



THE MUNICIPALITY OF
LAMBTON SHORES

Spot Dredging Operations

Overview

- Spot dredging has historically occurred annually in Port Franks at the beginning of May
- Although the Municipality has completed this work in the past, there is no requirement to do so



Spot Dredging Overview



- Focus has generally been marina, boat launch and yacht club area
- Done by barge and excavator
- Dredged materials are removed off site
- Barge is static with no propulsion method



Spot Dredging Overview



- Cost is based on per cubic metre of removed material
- Additional costs include mobilization of equipment and restoration
- New consideration for disposal of materials per Excess Soils Legislation
- Amount of material is difficult to predict until late spring when staff complete depth soundings
- The budget is generally based on previous year's operations



Excess Soils Legislation

- O. Reg 406/19: Onsite and Excess Soil Management now in effect (January 1, 2023)
- Applies to materials being removed from the river
- Material needs to be stored until dry enough for testing
- Once dried, test for contaminants and prepare report by qualified person.
- If NOT contaminated, can be repurposed for beneficial use (municipal projects)
- If contaminated, will need to be disposed of in landfill or other approved site depending on contaminants



Excess Soils – Port Franks Material

- Samples were collected prior to the dredge to determine any significant contaminants. None found at this time.
- Dredge completed May 2023
- Material brought to Northville Yard to dry out (3,120 m³)
- Samples collected by WSP once material deemed dry (June 2023)
- 24 samples submitted to lab for testing based on legislative parameters for reuse
- The salt-related parameters exceeded established limits for agricultural reuse.
- Reuse options are limited



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Soil Reuse Options

- The excess soil is finally placed at one of the following locations:
 - *where it is reasonable to expect that the soil will be affected by the same chemicals as a result of continued application of a substance for the safety of vehicular or pedestrian traffic under conditions of snow or ice;*
 - *at an industrial or commercial property to which non-potable groundwater standards would be applicable; or*
 - *at least 1.5 metres below the surface of the soil.*
- The excess soil is not finally placed at any of the following locations:
 - *within 30 metres of a waterbody;*
 - *within 100 metres of a potable water well or area with an intended property use that may require a potable water well; or,*
 - *a location that will be used for growing crops or pasturing livestock unless the excess soil is placed 1.5 metres or greater below the soil surface.*



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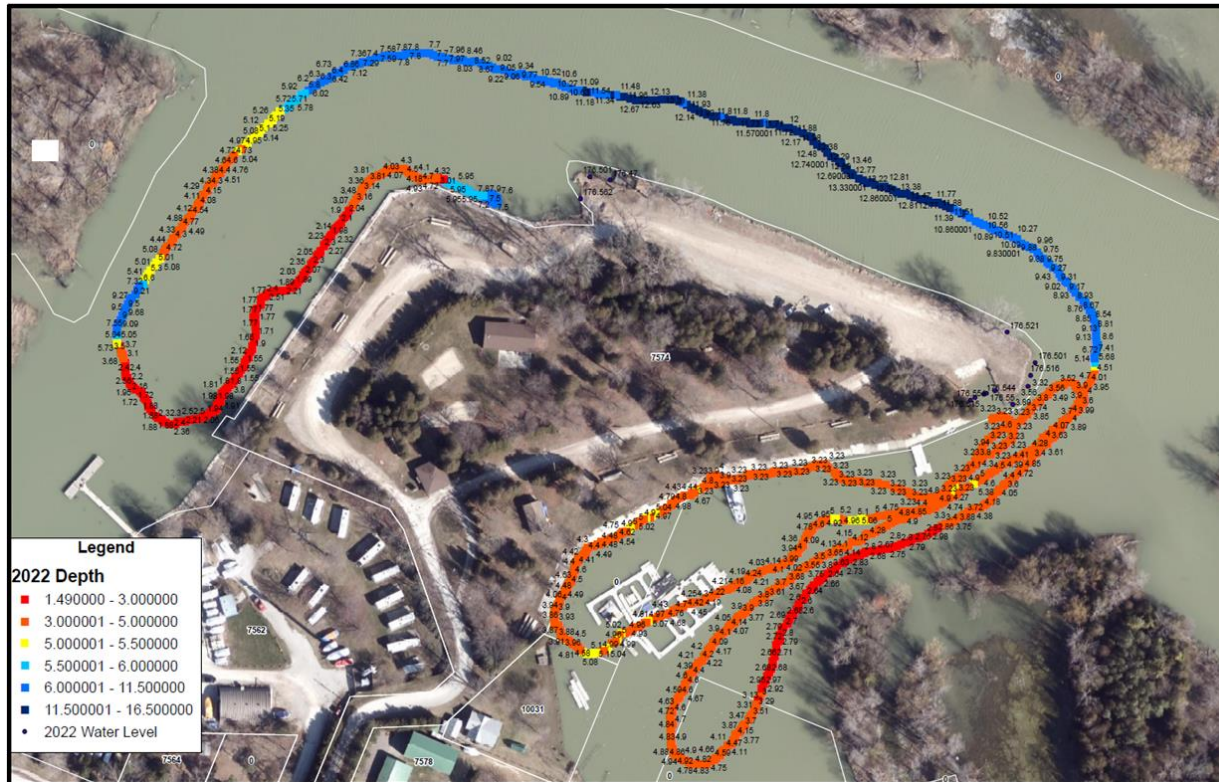
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Soil Reuse Options

- Staff met with WSP to further clarify suitable reuse options.
- Based on the lab results, the two most likely scenarios is either to use the material as fill for a quarry site, or to send the material to landfill.
- Staff have received a high-level estimate to send the material to a quarry as fill. The estimate, including trucking is \$100,000.
- Landfill costs are estimated to be slightly higher.



