

Protect Our Plan:

Priorities for the Review of the Lake Simcoe Protection Plan

March 23, 2019



Preamble:

Lake Simcoe has benefited from \$50 million invested over the past ten years, and the best watershed-based legislation in Canada. And yet, we are not making sufficient progress towards the targets of the Lake Simcoe Protection Plan (LSPP). The priorities below represent what is urgently needed for the LSPP to achieve its goals.

PRIORITIES FOR THE REVIEW OF THE LAKE SIMCOE PROTECTION PLAN

- 1) Develop sector-specific interim targets to achieve the 44 tonnes per year phosphorus loading target of the LSPP. Measure, monitor and adapt through an improved Phosphorus Reduction Strategy;
- 2) Protect 40% of the watershed's greenspace, using a variety of tools, to achieve the high-quality natural cover target of the LSPP;
- 3) Add the Lake Simcoe Climate Change Adaptation Strategy policies to the LSPP in order to reduce phosphorus loads, mitigate the impacts of climate change, and increase natural cover;
- 4) Maintain nutrient load caps on Sewage Treatment Plants;
- 5) Provide a minimum of \$10 million for a reboot of the Phosphorus Reduction Strategy, and for implementation of high priority projects;
- 6) Use a cost-benefit approach to prioritizing phosphorus reduction actions to undertake, with strict criteria for achieving multiple benefits;
- 7) Strengthen stormwater and development policies to bring down sedimentation and phosphorus loads;

- 8) Promote partnership with First Nations in implementing the LSPP by funding a position under the direction of Lake Simcoe's First Nations, to identify LSPP policies that require more thorough First Nations involvement, input, and/or Traditional Ecological Knowledge;
- 9) Get the public and businesses on board through targeted funding for collaborative, locally-driven stewardship activities;
- 10) Continue to work on bringing down salt levels;
- 11) Update the roles of the Lake Simcoe Coordinating Committee and Lake Simcoe Science Committee to make the committees more effective.

Detail on the priorities:

- 1) Develop sector-specific interim targets to achieve the 44 tonnes per year phosphorus loading target of the LSPP. Measure, monitor and adapt through an improved Phosphorus Reduction Strategy.
 - a) Define concrete ways for sectors responsible for the implementation of the LSPP to achieve the phosphorus loading target of 44 tonnes per year through the Phosphorus Reduction Strategy (PRS), LSPP policy 4.24 SA. Identify interim goals, between now and 2045, and use the adaptive management approach to change course when needed, in response to the evidence provided at the interim goal points. A substantial amount of the P load reduction should be achieved by 2026.

To this end, update and complete the Phosphorus Reduction Strategy work outlined in the LSPP, policy 4.26-SA, including:

- a. developing subwatershed phosphorus loading targets;
 - d. the identification of practical and effective actions that should be undertaken to address each source or sector...;
 - f. the examination of how effluent re-use opportunities in the Lake Simcoe watershed may contribute to reducing phosphorus loadings to achieve the dissolved oxygen target of 7mg/L.
- b) The Phosphorus Reduction Strategy is but one of many tools that could be used to lower phosphorus loads. Continued investment in research, application, monitoring, and refining implementation actions that address phosphorus pollution would help many water bodies in Ontario struggling with the impacts of phosphorus pollution (ie. Lake of the Woods, Muskoka, Lake Erie, Muskrat Lake, etc.)

- c) Report yearly on phosphorus levels giving specific information about each monitoring station.
- 2) Protect 40% of the watershed's greenspace using a variety of tools, to achieve the high-quality natural cover target of the LSPP.

Green space adds to people's quality of life through outdoor recreation and enjoyment, and it provides habitats for the flora and fauna in the watershed, including Species at Risk. It also helps buffer us from the impacts of climate change, like flooding, rising air and water temperatures, and is a carbon sink.

- a) The LSPP identifies that 40% of the watershed should be "high quality natural cover". High quality natural cover has been defined and research is being undertaken to identify what percentage of the watershed is currently in this category. We encourage the Province to continue this research in order to work towards achieving this target.
- b) In order to work towards the goal of 40% high quality natural cover, pursue the following the mechanisms:
 - i. In partnership with the public, Land Conservancies and Conservation Authorities purchase environmentally significant lands and linkage lands. Ensure that Indigenous communities are engaged and that the process consider co-management with Indigenous communities;
 - ii. Give or sell Crownlands under the protection of the province to Land Conservancies or create Indigenous Protected and Conserved Areas with supporting stewardship funding. Build on the Springwater Park example, with a stronger management role for First Nations, and with adequate resources;
 - iii. Provide grants or matching funds for targeted public and corporate donations to purchase lands through Land Conservancies;
 - iv. Increase the strength of the policies in the LSPP that achieve protection of natural heritage features, or increase support to rolling out programs that achieve the policies' objectives; (ie. LSPP policies 6.14, re-naturalizing public areas adjacent to shorelines; 6.15, outreach to shoreline property owners to re-naturalize their shorelines.)
 - v. Building on the research completed by the MNRF, provide guidance for the development of a shoreline management plan, and associated public outreach, to be developed in partnership with the Lake Simcoe Region Conservation Authority, First Nations and municipalities. This would help achieve the targets of the Lake

Simcoe Protection Plan, “No further loss of natural shorelines on lake Simcoe”; and “Achieve naturalized riparian areas on Lake Simcoe and along streams.”

