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Ministry of Natural Resources and Forestry
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300 Water Street
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Dear Ms. McIntosh,

RE: EBR 012 – 7675: A Wetland Conservation Strategy for Ontario 2016-2030

We, the undersigned, fully support Premier Kathleen Wynne’s pledge to reverse wetland loss in Ontario by 2025, as stated in an open letter to Ducks Unlimited Canada (June 9, 2014).¹ However, we do not believe that the proposed Wetland Conservation Strategy for Ontario, as drafted, will serve to achieve this objective given the weak overall targets, loose commitments and failure to earmark areas for government investment.

Despite the wetland strategies, partnerships and education programs in place for many years in Ontario (outlined in the proposed strategy, pp. 9 – 17), wetland loss continues. Even those wetlands that benefit from the highest level of policy protection are disappearing. In some cases, community groups must battle powerful corporate interests to protect Provincially Significant Wetlands (PSWs) in places like Niagara² and York Region,³ where historic wetland losses exceed 85 percent in many areas. Meanwhile, lower Great Lakes coastal wetlands have been lost at a rate of 5,336 hectares per year over the last decade, as highlighted in a recent Ducks Unlimited Canada analysis.⁴ According to the analysis, much of this loss is a result of development for infrastructure, industry and recreation (marinas), residential development and agricultural practices.

In their 2012 report, the members of the Great Lakes Wetlands Conservation Action Plan (GLWCAP), who include representatives from the Ministry of Natural Resources and Forestry (MNR), write: “We continue to lose wetlands to development, road construction and drainage. The small proportion of original wetlands that remain

¹ <http://www.ducks.ca/assets/2012/06/Liberal-Party-Response.pdf>

² <https://www.ontarionature.org/connect/blog/category/wetlands/page/2/>

³ <https://www.ontarionature.org/connect/blog/municipal-politics-all-wet-when-it-comes-to-wetlands/#more-4819>

⁴ Ducks Unlimited Canada. 2015. Coastal Wetland Status and Trends: Project Summary.

emphasizes the importance of protecting all remaining wetlands.”⁵ Nowhere does the proposed Wetland Conservation Strategy for Ontario embrace this perspective or the sense of urgency that underlies it.

While we agree that awareness, knowledge and partnership are important strategic directions, we believe that the proposed strategy should centre on strengthening policy and ensuring its effective implementation. Accordingly, our comments below focus on that aspect of the strategy and highlight key issues that need to be addressed.

1. Issue: Target of achieving no net loss of wetlands by 2030 is unacceptably weak.

No net loss is an inappropriate goal for an Ontario wetland strategy in 2016, especially for a landscape like southern Ontario where wetlands losses are ongoing and exceed 85% in many areas.⁶ The target enshrines the status quo of loss, and does not seek to achieve no net loss for another 14 years.

Despite the fact that no net loss of wetland function or area has been a policy goal for over twenty years in Ontario, we are still losing wetlands – even PSWs and Great Lakes coastal wetlands that benefit from the highest level of protection, as noted above. We need to aim higher, especially in an era of climate change given the critical role that wetlands play in absorbing and storing carbon, tempering the impacts of drought, retaining water and reducing the risk of floods.

We must aim for an overall net gain of wetland habitats and functions in Ontario. Reaching this target will require that policy drive both the protection and the restoration of wetlands. Both are critical and protection is paramount.

Even though wetland restoration is critical to achieving net gain, we must recognize that in many if not most cases, restored wetlands cannot fully compensate for the loss of naturally occurring wetlands. In a 2012 meta-analysis of 621 wetlands sites around the world, researchers found that “restoration performance is limited: current restoration practice fails to recover original levels of wetland ecosystem functions, even after many decades.”⁷ More specifically, they determined that even a century after restoration efforts, biological structure and biogeochemical functioning “remained on average 26% and 23% (respectively) lower in restored or created wetlands than in

⁵ Great Lakes Wetlands Conservation Action Plan. 2012. *Great Lakes Wetlands Conservation Action Plan Highlights Report 2005–2010*. Peterborough, Ontario, p. 25. http://glwcap.ca/files/2012/05/GLWCAP_Highlights_2005-2010_EN.pdf

⁶ Great Lakes Wetlands Conservation Action Plan, (2012), *Great Lakes Wetlands Conservation Action Plan Highlights Report 2005–2010*. Peterborough, Ontario. See map, p. 11. http://glwcap.ca/GLWCAPfiles/GLWCAP_HighlightsReport_2005-2010.pdf

⁷ Moreno-Mateos D. et al., (2012), “Structural and Functional Loss in Restored Wetland Ecosystems,” *PLOS Biology* 10(1), p. 1.

reference wetlands.” They concluded that the recovery of wetlands following restoration is “often slow and incomplete,”⁸

Recommendation 1: The target and overarching goal of the strategy must be to reverse the loss of wetlands in Ontario by 2025. In terms of implementation, it will mean differentiating southern Ontario and the near north from the Far North. In southern Ontario and the near north, the target should be net gain, with particular attention to achieving net gain within watersheds where development and land use change pressures are most heavily occurring. In the Far North, land use decisions and development approvals should include consideration of regional and cumulative effects and require mitigation of and compensation for biodiversity loss, carbon emissions and damages, and adverse impacts on values identified by Indigenous communities. Despite regional differences, the target should be a net gain in wetland area and function for the province overall.

