

# Action Plan for the Horned Grebe (*Podiceps auritus*), Magdalen Islands population, in Canada

## Horned Grebe, Magdalen Islands population



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For copies of the action plan, or for additional information on species at risk, including COSEWIC Status Reports, residence descriptions, recovery strategies and other related recovery documents, please visit the [Species at Risk Public Registry](#)<sup>1</sup>.

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<sup>1</sup> <http://registrelep-sararegistry.gc.ca/default.asp?lang=En&n=24F7211B-1>

## Preface

The federal, provincial, and territorial government signatories under the [Accord for the Protection of Species at Risk \(1996\)](#)<sup>2</sup> agreed to establish complementary legislation and programs that provide for effective protection of species at risk throughout Canada. Under the *Species at Risk Act* (S.C. 2002, c.29) (SARA), the federal competent ministers are responsible for the preparation of action plans for species listed as Extirpated, Endangered, and Threatened for which recovery has been deemed feasible. They are also required to report on progress five years after the publication of the final document on the SAR Public Registry.

Under SARA, one or more action plan(s) provides the detailed recovery planning that supports the strategic direction set out in the recovery strategy for the species. The plan outlines what needs to be done to achieve the population and distribution objectives (previously referred to as recovery goals and objectives) identified in the recovery strategy, including the measures to be taken to address the threats and monitor the recovery of the species, as well as the proposed measures to protect critical habitat that has been identified for the species. The action plan also includes an evaluation of the socio-economic costs of the action plan and the benefits to be derived from its implementation. The action plan is considered one in a series of documents that are linked and should be taken into consideration together. Those being the COSEWIC status report, the recovery strategy, and one or more action plans.

The Minister of the Environment is the competent minister under SARA for the Horned Grebe, Magdalen Islands population, and has prepared this action plan to implement the recovery strategy, as per section 47 of SARA. To the extent possible, it has been prepared in cooperation with the province of Quebec, the Regroupement QuébecOiseaux and Attention Fragîles.

Success in the recovery of this species depends on the commitment and cooperation of many different constituencies that will be involved in implementing the directions and actions set out in this action plan and will not be achieved by Environment Canada, or any other jurisdiction alone. All Canadians are invited to join in supporting and implementing this action plan for the benefit of the Horned Grebe, Magdalen Islands population, and Canadian society as a whole.

Implementation of this action plan is subject to appropriations, priorities and budgetary constraints of the participating jurisdictions and organizations.

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<sup>2</sup> <http://registrelep-sararegistry.gc.ca/default.asp?lang=en&n=6B319869-1#2>

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## Executive Summary

This action plan complements the *Recovery Strategy for the Horned Grebe (Podiceps auritus), Magdalen Islands population, in Canada* (Environment Canada 2013). The proposed recovery measures seek to implement the full complement of broad recovery strategies and approaches set out in the recovery strategy for the entire population and distribution of the Horned Grebe, Magdalen Islands population.

The critical habitat of the Horned Grebe, Magdalen Islands population, was identified in the recovery strategy and is considered sufficient to achieve the long-term population and distribution objectives. No additional critical habitat is identified in this action plan.

The critical habitat for the Horned Grebe, Magdalen Islands population, is located on both federal and non-federal land. Proposed measures to protect critical habitat are presented in section 1.4.

The recovery measures proposed in this action plan are related to five broad strategies: 1) Encourage habitat conservation and stewardship; 2) Promote a higher survival rate and better reproductive success; 3) Increase knowledge about demographics, genetics, biology and wintering areas; 4) Reduce interspecific competition; and 5) Improve species management. A schedule outlining the priorities for the implementation of these measures has been developed and a socio-economic evaluation has been conducted. The implementation of the recovery measures outlined in this action plan will have moderate positive socio-economic impacts. The direct costs of implementing the action plan are estimated at \$321,500 for the period 2015–2020.

