

Ramsar National Report to COP13

Section 1: Institutional Information

Important note: the responses below will be considered by the Ramsar Secretariat as the definitive list of your focal points, and will be used to update the information it holds. The Secretariat's current information about your focal points is available at <http://www.ramsar.org/search-contact>.

Name of Contracting Party

The completed National Report **must be accompanied by a letter** in the name of the Head of Administrative Authority, confirming that this is the Contracting Party's official submission of its COP13 National Report. It can be attached to this question using the "Manage documents" function (blue symbol below)

> CANADA

You have attached the following documents to this answer.

[Canada's_national_report_submission.pdf](#)

Designated Ramsar Administrative Authority

Name of Administrative Authority

> Stewardship and Regional Operations/Canadian Wildlife Service/ Environment and Climate Change Canada

Head of Administrative Authority - name and title

> Laura Farquharson, Director General

Mailing address

> 351 St. Joseph Blvd., Gatineau, Quebec K1A 0H3 Canada

Telephone/Fax

> 819-420-7274 / 819-938-4065

Email

> Laura.Farquharson@Canada.ca

Designated National Focal Point for Ramsar Convention Matters

Name and title

> Grant Hogg, Director, Stewardship

Mailing address

> 351 St. Joseph Blvd., Gatineau, Quebec K1A 0H3 Canada

Telephone/Fax

> 819-938-3992 / 819-938-4065

Email

> Grant.Hogg@Canada.ca

Designated National Focal Point for Matters Relating to The Scientific and Technical Review Panel (STRP)

Name and title

> Barry Warner, Professor

Name of organisation

> Department of Earth & Environmental Sciences, University of Waterloo

Mailing address

> 200 University Avenue W., Waterloo, Ontario N2L 3G1 Canada

Telephone/Fax

> 519-888-4567 x 33607

Email

> bwarner@uwaterloo.ca

Designated Government National Focal Point for Matters Relating to The Programme on Communication, Education, Participation and Awareness (CEPA)

Name and title

> No designated government focal point for CEPA

Designated Non-Government National Focal Point for Matters Relating to The Programme on Communication, Education, Participation and Awareness (CEPA)

Name and title

> No designated non-government focal point for CEPA

Section 2: General summary of national implementation progress and challenges

In your country, in the past triennium (i.e., since COP12 reporting)

A. What have been the five most successful aspects of implementation of the Convention?

1)

> New and improved policies and legislation continue to guide wetland conservation in Canada. For example, Ontario's new Wetland Conservation Strategy (2017) represents a 15-year (2017-2030) blueprint to improve the conservation of wetlands by providing a conceptual framework for conserving Ontario's wetlands in order to achieve by 2030, a net gain in wetland area and function where wetland loss has been the greatest in the province. Manitoba's new Peatlands Stewardship Act (2014), which came into effect in 2015, promotes the protection and conservation of peatlands and Quebec's new Act respecting the conservation of wetlands and bodies of water (2017) reforms the legal framework in order to modernize the measures that ensure wetland conservation.

2)

> Between September 2014 and March 2016, multiple partners invested more than \$41 million in over 130 National Wetland Conservation Fund projects. These wetland restoration/enhancement and science projects restored over 1,000 hectares of wetland habitat and associated uplands, enhanced over 318,000 hectares of land, and contributed to improving water quality for fish, waterfowl, and other wildlife

3)

> Implementation of the North American Waterfowl Management Plan, an international action plan to conserve migratory birds throughout North America, continues to be the cornerstone of wetland and waterfowl conservation in Canada. Between April 1, 2014 and March 31, 2017, Canadian North American Waterfowl Management Plan partners secured over 472,600 hectares, enhanced over 377,500 hectares and managed almost 850,000 hectares of wetlands and associated uplands in Canada. This brings the total secured wetlands and associated uplands under the auspices of the Plan to over 8.5 million hectares since 1986.

4)

> In partnership with the provinces and territories and in consultation with Indigenous Peoples, the 2016 Pan-Canadian Framework on Clean Growth and Climate Change was launched to combat climate change and reduce greenhouse gas emissions to meet emissions targets and to grow the economy. The Pan-Canadian Framework recognizes that forests, wetlands, and agricultural lands across Canada play important natural roles in a low-carbon economy by absorbing and storing atmospheric carbon, in addition to conserving biodiversity.

5)

> The Canadian Wetlands Roundtable, a national, multi-stakeholder partnership established in 2014 to influence policies and communicate the values of wetlands held three national workshops in 2016 and 2017 to advance dialogue on: wetlands inventory, wetlands policy, and ecological goods and services. The workshops provided recommendations for action on each theme. Approximately 45 participants representing governments, non-governmental organizations, industries and academia attended each workshop

B. What have been the five greatest difficulties in implementing the Convention?

1)

> Limited data to accurately assess the full extent of wetlands in Canada, especially in the northern regions, and lack of ongoing monitoring programs to track status and trends of all classes of wetlands and key aspects of the ecological goods and services that they provide.

2)

> Limited financial resources and capacity relating to the implementation of the Convention across Canada, including communication and information sharing and engaging partners in a national dialogue for advancing Ramsar objectives in Canada.

3)

> Communicating the values and roles of wetlands to the public to increase and support responsible management, use, and conservation of wetlands.

4)

> Challenges with Ramsar Sites' management related to biophysical factors such as changing water levels and spread of invasive alien species.

- 5)
> Development pressures on natural habitats in Southern Canada causing wetland loss, fragmentation, and degradation

C. What are the five priorities for future implementation of the Convention?

- 1)
> Work towards implementing the key recommendations from the three Canadian Wetlands Roundtable workshops held in 2016 and 2017 specific to inventories, policies and ecological goods and services. This includes, for example, developing a Wetlands Inventory Framework to ensure consistent standards while allowing for regional needs.
- 2)
> Better communicate the importance of wetlands to Canadians, including their role in mitigating and adapting to climate change, and encourage responsible wetland management.
- 3)
> Strengthen Indigenous Peoples' participation in the conservation of wetlands, including Ramsar Sites.
- 4)
> Increase dialogue and opportunities for sharing information between wetland stakeholders to improve the understanding and implementation of the Ramsar Convention, for example, through the Canadian Wetlands Roundtable and by examining ways to provide support to assist with documenting and addressing changes to Ramsar Sites.
- 5)
> Conserve wetlands as part of Canada's commitment to conserve at least 17 percent of Canada's land and freshwater through a network of parks, protected and conserved areas, and other effective area-based conservation measures by 2020. These areas, including wetlands, conserve Canada's biodiversity, contribute to climate change mitigation and adaptation, provide habitat to recover species at risk, and prevent other species from becoming at risk.

D. Do you (AA) have any recommendations concerning implementation assistance from the Ramsar Secretariat?

- > No specific recommendations at this time.

E. Do you (AA) have any recommendations concerning implementation assistance from the Convention's International Organisation Partners (IOPs)? (including ongoing partnerships and partnerships to develop)

- > No specific recommendations at this time.

F. How can national implementation of the Ramsar Convention be better linked with implementation of other multilateral environmental agreements (MEAs), especially those in the 'biodiversity cluster' (Convention on Biological Diversity (CBD), Convention on Migratory Species (CMS), Convention on International Trade in Endangered Species (CITES), World Heritage Convention (WHC), and United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC)?

- > Canada has a national-scale coordination mechanism including committees and steering groups that facilitate the exchange of ideas between government agencies, within different levels of governments, and with partners and stakeholders. Opportunities to work collaboratively on issues that are shared between MEAs are identified and enabled through these groups. Nevertheless, the national implementation of the Ramsar Convention and other biodiversity-related conventions can still be improved through sharing of information regarding biodiversity, climate change, and promoting opportunities to achieve shared or overlapping implementation objectives.

G. How can implementation of the Ramsar Convention be better linked with the implementation of water policy/strategy and other strategies in the country (e.g., on sustainable development, energy, extractive industries, poverty reduction, sanitation, food security, biodiversity)?

- > Currently, Ramsar guidance and wise use principles are considered, where possible, in provincial, territorial, and federal strategies and their use should continue to be encouraged. Through sustainable development initiatives and analysis of ecosystem services, improved strategies will be researched, shared, and supported by policy makers to influence the conservation and management of wetlands.

H. Do you (AA) have any other general comments on the implementation of the Convention?

- > Ramsar's Scientific and Technical Review Panel needs to continue collaboration and leverage the expertise of other bodies (e.g. Convention on Biological Diversity, Intergovernmental Platform on Biodiversity and

Ecosystem Services, International Organization Partners) in order to undertake tasks with minimal resources. Additionally, natural disasters and recent weather events have increased the sense of urgency surrounding wetland degradation and loss of wetlands that cannot be ignored.

I. Please list the names of the organisations which have been consulted on or have contributed to the information provided in this report

> List of Organizations Invited to Contribute:

Federal Government: Agriculture and Agri-Food Canada; Environment and Climate Change Canada; Fisheries and Oceans Canada; Global Affairs Canada; International Joint Commission (Canadian Section); Natural Resources Canada; National Capital Commission; Parks Canada Agency; Statistics Canada.

Provincial/ Territorial Governments: Alberta; British Columbia; Manitoba; New Brunswick; Newfoundland and Labrador; Northwest Territories; Nova Scotia; Nunavut; Ontario; Prince Edward Island; Quebec; Saskatchewan; Yukon.

Municipal/ Regional: Creston Valley Wildlife Management Authority (British Columbia); Metro Vancouver (British Columbia); Nottawasaga Valley Conservation Authority (Ontario).

Non-Government: ALUS Canada; Bird Studies Canada; British Columbia Waterfowl Society; British Columbia Wildlife Federation; Delta Farmland and Wildlife Trust; Delta Waterfowl; Ducks Unlimited Canada; Lac Saint-Pierre Biosphere Reserve; Manitoba Habitat Heritage Corporation; Nature Canada; Nature Conservancy of Canada; Ontario Nature; Wildlife Habitat Canada.

Academic/ Research: Acadia University; International Institute for Sustainable Development; Laval University; the Northern Alberta Institute of Technology; University of Saskatchewan; University of Toronto; University of Waterloo; and the University of Calgary.

Private/ Industry: Canadian Association of Petroleum Producers; Canadian Cattleman's Association; Canadian Federation of Agriculture; Canadian Sphagnum Peat Moss Association; Forest Products Association of Canada; Mining Association of Canada; Quebec Horticultural Peat Producers Association.

Section 3: Indicator questions and further implementation information

Goal 1. Addressing the drivers of wetland loss and degradation

Target 1

Wetland benefits are featured in national/ local policy strategies and plans relating to key sectors such as water, energy, mining, agriculture, tourism, urban development, infrastructure, industry, forestry, aquaculture, fisheries at the national and local level.

1.1 Have wetland issues/benefits been incorporated into other national strategies and planning processes, including: {1.3.2} {1.3.3} KRA 1.3.i

Please select only one per square.

| | |
|---|---|
| a) National Policy or strategy for wetland management | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| b) Poverty eradication strategies | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| c) Water resource management and water efficiency plans | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| d) Coastal and marine resource management plans | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| e) Integrated Coastal Zone Management Plan | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| f) National forest programmes | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| g) National policies or measures on agriculture | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| h) National Biodiversity Strategy and Action Plans drawn up under the CBD | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| i) National policies on energy and mining | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |

| | |
|--|---|
| j) National policies on tourism | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input checked="" type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| k) National policies on urban development | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| l) National policies on infrastructure | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| m) National policies on industry | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| n) National policies on aquaculture and fisheries {1.3.3} KRA 1.3.i | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| o) National plans of actions (NPAs) for pollution control and management | <input type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input checked="" type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| p) National policies on wastewater management and water quality | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |

1.1 Additional information

> Various federal, provincial/ territorial strategies and planning processes incorporate wetland conservation values.

a) National policy or strategy for wetland management

Wetland conservation in Canada is a shared federal, provincial, and territorial responsibility and therefore, no national policy exists. However, there is a Federal Policy on Wetland Conservation (1991) and a number of provincial and territorial policies that contribute to the development of a national approach to wetland management in Canada.

The Federal Policy on Wetland Conservation (1991) promotes conservation through federal decisions and shared responsibilities between provinces for wetland conservation. Other federal policies (e.g. Federal Water Policy, Federal Policy on Land Use, the Fisheries and Oceans Canada Policy for the Management of Fish Habitat, the Federal Environmental Quality Policy Framework, and the Arctic Marine Conservation Strategy) support wetland conservation.

Alberta's Wetland Policy (2013) provides strategic directions for continued growth and economic development, allowing informed management decisions for the long term, and minimizes the loss and degradation of wetlands by conserving, protecting, and managing Alberta's wetlands to sustain the benefits they provide to the environment, society, and the economy.

In Ontario, wetland policy is currently comprised of over 20 different pieces of legislation administered and/or implemented by a number of provincial ministries, agencies, conservation authorities, municipalities, and a variety of stakeholders and partners. Some of these statutes enable aspects of natural resources or natural heritage conservation and management which include wetlands (e.g. Great Lakes Protection Act (2015), Conservation Land Act (1990)), while others may explicitly prohibit or permit certain land use activities within them (e.g. Planning Act (1990), Provincial Policy Statement (2014), Greenbelt Act (2005) and the Lake Ontario-St. Lawrence River Plan 2014). Recently, Ontario has adopted a new Wetland Conservation Strategy (2017).

Nova Scotia's Wetland Conservation Policy (2012) provides direction and a framework for the conservation of

wetlands by providing legislation, regulations, and operational policies designed to protect and guide the management of wetlands. In Nova Scotia, the Environment Act (1994-95) and the Environmental Goals and Sustainable Prosperity Act (2007) contain critical provisions related to wetlands. Under these tools, Nova Scotia has the primary regulatory and enforcement responsibilities for wetlands.