Recommendation 2: Given the limits of human ability to fully restore wetland function and structure, the Province should prioritize the protection of existing wetlands, while nevertheless supporting restoration to achieve net gain.

2. Issue: No clear commitment to protecting Provincially Significant Wetlands (PSWs), Great Lakes coastal wetlands, or locally, regionally or internationally significant wetlands.

The proposed approach to offsetting opens the door to development within Provincially Significant Wetlands (PSWs) and Great Lakes coastal wetlands:

Some sites, features and habitat, such as provincially significant wetlands, may be ineligible for offsetting based on, for example, their biological and hydrological attributes, their vulnerability or irreplaceability etc. (p. 39)

The noncommittal language, underlined, suggests that protection for these wetlands afforded under the *Provincial Policy Statement, 2014* (PPS) may be undermined through offsetting. This must be changed. Indeed, the strategy should include a clear commitment not only to upholding current protections, but also to enhancing them by addressing ongoing losses of PSWs occurring through drainage and infrastructure development (neither of which is addressed through the PPS). On this point, note that in her 2016 report, *Small Steps Forward. Environmental Protection Report 2015/2016, Volume 2*, the Environmental Commissioner of Ontario recommends that the government “prohibit infrastructure in provincially significant wetlands.”⁹

Wetlands are particularly susceptible to the negative impacts of development on adjacent lands, especially if these affect water tables and recharge areas. In most

⁸ *Ibid*, pp. 2, 6.

⁹ Environmental Commissioner of Ontario, *Small Steps Forward. Environmental Protection Report 2015/2016, Volume 2*, (p. 80).

cases, development projects are assessed and approved on a case by case basis, a process which fails to address the cumulative impacts of isolated activities.

Further, the strategy offers no clear protection for important wetlands that have been identified in municipal or regional policies or under the Ramsar convention. The 2012 Great Lakes Wetlands Conservation Action Plan report emphasizes the importance of identifying and protecting wetlands at the municipal level:

Working with municipalities to build wetland policy into their Official Plans remains one of the most important and effective ways of protecting wetlands throughout the Great Lakes Basin.¹⁰

Where communities identify wetlands of local significance, these need to be protected from development. This may include wetlands that are less than two hectares in size (too small to be considered PSWs under the current system), especially in municipalities where historic wetland losses have been particularly intense or where certain types of wetlands are rare.

Eight wetlands of international importance, covering an area of 56,419 hectares, have been identified as Ramsar sites in Ontario. While the proposed strategy aims to promote awareness of Ramsar sites and identify new candidates, it is silent on protecting those not currently found within national or provincial protected areas.

Protecting these wetlands will help Ontario progress towards meeting international conservation targets, such as Aichi Target 11 (*Convention on Biological Diversity*), embraced by the Province in the *Ontario Biodiversity Strategy*: “By 2020, at least 17 per cent of terrestrial and aquatic systems are conserved through well-connected networks of protected areas and other effective area-based conservation measures.”¹¹

Recommendation 3: PSWs and Great Lakes coastal wetlands must continue to be strictly off limits to development and protected from the impacts of development on adjacent lands. The strategy must also aim to enhance the level of protection for these wetlands through policy that addresses the adverse impacts of drainage and infrastructure development.

Recommendation 4: The strategy should ensure that where there is a discrepancy among policies (e.g., municipal versus provincial policy), the policy which offers the highest level of protection for wetlands will prevail.

Recommendation 5: The Province should work with municipalities to incorporate effective wetland policies into municipal Official Plans. In municipalities where historic losses have exceeded 85 percent, wetlands that are less than two hectares in size should be protected.

¹⁰ Great Lakes Wetlands Conservation Action Plan, 2012, p. 24.

¹¹ *Ontario Biodiversity Strategy*, Target 13. See http://sobr.ca/_biosite/wp-content/uploads/OBS_Targets.pdf

Recommendation 6: The Province should develop policies and guidelines to effectively protect wetlands from the negative impacts of development on adjacent lands and water recharge areas and from the cumulative impacts of multiple individual projects.

Recommendation 7: The Province should move beyond merely recognizing Ramsar sites to developing policies to protect them from development (where they are not found within national or provincial protected areas).

