

ALBERTA LAND INSTITUTE

BIODIVERSITY OFFSETTING IN CANADA: A BRIEF REVIEW OF POLICIES

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Contents

Introduction	2
Federal Policies	2
a) Fish and Fish Habitat	2
b) Wetlands	3
c) Species at Risk	3
d) Operational Framework for the Use of Conservation Allowances	3
Provincial Policies.....	4
British Columbia.....	4
a) Environmental Mitigation Policy and Procedures	4
b) Water Sustainability Act.....	4
Alberta.....	5
a) Wetlands	5
b) Alberta Land Stewardship Act.....	5
Saskatchewan	6
a) Habitat Mitigation.....	6
b) Agricultural Water Management.....	7
Northwest Territories	7
Manitoba.....	8
Ontario	9
a) Endangered Species	9
b) Wetlands	9
Quebec.....	10
New Brunswick.....	10
Prince Edward Island.....	11
Nova Scotia	11

Introduction

Under the Canadian constitution federal, provincial and territorial governments each have jurisdiction and responsibility for some components of the environment. The federal government, to name just two of the more important categories, has responsibility for coastal and inland fisheries, and for navigable waters. It also has authority over projects spanning between provinces, including many pieces of major transportation infrastructure like railways and pipelines. The provinces, on the other hand, have responsibility for natural resources, for property rights, and local undertakings.

This means that each level of government is faced with the task of determining the appropriate mitigation of adverse environmental impacts in particular circumstances. Each therefore has the opportunity to consider the mitigation hierarchy and the use of offsetting for biodiversity. The hierarchy is a common prescription that impacts should first be avoided altogether, and secondly be minimized through a variety of mitigation techniques. Onsite restoration may reverse some impacts as a third measure. Offsetting and compensation are only to be employed to address the residual losses that remain after all these prior steps have been taken.

This document has the very limited purpose of enumerating federal, provincial and territorial policies having a significant focus on offsetting for biodiversity. It does not attempt to take into account the voluntary offset measures that development proponents have taken at times, municipal policies and initiatives, Indigenous initiatives, or the ways in which various regulators have applied offsets, either with or without policy guidance. All of these spheres are important and the facts that they are not reviewed here should not be taken to diminish their conservation or policy value.

Federal Policies

a) Fish and Fish Habitat

Canada's longest-standing offset program has operated since 1986 under the federal *Fisheries Act*.¹ While the Act has been amended several times but the essence of the offset program has remained the same. Section 35 provides a prohibition on the "harmful alternation, disruption or destruction" of fish habitat – often referred to as the HADD provision. It allows, however, the authorization of such activity on conditions set by the appropriate Minister, currently the Minister of Fisheries, Oceans and the Canadian Coast Guard.

There have been a series of policy guidance documents setting out the conditions which should be expected as part of such an authorization for HADD activities. For many years the main policy guidance committed to a goal of no net loss of fish habitat and laid the groundwork for a system of offsetting.² That system has become an accepted part of any project planning on or near fish habitat across Canada.

The most recent version of the policy guidance sets out an endorsement of the mitigation hierarchy and the principles of offsetting, but sets a less precise standard of "support[ing] the conservation and protection of fish habitat by counterbalancing the residual death of fish and/or the harmful alternation,

¹ RSC 1985, c F-14.

² Fisheries and Oceans Canada, *Policy for the Management of Fish Habitat* (Ottawa: DFO, 1986)

disruption or destruction of fish habitat”³ This is, however, supplemented by the principle that “[b]enefits from measures to offset should balance the adverse effects,”⁴ which might be read as a restatement of a no net loss goal.

