



Terese McIntosh, Biodiversity and Wetlands Program and Policy Advisor
Ministry of Natural Resources and Forestry
Policy Division
Natural Resources Conservation Policy Branch
300 Water Street
Peterborough, Ontario, K9J 8M5

September 29, 2015

Dear Ms. McIntosh:

Re: Wetland Conservation in Ontario: A Discussion Paper (EBR 012-4464)

Thank you for the opportunity to comment on the Discussion Paper entitled “Wetland Conservation in Ontario”. Conservation Ontario (CO) represents Ontario’s 36 Conservation Authorities (CAs), which are local watershed management agencies, whose mandate includes a variety of responsibilities related to natural heritage, including acting as regulatory bodies responsible for wetland conservation as defined under section 28 of the *Conservation Authorities Act*.

CAs provide valuable information and advice on the conservation of significant natural features, such as wetlands, and their functions within their respective watersheds. Furthermore, CAs assist municipalities in fulfilling their responsibilities associated with natural heritage, water resources and natural hazard management, and are often first responders to address questions about wetlands, including identification, interpretation, enforcement and education.

The following comments are submitted for your consideration based upon a review by CAs. These comments are not intended to limit consideration of comments shared individually by CAs. The comments below are organized based on the questions provided in the Discussion Paper.

We believe the province has taken a positive step in the protection of wetlands and support the provincial initiative to develop a strategic plan for Ontario wetlands. The establishment of a strategic plan that includes vision, goals and objectives as well as a number of actions that the province will take to improve wetland conservation in Ontario is applauded. CO looks forward to the release of a Provincial Wetland Strategic Plan and the supporting implementation documents.

1) Do you think there are current challenges related to wetland conservation in Ontario? If so, what are the challenges?

CO supports the 6 main categories of threats listed in the Discussion Paper; however we offer these additional comments:

It should be noted under the category of *'Land Conversion'* that competition for land is a significant challenge, especially in developed and developing areas of Ontario. With prices of land being high and supply limited, and it no longer being cost-prohibitive to clear and drain wetlands, there is pressure to develop or convert lands to generate revenues. Many land uses either threaten or are not compatible with wetlands – example: urban development, infrastructure and unsustainable agricultural practices.

It is felt that *'Alteration to natural water levels'* is a serious threat to wetlands, especially because there is poor understanding of the connection between hydrologic, hydrogeologic and ecological function of wetlands. Currently, the wetlands that are protected from development or site alteration are still being impacted by alteration of their water balances. Development and water takings are altering the quantity, quality, timing, and source of the water to wetlands. These alterations are changing the hydroperiods, disturbance regimes, soil (nutrient, sediment, organic) characteristics, and water temperatures. All of these factors are important in determining floral and faunal community composition and ultimately the ecological function of wetlands.

Current wetland policies focus on impacts of a specific project and not the *'cumulative impacts'* of development on wetlands. The very nature of wetlands makes them particularly susceptible to additional stresses and the cumulative effects of development can result in significant loss of wetland habitat and function. Development located both within *'adjacent lands'*, and beyond, can alter wetland hydrology by impacting the surface and/or ground water catchments of wetlands. There is insufficient monitoring information on long-term development impacts and success of various mitigation techniques.

Conservation Ontario would like the province to consider the following threats to wetlands:

- 1) *Lack of Wetland Education and Awareness:* Wetland features are not generally valued by the public for the positive role they play in communities and watersheds. In fact, wetlands are often seen in a negative light, with landowners identifying wetlands as “wastelands”. This often results in destruction of wetlands and poses a challenge for wetland conservation and restoration.
- 2) *Legislative and Policy Gaps:* The current policy framework is fragmented, complex and not effective enough in conserving Ontario's wetlands. There are legislative and policy gaps resulting in development within wetlands. Terms, definitions, implementation instruments and technical guidelines need to be further harmonized or coordinated between policy and legislation.

3) *Illegal Activities (dumping of fill and peat extraction)*: Despite CA regulations and municipal official plans and by-laws, illegal dumping of fill, development activities and peat extraction in wetlands continue to occur due to the positive economic return. These illegal activities are particularly detrimental to wetlands because even if the infractions are identified and prosecuted, it is difficult to restore the damaged wetland back to its original ecological and hydrologic state.

2) **Three priority areas of focus for wetland conservation in Ontario are proposed: strengthen policy, encourage partnership and improve knowledge. What do you think of these three focus areas? Do you have other ideas for additional focus areas?**

Overall CO agrees that *'strengthen policy', 'encourage partnerships' and 'improve knowledge'* are appropriate focus areas which capture the majority of the activities that are needed to improve wetland conservation in Ontario.

