

CASE STUDY: DEBRIS MANAGEMENT

Safety, Knowledge and Experience - The GFL Advantage



GFL Environmental's Industrial Services Division successfully removed trees and debris from an oilsands tailings pond and shoreline with mobile self-propelled dredges. The debris was stockpiled onshore, moved to a central location with a lumber skid, and the material chipped for easy transportation. The debris needed to be removed from the pond to enable the entire tailings pond to be dredged with larger units.

Situational Details

Pond 8B was constructed approximately 15 years ago, with the aim to keep all the existing flora and fauna in place. The large trees, branches, and debris that remained were inhibiting the dredging process of the tailings pond, a process that was necessary to remediate and reclaim the area to regulatory requirements. Our client approached GFL requesting a new method or technology to remove the branches, trees and debris from the pond for the large dredges to complete the remediation process. Our team rose to the challenge!

Innovative Approach to Complex Debris Challenge

- Evaluated how the forestry industry deals with handling of trees and determined refitted shears and grapples would work perfectly for our client's debris.
- Worked in conjunction with engineers and welders to refit forestry grapples and shears to attach onto the Amphibex dredge.
- Dredge was trialed at site and deemed the grapple/ shear enabled dredge was successful and fit for purpose.
- Dredging team commenced the debris management program removing trees from pond 8B.
- Pond was successfully cleaned, and the material was chipped for easy transport.



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GFL used mobile self-propelled Amphibex 400 dredges equipped with specialized attachments to remove the trees from the pond and shoreline to a designated area. Grapples, industrial shears, and cutting heads were used to remove the debris, which was loaded onto an Amphi-Transport 300 with a dump box and transported to the shoreline. The debris was stockpiled and moved with a lumber skid to a central location and chipped with a mechanical chipper.

These Amphibex dredges are specifically designed for large volume pumping and superior excavation depths. The dredges are easily transportable and can self-load or unload. These intricately designed machines allow us to exceed expectations for completing jobs with outstanding results while continuing to meet our commitment to health, safety and the environment.

Equipment Utilized:

Horizontal Bucket Suction Dredging Equipment Amphibex Series

The Amphibex AE400E and Amphibex AE600E series were built with versatility in mind for operations incorporating preventive ice breaking, private and municipal intakes/ outfalls placement and environmental restoration and aquatic plant control.

Amphi-Transport AT300

With a wide range of optional equipment (dump, roll-on/ roll-off, conveyors, cranes, etc.), the AT300 Amphi-Transport can be adapted to specific uses. It is equipped with four hydraulic articulated anchoring piles that can work in complete stability. The AT300 AmphiTransport moves at a speed of five to eight knots with powerful hydraulic motors with propellers and can be adapted for specific uses (optional equipment: dump, roll-on/ roll-off, conveyors, cranes).

Client Feedback:

- "I highly recommend GFL. They have proven to us that not only do they provide excellence within the dredging division, that the same core fundamentals of business apply in all other areas of service they offer."
- "Everything went really good...they were a treat to work with. The experience, knowledge and delivery brought to this project was impressive. Thanks for putting such a strong team together."
- "Hey guys I just wanted to pass on a thank you for all the hard work. Your team did a fantastic job! Your technology-based focus and aligning with our clients' needs is something to be proud of."

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