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Re: Comments on Canada-Ontario Action Plan for Lake Erie **(EBR Registry #012-9971)**

Thank you for the opportunity to provide comments on the proposed *Partnering in Phosphorus Control: Achieving Phosphorus Reductions in Lake Erie from Canadian Sources* ("Draft Action Plan") to reduce phosphorus loading in Lake Erie, in order to achieve the 40 per cent phosphorus reduction target. These comments are provided to you on behalf of a number of non-governmental environmental organizations interested in protecting the waters of the Great Lakes Region. They are authored by Freshwater Future, Environmental Defence, Canadian Freshwater Alliance, National Wildlife Federation, Alliance for the Great Lakes, Michigan League of Conservation Voters and Ohio Environmental Council. These comments are not intended to limit consideration of comments shared individually by these or other environmental organizations.

The binational and multi-jurisdictional nature of the collaboration between our organizations is intentional. We believe it is critical to work towards common goals across the watershed to promote a comprehensive and effective approach to addressing the issue of harmful and nuisance algal blooms in Lake Erie. Together, these organizations articulated the regional approach we argue is necessary, called "Expectations for Domestic Action Plans under the Great Lakes Water Quality Agreement" ("Expectations document"). At the time of publication, June 2016, we committed to using that document as a tool to evaluate the draft DAPs as they are released in each jurisdiction, and to communicate with Lake Erie stakeholders about the actions and investments needed for a clean, restored Lake Erie. These comments present this comparison through a series of tables that compare the contents of the Draft Action Plan to the

Expectations document. It also provides any additional or revised recommendations if applicable in the third column.

The document begins by highlighting some of the positive aspects of the plan before outlining some of the most significant omissions.

Strengths of the draft action plan

We applaud Ontario's leadership in being the first of the Lake Erie western basin jurisdictions to release its draft action plan. It is also encouraging that the plan was released far enough in advance to allow for public consultation. The plan being implemented by Canada and Ontario seems to be a genuine effort to gather and listen to feedback from a variety of sectors. It is encouraging that a combination of approaches are being used including an online website, in-person sector-specific meetings, a multi-sector in person meeting, and public townhalls. People are engaged in the issue and they want to learn more and participate in solution development. It is our hope that what you hear is reflected in the final action plan in terms of both additional actions that stakeholders can contribute as well as refinements and amendments to proposed government policies, programs and plans. The Lake Erie Collective hopes that other jurisdictions, including Ohio and Michigan, follow Ontario's example to consult and take into consideration the opinions of public and other stakeholders on their draft plans.

We are also encouraged by a recognition of the need to take specific focused action to address discharge from greenhouses, especially in the Leamington area. It is our hope that the investments made in research technology will continue to enable increased recirculation (especially in older greenhouses) and more efficient use of fertilizers within the greenhouse. We hope that the working group that has been created to develop an Ontario Greenhouse Environmental Strategy will lead to enhanced environmental compliance in the industry. MOECC should be verifying adherence to rules for greenhouse operators that includes random site inspection of records and field operations. We further encourage other Lake Erie jurisdictions to review their regulations to ensure that as the greenhouse industry continues to grow, it will not create similar localized problems to the Leamington area.

Another positive aspect of the draft plan includes measurable reductions from municipal wastewater treatment. While more complicated to measure, similar estimates and measurable goals should be identified for other sources as well.

Finally, the draft plan acknowledges that the solution will require efforts across urban, rural and agricultural landscapes. It is the shared responsibility of governments, landowners and other stakeholders to work together to address the problem. While phosphorus comes from a multitude of sources, governments should be clear that the majority of effort needs to be on finding reductions in the agricultural sources. Contributors need to be responsible for their share of phosphorus loading.

Significant areas of concern

1. **The draft Action Plan requires details and a timeline to ensure implementation**

The Draft Action Plan needs to be a plan about what is required to be done, not a list of what is already happening. While we recognize that it may take some time to see the results of actions currently being taken, it is broadly recognized (by scientists, modellers, staff, stakeholders) that we will likely need to do much more than we are doing today to meet the targets. The final Plan should include a list of programs, policies and plans that are needed to meet the binational targets. It should use existing science and data to evaluate gaps in the current approach to identify what further work is needed to ensure we will be able meet its commitments. The current draft plan does not do this. It is mostly a list of activities that governments are either doing or can commit to at this point under current funding schemes. This makes it difficult (if not impossible) to assess whether Ontario and Canada will be able to reduce algal blooms and improve the water quality of Lake Erie.