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# 1. Recovery Actions

## 1.1 Context and Scope of the Action Plan

The Horned Grebe (*Podiceps auritus*) is a waterbird species found in Eurasia and North America. There are two populations in North America: the western population, which numbers between 200 000 and 500 000 individuals, and a small isolated population in the east, namely in the Magdalen Islands. The latter breeds in small ponds in dune environments.

The Horned Grebe, Magdalen Islands population, was designated Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 2009 and has been listed as such on Schedule 1 of the *Species at Risk Act* (SARA) since 2011. In Quebec, the species was designated Threatened under the *Act Respecting Threatened or Vulnerable Species* (R.S.Q., c. E-12.01) in 2000.

The main threats to the Horned Grebe, Magdalen Islands population, are wetlands destruction, contaminant poisoning, accidental killing (incidental take) during the waterfowl hunt, oil spills, recreational activities, commercial fishing, adverse weather, predation and interspecific competition with the Pied-billed Grebe.

The population and distribution objectives for the next five years are to maintain and, to the extent possible, increase the population size and distribution of the Horned Grebe, Magdalen Islands population. The population objective is to maintain 15 adults per year and, if possible, to increase this number. With respect to distribution, the species must be present on Île Brion and Île de l'Est and, if possible, must recolonize other islands in the archipelago. Long-term objectives (20 years) are to increase the size and distribution of the population so that it occupies all areas in which it was present before 2005. The population objective is to reach an annual population of at least 30 adults. In terms of distribution, the species must be present on Île de l'Est and Île Brion and must recolonize Île de la Grande Entrée, Grosse Île, Île aux Loups, Île du Havre aux Maisons, Île du Cap aux Meules and Île du Havre Aubert.

Critical habitat for the Horned Grebe, Magdalen Islands population, has been identified in the recovery strategy as all ponds having nesting potential as well as all ponds where the species has been observed feeding or is suspected of having nested between 1995 and 2011. A total of 52 ponds are identified as critical habitat. The boundaries of a pond are defined by the presence of open water, emergent plants and aquatic plants around the periphery of the pond.

This action plan covers the entire population and distribution of the Horned Grebe, Magdalen Islands population, as well as all strategies identified in the *Recovery Strategy for the Horned Grebe (Podiceps auritus), Magdalen Islands population, in Canada* (Environment Canada 2013).

## 1.2 Measures to be Taken and Implementation Schedule

Table 1. Implementation schedule

#	Recovery Measures	Priority <sup>3</sup>	Threats or Objectives Addressed	Timeline
<b>Broad strategy: Encourage habitat conservation and stewardship</b>				
<b>Approach:</b> Develop a communication strategy targeting increased public awareness, participation and engagement with respect to the Horned Grebe				
1	Develop ways to promote public awareness and engagement in the protection of the Horned Grebe	Medium	Accidental killing in relation to waterfowl hunting (incidental take), recreational activities, oil spills, climate change, wetland destruction, contaminant toxicity	Underway
<b>Approach:</b> Work with landowners, decision makers and other stakeholders to promote sound management of important habitats (breeding, feeding, moulting) suitable for the Horned Grebe				
2	Prepare communication documents and distribute them to land managers and landowners in areas adjacent to Horned Grebe habitat	High	Recreational activities	2017
3	Take the needs of the Horned Grebe into account in the implementation of management plans for protected areas where the species occurs (Île-Brion ecological reserve, the Pointe de l'Est National Wildlife Area and the Pointe de l'Est wildlife refuge)	Medium	Recreational activities	2019
4	Incorporate the needs of the Horned Grebe into the land use plan of the RCM of Les Îles-de-la-Madeleine	Medium	Recreational activities	2019

<sup>3</sup>“Priority” reflects the degree to which the action contributes directly to the recovery of the species or is an essential precursor to an action that contributes to the recovery of the species.