3. Issue: Weak commitment and timeline for completing wetland mapping and evaluation.

The strategy introduces the possibility of, but does not commit to, completing wetland mapping and evaluation: “Ontario’s wetland inventory could be improved by implementing a series of activities that includes: ...” (p. 37). Again, this noncommittal language is inappropriate. There is no doubt that improvement is needed. Most wetlands in Ontario have not been evaluated. Almost all wetlands that have been evaluated are south of the Canadian Shield, and even in this region, almost half of the wetlands are still awaiting evaluation. What is required is a clear commitment to act, including especially investment from the Province to address this shortcoming.

Further, although identification of PSWs by 2025 is one of the two proposed targets, the target fails to acknowledge both the importance of protecting biodiversity and the urgency of completing wetland evaluation south of the Canadian Shield (where losses have been greatest). It also leaves the door open to wetland destruction in the absence of evaluation being completed.

Recommendation 8: The target should be revised to state: “By 2020, all significant wetlands in southern Ontario (i.e., Mixedwood Plains ecozone) are evaluated and protected to conserve biodiversity and sustain ecosystem services. By 2025 all of Ontario’s significant wetlands are evaluated and protected.”

Recommendation 9: The strategy should indicate that all wetlands will be considered provincially significant until evaluation indicates otherwise. In other words, the evaluation of significance must precede development approvals to ensure that no unevaluated PSW is negatively impacted.

4. Issue: Clear direction lacking for wetland evaluation

The strategy proposes to “develop more efficient, cost-effective methods” for evaluation and contemplates removing some values from among those that are currently considered. The lack of clear direction raises legitimate concerns about the government’s intent and about potential weakening of the system, despite the assertion that the review will not compromise the quality or accuracy of the Ontario Wetland Evaluation System (OWES) process (p. 41). It is well known that some developers are unhappy with OWES, because they feel that the criteria for identifying PSWs result in wetlands being made off-limits to development.

Recommendation 10: Either clearly state the government’s intent to improve protection for wetlands through a review of OWES, or remove this element from the strategy altogether.

As part of the proposed review of OWES, the strategy is noncommittal about the intent to “improve the way in which traditional ecological knowledge or other Indigenous values are evaluated” (p.41): whether or not this is possible is identified as a topic for exploration. There needs to be a clearer commitment to ensuring that traditional ecological knowledge and other Indigenous values will be appropriately incorporated into wetland evaluation. This requires political will and investment so that Indigenous communities have adequate opportunities and capacity to engage.

Recommendation 11: The strategy should clearly commit the Province to working with Indigenous communities to ensure that traditional ecological knowledge and Indigenous values are appropriately incorporated into wetland evaluation and decision-making.

A unique approach to evaluating the vast, intact wetlands of the Far North is needed, given their incredible importance from a climate change, biodiversity and Indigenous cultural perspective.

Recommendation 12: Develop and consult on an appropriate method for evaluating PSWs in the Far North that integrates Indigenous knowledge and sound science.

5. Issue: The “Vision” does not mention biodiversity conservation as an intended outcome.

Ontario’s wetlands are hot spots of biodiversity and a haven for well over 20 percent of the province’s species at risk. The strategy needs to explicitly embrace biodiversity conservation as an intended outcome, for example in the vision statement.

Recommendation 13: Revise the vision to explicitly acknowledge biodiversity conservation as an intended outcome so that it states: “Ontario’s wetlands and their functions are valued, protected and restored to conserve biodiversity, to sustain healthy and resilient ecosystems, and to provide ecosystem services for all life, now and in the future.”

6. Issue: Overall, the strategy is vague and non-committal, offering little in terms of clear priorities, timelines and targets needed to drive action and assess outcomes.

The strategic direction for policy is disturbingly vague and non-committal. The proposed strategy acknowledges that improvements to laws and policies are needed, but commits to reviewing and improving them only “as opportunities arise” (p. 30). It identifies 19 actions to be undertaken, listed without any prioritization or time-bound

targets (p. 31). It reads like a wish list and as such is a recipe for indecision, delay and inaction. Good intentions are not enough. Waiting for opportunities to arise is not an option if the government truly intends to reverse wetland decline. The longer we wait, the more we will lose, and the more it will cost to repair or mitigate the damage done.

We recognize that this section of the strategy sets three policy priorities: improving wetland inventorying and mapping (pp. 37-38); developing policy approaches to prevent net loss (which is exclusively focussed on wetland offsetting, pp. 38-39); and improving guidance for wetland evaluation (pp. 40 – 41). But even here, commitments or potential actions are listed without prioritization or time-bound targets needed to drive action and evaluate success.

Recommendation 14: Prioritize the proposed actions for policy improvement; set clear timelines and establish quantitative and time-referenced targets to drive action and assess outcomes.

7. Issue: No commitment to government investment to implement the strategy.

The strategy makes no mention of government investment in wetland protection and restoration, despite the fact that wetlands in southern Ontario alone provide benefits valued at over \$51 billion per year (water purification, flood control, erosion reduction, climate change mitigation).¹² Investment is needed to protect these and other assets, and at the same time to advance other provincial priorities related to biodiversity conservation, Great Lakes protection and climate change.