Strengthen Policy: CO supports the need to strengthen policy as it relates to wetland conservation. Current policy could be strengthened with reference to implementation tools to assist with wetland conservation, including reference to Section 28 permits under the *Conservation Authorities Act*. Section 28 Regulations are a complementary tool to support the implementation of wetland planning policies and can fill the gap for those activities that can cause wetland destruction and may not be subject to *Planning Act* applications, (e.g. site alteration and fill placement). The gaps in Ontario's current wetland policy framework have created loop holes for wetland destruction. Conservation Ontario strongly recommends that the province broaden this focus area to also include:

- identifying and addressing current legislative and policy inconsistencies and gaps (e.g. especially the *Conservation Authorities Act* and implementation of Section 28);
- providing necessary guidance and technical material; and,
- requiring Watershed and/or subwatershed plans and Natural Heritage System (NHS) planning, with a focus on the importance of wetland function to the overall system.

Encourage Partnerships: Partnerships between the province, municipalities, CAs, academia, non-government groups, corporations, and others are necessary to pool resources and expertise to ensure on-the-ground implementation of wetland conservation at the watershed and local levels. There are many parties in Ontario currently working on wetland conservation, restoration, and research and we recommend the province limit duplication of work and resources by utilizing partnerships to access and build on these efforts.

Improve Knowledge: Improved knowledge in the areas of science (monitoring, research and modeling), professional expertise, wetland education and awareness, and wetland identification/evaluation are critical to reverse the trending loss of wetlands in Ontario. CO strongly supports this focus area.

Adding to the focus areas identified in the Discussion Paper, CO would like the province to consider an additional focus area: **Support Wetland Conservation Incentives**. It is felt that expanding and strengthening the province's wetland conservation initiatives will help promote and support public ownership of threatened wetlands and will see that the province's goals are more fully realized. The threat and pressure of land conversion to a revenue generating land use is likely going to increase as the

province's growth intensifies, and as a result the province needs to provide incentives for the public to hold and preserve privately owned wetlands.

3) Considering the three priority areas of focus, what are some actions and activities that government, organizations, and individuals could take to improve wetland conservation in Ontario? What partnerships should the Ontario government explore to stop wetland loss?

To answer this question multiple actions and activities have been identified that would help strengthen wetland conservation in Ontario, and gaps have been identified as well. These suggestions have been grouped under the headings of the 3 focus areas identified in the Discussion Paper and the crucial actions/activities are bolded.

Strengthen Policy

1) Gap: Lack of consistent definitions/interpretations: From a *Conservation Authorities Act* perspective, there are outstanding questions related to the definition and interpretations of the terms 'wetland', 'conservation of land' and 'interference in any way' as they relate to Section 28. MNRF should work with CO and CAs to provide a clear interpretation of 'conservation of land' and 'interference in any way' through a Section 40 "Definitions" Regulation under the *Conservation Authorities Act*. Also the province needs to review the current wetland definition in Section 28(25) of the *Conservation Authorities Act*. The definition should be updated to reflect more frequently used definitions such as provided in the *Planning Act* and Provincial land use plans. The province is encouraged to ensure the term is consistently defined in all provincial legislation, regulation, and guidance documents.

2) Enforcement: When violations under S. 28 of the *Conservation Authorities Act* occur, and wetlands are illegally lost or damaged, CAs take on the enforcement role. The costs to go through the court system and prosecute violations are borne by the individual CAs. This system is cost prohibitive for CAs and as a result not all infractions can be appropriately addressed. We know if wetland conservation is not strongly enforced, then people will continue to fill in, destroy and adversely impact wetlands. If the province is committed to wetland conservation, the enforcement gaps need to be addressed by providing additional support to CAs through enforcement guidelines and resources. CAs have requested the province modernize the compliance provisions of the *Conservation Authorities Act* to provide CAs with current enforcement tools - e.g. ability to issue stop work orders, increased fines, stronger penalties and mandatory remediation requirements (or, if not possible, compensation requirements).

3) Zoning By-Laws: Guidance from the province (Ministry of Natural Resources and Forestry (MNRF) and Ministry of Municipal Affairs and Housing (MMAH)) could provide clarification around the application of land use designations and zoning by-laws for those lands identified as Provincially Significant Wetlands (PSWs). This is a deficiency in the process for ensuring the long-term conservation of wetlands. For example, a wetland that is evaluated and found to be PSW under the Ontario Wetland Evaluation System manual should be included in the next official plan and comprehensive zoning by-law update. MNRF and MMAH have the lead role in ensuring that these updates occur in a timely manner - i.e. the Provincial Policy Statement (PPS) requires that decisions affecting planning matters "shall be consistent with policy statements issued under the

120 Bayview Parkway Newmarket Ontario L3Y 3W3
Tel: (905) 895-0716 Fax: (905) 895-0751 Email: info@conservationontario.ca

Act” and 4.8 of the PPS states “Planning authorities shall keep their zoning and development permit by-laws up-to-date with their official plans and this PPS”. In some areas of the province there are zoning by-laws from the 1980s (and before). This creates a “loop-hole” where existing zoning permissions are available when the zoning may not be in conformity with municipal official plan and the PPS. CO urges the province to review this situation and consider providing incentives to municipalities to update official plans and zoning by-laws on a regular basis.

