reduce odour. SPS also have emergency backup power (or a connection for a portable generator) so that the wastewater continues to flow during power outages.
- **Air Management Facilities:** air management facilities (AMF) range in complexity, from passive air vents on a sewer with carbon media, to equipment located at SPS, to dedicated standalone facilities with fans that pull air out of the sewers for treatment. AMF help to reduce odours and infrastructure corrosion caused by gases that can be generated in wastewater.

The Ontario Ministry of the Environment, Conservation and Parks (MECP, or the “Ministry”) issued York Region a Consolidated Linear Infrastructure Environmental Compliance Approval (CLI ECA, or simply “ECA”) to govern all the Region’s wastewater collection system works. The CLI ECA contains definitions and rules for all collection system works and includes permissions for municipalities to internally authorize many low-risk upgrades without Ministry review, if specific rules are met. This ECA format improves operational efficiency and compliance and reduces timelines for implementing some projects. Preauthorized alterations help to expedite the expansion and repair of the wastewater collection infrastructure and to facilitate housing growth. The CLI ECA also requires this annual performance report to be published on the Region’s website. The reporting conditions in this report meet or exceed annual performance reporting conditions listed in the CLI ECA.

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The Region's Collection system comprises multiple standalone sub-systems, some of which are completely isolated from the others and are serviced by a Regional Water Resource Recovery Facility (WRRF). The Region's sub-systems are as follows:

- Sutton sub-system (isolated)
- Keswick sub-system (isolated)
- Mount Albert sub-system (isolated)
- Schomberg sub-system (isolated)
- Nobleton sub-system (isolated)
- York-Durham Sewage System sub-system (includes the Southeast Collector, connected to Peel Region and Durham Region)

The York-Durham Sewage System (YDSS) services much of the Region's population, and discharges to either the G.E. Booth Wastewater Treatment Facility (located in and operated by Peel Region) or the Duffin Creek Water Pollution Control Plant (located in and operated by Durham Region). The northern part of the YDSS can be redirected to the Holland Landing Lagoons (located in East Gwillimbury and operated by York Region) in emergency conditions, but the lagoons have not been used since October 2023. York Region does not have any collection system infrastructure connected to the Kleinburg WRRF (located in Vaughan and operated by York Region), so Kleinburg wastewater is out of scope for this report.

The Regional Municipalities of York and Durham are working together to carry out the York Region Sewage Works Project, a long-term wastewater infrastructure project across the Towns of East Gwillimbury, Newmarket, Aurora, Ajax and the Cities of Richmond Hill, Markham and Pickering. As required by the *Supporting Growth and Housing in York and Durham Regions Act, 2022, S.O. 2022, c. 21, Sched. 10*, the York Region Sewage Works Project will increase capacity in the existing York Durham Sewage System, including new or expanded wastewater sewers, pumping stations and enhancements to the Duffin Creek Water Pollution Control Plant on the shore of Lake Ontario in the City of Pickering. Durham Region supports proposed work in the City of Pickering as part of the project.

Alternate formats or communications supports are available upon request.
Contact Corporate Communications at 1-877-464-9675 ext. 71234, Dial 711 with a TTY Device,
or email yrcorporatecommunications@york.ca

Report condition 4.6.3 If applicable, includes a summary of all required monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations

York Region is not required to conduct routine collection system monitoring. If possible, operators collect samples of wastewater Spills and Collection System Overflows ("overflows"). When applicable, results of samples collected for wastewater Spills and overflows are described in Condition 4.6.8 of this report.

Wastewater flow monitoring in the collection system is not required. However, the Region does monitor collection system flow. Basic data about each SPS' flow is provided in the graph pages next to each SPS description. Flow monitoring helps staff to:

- Target I&I reduction efforts
- Provide information when evaluating energy efficiency
- Plan maintenance on equipment after operating for a set period of time

Report condition 4.6.4 Summary of any operating problems encountered and corrective actions taken

Operating issues encountered in the York Region Collection System mostly consisted of general mechanical equipment disruptions, which were repaired and did not interfere with the facility processes, nor compromise any downstream processes. Examples of common operating issues for sewage pumping stations include faulting or malfunctioning of pumps and variable frequency drives, standby power generators, or the screening/grit removal systems. As needed, staff repair the atmospheric monitoring and ventilation systems. Operating issues are usually corrected by replacing broken or expendable components of assets, recalibrating monitoring equipment, and other similar minor repairs.

