

# Annual Update Waste Disposal Sites

Township of  
South Frontenac

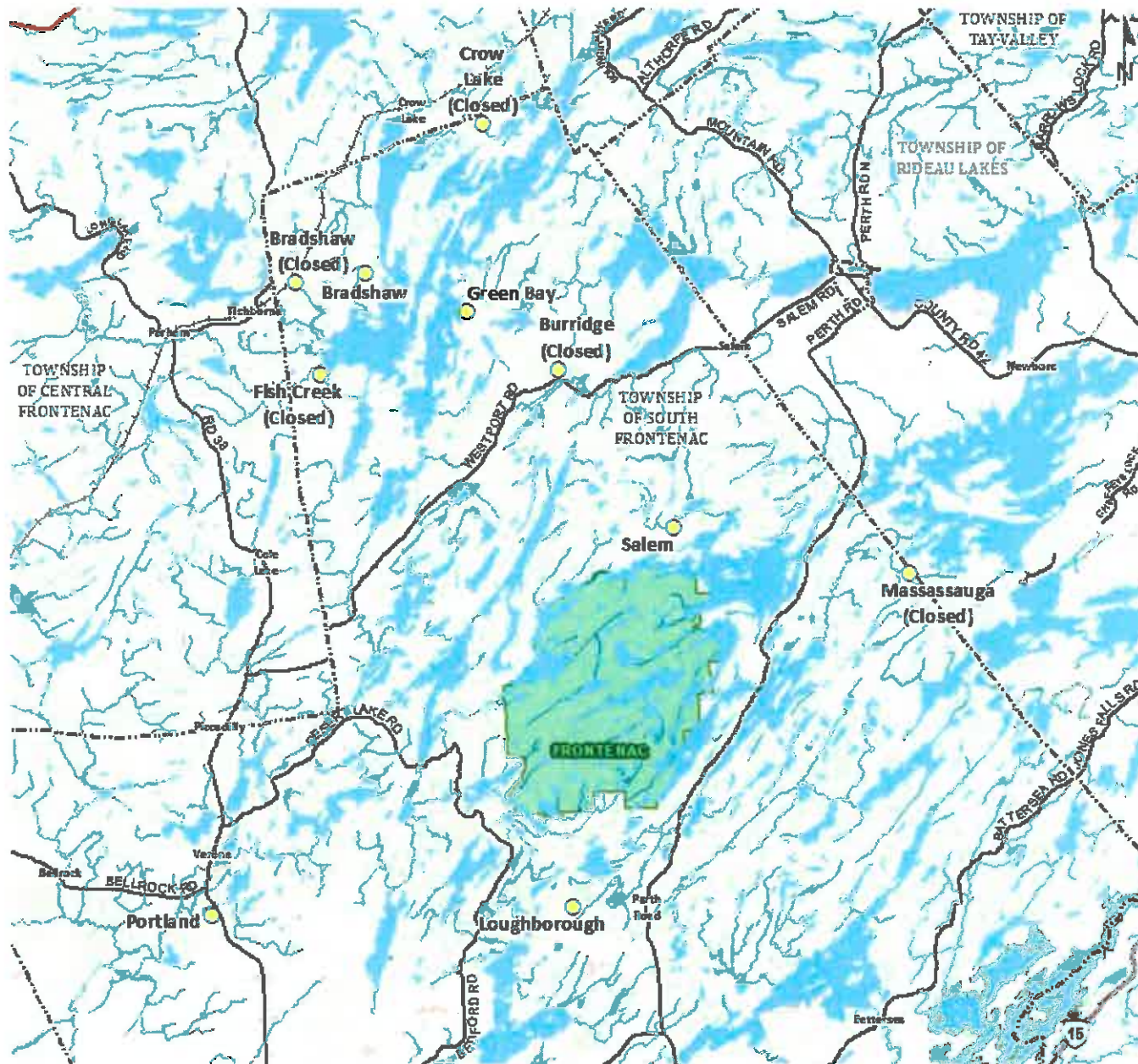
April 16, 2019





# Overview

- Current System Overview
  - Annual Monitoring & Reporting
  - 5 Active Waste Disposal Sites (landfill)
  - 5 Closed Sites (former landfills)







# Overview

- Annual Monitoring & Reporting
  - Collection of required groundwater, surface water samples, and landfill gas annually
  - Completion of updated topographic capacity surveys (active landfills)
  - Ministry Guidelines and Accredited Lab
  - Inspection
  - Operational information
  - Summarized in annual report to the Ministry, as required by ECA (PC of A)



