



CONSERVATION PRO
A PROUD DIVISION OF DUCKS UNLIMITED CANADA



CASE STUDY

TREATMENT WETLANDS CAPTURE
SALT, HYDROCARBONS, HEAVY
METALS AND MORE.

Treatment Wetlands: Sustainable Solutions for Road Salt Runoff

THE CHALLENGE: ENVIRONMENTAL IMPACTS OF WINTER ROAD SALT

Each winter, municipalities face the challenge of keeping roadways safe for drivers, often using road salt and de-icing chemicals to combat snow and ice. While effective at melting snow and ice to improve driving safety, there is growing concern about the environmental tradeoffs as these chemicals run into our rivers and lakes, impacting water quality and wildlife habitat for many species of plants and animals.

The runoff from municipal “snow dumps” can be especially problematic, containing gravel, salt and hydrocarbons from oil and gas, among other things.

THE SOLUTION: CONSTRUCTED WETLANDS

The City of Moncton partnered with Ducks Unlimited Canada (DUC) to build a three-acre (1.6-hectare) constructed wetland, strategically located between a snow dump and a local watercourse. The wetland filters runoff from snowmelt, using salt-resistant plants to remove pollutants like salt, gravel and oil.

RESULTS SHOWED A REDUCTION IN
CHLORIDE LEVELS BETWEEN 66-93%

“We’re pleased with the results we’ve seen so far. Clearly wetlands and green infrastructure can go a long way towards filtering a lot of the pollutants that get scooped up during snow removal operations. We look forward to applying these and other solutions in the future to help protect the quality of our waterbodies.”

— Tim Moerman, Director of Environmental Planning and Management, City of Moncton

WHY TREATMENT WETLANDS?

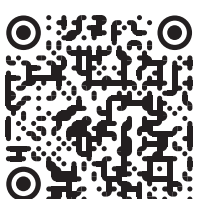
Treatment wetlands offer a natural, cost-effective solution to reduce road salt runoff, improve water quality, and protect wildlife. These green infrastructure systems provide long-term environmental benefits for municipalities.

LOOKING AHEAD

DUC is excited about the success of the Moncton project and about expanding treatment wetlands across Canada. The growing demand for green infrastructure solutions reflects the increasing awareness of environmental stewardship, and treatment wetlands offer a powerful, sustainable solution to address critical environmental challenges.

Ducks Unlimited Canada provides environmental consulting services on a cost-recovery basis, directing net revenue to habitat conservation in Canada.

WANT TO LEARN MORE ABOUT TREATMENT WETLANDS FOR YOUR COMMUNITY? **LET’S TALK.**



Visit ducks.ca/habitat-restoration-services or scan the QR code to learn more.

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