- **System-Wide:** Some significant storm events occurred in 2025, resulting in high flows in some areas of the systems. Based on weather and precipitation data from Environment Canada and York Region's rainfall monitoring stations, 2025 saw overall lower precipitation levels compared to some recent years, although the beginning of the year was very wet. Average temperatures in late 2024 and early 2025 were cold, resulting in precipitation falling as snow and potentially yielding a deeper snowpack. The subsequent melting of this snowpack, which saturated the ground, is believed to have contributed to the peak flows observed early in the year.
  - The peak (maximum daily) flows in April 2025 related to a storm event which was compounded by already saturated ground conditions. This caused overland flow and increased I&I into Regional and local systems. The storm challenged all Regional systems and three overflow events occurred on April 3rd. The events were minor in the context of the maximum daily flows recorded. More information about these events is described in Condition 4.6.8 of this report.

- Careful control of the flows, quick response by Operators, a rigorous preventative and corrective maintenance program and I&I reduction efforts mitigated potential challenges resulting from high flows and storm events.

Report condition 4.6.5 Summary of all calibration, maintenance, and repairs carried out on any major structure, Equipment, apparatus, mechanism, or thing forming part of the Municipal Sewage Collection System.

The Region worked on its sewage pumping stations in 2025 to keep wastewater moving safely. Preventive maintenance and unplanned repairs were scheduled and completed as required. Crews fixed pumps, electrical parts, and control systems. These repairs helped prevent breakdowns during normal and heavy flows. All equipment was promptly repaired and equipment returned to service. Notable maintenance and repair include:

- **Aurora SPS:** pumps repair and bar screens cleaning
- **Bogart Creek SPS:** pumps, motors, and blowers repairs, and chamber flood alarm response
- **Leslie SPS:** pumps, screens, and generator repairs
- **Newmarket SPS:** pump and lifting equipment repairs
- **2nd Concession SPS:** electrical parts, hydrogen sulfide monitoring pump, hatch switches, generator breaker, and heat-trace wiring repairs
- **Georgina No. 4 SPS:** level sensors repairs
- **High Street SPS:** pump and impeller repairs, and pump speed control fix
- **Holland Landing SPS:** pumps and cooling fans replacement and chamber flood alarm response
- **Joe Dales SPS:** pump repair and odour-control equipment fix
- **Keswick SPS:** pump impellers replacement and pump speed control software update
- **Queensville SPS:** sump pump floats replacement
- **Woodriver Bend SPS:** pump flow inconsistency fix
- **Black Creek SPS:** pump speed control equipment, generator, and level sensors repairs
- **Humber SPS,** bar screens, waterlines, pump valves, and pump drive system fixes

Air management facilities received the same diligent equipment maintenance, with odour controlling equipment monitored for performance and repaired or replaced as needed. Staff inspected and tested sewer and forcemain valves regularly to ensure they can reliably isolate sections of the sewers for maintenance or repairs.

Continuous monitoring equipment is calibrated and maintained by Regional instrumentation technicians and by contracted authorized equipment technicians. Calibrations ensure the equipment is accurate within the required tolerance range and allows for visual confirmation of satisfactory equipment condition. A summary of 2025 scheduled calibrations of the major facility monitoring equipment is shown in Appendix 1.

These actions helped the Region keep its stations safe, reliable, and in compliance with regulatory requirements.

Report condition 4.6.6 Summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints

York Region has a proactive maintenance program to inspect the air management facilities (AMF) and devices regularly and replaces carbon media in applicable locations before it is fully exhausted. A Region-wide study was conducted in 2023 to evaluate the effectiveness of Regional equipment and processes to counter hydrogen sulfide (H2S) generated from wastewater. The study concluded that the Region is using suitable equipment to combat H2S across the Region. York Region continually reviews and refines its Air Management Framework. This framework is used to systematically review and address odour complaints, enhance data collection for informed and proactive decision-making, and ensure effective communication.

Complaints are tracked and recorded. Operations and support staff review all complaints to identify potential trends and opportunities to improve response procedures. Communications trends and infrastructure-related complaints are reported quarterly to management. Staff are dispatched promptly upon receiving a complaint. If a follow-up is requested, or for repeat complaints, an operator or supervisor will follow up with the customer. 2025 complaints are summarized below:

- **Bayview Steeles AMF:** 6 odour complaints received:
  - Staff responded to all complaints promptly upon receiving them and thoroughly investigated the facility and the surrounding area. In each case, the facility was found operating normally and as designed, with no odour or occasionally a very mild odour immediately beside the building. A York Region operator or supervisor followed up with the customer after the investigation. The York Region Operations Director is involved in tracking and responding to the complaints.
  - The Region and the City of Markham jointly evaluated Regional and local sewers in November. They conducted an extensive investigation of the nearby infrastructure and found no obvious odour sources at street level. Markham made plans to seal some maintenance holes that revealed mild odour when they were opened, as an additional preventive measure.
  - A new odour study for the Bayview Steeles AMF was contracted in late 2025. The project officially started in January 2026. The study will place several odour-logging units in the spring of 2026 to measure air conditions in the sewers. It will also check if air from nearby sewers is being pushed up to the street by air pressure. The study will suggest solutions based on the data, which may include modifying or replacing the current facility.
  - The odour controlling equipment and media undergo regular inspection and testing to confirm whether it needs to be topped up or replaced. In 2025, the media did not need to be replaced. The mist eliminating filters were replaced in October as a precaution. The media will be replaced in spring 2026 after the odour-logging equipment has gathered enough data for analysis.
  - Dates when complaints were reported to the Region's Corporate Call Centre call centre: June 30, October 6, October 22, October 27, and two on November 7.