In Québec, the Act respecting the conservation of wetlands and bodies of water (2017) reforms the legal framework applicable to wetlands and bodies of water in order to modernize the measures that ensure their conservation. The various Acts amended under this Act reflect the different components of the reform, which concerns land use planning, the planning and integrated management of water resources, the environmental authorization scheme and natural heritage conservation measures. The Act recognizes an objective and an approach based on a no net loss of wetlands and water bodies.

b) Poverty eradication strategies

No national plan currently exists across Canada; however, in 2017 the federal government committed to developing a Canadian Poverty Reduction Strategy to reduce poverty and improve the economic well-being of all Canadian families (<https://www.canada.ca/en/employment-social-development/campaigns/poverty-reduction.html>). Since it is early in the process, it is unknown at this time whether or not wetlands will be included within the Strategy.

c) Water resource management and water efficiency plans

Federal and provincial governments are moving towards more efficient uses of water to reduce costs for supplying the resource. The following are provincial examples that all recognize the importance of wetland ecosystem services in water resource management planning: British Columbia's Water Sustainability Act (2016); Saskatchewan's 25 Year Water Security Plan (2012); the Yukon Water Strategy and Action Plan (2014); Nova Scotia's Wetland Conservation Policy (2011); Wetland Conservation Strategy for Ontario 2017-2030 (2017); Quebec's Act respecting the conservation of wetlands and bodies of water (2017); Alberta's Wetland Policy (2013); and the Northwest Territories' Water Stewardship Strategy (2010) and Action Plan (2016-2020).

d) Coastal and marine resource management plans

Canada's Ocean Strategy, stemming from the federal Oceans Act (1997), provides a strategic framework for coastal and marine programs and policies based on sustainable development, integrated management and the precautionary approach. Principles are applied through the development and implementation of integrated management plans. Continued research provides opportunities to document changes in wetlands within priority coastal and marine areas over time through land use activities, agriculture, urban/industrial activities, or the effects of climate change.

e) Integrated Coastal Zone Management Plan

Integrated coastal management planning considers ecologically significant areas, including wetlands. The Federal Health of the Oceans Initiative (2007-2013) provided support for the protection of unique and vulnerable marine areas. In addition, amendments to the Ontario Provincial Policy Statement (2014) have resulted in an increased consideration and protection for Great Lakes coastal wetlands. In 2015, Ontario implemented a regulation to enact the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement (2005) to protect the basin's water resources and dependent ecosystems. In 2017, the International Joint Commission implemented a new water level regulation plan (Plan 2014) for Lake Ontario-St. Lawrence River (with the concurrence of both the Canadian and United States governments) designed in part to protect coastal wetland health. Canada and Ontario promoted wetland interests through the plan review and are participating in long-term monitoring.

f) National forest programmes

Forest management guidelines and regulations provide standards for consideration of many wetlands and buffers (e.g. British Columbia's Forest and Range Practices Act (2002); Yukon's Forest Resources Act (2008) and Quebec's Sustainable Forest Management Act (2013) and Sustainable Forest Management Strategy (2015)). Sustainable forests certified by independent certification bodies (i.e. the Canadian Standards Association, Forest Stewardship Council, and Sustainable Forestry Initiative) have requirements regarding operations near waterbodies, including wetlands, in their standards. Additionally, all Forest Products Association of Canada members are subject to third party audits to make sure they are implementing their wetland and other management performance measures.

Through one of its research programs, Natural Resources Canada maps forested wetlands of Canada and develops a forested wetland carbon accounting framework integrating upland forest carbon accounting for the National Inventory Report.

g) National policies or measures on agriculture

Growing Forward II (2013-2018), led by Agriculture and Agri-Food Canada, provides a federal-provincial-territorial policy framework for agriculture in Canada with cost-shared funding to producers to identify on-farm environmental risks and implement beneficial management practices, including some that directly or indirectly support the conservation and wise use of wetlands.

h) National Biodiversity Strategy and Action Plans drawn up under the CBD

In 1996, the Canadian Biodiversity Strategy was adopted in response to Canada's obligation as a party to the United Nations Convention on Biological Diversity. The strategy recognizes the importance and value of wetland ecosystems and includes a reference to the Ramsar Convention. In 2015, the national Biodiversity Strategy was updated with the 2020 Biodiversity Goals and Targets for Canada by a federal-provincial-territorial working group with input from stakeholders and Indigenous organizations using the Convention on Biological Diversity Strategic Plan for 2011-2020, specifically the global Aichi Targets, as guidance. Under Goal

A, Target 1, Canada commits to the conservation of at least 17 percent of terrestrial areas and inland water, and 10 percent of coastal and marine areas through networks of protected areas and other effective area-based conservation measures. Goal A, Target 3 refers directly to wetland conservation: 'By 2020, Canada's wetlands are conserved or enhanced to sustain their ecosystem services through retention, restoration and management activities'.

i) National policies on energy and mining

Legislation, policy, guidance and stewardship programs in support of mining and energy best practices are in place at many sub-national levels across Canada to guide land-use decisions that impact wetlands. The federal Fisheries Act (1985) regulates metal mining effluent involving wetlands and waterbodies. Mining industries support wetland conservation efforts. For example, Northern Ontario Goldcorp formed a three-year partnership (2015-2018) with Ducks Unlimited Canada to support the conservation and restoration of wetlands vital for waterfowl, other wildlife and the local community.

j) National policies on tourism

Canada's new Federal Tourism Action Plan (2017) is focused on achieving economic growth and change through policy and regulatory reforms. Socio-economic functions of wetlands attribute as attractions for tourism and recreation in many parts of Canada and wetlands are valued in the billions of dollars range, including the financial value of annual production directly related to wetlands, for both consumptive activities such as hunting, fishing and trapping, and non-consumptive activities such as tourism and recreation (Federal Policy on Wetland Conservation, 1991). Specific details of the new action plan, once released, will determine if socio-economic functions of wetlands at the national level are included.

k) National policies on urban development

There is no overarching national policy on urban development and wetlands; however, many provincial and municipal policies exist in Canada. For example, Ontario's Growth Plan for the Greater Golden Horseshoe works to manage growth, build complete communities, curb sprawl and protect the natural environment, including the use and conservation of wetlands.

Additionally, the North American Waterfowl Management Plan aims to protect and conserve North American wetlands from many stressors including urban development. The joint plan provides broad guidelines for habitat protection and management actions to restore, protect, and enhance wetland habitat for the benefit of waterfowl, biodiversity, and humans.

l) National policies on infrastructure

Canada's 2016 infrastructure plan aims to ensure that Canadian communities are healthy and productive places to live and includes investments of \$5 billion over five years towards infrastructure projects that protect communities and support Canada's ongoing transition to a clean growth economy. This includes Infrastructure Canada's Clean Water and Wastewater Fund, a \$2 billion fund which can support the construction of naturalized systems for management and treatment of wastewater and stormwater. To advance Canada's efforts to build a clean economy, Budget 2017 laid out a plan to invest \$21.9 billion in green infrastructure, including initiatives that will support the implementation of the Pan-Canadian Framework on Clean Growth and Climate Change. Of that amount, \$9.2 billion will be provided to provinces and territories, to support projects to reduce greenhouse gas emissions, deliver clean water, safely manage wastewater, help communities prepare for challenges that result from climate change, and help build cleaner, better-connected electricity systems. A further \$5 billion will be available for green infrastructure projects through the Canada Infrastructure Bank and \$2.8 billion through a series of national programs.

A number of provincial and territorial plans and policies on infrastructure exist as well. For example, in Ontario, policies exist that enhance the protection of wetlands through the provincial land use planning process, including requiring municipalities to complete watershed plans before expanding settlement areas, infrastructure or major developments that could affect those watersheds.

Manitoba's Water Protection Act (2006) guides watershed planning in the province, enabling Conservation Districts to coordinate and support integrated watershed management planning with stakeholders. Additionally, Manitoba's Surface Water Management Strategy (2014) and Manitoba's Surface Water Management Act (2016) provide an integrated approach to surface water management in the agricultural and municipal areas of the province. The Strategy has a goal of no-net loss of wetlands benefits and will facilitate movement to a watershed-based regulatory planning framework where water retention and drainage projects are considered together.

Québec's Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection (amended in 2017) recognizes the ecological functions of wetlands and bodies of water, clarifies the role of watershed bodies and regional advisory panels, and requires the regional county municipalities and local municipalities to elaborate and apply a regional plan to maintain wetlands and bodies of water in their territory.

The Yukon Water Strategy and Action Plan (2014) recognizes the importance of wetlands for ground water and sets a broad goal to sustain water quality and quantity for aquatic and terrestrial health and ecosystem services for long-term sustainability related to municipal infrastructure services. Similarly, the Northwest Territories recognizes the importance of wetland ecosystem services in its Water Stewardship Strategy (2010) and is working to integrate the strategy's principles into watershed and natural resource planning frameworks related to infrastructure works and municipal planning.

m) National policies on industry

Although there are no national policies on industry that incorporate wetland issues or benefits, some

examples of how wetlands may be considered follow below.

The Pan-Canadian Framework on Clean Growth and Climate Change (2016) was developed in consultation with provinces, territories, and Indigenous Peoples to ensure Canadians meet emissions reduction targets for greenhouse gases and economic growth. This approach applies to pricing carbon pollution and measures to achieve reductions across all sectors.

Wetland management is an important part of reclamation for the mining, energy, oil and gas, and agriculture industries. Environment and Climate Change Canada partners with industry on a number of projects through the North American Waterfowl Management Plan focusing various projects across Canada aimed at species and habitats at risk.

In Canada, peatlands are partially protected by the Federal Policy on Wetland Conservation (1991), but the responsibility for the management of natural resources is under the authority of the provincial and territorial governments. Provincially, Alberta, Manitoba, Quebec and New Brunswick all have policies relating to peatland extraction and conservation of wetlands. For example, in Manitoba the Peatlands Stewardship Act (2014) promotes the protection and conservation of peatlands and is one of the first of its kind in Canada.

n) National policies on Aquaculture and Fisheries

Under the federal Fisheries Act (1985), Fisheries and Oceans Canada regulates the aquaculture industry in order to protect fish and fish habitat, including wetlands, through Canada's Aquaculture Policy Framework (2008), Canada's Wild Atlantic Salmon Policy (2009), and the Sustainable Fisheries Framework (updated 2013). In addition to these policies, the federal Species At Risk Act (2002) sets out authorities to support the protection of wildlife species at risk in Canada, including those that use wetlands and their habitats.

o) National plans of actions (NPAs) for pollution control and management

The Canadian Environmental Protection Act (1999) is one of Canada's primary tools for achieving sustainable development and pollution prevention. This Act supports the prevention and management of risks posed by harmful substances as well as the management of environmental and human health impacts of new and existing substances.

The federal and Ontario provincial government work together to achieve wetland benefits and address wetland conservation objectives through joint collaboration under the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health (2014). The Agreement includes commitments to restore, protect, and conserve wetlands and other coastal areas of the Great Lakes. Lakewide Action and Management Plans for each of the Canadian Great Lakes incorporate wetland conservation priorities with the Agreement and in Lake Biodiversity Conservation Strategies.

p) National policies on wastewater management and water quality

All levels of government share the responsibility for managing the collection, treatment, and the release of wastewater effluent. The Canada-Wide Strategy for the Management of Municipal Wastewater Effluent (2009) set out a collective agreement to ensure that wastewater effluent is managed under a harmonized framework that is protective of the environment and human health, with each jurisdiction using its authority. The federal government manages wastewater through the Wastewater Systems Effluent Regulations (2012) established under the federal Fisheries Act (1985). These Regulations require wastewater systems to meet effluent quality standards equivalent to a secondary level of treatment. The Regulations fulfill a federal commitment in the Strategy for the establishment of national effluent quality standards for secondary wastewater treatment.

With regards to water quality, the Canadian Water Quality Guidelines represent national water quality guidelines for major water uses in Canada. Although not specific to wetlands, these guidelines suggest site-specific guidance for the protection of aquatic life, which includes wetlands and wetland species and agricultural water uses such as irrigation.

Investments in infrastructure are a priority for the federal government. In 2016, Canada launched a new water and wastewater fund to provide communities with more reliable water and wastewater systems so that both drinking water and effluent meet legislated standards. The Government of Canada entered into bilateral agreements with provinces and territories to support provincial, territorial, and municipal water and wastewater priorities. The federal government funds up to 50% of eligible costs of the fund for projects such as stormwater rehabilitation projects, constructed wetlands, stormwater ponds, and or expansions on infrastructure for treatment facilities.

Target 2

Water use respects wetland ecosystem needs for them to fulfil their functions and provide services at the appropriate scale inter alia at the basin level or along a coastal zone

2.1 Has the quantity and quality of water available to, and required by, wetlands been assessed to support the implementation of the Guidelines for the allocation and management of water for maintaining the ecological functions of wetlands (Resolution VIII.1, VIII.2) ? 1.24.

C=Partially

2.1 Additional Information

> Scientists at the University of Alberta and the University of Waterloo have researched the quantity and quality of water available to, and required by, wetlands to support the implementation of the Guidelines for the allocation and management of water for maintaining the ecological functions of wetlands.

In Canada, there are a number of research programs related to peat extraction and water quality and quantity.