This draft action plan is missing key details that are needed to ensure that action is taken. Such details include:

1. Specific and measureable actions, and objectives
2. Measureable results
3. Clear and reasonable timelines and deadlines
4. Accountability
5. Adequate resourcing for implementation
6. Ongoing and continuous public engagement

Another significant concern that needs to be addressed is that there is no timeline mentioned for meeting the targets. While the province committed to meeting the 40% phosphorus reduction target by 2025 in the Great Lakes Protection Act, that timeline is conspicuously missing from the proposed draft action plan. Without a timeframe for achieving the targets and objectives, it will be hard to garner the necessary political will and financial resources to act.

2. **Agricultural actions are mostly status quo and largely inadequate for achieving what will be needed to meet the targets**

The draft Action Plan states that:

> “From 2003 to 2013, Canadian non-point sources contributed an average of 71 percent of the Canadian soluble reactive phosphorus load and 93 percent of the total phosphorus load. With about three quarters of Ontario’s Lake Erie basin in agricultural production, farmland is considered a substantial contributor to the total non-point source phosphorus load.”

It is our opinion that the final action plan must include specific tactics in proportion to the contributing sources. As such, a concerted effort is needed to work with farmers to implement changes to agricultural practices in a way that is supportive and customized to their unique circumstances on a farm by farm basis.

Scientists and modellers suggest that to meet the phosphorus reduction targets, we likely need to be applying multiple Best Management Practices (BMPs) to the majority of farms in the basin. To make such an effort feasible, outreach and extension services are needed to work directly with farmers to determine which combination of BMPs would best be suited to each particular field in a way that considers geography, economic factors and other farmer-directed criteria.

Outreach networks can also support the implementation of other policies, programs and regulations that need to be followed. They can help improve the uptake of proven new technology and innovative approaches.

Success factors:

- The program requires connecting trusted experts with farmers face-to-face; not just providing written material and online tools.
- The program could use a suite of agents to deliver the same advice, allowing farmers to chose the agency it most trusts (e.g., Ontario Soil and Crop Improvement Association, conservation authorities and OMAFRA staff).
- Consider a peer review approach with a panel of local farmers and experts to help decide what projects to fund through the cost-share programs based on local threats.
- The program should include accountability mechanisms (e.g., reporting criteria).
- Program design should involve those it affects (i.e., farmers) to ensure it will be effective and supported when launched.
- Outreach staff need to be knowledgeable, unbiased and trusted by farmers, agencies and environmental organizations.
- Ongoing training is required to ensure outreach staff are current on the latest technology, innovative approaches, regulations and incentive programs.
- Long-term sustainable funding is critical to the success of the program.

3. The Action Plan must be supported by a detailed and sustainable resourcing plan

The plan described above as well as other other necessary activities will require staff and financial resources to implement. Ontario and Canada must be accountable for meeting the phosphorus reduction targets committed to through the Great Lakes Water Quality Agreement, and the Great Lakes Protection Act as well as a number of other agreements. It is not possible to determine if the targets will be met without an action plan that is accompanied by a detailed resourcing plan that outlines what resources are available and what resources are required to implement the actions identified in the plans.

Success factors:

- Scientists, researchers and modellers tell us that the targets will not be met without increasing the amount of funding for Lake Erie programs.
- The resourcing plan should identify funding priorities (in proportion to the contributing sources) and describe various scenarios that identify what actions and achievements are possible under different funding levels.
- Among the top funding priorities, the author organizations recommend resources be made available to: expand monitoring capacity; implement a robust outreach and extension program (including cost-share programs for implementing BMPs); research in BMPs and technologies; and, support a holistic approach to encouraging compliance with the action plan. Resourcing required to administer programs should be included in the costing.
- Ontario and Canada should be investigating how to ensure ongoing funding is made available to support these programs at least until 2025. Such funding would support increases in each jurisdiction's technical capacity and support efforts to ensure compliance with plans and rules over the long term.

4. Prioritize implementation of a robust monitoring network

The draft Action Plan states that:

> "A strong science and monitoring foundation underlies this draft Action Plan and will continue to inform its implementation." and "These monitoring programs can be enhanced to gather information specific to particular sources or activities and new or enhanced monitoring tools can facilitate data collection. As part of adaptive management, available information and research questions continually evolve resulting in a need to coordinate research activities and share the information generated across government agencies, stakeholder groups, and other partners."