5	Encourage the continuation of the wildlife habitat identification process initiated by the Quebec government	High	Accidental killing in relation to waterfowl hunting (incidental take), recreational activities, oil spills, climate change, wetland destruction, contaminant toxicity	2016
<b>Approach:</b> Support actions targeting maintenance of the Western population of the Horned Grebe to help ensure that the population remains abundant, thereby increasing the probability of exchanges with the Magdalen Islands population				
6	Exchange information and work with the groups responsible for the recovery of the Horned Grebe, Western population	Low	All	2020
<b>Broad strategy: Promote a higher survival rate and higher reproductive success</b>				
<b>Approach:</b> Reduce human threats likely to affect the survival rate and reproductive success of the Horned Grebe				
7	Develop and promote a code of ethics for birdwatchers and photographers	High	Recreational activities	2016
8	Determine the vulnerability of the Horned Grebe during the waterfowl hunt (incidental take) and, if required, develop a way to reduce it	High	Accidental killing in relation to waterfowl hunting (incidental take)	2019
9	Implement the oil or contaminant spill response plan and plan the establishment of a bird-cleaning facility for the Horned Grebe	Medium	Oil spills, climate change, contaminant toxicity	2018
<b>Broad strategy: Increase knowledge about demographics, genetics, biology and wintering areas</b>				
<b>Approach:</b> Determine the population size and annual reproductive success				
10	Develop and implement a method for monitoring breeding pairs	High	Address knowledge gaps	2018
11	Develop and implement a method for measuring reproductive success	High	Address knowledge gaps	2018
12	Develop and implement a method for monitoring birds using the Étang de l'Est moulting area	High	Address knowledge gaps	2018

13	Maintain an up-to-date database	High	Address knowledge gaps	Ongoing
<b>Approach:</b> Determine the locations of migration and wintering areas				
14	Develop and implement a suitable telemetry method for locating migration and wintering areas	High	Address knowledge gaps	2019
<b>Approach:</b> Determine population viability				
15	Determine the variables required for modelling population viability, obtain those variables and conduct the analysis	Low	Address knowledge gaps	2020
<b>Approach:</b> Assess the relevance of habitat restoration or improvement				
16	Monitor changes in breeding pond quality (% open water vs vegetation) and, if necessary, propose a method for improving it	Low	Address knowledge gaps	2020
17	Assess the abundance and diversity of prey (invertebrates and fish) found in ponds identified as critical habitat and, if necessary, identify a way to maintain or, where applicable, increase them	Medium	Address knowledge gaps	2020
<b>Approach:</b> Identify the types of predation affecting the species and possible solutions				
18	Identify the predators of Horned Grebe adults, eggs and juveniles by documenting each case of mortality and finding techniques to reduce predation	High	Address knowledge gaps, predation	2018
<b>Broad strategy: Reduce interspecific competition</b>				
<b>Approach:</b> Assess the significance of competition between the Horned Grebe and the Pied-billed Grebe and implement appropriate measures in response				
19	Conduct a study to document the degree of competition between Horned Grebe and Pied-billed Grebe	High	Address knowledge gaps	2019
20	Determine an appropriate method for ensuring that high-quality ponds remain available for Horned Grebe breeding and take the necessary measures to reduce competition with the Pied-billed Grebe	High	Competition with the Pied-billed Grebe	2019

<b>Broad strategy: Improve species management</b>				
<b>Approach:</b> Work with partners elsewhere in Canada and in the United States to pool efforts so as to take the species' habitat, migration and wintering requirements into account				
21	Take part in discussions on the Waterbird Conservation Plan via the North American Bird Conservation Initiative (NABCI)	Low	Oil spills, climate change, contaminant toxicity, commercial fishery	2019
22	Make the appropriate authorities in the United States, where the species likely winters, aware of the status of the Horned Grebe, Magdalen Islands population	Low	Oil spills, climate change, contaminant toxicity, commercial fishery	2019

### 1.3 Critical Habitat

#### 1.3.1 Identification of the species' critical habitat

The critical habitat identified in section 7.1 of the recovery strategy (Environment Canada 2013) is sufficient to achieve the population and distribution objectives. As a result, no additional critical habitat is identified in this action plan.