For example, researchers from the University of Waterloo and supported by the Natural Sciences and Engineering Research Council of Canada investigated the impact of roads on water flow in peatlands and how this may alter greenhouse gas emissions in the areas adjacent to the roads. Preliminary results demonstrate that water backs up substantially on the upstream side of a bog site near Peace River, Alberta, resulting in higher methane emissions through the wetlands and upland habitat. Additionally, researchers from the Universities of Laval, Waterloo, and Brandon University, under a Natural Sciences and Engineering Research Council Industrial Research Chair in Peatland Management and the associated Collaborative Research and Development Grant, are working on assessing and improving hydrological functions before and after ecological restoration of peatlands.

Provincial/territorial government agencies and partners also monitor water quality and/or quantity parameters including Alberta, Northwest Territories, Ontario, Quebec, and Yukon.

2.2 Have assessments of environmental flow been undertaken in relation to mitigation of impacts on the ecological character of wetlands (Action r3.4.iv)

C=Partially

2.2 Additional Information

> Assessments to measure environmental flow have been undertaken in some areas, but there is not a comprehensive assessment across Canada. Source water protection planning through various conservation partners in some provinces such as Ontario have multi-barrier approaches to measure and assess environmental flow, but this is not representative across all of Canada. As part of Ontario's Wetland Conservation Strategy (2017) actions are included to assess and improve the capacity to map, describe, and document hydrologic functions of wetlands over time.

2.3 Have Ramsar Sites improved the sustainability of water use in the context of ecosystem requirements?

O=No Change

2.3 Additional Information

> Water management decisions have increasingly been incorporated into objectives to maintain ecological functions of wetlands. Maintaining ecological and hydrological functions of wetlands are key principles in the Federal Policy on Wetland Conservation (1991) and Ontario's Wetland Conservation Strategy (2017). More information is needed to accurately evaluate if Ramsar Sites have improved the sustainability of water use.

2.4 Have the Guidelines for allocation and management of water for maintaining ecological functions of wetlands (Resolutions VIII.1 and XII.12) been used/applied in decision-making processes. (Action 3.4.6.)

C=Partially

2.4 Additional Information

> In Canada, natural resources management, including water allocation, is under provincial or territorial jurisdiction.

Guidelines for water allocation and management for ecological functions vary from province to province. Many provinces utilize provincial permitting or licensing agreements for their large water users such as Ontario's Permit to Take Water Program (1996), Alberta's Water Licensing and Allocation Program (2008), or Quebec's Environment Quality Act (1996).

In addition, the International Joint Commission, through work to support implementation of the new water level regulation plan (Plan 2014), is working closely with provincial agencies and stakeholders to support the health and diversity of Lake Ontario and its coastal wetlands with regards to allocation and management of water for ecological functions. The Commission assists Canada and the United States in the protection of the transboundary environment and in the implementation of the Great Lakes Water Quality Agreement.

Activities undertaken by non-governmental organizations including Ducks Unlimited Canada, the Nature Conservancy of Canada, and Wildlife Habitat Canada support the principles outlined in the Guidelines in their activities.

Many Ramsar Sites support the use of the guidelines in their operations, including Baie de l'Isle-Verte, which operates restoration efforts for marshes whose dykes and structures show signs of deterioration (breaches, erosion, subsidence, etc.) and adopts ecological concepts for controlling water levels and water/vegetation ratios for waterfowl and water habitats of local flora and fauna.

2.5 Have projects that promote and demonstrate good practice in water allocation and management for maintaining the ecological functions of wetlands been developed (Action r3.4.ix.)

A=Yes

2.5 Additional Information

> Federal funding programs such as the National Wetland Conservation Fund and the Habitat Stewardship Program support projects aimed at managing water (e.g. water control structures, water flow reconfiguration) to improve or maintain ecological function of wetlands. Canada's federal-provincial-territorial Growing Forward II Agricultural Policy Framework (2013-2018) provides cost-shared funding to producers to identify on-farm environmental risks and implement beneficial management practices. Some beneficial management practices directly or indirectly support water allocation and management for maintaining the ecological functions of wetlands. In 2017, the International Joint Commission launched Plan 2014 to regulate water levels in Lake Ontario - St. Lawrence River. The Plan strives to balance economic and environmental interests and aids the restoration and health and diversity of Lake Ontario - St. Lawrence River coastal wetlands through more natural water level fluctuations .

The following provincial/territorial projects and agreements promote good practices related to water allocation and management for ecological functions of wetlands:

-In British Columbia, under the Fisheries Act (1985) and the Canada Shipping Act (2001) and recent amendments (2016) to its associated Vessel Operations Restriction Regulations, the federal government instills boating restrictions in the Upper Columbia River for protection of wetlands, birds and nesting sites from recreational boating and boat wakes.

-In Alberta, a Wetland Policy (2013) was developed to achieve management of wetlands by avoiding and minimizing negative impacts and replacing lost wetland values.

- Alberta and the Northwest Territories established a Bilateral Water Management Agreement for the Mackenzie River Basin in 2015 to facilitate joint sharing of information that will sustain bilateral water management actions on transboundary waters, including rivers, deltas, lakes, wetlands and groundwater.

-In the Prairie provinces of Alberta, Saskatchewan, and Manitoba, hydrological mapping studies aid in identifying water management activities and ecological functions of wetlands, specifically within the agricultural landscape.

-In Quebec, wildlife management projects with a water management dimension in the wetland-rich Lac Saint-Pierre ecosystem are undertaken.

Many non-government organizations undertake projects that complement existing legislation across Canada. For example, Ducks Unlimited Canada and the Nature Conservancy of Canada support a variety of wetland conservation projects that promote and demonstrate good water allocation and management practices.

2.6 How many household/municipalities are linked to sewage system? SDG Target 6.3.1.

E=Exact number (households/municipalities)

> 1524 municipalities

2.6 Additional Information

> Statistics reported are from 2009 which are found in the 2011 Municipal Water Use Report.

1,524 municipalities, accounting for 28.1 million Canadians, provided information on the number of people in their jurisdiction, who were connected to a sanitary sewer system or who used private septic systems or sewage haulage. Of this population, a large majority (87.1%) is served by a piped sewer network, with 12.4% using private septic systems and 0.5% sewage haulage.

2.7 What is the percentage of sewerage coverage in the country? SDG Target 6.3.1.

E=Exact number (percentage)

> 87

2.7 Additional Information

> 87.1% of the population from the 1,524 responding municipalities in the 2011 Municipal Water Use Report is served by a piped sewer network.

2.8 What is the percentage of users of septic tank/pit latrine? SDG Target 6.3.1.

E=Exact number (percentage)

> 13

2.8 Additional Information

> 12.9% of the population from the 1,524 responding municipalities in the 2011 Municipal Water Use Report is on private septic systems/served sewage haulage.

2.9 Does the country use constructed wetlands/ponds as wastewater treatment technology? SDG Target 6.3.1.

A=Yes

2.9 Additional Information

> Canada uses constructed wetlands/ponds as wastewater treatment technologies in various parts of the country. Many international airports, including Toronto and Edmonton use constructed wetlands for the treatment of glycol contaminated stormwater. For example, using constructed wetlands, the Edmonton International Airport treated 3,000,000 litres of de-icing fluid in 2014 compared to 500,000 litres in 2006. Constructed wetlands/ponds are used as wastewater treatment technology including tertiary treatment systems in Canada with examples in Nova Scotia, Yukon, and many remote northern communities. In 2016, Canada launched a new water and wastewater fund to provide communities with more reliable water and wastewater systems, ensuring drinking water and effluent meet legislated standards. The federal government funds up to 50% of eligible costs of the fund for projects, such as stormwater rehabilitation projects, constructed wetlands, stormwater ponds, and/or expansions on infrastructure for treatment facilities.

2.10 How do the country use constructed wetlands/ponds as wastewater treatment technology perform? SDG Target 6.3.1.

X=Unknown

2.10 Additional Information

> Constructed wetlands/ponds have been used as wastewater treatment technologies in Canada for a number of years. Current data relating to the use/efficiency of constructed wetlands/ponds as wastewater treatment technology is currently being compiled by Statistics Canada and will be published in early 2018. A large scale example is the City of Toronto where in 2013 an extreme weather event unleashed 126 millimetres of rain on Toronto within a two hour period, ranking it the most costly natural disaster in Ontario's history. Since that time, the City of Toronto has piloted the use of constructed wetlands/ponds. In addition, in 2015, the City of Toronto published Landscape Design Guidelines for Management Ponds.

2.11 How many centralised wastewater treatment plants exist at national level? SDG Target 6.3.1.

G=More than (plants)

> 3,700

2.11 Additional Information

> It is estimated that over 3,700 wastewater treatment systems exist in Canada as per the 2011 Municipal Water Use Report.

2.12 How is the functional status of the wastewater treatment plants? SDG Target 6.3.1.

A=Good

2.12 Additional Information

> Based on the 2011 Municipal Water Use Report, of the 34.34 million Canadians connected to the sanitary sewer system, 78.7% had their wastewater effluent treated at a secondary level or higher with 6.8% receiving secondary treatment in waste stabilization ponds (sewage lagoons), 54.5% receiving secondary mechanical treatment and 17.4% receiving tertiary-level treatment. Only 3.2% received no treatment or preliminary treatment (screening, grit removal) of their wastewater, while 18.1% received primary treatment.

2.13 The percentage of decentralized wastewater treatment technology, including constructed wetlands/ponds is? SDG Target 6.3.1.

X=Unknown

2.13 Additional Information

> Statistics Canada is currently compiling data from a variety of sources and will be releasing estimates in 2018.

2.14 Is there a wastewater reuse system? SDG Target 6.3.1.

C=Partially

2.14 Additional Information

> The Industrial Water Survey (2015) includes estimates of water recirculation and most recent sources report 2,593.2 cubic metres of total water recirculation for all industries in Canada. The Agricultural Water Survey of Canada (2017) reports Canadian totals from irrigators using treated wastewater as an irrigation source on, or off, farm. Although a very low response rate and a statistically large coefficient of variation, 60 farms reported using off-farm treated wastewater for irrigation, based on the 2016 Agricultural Water Survey. Some provinces have permitted uses and standards for reclaimed water. In British Columbia, treated

wastewater can be used, for example, to water grass in remote areas of parks or golf courses, clean streets or for fire protection.

2.15 What Is the purpose of the wastewater reuse system? SDG Target 6.3.1.

R=Agriculture

2.15 Additional Information

Please indicate if the wastewater reuse system is for free or taxed or add any additional information.

> R= Agriculture, S= Landscape, T= Industrial

Canada has wastewater reuse systems in place for agriculture, landscape, and industrial use. Various regions of Canada may be impacted from water shortages at various times of the year due to droughts, surface and groundwater contamination, isolation from large-scale municipal treatment centres, under-capacity municipal potable water and wastewater treatment facilities. On-site water reuse technology offers an affordable alternative to conventional systems, particularly in areas where infrastructure expansion is required. Water reuse systems are used for agricultural irrigation, non-potable urban and recreational reuse, on-site grey water reuse, industrial reuse, rainwater or stormwater collection and surface water augmentation and groundwater recharge in many parts of Western and Central Canada.

The majority of large wastewater reuse systems are taxed as they operate on municipal systems or municipal infrastructure.

Target 3

Public and private sectors have increased their efforts to apply guidelines and good practices for the wise use of water and wetlands. {1.10}

3.1 Is the private sector encouraged to apply the Ramsar wise use principle and guidance (Ramsar handbooks for the wise use of wetlands) in its activities and investments concerning wetlands? {1.10.1}

KRA 1.10.i

C=Partially

3.1 Additional Information

> Many of the principles and guidance provided by Ramsar are reflected in federal and/or provincial and territorial guidelines and programs available to the private sector. Many non-governmental organizations including Ducks Unlimited Canada, Nature Conservancy of Canada, and Wildlife Habitat Canada promote their use with the private sector, through a number of their programs

3.2 Has the private sector undertaken activities or actions for the conservation, wise use and management of {1.10.2} KRA 1.10.ii

Please select only one per square.

| | |
|------------------------|---|
| a) Ramsar Sites | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |
| b) Wetlands in general | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned <input type="checkbox"/> X=Unknown <input type="checkbox"/> Y=Not Relevant |

3.2 Additional information

> a) Ramsar Sites

- Baie de l'Isle-Verte: The Kiskotuk Coastal Park which includes the Ramsar Site was established by community stakeholders (non-government organizations, Indigenous People and municipal authorities) as a coastal corridor.

- Fraser River Delta: The British Columbia Waterfowl Society manages part of the Ramsar Site (the Reifel Migratory Bird Sanctuary) and promotes public awareness of wetland values.

- Lac Saint-François: The filming of a movie (Le fabuleux marais) captures the site's ecological treasures with local stories.

- Columbia River Wetlands: Local conservation groups conduct species inventories through an annual clean-up and invasive alien plant removal project.

- Long Point: Long Point Waterfowl studies migratory bird use on Long Point and threats to local wetlands.

b) Wetlands in general

Conservation groups work with private landowners to support wetland conservation including: contributing to the goals of the North American Waterfowl Management Plan; identifying beneficial management practices for wetland stewardship; and enabling wetland restoration. Environmental Farm Planning and producer-driven programs (such as 'Alternative Land Use Services Canada') also promote wetland conservation on private lands. Hunters provide an ongoing financial commitment to support wetland conservation programs through provincial/ territorial licensing fees and purchase of the Canadian Wildlife Habitat Conservation Stamp associated with federal Migratory Game Bird Hunting Permits.

Two examples of non-government organizations activities or actions:

-Between 2014 and 2016, Ducks Unlimited Canada secured over 83,769 hectares of wetlands and associated uplands across all ten provinces.

- Between April 1, 2014 and March 31, 2017, the Nature Conservancy of Canada secured (in perpetuity) over 21,000 hectares of priority wetland and associated upland habitat.