- vi. Develop, fund and implement a shoreline version of the Managed Forest Tax Incentive Plan (MFTIP) in order to provide moderate tax incentives for shoreline landowners to improve the health of their shoreline.
 - vii. Give the Lake Simcoe Coordinating Committee a greater role in promoting and achieving this objective. For example, allow the committee and support staff to administer and leverage funding targeted to achieving LSPP targets.
- c) Ensure that all Lake Simcoe municipalities have strong tree cutting bylaws. Amend policy 6.46-SA as follows, and make it a Designated Policy, one having legal effect:
- ~~6.46-SA Within two years of the date the Plan comes into effect, the MNR and MOE, in consultation with other ministries, municipalities and the LSRCA will lead the development of a template for~~ Ensure the following development will encourage implementation of the model municipal *site alteration* and tree cutting bylaw within the watershed as related to natural heritage features including *wetlands* and *woodlands*, developed by MNR, MoE etc.
- d) Require municipalities to re-naturalize public areas adjacent to shorelines and streams, or provide financial incentives for municipalities to do this work.
- Make policy 6.14-SA a Designated Policy, one having legal effect and amend as follows:
- ~~6.14-SA Public bodies are encouraged to~~ [must] actively re-naturalize public areas adjacent to shorelines and streams to a minimum of 30 metres where practical and feasible.
- e) Enable better naturalization of privately owned shoreline areas by supporting outreach and funding incentives, to achieve the following policy of the LSPP:
- 6.15-SA Through the implementation of the stewardship, education and outreach policies (8.5-8.11) owners of existing cottages and residences will be encouraged to re-naturalize shorelines and areas adjacent to streams up to 30 metres where practical and feasible.

- 3) Add the Lake Simcoe Climate Change Adaptation Strategy policies to the LSPP in order to reduce phosphorus loads, mitigate the impacts of climate change, and increase natural cover.

The following elements of the Lake Simcoe Climate Adaptation Change Strategy should be included in the LSPP as Designated Policies. All of these actions would have multiple benefits and help us achieve P reductions and the 40% natural cover target.

Below text is quoted from: <https://www.ontario.ca/page/lake-simcoe-climate-change-adaptation-strategy#section-0>

Aquatic life, shorelines and natural heritage

Strategic actions

All partners, in collaboration with the Province, should increase protection of aquatic and terrestrial natural heritage areas (such as wetlands, watercourses, and forests), as well as connections to urban green spaces (such as parks, backyards, boulevards, hedgerows and woodlots) in order to:

- Reduce climate change impacts on ecosystems and species;
- Protect and restore habitat for species at risk; and
- Facilitate the natural adaptive response of species to climate change

Develop explicit terrestrial, aquatic, and rehabilitation targets to restore and maintain ecological integrity and ecosystem function in the watershed (e.g., set threshold targets for minimum forest cover and minimum stream base flows).

Support, promote and implement restoration programs in both built and natural areas by planting a diverse mix of indigenous tree species, including those expected to be better adapted to climate change, and maintain high levels of genetic diversity to reduce vulnerability to climate change impacts.

Maintain and improve functional stream corridors by reducing impacts from on-line ponds, barriers to fish movement where appropriate, and other factors that can alter the stream thermal regime.

Water quality and quantity

Strategic actions – water quality

All partners, in collaboration with the Province, should adopt practices in the watershed to minimize the flow of nutrients and other pollutants into tributaries, groundwater and/or the lake at all times.

- 2.4. Implement Best Management Practices (BMPs) on land use to manage urban, rural and agricultural runoff and nutrient loading.
- 2.5. Develop joint programs through public/private partnerships that may include cost-sharing for innovative initiatives, such as rainwater harvesting, green roofs and greywater reuse.
- 2.6. Integrate climate change adaptation considerations and BMPs into manuals and guidelines available to people working in agriculture, land use development and other sectors.”

4) Maintain nutrient load caps on Sewage Treatment Plants.

As one of the few point sources of phosphorus pollution in the watershed, measuring the effluent from STPs is relatively easy. Between 2005 and 2010, phosphorus loads from STPs have gone down significantly, by 46%. We must not go backwards on this front. Hard caps on effluent discharges are also an effective way of driving innovation in the management of wastewater, and promote water management conservation best practices. Under the Lake Simcoe Protection Act and associated regulation, no new sewage systems are allowed unless they are replacing an old one; that regulation should be maintained.