- **Keswick SPS:** 1 noise and vibration complaint received:
  - **June 5, 2025:** a resident reported noise and vibration concerns from the previous week that were believed to have potentially originated from the Keswick SPS or the Keswick WRRF. The capital delivery project manager responded to the resident on the same day, confirming that there had been no construction-related activities during that time, and that the station was operating normally.
- **Keswick Morton Avenue Air Management Facility:** 1 odour complaint received:
  - **June 17, 2025:** a resident reported an odour from the Keswick Morton AMF. Staff responded to site and found all equipment operating normally, with no odours detected at the facility or near the residence. The odour controlling media was replaced on June 25.
- **Sutton Woodriver Bend SPS:** 1 odour complaint received:
  - **November 4, 2025:** the Town of Georgina forwarded a resident's odour complaint. Staff responded to site and found no odours at the facility or the nearby area. All equipment was operating normally and the operator noted that new asphalt was being applied to the roadway. The Area Supervisor followed up with the resident who said they smelled the odour on and off in the mornings. The Supervisor advised the resident to keep in communication to support further investigation. The concern did not reoccur.
- **YDSS sewers:** 5 odour and 1 noise complaints received:
  - **March 12, 2025:** a customer reported a noise complaint related to a sewer installation project in Vaughan (near Keele Street and Langstaff Road). The construction project team replied. They explained that tunneling operations caused the noise and that tunneling work would be completed by the end of April, 2025.
  - **July 28, 2025:** a municipal councillor forwarded an odour complaint on the weekend, from a business in Richmond Hill near the intersection of Yonge Street and Jefferson Forest Drive. Staff responded on Monday and did not find any odours around the business at the time. Since there are no Regional chambers near the plaza, the Town of Richmond Hill was also notified in case there were odour concerns in their system.
  - **July 31, 2025:** the City of Richmond Hill notified York Region operations about an odour on Yonge Street between 19th Ave and Tower Hill Rd. York Region operators met Richmond Hill operators onsite and investigated together that day, intermittently noticing a faint odour. The odour was not identified to have originated from York Region infrastructure.
  - **August 12, 2025:** a resident reported an odour complaint related to a construction project at 16th Ave and Mingay Ave. The project manager told resident the project would finish by the end of the summer and provided their contact information. They reminded the project team to keep the air shaft covered when not actively working.
  - **August 13, 2025:** the City of Richmond Hill forwarded a resident’s odour complaint coming from a maintenance hole to the City of Richmond Hill on Newkirk Road. York Region's operator met

the resident onsite, who noted the weather had been extremely hot that day and that the rain cleared the odour. Staff investigated the maintenance hole, found no odour at the time, replaced the odour controlling media, and sealed the maintenance hole.

  - **October 24, 2025:** a resident reported an odour complaint near the intersection of Yonge Street and Gamble Road (19th Avenue). Staff responded to site that day and observed positive air pressure at the maintenance hole lid, allowing some odour to escape. They sealed the maintenance lid and replaced the carbon media upstream of the maintenance hole to resolve the concern.

- **YDSS Aurora SPS:** 1 odour complaint received:
  - September 18, 2025: a resident reported a recurring, nighttime, odour complaint. An operator responded to site and found the station operating normally, including the odour controlling equipment. All doors were closed, and all bins were stored inside. Staff followed up with the resident. The project to eliminate odour sources from the hauled waste receiving facility was commissioned later in September.
- **YDSS East Gwillimbury 2nd Concession SPS:** 1 odour complaint received:
  - **August 27, 2025:** the Town of East Gwillimbury forwarded an odour complaint upstream from the 2nd Concession SPS. Operators responded that day to the station and nearby maintenance holes and found no odour at the time of the investigation. They confirmed all equipment was operating normally, replaced the odour controlling media, and capped two upstream air vents. A response was provided to the resident.
- **YDSS King City SPS:** 2 odour complaints received:
  - **September 26, 2025:** a resident reported an odour complaint. An operator responded to the facility and found the equipment operating normally with the waste bins almost empty. A faint, intermittent odour was detected at the facility and at a maintenance hole upstream of the resident's home. An operator from King Township confirmed their odour controlling equipment was operating normally and flushed the collection system, which purged the odour.
  - **September 29, 2025:** a resident reported an odour complaint. An operator responded to the facility and the residence. They found the facility operating normally, with no odours at the boundary of the facility or the residence. York Region's operators coordinated with King Township's operators to flush the sewers.
- **YDSS Newmarket Bogart Creek SPS:** 2 odour complaints received:
  - **July 24, 2025:** a resident reported a noise complaint directly to staff onsite. Staff took one of the fans out of service and created a work order to get it repaired, which was completed on July 28th.
  - **July 29, 2025:** the same resident advised the noise returned a few days after the fan repair. Staff responded to site and did not notice any unusual noise with the fan that had been repaired but placed it out of service for the weekend anyway. The Supervisor responded to the resident and