Comprehensive monitoring is critical to understanding current conditions and the effectiveness of future solutions. Immediate investments are required to address gaps in the existing monitoring network to create a robust system that is capable of collecting the data necessary to make cost-effective and competent management decisions and monitor progress over time.

Success factors:

- We need a system capable of identifying water quality and ecosystem trends and guide program investments. It should be capable of assessing the effects of land use decisions on water quality (e.g., what programs are working and what programs are not).
- Robust monitoring is critical for implementing an effective adaptive management strategy that continuously learns from and improves policies, programs and plans. Expansion of the monitoring network should be a priority, but should not delay action.

- The action plan should outline priorities for improving the monitoring network with associated timelines. Similar to the Great Lakes Agricultural Stewardship Initiative, the Thames River and Leamington tributaries, identified as priority watersheds, should be targeted for improved monitoring.
- Environment Canada and Climate Change should lead, in partnership with MOECC, an in-depth analysis of the gaps and needs for water data in the Lake Erie basin, and make it publicly available. The final action plan should include the plans and commitments to address any shortfalls, incorporating the recommendations from the analysis.
- Environment Canada and Climate Change should lead, in partnership with MOECC, in efforts to coordinate and integrate data from various existing monitoring networks. Common data collection standards should be created to enable integrated data analysis.
- Comprehensive monitoring, combined with modelling, is required to support subwatershed planning and community engagement at a subwatershed scale (e.g., quaternary scale).
- Funding is required to support both the analysis of the data and the actions required.

5. **Design a holistic approach to encourage participation with programs and compliance with laws**

Efforts that encourage the adoption of BMPs and other participation in voluntary programs designed to promote behavioral change will be essential in achieving phosphorus load reductions. We believe outreach and extension is core to the overall approach to phosphorus reduction. In addition, other elements are required to create a holistic approach to the problem.

- ➔ Ongoing education programs introduce people to information about best practices.
- ➔ Cost-share programs assist those who do not have resources in making the required changes.
- ➔ Programs that create peer pressure create an additional behavioral incentive.
- ➔ Compliance is the safety net that can be used as a last resort to ensure that everyone is meeting a minimum standard. It is central to a fair and equitable system.

Success factors:

- An evaluation of the best practices is required to understand which tools will be most effective at encouraging adoption. Some practices better lend themselves to education (e.g., promoting soil health) than others (e.g., winter spreading of manure).
- Key is to ensure that existing laws (e.g. in the Nutrient Management Act) are fully supported and enforced.
- A holistic approach should also examine lessons learned from programs where farmers self-govern their community as an effective tool before government enforcement.

6. **Provide timelines for completing policy reviews**

The draft plan's actions under the section "Ensure Effective Policies, Programs and Legislation" are particularly weak.

The draft plan states:

> "A first step in ensuring effective policies and legislation is to understand what currently exists and ensure that it is working to its full potential. There are also opportunities to identify gaps and explore innovative policy approaches for reducing phosphorus loadings."

The draft action plan has been under development for a number of years. Policy reviews should have been completed prior to the release of the draft. However, moving forward the final plan, at a minimum, should provide timelines for completing the review of policies including those mentioned below.

We are encouraged that Ontario:

> "will consider further restrictions on the application of nutrients during the non-growing season"

In the final plan, we expect Ontario to announce that further restrictions will happen to eliminate existing loopholes in the restrictions. As mentioned above, a timeline for the beginning and completing the review is needed. Ontario should address other existing loopholes in the Nutrient Management Act such as nutrient application on croplands and the fact that many farms are exempt from the legislation.

Likewise, we are encouraged that Ontario will:

> "consider enhancing and clarifying regionalized requirements for mandatory pump-out and inspections of septic systems to increase protection of ground and surface water quality."

Once again, Ontario should announce this as an action with a timeline for beginning and completion in the final plan.

We are happy to see that:

> "Canada and Ontario will, in cooperation with the U.S. counterparts, develop phosphorus load reduction targets to reduce nuisance algae in the eastern basin of Lake Erie."

However, as stated previously, this does not provide enough detail. We recommend including a timeline (or an estimated timeline) for setting the target. We would also suggest more detail is included about what will be done in the meantime to start to reduce nutrient loading from Canadian tributaries to the eastern part of the lake.