While first-party or self-banking has been allowed for fish habitat for some time under a series of bilateral agreements between Fisheries and Oceans Canada and major proponents with ongoing activities in this area, the 2019 amendments to the *Fisheries Act* expressly allowed self-banking and set out a process for its pursuit. Third party banking is not yet allowed, but the department is believed to be giving it consideration.

b) Wetlands

Those wetlands on federal land or affected by federally-authorized projects are covered by the federal policy on wetland conservation.⁵ The policy contains an objective of sustaining the ecological and socio-economic functions of wetlands and set out a goal of no net loss of wetland functions.⁶ Based on this policy federal regulators have routinely required offsetting for those wetlands covered by the policy for the past two decades.

c) Species at Risk

Section 73 of the federal *Species at Risk Act*⁷ allows the Minister of Environment to authorize activities that are likely to adversely affect list wildlife species or their habitat, on condition that (among other criteria) the activity benefits the species and will not jeopardize its survival or recovery. This provision has been interpreted to enable offsetting for such activities.

In 2016 the federal government released a draft policy for the interpretation and application of Section 73, which set out offset principles.⁸ After extensive public feedback that policy was not finalized but is still often referred to.

Notwithstanding the inchoate nature of the federal policy, federal regulators have often imposed offset conditions on activities adversely affecting listed species.

d) Operational Framework for the Use of Conservation Allowances

In addition to the above specific policies, since 2012 federal authorities have had policy guidance for the application of the offsetting and the mitigation hierarchy in all federal activities. The *Operational Framework for the Use of Conservation Allowances*⁹ reviews the federal experience with offsetting and sets out a series of principles for its application. It is currently being reviewed for possible updating.

³ Fisheries and Oceans Canada, *Policy for Applying Measures to Offset Adverse Effects on Fish and Fish Habitat Under the Fisheries Act*, December 2019, online: <<https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/policies-politiques-eng.html>>. Quote at page 8.

⁴ *Ibid* at 9.

⁵ Government of Canada, *The Federal Policy on Wetland Conservation*, 1991, online: <<https://ceaa-acee.gc.ca/050/documents/p80054/129982E.pdf>>.

⁶ *Ibid* at 5.

⁷ SC 2002, c 29.

⁸ Government of Canada, *Proposed Species at Risk Act Permitting Policy*, 2016, online: <https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/policies/Permitting_EN.pdf>.

⁹ Environment Canada, *Operational Framework for the Use of Conservation Allowances* (Ottawa: Environment Canada, 2012), online: <<https://www.canada.ca/en/environment-climate-change/services/sustainable->

Provincial Policies

British Columbia

a) Environmental Mitigation Policy and Procedures

The Province of British Columbia has no mandatory requirement of offsetting for impacts to landscapes. Instead it has provided voluntary guidance for the Province's regulators and development proponents who might choose to consider offsetting as a form of mitigation.

The *Environmental Mitigation Policy* and accompanying *Environmental Mitigation Procedures* were released in 2014.¹⁰ The *Policy* is a 4-page document that introduces and endorses the mitigation hierarchy, including offsetting. It makes clear that it is permissive in nature, and does not add any legal requirements to existing environmental mitigation processes. The *Procedures* go further to elaborate on how each level of the hierarchy may be applied under different circumstances. They also set out a process for applying the guidance to particular projects and types of impacts. They do not prescribe specific mitigation targets, including no net loss.

One innovative aspect of British Columbia's offset policy lies in the calculation of multiplier ratios. After several years of *ad hoc* decisions and rules of thumb, the B.C. Ministry of the Environment developed a "multiplier tool" spreadsheet that calculates multipliers based on a weighted factoring of impact severity, landscape type and importance, and time lags in offset effectiveness. It is important to understand, however, that the tool is not intended to be determinative but a transparent means of anticipating the implications of a variety of project design options, and a spur to discussion and innovation.

The application of British Columbia's *Policy* and *Procedures* depends on voluntary uptake by both development proponents and provincial regulators. That remains a struggle, with many projects being approved without application of these policy tools. However, work to refine the tools and improve their adoption is ongoing.

b) Water Sustainability Act

B.C.'s *Water Sustainability Act*¹¹ governs the use of water as a public resource and the authorization of any diversion of water. It provides that the authorization of any diversion of water from a stream may be made conditional upon compensatory mitigation measures on a different part of the stream or on a different stream.¹²

development/publications/operational-framework-use-conservation-allowances.html>. The Framework does not use the term offsetting, but rather "conservation allowance," which appears to be synonymous.