### 1.4 Proposed Measures to Protect Critical Habitat

#### 1.4.1 Proposed protection measures on federal lands

Sixteen ponds within the boundaries of the Pointe de l'Est National Wildlife Area, a federal protected area, were identified as critical habitat for the Horned Grebe, Magdalen Islands population. As required under SARA, a description of the portions of the critical habitat for Horned Grebe found at this location will be published in the *Canada Gazette*. Critical habitat located in the Pointe de l'Est National Wildlife Area will be protected under section 58(1) of SARA 90 days after the description is published in the *Canada Gazette*.

Other portions of the critical habitat for Horned Grebe are located on land owned by Environment Canada in the Pointe de l'Est sector. Section 58(5) of SARA requires the competent minister to make an order for any part of the critical habitat that is not legally protected by the provisions or measures under SARA or any other federal act within 180 days of the final posting of the recovery strategy identifying the critical habitat in the Species at Risk Public Registry. If the competent minister does not make the order, he or she must include in the Public Registry a statement setting out how the critical habitat or portions of it are legally protected.

### 1.4.2 Proposed protection measures on non-federal lands

With respect to the portions of the critical habitat found on non-federal lands, Environment Canada intends to work with the Government of Quebec to determine whether provincial acts and regulations constitute protection for the species' critical habitat under SARA.

In keeping with jurisdictional considerations, Environment Canada's approach is to begin by looking at the provincial legislation and, if necessary, to move to an assessment of the provisions or measures under SARA or any other federal act to determine whether they can protect these portions of the critical habitat.

If it is determined that the critical habitat is not protected in whole or in part, progress towards achieving its protection will be included in the Species at Risk Public Registry via the reports provided for in section 63 of SARA.

The implementation of conservation measures is an important complementary strategy for preserving the critical habitat of this species. Environment Canada will work with the Government of Quebec, non-governmental organizations and individuals to facilitate the implementation of conservation measures.

## 2. Socio-economic Evaluation

The *Species at Risk Act* requires that an action plan include an evaluation of the socio-economic costs of the action plan and the benefits to be derived from its implementation (SARA 2003). The protection and recovery of species at risk can result in both benefits and costs. SARA recognizes that "*wildlife, in all its forms, has value in and of itself and is valued by Canadians for aesthetic, cultural, spiritual, recreational, educational, historical, economic, medical, ecological and scientific reasons.*" Self-sustaining and healthy ecosystems with their various elements in place, including species at risk, contribute positively to the livelihoods and the quality of life of all Canadians. A review of the literature confirms that Canadians value the preservation and conservation of species in and of themselves. Actions taken to preserve a species, such as habitat protection and restoration, are also valued. In addition, the more an action contributes to the recovery of a species, the higher the value the public places on that action (Loomis and White 1996; Fisheries and Oceans Canada 2008). The conservation of species at risk is an important component of the Government of Canada's commitment to conserving biological diversity under the International Convention on Biological Diversity. The Government of Canada has also made a commitment to protect and recover species at risk through the [National Accord for the Protection of Species at Risk](#).

This section evaluates the potential socio-economic costs of the action plan and the possible benefits to be derived from its implementation.

## 2.1 Costs

### 2.1.1 Direct costs

The action plan for the Horned Grebe, Magdalen Islands population, describes the recovery actions to be implemented to achieve the population and distribution objectives set out in the recovery strategy. Table 2 presents the anticipated direct costs broken down by broad recovery strategy. It is a compilation of the estimated costs for each activity in Table 1 as determined by consulting the main species conservation stakeholders. Given that the stakeholders are often involved in the conservation of a number of species or, more generally, in the conservation of habitat, the costs presented cannot be attributed entirely to the Horned Grebe.