Finally, we understand that Ontario has also planned a review of the Drainage Act in 2018. This is positive but is not mentioned in the draft plan. We recommend a commitment to this be made in the final plan, along with a timeline for the beginning and completion of the review.

7. **Increase protection for wetlands**

It is encouraging that the plan states its support for strengthening wetland policies including through the use of Ontario's Wetland Conservation Strategy as a key tool for stopping net loss of wetlands, sustaining ecosystem services and improving water quality. However, there is little concrete action or commitment towards improving wetland protection.

The Ontario and federal governments should work together to establish a science-based target (or targets) for wetland conservation in the Lake Erie Basin. Development of the target should consider the optimal amount wetland area required in the basin to maximize reductions in phosphorus loadings to Lake Erie; but also consider the need for other wetland ecosystem services such as flood mitigation, carbon capture, and biodiversity improvement. The International Joint Commission's Lake Erie Ecosystem Priorities report makes a similar recommendation for setting a wetland conservation goal, specific to coastal wetlands:

- "commit to the goal of a 10% increase by 2030 beyond current levels of coastal wetland areas in the western basin of Lake Erie to reduce nutrient pollution and promote biodiversity (an increase of about 1,053 ha or 2,600 acres)."
- "set a science-based goal for protection and restoration of wetlands inland from the Lake Erie coastal zone and develop appropriate strategies to meet the goal"

We recommend that the target be broader to include both coastal and inland wetlands.

8. **Implement effective monitoring and compliance programs for the greenhouse industry**

As stated above, we are encouraged by the action Ontario has already taken to address discharges from greenhouses. Moving forward, it will effective monitoring and enforcement will be among the most critical actions to ensure the actions being taken protect tributary and Lake Erie water quality.

As such, we recommend that MOECC expands its enforcement division to verify adherence to rules for greenhouse operators that includes random site inspection of records and field operations.

We also suggest that an "adaptive management" approach (including triggers and consequences) be applied to the greenhouse regulations. This would allow for adjustments to regulations that may become necessary based on monitoring results and new scientific information.

Comparison Tables

How the *Canada-Ontario Draft Action Plan* compares to *Expectations for Domestic Action Plans under the Great Lakes Water Quality Agreement (June 2016)*

In June 2016, a number of organizations working on Lake Erie nutrient issues - Freshwater Future, Environmental Defence, Canadian Freshwater Alliance, National Wildlife Federation, Alliance for the Great Lakes and Ohio Environmental Council - put together a document that outlined their expectations for all of the draft Domestic Action Plans. The following tables compares those expectations to what is included in the Canada-Ontario Draft Action Plan.

Monitoring and Modeling

NGO Expectation	**Canada-Ontario Draft Plan**	**Revised or amended recommendation** *If blank, original recommendation stands*
Undertake **an assessment of current monitoring capabilities** and identify the **gaps** to align water quality monitoring with the adopted targets to meet the ecosystem objectives called for in the Agreement.	Not included	In addition to assessing capabilities and gaps, make publicly available the projects and activities being undertaken related to assessing current monitoring capabilities (as well as the results of those activities).
DAPs should **include the plans and commitments to address any shortfalls**, incorporating the **recommendations from the Northeast-Midwest Institute report** and addendum (Betanzo, et al., 2015).	Gaps in existing monitoring network not described. No plans for how to address gaps included.	
DAPs should include **a description of the**	Commitment to continue monitoring but not to enhance	

monitoring networks that will be implemented, making sure the networks are capable of supporting the data necessary to identify water quality and ecosystem trends and guide program investments.	(one exception related to a monitoring and research project on the Lake St. Clair /Lower Thames to better understand sources and types of phosphorus)	
DAPs need to present monitoring network information **by jurisdiction** as well as an **overview for each respective country**.	Key programs in the monitoring network are mentioned but there is no summary or analysis of monitoring capacity, or how it compares to other jurisdictions	
Tributary monitoring at the mouths should include **annual and spring** loading data that includes **total phosphorus, soluble reactive phosphorus and suspended sediments**. Data collection should be sufficient to calculate **flow weighted mean concentrations** to enable comparisons of loadings in a consistent approach across the different river basins in the Lake Erie basin.	Canada will measure phosphorus loads to Lake Erie from selected Canadian tributaries. Adaptive management strategy includes 1. Annual routine monitoring of loads, total phosphorus and soluble reactive phosphorus concentrations in key Canadian tributaries leading into Lake Erie, and in-lake nutrient-eutrophication response indicators. No mention of whether we will be able to calculate flow weighted mean concentrations	Confirmation of what information will be collected where is needed.
Data collection on the Detroit River should be expanded to refine information on its loads.	"Ontario will lead, with Canada's support, the undertaking of a monitoring and research project in Lake St. Clair/Lower Thames to better understand the source and types of phosphorus that	Confirm whether this includes the Detroit River