Recommendation 15: Earmark areas for government investment in strategy implementation. Investment in wetlands and other green infrastructure should be a central plank in the government's historic public infrastructure investment, planned over the next 10 years.

8. Issue: Weak direction on wetland offsetting

The proposed strategy sets the stage to “explore the feasibility of wetland offsetting and develop options for its appropriate use in different areas of Ontario.” There are several weaknesses to this section of the strategy. First, the explanation provided is inaccurate and confusing, for example, the second paragraph, p. 38, which states that wetland offsetting “is a policy.” Wetland offsetting may be guided by policy, but it is not a policy in and of itself.

Second, despite the fact that many important considerations for developing an offsetting policy are identified, the language in many places is noncommittal (“may be,” “should be,” etc.), providing unclear direction about how the Province intends to resolve these issues.

¹² Troy A. & Bagstad K. *Estimating ecosystem services in Southern Ontario*. Ontario Ministry of Natural Resources, Ontario. 2009, Table 4, p. 18.

Third, and most importantly, there is no clear commitment to requiring a net gain approach to wetland offsetting. Unless a net gain approach is adopted, there will be no improvement to the status quo: offsetting without net gain will merely entrench ongoing trends of wetland decline. Such an approach is unacceptable given historic wetland loss in Ontario and the considerable risks inherent in offsetting.

Below we outline 11 key issues that the wetland offsetting policy needs to address.

8.1 Net gain

There is strong support for a net gain approach to biodiversity offsetting generally¹³ and wetland offsetting in particular. For example, at a workshop hosted by Ontario Nature and Ducks Unlimited on October 26, 2015, attended by 85 diverse stakeholders, government representatives and members of Indigenous communities, 91 percent of participants agreed that “policy for compensation/biodiversity offsetting should require the achievement of a net gain in wetland habitat and function.”

Given ongoing biodiversity losses in Ontario, across Canada and around the world, holding the line with a no-net-loss approach is simply not good enough. Dan Kraus of the Nature Conservancy of Canada provides an incisive critique of the no-net-loss approach, reflecting on its legacy in Canada and internationally:

Although the science of restoration ecology has advanced significantly, trying to replicate nature is fraught with uncertainty and complexity. A review of Canada’s no net loss policy for fish habitat in 2006 concluded that 63 percent of projects resulted in loss of habitat productivity.

Similar results are documented from compensatory mitigation under the U.S. Clean Water Act to provide no net loss of wetlands and from no net loss policies in France. The lag time between loss and restoration can also result in biodiversity losses that last for a very long time.

The other issue of no net loss is that it fails to solve the problems of habitat loss, degradation and species at risk that already exist. In a country where we have lost large amount of our wetlands, grasslands and forests in the southern regions where Canadians live, no net loss and the incremental continued losses that occur under this policy just continue a trend of habitat declines. In a twisted conservation outcome, it may even increase this loss because policies to protect key areas could be watered down under the auspices that we can offset any impacts.

¹³ See Business and Biodiversity Offsets Programme (BBOP). Principles on Biodiversity Offsets. principle #4: “No net loss: A biodiversity offset should be designed and implemented to achieve in situ, measurable conservation outcomes that can reasonably be expected to result in no net loss and preferably a net gain of biodiversity.” (emphasis added) bbop.forest-trends.org/documents/files/bbop_principles.pdf

Perhaps most importantly, no net loss sends the wrong message about nature. Why, in a country that has a long list of rare species and where habitats such as wetlands in southern Ontario and Quebec and BC, and native prairies are reduced to a small fraction of their former extent, would we want to legislate the status quo? If your money manager had been losing on your investments for 20 years, and then claimed a couple of years of breaking even as a success, it may certainly be an improvement, but still woefully lacking.¹⁴

In determining net gain, offsetting policy must account for losses in biodiversity (including areal extent and quality of wetlands) and ecosystem function as well as the adverse social, cultural and economic impacts of wetland loss.

Recommendation 16: Provincial policy for wetland offsetting must require the achievement of an overall net gain in wetland area and functions. If the proposed development negatively impacts Indigenous cultural values, these impacts must also be offset on a net gain basis.

8.2 Clear and consistent policy framework

Wetland offsetting is occurring in Ontario without a clear, consistent policy framework. It has been taking place for years under the federal *Fisheries Act*, and more recently under the PPS. At our October 2015 wetlands workshop noted above, 72 percent of participants indicated that comprehensive policy was required to address inconsistencies and provide certainty regarding offsetting. Whether this objective could best be achieved by creating a new overarching policy or by aligning and refining existing policies was keenly debated. Regardless, the desire for consistency and transparency was clear.