asked them to follow up again if the noise persists. In mid-August, staff adjusted sound blocking material at the site as an additional corrective measure.

- **YDSS Oak Ridges AMF:** 2 odour complaints received:
  - **August 21, 2025:** a customer reported an odour complaint, which was referred to the capital delivery project manager. They responded to the customer to explain that the new air management facility will remove odours when it is commissioned.
  - **October 6, 2025:** a customer reported a sewage odour coming from North Lake Road and Yonge Street as well as King Street and Yonge Street. Due to an administrative error, responding to the resident was delayed until after the facility was commissioned shortly thereafter. The customer was understanding and is satisfied with the performance of the new facility.

Report condition 4.6.7 Summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat

In 2025, there were no Alterations sought or completed through an amendment to the CLI ECA. The Oak Ridges AMF was constructed under authorization of an earlier Approval and was commissioned under a Form A1 in October 2025. More details are described below.

In 2025, the following Alterations to the system were competed or authorized through the ECA's pre-authorized alterations process. None of the Alterations to the system were identified as a Significant Drinking Water Threat.

Form SS1 – Alteration to Separate Sewers or Forcemains:

- **Keswick SPS:** programming enhancements to allow operating both forcemains at the same time ensured full station capacity performance during high flow events. A second Form SS1 was issued later in 2025 to return the facility to single forcemain operation after the pumps received repairs.
- **Markham District Energy Wastewater Energy Transfer System:** two new chambers added on the Southeast Collector sewer to enable Markham District Energy's wastewater energy transfer system in Markham. Construction began in September 2025. Commissioning is anticipated in early 2026.
- **North Don Collector Emergency Repair Project:** a portion of the sewer was relocated within the same easement as part of an emergency repair. The earth in its original location had settled significantly and put the sewer at risk of failure. Three maintenance holes were replaced with two and the abandoned portion of the sewer was grouted. The remaining, original section of sewer was relined to reinforce it. The work was completed in April 2025.

Form SS2 – Alteration to Facilities and Components of the Sewage Collection System:

- **Aurora SPS – vibration control measures:** additional pipe supports and flexible couplings were installed to reduce pump vibration. The work was completed in March 2025.

- **Aurora SPS – hauled waste receiving facility:** the holding tank (with two pumps, screening and grit management) was replaced with an automatic rinsing system, complete with a hydropneumatics tank and pumps. This converted the equipment to a closed pipe system. The work was completed at the end of September 2025.
- **Markham Boxgrove (Southeast Collector) Corrosion Control Facility:** modifications were made to the chemical dosing system to address health and safety and reduce water consumption. The modifications include replacing the chemical (hydrogen peroxide) dosing system, replacing drainage pipes and valves for the chemical storage tanks, and adjustments to the electrical and control systems. The work was completed in October 2025.
- **Nobleton SPS:** upgrades to the SPS will increase capacity and add volume storage. The new storage tank will contain three pumps and can act as a second wet well. Two new grinders will be added – one in a new chamber upstream of the existing wet well and one in the new storage tank. Some yard piping will be replaced, and new piping will connect the new storage/wet well and the existing station. Commissioning is anticipated in early 2027.
- **Joe Dales SPS:** two fuel tanks will be replaced with new, safer fuel tanks and some fuel monitoring instruments will be replaced with equivalent equipment. Commissioning is anticipated in early 2026.

Form A1 – Alteration for Equipment Discharging to the Atmosphere:

- **Aurora SPS – hauled waste receiving facility:** the inactive air management equipment was removed because other modifications to the septage receiving station eliminate potential odour emission sources. The work was completed in late September 2025.
- **Nobleton SPS:** the emergency generator will be upgraded to a higher capacity and two air management units will be installed. Commissioning is anticipated in early 2027.
- **Oak Ridges AMF:** the Oak Ridges AMF was originally authorized under a previous ECA and commissioned under a Form A1. The facility design was adapted to equipment availability and site layout during installation. The new treatment units have a smaller footprint and there were no changes to standby power. An engineering review confirmed the facility meets the original performance standards. The Ministry was consulted prior to formalizing the design change through the Form A1. The site was commissioned in October 2025. The AMF is now authorized under the current CLI ECA,

The Region is nearing completion of a multi-site project to bring standby power equipment and fuel storage up to modern safety standards. The scope is different for each site and includes work like repairs and upgrades to standby generator systems, exhaust and fuel piping replacements, ventilation system modernization, and associated fuel tank monitoring enhancements. There will be no change to generator performance or emissions. The following sites had Form A1s issued 2025 or were commissioned in 2025:

- **Aurora SPS:** Form A1 issued in 2025. Commissioning is anticipated in early 2026.
- **Black Creek SPS:** Form A1 issued in 2024. Commissioned in May 2025.