	are contributing to algal growth.”	
Subwatershed allocations should be established for the eight priority tributaries based on the 2008 loads (excluding the Leamington tributaries) utilize the subwatershed framework	No commitment to monitor at subwatershed scale.	
DAPs should **identify a coordinating entity to facilitate collaboration among monitoring agencies and organizations.** DAPs should specify how monitoring results from each jurisdiction will be made available in a manner that is transparent and publicly accessible coordinating entity.	Canada and Ontario will coordinate research, monitoring and modelling activities to improve scientific efforts towards phosphorus reduction on an annual basis. Reporting will be coordinated by Canada and Ontario through the COA Nutrients Annex Committee Specific agency responsible not identified	In addition, Canada and Ontario should consider a more formal arrangement and assigning responsibility with one agency and dedicated staff specifically responsible for coordination.
DAPs should incorporate commitments to the recommendations in the Recommended Phosphorus Loading Targets for Lake Erie final report that the **models utilized to develop the targets be applied every five years and synchronized** with the data collection efforts during the Coordinated Science and Monitoring Initiative (CSMI).	No commitment to use models to update the loading targets on a regular basis.	
DAPs should include **commitments to continuing**	No mention of resources required.	More specifics are required on what research Canada and Ontario will conduct to

investments in simulations of agricultural conservation scenarios.	Canada and Ontario will conduct research to improve modeling capability to quantify phosphorus reductions from BMPs at a landscape scale.	improve modelling

Tracking, Adaptive Management and Reporting

NGO Expectation	**Canada-Ontario Draft Plan**	**Revised or amended recommendation** *If blank, original recommendation stands*
Track nutrient reductions from all sources.	"Canada will measure phosphorus loads to Lake Erie from selected Canadian tributaries." It is difficult to tell from the commitments made in the plan if all sources will be tracked.	
Identify and implement tracking mechanism(s) for a c**omprehensive accounting of all BMP installation** funded by both public sector programs and private, independent sources. Establish an independent **auditing program of BMPs** that evaluates installation and proper functioning.	"Canada and Ontario will investigate current (baseline) and future adoption of BMPs within the Lake Erie basin and within selected sub-watersheds to inform monitoring efforts and progress towards targets."	Include a timeline for investigation and implementation. As stated, ensure program includes an evaluation of how well BMPs are working to support adaptive management.
DAPs should identify specific t**rigger mechanisms that**	No trigger mechanisms are mentioned. Little indication of	

will initiate evaluation and modification of programs and actions based on monitoring results and new information.	what would trigger additional efforts (other than perhaps reporting, we assume)	
The DAPs should identify and commit to a trigger mechanism that includes a **periodic review of the results of nutrient loading** at the tributary mouths and the subwatershed allocations.	Plan commits to 5 year review of loads, total phosphorus and soluble reactive phosphorus concentrations in key Canadian tributaries leading. No specific triggers mentioned.	Clarify at which point will results trigger a response (e.g., if we find we are not on track to meet commitments, when will we enhance efforts)
DAPs should include commitments and a plan for **annual reports** that detail the status of implementation and progress toward reaching the targets.	Ontario will work with its partners to provide an annual update on Lake Erie through its website, and report on Lake Erie as part of the progress report required every three years under Ontario's Great Lakes Protection Act, 2015. Canada and Ontario will assess and report on progress towards achieving phosphorus reduction actions and targets in 2023 and every five years thereafter.	While there is usually a delay between implementation and seeing the results, it is important to regularly communicate with the public about what actions are being taken and how the plan is being implemented
DAPs need to include **timelines, roles and responsibilities, measures of success and funding needs and funding sources.**	General roles and responsibilities between Canada and Ontario are outlined but no further are outlined	Details are required to ensure plan will be implemented and to understand how stakeholders can be play a role in helping.
The DAPs should identify a process for maintaining an ongoing **list of gaps in knowledge and science** (including monitoring and	Not included	

modeling) that need to be addressed to direct future actions. Identify priorities and plans to address these gaps.		