¹⁰ Both documents and supporting materials are available online at <<https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/environmental-guidance-and-policy/environmental-mitigation-policy>>.

¹¹ SBC 2014, c 15.

¹² *Ibid* s 16.

Alberta

a) Wetlands

The most requirement for habitat offsetting is imposed by the *Alberta Wetland Policy*, released in 2013.¹³ The legislative foundation of the system is the *Alberta Water Act*, which requires an approval for any disturbance of a water body, and provides that such approvals may be granted on conditions.¹⁴ The policy takes that further to explain that any loss of wetland area, after application of the full mitigation hierarchy, is to be compensated through some provisions of replacement wetland(s).

The extent of offset obligation for wetlands is based upon an assessment of the “Relative Wetland Value” of the affected wetland, which is based on consideration of the wetland’s contribution to water quality, hydrology, biodiversity and human uses.¹⁵ This assessment results in each wetland being assigned a value according to a 4-level scale, A to D with A having the highest value. The assigned value of the affected wetland and the proposed replacement value are the key inputs in application of a prescribed range of multiplier ratios. Like-for-like replacements (A for A, B for B) use a 1:1 ratio, where those with the greatest discrepancy (A for D) use an 8:1 ratio. (This ratio works in reverse as well, so that a D for A exchange attracts a ratio of just 1:8.)¹⁶

The *Alberta Wetland Policy* provides that replacement wetlands may be provided via two routes: “restorative replacement,” meaning the actual restoration, enhancement, construction, or protection of an equivalent wetland, or “non-restorative replacement,” which amount to payment into an in-lieu fund. The use of in-lieu payments is not new to Alberta. Under the prior wetland policy regulators commonly required payments to a non-profit wetland conservation group as a means of providing wetland conservation. The current policy originally aimed to create a variety of such “wetland replacement agents,” but has devolved into a government-controlled fund making discretionary disbursements and grants.

b) Alberta Land Stewardship Act

The first decade of the 21st century saw a lot of interest in Alberta in improving land stewardship and environmental protection through the use of market-based instruments. This was reflected in landmark policies such as the *Water for Life* strategy¹⁷ and the *Alberta Land-Use Framework*.¹⁸ The latter, released in 2008, set out a vision whereby the pressures on the landscape from both regulated and non-regulated sectors, including recreation, would be managed within the carrying capacity of the landscape. This was to be done through the development of regional plans containing objectives and

¹³ The policy and supporting documents are available online at <<https://www.alberta.ca/alberta-wetland-policy-implementation.aspx>>.

¹⁴ RSA 2000, c W-3, s 35-37.

¹⁵ *Alberta Wetland Policy* at 11.

¹⁶ *Ibid* at 19.

¹⁷ Alberta, *Water for Life* strategy, online: <<https://www.alberta.ca/water-for-life-strategy.aspx>>.

¹⁸ Alberta, *Land-Use Framework*, online: <<https://landuse.alberta.ca/LandUse%20Documents/Land-use%20Framework%20-%202008-12.pdf>>.

thresholds, and through the increased use of innovative market mechanisms to incent sound land management.

The *Land-Use Framework* was given legislated form by the adoption of the *Alberta Land Stewardship Act*¹⁹ in 2009. In addition to mandating regional planning, that act contained a general endorsement of research and development into the use of market-based instruments,²⁰ and enabled the development of regulations for several specific instruments including conservation easements, trade of development credits and conservation offsets (essentially synonymous with biodiversity offsets). The provisions respecting conservation offsets envision a system of “stewardship units” (representing positive and negative environmental values) being offset against each other as well as an exchange where stewardship units could be sold in an open market.²¹ The inchoate offset system has been the subject of much discussion both within and outside the Government of Alberta over the last decade. To date, however, no regulations have been developed to give these provisions force.

Saskatchewan

a) Habitat Mitigation

Several pieces of provincial legislation enable the Ministry of Environment to impose mitigation requirements in the permitting of a broad range of activities having adverse impacts on fish and wildlife. The Ministry has been exploring the potential use of offsets as a mitigation measure since 2011, though to date such conditions have only been used in a sub-set of activities, mainly in the southern part of the province.