Recommendation 17: The Province should work with Indigenous communities, municipalities and stakeholders to establish a coherent policy framework for wetland offsetting that provides consistent, high-level guidance, ensures fairness and transparency, respects Indigenous rights, responsibilities and interests, and aims to protect, restore and enhance wetlands across Ontario.

8.3 Governance

As noted in the proposed strategy, identification of clear roles and responsibilities for implementation (p. 39) is a key consideration in the development of wetland offsetting policy. With respect to offsetting generally in Ontario, there are many regulators, including federal, provincial and municipal governments and conservation authorities, but no independent body to provide oversight, monitor projects and deal with conflicts of interest.

¹⁴ Dan Kraus, "Why no net loss in biodiversity offsets fails nature and people." November 25, 2015. natureconservancy.ca/en/blog/why-no-net-loss-in.html

The issue is discussed in Ontario Nature’s 2016 report on biodiversity offsetting:¹⁵

With respect to the administration of offsetting programs, [Dave] Poulton points to an inherent tension between the desire on one hand to avoid uncertainty, delay and transaction costs, and on the other to gather the information needed to fully understand site-specific circumstances and address the inevitable risks and uncertainties. Regulators and development proponents, he explains, share a common interest in efficiency. But the public interest in biodiversity conservation may best be served by taking the time to gather detailed information, which tends to increase costs and slow down decisions.¹⁶ He observes that “there is a danger that the focused, shared interest of administrators and development proponents in having the system function smoothly may dominate the diffuse public interest in environmental protection.”¹⁷

In response, Poulton recommends a distinct separation between the agency responsible for the day-to-day administration of the offsetting program and the agency responsible for the substantive environmental outcomes. By separating these roles and responsibilities, the former agency can focus on administrative efficiencies while the latter can independently assess the outcomes against policy goals and objectives. He notes that in many jurisdictions there is a division of responsibilities among levels or agencies of government. In the United States, for example, the U.S. Army Corps of Engineers directly administers wetland offsets while policy development and oversight is provided by the Environmental Protection Agency.¹⁸

In light of these insights, we recommend the following:

Recommendation 18: The province should identify or establish an independent oversight body with the mandate and capacity to monitor and assess the adequacy of outcomes of wetland offsetting policies and programs and to ensure accountability and transparency.

¹⁵ Ontario Nature, October 2016, *Biodiversity offsetting In Ontario: Issues, accomplishments and future directions*, pp. 32 – 33.

¹⁶ Poulton, D. *Key Issues in Biodiversity Offset Law and Policy: A Comparison of six jurisdictions*. Toronto: Ontario Nature, June 2015, pp. 11 –12. The conflict is even more challenging when Indigenous communities are involved. The capacity of regulatory bodies and developers to negotiate in a respectful cross-cultural way and to provide appropriate accommodation is extremely limited. Furthermore the duty to consult is a provincial responsibility that cannot be transferred.

¹⁷ *Ibid.*, p. 12.

¹⁸ *Ibid.*, pp. 39–40.

8.4 Engaging Indigenous peoples

We note the government's intent to seek input from Indigenous communities in the development of the wetland offsetting policy (p. 39). In so doing, we would expect that the government will satisfy all legal duties regarding consultation, recognize Indigenous rights, and make every effort to integrate Indigenous cultural values and interests into the policy framework.

Recommendation 19: Ontario's wetland offsetting policy should be developed in consultation with Indigenous communities and should explicitly recognize Indigenous rights, including the right to Free, Prior and Informed Consent.

8.5 Limits to wetland offsetting

As noted in the proposed strategy, wetland offsetting policy will need to identify "the types of wetlands and functions that can or cannot be compensated for," and thus the wetlands that will be ineligible for offsetting based on "their biological and hydrological attributes, their vulnerability or irreplaceability, etc." (pp. 39). We are pleased to see that the government intends to set limits to wetland offsetting based on these and potentially other considerations. However, as discussed above, the lack of a clear commitment to set PSWs and Great Lakes coastal wetlands off-limits to development through offsetting is of deep concern. We have no doubt that opening the door to development in these significant wetlands through offsetting would be unacceptable to most Ontarians.

Generally, there is broad international agreement about the requirement to set limits to offsetting.¹⁹ Likewise, over the past three years, participants at Ontario Nature's biodiversity offsetting workshops have expressed strong support for setting some sites, features and habitats off-limits to offsetting, based on their vulnerability and irreplaceability. Discussions with members of Indigenous communities have highlighted the need to draw on Indigenous knowledge to establish limits to offsetting and to account for community values, relationships and practices in determining vulnerability, irreplaceability and significance.

Recommendation 20: The Province should set criteria for determining limits to wetland offsetting, taking into account the irreplaceability, vulnerability and significance of the wetlands in question and their cultural significance for Indigenous peoples. In so doing, it must uphold or strengthen current protections for PSWs and Great lakes coastal wetlands. Some wetlands, such as fens and bogs, are notoriously difficult if not impossible to restore. Where these wetland types are rare (south of the Canadian Shield) or provide significant wildlife habitat (e.g., the James Bay and Hudson Bay coastlines), strict protections should apply.