2022 Soundings Pre-Dredge



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2023 Soundings Pre-Dredge

Spot Dredging - 2023 Soundings - Pre-Dredge



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2023 Approximate Costs by Area

- Yacht Club Slips (Area 1) – est. 2,000 m³
 - Dredge Costs: \$90,000
 - Disposal Costs: \$66,660
- Pontoon area (Area 2) – est. 440 m³
 - Dredge Costs: \$19,800
 - Disposal Costs: \$14,665
- Boat Launch area (Area 3) – est. 560 m³
 - Dredge Costs: \$25,200
 - Disposal Costs: \$18,665



2023 Budget Implications

- The 2023 budget included \$200,000 for dredging in Port Franks
- This includes both the prop wash and the spot dredging contracts
- Funds spent to date in Port Franks for dredging are: \$243,461 which includes prop washing, spot dredging and material testing costs.
- An additional \$100,000 will be incurred in 2023 for material disposal.



2024 Budget Implications

- \$200,000 has been included for dredging in Port Franks
- This amount includes funds for the contract for prop washing
- Council direction is needed for future spot dredging considerations



Options – 1) Status Quo

- Based on predicted water levels for 2024, it is assumed that a status quo operation would mean removal of the same quantity of material as previous years (+/- 3,200 m³)
- It is assumed that future sampling will yield same results with limited soil reuse options
- It is assumed that material will need to be transported to either a registered site or landfill annually



Options – 1) Status Quo

- If this option is selected, funds will need to be included for material disposal and testing annually, in addition to the spot dredge contract.



Options – 2) Dredge Targeted areas

Area 2 and 3

Spot Dredging - 2023 Soundings -
Pre-Dredge



Area 1 (Yacht Club slips) – estimated 2,000 m³

Area 2 (Pontoon area) – estimated 440 m³

Area 3 (Boat Launch area) – estimated 560 m³



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Options – 2) Dredge Targeted Areas

Area 2 and 3

- The Municipality has an agreement with the Port Franks Yacht Club for slips on the west side of the marina.
- These slips are administered by the Club and fees are collected by the Club and submitted to the Municipality. Fees collected are consistent with the Municipality's Fee By-Law.
- Most of the dredging material is removed from the Yacht Club slip area (approximately 2,000 m³ of 3,120 m³ in 2023).
- The agreement with the Yacht Club expired December 31, 2023



Options – 2) Dredge Targeted Areas

Area 2 and 3

- The agreement includes the following:

The Municipality is responsible for the dredging in the slips and the river in front of the slips, to a depth of approximately four feet. Dredging may not occur if costs of dredging exceed the boat slip revenues, in which case the agreement is null and void and all deposits will be returned.

- Revenue received from the Yacht Club in 2023 was \$58,483.50 + HST
- Dredging costs for the Yacht Club area in 2023 were approximately:
 - Dredge Costs: \$90,000
 - Disposal Costs: \$66,660 (based on estimate of \$100,000 for disposal of all material)



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Options – 2) Dredge Targeted Areas

Area 2 and 3

- Council could eliminate the Yacht Club area from the municipal dredging operations or have this area fully funded by the Yacht Club if they choose to accept the terms.
- The cost to the Yacht Club would be somewhat difficult to predict year-to-year and could not be confirmed until completion of the dredge operation. In 2023, the cost to dredge the Yacht Club area was \$90,000 and an additional estimated \$66,660 to dispose of materials for a total of \$156,660.
- To cover the dredging operation in the Yacht Club area, the cost to each slip would average approximately \$6,800.



Options – 2) Dredge Targeted Areas

Area 2 and 3

- If this option is selected, Council would need to direct staff to communicate the expectation to the Yacht Club and update the agreement with the Club based on the clear terms and responsibilities.
- If the Yacht Club chooses not to participate, some of the slips in the Yacht Club area could potentially be leased to smaller vessels requiring less depth. This would be entirely dependent on water levels and marina conditions.



Options – 3) Discontinue Spot Dredge Operations

- There is no requirement for the municipality to provide dredging services.
- Council could choose to discontinue the spot dredging operation as an annual maintenance activity.
- It may be possible to utilize prop washing method around the boat launch area – this can be investigated in 2024.
- This option could decommission the use of slips at the Yacht Club area and Pontoon area depending on water levels.
- Some slips in the Yacht Club area could be offered to smaller vessels.



Next Steps

- Council direction is needed to determine the future of the spot dredging operation in Port Franks.
- Budget implications will depend on Council's direction

	2024 Draft Budget	2024 Required Budget	Change to 2024 Budget Required
Option 1 – Status Quo	\$200,000	\$345,000	+ \$145,000
Option 2 – Dredge Targeted Areas (Areas 2 and 3)	\$200,000	\$170,500	- \$29,500
Option 3 – Discontinue Spot Dredging	\$200,000	\$65,000	- \$135,000

Budget numbers are based on 2023 pricing and include prop washing, spot dredging, mobilization, restoration, material disposal and testing where applicable.