In response to industry advice, a draft habitat mitigation framework is being developed to communicate outcome targets and principles and provide a basis for continued development of practical mitigation approaches that avoid, minimize and offset impacts to priority habitat for wild species while allowing for balanced conservation and development. This item is still a draft in development.

At the same time, the Province has listed “mitigation offsets” as one of the five management strategies listed in the *Draft Range Plan for Woodland Caribou in Saskatchewan*, released in 2019.²²

The Ministry is continuing work to develop and test habitat offset protocols for the boreal forest, prairie grasslands and wetlands and is exploring conservation banking approaches that can support boreal and other habitat mitigation in Saskatchewan.

¹⁹ SA 2009, c A-26.8.

²⁰ *Ibid* s 23.

²¹ *Ibid* s 45-47.

²² Online: <<https://pubsaskdev.blob.core.windows.net/pubsask-prod/114947/Draft%252BRange%252BPlan%252Bfor%252BWoodland%252BCaribou%252Bin%252BSK%252BSK2%252BWest.pdf>>.

b) Agricultural Water Management

Saskatchewan's Agricultural Water Management Strategy²³ was released in 2016 with the objective of ensuring that water quality, quantity and habitat impacts from drainage are appropriately mitigated. The focus of the strategy to date has been on bringing agricultural drainage in priority areas into regulatory compliance, with requirements for implementation of beneficial management practices to minimize impacts. Mitigation policy tied to the Agricultural Water Management Strategy is still in development and may make provision for offsetting for wetlands.²⁴

Northwest Territories

In the last five years two significant regulatory decisions have moved the Government of the Northwest Territories toward the development of a general offset policy. In 2016 the Mackenzie Valley Review Board (MVRB) issued its Report of Environmental Assessment and Reasons for Decision (REA) with respect to Dominion Diamond Ekati Corporation's application to expand the Ekati diamond mine.²⁵ The REA included a required measure that Dominion develop a plan to offset the residual adverse impacts of the mine expansion on caribou. The most significant potential impact was on barren-ground the Bathurst herd of barren-ground caribou.

Two years later in 2018 the MVRB issued a REA respecting the proposal by the Northwest Territories Government itself to build the Tł̨chq̨ All-Season Road, a 97-kilometre 2-lane gravel road to connect the community of Whatì to Highway 3.²⁶ Again the MVRB required the development and implementation of a habitat offset plan, this time for boreal caribou.

These decisions took place in the absence of any official policy on offsetting, but have stimulated a series of moves toward the development of such policy. In response to the MVRB decision on the Ekati mine the Department of Environment and Natural Resources (DENR) commissioned this author to draft an assessment framework for offsetting for caribou.²⁷ In 2019 the GNWT released its *Wildlife Management and Monitoring Plan Process and Content Guidelines*, which encouraged developers to use the mitigation hierarchy, including offsetting, in the planning of their mitigation activities. Later that year both the range plan for the Bathurst barren-ground caribou herd²⁸ and the range planning

²³ Saskatchewan Water Security Agency, *Agricultural Water Management Strategy* (website), online: <<https://www.wsask.ca/Water-Programs/Agricultural-Drainage-/Agricultural-Water-Management-Strategy/>>.

²⁴ Corie White, personal communication, June 9, 2021.

²⁵ Mackenzie Valley Review Board, *Report of Environmental Assessment and Reasons for Decision, Dominion Diamond Ekati Corp. Jap Project*, EA 1314-01, February 1, 2016, online MVRB: <http://reviewboard.ca/upload/project_document/EA1314-01_Report_of_Environmental_Assesment_and_Reasons_for_Decision.PDF>.

²⁶ Mackenzie Valley Environmental Impact Review Board (MVEIRB 2018), *Report of Environmental Assessment and Reasons for Decision: GNWT Tł̨chq̨ All-Season Road project*, EA1617-01, March 29, 2018, online MVRB: <https://reviewboard.ca/upload/project_document/Final%20TASR%20REA%20April%2003.pdf>.