- **King City SPS:** Form A1 issued in 2024. Commissioned in May 2025.
- **Markham South East Collector OCF (SEC Shaft 9):** Form A1 issued in 2025. Commissioned in December 2025.
- **Mount Albert SPS:** Form A1 issued in 2024. Commissioned in February 2025.
- **Pickering AMF (York Durham OCF):** Form A1 issued in 2025. Commissioning is anticipated in early 2026.
- **Pickering Altona SEC AMF (SEC Shaft 6/7):** Form A1 issued in 2025. Commissioned in May 2025.
- **Pickering Fairport AMF (SEC Shaft 4):** Form A1 issued in 2025. Commissioned in May 2025.

Report condition 4.6.8 Summary of all Collection System Overflow(s) and Spill(s) of Sewage, including: dates, volumes and durations. If applicable, also including loading for total suspended solids, BOD, total phosphorus, and total Kjeldahl nitrogen, and sampling results for E.coli, disinfection, any adverse impact(s) and corrective actions, if applicable

The Region tracks and records all environmental incidents. Since York Region operates a Separate Sewer system, unplanned discharges through overflow points are legally defined as Spills. For simplicity, in this report, unplanned discharges through overflow points are referred to as “overflows”. The Region has never planned a discharge of sewage to the environment. If a possible Spill or overflow situation was forecasted, the Region would hire vacuum trucks, install temporary piping or take other measures to prevent possible overflows or Spills.

In 2025, there were three overflows. All occurred on April 3, related to a storm event. Multiple debrief sessions were held after the storm passed. A primary cause identified was the severity and duration of the storm over saturated the ground, causing overland flow to drain into the sewers. Staff diligently continue to complete preventative maintenance to mitigate the risk of future occurrences related to equipment issues. The Operations, Infrastructure Data and Analytics, and Asset System Performance teams are working together to enhance monitoring and early response strategies to reduce the risk of this happening again.

Sutton Woodriver Bend SPS:

- Between 3:02 a.m. and 5:25 a.m. on April 3, about 400 m^3 spilled through the overflow point. One of the two pumps stopped working and the functioning pump could not handle the large amount of water entering the wet well.
- An emergency vacuum truck company pumped out the wet well. Staff took samples at the overflow site and reported the overflow to SAC(#1-N7HNNK), Public Health, and the Lake Simcoe and Region Conservation Authority.
- A York Region Environmental Specialist visited the site and saw some debris in the small stream between the outfall and about 70 meters downstream. There were no signs of harm to plants or animals. The operations crew cleaned up the debris later that day.
- An on-call electrician and the maintenance team came to replace the broken pump. Staff also checked the other pump and confirmed it was not damaged.

- Results of sampling:
  - E. coli (490 CFU/100 mL)
  - BOD5 (3.1 mg/L, 1.2 kg deposited)
  - TKN (0.5 mg/L, 0.2 kg deposited)
  - TP (0.049 mg/L, 0.0196 kg deposited)
  - TSS (32.6 mg/L, 13.0 kg deposited)

Georgina Number 4 SPS:

- Between 3:45 a.m. and 10:45 a.m. on April 3, 363 m³ spilled through the overflow point into a storm sewer, which led to Lake Simcoe. Even with all 3 pumps running at their maximum capacity, the facility was unable to keep pace with the incoming flow rate.
- Staff took samples at the overflow site and reported the overflow to SAC (#1-N7P74F), Public Health, and the Lake Simcoe and Region Conservation Authority. The wet well levels dropped on their own as the storm slowed down.
- A York Region Environmental Specialist visited the lake and saw fast-moving water and some foam. The foam was believed to be caused by the strong flow stirring up natural particles in the stormwater. The lake water was clear with no signs of pollution or debris, and there were no signs of harm to plants or animals at that time.
- Results of sampling:
  - E. coli (320,000 CFU/100 mL)
  - BOD5 (51.6 mg/L, 18.7 kg deposited)
  - TKN (2.9 mg/L, 1.1 kg deposited)
  - TP (0.469 mg/L, 0.170 kg deposited)
  - TSS (185 mg/L, 67.2 kg deposited)

Newmarket SPS:

- Between 9:30 a.m. and 10:02 a.m. on April 3, 289 m³ spilled from the Newmarket SPS overflow point into the East Holland River.
- At 8:45 a.m., the operator on site confirmed the station was not overflowing and slowly reduced the flow going into the downstream forcemain. The downstream Aurora SPS was already running at full capacity, and its equalization tank was filling quickly because of heavy surcharging.
- At 9:30 a.m., the operator saw that an overflow at Newmarket SPS had started. They continued adjusting the flow to minimize the risk of basement flooding and uncontrolled spills. All pumps at the upstream Green Lane SPS were turned off to slow the surges and let water flow smoothly by gravity into the Newmarket SPS.