Two examples of Canadian industries investing in wetland research and engagement through conservation partnerships are as follows:

- The Canadian Wetlands Roundtable held three workshops (2016 and 2017) on wetlands inventory, wetland policy, and ecological goods and services. At these workshops wetland policy options and challenges were identified and communicated to government, industries, and stakeholders.

- Between 1997 and 2017, the Canadian Sphagnum Peat Moss Association and its members invested over \$7 million in peatland restoration research. The Association continues to work with others to quantify potential climate mitigation impacts of peatland management and restoration.

3.3 Have actions been taken to implement incentive measures which encourage the conservation and wise use of wetlands? {1.11.1} KRA 1.11.i

A=Yes

3.3 Additional information

> During the past triennium, a number of actions have been taken to implement incentive measures encouraging wetland conservation and wise use. Examples of national programs include:

- In 2014, \$50 million over five years (2014-2019) was invested by the federal government through the National Wetland Conservation Fund to restore and enhance wetlands in local wetland conservation projects. For example, in 2015-2016, \$73,450 dollars went to the Walpole Island First Nations (Ontario) to restore a wetland near their community, including removal of invasive species.

- The federal Habitat Stewardship Program allocates approximately \$12.2 million a year to projects that both conserve and protect species at risk, their habitats and factors that prevent other species from becoming a conservation concern.

- The federal Ecological Gifts Program allows landowners who donate full title or a partial interest in ecologically sensitive land, including wetlands, to receive an enhanced income tax credit. Between April 2014 and October 2017, 208 ecologically sensitive lands have been secured under the program, of which 32% contain wetlands.

- Federal-provincial-territorial cost-shared funding to agricultural producers help identify on-farm environmental risks based on Environmental Farm Plans and support the implementation of Beneficial Management Practices, including some that directly (or indirectly) support the conservation and wise use of wetlands on agricultural lands.

A number of specific regional actions have implementation incentives:

- Alternative Land Use Services Canada is a community-developed, farmer-delivered program, which provides support to farmers and ranchers to retain and reconstruct natural areas (e.g. wetlands, grasslands, riparian areas) for the maintenance and rehabilitation of processes such as water filtration and purification, nutrient cycling and carbon sequestration, and conservation of wildlife habitat.

- The federal Lake Winnipeg Basin Stewardship Fund provides financial support to high impact, community-driven stewardship projects including wetland restoration aimed at reducing nutrient loading within the basin.

- Manitoba's Wetland Restoration Incentive Program provides financial incentives, technical support, and advice to landowners wanting to restore wetlands on their property. Landowners are offered an ecological goods and services payment for restoration once they secure their land with conservation organizations via conservation agreements.

- Ontario's Conservation Land Tax Incentive Program provides a property tax exemption to recognize, encourage and support the long-term private stewardship of important natural features, including provincially significant wetlands. Ontario's Species at Risk Stewardship Fund provides incentives to restore or create species at risk habitat.

- Ducks Unlimited Canada's Flex Farm Program compensates farmers in wetland rich agricultural areas for the ecosystem services that their land provides. Ducks Unlimited Canada also works with Crop Production Services Canada to provide incentive for the conversion of cultivated land to hay or pasture.

3.4 Have actions been taken to remove perverse incentive measures which discourage conservation and wise use of wetlands? {1.11.2} KRA 1.11.i

A=Yes

3.4 Additional Information

> While a number of perverse legislative and incentive measures are still in place in some regions, efforts are being made to reduce impacts. Through partnerships, actions of policy development/enforcement, economic benefit, funding incentives, and increases to infrastructure, perverse legislative and incentive measures continue to be minimized.

- Policy Development: Provincially, the British Columbia Wetland Stewardship Partnership is working proactively with the province of British Columbia and other partners to elevate the need for a wetland policy. In Manitoba, no new peat harvesting licences have been issued since 2015 and restoration efforts of existing peat extraction operations are ongoing. In addition, under the new Peatlands Stewardship Act (2014) in Manitoba, there shall no longer be commercial development of Crown peatlands within Wildlife Management Areas, Provincial Parks and Provincially Significant Peatlands.

- Economic Benefits: In both Saskatchewan and Alberta, funding for engineered drainage is no longer available.

- Funding Incentives: In Ontario, government financial incentives for drainage are no longer available to producers who wish to establish drains in provincially significant wetlands.

Target 4

Invasive alien species and pathways of introduction and expansion are identified and prioritized, priority invasive alien species are controlled or eradicated, and management responses are prepared and implemented to prevent their introduction and establishment.

4.1 Does your country have a comprehensive national inventory of invasive alien species that currently or potentially impact the ecological character of wetlands? {1.9.1} KRA 1.9.i

C=Partially

4.1 Additional information

> Several online open access databases at the national scale are available on invasive alien species including those that impact wetlands.

-Canadian Wildlife Federation Invasive Aquatic Plant Encyclopedia (<http://cwfc.org/en/resources/encyclopedias/invasive-species/invasive-aquatic-animals-encyclopedia.html?src=menu>);

-Wild Species 2015 (http://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=3174) is a Canadian database with information on 2394 exotic species

-NatureServe Explorer (<http://explorer.natureserve.org/>) includes 317 invasive alien plant species in Canada.

-The Canadian Wildlife Federation maintains an invasive alien species encyclopedia (<http://cwfc.org/en/resources/encyclopedias/invasive-species/>).

Provinces and territories also maintain inventories listing invasive alien species:

-British Columbia: Invasive Species Council of British Columbia works to minimize the spread and impact of invasive species (<http://bcinvasives.ca/invasive-species/identify/>).

- Alberta: The Alberta Biodiversity Monitoring Institute monitors wetlands for species data and abundance through Alberta's Aquatic Invasive Species Program.

- Saskatchewan: The Saskatchewan Conservation Data Centre maintains iMapInvasives for mapping and inventorying invasive alien species in the province (<http://www.biodiversity.sk.ca/invasives.htm>).

- Ontario: Ontario's Early Detection and Distribution Mapping System lists invasive alien aquatic and terrestrial species (www.eddmaps.org/ontario/)

-Quebec: In Quebec, aquatic inventory and monitoring programs operate in close collaboration with commercial and sport fishermen to make it possible to detect the arrival of new species at early stages. The Sentinelle network is a citizen-based detection tool for invasive alien plants

(<https://www.pub.mddefp.gouv.qc.ca/scc/#no-back-button>)

Many management plans, such as those for National Parks and other federal Protected Areas also include partial inventories of invasive alien species.

4.2 Have national policies or guidelines on invasive species control and management been established or reviewed for wetlands? {1.9.2} KRA 1.9.iii

C=Partially

4.2 Additional information

> Nationally, the 2004 Invasive Alien Species Strategy for Canada outlines a national approach for managing invasive alien species, including those that impact wetlands. The strategy assists to prevent new invasions, detect and respond to new invasive alien species as well as manage established invasive alien species through eradication, containment, and control. In 2015, federal-provincial-territorial Conservation, Wildlife and Biodiversity Ministers adopted recommendations to support continued progress on implementation of the Invasive Alien Species Strategy

(<http://biodivcanada.ca/default.asp?lang=En&n=81BC7F85-1>). These recommendations are relevant across Canada and include wetland areas affected, or potentially affected, by invasive alien species.

A Binational (Canada-United States) Aquatic Invasive Species Rapid Response Plan (2012) has been developed through the International Joint Commission for the Lake Huron-Lake Erie Corridor, an area of significant

wetlands, to minimize the likelihood of establishment of high risk aquatic invasive alien species. Many provinces and territories also have strategies or guidelines to address invasive alien species, including those present in wetlands (e.g. Invasive Alien Species Strategy for British Columbia (2013); Ontario Invasive Species Strategic Plan (2012)). Ontario has adopted an Invasive Species Act (2015) and best management practices for addressing invasive alien Phragmites are promoted. Certain invasive species of fish and freshwater mussels are controlled under the Controlled Alien Species Regulations of the British Columbia Wildlife Act (1996). In Saskatchewan, an aquatic invasive species management plan has been developed and an invasive alien species management framework is proposed. Non-governmental organizations, including Ducks Unlimited Canada and the Nature Conservancy of Canada, assist in controlling many invasive alien species such as European water chestnut (*Trapa natans* L.), Purple loosestrife (*Lythrum salicaria*), Common carp (*Cyprinus carpio*), Cordgrass (*Spartina* spp.) and Phragmites on wetland project sites.

4.3 How many invasive species are being controlled through management actions.

X=Unknown

4.3 Additional information

If 'Yes', please indicate the year of assessment and the source of the information

> A comprehensive national inventory is not available at this time. Invasive alien species control measures cover a wide range of activities ranging from education and awareness to direct physical control, making it difficult to identify a specific number of species. A number of provincial programs exist (e.g. Ontario's Invading Species Awareness Program through the Ontario Invasive Species Centre; Quebec's Asian Carp program) for the control of invasive species through management actions specifically in the provinces of British Columbia, Manitoba, Ontario, and Quebec, and at specific websites as reflected in section 4.1. Invasive alien species-impacted wetlands are protected from further encroachment of invasive fish species. For example, at the Delta Marsh Ramsar Site, Ducks Unlimited Canada excludes common carp to maintain the ecological integrity of the marsh. Since 2014, the Nature Conservancy of Canada has helped control vast areas of invasive Phragmites on properties at Long Point allowing native wetland vegetation to re-establish.

4.4 Have the effectiveness of wetland invasive alien species control programmes been assessed?

C=Partially

4.4 Additional information

> A comprehensive effectiveness assessment of invasive alien species control programs is not available at this time. However, various provinces have adopted control programs for Water Soldier, European Water Chestnut and Phragmites. These programs are being assessed on an annual basis to determine their efficacy, impact on native species and to inform future management plans.

Ducks Unlimited Canada controls invasive plant species and is working to eradicate *Spartina* spp. cordgrass as a joint effort on the Pacific Coast. After a successful pilot program, they are continuing to evaluate the effectiveness of using herbicide and the impacts to non-target plants.

In 2015, under the auspices of the Great Lakes Water Quality Agreement, Canada and the United States agreed to assess the effectiveness of aquatic invasive species control, eradication and detection efforts. Since then, partners have been developing an approach to quantifying existing surveys of habitats and species for determining net gains and to establish targets.

Goal 2. Effectively conserving and managing the Ramsar Site network

Target 5

The ecological character of Ramsar Sites is maintained or restored through effective, planning and integrated management {2.1.}

5.1 Have a national strategy and priorities been established for the further designation of Ramsar Sites, using the Strategic Framework for the Ramsar List? {2.1.1} KRA 2.1.i

A=Yes

5.1 Additional information

> A 'Strategic Overview of the Canadian Ramsar Program', was published by Environment and Climate Change Canada in 1996, encouraging further designation for Ramsar Sites based on: geographic and biological representation; priority areas for internationally important migratory bird species; and Ramsar Criteria. The report also encourages on-the-ground initiation of future designations by provincial, territorial, Indigenous and non-government agencies.

A few sites have been identified for future designation but discussions with stakeholders are still ongoing. For example, organizations in Ontario and New York continue to advance efforts to recognize the Niagara River corridor with a transboundary Ramsar Site nomination

5.2 Are the Ramsar Sites Information Service and its tools being used in national identification of further

Ramsar Sites to designate? {2.2.1} KRA 2.2.ii

B=No

5.3 How many Ramsar Sites have an effective, implemented management plan? {2.4.1} KRA 2.4.i

E=Exact number (sites)

> 24

5.4 For how many of the Ramsar Sites with a management plan is the plan being implemented? {2.4.2} KRA 2.4.i

E=Exact number (sites)

> 24

5.5 For how many Ramsar Sites is effective management planning currently being implemented (outside of formal management plans ? {2.4.3} KRA 2.4.i

F=Less than (sites)

> 15

5.3 – 5.5 Additional information

> The following Ramsar Sites have a management plan for all or a portion of the site (depending on designation): Baie de l'Isle Verte (1986); Cap Tourmente (1986); Chignecto (1984); Columbia River Wetlands (2004); Creston Valley (2004); Fraser River Delta (various dates by management unit); Grand Codroy Estuary (1995); Hay-Zama Lakes (2002); Lac Saint-François (2014); Lac Saint-Pierre (2013); Last Mountain Lake (1999); Long Point (1983); Mary's Point (1984); Matchedash Bay Provincial Wildlife Area (1989); Mer Bleue Conservation Area (2007); Minesing Wetlands (2014); Old Crow Flats (2006, 2010 by management unit); Peace-Athabasca Delta (2010); Point Pelee National Park (2010); Polar Bear Provincial Park (1980); Shepody Bay (2016, National Wildlife Area portion); St. Clair National Wildlife Area (1982); Tabusintac Lagoon & River Estuary (2004); and Whooping Crane Summer Range (2010).

Several Ramsar Sites are drafting updates to their existing plans: Baie de l'Isle-Verte; Cap Tourmente; Chignecto; Columbia River Wetlands; Creston Valley; Last Mountain Lake; Long Point; Old Crow Flats; and St Clair National Wildlife Area.

Ramsar Sites with a management plan in preparation :

Delta Marsh; Dewey Soper Migratory Bird Sanctuary with the assistance of the Isulijarnik Area Co-Management Committee; McConnell River with the assistance of the Nivvialik Area Co-Management Committee; Musquodoboit Harbour (Martinique Beach Provincial Park portion of site); Oak Hammock; Queen Maud Gulf; and Polar Bear Pass with the assistance of the Sulukvaut Area Co-Management Committee.