- 4) ***Risk to Unevaluated and small wetlands:*** Unevaluated and small wetlands (i.e. less than 2 hectares) are at risk from development in some parts of the province due to pressures in urban, urbanizing and near-urban areas. Unevaluated and small wetlands are significant with regard to maintaining local and regional biodiversity and hydrologic functions – particularly in areas (subwatersheds) where wetland cover is limited and it has been identified the area is hydrologically impaired or sensitive. The lack of a consistent protected status for these types of wetlands in various provincial legislation, regulations, and policies, make it difficult to protect these features. The different policy standards applied to these wetlands create conflict and misunderstanding when communicating the importance and value of wetlands and the need to protect these valuable features on the landscape. CO recommends that when the province conducts a review of Ontario’s wetland policies and legislation, special attention should be given to these types of wetland features. The PPS should recognize the importance of non-PSWs and unevaluated wetlands and provide guidance on how they should be addressed and support municipalities that have policies that protect wetlands they consider to be of local importance in their jurisdiction. Additionally, there currently is no provincial policy requiring the evaluation of unevaluated wetlands prior to development. Although some subwatershed studies undertaken in support of future development may require unevaluated wetlands to be evaluated, this is not the case across the board and there is no provincial direction in this regard. Given historic losses and current coverage in relation to science-based targets, all wetlands in southern Ontario areas outside the Canadian Shield should be considered PSWs until they are evaluated to prove otherwise.

5) Natural Heritage System (NHS) Approach: CO encourages the province to support a NHS planning approach to assist with wetland protection and conservation. A comprehensive NHS planning approach will help to identify wetlands that have functional connections to other natural features and need to be protected, identify areas where wetlands can be restored, and strategically identify wetland features where compensation may be appropriate.

6) Environmental Impact Study (EIS) Inconsistencies: The PPS requires developments to demonstrate that there are no negative impacts to PSWs. This requirement is consistently reflected as a policy in municipal official plans, but many official plans do not have policies for different scales of development. For example, the official plan may not have policies for a scoped EIS, and conversely the municipality may not require a full EIS for some types of planning applications (e.g. consent). As a result, the level of protection is not consistent, especially for small development. Another flaw with EIS is the environmental studies undertaken for a development usually reflect the scale of the development application, not the status of the wetland that is being impacted. An EIS for a project impacting a portion of a larger wetland complex may not comment on whether the wetland complex as a whole may be provincially significant and should be

evaluated before the single application is approved. For example, the new PPS requires that PSWs be protected, but in practice the unevaluated wetlands may not be protected because their significance remains undetermined. Furthermore, at this time there is limited understanding or analysis of the cumulative impacts of many small projects on a wetland as a whole. Generally the studies examine the impacts of the one project in isolation of any other impacts that have or will occur as a result of other activities. To address these inconsistencies and gaps, CO recommends that the province initiate a review of wetland development proposals and EIS guidance documents for land use planning decisions. Consolidation and formalization of EIS requirements, such as section 13 of the Ontario Natural Heritage Reference Manual, would provide greater clarity and consistency to the review process. Lastly, it should be ensured that guidelines address cumulative impacts and speak to the need to describe and evaluate changes to the seasonal water balance and hydroperiod for the wetland to ensure that there is integration between water management (ground water and surface water (including stormwater)) and ecological components of the EIS.

7) *Conservation of Wetlands on Crown Land*: There are opportunities for the province to more carefully manage wetlands on Crown lands, including those lying over the beds of waterbodies below the high water mark. A revised Free Use Policy under the *Public Lands Act* could require greater MNRF oversight/approvals for development in wetlands, particularly PSWs. Currently there is limited restriction regarding development or site alteration in these areas under the Free Use Policy (e.g. floating docks under 15 m² are allowed without review/permission, opening the door to wetland disturbance and degradation). The Free Use Policy should limit activities in PSWs.