- Staff took samples and reported the overflow to SAC (#1-N7VP0R), Public Health, and the Lake Simcoe and Region Conservation Authority. There were no signs of harm to plants or animals. The river was very high and moving very fast because of the storm, which helped dilute the overflow.
- Results of sampling:
  - cBOD5 (36.7 mg/L, 10.6 kg deposited)
  - TKN (11.5 mg/L, 3.3 kg deposited)
  - TP (1.3 mg/L, 0.376 kg deposited)
  - TSS (120 mg/L, 34.7 kg deposited).
- Miscommunication resulted in a missed E. coli sample and cBOD5 being sampled and tested instead of BOD5. Staff were reminded of the correct sampling set, including E. coli and BOD5.

Report condition 4.6.9 Summary of efforts made to reduce Collection System Overflows, Spills, treatment facility Overflows, and/or treatment facility Bypasses and the effectiveness of these efforts, including: projects and proposed projects to reduce or eliminate overflows (including expenditures and estimated budget forecast for the following year), a summary of conformance to Procedure F-5-1, and the public reporting approach including proactive efforts

Procedure F-5-1 speaks to proper design of sewage works, and details examples of actions that can reduce the frequency and severity of bypass and overflow events through provision of adequate sewer and pumping station capacity, stand-by equipment, stand-by power, reserve storage capacity in sewers, and/or at treatment facilities and adequate capacity in sewage treatment works. The Region's proactive efforts include capital upgrades, timely repair and maintenance, data analytics, and commitment to continual improvement through certification with ISO 9001 and 14001 to demonstrate successful conformance to procedure F-5-1. Dedicated remote operators monitor the system 24/7 and can operate equipment remotely and/or dispatch field operators to respond to site to minimize the potential risk of Overflows, Spills, and treatment facility Bypasses. Emergency response procedures developed with York Region Public Health and the Region's emergency preparedness staff include protocols for notifying municipal council and the public about incidents that impact service delivery or which pose a risk to public health.

York Region and its local municipality partners also collaborate on inflow and infiltration (I&I) reduction programs. Finding and reducing I&I is a top priority, as it helps maintain the integrity of the collection system, reduces costs associated with pumping and treating stormwater, and mitigates the potential risk of sewer backups and Overflows. Through monitoring rainfall and sanitary sewer flow, the Region identifies areas with a high response to rain events. York Region and its local municipalities then conduct further investigations and implement programs in priority areas to pinpoint and remediate I&I sources. By reducing the volume of extraneous flows in the sanitary sewer system, York Region maximizes the existing capacity of sanitary infrastructure. York Region also applies I&I reduction considerations into the design and construction of new developments to proactively reduce the potential of I&I, extending the lifespan of new sanitary systems. To learn more about how I&I is cooperatively managed in York Region, visit www.york.ca/iandi

In 2025, approximately $145.4 million was invested Region-wide on Capital projects, excluding work at the Duffin Creek WPCP. This total includes final commissioning of a new remote operations center to ensure resilient and secure technology is available to remote operators for monitoring and controlling all Regional water and wastewater facilities. For 2026, approximately $236.9 million is budgeted as part of the 10-year Capital plan for all wastewater portfolio programs, excluding work at the Duffin Creek WPCP.

For repair and maintenance of the Region's wastewater works, that includes activities such as equipment repairs, planned maintenance and program related inspections, approximately $2.1 million was spent in 2025, and for 2026 an estimated $4.1 million is planned in the Region's annual budget. These expenditures support conformance with Procedure F-5-1.

