Frequently Asked Questions (FAQ)

Public Consultation Centre #1 for Tavistock Wastewater Treatment Plant Class Environmental Assessment

An in-person Public Consultation Centre (PCC) was held on December 11, 2025, for the Tavistock Wastewater Treatment Plant's Class Environmental Assessment.

General questions from participants follow below.

1. **Q: What analyses were performed to evaluate odour and noise in the upcoming expansion?**

   A: Historically odours at the WWTP have been caused by a lack of aeration capacity during peak influent loading conditions. In 2025 Oxford staff increased the size of one of the aeration blowers to add additional aeration capacity. Staff also monitor the WWTP and add calcium nitrate as a supplemental oxygen source if needed to mitigate odours.

   Any WWTP upgrade would include further upgrades of the aeration system to provide peak aeration capacity to prevent septic conditions which can lead to odours. In addition, Oxford is also working with sewer users to reduce peak loadings to the WWTP.

   With respect to odour produced during lagoon cleanouts, the County will look to implement best management practices on future lagoon sludge removal operations based on recent successful work at the Plattsville WWTP which was completed without draining the lagoon.

   Noise at the WWTP is primarily produced by the aeration blowers. Upgraded blowers will be designed in accordance with MECP guidelines, adhering to maximum allowable noise levels, and will be installed inside buildings to minimize noise impacts. Of the two alternatives evaluated, it is expected that both options would have similar noise emissions.

   Finally, alternative designs will consider the MECP's guidelines with respect to separation distances from sensitive receivers and other mitigation methods such as berms or vegetation plantings.

2. **Q: Do you have high level costs for each of the 2 alternatives considered at this point?**

   A: High level Capital Costs for Alternative 4 has been estimated to be approximately $20 – $25 Million dollars. Capital Costs for Alternative 5 has been estimated to be approximately $40 – $45 Million dollars. Estimates will be refined during Phase three for the preferred alternative.

3. **Q: What was considered in terms of aesthetic impacts?**

   A: Considered aesthetic impacts include the construction of new tankage, process buildings, and unit processes (filters, etc.) which would add new features to the WWTP landscape. It is expected that aesthetic impacts could be mitigated through the planting of trees, construction of berms and/or other landscaping measures.

4. **Q: Will the recommended Alternative (Alternate 4 – Partial Mechanical Upgrade) be sufficient beyond the 20-year study period?**

   A: Alternative 4 (and also Alternative 5) would be designed to accommodate the projected flows to 2046 or until flow reach 3,905 m^3/d, whichever occurs first. Once flows reach the rated capacity of the upgraded facility (regardless of if Alternative 4 or 5 is chosen) the plant will require an upgrade.

   A major requirement of the proposed upgrades (whether Alternatives 4 or 5) is to provide capacity to treat greater influent wastewater flows while maintaining or reducing the loading (mass) of specific treatment parameters (suspended solids, phosphorus, nitrogen, etc.) to the Thames River. This requires a reduction in the concentration of the parameters in the effluent and a higher degree of treatment. In addition, monthly effluent flows to the Thames River also need to vary to consider the changes in sensitivity of the Thames over the year.

   While there is likely sufficient space within current Tavistock WWTP property to allow for post 2046 expansion of unit processes (filters, aeration, etc.), it is expected that the current increase (to 3,905 m^3/d) likely represents the upper limit of the assimilative capacity of the Thames River at this location with respect to effluent volume and loading.

5. **Q: What is the plan to fund the expansion of the WWTP? Is the plan to fund this via development charges or will it be charged to existing users via rate increases or supplemental charges?**

A: Capital projects are funded through a variety of methods including: development charges, which ensure that growth pays for growth; reserve funds; debt funding; and available grants.

Development charges are fees that are paid by new development to fund the growth-related capital cost of services constructed throughout Oxford County. Development charges play an important part in how growth-related infrastructure is financed. Each new or expanded residential and non-residential development requires increased municipal infrastructure and services to function efficiently and effectively.