¹⁹ Business and Biodiversity Offsets Programme: Principles on Biodiversity Offsets, 2009, Principle 2. http://bbop.forest-trends.org/documents/files/bbop_principles.pdf

8.6. *Mitigation sequence/hierarchy:*

We appreciate the treatment of the mitigation sequence/hierarchy in the proposed strategy, which provides a clear explanation of the progression from avoidance of impacts, to minimization of unavoidable impacts and finally to offsetting of (compensation for) impacts that cannot be avoided. As noted in the strategy offsetting is to be considered only as a “final option.” This conceptualization of the mitigation sequence/hierarchy aligns well with international standards and expectations.

The mitigation sequence/hierarchy is an expression of the value of leaving natural ecosystems intact and the risks and uncertainties inherent in human interventions aimed at minimizing disturbance and restoring, enhancing or constructing wetlands to create effective offsets.

There is broad agreement internationally regarding adherence to the mitigation sequence/hierarchy so that offsetting is used only to compensate for significant residual impacts that could not otherwise be avoided or minimized.²⁰ Among participants in Ontario Nature’s initiative there has been very strong support for the mitigation sequence/hierarchy. For example, discussions with members of Indigenous communities validated its importance and highlighted the need to integrate Indigenous knowledge and values into the application of the sequence, in accordance with community protocols. Likewise, at the October 2015 wetlands workshop, 88 percent of participants agreed that offsetting “should be employed only as a final option within a clear mitigation hierarchy that prioritizes avoidance of impacts.” However, some participants expressed concerns about the lack of discipline in applying the sequence/hierarchy (developers jumping straight to offsetting without first avoiding or minimizing harm) and about the need for an option to simply say “no” to development.

Indeed, despite widespread support for the mitigation sequence/hierarchy, it has proven difficult to implement in practice. As outlined by Justice Brian J. Preston:

There appears to be a general lack of clarity as to how to know when to move from one step in the hierarchy to the next. Questions arise as to, first, how widely a proponent is required to search for alternatives that avoid adverse impacts before declaring that the adverse impacts are “unavoidable” and moving on to options for mitigation/minimisation, secondly, when is mitigation unfeasible and consideration of compensatory measures appropriate, and thirdly, what are the thresholds to be met in order to move between the steps?²¹

²⁰ *Ibid.*, Principle 1. See also Poulton, pp. 7, 33.

²¹ Brian J. Preston, “Biodiversity Offsets: Adequacy and Efficacy in Theory and Practice,” IUCN Academy of Environmental Law, 13th Annual Colloquium, Jakarta, September 7 – 12, 2015.

Particularly problematic, according to Poulton is the application of the first step, avoidance. In some jurisdictions key project variables, such as project purpose and location, are not subject to the duty to avoid. Consequently, “alternatives that might bring greater avoidance are effectively ruled out from the moment the application is drafted.”²²

To support implementation, Ontario’s wetlands offsetting policy should set clear objectives and thresholds for each step in the sequence/hierarchy, including consideration of alternative locations, designs, construction and operational techniques, on-site restoration methods, etc., which might reasonably and practicably serve the same purpose with less environmental damage. The policy should require project proponents to document all measures taken to avoid and minimize negative impacts on wetland values, including the consideration of alternatives.

Recommendation 21: Policy for wetland offsetting should clearly position offsetting as the last step within a clear mitigation sequence/hierarchy, the first step being to define areas that are off-limits to development and to be protected from negative impacts as defined through sound science and Indigenous knowledge. Following this, any unavoidable negative impacts must be minimized to the extent possible. Offsetting then offers a means to deal with residual impacts that cannot be addressed through avoidance or minimizing harm.

Recommendation 22: Policy for wetland offsetting should set out precise steps or thresholds for compliance and require development proponents to document all measures taken to avoid and minimize negative impacts on biodiversity and wetland function, including consideration of alternatives. It should require development proponents to engage affected Indigenous communities in order to integrate Indigenous knowledge according to community protocols. It should also require regulators to carry out their own assessments of proponents’ efforts to avoid and minimize impacts. Where efforts have been insufficient, the policy should direct regulators to refuse to grant authorizations for proposed developments.

8.7. Establishing Equivalence:

We appreciate the intent to address the issue of equivalence in the wetlands offsetting policy, as stated in the proposed strategy (p. 39). Establishing equivalence between the negative impacts of development at one site and compensation for those impacts at another site is a necessary yet difficult and risk-fraught exercise. It entails prioritizing

²² Poulton, p. 33.

select ecosystem features, functions and values to design and evaluate the offset, but can never be a perfect science, given the unique attributes and values of each site. It also gives rise to an inherent tension between gathering sufficient information on one hand and avoiding delay and transaction costs on the other. Notwithstanding, for offsetting to proceed, common metrics must be established to enable a comparison of the damage anticipated or incurred and the compensation proposed or achieved.

