

Evaluating the impact of nearby forestry harvesting and conservation buffers on forested wetlands in Nova Scotia

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The impacts of human activities often extend beyond their immediate boundaries, affecting adjacent ecosystems. Buffers—designated areas with limited or no activity—are crucial for mitigating these impacts, especially around sensitive areas such as wetlands and water bodies. While buffers are well-known for protecting water bodies from nutrient pollution and wildlife community changes, their role in safeguarding forested wetlands during nearby forestry harvesting is less understood. Forested wetlands, among Nova Scotia's most biodiverse ecosystems, support many species at risk and provide billions of dollars in ecological services annually. This research examines how unharvested forest conservation buffers around forested wetlands can mitigate environmental impacts and inform sustainable forestry practices. Our study seeks to determine the impacts on wetlands when no conservation buffer is maintained, as well as the minimum buffer width required to protect wetland communities at varying levels of forestry harvesting. In collaboration with the Family Forest Network, Medway Community Forest Cooperative, and other partners, we will monitor forested wetland communities across Nova Scotia. The study will focus on sites with different buffer widths, comparing harvest and control (non-harvested) areas through pre- and post-harvest assessments. The findings will inform the development of better management practices for the forestry industry, ensuring that harvesting techniques align with the conservation of these critical ecosystems.

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