Eastern Basin of Lake Erie

NGO Expectation	**Canada-Ontario Draft Plan**	**Revised or amended recommendation** *If blank, original recommendation stands*
The draft **targets should be released at the same time as the draft DAPs**. If such timelines are not feasible, governments should be open and transparent **about why**.	Commitment to set a target but no targets announced. No interim plan mentioned. Explanation mentioned: not enough science.	Plan should explain how action will happen without eastern basin targets.
The DAPs should include the **timelines** for data collection, analysis and projected timeframe **for establishing a target(s) for the eastern basin.**	No timeline for eastern basin targets	

Funding

NGO Expectation	**Canada-Ontario Draft Plan**	**Revised or amended recommendation** *If blank, original recommendation stands*
DAPs should include a section detailing **funding**	No resourcing plans included.	

needs for each aspect of the plan and include a budget table outlining what resources are available and what resources are required to implement the actions identified in the plans.		

Compliance and Enforcement

NGO Expectation	**Canada-Ontario Draft Plan**	**Revised or amended recommendation** *If blank, original recommendation stands*
Establish **fair, clear and consistently enforced consequences and penalties** (i.e. fines, withdrawal of funding) for non-compliance with policies and plans.	A greenhouse environmental compliance plan was initiated. No compliance and enforcement mentioned as part of other programs	
Dedicate adequate human and financial resources committed to support compliance monitoring and regulatory enforcement.	No mention of resourcing requirements	
Create an **inspection program** that will randomly assess compliance with plans, programs and rules targeted at key times when nutrient pollution risk is highest.	Inspections mentioned for greenhouses but details not included No inspections for other areas of management.	Details of compliance plans should be released. Compliance should clearly be part of a holistic approach to helping farmers reduce phosphorus loss on lands.

Tactics to Meet Nutrient Reduction Targets

NGO Expectation	**Canada-Ontario Draft Plan**	**Revised or amended recommendation** *If blank, original recommendation stands*
The DAPs should include specific **information on measurable actions and timing for those actions** by jurisdiction with identification of responsible entities for implementation.	Few timelines provided through plan. Most actions do not include enough detail to allow progress to be quantified.	
The Canadian Domestic Action Plan should **include sections specifying objectives and tactics** similar to the USEPA Annex 4 Domestic Action Plan Outline (September 16, 2015).	No indication of how the actions in the plan will or will not contribute to meeting objectives. Performance measures to be developed.	Every effort should be made to include performance measures in final plan.
A wide variability of programs and authorities available to implement the DAPs exists across the jurisdictions, and the DAPs should **include an inventory** of the relevant authorities by jurisdiction (perhaps as an appendix).	No review done	
The DAPs should include an **analysis of program and policy gaps** for those areas lacking in sufficient authorities or funding to meet the reduction targets, and incorporate analysis results	Few details provided. Plan does not mention an analysis but there is a section on ensuring effective policies, programs and legislation.	

into future actions.		
The states and province should establish **new mechanisms that require agricultural producers to identify and implement best management practices** that effectively reduce both total and dissolved reactive phosphorus runoff from field surfaces and tile drains.	No new programs Educational - focused approach supports a multi-BMP whole farm approach	See #2 on page 3.
The states and province should develop **regular uniform standardized soil test sampling**, methods and reporting protocols to ensure test results are consistent throughout the Lake Erie watershed.	Plans to implement a new Agricultural Soil Health and Conservation Strategy but not known if this will mention soil testing. Ontario will work with the agriculture sector to communicate practices for responsible nutrient management, including soil testing to determine appropriate phosphorus requirements.	Ontario should consult with the environmental community on its Agricultural Soil Health and Conservation Strategy before finalizing.
The states and province should enact new, or revise current authority, to **ensure nutrient applications adhere to appropriate agronomic rates.**	Program is not mandatory, nor are there details about how the program will be supported. “Ontario will continue to support the development and implementation of an Ontario industry-led 4R program” “Canada will continue to develop and assess methods for evaluating sustainable phosphorus levels in soils.”	More discussion is needed to evaluate feasible programs with this goal in mind.