5) Provide a minimum of \$10 million for a reboot of the Phosphorus Reduction Strategy, and for implementation of high priority projects.

- a) It is abundantly clear that for Lake Simcoe to accommodate the impacts of approved growth in the watershed, much remediation work needs to be completed. Funding a thorough update of the Phosphorus Reduction Strategy, with interim targets and priority phosphorus reduction projects identified, is necessary.
- b) The Muskoka watershed area is receiving \$10 million from the Province to develop a watershed plan. There is much they can learn from the Lake Simcoe experience. We hope that the Province will facilitate a transfer of knowledge to build on lessons learned at Lake Simcoe.

6) Use a cost-benefit approach to prioritizing phosphorus reduction actions to undertake, following criteria that ensure:

- a) The work will have beneficial, long-term impacts on phosphorus load reductions. (For example, if we choose to focus on streambanks stabilization and restoration and planting, is there evidence that these actions reduce P loads year after year the way STP caps do? Are they measurable? Is the science solid?)
- b) That multiple benefits are achieved with each project, in particular:
 - climate change adaptation and mitigation,
 - reducing flooding risk,
 - natural heritage protection,
 - engaging the public and the business community.

7) Strengthen stormwater and development policies.

- a) Amend Policy 4.6-SA to make it a Designated Policy, DP, one having legal effect, as follows:

4.6-SA Municipalities ~~are encouraged to~~ [must] implement a stormwater retrofit prior to the completion of a stormwater management master plan if a stormwater retrofit opportunity has been identified as a priority for a *settlement area* ~~and is determined to be economically feasible.~~

- b) Amend Policy 4.8-DP as follows:

An application for *major development* shall be accompanied by a stormwater management plan that demonstrates: [stet]
 ADD: that Best Management Practices have been implemented during the construction phase including following: the CSA standard, CAN/CSA-W202-18 Erosion and sediment control inspection and monitoring; the Lake Simcoe Phosphorus Offset Program (LSPOP); and Stormwater Management guidelines. These should be reviewed and updated as required.

- 8) Promote partnership with First Nations in implementing the LSPP.

Although the Lake Simcoe Protection Plan states that First Nations will be involved in the development and implementation of LSPP policies, there has not been an adequate effort made to do so in a meaningful and substantially helpful way. We want to support the ability of First Nations communities at Lake Simcoe to engage in the development and implementation of LSPP policies, ensuring their involvement at the idea stage of a policy, and throughout. To this end, in the lead up to the 2019 review of the LSPP, the Province should fund a position for someone identified by the Georgina Island First Nation to do a thorough review of the those LSPP policies that call for First Nations (FN) involvement. A thorough review will assist in identifying and prioritizing the policies for

which there should be better FN consultation, including meaningful involvement and input. This action will also help to build capacity among Lake Simcoe's First Nations.

- a) Fund a position under the direction of Lake Simcoe's First Nations, to prioritize LSPP policies that require more thorough First Nations involvement, input, and/or Traditional Ecological Knowledge.
 - b) Consultation itself should be supported by providing advance notice of timelines, and by providing adequate compensation to the FN experts who are asked for their knowledge and participation, as well as travel reimbursements.
 - c) In partnership with the relevant agencies identified by the relevant LSPP policies, additional time and review should be given to how Traditional Ecological Knowledge and/or First Nations priorities and perspectives will be incorporated in the implementation of the LSPP policies.
- 9) Get the public and businesses on board, through targeted funding for collaborative, locally-driven stewardship activities.
- a) Improve public communications around lake health about what individuals can do.
 - b) Put the Stewardship Network in the hands of the Conservation Authority, so stewardship activities can be well co-ordinated and effectiveness tracked using a consistent methodology.
 - c) Increase the capacity of local stewardship groups and municipalities (with financial investments and staff support) to understand their subwatershed plan and address problems in the subwatershed plan.
 - d) Focus on beach water quality, and track sources of contamination. Address those sources through focused local action, using the subwatershed approach, in partnership with municipalities, THE conservation authority and interested local groups.
- 10) Continue to work on bringing down salt levels.
- a) Continue to train salt applicators;
 - b) Monitor results;
 - c) Investigate technologies to remove salt from water and pilot those technologies;
 - d) Regulate salt application.

- 11) Update the roles of the Lake Simcoe Coordinating Committee and Lake Simcoe Science Committee to make the committees more effective.
 - a) Allow the Lake Simcoe Coordinating Committee and to have a more active role in attracting private money to the implementation of the LSPP;
 - b) Create opportunities for committee members to champion the lake's cause and share information with the public;
 - c) Have two joint meetings of the committees per year to facilitate the transfer of monitoring results to the adaptive management of the Lake Simcoe Protection Plan and associated actions.

END