Direct costs associated with implementing the recovery measures are assessed for the period 2015 to 2020<sup>4</sup>. The total direct costs are estimated at \$321,500, which includes salaries, volunteer time, travel, material, equipment and other related costs (Table 2). Conservation groups have already invested in the implementation of the recovery of the Horned Grebe and intend to continue their involvement. The same is true for Attention Fragîles, the Société de conservation des Îles-de-la-Madeleine, Nature Québec and Regroupement QuébecOiseaux.

Attention Fragîles and its volunteers have organized a number of outreach activities, planted vegetation to prevent erosion of barrier dunes, and cleaned up beaches, lagoons and dunes to reduce the number of predators (Anne-Marie Boudreau, Attention Fragîles, pers. comm., 2011). A conservation plan for the species at risk in the Magdalen Islands was prepared in 2002 by Attention Fragîles (Bouffard and Poirier 2002). The Société de conservation des Îles-de-la-Madeleine has also invested in recovery implementation through the acquisition of three properties identified as suitable habitat (Véronique Déraspe, Société de conservation des Îles-de-la-Madeleine, pers. comm., 2011). The organization has also developed habitat protection and enhancement plans for 18 species, including the Horned Grebe, since September 2011. Those plans will involve certain costs. As for Quebec's Ministère de Développement durable, de l'Environnement, de la Faune et de la Lutte contre les changements climatiques (formerly the Ministère des Ressources naturelles et de la Faune), a wildlife officer spent close to a month in 2011 characterizing the status of the Horned Grebe population (breeding grounds and habitat destruction) in the Magdalen Islands (Alexandre Meunier, MRNF, pers. comm., 2011). This Quebec ministry is also working actively on designating certain portions of the critical habitat as wildlife habitat under Quebec's *Act Respecting the Conservation and Development of Wildlife*. To this end, it has mapped the habitat and has held consultations with other provincial departments, municipalities and Aboriginal communities. This administrative process has been completed. All that remains is publication in the *Gazette officielle du Québec*.

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<sup>4</sup> As required by section 55 of SARA, the competent minister must assess progress towards meeting the objectives outlined in the action plan and report on its implementation and ecological and socio-economic impacts five years after the plan comes into effect.

**Table 2. Estimate of the direct costs of recovery implementation for the period 2015-2020**

<b>Broad strategy</b>	<b>Priority</b>	<b>Government (federal and provincial)</b>	<b>Other stakeholders</b>
Encourage habitat conservation and stewardship	Medium	\$12,500	\$14,000
Promote a higher survival rate and better reproductive success	High	\$45,000	\$11,000
Increase knowledge about demographics, genetics, biology and wintering areas	High	\$147,000	\$9,000
Reduce interspecific competition	High	\$60,000	\$5,000
Improve species management	Low	\$8,000	\$10,000
<b>Subtotal</b>		<b>\$272,500</b>	<b>\$49,000</b>
<b>Total</b>		<b>\$321,500</b>	

### 2.1.2 Indirect costs

Indirect costs are the potential costs associated with implementing the action plan that may have an impact on the various stakeholders.

The critical habitat identified in the recovery strategy includes 52 ponds. Most of the ponds (44) are located entirely on federal or provincial land, and close to half of these ponds are in areas where land management favours conservation of natural environments (national wildlife area, wildlife preserve or ecological reserve). There should therefore be no significant indirect costs resulting from the identification of critical habitat for these latter sites.

With respect to critical habitat identified at the other ponds (i.e. on private land and on provincial land not dedicated to conservation), there could be impacts on the habits of the owners of the land or on users of public lands. For example, during the summer, trailers are installed on the edges of ponds and in dunes, not far from the ponds used by the Horned Grebe. Human activities in the vicinity of these temporary residences often disturb the Horned Grebe. It has been proposed that this practice be better regulated. If the proposed alternative sites are less attractive to users, this measure could have an impact on the revenues of individuals who rent their homes and live in trailers, or who rent trailers directly. This action plan is designed to encourage managers of public lands to take into account the needs of the Horned Grebe.