Policies should be enacted or revised that **eliminate nutrient application on frozen, snow-covered, and saturated ground**, or when the weather forecast calls for heavy precipitation. Not all jurisdictions currently have this requirement, or do with problematic exemptions.	"Ontario will consider further restrictions on the application of nutrients during the non-growing season."	Final plan should include a timeline for the review and commit to addressing loopholes in the legislation.
Where viable or necessary, policies and programs should **incentivize land conversion to low phosphorus contributing uses** such as switchgrass on marginal agricultural lands, wetland restoration and construction, wood lots, etc.	Not mentioned	This should be included in resourcing plans.
The federal, state and provincial governments should **promote green infrastructure solutions** to reduce urban stormwater pollution by providing funding, regulatory direction and technical support to municipalities and urging the use of green infrastructure as an alternative to more expensive stormwater controls where feasible and appropriate.	Ontario and its municipal partners will work towards reducing loadings, through improvements to stormwater management systems (including facility rehabilitation and incorporation of green infrastructure) Ontario will work with developers, municipalities, conservation authorities, and others to promote and support the use of green infrastructure and low impact development (LID) for stormwater management, including clarifying and enhancing policies, and developing green standards. Ontario's draft stormwater	It is difficult to say if this is adequate without seeing the final LID guidance manual or knowing more about how Ontario will work with municipalities to encourage improved stormwater management.

	LID guidance manual is aimed at assisting proponents in implementing LID and green infrastructure, and will be available for public comment in early 2017. Ontario will support studies that improve understanding of the correlation between phosphorus load reduction and high uptake of low impact development/green infrastructure. No mention of funding.	
The states and province should provide funding for and direction to local governments to **conduct inspections of home sewage treatment systems** to identify those that are poorly maintained or failing. The states and province should adopt jurisdiction-wide **uniform septic code and inspection requirements.**	"Ontario will, in collaboration with partners, consider enhancing and clarifying regionalized requirements for mandatory pump-out and inspections of septic systems to increase protection of ground and surface water quality."	Commitment to enhancing program is required, along with a timeline.
Conduct an **analysis to understand relative contributions of nutrient loading from all sources** (including but not limited to home sewage treatment systems, wastewater facilities, combined sewer overflows and nonpoint source agriculture) in the Lake Erie watershed on the Canadian side. That analysis	Partially completed - by source: Point - 10-15% Nonpoint - 93% From 2003 to 2013, Canadian non-point sources contributed an average of 71 percent of the Canadian soluble reactive phosphorus load and 93 percent of the total phosphorus load. The relative contribution from	Further explanation needed to explain how actions are proportionate to sources of phosphorus.

should inform targeting of investments to achieve nutrient reductions in the most efficient and effective manner	urban point sources, including municipal wastewater treatment plants, combined sewer overflows (CSOs) and industrial direct discharges, is estimated to be only 10 to 15 percent of the total load	
End the dumping of dredged sediments from harbors and river mouths into Lake Erie.	Not mentioned	Confirm that Ontario-Canada does not allow the dumping of dredged sediment into Lake Erie.

Public Consultation

NGO Expectation	Canada-Ontario Draft Plan	Revised or amended recommendation *If blank, original recommendation stands*
Involve stakeholders at an earlier stage and continuously through the DAP writing process.	To some degree they have done this through means such as quarterly webinars with our organizations.	Continue to involve stakeholders during the finalization process.
Share information **where gaps in science and monitoring exist** so that stakeholders can be part of the process that defines ways of addressing the gaps.	Plan does not clearly outline where gaps in science and monitoring exist. “Canada and Ontario will make relevant long-term data and information on Lake Erie public as it becomes available.”	More details about gaps are needed, including how data and information will be presented to public.
Host a public consultation period that is no shorter than 60 days once the DAPs are drafted. This should be	**Condition fully met.** Public consultation period is 75 days	

accompanied by in person meetings in key communities across the basin.	Two public consultation meetings scheduled: May 16 and May 18 (Dunnville and Chatham)	
Respond to the public consultation comments received.	To be determined	
Consider hosting **biannual webinars** through the implementation process to keep stakeholders apprised of progress. Host **webinars** to complement each written annual progress reports.	Canada and Ontario will update the Great Lakes community on progress in implementing the Action Plan through opportunities such as webinars, forums and meetings.	Include more information about how the community will be updated, how often and if and how information will be presented as it compares to other Lake Erie jurisdictions.

Endorsements

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