5.6 Have all Ramsar sites been assessed regarding the effectiveness of their management (through formal management plans where they exist or otherwise through existing actions for appropriate wetland management ? {1.6.2} KRA 1.6.ii

C=Partially

5.6 Additional information

> Sites with a completed assessment of the effectiveness of their management plan include Chignecto; Creston Valley; Columbia River Wetlands; Delta Marsh; Grand Codroy Estuary; Point Pelee National Park; Polar Bear Provincial Park; St. Clair National Wildlife Area; and Whooping Crane Summer Range.

5.7 How many Ramsar Sites have a cross-sectoral management committee? {2.4.4} {2.4.6} KRA 2.4.iv

E=Exact number (sites)

> 17

5.7 Additional information

If at least 1 site, please give the name and official number of the site or sites

> The following Ramsar Sites have cross-sectoral management committees: Columbia River Wetlands (1463); Delta Marsh (238); Dewey Soper Migratory Bird Sanctuary (249); Hay-Zama Lakes (242); Lake Saint-Pierre (949); Matchedash Bay Provincial Wildlife Area (866); McConnell River (248); Minesing Wetlands (865); Oak Hammock Marsh (366); Old Crow Flats (244); Peace-Athabasca Delta (241); Point Pelee National Park (368); Polar Bear Pass (245); Queen Maud Gulf (246); St. Clair National Wildlife Area (319); Tabusintac Lagoon & River Estuary (612); and Whooping Crane Summer Range (240).

5.8 For how many Ramsar Sites has an ecological character description been prepared (see Resolution X.15)? {2.4.5}{2.4.7} KRA 2.4.v

E=Exact number (sites)

> 23

5.8 Additional information

If at least 1 site, please give the name and official number of the site or sites

> Ecological character descriptions are an important component of most management plans and/or have been conducted for portions of many sites: Baie de l'Isle-Verte (362); Beaverhill Lake (370); Cap Tourmente (214); Chignecto (320); Columbia River Wetlands (1463); Delta Marsh (238); Grand Codroy Estuary (364); Hay-Zama Lakes (242); Lac Saint-François (361); Lac Saint-Pierre (949); Last Mountain Lake (239); Long Point (237); McConnell River (248); Mer Bleue Conservation Area (755); Minesing Wetlands (865); Oak Hammock Marsh (366); Old Crow Flats (244); Peace-Athabasca Delta (241); Point Pelee National Park (368); Quill Lakes (365); St. Clair National Wildlife Area (319); Tabusintac Lagoon & River Estuary (612); and Whooping Crane Summer Range (240).

5.9 Have any assessments of the effectiveness of Ramsar Site management been made? {2.5.1} KRA 2.5.i

C=Some Sites

5.9 Additional information

If 'Yes' or 'Some sites', please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15, and the source of the information

> A number of Ramsar Sites have completed assessments of the effectiveness of Ramsar Site management since COP12:

- Long Point: The site has been assessed for effectiveness of white-tailed deer management and the response of upland vegetation communities and breeding birds.

- Hay-Zama Lakes: A Protected Area Management Evaluation assessment was conducted for Hay-Zama Lakes Wildland Provincial Park in 2017. An enhanced Management Effectiveness Tracking Tool (METT) was used and the total score was 60%. Comprehensive assessments of the conservation, recreation and other human dimension values of the site were done and used to inform the evaluation of the METT.

Whooping Crane Summer Range: Initiated in 2015, Wood Buffalo National Park, within which the Ramsar Site is located, has participated in population viability analysis and population and habitat viability assessment workshops with members of the International Recovery Team for whooping cranes and other invited specialists. The most recent workshop was in January 2017. The work is a collaboration of the Conservation Breeding Specialist Group, part of the Species Survival Commission of the International Union for Conservation of Nature and is intended to update the Recovery Plan for whooping cranes and to incorporate new information and techniques with the overall goal of down-listing, and eventually, fully recovering the species using efficient and effective strategies.

Target 7

Sites that are at risk of change of ecological character have threats addressed {2.6.}.

7.1 Are mechanisms in place for the Administrative Authority to be informed of negative human-induced changes or likely changes in the ecological character of Ramsar Sites, pursuant to Article 3.2? {2.6.1} KRA 2.6.i

A=Yes

7.1 Additional information

If 'Yes' or 'Some sites', please summarise the mechanism or mechanisms established

> Thirteen Ramsar Sites are part of Environment and Climate Change Canada's network of National Wildlife Areas and seven Ramsar Sites contain Migratory Bird Sanctuaries. Environment and Climate Change Canada has a system in place for reporting to the Administrative Authority on changes at these sites.

The 3-year national report cycle encourages all Ramsar Site managers to relay Ramsar Site management concerns to the Administrative Authority. In addition, Ramsar Site Managers participate in conference calls with the Administrative Authority, while the public may approach the Administrative Authority directly with concerns.

7.2 Have all cases of negative human-induced change or likely change in the ecological character of Ramsar Sites been reported to the Ramsar Secretariat, pursuant to Article 3.2? {2.6.2} KRA 2.6.i

A=Yes

7.2 Additional information

If 'Yes' or 'Some cases', please indicate for which Ramsar Sites the Administrative Authority has made Article 3.2 reports to the Secretariat, and for which sites such reports of change or likely change have not yet been made

> In August 2017, the Administrative Authority informed the Ramsar Secretariat of a possible change in ecological character of the Southern Bight-Minas Basin Ramsar Site due to human interference (causeway/aboteau replacement) impacting approximately 2 hectares of intertidal wetland adjacent to the causeway.

In 2015 and 2017, the Administrative Authority was informed by third parties about possible impacts to the

Fraser River Delta Ramsar Site due to human interference of a proposed Liquefied Natural Gas project and a bridge development project, respectively. In 2016 and 2017, the Administrative Authority confirmed with the Ramsar Secretariat there were no known direct effects on the Ramsar Site.

7.3 If applicable, have actions been taken to address the issues for which Ramsar Sites have been listed on the Montreux Record, including requesting a Ramsar Advisory Mission? {2.6.3} KRA 2.6.ii

Z=Not Applicable

Goal 3. Wisely Using All Wetlands

Target 8

National wetland inventories have been either initiated, completed or updated and disseminated and used for promoting the conservation and effective management of all wetlands {1.1.1} KRA 1.1.i

8.1 Does your country have a complete National Wetland Inventory? {1.1.1} KRA 1.1.i

C=In Progress

8.1 Additional information

> The Canadian Wetland Inventory was initiated in 2002 with an initial partnership between the Canadian Space Agency, Environment and Climate Change Canada, Ducks Unlimited Canada, and the North American Wetlands Conservation Council (Canada). To date, approximately 25% of the Canadian Wetland Inventory is underway or completed, representing over 251 million hectares (<http://maps.ducks.ca/cwi/>).

Many provinces maintain their own wetland inventory or have initiated inventory work in priority areas. For example, Alberta, as a commitment under their 2013 Wetland Policy, has developed a variety of tools to enhance decision-making using the existing provincial wetland inventory including: a GIS-based wetland value assessment system; a publicly available database and reporting tool; and an inventory of drained wetlands/restoration opportunities. In Saskatchewan, inventories of intact and drained wetlands are available for portions of the province. In Manitoba, the government is working towards a new province-wide wetlands inventory, focusing initial efforts on priority needs in southern regions. In the Northwest Territories, current activities under the current Water Stewardship Action Plan (2016-2020) are to advance the establishment of a wetland inventory approach using remote sensing imagery.

The Great Lakes Coastal Wetlands Consortium, a bi-national partnership with scientific experts from the United States and Canada, including federal, state and provincial agencies, non-government organizations and other interest groups, has developed a basin-wide digital coastal wetland inventory as the framework for long-term monitoring of Great Lakes wetlands.

The Canada Centre for Mapping and Earth Observation continues to develop new methodologies and geospatial platforms to advance the mapping and monitoring of Canada's wetlands.

In 2016, the Canadian Wetlands Roundtable held a wetland inventory workshop with outcomes that include a list of needs regarding a Canadian wetlands inventory and an agreement among participants to develop a national inventory.

In 2016, Environment and Climate Change Canada developed a new indicator "Extent of Canada's Wetlands" under the Canadian Environmental Sustainability Indicators program (<https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=B253CF38-1&offset=2&toc=show>). The indicator is a measure of the extent of Canadian wetlands and provides a baseline (circa 2000) from which change can be measured. This indicator is derived from several data sources including provincial/territorial governments and the Canadian Wetland Inventory.

8.2 Has your country updated a National Wetland Inventory in the last decade?

C1=Partially

8.2 Additional information

> Canada's new "Extent of Canada's Wetlands" indicator was published for the first time in July 2016 and is available at <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/extent-wetlands.html>. Updates will occur as data sources from federal, provincial, territorial and non-governmental organizations become available, including the Canadian Wetland Inventory.

8.3 Is wetland inventory data and information maintained? {1.1.2} KRA 1.1.ii

A=Yes

8.3 Additional information

> The Canadian Wetland Inventory is currently managed by Ducks Unlimited Canada and the Extent of Canada's Wetlands indicator is maintained by Environment and Climate Change Canada. Regular updates to both occur.

8.4 Is wetland inventory data and information made accessible to all stakeholders? {1.1.2} KRA 1.1.ii

A=Yes

8.4 Additional information

> Data sources used to generate the Extent of Canada's Wetlands Indicator is available to all stakeholders and can be accessed through the Government of Canada's open data portal through the Federal Geospatial Platform and Open Maps (<http://open.canada.ca/en/open-maps>).

The Canadian Wetland Inventory map (<http://maps.ducks.ca/cwi/>) provides access to detailed wetland polygons and source and partner information for the various wetland inventory datasets are provided within the application.

8.5 Has the condition* of wetlands in your country, overall, changed during the last triennium? {1.1.3}

Please describe on the sources of the information on which your answer is based in the free- text box below. If there is a difference between inland and coastal wetland situations, please describe. If you are able to, please describe the principal driver(s) of the change(s).

* 'Condition' corresponds to ecological character, as defined by the Convention

Please select only one per square.

| | |
|-----------------------|---|
| a) Ramsar Sites | <input type="checkbox"/> N=Status Deteriorated <input checked="" type="checkbox"/> O=No Change <input type="checkbox"/> P=Status Improved |
| b) Wetlands generally | <input type="checkbox"/> N=Status Deteriorated <input checked="" type="checkbox"/> O=No Change <input type="checkbox"/> P=Status Improved |

8.5 Additional information on a) and/or b)

> a) The overall condition of Canada's Ramsar Sites has not changed since COP12. Some site managers continue to monitor water level changes, while others continue to manage and control for invasive alien species.

b) The ecological condition of wetlands in Canada has not changed since COP 12; however, overall the loss of wetlands across Canada continues. Canada's most recent national biodiversity assessment (Canadian Biodiversity: Ecosystem Status and Trends 2010) reported that there is an increase of wetlands in some areas and a loss in others, especially in the south, from land conversion, water level control (including flooding from hydroelectric development) and climate change.

Regional and local projects are underway to assist in data collection to assess ecological changes in wetlands over time. For example, work is underway to update wetland loss trend information across southern Ontario and to report on the status and trends of Ontario's Great Lakes coastal wetlands.

8.6 Based upon the National Wetland Inventory if available please provide a baseline figure in square kilometres for the extent of wetlands (according to the Ramsar definition) for the year 2017. SDG Target 6.6

E=Exact Number (km2)

> 1,290,000

8.6 Additional information

If the information is available please indicate the % of change in the extent of wetlands over the last three years.

> Based on the environmental indicator, the Extent of Canada's Wetlands, current wetlands in Canada account for approximately 1,290,000 km2 (13% of landmass). No information is available regarding the percentage of change over the last three years however as the Extent of Canada's Wetlands indicator was newly established in 2016.

Target 9

The wise use of wetlands is strengthened through integrated resource management at the appropriate scale, inter alia, within a river basin or along a coastal zone {1.3.}.

9.1 Is a Wetland Policy (or equivalent instrument) that promotes the wise use of wetlands in place? {1.3.1} KRA 1.3.i

If 'Yes', please give the title and date of the policy in the green text box

A=Yes

9.1 Additional information

> Wetland conservation in Canada is a shared federal, provincial and territorial responsibility with several policies. The federal government is a major landowner and is responsible for implementing the Federal Policy on Wetland Conservation (1991).

Many provinces have a wetland policy or strategy that promotes the wise use of wetlands for regions under their jurisdiction. A new strategy was recently approved in Ontario: the Wetland Conservation Strategy for

Ontario 2017-2030. Other sub-national strategies and plans recognize the importance of wetlands, e.g. the Northwest Territories' Water Strategy (2010) and current 2016-2020 Water Stewardship Strategy Action Plan, Alberta's Wetland Policy (2013) and Saskatchewan's 25-year Water Security Plan (2012). In Manitoba, the Peatlands Stewardship Strategy released under the Peatlands Stewardship Act (2014) promotes the wise use of wetlands through the sustainable use of well-managed peatland ecosystems that also provide valued ecological goods and services. Overall this strategy integrates and coordinates efforts to manage and protect peatlands.

The Federal Policy on Wetland Conservation (1991) and provincial and territorial wetland conservation/management policies are all based on the principle of wise use and associated mitigation hierarchy of avoidance, minimization and offsets.

Other provinces and territories committed to developing a wetland policy include:

- Newfoundland and Labrador are currently developing a wetland strategy framework,
- Yukon has committed to developing a Wetland Policy by 2019.