With respect to metrics, policy must provide standards and criteria for assessing and comparing gains and losses. It should require equivalence in terms of form (i.e., like-for-like offsets of the same type of wetland) and function (e.g., the services provided).²³ It should also take into account not only quantity (e.g., the size of the wetland lost or gained) but also quality with respect to the condition of both sites and should include a consideration of adjacent lands. Moreno-Mateos et al. note the difficulty of recovering plant assemblages and attaining pre-impact levels of carbon and nitrogen storage and cycling through wetland restoration.²⁴ Wetland offset policy should set clear expectations about recovering these and other features and functions, at least in part through replacement ratios that account for vulnerability, risk and social and economic values.

The international Business and Biodiversity Offset Programme similarly recommends consideration of social and cultural values as well as the landscape context for the offset:

A biodiversity offset should be designed and implemented in a landscape context to achieve the expected measurable conservation outcomes taking into account available information on the full range of biological, social and cultural values of biodiversity, and supporting an ecosystem approach.²⁵

The importance of integrating the full range of Indigenous cultural values and interests when calculating equivalence was emphasized in our discussions with members of Indigenous communities.

Recommendation 23: In establishing equivalence of impacts and offsets, provincial wetlands policy should require consideration of the size, form, function, condition and landscape context of the development and offset sites as well as associated social and economic values. Indigenous cultural values must be fully considered in accordance with Indigenous rights, responsibilities and interests.

²³ See Preston, p. 16.

²⁴ Moreno-Mateos, p. 3.

²⁵ Business and Biodiversity Offsets Programme, Principle 3.

8.8 Location of offset:

We agree with the following statement in the proposed strategy: “The location of the wetland offset, including its proximity to the impact, should also be considered in assessing equivalency. Wetland losses in the south should not be compensated for by gains in the north.” (p. 39) In addition, it should be acknowledged that the location of the offset is central not only to conservation outcomes, but also to equitable outcomes from a community perspective. Wetland offsetting policy should ensure that both are considered and addressed.

From a community perspective, it would be desirable to locate the offset as close to the impact site as possible so that the benefits it provides are maintained in a given area and the community does not lose out. However, in some cases, due to a lack of appropriate or available lands, it may not be possible to locate the offset near the impact site. Further, from a conservation outcomes perspective, there could be a greater overall benefit if offsets are located so as to increase the size of an existing habitat area, connect existing habitats or create habitat of a higher quality (better climate, better soil, closer population sources, etc.).

In their review of offsetting policies internationally, McKenney and Kiesecker show that the offset location is generally determined according to the landscape context (e.g., same watershed, same bioregion, same bird migratory path) and conservation outcome (e.g., best long-term benefit to the species). They contend that policy guidance is moving away from strict requirements to locate the offset as close as possible to the impact site.²⁶

Nevertheless, in his review of biodiversity offset law and policy internationally, Poulton found that five of the six jurisdictions surveyed express a preference for proximity of impact and offset sites (e.g., in the same vicinity, watershed, biogeoclimatic zone, landscape unit, catchment, ecological district). He recommends that “the equitable distribution of social costs and benefits” be factored into decisions about locating the offset site.²⁷

Indeed, internationally there is agreement that there must be an equitable distribution of social costs and benefits, as expressed in the following Business and Biodiversity Offsets Programme principle:

²⁶ McKenney, B.A. and J.M. Kiesecker, “Policy Development for Biodiversity Offsets: A Review of Offset Frameworks,” *Environmental Management*, 45 (2010), Table 1, pp. 169, 173.

²⁷ Poulton, p. 38.

Equity: A biodiversity offset should be designed and implemented in an equitable manner, which means the sharing among stakeholders of the rights and responsibilities, risks and rewards associated with a project and offset in a fair and balanced way, respecting legal and customary arrangements. Special consideration should be given to respecting both internationally and nationally recognized rights of indigenous peoples and local communities.²⁸

Given the significant ecological, social and economic benefits of wetlands, including their importance in storing and purifying water and attenuating the negative impacts of climate change, policy should ensure that offset sites are located within the same catchment or sub-watershed as the impact sites.

Recommendation 24: Policy for wetland offsetting should require that offset sites be located within the same catchment or sub-watershed as the impact sites. Decisions should be based on a consideration of the landscape context and desired conservation outcomes as well as the equitable distribution of social costs and benefits.