²⁷ David W. Poulton, *Offsetting for Caribou: Toward an Assessment Framework for the Northwest Territories*, February 2018,

²⁸ Government of the Northwest Territories, *Bathurst Caribou Range Plan*, August 2019, online DENR: <https://www.enr.gov.nt.ca/sites/enr/files/resources/bathurst_caribou_range_plan_2019_-_plan_pour_laie_de_repartition_des_caribous_de_bathurst_2019.pdf>.

framework for boreal caribou prescribed offsetting, in addition to the other steps in the mitigation hierarchy.

The GNWT has not yet developed policy guidance for how offsetting is to be implemented, nor established any administrative structures for such a process, but work is currently underway with a target for completion of early 2022.

Manitoba

The Province of Manitoba does not have a well-developed offset policy but many similar elements have been articulated with respect to the conservation of the province's wetlands. For several years the impacts from the development of provincial transportation and infrastructure have been subject to an informal type of compensation in the form of financial support for the wetlands conservation programs of the Manitoba Habitat Heritage Corporation.

More recently, the Province has committed to no net loss of water retention focusing on that one hydrological function.²⁹ Further, the same policy comes close in the following passage to suggesting that offsetting will be a mechanisms for achieving this (though stops short of actually saying so): "While avoidance and minimization are the priorities , Manitoba will be exploring options for a mechanism to allow a more flexible and effective framework for mitigating wetland loss."³⁰

A more recent policy consultation document in the development of Manitoba's Water Management Strategy suggests that the credit side of any notion of offsetting may not necessarily take the form of a positive contribution to wetland conservation *per se*. Rather, it suggests that in addition to wetland restoration and construction, water retention goals may be achieved "through the construction of water retention structures such as dugouts and irrigation reservoirs, and through improved soil health."³¹ It may be that some of these measures would not optimize benefits to biodiversity, as that is not the focus of the program.

²⁹ Manitoba Sustainable Development, *Made-in-Manitoba Climate and Green Plan: Hearing from Manitoban*, 2017, at 36, online:

<https://www.gov.mb.ca/asset_library/en/climatechange/climategreenplandiscussionpaper.pdf>.

³⁰ *Ibid* at 36.

³¹ Manitoba's Expert Advisory Council under the Climate and Green Plan Implementation Act, *Manitoba Water Management Strategy – Seeking Perspectives: An Engagement Document*, August 2020, at 28, online:

<[https://ehq-production-canada.s3.ca-central-](https://ehq-production-canada.s3.ca-central-1.amazonaws.com/3f808ab48c69368a6dcf3c53034dac37c9040c45/original/1597341490/EAC_Water_MB_2020_Paper_tk106_ACCESS.pdf_44791995ca670b25c985e6737c249654?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIBJCUK4Z04WUUA%2F20210605%2Fca-central-1%2Fs3%2Faws4_request&X-Amz-Date=20210605T224211Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=7b1b8015f670abf99c094e3ec4c687f3b05b0971616aa9f9cfd3c19ed89b82e5)

[1.amazonaws.com/3f808ab48c69368a6dcf3c53034dac37c9040c45/original/1597341490/EAC_Water_MB_2020_Paper_tk106_ACCESS.pdf_44791995ca670b25c985e6737c249654?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIBJCUK4Z04WUUA%2F20210605%2Fca-central-1%2Fs3%2Faws4_request&X-Amz-Date=20210605T224211Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=7b1b8015f670abf99c094e3ec4c687f3b05b0971616aa9f9cfd3c19ed89b82e5](https://ehq-production-canada.s3.ca-central-1.amazonaws.com/3f808ab48c69368a6dcf3c53034dac37c9040c45/original/1597341490/EAC_Water_MB_2020_Paper_tk106_ACCESS.pdf_44791995ca670b25c985e6737c249654?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIBJCUK4Z04WUUA%2F20210605%2Fca-central-1%2Fs3%2Faws4_request&X-Amz-Date=20210605T224211Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=7b1b8015f670abf99c094e3ec4c687f3b05b0971616aa9f9cfd3c19ed89b82e5)>.