For 2025, key projects included (all figures are approximate):

- $96.8 million for various work relating to sewers and forcemains, including:
  - $66.8 million for gravity sewer construction from Rutherford Road to Vaughan Humber SPS
  - $12.7 million for wastewater servicing design and construction in Northeast Vaughan
  - $12.7 million for emergency repairs
  - $4.4 million for rehabilitation design and construction to extend the life of the infrastructure
- $18.8 million for projects in support of the North York Durham Sewage System (YDSS) expansion, including:
  - $11.4 million for upgrades and expansion design to sewers
  - $3.7 million for Newmarket SPS upgrades design
  - $2.9 million for program management
  - $754,000 for 2nd Concession SPS upgrades design
- $18 million at Vaughan Humber SPS for construction of the replacement facility
- $2.1 million at various Southeast Collector facilities for fuel oil upgrades construction, facility upgrades construction and chemical dosing system upgrades design
- $1.8 million at Markham Leslie SPS for electrical upgrades construction, valve and gate replacement upgrades construction, and standby power generator replacement
- $1.4 million at Aurora SPS for septage haulage station upgrades construction, pump vibration reduction measures construction, fuel oil upgrades construction, facility upgrades design and diversion pipe design
- $623,000 at Nobleton SPS for upgrades design and construction to support growth
- $415,000 at Bogart Creek SPS for facility rehabilitation design including structural, mechanical, and process instrumentation devices
- $397,000 at Keswick SPS to upgrade mechanical, electrical, piping and ventilation systems and install a new channel grinder
- $317,000 at Joe Dales SPS for fuel oil upgrades construction
- $220,000 at Black Creek SPS for fuel oil upgrades construction

- $203,000 at Queensville SPS, Holland Landing SPS, and 2nd Concession SPS to address deficiencies
- $132,000 at Pine Valley SPS and King City SPS for facility rehabilitation construction
- $120,000 at King City SPS for fuel oil upgrades construction

For 2026, forecasted investments include (all figures are approximate):

- $127.5 million for various work relating to sewers and forcemains, including:
  - $77 million for gravity sewer construction from Rutherford Road to Vaughan Humber SPS
  - $24.5 million for rehabilitation design and construction to extend the life of the infrastructure
  - $12.3 million for wastewater servicing design and construction in Northeast Vaughan
  - $8.1 million for YDSS primary trunk twinning design
  - $260,000 for YDSS optimization
- $47.5 million for projects in support of the North York Durham Sewage System (YDSS) expansion, including:
  - $28 million for upgrades and expansion design to sewers
  - $16.2 million at Newmarket SPS for upgrades design
  - $2.3 million for program management
  - $1.1 million at 2nd Concession SPS upgrades design
- $16.9 million for Vaughan Humber SPS for construction of the replacement facility
- $11 million at Nobleton SPS for facility upgrades construction to support population growth
- $3.5 million at Bogart Creek SPS for facility rehabilitation design and construction
- $3 million at Markham Leslie SPS for electrical upgrades construction and standby power generator replacement
- $1.7 million at Queensville SPS, Holland Landing SPS, and 2nd Concession SPS to address deficiencies
- $1 million at various facilities to finish fuel oil appliance upgrades construction
- $897,000 at Aurora SPS for facility upgrades design and construction
- $877,000 at High Street SPS for facility upgrades design
- $635,000 at Woodriver Bend SPS for facility upgrades design
- $330,000 at South River Road SPS for facility upgrades construction
- $125,000 at King City SPS for rehabilitation design and construction

APPENDIX 1: 2025 CALIBRATIONS OF THE MAJOR FACILITY MONITORING EQUIPMENT (FLOWMETERS)

Note: Sutton High Street SPS, Sutton Wood River Bend SPS, and Schomberg Dr Kay SPS do not have onsite flow monitoring. Their flows are monitored as Influent at the downstream treatment facilities.

Keswick sub-system

- Keswick Georgina No. 4 SPS: October 31, 2025
- Keswick SPS Pumps 1 to 4: December 3, 2025
- Keswick Joe Dales SPS: September 9, 2025

Mount Albert sub-system

- Mount Albert SPS: January 24, 2025

Nobleton sub-system

- Nobleton/Janet Ave SPS: November 27, 2025

Schomberg sub-system

- Schomberg Dr. Kay SPS: July 24, 2025

Sutton sub-system

- Sutton High Street SPS: July 13, 2025
- Sutton South River SPS: flow from this facility is not directly measured – it flows into Woodriver Bend SPS
- Sutton Woodriver Bend SPS: July 13, 2025

York-Durham Sewage System

Aurora

- Aurora Equalization Tank Overflow: February 6, 2025
- Aurora SPS Pumps 1 to 6: September 23, 2025
- Aurora SPS Equalization Tank Discharge to YDSS: February 5, 2025
- Aurora SPS Hauled Waste Receiving Facility Flowmeters 1 to 3: August 14, 2025
- Henderson SPS Pumps 1 to 4: November 25, 2025

East Gwillimbury

- East Gwillimbury 2nd Concession SPS Forcemain: October 16, 2025

- East Gwillimbury 2nd Concession SPS Wet Well Overflow: October 16, 2025
- Holland Landing SPS Forcemains 1 and 2: October 10, 2025
- Holland Landing SPS Wet Well Overflow: October 10, 2025
- Queensville West SPS Forcemains 1 and 2: February 20, 2025
- Queensville West SPS Wet Well Overflow: February 20, 2025

