

# SPENCERVILLE LAGOONS

TOWNSHIP OF EDWARDSBURGH CARDINAL

MAY 26<sup>th</sup>, 2025



# ENVIRONMENTAL ASSESSMENT PROCESS

In Ontario, municipal wastewater projects are subject to the provisions of the Environmental Assessment Act (EAA). The Class Environmental Assessment Document (Class EA) is an approved planning document which describes the process which municipalities must follow to meet the requirements of the EAA.

The Class EA process requires:

- Consultation with the public and agencies potentially affected by the proposed project;
- Consideration of a reasonable range of alternatives; and
- Documentation of the planning process.

# SPENCERVILLE LAGOON

- Spencerville Lagoon is located at 2301 County Road 21, Spencerville, ON
- Certificate of Approval Number 3-1377-87-896
  - Spring Discharge
  - Effluent Limits (as modified by Wastewater Systems Effluent Regulation)

| Year | Volume of Discharge<br>(m <sup>3</sup> /d) | % of Rated Capacity |
|------|--------------------------------------------|---------------------|
| 2019 | 79,915                                     | 69%                 |
| 2020 | 83,004                                     | 72%                 |
| 2021 | 68,502                                     | 59%                 |
| 2022 | 75,629                                     | 65%                 |
| 2023 | 97,204                                     | 84%                 |
| 2024 | 74,040                                     | 64%                 |

# Problem Statement

The Township of Edwardsburgh Cardinal has identified opportunities for growth within the serviced area of Spencerville. To prepare for these potential growth opportunities, the Township has initiated the environmental assessment process to determine the requirements to increase the rated capacity of the Spencerville Lagoon.

- Current Certificate of Approval:
  - Permits a single discharge per year
  - March 15 to April 21



# Spencerville Lagoons Effluent Discharge Quality

| Year        | BOD5 | Suspended Solids | Total Phosphorus | Total Ammonia |
|-------------|------|------------------|------------------|---------------|
| 2012        | 6.08 | 11.8             | 0.12             | 5.91          |
| 2013        | 8.33 | 8.5              | 0.12             | 4.5           |
| 2014        | 5.75 | 4.8              | 0.08             | 3.9           |
| 2015        | 6.4  | 12.4             | 0.16             | 6.3           |
| 2016        | 4.8  | 9.4              | 0.1              | 4.7           |
| 2017 Spring | 5    | 8.5              | 0.12             | 2.9           |
| 2017 Fall   | 3.2  | 3.7              | 0.06             | 0.5           |
| 2018        | 5.5  | 11.9             | 0.16             | 2.6           |
| 2019        | 5.4  | 14.3             | 0.16             | 3.9           |
| 2020        | 5.4  | 10.5             | 0.16             | 3.6           |
| 2021        | 6.3  | 10               | 0.15             | 5.6           |
| 2022        | 3.8  | 9.7              | 0.1              | 5.2           |
| 2023        | 5.3  | 7.8              | 0.11             | 3.9           |
| Min         | 3.2  | 3.7              | 0.06             | 0.5           |
| Max         | 8.33 | 14.3             | 0.16             | 6.3           |
| Average     | 5.48 | 9.48             | 0.12             | 4.12          |
| CoA Limits  | 25   | 30               | 1                | 20            |

## Potential Rating Increase

- Potential to increase the rated capacity of the Spencerville Lagoon by incorporating a fall discharge.
- The acceptance of a fall discharge by the Ministry of the Environment, Conservation and Parks will nearly double the capacity of the Spencerville Lagoons.
- Benefits – does not require capital funds to increase the capacity.
- Need approval through the preparation of an Assimilative Capacity Study.

# Assimilative Capacity Study

- Assimilative Capacity Study has been prepared to summarize the impact of a fall discharge on the South Nation River.
- Required to obtain approval as part of the environmental assessment process.
- Need to demonstrate that there will not be a negatively impact on the receiving stream as a result of the new fall discharge.
- An Assimilative Capacity Study was submitted to the Ministry of the Environment, Conservation and Parks and EVB has been addressing comments by the MECP. Recently, a new MECP reviewer has been assigned, and we have a new set of comments to address.



## Next Steps

- Address comments by MECP Reviewer on Assimilative Capacity Study (June 2025)
- Host a Public Information Centre (July 2025)
- Prepare an Environmental Study Report (ESR) to support the recommendation of introducing a new fall discharge (September 2025)
- Circulate the ESR to the public and review agencies for comment (October 2025)

# QUESTIONS?