8.9 Duration of offset:

We agree with the proposed strategy (p. 39) that the duration of the offset is a key consideration that should be addressed in developing the wetland offset policy. The duration of an offset – how long it needs to last – is linked to the duration of the impacts of development. There is broad agreement that the outcomes secured through an offset should last at least as long as the project’s impacts, and ideally in perpetuity. This perspective is expressed in the following Business and Biodiversity Offsets Programme principle:

Long-term outcomes: The design and implementation of a biodiversity offset should be based on an adaptive management approach, incorporating monitoring and evaluation, with the objective of securing outcomes that last at least as long as the project’s impacts and preferably in perpetuity.²⁹

Recommendation 25: Policy for wetland offsetting should ensure that outcomes secured through an offset last at least as long as the project’s impacts, and ideally in perpetuity.

²⁸ Business and Biodiversity Offsets Programme, Principle 7.

²⁹ Business and Biodiversity Offsets Program, Principle 8.

8.10 Monitoring:

Though biodiversity offsetting has been occurring for many years, there has been a lack of long-term monitoring to demonstrate success. In fact, shortcomings in monitoring are a key factor in the failure of offsetting projects.³⁰ The need to address this deficiency is widely recognized. For example, the Business and Biodiversity Offsets Programme considers monitoring to be an essential element of both stakeholder participation and the securement of long-term outcomes.³¹ Certainly monitoring is key to demonstrating compliance with relevant policy and regulations.³²

There are a number of issues with respect to monitoring that will need to be addressed in the wetland offset policy. These include: who will be required to conduct the monitoring; who will pay for the monitoring, especially over the long-term; how long monitoring will be required and how frequently it must occur; how to integrate monitoring into adaptive management; and how communities and stakeholders will be involved and kept informed of results. Underlying these issues is the need for policy to strike an appropriate balance between effectiveness and efficiency.

Recommendation 26: Policy for wetland offsetting should set clear requirements and high standards for monitoring. It should stipulate that development proponents must cover the cost of monitoring. It should require baseline surveys prior to impacts as well as long-term monitoring sufficient to determine whether outcomes have been achieved and to demonstrate compliance with regulatory requirements.

8.11 Conservation banking:

Conservation banking refers to the restoration and protection of lands that serve to offset adverse impacts to species or habitats elsewhere through the use of conservation credits. It involves undertaking conservation actions prior to any particular corresponding development and creating credits to be applied at a later date to development projects needing offsets. Conservation banking is a cornerstone of wetland offsetting in the United States, one of the most long-standing offset programs in the world. There, as noted by Poulton, the banking system has grown rapidly, exceeding over 2,000 mitigation banks and in-lieu fee programs offering credits.³³

³⁰ International Union for the Conservation of Nature, *Biodiversity Offsets Technical Study Paper*, Gland, Switzerland: IUCN, 2014, p. 34.

³¹ Business and Biodiversity Offsets Program, Principles 6 (stakeholder participation) and 8 (long-term outcomes).

³² Preston, p. 26.

³³ Poulton, p. 29.

Conservation banking is an issue that generates significant concern and unease. For example, at a biodiversity offsetting forum hosted by Ontario Nature in 2014 only 59 percent of participants (out of 29) agreed that “it is important to set up conservation banking alongside biodiversity offsetting.” At a conservation banking workshop hosted by Ontario Nature and Toronto and Region Conservation Authority in March 2016, 69 percent of participants (out of 104) indicated support for conservation banking (22 percent were unsure and 9 percent were opposed).

Conservation banking is understood to offer several potential benefits including: securement of conservation outcomes in advance of development impacts; new revenue for conservation efforts, including farm stewardship; a more strategic, landscape-based approach to ecological restoration; and reduction of transaction costs for development proponents and offset providers. At the same time, however, for conservation banking to gain credibility and acceptance, policy must address a variety of legitimate concerns about potential abuses, liability, pricing, availability of offset sites and more.

In developing the wetland offset policy, the Province should carefully examine and provide direction on conservation banking, with input from Indigenous communities, municipalities and stakeholders. For one thing, conservation banking is already occurring in one form or another, but without government policy or guidance. At the March 2016 conservation banking workshop, participants were asked whether they already used a form of conservation banking. Participants from six organizations (one conservation authority, one municipality, one federal government agency, two consultants and one anonymous) responded “yes,” and participants from 12 organizations (one industry, two conservation authorities, two municipalities, two government agencies, two consultants, two non-government organizations and one anonymous) responded “somewhat.”

Recommendation 27: The province should carefully examine and provide direction on conservation banking, with input from Indigenous communities, municipalities and stakeholders. If it decides to enable conservation banking through law and policy, it must address such issues as governance and oversight, potential abuses, liability, pricing, equity, transparency, establishing equivalence, monitoring and enforcement.

Conclusion

The development of a wetland conservation strategy for Ontario presents a significant and welcome opportunity to improve the state of Ontario’s biodiversity and to mitigate and enhance our resilience to the impacts of climate change. Public support for the

strategy will depend, however, on addressing the issues outlined above and setting a clear policy direction aimed unequivocally at reversing the ongoing trend of wetland loss in Ontario.



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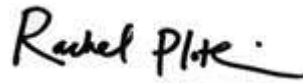
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