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Feasibility Assessment for Water Quality Trading in Lake Winnipeg, Canada: Phase 1

WRITTEN BY

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Water quality trading (WQT) has the potential to reduce nutrient loading to receiving waterbodies at lower cost and more effectively than could otherwise be achieved. While prior studies on WQT for Lake Winnipeg date back more than a decade, none have focused on the fundamental factors across social, environmental, economic, and legal realms. Pulling from experience leading and advising many other WQT programs in the United States, the team considers the most critical elements to realistically assess the potential for WQT to reduce nutrients in Lake Winnipeg.

Current supportive watershed and policy conditions and the new existence of a historic collaborative political group – the Collaborative Leadership Initiative (CLI) committed to reconciliation and environmental outcomes – suggest it may be time to proceed with the implementation of a WQT program that benefits Lake Winnipeg. With this assessment complete, it will be important to proceed with the key actions to continue assessing the reality of WQT in Lake Winnipeg.

This analysis is considered Phase 1 of a feasibility assessment for WQT in the Red River Watershed that drains into Lake Winnipeg. This analysis will *not* detail the rules of a Winnipeg WQT program (trading ratios, credit pricing, tracking, verification, etc.) as it is much too early to develop such criteria. Rather, the assessment will carefully consider threshold legal, scientific, and social elements for a WQT program, suggest whether it is indeed a viable option and, if so, how best to proceed.

The effort to proceed with WQT appears worthwhile, with water conditions in Lake Winnipeg predicted to decline, financial costs for alternative approaches approaching $2B for a single discharger, Canada's over multi-billion dollar green infrastructure commitment to improve watersheds, and the existence of a motivated collaborative leadership group (CLI).

The key next steps for proceeding to another phase of this work are detailed, including developing a full watershed model, proceeding with two specific legal amendments, and confirming participation from the most critical credit buyer (the City of Winnipeg).

WQT is a good way to help meet reduction requirements of the North End Sewage Treatment Plant in lieu of a

technology approach that could be a decade away. It may also help mitigate the problem of non-regulated CSO and non-point source loading which are classically intractable issues to tackle.

Finally, WQT for Lake Winnipeg is a “no regrets” strategy that uses natural infrastructure with ancillary benefits including carbon, biodiversity, and landowner support that go well beyond what can be achieved by only a technology-based solution.

Read full report.

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