9.2 Have any amendments to existing legislation been made to reflect Ramsar commitments? {1.3.5}{1.3.6}

A=Yes

9.2 Additional information

> No legislation refers directly to the Ramsar Convention, but new legislation does refer to the principles of the Convention. For example, Ontario's New Wetland Conservation Strategy (2017). Similarly, Quebec's new Act respecting the conservation of wetlands and bodies of water (2017) is the first legislation in Canada to respect the conservation of wetlands and waterways and embodies the principle of "no net loss". Manitoba's Peatlands Stewardship Act (2014) is the first standalone peatland legislation within Canada and promotes the wise use of wetlands through the sustainable use of well-managed peatlands which also provide ecological goods and services.

9.3 Do your country's water governance and management systems treat wetlands as natural water infrastructure integral to water resource management at the scale of river basins? {1.7.1} {1.7.2} KRA 1.7.ii

A=Yes

9.3 Additional information

> Wetlands are recognized as natural water infrastructure at the scale of river basins through existing legislation, policy and integrated watershed planning frameworks. For example, in Ontario, Conservation Authorities use a permitting process to regulate proposed development including the control of interference with natural storage areas such as wetlands for flood attenuation and for shoreline erosion prevention/mitigation.

Canada and the United States are signatories to the Great Lakes Water Quality Agreement. Both countries recognize the importance of wetlands to the maintenance of the physical, chemical and biological integrity of the waters of the Great Lakes basin ecosystem.

In other provinces, independent watershed management groups designated by the provincial management authority assess watershed conditions and prepare management plans (e.g. Alberta's Watershed Planning and Advisory Councils, Quebec's Watershed Organizations, and Saskatchewan's Watershed Advisory Committees). Provinces and Territories that treat wetlands as natural water infrastructure include British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec and Atlantic Canada. In Northern Canada, there are benefits to relying on mechanical treatment systems due to cold weather and temperatures.

9.4 Have Communication, Education, Participation and Awareness (CEPA) expertise and tools been incorporated into catchment/river basin planning and management (see Resolution X.19)? {1.7.2}{1.7.3}

A=Yes

9.4 Additional information

> Wetland communication, education, participation and awareness are often part of the wetland conservation projects funded by federal, provincial, and regional governments. CEPA plans have been implemented in a number of provinces by partners. For example, in British Columbia, the Okanagan Wetlands Strategy led by the Okanagan Basin Water Board has incorporated a green bylaws toolkit into planning and management. Provincial and territorial governments also work with stakeholders, such as watershed-based organizations and municipalities, to ensure participation in planning processes. For example, in Saskatchewan, wetland issues have been examined during community-led, watershed-based, source water protection planning facilitated by the Saskatchewan Water Security Agency. In Ontario, Conservation Authorities and environmental non-government organizations work with municipalities to encourage inclusion of wetland policies in local plans. Communication, education, participation and awareness elements are also incorporated to varying degrees within watershed plans, watershed report cards and through print and electronic outreach material produced by Conservation Authorities in the Great Lakes basin.

Other provinces, like Alberta, have adopted water management plans guided by the Framework for Water

Management Planning and include public education, information sharing and consultations in the planning process.

Many Ramsar Sites as described in section 5.3 are in the process of drafting or revising their management plans which may also incorporate CEPA expertise and tools into catchment/river basin planning.

9.5 Has your country established policies or guidelines for enhancing the role of wetlands in mitigating or adapting to climate change? {1.7.3} {1.7.5} KRA 1.7.iii

A=Yes

9.5 Additional information

> As a signatory to the United Nations Framework Convention on Climate Change, Environment and Climate Change Canada is obligated to annually prepare and submit a national greenhouse gas inventory covering anthropogenic emissions by sources and removals by sinks. Canada's annual greenhouse gas emission estimates date back to 1990 and the representation of wetland conversion and management includes greenhouse gas estimates from historic peatland loss to agriculture as cultivation of organic soils, and peatlands drained for peat harvesting. Work is ongoing to develop methods and quantify the greenhouse gas impacts of other human activities on wetlands.

The International Panel on Climate Change Wetlands Supplement (2013) on greenhouse gas emissions updates previous guidelines and provides cross-cutting methodological guidance for drained and rewetted organic soils, coastal wetlands, wet mineral soils and constructed wetlands for wastewater treatment. Efforts have been made to develop methodologies relevant to domestic circumstances, including acquiring and/or developing improved data, and utilizing land management practices and their greenhouse gas impacts. These developments help improve the quantification of the anthropogenic greenhouse gas impacts of major drivers affecting Canadian wetlands and assist in identifying mitigation policies and measures.

In 2016, the Pan-Canadian Framework on Climate Change identifies recommendations designed to incorporate the use of restored and conserved natural wetlands to mitigate or offset the impacts of a changing climate. Canada's federal-provincial-territorial Growing Forward II Agricultural Policy Framework (2013-2018), includes programming for producer incentives to support adoption of beneficial management practices including those that contribute to greenhouse gas mitigation and adaptation to climate change.

Several provinces and territories also have also established guidance on enhancing the role of wetlands in mitigating or adapting to climate change. Alberta's Climate Leadership Implementation Act (2016) imposed a carbon tax and the funds collected support greenhouse gas emission reduction technology development and research. Manitoba's draft Terrestrial Carbon Management Action Plan considers the responsible management of provincial forest and peatland ecosystems. Ontario is addressing climate change through both mitigation and adaptation strategies, including through the new Wetland Conservation Strategy for Ontario, 2017-2030; Ontario's Climate Change Strategy and Action Plan (2016); and Naturally Resilient: Ministry of Natural Resources and Forestry's Natural Resource Climate Adaptation Strategy (2017).

Many industries and non-government organizations collaborate with provincial and federal government agencies for the development of policies, regulations and guidelines relating to wetland enhancement, mitigation or adaptation to climate change. These partners include the Canadian Federation of Agriculture, Canadian Sphagnum Peat Moss Association, Wildlife Habitat Canada, Ducks Unlimited Canada, Forest Producers Association of Canada and the British Columbia Waterfowl Society.

9.6 Has your country formulated plans or projects to sustain and enhance the role of wetlands in supporting and maintaining viable farming systems? {1.7.4} {1.7.6} KRA 1.7.v

A=Yes

9.6 Additional information

> Agriculture and Agri-Food Canada is committed to helping the agriculture sector contribute to clean and healthy water resources. In order to promote an environmentally responsible agricultural sector, since 2003, Agriculture and Agri-Food Canada has led the Environmental Farm Plan Program in partnership with the provinces and territories.

Environmental Farm Plans and cost-shared incentives for implementation of beneficial management practices are delivered by the provinces and territories based on identified regional priorities. On-farm beneficial management practices eligible for financial assistance range from water quality protection through soil and nutrient management, to riparian protection/enhancement, wetland restoration, biodiversity conservation, wildlife habitat stewardship and mitigation of wildlife damage. Several provinces have also developed broader watershed planning initiatives to facilitate strategic actions in high-risk areas (e.g. Alberta's Agricultural Watershed Enhancement Program; Saskatchewan's Agri-Environmental Group Plans). Other provinces have developed programs acknowledging the provision of ecological goods and services (e.g. Manitoba's Growing Assurance Ecological Goods and Services Program delivered by local Conservation Districts, New Brunswick's Enhanced Support for selected priority beneficial management practices and Prince Edward Island's Alternative Land Use Services 2).

Other broad scale partnership programs also exist. For example, in Atlantic Canada, the Eastern Habitat Joint Venture (under the North American Waterfowl Management Plan) supports private land stewardship and restoration projects integrating wetlands and agriculture and promotes the importance of maintaining

wetlands as a water source for farms. In Alberta, British Columbia and Ontario, federal, provincial and regional governments as well as non-government conservation organizations (e.g., Ducks Unlimited Canada, Rural Lambton Stewardship Network) partner with the agricultural sector to promote wetland conservation and implement best management practices. Nova Scotia's Department of Natural Resources stewardship program, Agricultural Biodiversity Conservation Plans, works with individual to identify biodiversity values on their farm holdings and develop best practices to support biodiversity.

9.7 Has research to inform wetland policies and plans been undertaken in your country on:

{1.6.1} KRA 1.6.i

Please select only one per square.

| | |
|-------------------------------------|--|
| a) agriculture-wetland interactions | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> D=Planned |
| b) climate change | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> D=Planned |
| c) valuation of ecosystem services | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> D=Planned |

9.7 Additional information

> a) Agriculture-Wetland Interactions

- Researchers from the University of Waterloo study peatlands and the role that disturbance plays in peatland greenhouse gas exchange. Research is also occurring that investigates the impact of roads on water flow in peatlands and how this may alter greenhouse gas emissions in the areas adjacent to the road.
- Western University investigated carbon sequestration in restored wetlands, including an assessment of the value of carbon sequestration.
- Researchers from the University of Saskatchewan have advanced a model for prairie wetland hydrology to help improve the relationship between agricultural wetlands drainage and flooding.
- Other research includes the studies of wetland functions in dyked wetlands between Nova Scotia and New Brunswick (once used as agricultural dykes).

b) Climate Change

- Researchers from different universities are examining the impact and response of boreal peatlands to an expected changing climate, particularly to drought.
- Canada's Natural Science and Engineering Research Council provided five years (2012-2017) of funding for the Canadian Network for Aquatic Ecosystem Services. University, government and industrial partners are investigating the impacts of regional climate change on wetland ecosystem services.
- Agriculture and Agri-Food Canada's Science and Technology Branch has conducted research related to agriculture-wetlands interactions as well as to climate change mitigation and/or adaptation. Research projects include evaluating the impacts of wetlands on the agricultural landscape, including the potential contribution of wetlands to agricultural resilience to climate change.
- Through the International Development Research Centre, Canadian researchers collaborate with researchers from universities in Brazil, Uruguay and Portugal to investigate climate change stressors, factors affecting wetland management and risk perception by local communities on South America's Atlantic coast.
- In the Northwest Territories, researchers are investigating and developing new modeling tools to predict the rates and patterns of permafrost thaw in boreal forest wetland areas. Researchers are also working to better understand the hydrological and ecological consequences of the permafrost thaw.

c) Valuation of Ecosystem Services

- Statistics Canada's 2013 'Measuring Ecosystem Goods and Services in Canada' compendium includes a section on the valuation of wetland services.
- Studies by the University of Alberta and the University of Waterloo have assessed the quantity and quality of water available to, and required by, wetlands.
- Canada's federal, provincial and territorial governments collaborated to produce the 2017 "Completing and Using Ecosystem Service Assessment for Decision-Making" toolkit (<http://biodivcanada.ca/default.asp?lang=En&n=B443A05E-1>). The toolkit is a technical guide to ecosystem services assessment and analysis that offers practical, step-by-step guidance for governments at all levels, as well as for consultants and academics.
- Using quantifiable environmental and socioeconomic benefits, Ducks Unlimited Canada and the Universities of Saskatchewan and Alberta are developing a case example related to flooding, water quality and carbon sequestration in southern Saskatchewan wetlands.
- The Universities of Laval, Waterloo, Brandon and Alberta have collaborated to investigate ecosystem effects on biodiversity, hydrology and greenhouse gas emissions related to post-harvest restoration on peatlands in Quebec, New Brunswick, Manitoba and Alberta.

9.8 Has your country submitted a request for Wetland City Accreditation of the Ramsar Convention, Resolution XII.10 ?

B=No

Target 10

The traditional knowledge innovations and practices of indigenous peoples and local communities relevant for the wise use of wetlands and their customary use of wetland resources, are documented, respected, subject to national legislation and relevant international obligations and fully integrated and reflected in the implementation of the Convention with a full and effective participation of indigenous and local communities at all relevant levels.

10.1 Have the guiding principles for taking into account the cultural values of wetlands including traditional knowledge for the effective management of sites (Resolution VIII.19) been used or applied?.(Action 6.1.2/ 6.1.6)

C1=Partially

10.1 Additional information

> Federal, provincial and territorial governments generally take cultural values of wetlands into account in their management.

In 2016, the Indigenous Circle of Experts was formed to ensure Indigenous expert advice is applied to all elements of the development of the pathway to achieve Canada Target 1 and the establishment of a coordinated network of parks and conservation areas throughout Canada.

Alberta has integrated traditional knowledge into water management frameworks by developing and implementing the Aboriginal Navigation Index for the Lower Athabasca River.

The new resource management framework under Manitoba's Peatlands Stewardship Act (2014) promotes industry engagement with Indigenous communities on land management and recovery plans, with the intent of including traditional knowledge in resource planning.

In Ontario, the new Wetland Strategy for Ontario 2017-2030 contains actions to build local tools in managing local traditional ecological knowledge related to wetlands.

In the Northwest Territories, a number of research and monitoring projects

(<http://www.nwtwaterstewardship.ca/srdp>) ensure Indigenous communities have the opportunity to be actively involved in research, monitoring, and planning initiatives along the Slave River Delta using both traditional knowledge and western science.

Cultural values are also taken into account for the effective management of Ramsar Sites. For example, two Ramsar Sites in Wood Buffalo National Park (Peace-Athabasca Delta and Whooping Crane Summer Range) contribute to strengthening cultural and traditional practices and knowledge. Park managers work collaboratively with 11 Indigenous groups who help manage traditional harvesting and cultural activities within the park. These opportunities deliver on conservation management objectives through education and research collaborations offering Indigenous communities assistance in building a bigger awareness of culturally important sweetgrass.

10.2 Have case studies, participation in projects or successful experiences on cultural aspects of wetlands been compiled. Resolution VIII.19 and Resolution IX.21? (Action 6.1.6)

C=In Preparation

10.2 Additional information

If yes please indicate the case studies or projects documenting information and experiences concerning culture and wetlands

> The Government of Manitoba is currently examining traditional knowledge associated with peatlands in other jurisdictions.