Encourage Partnership

- 1) **CA and MNRF Relationship**: The province is encouraged to examine new partnerships with the CAs regarding wetland and natural heritage policies. CAs are the regulatory body responsible for assessing hydrologic impacts to wetlands as defined under section 28 of the *Conservation Authorities Act*. In addition CAs provide watershed-based environmental planning advice and expertise to assist municipalities, taking into account applicable federal and provincial legislation and policies, authority policy and municipal planning policy. CAs are well positioned to assist the province in the protection and enhancement of wetlands and the broader natural heritage system.
- 2) **Multi-Ministry Collaboration**: It is recommended that MNRF take advantage of opportunities related to climate change and green infrastructure to collaborate with the Ministry of the Environment and Climate Change (MOECC), Ministry of Economic Development, Employment and Infrastructure and Ministry of Transportation to support the need for wetland conservation. Further, MNRF is encouraged to reach out to all ministries to reaffirm their legislative responsibilities to activities that assist with wetland conservation. For example:
 - a. The *Environmental Protection Act* provides MOECC with the legislative responsibility to enforce the discharge of contaminants into the natural environment. The MOECC and CAs should be working closely on enforcement files where violations have occurred whereby there is potential that contaminated fill has been illegally dumped.
 - b. MOECC is a key partner because of their role in overseeing stormwater management in Ontario. Stormwater management can significantly alter the hydrology of wetlands within

120 Bayview Parkway Newmarket Ontario L3Y 3W3
Tel: (905) 895-0716 Fax: (905) 895-0751 Email: info@conservationontario.ca

their catchment areas and the use of certain Low Impact Development (LID) applications is encouraged as they can reduce the hydrologic impact on wetlands and provide some wetland function. CAs believe that LID technologies that divert stormwater away from end-of-pipe facilities do not receive adequate “credit” under current engineering practices.

- c. MOECC is also responsible for the *Environmental Assessment Act*. The reality, in many areas, is that infrastructure is a major threat to direct loss of PSWs and development of that infrastructure is following either a Class Environmental Assessment (EA) process or (less commonly) an Individual EA. Generally the loss of features is rationalized as necessary because of the “public good” associated with the infrastructure. What is missed in this is that the NHS (features and functions) has also been identified for the “public good”. It needs to be recognized as part of the EA process that when one activity in the public interest affects another, there needs to be some form of compensation.
 - d. MOECC and MNRF should collaborate around an amendment to the *Conservation Authorities Act* with regard to reinstating the use of ‘conservation of land’ when reviewing and considering approvals of renewable energy projects.
- 3) **Collaborative efforts:** The MNRF is strongly encouraged to explore partnerships to expand the capacity of wetland conservation and research initiatives. For example:
- a. Credit Valley Conservation Authority has a partnership with Ducks Unlimited Canada (DUC) which is exploring the hydrologic and flood mitigation benefits of wetlands as green infrastructure.
 - b. The province should explore the benefits and services that partnerships with the academic community (colleges, universities, etc.) can provide. The academic community is a valuable resource, especially for science-based work such as modeling, monitoring and research.
- 4) **Federal and North American Partners:** The province must also play an important role in the big-picture of wetland conservation and collaborate with federal and North American partners. In May 2015, the federal government announced the establishment of a \$50 million National Wetland Conservation Fund. CO recommends that the province partner with the federal government to prioritize the allocation of funds within Ontario to benefit wetland conservation activities.

Improve Knowledge

- 1) **Hydrologic Knowledge and Modelling:** Improved knowledge is needed when it comes to wetland hydrology. To assess potential impacts to wetlands, hydrologic modelling is required; however current hydrologic models are inaccurate and frequently contain assumptions that have not been verified in the field to calibrate models (e.g. local surficial geology and hydrologic conditions). Further there is a lack of integrated hydrologic models accounting for groundwater, surface water and interflow. CO recommends that the province explore partnerships with post-secondary educational institutions and the Great Lakes Wetland Conservation Action Plan Committee (including representatives from MNRF, Environment Canada, CO, DUC, and others) which has identified research into hydrologic impacts to wetlands as a strategic priority over the next five years.

- 2) **Wetland Evaluations:** Over the years MNRF has reduced their role in conducting wetland evaluations and shifted the responsibility to proponents. Some CAs have taken on the task of proactively updating wetland evaluations for their municipalities that lack the expertise or the resources, however there are resource constraints for other CAs for taking on such evaluation programs. There is a gap in wetland conservation because not all wetlands have been evaluated and there is no policy requirement to do so. In order to fully protect wetlands, CAs need up to date, thorough wetland mapping. Additionally, the Ontario Government should offer the Ontario Wetland Evaluation System training program free of charge to CA staff. If this were the case, and resources were provided (staff time, program support, etc.), CA staff could properly assist in the evaluation of remaining wetlands within their watersheds.

