

The Impacts of Wetland Loss in the Lake Simcoe Watershed

see the full
report online at:
[ducks.ca/
blackriver2011](http://ducks.ca/blackriver2011)

Ontario can't afford to continue to lose its wetlands – environmentally or economically

Wetlands are one of the earth's most productive ecosystems; unfortunately, they are also one of the earth's most threatened ecosystems. Research indicates that 72 per cent of southern Ontario's wetlands have been lost or degraded since settlement and despite a growing awareness of their benefits, we continue to lose wetlands.

The growing and relentless land use pressures in the Lake Simcoe watershed have resulted in significant environmental degradation. With the help of the Lake Simcoe Clean-up Fund, the University of Guelph and the University of Alberta, DUC has recently completed research that examined the ecological values of wetlands in the Black River subwatershed of the Lake Simcoe basin and the economic impacts of wetland loss – essentially, DUC assigned a dollar value to local wetlands.

The science clearly indicates that wetlands are critical to solving Lake Simcoe's water quality problems

The research determined that as wetlands continue to be lost, so will the benefits they provide. If all of the Black River subwatershed's remaining wetlands were lost, the impacts would be startling:

- * 891% increase in phosphorus loading, equivalent to dumping 47 tonnes or 220,000 bags of lawn fertilizer into the river, every year (impacts water quality and public use – swimming/recreation)
- * 13% decrease in groundwater recharge capabilities (impacts water quantity)
- * 251% increase in sediment load (impacts water quality)
- * 260% increase in nitrogen loading (impacts public use – swimming / recreation)

The degraded water quality – in particular phosphorus loading – which has impacted the natural ecosystem and recreation attractiveness of Lake Simcoe, has caused widespread concern and a subsequent provincial government protection plan to improve the Lake's environmental conditions.

DUC's study builds on the Lake Simcoe Region Conservation Authority report that identified wetlands provide an estimated \$435 million in ecological goods and services to the Lake Simcoe watershed each year.

Ontario's Wetlands: Vital Natural Assets

Wetlands are an essential component of Canada's natural capital infrastructure and provide numerous ecological values while directly supporting a range of economic benefits. Beyond providing habitat for wild-life and species at risk, wetlands provide benefits such as enhancing water quality, ground water recharge, flood and drought prevention and mitigating the impacts of climate change, in addition to offering eco-tourism opportunities and providing important social and cultural benefits to the people of Ontario and to all Canadians. Despite these values wetlands continue to be lost.



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Research Highlights



- * Wetlands stop phosphorus from entering Lake Simcoe, and are critical to meeting the phosphorus reduction objectives of the Lake Simcoe Protection Plan.
- * Black River wetlands currently remove harmful phosphorus from Lake Simcoe and save local municipalities about \$300,000 a year for this ecological service.
- * Further loss of wetlands in the Black River subwatershed will significantly increase phosphorus loading to Lake Simcoe.
- * Keeping the remaining wetlands we have, provides the highest return on investment.

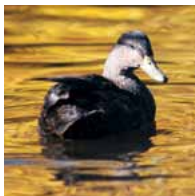
The results are clear. **Wetland loss must stop.**

Ontario's Future



The impact of wetland loss and water quality should be of concern to all Ontarians. We can't afford to continue to lose wetlands, as they provide Ontarians with an estimated \$435 million per year in ecological services.

To prevent further deterioration of Ontario's water resources, the Government of Ontario needs to provide taxpayers with a solution backed by financial commitment to support habitat protection and restoration programs for our wetlands now.



Help stop wetland loss – tell your Government of Ontario representative to make a commitment to protect our wetlands and stop wetland loss through a provincial wetland conservation strategy today.

**Your support is critical.
We are all part of the solution.**

Further wetland loss would significantly affect the benefit of the financial investment in local water treatment facilities in the Lake Simcoe watershed.

* *Losing approximately 25% (2,088 ha) of the remaining wetlands would negate the current annual phosphorus removal services of the Sutton Water Pollution Control Plant (WPCP).*

* *Losing another 52 ha of wetlands would negate the additional removal capacity of the proposed \$3.8 million WPCP upgrades.*

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Disclaimer: Opinions expressed in this document are those of Ducks Unlimited Canada and not necessarily those of the projects supporting organizations: the Lake Simcoe Region Conservation Authority, Conservation Ontario, Ontario Ministry of Natural Resources, Lake Simcoe Clean-up Fund and the University of Guelph.