## 2.2 Benefits

Many of the benefits derived from implementing the action plan are non-market benefits. Species have intrinsic value and are appreciated by Canadians for aesthetic, cultural, spiritual, recreational, educational, historical, economic, medical, ecological or scientific

reasons. The Government of Canada supports this vision, specifically through its international biodiversity conservation commitments. According to a 1991 survey, 83% of Canadians feel it is important or very important to maintain a diversity of wildlife species in Canada by protecting endangered or declining populations (Filion 1993). The importance of nature to Canadians can be expressed in economic terms. In 1996, Canadians spent close to \$1.3 billion on wildlife activities and \$1.2 billion on contributions to nature-related organizations, sustaining land for conservation and other wildlife-related activities (Leigh et al. 2000).

To ensure the maintenance of biological diversity, the ecosystems with which species are associated must be healthy and whole. These conditions are also important in the delivery of the various ecosystem services. Although it is difficult to assign a value to these benefits, studies conducted around the world have demonstrated that they make a significant contribution to the economy (Barbier and Heal 2006; Almack and Wilson 2010; TEEB 2010). A meta-analysis by Balmford et al. (2002) indicates that the cost-benefit ratio of effective programs for the conservation of wild nature is 1 to 100. In terms of the individual importance of a species, it varies depending on several factors, including the year, location and ecosystem services considered (Isbell et al. 2011). The significant contribution of biological diversity to the ecological services that ensure the current and future economic and environmental health of Canada would therefore justify the application of the precautionary principle in order to maintain and recover species at risk.

According to COSEWIC (2009), the small Horned Grebe population of the Magdalen Islands has a unique heritage value in eastern Canada. With its striking nuptial plumage, spectacular courtship displays and approachable nature, it has achieved special status among birdwatchers (COSEWIC 2009). The Horned Grebe, Magdalen Islands population, has been culturally valuable to birdwatchers for a long time. The first reports of the species published in ornithological notes by travellers from abroad date back to the 19th century (Young 1897). In addition, it is one of the primary bird attractions in the Magdalen Islands (Fradette 1992). For birdwatchers of Quebec and eastern Canada, the Magdalen Islands are the only location where the species' breeding behaviour can be observed, since the species does not breed anywhere else in eastern Canada. Locally, there has long been an interest in birdwatching, particularly among tourists to the Magdalen Islands. The Horned Grebe is one of the species that attracts foreign birdwatchers to the Magdalen Islands in summer.

A study conducted by Regroupement QuébecOiseaux in Quebec shows that birdwatching activities had a total economic impact of \$195.5 million in 2010 (CFM Stratégie 2011). In addition, as mentioned in the study by Booth et al. (2011), the presence of rare species can generate increased revenues for a region. Because of their unique ecosystems, which include large dunes, the Magdalen Islands are frequented by a number of rare or at-risk species such as the Horned Grebe. In 2011, the Magdalen Islands birdwatching club estimated that amateur birdwatchers (not to mention vacationers attracted by wildlife in general) generated revenues of close to

\$50,000 during a one-week activity held in June (Sébastien Cyr, Club d'ornithologie des Îles-de-la-Madeleine, pers. comm., 2011).