- 3) **Wetland Education and Awareness:** Increasing public support and awareness will help to reduce and minimize the contrasting opinions that exist amongst landowners and those involved in wetland conservation, regulation, management and restoration. Greater emphasis is needed on improving awareness of the importance of wetlands through education, outreach and stewardship. The province should consider utilizing CO's interactive educational CD, "Wetlands: the Workhorses of our Watershed" (<http://bit.ly/1KMyhvg>), developed in partnership with the Great Lake Wetland Conservation Action Plan Steering Committee with funding support from MNRF and Environment Canada.

- 4) **Research & Monitoring:** There is an urgent need for sustained, long term research on the condition of wetlands, especially in urbanizing settings. Urbanization typically results in changes to imperviousness, runoff patterns and catchment areas. Although various methods (e.g. roof leaders, third pipe system, etc.) have been employed in an attempt to mitigate these changes, it is difficult to replicate the hydrologic regime of the wetland from pre- to post-development. At present, there is no sufficiently robust research to support the decision-making process and to confirm acceptable limits of change. Additionally, more scientific research is required prior to determining a method for mitigating and compensating for wetland loss – which can only be done by monitoring the impacts of change over the long term in order to determine whether the methods used for compensation actually produce the anticipated or desired results. Too often implementation approaches are assumed to be "best practice" but little monitoring or assessment is done to determine whether the anticipated or desired results have been met. CO recommends that more monitoring programs be supported by the province, and would like to highlight the Durham Region Coastal Wetland Monitoring Project that enables the consequences of human activities on wetland health to be assessed. This project has also established the role and purpose of a long term and standardized monitoring program in evaluating health and in assessing restoration needs and success.

Support Wetland Conservation Incentives (CO proposed focus area)

- 1) **Land Tax Incentives:** Private landowner engagement in efforts to protect wetlands is critical, especially in southern Ontario. Provincial and municipal governments should partner to expand land tax incentives which will compensate landowners for the conservation of existing wetlands and provide incentives to establish new wetlands. The MNRF is encouraged to inform landowners if there are wetlands on their property or changes made to wetland boundaries on their property. Through this process, landowners should be informed of available tax incentive programs. Indeed,

120 Bayview Parkway Newmarket Ontario L3Y 3W3
 Tel: (905) 895-0716 Fax: (905) 895-0751 Email: info@conservationontario.ca

property tax incentives already exist, but there are many landowners/properties where these programs are of no benefit - for example only properties with PSWs larger than ½ acre are eligible for the Conservation Land Tax Incentive program and landowners already receiving the Farm Property Class Tax Rate Program are only moderately incented to participate in the program because they are already only paying 25% of the rural residential tax rate. It is suggested that barriers to adoption of existing tax programs be reviewed and opportunities to improve participation be explored and implemented.

- 2) **Land Securement:** The province should promote and support public ownership of wetlands. Wetlands can have significant benefits, however they require significant funding for land acquisition and long term maintenance. The MNRF should provide funds that can be accessed by municipalities, CAs and other conservation organizations to assist with land acquisition and maintenance of threatened wetland areas and habitats. This will require the collaboration of all levels of government [i.e. municipal, provincial, and potentially federal (e.g. National Conservation Plan funding)] and an agency such as a CA to own and manage the wetland. In the past, there were a number of organizations that had substantial funding set aside for land securement. These funding opportunities no longer exist and recent experiences in attempts to secure significant wetlands through donation and/or split receipts (cash and charitable receipt) have not been very successful.

4) What do you think about Ontario’s current wetland policy framework? Can it be improved? Can it be made more effective? If so, how?

Current wetland–related policies and legislation in Ontario are scattered across a complex multi-jurisdictional “framework” of legislation, policies, plans and guidelines, and it is recommended that the government and partners reconcile wetland policies to the extent possible. It is suggested that the largest hindrance to wetland conservation is the lack of coordinated terms, definitions, implementation instruments and technical guidelines.

As stated earlier in this letter, a challenge in the current policy framework is the lack of a unified interpretation for the terms ‘interference in any way’ and ‘conservation of land’ under the *Conservation Authorities Act*. This has created a policy gap in the approach that CAs are taking with respect to protecting and regulating wetlands from development and site alteration. To strengthen and clarify the CAs’ regulatory role and improve consistency in implementation, the terms should be defined. The direction taken on these definitions should be consistent with taking a watershed ecosystem approach as per the most recent Mining and Lands Commissioner decisions identified in the 2008 “Draft Guidelines to Support Conservation Authority Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation”. For example, in the 2008 Draft Guidelines the interpretation for “Conservation of Land” is:... *the protection, management, or restoration of lands within the watershed ecosystem for the purpose of maintaining or enhancing the natural features and hydrologic and ecological functions within the watershed* (February 2008). The Ontario government could assist CAs in support of the protection of wetlands by defining these terms.