King City SPS

- King City SPS: April 14, 2025

Markham

- Markham Leslie SPS Discharge Headers– North and South: September 16, 2025

Newmarket

- Newmarket Bogart Creek SPS Discharge to Forcemains 1 and 2: November 19, 2025
- Newmarket Greenlane Interim SPS: January 24, 2025
- Newmarket SPS: February 3, 2025
- Newmarket SPS Equalization Tank Effluent Pumps 1 and 2: November 10, 2025

Vaughan

- Vaughan Black Creek SPS: May 13, 2025
- Vaughan Humber SPS Forcemains 1 and 2: November 24, 2025
- Vaughan Pine Valley SPS: July 18, 2025

APPENDIX 2: GLOSSARY

Air Management Facility (AMF) – A facility or structure which help reduce odours and infrastructure corrosion caused by gases that can be generated in wastewater.

Alteration – Extend, replace, upgrade, modify, add to, enlarge, or retire part of, the wastewater system. Some Alterations do not require approval, some are preauthorized, and some require Ministry review and approval.

BOD_5 – Five-Day Biochemical Oxygen Demand – a test that measures how much oxygen is used by biological organisms that consume carbon-based and nitrogen-based matter in the wastewater.

Bypass – A diversion of sewage around one or more unit processes at a treatment facility. This does not include preliminary screening and grit removal. Bypassed flows return to the treatment train before the final effluent sampling point and discharge to the environment through the outfall.

CFU - Colony Forming Units, a method of counting or estimating the concentration of bacteria in a sample.

Collection System Overflow (overflow) – A discharge to the environment from an engineered failure point. Overflows are a type of Spill. In the collection system, these engineered overflow points discharge to the environment where the risk of adverse effects is lowest. Collection System Overflows through engineered points minimize the risk of basement flooding or uncontrolled Spills from elsewhere in the system. Overflows at treatment plants would also discharge to the environment at an engineered location. York Region's treatment plants do not have engineered Overflow points because other flow controls mitigate the risk of adverse effects.

E. coli – A type of bacteria found in fecal matter. With certain exceptions, most species of E. coli do not cause disease. Coliform testing provides an indicator of the effectiveness of wastewater treatment.

Environmental Compliance Approval (ECA) – A permit to operate wastewater facilities, issued by the Ministry of Environment, Conservation and Parks.

Form SS1, Form SS2, and Form A1 – Official Ministry Forms for documenting preauthorized alterations in the Consolidated Linear Infrastructure ECA.

Hydrogen Sulfide (H2S) – A gas that can be released from wastewater, which can cause corrosion and odours.

Inflow and Infiltration (I&I) – Water that enters the sanitary sewage system through leaking infrastructure or overland flow into maintenance holes. The Region has a collaborative approach to managing I&I with partner municipalities and the development community.

Milligram per Litre (mg/L) – A unit of measure for the concentration of a parameter. It is the same as parts per million (ppm).

Ministry of the Environment, Conservation, and Parks (MECP, or Ministry) – Provincial regulatory agency responsible for overseeing the water and wastewater in Ontario.

MECP Spills Action Centre (SAC) – Manages reports of spills, adverse drinking water results and environmental concerns. SAC operates 24 hours per day, 7 days per week.

pH – Index of hydrogen ion activity as an indicator of corrosiveness. A solution of pH from 0-7 is acidic, 7 is neutral, and 7-14 is alkaline or basic.

Spill – As defined in the Ontario *Environmental Protection Act, R.S.O. 1990, c. E.19*, a Spill is a direct or indirect release of a pollutant into the natural environment from infrastructure or assets, when the release is out of the course of normal events, and which causes or has the potential to cause adverse effects, such as harm to wildlife, danger to persons, and property damage.

Sewage Pumping Station (SPS) – A facility that helps to move sewage through the system by pressurizing it and sometimes removing solids from the flows.

Total Ammonia Nitrogen (TAN) – A measurement of the total amount of ionized and unionized ammonia in a sample.

Total Kjeldahl Nitrogen (TKN) – A measurement of the total amount of organic nitrogen and ammonia nitrogen in a sample.

Total Phosphorus (TP) – A measurement of the total amount of dissolved and particulate phosphorus in a sample.

Total Suspended Solids (TSS) – A measurement of the total amount of suspended particles in water.

Water Resource Recovery Facility (WRRF), Water Pollution Control Plant (WPCP) – Also known as a sewage treatment plant or a wastewater treatment facility. It is where the sewage is treated before returning it to the environment.

York Durham Sewage System (YDSS) – The collection system infrastructure that services much of York Region and conveys wastewater to Peel Region and Durham Region for treatment.