Ontario

a) Endangered Species

Ontario's *Endangered Species Act*³² of 2007 established a form of offsetting for impacts upon those species listed under the Act. The Act contained prohibitions on the "killing, harming, capture, etc." of species (section 9) and the damage or destruction of such species' habitat (section 10). The responsible Minister, however, was empowered to issue a permit for activities having those impacts providing that the conditions on such a permit were likely to produce an "overall benefit" for the species in question. "Overall benefit" was understood to go beyond a no net loss goal to require a net positive benefit to the species.³³ For several years permitting has proceeded on this basis and offsetting has become an accepted part of environmental protection on the Province.

Amendments to the Act in 2019 substantially augmented this regime. One aspect of this was the allowance of "Landscape Agreements" that could be a basis for permitting activities producing otherwise prohibited impacts. Such agreements are to "assist with the protection or recovery of one or more [listed] species," though not necessarily the same species impacted by the primary development, so long as one impacted species benefits.³⁴ This amounts to a loosening of equivalency rules for offsetting.

Secondly, in response to complaints from the business community that the overall benefit permitting process was too cumbersome, the new version of the Act established the Species at Risk Conservation Fund.³⁵ The Fund was established to facilitate permitting through a form of in-lieu fees, whereby developers could satisfy their offset obligations by making a specified payment into the Fund. Interestingly, however, the Fund is designed to apply only to a sub-set of the larger list of species covered by the Act's protections. Not every listed species is a fund species. Further, for those species covered by the fund, the species that benefit from fund-sponsored conservation projects do not have to be the same species as those impacted by the activities requiring payment in. To the author's knowledge the Fund has not yet been established nor has a list of fund species been released.

b) Wetlands

Ontario has in the past expressed interest in developing a regulatory process for offsetting for wetlands. In a 2017 policy document *A Wetland Conservation Strategy for Ontario*,³⁶ described offsetting, set within the context of the mitigation hierarchy, as one option to prevent the net loss of wetlands in the

³² SO 2007, c 6.

³³ Government of Ontario, *Endangered Species Act Submission Standards for Activity Review and 17(2)(c) "overall benefit" Permits*, February 2012, online (Ontario): <https://files.ontario.ca/environment-and-energy/species-at-risk/stdprod_093115.pdf>.

³⁴ *Ibid* s 16.1.

³⁵ *Ibid* s 20.1–20.18.

³⁶ Ontario Ministry of Natural Resources and Forestry, *A Wetland Conservation Strategy for Ontario*, (Toronto: Queen's Printer, 2017), online: <https://files.ontario.ca/mnr_17-075_wetlandstrategy_final_en-accessible.pdf>.

province.³⁷ The document went further to outline the importance of issues of the limits of offsetting, clear rules of equivalency, duration, etc. Again, however, no further move has been made in this direction, to the author's knowledge.

Quebec

In 2017 the Government of Quebec adopted offsetting as one part of a suite of measures to pursue a goal of no net loss of wetlands in the province. The *Loi Concernant la Conservation des Milieux Humides et Hydrique*³⁸ (LCMHH - An Act Respecting the Conservation of Wetlands and Bodies of Water) amended five pieces of previous legislation to endorse the mitigation hierarchy, reserving offsetting as the final step to address impacts that cannot be avoided or minimized. To compensate for residual impacts development proponents are to pay into an in-lieu fund. The fund, established in 2019, is used to finance restoration and creation of wetlands through the Regional Municipalities where ecosystem loss has occurred.