Similarly, further research and discussion is required with respect to the actual definition of a ‘wetland’. Discrepancies exist between various instruments (e.g., Ontario Wetland Evaluation System, Ecological

Land Classification System, the *Planning Act* and the *Conservation Authorities Act*) with respect to the definition of a wetland. These discrepancies need to be reconciled. Wetland conservation may be compromised if legal challenges demonstrate a lack of definition or lack of integrity and cohesiveness between the various instruments. It is requested that the wetland definition in the *Conservation Authorities Act* be amended to reflect more frequently used definitions as provided in the *Planning Act* and Provincial land use plans.

Another way to make the policy framework more effective would be to provide provincially endorsed technical guidelines to assist CA staff in reviewing Section 28 permit applications for development within wetlands, development within regulated “other areas” and interference with wetlands. As stated earlier, the provincial technical guidelines should include a template for wetland EIS guidelines. CO is prepared to assist the province in this endeavor however guidelines for wetland EIS for purposes of Section 28 of the *Conservation Authorities Act* could only be developed once the definitions for ‘conservation of land’ and ‘interference in any way’ are clarified via a Section 40 regulation under the *Conservation Authorities Act*. Since many municipalities also have EIS guidelines for land use planning applications, coordination with MMAH and municipalities would be advisable.

5) Should targets be considered to help achieve wetland conservation in Ontario? If so, what form should these targets take?

Targets inspire action and should be considered to help achieve wetland conservation. The adoption of targets provides something to strive for and generates something tangible to measure and evaluate progress.

When setting wetland targets, the guiding target should be “net gain” for wetlands in Ontario. Also targets should:

- consider previous recommended watershed-based targets set by Environment Canada in ‘How Much Habitat is Enough’ (Third Edition, 2013). This publication recommends the following in relation to wetland coverage in order to address “basic minimal generic ecological functions”: “At minimum, the greater of (a) 10% of each major watershed and 6% of each subwatershed, or (b) 40% of the historic watershed wetland coverage, should be protected and restored”;
- be realistic and science-based;
- be watershed-based at various scales e.g. Lake Ontario basin and sub-basins;
- include timelines;
- consider and assess wetland diversity, location, health and functionality;
- consider ecological and hydrologic requirements to maintain or restore the function of the subwatershed, historic wetland cover, hydrologic potential, and anticipated hydrologic impacts of the proposed future development scenario;
- consider the role wetlands play in stormwater management including water quality, flood control and flow augmentation;
- take into consideration the need for wetlands due to their services (e.g. water retention) based on current land uses , not just attempt to restore all historic wetland locations; and,

- include a reporting element (e.g. build upon CA Watershed Report Cards– see more details in response to 6c).

6) The Ontario government is considering approaches to achieve no net loss of wetlands.

a. What do you think of the establishment of a mitigation/compensation hierarchy to achieve no net loss? Are there other approaches?

It is noted that one of the primary objectives in the very first Wetlands Policy Statement introduced in Ontario in 1992 was to ensure no loss of wetland function or wetland area of PSWs in the Great Lakes – St. Lawrence Region. The concept of no loss is not synonymous with ‘no net loss’. CAs believe that Ontario needs to reestablish and enhance wetlands, especially in southern Ontario where the majority of wetlands have already been lost, and a ‘no net loss’ approach will not accomplish this.

The cumulative effect of “insignificant” impacts, together with those negative impacts not regulated, contribute to the downward trends in wetlands’ ecological health. In addition, the stresses of climate change and invasive species further calls on everyone to aim higher in protecting and restoring wetlands. By adopting a goal of ‘net gain’ where compensation is being applied it is more likely that in effect “no net loss” will be achieved. Basically, a ‘net gain’ approach provides a factor of safety embedded in the precautionary approach which more effectively addresses the inherent risks and uncertainties (e.g. climate change) when dealing with complex ecosystems like wetlands. Ontario should strive for ‘net gain’ of wetlands as there are always losses of biodiversity, ecosystem complexity, maturity, and function when you replace a naturally formed wetland with a created wetland. A “net gain” policy should only be considered for the replacement of small, non-significant wetlands and generally should not undermine the strong protections in place for PSWs.

CAs believe a ‘no net loss’ wetland strategy will allow for the continued degradation of wetlands, and would strongly request the province consider a ‘net gain’ approach. A ‘no net loss’ strategy would not rectify the wetland loss that has already happened and the remaining wetlands would be subject to continued degradation through our inability to completely protect them from all the direct and indirect stressors of urbanization and climate change. Moving forward in this letter, we refer to a “no net loss” scenario strictly because that was proposed in the Discussion Paper. Extreme caution is advised if proposing a ‘no net loss’ strategy with compensation as an option.