According to COSEWIC (2009), the Horned Grebe, Magdalen Islands population, is at the top of the food chain, and an important part of its life cycle is associated with the presence of ponds. In this sense, this species has scientific value, as it is a good indicator of changes in wetland integrity. Over the past 20 years, the Horned Grebe has been present at close to 30 of the 200 freshwater ponds in the Magdalen Islands. Its habitat is part of a larger ecosystem that provides important ecological services to humans. According to the regional integrated land and resources development plan for Gaspésie–Îles-de-la-Madeleine (CRÉGIM/CRNT 2010), healthy wetlands contribute to maintaining the quality of groundwater by playing an important role in by purifying and treating the water (Boily and Poirier 2006; Miquelon and Déraspe 2005 in Bergeron 2007). The ponds degrade certain toxic compounds and reduce sediment loadings to other bodies of water, thereby decreasing the quantity of suspended matter present in bays and lagoons (Bergeron 2007). Given the relative rarity of freshwater in the Magdalen Islands, this action plan contributes indirectly to maintaining the ecological services provided by wetlands. Its implementation will therefore have significant benefits in terms of cost savings to the municipality, by contributing to guaranteeing a sufficient supply of freshwater to meet the residents' needs. Moreover, wetlands (including freshwater ponds) have significant value in terms of biodiversity (Millennium Ecosystem Assessment 2005) and support species of importance to Magdalen Islands residents and waterfowl hunters.

Overall, the impact will be felt at the local level in the sector targeted by the action plan and its environmental, social and economic impact will be moderate and positive. The protection of species at risk aligns with the Federal Sustainable Development Strategy (Environment Canada 2010) in that biodiversity contributes to economic and social well-being.

### **3. Measuring Progress**

The performance indicators presented in the associated recovery strategy provide a way to define and measure progress towards achieving the population and distribution objectives for this species.

A report will be produced pursuant to section 55 of the *Species at Risk Act* assessing the progress towards implementing the broad strategies set out in the action plan.

A report on the ecological and socio-economic impacts of the action plan will be produced under section 55 of SARA by evaluating the results of monitoring the recovery of the species and its long-term viability as well as the implementation of the action plan.

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## Appendix A: Effects on the Environment and Other Species

A strategic environmental assessment (SEA) is conducted for all SARA recovery planning documents, in accordance with the [Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals](#)<sup>5</sup>. The purpose of a SEA is to incorporate environmental considerations into the development of public policies, plans and programs proposals to support environmentally sound decision-making.

Recovery planning is intended to benefit species at risk and biodiversity in general. However, it is recognized that action plans may also inadvertently lead to environmental effects beyond the intended benefits. The planning process based on national guidelines directly incorporates consideration of all environmental effects, with a particular focus on possible impacts on non-target species or habitats. The results of the SEA are incorporated directly into the action plan itself, but are also summarized below in this statement.

The SEA concluded that this plan will clearly benefit the environment and will not entail any significant adverse effects. Overall, a positive effect is anticipated on all plant and animal species present in the habitat of the target species. The protection of critical habitat will contribute to the protection of wetlands and dunes. In the Magdalen Islands, dunes are recognized as a natural barrier against erosion. The dunes in which the ponds used by the Horned Grebe are located also support plant species that are at risk, including Broom Crowberry (*Corema conradii*), a threatened species in Quebec, Sand Heather (*Hudsonia tomentosa*), a species likely to be designated threatened or vulnerable in Quebec, and Gulf of St. Lawrence Aster (*Symphyotrichum laurentianum*), a threatened species listed in Schedule 1 of SARA. A number of the activities recommended to protect critical habitat for the Horned Grebe may also benefit the Rusty Blackbird (*Euphagus carolinus*), which is designated a species of Special Concern in Canada and which breeds on the edges of ponds. The proposed measures may also benefit several bird species that are not at risk and that nest in the same habitat, including waterbirds such as the Sora (*Porzana carolina*), American Bittern (*Botaurus lentiginosus*), American Black Duck (*Anas rubripes*) and Northern Pintail (*Anas acuta*).

The Pied-billed Grebe, a waterbird species that competes with the Horned Grebe for breeding ponds, could be negatively affected by some of the recommended activities. However, the extent of the impact on the Pied-billed Grebe will be local and therefore negligible at the scale of eastern Canada. Apart from the impact on this species, this recovery action plan will not entail any significant adverse effects.

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<sup>5</sup> <http://www.ceaa.gc.ca/default.asp?lang=En&n=B3186435-1>