All of this is to occur in the context of planning at a regional watershed scale. Céline Jacob and Jérôme Dupras have noted that Quebec's wetland offset program is co-ordinated primarily at the provincial level, but depends upon regional and local governments for implementation.³⁹

In what may be a unique situation for Canadian offset programs, the Quebec legislation requires the responsible Minister to report every ten years on the flow of monies through the wetland conservation fund and the progress of implementation of wetland restoration and creation programs.⁴⁰

New Brunswick

New Brunswick applies offsetting to a subset of its wetlands. The *New Brunswick Wetlands Conservation Policy* has two broad objectives: the maintenance of wetland function and the "securement, stewardship, education and awareness" of wetlands.⁴¹ The maintenance objective is operationalized by a bar to development in Provincially Significant Wetlands (as defined by the policy, generally those with special legal status or conservation value) and a no net loss approach based on function to all other wetlands over one hectare in size.

³⁷ *Ibid* at 42-42.

³⁸ SQ 2017, c 14.

³⁹ Céline Jacob & Jérôme Dupras. "Institutional Bricolage and the Application of the No Net Loss Policy in Quebec: Can We Really Engender 'social Fit' for More Sustainable Land Use Planning?" *Journal of Environmental Policy & Planning*, September 5, 2020, 1–16.

⁴⁰ *Supra* note 40, s 17.2

⁴¹ New Brunswick Natural Resources and Energy & New Brunswick Environment and Local Government, *New Brunswick Wetlands Conservation Policy*, July 2002, at 3, online: <<https://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Wetlands-TerreHumides/WetlandsTerresHumides.pdf>>.

For the default category (non-Provincially Significant Wetlands over one hectare) the mitigation hierarchy is encouraged, including a warning in the policy that compensation may not be allowed unless avoidance and minimization options are fully explored.⁴² Where residual impacts remain and compensation is allowed, offsetting may be carried out by the permittee directly, through restoration, creation, enhancement or preservation, or by financing a project selected from a pre-approved project inventory held by a wetland compensation consultant. The largest wetland compensation consultant is Ducks Unlimited Canada. A government-administered in-lieu fund has been contemplated.⁴³

Prince Edward Island

In its wetland conservation policy the Province of Prince Edward Island commits to a goal of no net loss of wetlands and wetland function.⁴⁴ The policy endorses that mitigation hierarchy, including compensation as the final step. As guidance for implementation the policy incorporates a section from the application framework developed by the North American Wetlands Conservation Council (Canada).⁴⁵

Nova Scotia

Offsetting in Nova Scotia is also limited to wetlands. Wetlands of particularly high ecological value (“Wetlands of Special Significance”) are essentially deemed to be non-offsettable and disturbance of them only to be allowed in special circumstances. For all others, the mitigation hierarchy, including offsetting, is to apply.⁴⁶

Proponents attracting offset obligations are directed by the Ministry of Environment to work with professional wetland experts to design bespoke offset projects or to work with wetland restoration groups, such as Ducks Unlimited Canada or East Coast Aquatics, who have letters of understanding with the Ministry and maintain lists of pre-approved restoration projects.⁴⁷

Nova Scotia applies multipliers differentially on the basis of the offset technique used: 2:1 for restoration or expansion, 3:1 for enhancement, 4:1 for creation of a new wetland.

⁴² *Ibid* at 4-5.

⁴³ New Brunswick Department of Environment, *Wetland Mitigation Operational Protocols*, June 19, 2009, at 8-9 online: <<https://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Wetlands-TerreHumides/WetlandEcosystemServicesProtocol.pdf>>.

⁴⁴ Prince Edward Island Environment, Energy and Forest, *A Wetland Conservation Policy for Prince Edward Island*, at 1, online: <https://www.princeedwardisland.ca/sites/default/files/publications/pei_wetland_policy_2007_0.pdf>.

⁴⁵ *Ibid* at 11-17.

⁴⁶ . Government of Nova Scotia, *Nova Scotia Wetland Conservation Policy* (September 2011), online: <[novascotia.ca/nse/wetland/docs/Nova.Scotia.Wetland.Conservation.Policy.pdf](https://www.novascotia.ca/nse/wetland/docs/Nova.Scotia.Wetland.Conservation.Policy.pdf)>.

⁴⁷ Nova Scotia Department of Environment, *Wetland Compensation: What’s Required and What Are My Options?*, online: <https://www.novascotia.ca/nse/wetland/docs/Wetland_Compensation.pdf>.