CAs believe a mitigation/compensation hierarchy is appropriate, as long as the hierarchy emphasizes avoidance and reserves the option of compensation for unique situations that are in the public interest. It is paramount that the focus continues to be on the protection of existing wetlands as opposed to compensation for lost features and/or functions to accommodate development.

Compensation should be a last resort and it should be required for any residual impacts, without a requirement to demonstrate that they are “significant”. It is unclear in the discussion paper whether ‘no net loss’ refers to the area, functions or quality of wetlands. Compensation efforts need to address all 3 - area of the wetland, the function of the wetland and the quality of the wetland. To account for uncertainties in dealing with complex ecosystems like wetlands, the province should require a minimum

compensation ratio of 2:1 to ensure 'no net loss' and preferably higher to achieve a 'net gain'.

Further, there must be recognition that some types of wetlands (e.g. bogs, fens, and the Great Lakes coastal marshes) that have evolved over thousands of years are irreplaceable and should not be considered for removal or compensation. These types of wetlands must be clearly identified as off-limits to any consideration of compensation, particularly in southern Ontario where these features are exceedingly rare to begin with. Even the replacement of swamps is questionable because of the length of time (decades to centuries) needed to reestablish the biodiversity which was previously present and to restore comparable ecological function.

If the province is going to proceed with compensation, a long term funded program for monitoring of wetlands created as part of a compensation strategy is required. A review timeframe will be required (e.g. 5-10 years) and, if it is discovered that compensation efforts fall short or fail to achieve a "no net loss" of wetland area, function or quality, there needs to be a clear process that holds the proponent responsible to address residual impacts. Additionally, if it generally appears that compensation efforts are failing, it should trigger a reassessment of the policy direction that led to the negative outcomes.

Additional suggestions for compensation:

- Compensation may be appropriate for wetlands that are not significant and are isolated from the NHS, already degraded, or are composed of early successional wetland communities that may be possible to replicate within an ecologically relevant timeframe;
- Compensation should be directed to on-the-ground ecosystem restoration and be informed by strategic watershed and restoration planning;
- Compensation should occur within the same catchment or subwatershed as the loss;
- Compensation should only be used for situations where it is not possible to ensure protection of existing features;
- Include consideration for the adjacent natural lands around wetlands;
- A compensation ratio greater than 1:1 (e.g. 2:1 as noted above) should be considered for Ontario;
- Compensation projects should be assessed from a financial perspective using two key questions: 1) what would it cost to replace the lost land base? 2) what would it cost to replicate the lost ecosystem structure?
- Adopt a principle that ensures no loss in total land area of the NHS (i.e. compensation would be required not within the identified NHS, but adjacent to ensure the overall area of the NHS is not reduced); and
- Compensation should be required for the loss of wetlands under the Environmental Assessment process and especially in areas deficient in wetland cover or already experiencing flooding or water shortage issues.

It should be noted that Ontario Nature and Toronto and Region Conservation Authority currently have projects underway in regard to biodiversity compensation and ecosystem services compensation, and it is recommended that the province work with these and other partners to avoid duplication of effort.

b) What tools (e.g., policy) could be used to implement approaches to achieve no net loss?

The legal authority for “no net loss” and the compensation framework should be established in legislation that would harmonize with all corresponding statutes that seek to regulate/influence wetland conservation. The administration and decision making authorities should be clearly set out along with a transparent process for approvals. The province is encouraged to ensure that watershed and/or subwatershed plans and Natural Heritage System (NHS) planning, with a focus on the importance of wetland function to the overall system, is completed in advance of any wetland compensation policy in order to target areas suitable for wetland compensation and to ensure protection for key wetland features. Embedded in this recommendation is the recognition that the hydraulic function of a wetland cannot be conserved or offset without first understanding its current role in the watershed.

Provincially endorsed compensation guidelines or procedural manuals are critical to standardize the process and assist reviewing agencies in making decisions related to wetland compensation. Standard formalized protocols and guidelines are required to facilitate an open and transparent, consistent and replicable and fair process, and to decrease conflict. At a minimum the province should provide:

- Guidelines to assist in determining when and where compensation is appropriate;
- A standardization of criteria to assess impacts (e.g. standards for defining the hydroperiod), cumulative effects and the offsetting powers of proposed mitigation measures to evaluate a proposed project’s overall impact;
- A standardization of criteria to assess the value of the original wetland in order to properly determine the level of compensation required to offset the loss of that wetland;
- Monitoring protocols, tools and resources for assessing the long term success of compensation projects;
- Guidelines for dealing with scenarios where compensation efforts have failed at achieving a “no net loss”; and,
- Mechanisms to ensure compensation projects are funded, constructed and maintained for an appropriate period of time post construction.