# Portland Waste Disposal Site

- Operating as a landfill with transfer station
- Groundwater, surface waste, survey, report
- Groundwater met compliance criteria in overburden
- New bedrock wells required to assess bedrock
  - Waiting on Ministry comments/approval of groundwater recommendations
- Surface water recommendations approved in 2018; new background surface water location to be established in 2019 to assess compliance
- Some minor well repairs required in 2019
- Operated in compliance with ECA



# Loughborough Waste Disposal Site

- Operating as a landfill with transfer station
- Groundwater, survey, report
- Phase 1 was capped with clay in late 2018; topsoil and seeding to occur in early 2019
- Groundwater compliance requires further assessment; PFAS analysis to be completed in 2019
- Remaining capacity of Phase 2 can be realized upon confirmation of groundwater compliance
- Preliminary surface water program to begin in 2019
- Some well repairs
- Inspections of Phase 1 final cover required in 2019
- Operated in compliance with ECA



# Bradshaw Waste Disposal Site

- Operating as a landfill with transfer station
- Groundwater, surface water, landfill gas, survey, report
- Groundwater met compliance criteria
- Surface water impacted to a degree but stable; new downstream location recommended
- Waiting on Ministry comment/approval of reductions for GW and SW
- No landfill gas detected in 2018
- Operated in compliance with PC of A
- *Old site closed and no monitoring or reporting*



# Salem Waste Disposal Site

- Operating as a landfill with a transfer station
- Groundwater, surface water, survey, report
- Groundwater and surface water did not meet compliance criteria; vegetation and aquatic community assessment completed in 2018
- Ecological studies did not identify any adverse impacts from site; recommended to continue biennially given increasing concentrations and continued non-compliance
- The east extent of the waste mound should be capped and closed; mound could be redesigned
- Operated in compliance with ECA





# Green Bay Waste Disposal Site

- Operating as a landfill and transfer station
- Groundwater, surface water, landfill gas, survey, report
- Groundwater and surface water met compliance criteria
  - *Surface water trigger mechanism was proposed in 2018 based on Ministry comments*
- Waiting on Ministry comments/approval for GW reductions
- No landfill gas detected
- Landfill footprint to be staked in 2019
- Operated in compliance with PC of A



# Fish Creek Waste Disposal Site

- Closed landfill
- Amendment to ECA in 2018
- Reduced monitoring program (annual groundwater, surface water)
- Reduced reporting frequency (6 years (2022))
- Groundwater and surface water met compliance criteria
- Decommissioning of wells required in 2019 (ECA)
- Observed to be in good condition with no evidence of erosion, seeps, litter, or vermin present
- Operated in compliance with ECA



# Crow Lake Waste Disposal Site

- Closed landfill
- Groundwater, surface water, report (5 years (2018))
- New background well in 2018; other wells replaced
- Decommissioning of old wells in 2019
- Groundwater and surface water met compliance criteria
- Observed to be in good condition with no evidence of erosion, seeps, litter, or vermin present
- Operated in compliance with ECA



# Massassauga Waste Disposal Site

- Closed landfill
- Groundwater, surface water, report
- Groundwater and surface water met compliance criteria
- Waiting on Ministry comment/approval for GW and SW recommendations
- Observed to be in good condition with no evidence of erosion, seeps, litter, or vermin
- Operated in compliance with ECA





# Burridge Waste Disposal Site

- Closed landfill
- Every 3 years: groundwater, surface water, report
  - Completed in 2018
- Groundwater and surface water met compliance criteria
- Observed to be in good condition with no evidence of erosion, seeps, litter or vermin present
- Operated in compliance with PC of A



# Summary

- Training  
(health and safety, on the job in 2018; waste site attendant training and waste hauling vehicle operators completed in 2017)
- Aesthetics  
(Generally in good order, clean-up of blown litter, cover more often, minor well repairs)
- Complaints and Incidents  
(none)



# Site Capacity

Year	Portland	Loughborough*	Bradshaw	Salem	Green Bay	Municipality
2017	27	7.6	9.6	9.5	15	20
2018	35	7.9	11	14	14	26

\*Loughborough values for Phase 1 and 2A only.

Due to operational changes (improvements) over past 5 years, average annual waste deposition rates have decreased, resulting in increased Site life overall (increase of ~6 years in 2018).



# Comments and Questions