10.3 Have the guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands been used or applied. (Resolution VII. 8) (Action 6.1.5)

A=Yes

10.3 Additional information

If the answer is "yes" please indicate the use or application of the guidelines

> The Canadian federal government involves Indigenous Peoples in a number of processes that impact wetlands and a number of Indigenous groups have received funding from federal funding programs. For example, the Aboriginal Fund for Species at Risk provides incentives for Indigenous groups to recover species at risk and protect their habitat, which includes wetlands. A number of Indigenous groups have received funding from the National Wetland Conservation Fund, which supports the restoration of wetlands and engages communities in wetland stewardship. For example, in 2016/2017, Katzie First Nation in British Columbia received funding from the Aboriginal Fund for Species at Risk and the National Wetland

Conservation Fund to help re-establish traditional knowledge and harvest of the Wapato plant in wetlands of their territory within the Fraser Valley.

Ontario's Wetland Conservation Strategy 2017-2030 identifies several actions related to working with Indigenous and Metis groups to increase knowledge and awareness of Indigenous wetland perspectives and to support the management of local traditional ecological knowledge.

In the Atlantic provinces, many Indigenous groups are working with local communities to encourage the involvement of Indigenous groups in the development of management plans for Ramsar Sites and within the decision-making processes related to the wise use of wetlands. For example, in Nova Scotia there is an effort by the government to consult with the Assembly of Nova Scotia Mi'kmaq Chiefs.

At Lac Saint-François National Wildlife Area in Quebec, wetlands are managed in collaboration with the adjacent Indigenous community (Mohawks of Akwesasne). This community is involved in the ecological monitoring of the National Wildlife Area as well as in the control of rough alder, a shrub species that invades and disrupts sedge marshes, potential habitat for a species at risk, the Yellow Rail, and the Sedge Wren. In Nunavut, Ramsar Sites located within National Wildlife Areas and Migratory Bird Sanctuaries are co-managed by Environment and Climate Change Canada and Inuit through area Co-management Committees. This ensures decision making for National Wildlife Areas and Migratory Birds Sanctuaries within the Nunavut Settlement Area are substantially informed and influenced by Inuit Qaujimagatuqangit/Inuit traditional knowledge and are involved in drafting the site-specific management plans.

10.4 Traditional knowledge and management practices relevant for the wise use of wetlands have been documented and their application encouraged (Action 6.1.2)

B=No

10.4 Additional information

> Traditional knowledge and co-management for the wise use of wetlands are encouraged in Canada but best practices have not yet been documented and compiled. Many management plans currently being drafted, as noted in section 5.3, work in collaboration with Indigenous communities who use traditional knowledge and management practices.

Target 11

Wetland functions, services and benefits are widely demonstrated, documented and disseminated. {1.4.}

11.1 Has an assessment been made of the ecosystem benefits/services provided by Ramsar Sites and other wetlands? {1.4.1} KRA 1.4.ii

C1=Partially

11.1 Additional information

If 'Yes' or 'Partially', please indicate, how many Ramsar Sites and their names

> A number of local/regional assessments have been undertaken that contribute to a general understanding of the benefits/services associated with wetlands in Canada including assessments at: Last Mountain Lake; Mer Bleue Conservation Area; and Minesing Wetlands. Two sites have partial assessments: Southern Bight-Minas Basin and Whooping Crane Summer Range.

In addition, one objective of the National Wetland Conservation Fund is to scientifically assess and monitor wetland functions and ecological goods and services under restoration and enhancement projects. For example, in 2016-2017 the National Wetland Conservation Fund invested \$57,600 in a wetland science and stewardship project to adapt a standardized assessment tool suitable for Atlantic Canada's tidal wetlands (salt marsh and eelgrass beds). This program serves to comprehensively assess the multiple ecosystem services of these tidal wetlands in the Atlantic Provinces, which is necessary in order to support the many ongoing programs to restore former tidal marshes to productive systems.

Through the Canadian Wetlands Roundtable, a diverse group of stakeholders have been participating in a national dialogue with regards to ecological goods and services concepts in wetland conservation. At a workshop offered in 2017, participants reviewed the current status of wetlands ecosystems goods and services knowledge and identified elements of a framework for ecosystems goods and services programming including market development, offsets and incentives.

11.2 Have wetland programmes or projects that contribute to poverty alleviation objectives or food and water security plans been implemented? {1.4.2} KRA 1.4.i

C=Partially

11.2 Additional information

> Provincial/territorial wetland programs or projects that contribute to poverty alleviation objectives or food and water security plans are ongoing in specific areas of Canada.

For example, Alberta's Water For Life Strategy (2003) and Alberta's Wetland Policy (2013) support safe and secure drinking water. Stream flow support and various water quality improvement and protection functions are considered when making management decisions about activities impacting wetlands. Additionally, work is

planned in Alberta to identify wetlands of highest value to several Indigenous communities, with a focus on food security for future wetland restoration or enhancement opportunities to improve food security for remote Indigenous communities.

In Ontario, all 36 Conservation Authorities across the province maintain source protection planning areas, including water security plans, and have also completed water mapping and ground water monitoring through Ontario's provincial groundwater monitoring program (<https://www.ontario.ca/environment-and-energy/map-provincial-groundwater-monitoring-network>).

11.3 Have socio-economic values of wetlands been included in the management planning for Ramsar Sites and other wetlands? {1.4.3}{1.4.4} KRA 1.4.iii

C=Partially

11.3 Additional information

If 'Yes' or 'Partially', please indicate, if known, how many Ramsar Sites and their names

> Twenty-five Ramsar Sites have socio-economic values included in their management planning: Baie de l'Isle-Verte; Cap Tourmente; Chignecto; Columbia River Wetlands; Creston Valley; Delta Marsh (draft management planning); Dewey Soper Migratory Bird Sanctuary (draft management planning); Grand Codroy Estuary; Lac Saint-François; Lac Saint-Pierre; Last Mountain Lake; Long Point; Mary's Point; McConnell River (draft management planning); Mer Bleue Conservation Area; Minesing Wetlands; Old Crow Flats; Peace-Athabasca Delta; Point Pelee National Park; Polar Bear Pass (draft management planning); Polar Bear Provincial Park; Queen Maud Gulf (draft management planning); St. Clair National Wildlife Area; Tabusintac Lagoon & River Estuary; and Whooping Crane Summer Range.

For other wetlands, the preservation of socio-economic wetland values is guided by the Federal Policy on Wetland Conservation (1991), with its overall objective to promote the conservation of Canada's wetlands to sustain their ecological and socio-economic functions now and in the future, and sub-national policies. For example, Manitoba's new peatland extraction policies promote more robust Indigenous and public engagement efforts to identify socio-economic significance and incorporate this into management and land recovery strategies.

11.4 Have cultural values of wetlands been included in the management planning for Ramsar Sites and other wetlands? {1.4.3}{1.4.4} KRA 1.4.iii

C=Partially

11.4 Additional information

If 'Yes' or 'Partially', please indicate, if known, how many Ramsar Sites and their names

> Twenty-five Ramsar Sites have cultural values included in their management planning: Baie de l'Isle-Verte; Cap Tourmente; Chignecto; Columbia River Wetlands; Creston Valley; Delta Marsh (partially); draft management planning); Dewey Soper Migratory Bird Sanctuary (draft management planning); Grand Codroy Estuary; Lac Saint-François; Lac Saint-Pierre; Last Mountain Lake; Long Point; Mary's Point; McConnell River (draft management planning); Mer Bleue Conservation Area; Minesing Wetlands; Old Crow Flats; Peace-Athabasca Delta; Point Pelee National Park; Polar Bear Pass (draft management planning); Polar Bear Provincial Park; Queen Maud Gulf (draft management planning); St. Clair National Wildlife Area; Tabusintac Lagoon & River Estuary; and Whooping Crane Summer Range.

Cultural values of wetlands beyond Ramsar Sites have also been included in some provincial/territorial policies and guidelines. For example, the Ontario Wetland Evaluation System identifies provincially significant wetlands and includes Indigenous values and cultural heritage as part of the evaluation tool. The Wetland Conservation Strategy for Ontario 2017-2030 also identifies several actions to increase Indigenous traditional knowledge and to work in partnership on stewardship initiatives. Also in Ontario, the Great Lakes Wetlands Conservation Action Plan (2005) is a cooperative initiative between federal and provincial governments as well as non-government organizations (Ducks Unlimited Canada, Ontario Nature, and the Nature Conservancy of Canada) to establish a comprehensive wetlands conservation program for Ontario wetlands within the Great Lakes basin.

Ducks Unlimited Canada has promoted the inclusion of Indigenous traditional cultural values into conservation strategies in its Boreal Conservation Programs.

Target 12

Restoration is in progress in degraded wetlands, with priority to wetlands that are relevant for biodiversity conservation, disaster risk reduction, livelihoods and/or climate change mitigation and adaptation. {1.8.}

12.1 Have priority sites for wetland restoration been identified? {1.8.1} KRA 1.8.i

A=Yes

12.1 Additional information

> Under the North American Waterfowl Management Plan (revised in 2012), priority sites for wetland restoration for waterfowl productivity are recognized through four public-private Habitat Joint Venture

partnerships in Canada. These Joint Ventures use a science-based implementation plan to deliver habitat conservation programs at a regional level. (<http://nawmp.wetlandnetwork.ca/joint-venture/habitat-joint-ventures/>)

Habitat priorities, including wetlands, are also identified under federal funding programs (e.g. Habitat Stewardship Program, National Wetland Conservation Fund, Lake Winnipeg Basin Stewardship Fund). Conservation organizations and watershed organizations also use blueprinting, sustainability planning and biodiversity hotspot exercises to prioritize sites for restoration.

The Wetland Conservation Strategy for Ontario 2017-2030 includes actions to prioritize areas for improving wetland inventory, knowledge and focusing efforts on conservation and restoration.

12.2 Have wetland restoration/rehabilitation programmes, plans or projects been effectively implemented?

{1.8.2} KRA 1.8.i

A=Yes

12.2 Additional information

If 'Yes' or 'Partially', please indicate, if available the extent of wetlands restored

> A number of wetland restoration programs, plans or projects have been implemented in Canada; however, the exact number is not known. A sampling of some projects is listed below:

\$50 million dollars over five years (2014-2019) was apportioned by the federal government to the National Wetland Conservation Fund. Between April/September 2014 and March 2016, the program has funded over 130 local projects with a total investment of more than \$41 million. These projects have led to the restoration of over 1,000 hectares of wetlands and associated uplands, along with the enhancement of over 318,000 hectares of land across the country.

Wetland securement and restoration for the benefit of waterfowl is a key action of the Habitat Joint Ventures established under the North American Waterfowl Management Plan. Between inception in 1986 and March 31, 2017, partners under the North American Waterfowl Management Plan have secured over 8.5 million hectares of wetlands or associated uplands, enhanced 1.5 million hectares, managed 5.1 million hectares and influenced 57 million hectares in Canada.

Each year through a partnership between Wildlife Habitat Canada and Environment and Climate Change Canada, a Canadian Wildlife Habitat Conservation Stamp is produced for purchase by waterfowl hunters to validate their Migratory Game Bird Hunting Permit. Revenues from the stamp and prints are directed to Wildlife Habitat Canada to administer projects that conserve and enhance wetlands. Since 1985, over \$50 million from the revenue of the stamp and print sales has been invested in over 1,500 conservation projects focusing primarily on wetlands across the country.

Provincially, there are many examples linking wetland restoration/rehabilitation programs or projects to effective implementation. For example, since 2007, Ontario has supported 73 individual wetland projects in the Great Lakes basin through the Canada-Ontario agreement, investing \$10.65 million in wetland restoration, enhancement, monitoring and assessment, evaluations and research. This funding has been leveraged by partners, community groups, individual landowners and other government agencies.

Ducks Unlimited Canada actively restores and rehabilitates wetlands through restoration projects, including the installation of ditch plugs, to restore wetlands that have been drained for agriculture as well as the replacement of water control structures and spillways to allow for better habitat management.

Many reclamation projects have been undertaken by or with support from industry. For example, Suncor Energy, with the collaboration of researchers from the University of Waterloo, has led pioneering fen research and in 2013, marked a milestone in wetland reclamation – the official opening of the first Canadian reconstructed fen planned to emulate the properties of a natural fen. This fen connects wetland conservation with an Indigenous community. (<http://sustainability.suncor.com/2016/en/environment/wetlands.aspx>).

The Canadian Sphagnum Peat Moss Association has been a partner of research on peatland restoration for 25 years. As of 2015, 7,500 hectares of peatlands used for horticultural peat harvesting had been restored and most of these sites are part of a long-term monitoring program.

Target 13

Enhanced sustainability of key sectors such as water, energy, mining, agriculture, tourism, urban development, infrastructure, industry, forestry, aquaculture and fisheries when they affect wetlands, contributing to biodiversity conservation and human livelihoods

13.1 Have actions been taken to enhance sustainability of key sectors such as water, energy, mining, agriculture, tourism, urban development, infrastructure, industry, forestry, aquaculture and fisheries when they affect wetlands?

A=Yes

13.1. Additional information

If 'Yes', please indicate the actions taken

> Many habitat conservation funding programs, including the federal National Wetland Conservation Fund and the Habitat Stewardship Program, support projects to implement sustainable practices in key sectors while

conserving habitat including wetlands.

Many provincial initiatives also aim to enhance the sustainability of key sectors:

- In British Columbia, the Green Bylaws Toolkit was revised and updated in 2016 to deal with urban development and loss of wetlands and other sensitive ecosystems. The Green Bylaws Toolkit provides local governments (municipal and regional) and the public with practical tools for protecting green infrastructure from a planning perspective, based on continued pressures from development relating to the use of green infrastructure.