In order to make compensation decisions based on wetland type, it is important that we have a thorough and up to date wetland mapping tool. There are large spans of unevaluated wetlands in Ontario, even in areas subject to intensive development pressure. Much of the wetland mapping that is available is outdated and was completed with limited data. A targeted evaluation of the remaining wetlands should be supported and funded to allow for a better picture of the location and distribution of these features on the landscape, and to facilitate sound decision making related to compensation. The Grand River Conservation Authority, MNRF Districts (Guelph and Aylmer) and DUC completed the ‘Grand River Watershed Wetland Evaluation Protocol’ (June 2006), that provides a framework for determining priorities for evaluation of wetlands and a wetland boundary (mapping) reconciliation process between the two agencies that may be of assistance.

Regular reporting is necessary to show whether the policy framework is working and to keep the public engaged and informed. For example, CA Watershed Report Cards are undertaken on a 5 year reporting cycle and could be utilized (see response to 6c).

c) What might the role of government, partners, private landowners and others be if no net loss approaches are implemented?

A 'no net loss' approach will require a partnership between the municipal planning and CA regulatory responsibilities. The role of municipalities in the 'no net loss' approach will be through the land use planning decision making process where decisions to compensate will generally be made through the planning or environmental assessment process. Given the current role of CAs in watershed management planning and wetland regulation and protection, a no net loss decision making approach could be integrated with the Section 28 Regulation permit process. As local conservation agencies, if given proper training, resources and tools, CA staff could evaluate wetlands and determine if they were eligible for compensation on a watershed basis, evaluate proposals for wetland compensation strategies and ensure monitoring of the long term effectiveness of compensation strategies in relation to the watersheds' wetland health.

In addition to the environmental planning and regulation role, CAs provide watershed leadership in land securement and management and environmental education and stewardship, all of which, with support from the province, can assist the province with the no net loss goal. For example, CAs run 47 outdoor education facilities and through environmental education programs, teach 430,000 students in almost 4,000 schools a year.

The Ontario government could also partner with CAs to report on the changing extent of wetland cover. Over 90% of Ontario's population lives in a CA watershed. Watershed report cards are issued by CAs on a five-year basis to illustrate environmental trends. One indicator of watershed health is the presence of wetlands, and where reliable data is available, some CAs report on wetland cover. Many CAs will release their next watershed report card in 2018. The MNRF could work with CAs to develop appropriate grades (i.e. A, B, C, etc.) for wetland cover percentages on a watershed basis.

d) Should no net loss approaches be applied uniformly across Ontario? Or, only where the risk of wetland loss is greatest?

In general, different policy is needed for southern Ontario areas outside the Canadian Shield versus the rest of Ontario. Given the vast disparities in wetland coverage, wetland type, historic coverage, threats, and the regional differences across the province, a 'one size fits all' approach is not recommended. It is suggested that in southern Ontario where the majority of wetlands have already been lost, a "net gain" approach should be considered. The lessons learned in southern Ontario should not be ignored and as such, a "no net loss" approach could be taken in northern Ontario.

7) Do you have any additional suggestions for improving wetland conservation?

CO recommends the province consider an Integrated Watershed Management (IWM) approach to wetland conservation. IWM is the process of managing human activities and natural resources on a watershed basis. This approach allows us to protect important water resources, while at the same time addressing critical issues such as the current and future impacts of rapid growth and climate change. It is the best way to conserve, restore, develop, and manage natural resources. This approach recognizes and

120 Bayview Parkway Newmarket Ontario L3Y 3W3
Tel: (905) 895-0716 Fax: (905) 895-0751 Email: info@conservationontario.ca

operates based on the interconnectedness of ecology, economy and society, and a key component is NHS planning. The IWM approach to wetland conservation would lend itself nicely to and support the focus areas outlined in the discussion paper: *strengthen policy, encourage partnerships* and *improve knowledge* and will provide a framework for the 'no net loss' approach to wetland conservation.

Thank you once again for the opportunity to comment on the Discussion Paper entitled "Wetland Conservation in Ontario". Conservation Ontario believes the province is taking a positive step in the conservation of wetlands through this provincial initiative to develop a Strategic Plan for Ontario Wetlands. We look forward to working with MNRF on its timely completion and trust that its implementation by the Ministry and partners will be adequately resourced to ensure successful implementation. Should you have any questions regarding the above comments please contact myself (ext. 223) or Taylor Knapp (Policy and Planning Officer) at 905-895-0716 ext. 266.

Sincerely,

A handwritten signature in black ink that reads "Bonnie Fox". The signature is written in a cursive, flowing style.

Bonnie Fox
Manager, Policy and Planning

c.c. All Conservation Authorities' CAOs