The County completed a water and wastewater master plan in 2024 which sets out a long-term strategy for providing water and wastewater services to the County out to 2046. This plan outlines high level project needs and cost estimates for necessary capital expansions. Identified projects (including the Tavistock WWTP) have already been accounted for in the development charges study and the County's 10-year capital plan. Estimates will be refined during Phase three for the preferred alternative.

6. **Q: What is the construction timeline difference between Alternate 4 and 5?**

A: It is expected that Alternative 4 will have the shortest construction duration. It is estimated that Alternate 4 could take approximately 18 months to construct and Alternate 5 could take approximately 30 months to construct. Please note these timelines are tentative and will be refined during Phase Three for the preferred alternative.

7. **Q: What additional land would be required for Alternates 4 and 5?**

A: It is anticipated that either upgrades will be constructed on WWTP's existing property and near the current location of the intermittent sand filters. This will be explored further in Phase Three.

8. **Q: Is the construction cost estimated based on the time of construction or on today's prices?**

A: Reported construction costs are estimated based on current prices, feedback from equipment suppliers and recently tendered construction projects.

9. **Q: Why is expansion considered only for the next 20-year period? Why is it not considered beyond 20-year period?**

A: A +/- 20-year period is typically considered a reasonable period for forecasting population growth and therefore WWTP capacity demands. Population forecasting beyond 20-years becomes increasingly difficult. Longer timescales (40 - 50 years, etc.) can overestimate required WWTP capacity and result in facilities that are significantly more expensive than may have been required or are under utilized and therefore require refurbishment before the asset can be sufficiently utilized. It is considered better practice to size the facility appropriately and allocate space to make future expansions more straightforward.

10 **Q: What is the difference between the quality of effluent and Operational and Maintenance (O&M) cost between Alternate 4 and 5?**

A: Alternate 4 will require less staff time to operate, generally has less equipment and is therefore anticipated to have a lower O&M cost. Quality of effluent discharged from the WWTP will be held to the same effluent criteria regardless of alternative chosen.

11 **Q: What will be the recommended expansion in 2046 considering population growth on the same scale?**

A: Recommended expansion in 2046 will depend on various factors including of the magnitude of the required upgrade and so it is challenging to say what kind of upgrade could be required. The most limiting factor will likely be the ability of the Thames River to receive more effluent.

12 **Q: What is the cost difference between treating sludge from a mechanical WWTP vs a lagoon-based system?**

A: Mechanical WWTP’s produce sludge every day which must be managed and stored as it is produced. Sludge needs to be digested to create a stable material and meet specific pathogen level requirements depending on the ultimate storage route. Processes such as sludge dewatering (to reduce volume) are often also completed to reduce sludge storage requirements however these are balanced against the capital and operational costs of these additional systems.

In a lagoon-based system, sludge digests slowly on the bottom of the lagoon and is removed periodically as needed (approximately every ~10 years or so) which results in a periodic, one-time, sludge management cost and is typically completed by a third-party contractor. The County will look to implement best

management practices on future lagoon sludge removal operations based on recent successful work completed at the Plattsville WWTP.

The capital and operational cost of management of sludge from mechanical WWTP's is thought to be greater than or equal to the sludge management costs associated with lagoon-based systems.

13 **Q: What will be approximate cost incurred per household for Alternate 4 and Alternate 5?**

A: Oxford County reviews and sets water and wastewater rates annually as part of the budget process. Rates are set specific to the community water and wastewater systems. They consider expenses, revenues, capital contributions, funding for reserves and future repairs and maintenance based on the County's asset management plan. To learn more about Oxford County's water and wastewater policy: https://www.oxfordcounty.ca/services-for-you/water-wastewater/rates-and-bylaws/#pane-a7d5b2abdf7a48e09bf9ae56fe484d3c.

14 Q: As the existing WWTP is situated near the core of Tavistock, can it be moved to another area during this expansion?

A: This alternative (6) was reviewed and discarded during this evaluation. This alternative was determined to not be feasible due to the significant costs associated with land acquisition and conveying wastewater to a new location as well as the resulting environmental impacts and consumption of existing agricultural land.

Contact for more information

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