- The British Columbia Cattlemen's Association is an active partner in the Canadian Intermountain Joint Venture linking the ranching sector to wetland stewardship in British Columbia.

- In Alberta, under the Alberta Wetland Policy (2013), any activity that impacts a wetland requires a wetland regulatory process. Forested wetland mapping products are available to national and sub-national regulators, who are responsible for planning and regulation of commercial activities on wetlands.

- In Manitoba, programs and policies are in place to support the sustainable use of wetlands within the forestry and peat extraction sectors.

Many municipalities complete watershed planning before expanding settlement areas, infrastructure or major developments that could affect local watersheds. For example, a number of land use plans in Ontario (such as the Oak Ridges Moraine Conservation Plan updated in 2017) work to manage growth, build complete communities, curb sprawl and protect the natural environment. Wetlands are acknowledged as fundamental components of the water resource system and identified and demonstrated impacts on these features have been avoided.

13.2 Are Strategic Environmental Assessment practices applied when reviewing policies, programmes and plans that may impact upon wetlands? {1.3.3} {1.3.4} KRA 1.3.ii

A=Yes

13.2 Additional information

> If a policy, plan or program proposal is expected to have important environmental implications, a strategic environmental assessment is required. The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals sets out this requirement for submissions at the federal level. Individual departments or agencies operate on a principle of self-assessment where they assess proposals they sponsor under the guidance of the Cabinet Directive (<http://www.ceaa.gc.ca/default.asp?lang=En&n=02123FE4>).

As of 2016, strategic environmental assessment analysis is also required to be linked to the Federal Sustainable Development Strategy's goals and targets. This includes the goal of sustainably managed lands and forests, incorporating both wetlands and their functions (<http://www.fsds-sfdd.ca/index.html#/en/detail/all/goal:G08>).

13.3 Are Environmental Impact Assessments made for any development projects (such as new buildings, new roads, extractive industry) from key sectors such as water, energy, mining, agriculture, tourism, urban development, infrastructure, industry, forestry, aquaculture and fisheries that may affect wetlands?

{1.3.4} {1.3.5} KRA 1.3.iii

A=Yes

13.3 Additional information

> Federally, the Canadian Environmental Assessment Act (updated in 2012) focuses on potential adverse environmental effects that are within federal jurisdiction, including: fish and fish habitat; other aquatic species; migratory birds; federal lands; effects that cross provincial or international boundaries; effects that impact Indigenous Peoples; and changes to the environment that are directly linked to, or necessarily incidental, to any federal decisions about a project (<http://www.ceaa-acee.gc.ca/default.asp?lang=en&n=16254939-1>).

The Federal Policy on Wetland Conservation (1991) also considers wetland values in its decision-making framework as a key consideration in federal environmental assessments and promotes the protection of wetlands and their functions from adverse impacts by applying the policy goal of "no net loss" of wetland functions.

Additionally, provinces and territories have their own legislation that requires environmental assessments be done on projects potentially impacting wetlands and their functions. For example, under the Yukon Environmental and Socio-Economic Assessment Act (2003), the importance of wetlands is recognized and avoidance or mitigation of wetland impacts is applied in environmental assessments. In Ontario, environmental impact assessments are required to determine if development projects will have any negative impacts to the features or functions of significant wetlands in northern Ontario (development is prohibited in significant wetlands in southern Ontario). An environmental impact assessment in Ontario is also required prior to approving development plans adjacent to significant wetlands. In Newfoundland and Labrador, environmental impact assessments have been completed for mining activities, new roads, cranberry farms, and transmission lines affecting wetlands.

Offset guidance is provided in some cases where development activities have the potential to impact wetlands. For example, under the Alberta Wetland Policy (2013), wetland replacement is required where impacts cannot be avoided or minimized and permanent wetland loss is incurred. The area to be replaced is dependent on a wetland valuation approach.

Goal 4. Enhancing implementation

Target 15

Ramsar Regional Initiatives with the active involvement and support of the Parties in each region are reinforced and developed into effective tools to assist in the full implementation of the Convention. {3.2.}

15.1 Have you (AA) been involved in the development and implementation of a Regional Initiative under the framework of the Convention? {3.2.1} KRA 3.2.i

B=No

15.2 Has your country supported or participated in the development of other regional (i.e., covering more than one country) wetland training and research centres? {3.2.2}

B=No

15.2 Additional information

If 'Yes', please indicate the name(s) of the centre(s)

> Canada has not supported the development of regional wetland training and research centres, however, Canadian researchers partner with colleagues in other countries through regional research networks.

Target 16

Wetlands conservation and wise use are mainstreamed through communication, capacity development, education, participation and awareness {4.1}

16.1 Has an action plan (or plans) for wetland CEPA been established? {4.1.1} KRA 4.1.i

Even if no CEPA plans have been developed, if broad CEPA objectives for CEPA actions have been established, please indicate this in the Additional information section below

Please select only one per square.

| | |
|--------------------------|--|
| a) At the national level | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=In Progress <input type="checkbox"/> D=Planned |
| b) Sub national level | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=In Progress <input type="checkbox"/> D=Planned |
| c) Catchment/basin level | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=In Progress <input type="checkbox"/> D=Planned |
| d) Local/site level | <input type="checkbox"/> A=Yes <input checked="" type="checkbox"/> B=No <input type="checkbox"/> C=In Progress <input type="checkbox"/> D=Planned |

16.1 Additional information

If 'Yes' or 'In progress' to one or more of the four questions above, for each please describe the mechanism, who is responsible and identify if it has involved CEPA NFPs

> Communication, education, participation and awareness values are incorporated in broader planning activities. For example:

a) The North American Wetlands Conservation Council (Canada) provides a national mechanism for the implementation of the North American Waterfowl Management Plan. The Council's strategic plan provides a national commitment to wetlands and includes a strategy focused on developing communications and outreach programs and materials related to the conservation of wetlands, waterfowl, and other wetland-dependent species.

b) Under the North American Waterfowl Management Plan, communication, education and stewardship are key strategies implemented by the Habitat Joint Ventures towards the conservation of wetland and upland habitat and waterfowl.

Provincial wetland policies (e.g. Nova Scotia's Wetland Conservation Policy (2011)), along with broader water and sustainability strategies (e.g. Alberta's Water for Life Strategy (2003)) also call for the development of wetland awareness, education, and stewardship programs targeting a range of stakeholders.

The Wetland Conservation Strategy for Ontario 2017-2030 recognizes communication, education, participation, and awareness activities across the province through increased knowledge and partnerships.

c) The Great Lakes Wetlands Conservation Action Plan has several strategies to increase public awareness and

commitment to protecting wetlands and continues to publicize the value of wetlands to society, to water, and to wildlife in order to encourage wetland conservation.

d) Ducks Unlimited Canada operates several programs across the country that seek to inform and educate youth and schools about wetlands including their 'Wetlands Centres of Excellence' program.

Grand Codroy Estuary and the Peace-Athabasca Delta Ramsar Sites incorporated specific objectives of increasing awareness of the importance of waterfowl and wood buffalo habitat, respectively, and the need for their conservation into their management plans. The Peace-Athabasca Delta incorporates educational events (including the Sweet Grass school trip) to teach children about cultural programming including traditional harvesting, country food and Indigenous storytelling.

16.2a How many centres (visitor centres, interpretation centres, education centres) have been established? {4.1.2} KRA 4.1.ii

a) at Ramsar Sites

E=Exact Number (centres)

> 21

16.2b How many centres (visitor centres, interpretation centres, education centres) have been established? {4.1.2} KRA 4.1.ii

b) at other wetlands

X=Unknown

16.2 Additional information

If centres are part of national or international networks, please describe the networks

> a) Ramsar Sites with some form of an education/visitor centre include: Baie de l'Isle-Verte; Cap Tourmente; Chignecto; Creston Valley; Delta Marsh; Fraser River Delta; Grand Codroy Estuary; Lac Saint-François; Lac Saint-Pierre; Last Mountain Lake; Mary's Point; Matchedash Bay Provincial Wildlife Area; Oak Hammock Marsh; Old Crow Flats; Peace-Athabasca Delta; Point Pelee National Park; Quill Lakes; Shepody Bay; Southern Bight-Minas Basin; Tabusintac Lagoon & River Estuary; and Whooping Crane Summer Range.

b) Many other wetland interpretation centres are established across Canada; however, no estimate of the number of these centres exists.

For example, Ducks Unlimited Canada has an extensive network of interpretive centres across the country, including more than 9 public centres and 18 school-based Wetland Centres of Excellence recognized for their effort to engage young people in wetland conservation.

Other conservation centres that focus on wetlands include the Fredericton Conservation Centre in New Brunswick and the Greenwing Legacy Interpretive Centre in Shubenacadie, Nova Scotia.

A number of interpretation areas at federal Protected Areas (e.g. the Vaseux-Bighorn National Wildlife Area) and National Parks also exist.

16.3 Does the Contracting Party {4.1.3} KRA 4.1.iii

Please select only one per square.

| | |
|--|--|
| a) promote stakeholder participation in decision-making on wetland planning and management | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned |
| b) specifically involve local stakeholders in the selection of new Ramsar Sites and in Ramsar Site management? | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned |

16.3 Additional information

If 'Yes' or 'Partially', please provide information about the ways in which stakeholders are involved

> a) For most jurisdictions, public consultation is an integral part of the policy development and regulatory process, including environmental assessments. It is also encouraged in management planning with a public comment period on draft management plans. Participation is also encouraged through community-based watershed planning activities. Four Canadian Habitat Joint Ventures (Eastern, Prairie, Canadian Intermountain, and Pacific Birds) integrate stakeholder participation into the decision-making process to achieve North American Waterfowl Management Plan goals. Each joint venture program operates through a joint venture advisory board whose members include federal, provincial and territorial governments, and environmental non-governmental organizations.

b) Many Ramsar Sites involve local stakeholders in site management. Several sites are under co-management regimes, while others have established management committees that are made up a diverse group of

partners (e.g. Hay-Zama Lakes, McConnell River, Old Crow Flats, Polar Bear Pass, Queen Maud Gulf, and St. Clair National Wildlife Area). Others engage local organizations and stakeholders directly in management (Columbia River Wetlands, Fraser River Delta, Minesing Wetlands), stewardship and mitigation of impacts from surrounding land uses (Grand Codroy Estuary, Long Point) and protection of surrounding lands (Malpeque Bay, Musquodoboit Harbour Outer Estuary, Mary's Point, Shepody Bay, and Tabusintac Lagoon & River Estuary). Several sites involve stakeholders by seeking advice/input or through formal consultation related to management planning or environmental assessment (Oak Hammock Marsh, Point Pelee National Park, and Last Mountain Lake). The involvement of local stakeholders is also critical to Ramsar Site selection. Canada will only support a site nomination where there is concurrence from the province or territory and all landowners as outlined in the 'Nomination and Listing of Wetlands of International Importance in Canada' procedures manual and support from other stakeholders is encouraged. For example, under the current process related to designation, federal, provincial, regional and municipal government support is to be sought in addition to the engagement and support of Indigenous communities and other stakeholders.

16.4 Do you have an operational cross-sectoral National Ramsar/Wetlands Committee? {4.1.6} KRA 4.3.v

B=No

16.4 Additional information

If 'Yes', indicate a) its membership; b) number of meetings since COP12; and c) what responsibilities the Committee has

> There is no National Ramsar/Wetlands Committee in Canada. The Canadian Wildlife Service at Environment and Climate Change Canada acts as an expert science and advisory agency working with a range of partners.

16.5 Do you have an operational cross-sectoral body equivalent to a National Ramsar/Wetlands Committee? {4.1.6} KRA 4.3.v

A=Yes

16.5 Additional information

If 'Yes', indicate a) its membership; b) number of meetings since COP12; and c) what responsibilities the Committee has

> The North American Wetlands Conservation Council (Canada) was established in 1990 to provide a national mechanism for the implementation of the North American Waterfowl Management Plan and to take a leadership role in wetlands policy and awareness. The North American Wetlands Conservation Council (Canada) provides leadership to the Canadian Habitat and Species Joint Ventures to help achieve North American Waterfowl Management Plan goals. It also serves as the national coordinating committee for developing and implementing national level wetland policies and programs in Canada.

The North American Wetlands Conservation Council (Canada) held twelve meetings since COP12. Its membership includes representatives from Environment and Climate Change Canada (2), the Canadian North American Waterfowl Management Plan Plan Committee (1), Habitat and Species Joint Ventures (7), non-governmental organizations (5) and provinces and territories (4).

In addition, the Canadian Wetlands Roundtable, a partnership of environmental non-governmental organizations, industry and government, was established in 2014 and focuses on developing and implementing a national wetlands conservation strategy for Canada through collaborative policy development and communication activities for effective wetland habitat conservation in Canada.

16.6 Are other communication mechanisms (apart from a national committee) in place to share Ramsar implementation guidelines and other information between the Administrative Authority and a), b) or c) below? {4.1.7} KRA 4.1.vi:

Please select only one per square.

| | |
|---|--|
| a) Ramsar Site managers | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned |
| b) other MEA national focal points | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned |
| c) other ministries, departments and agencies | <input checked="" type="checkbox"/> A=Yes <input type="checkbox"/> B=No <input type="checkbox"/> C=Partially <input type="checkbox"/> D=Planned |

16.6 Additional information

If 'Yes' or 'Partially', please describe what mechanisms are in place

> a) Ramsar activities are communicated on an ad-hoc basis through the Ramsar Site managers network. The national WetlandNetwork.ca website also provides a mechanism for the communication of current guidelines and tools (www.wetlandnetwork.ca).

b) Communication between the Ramsar Administrative Authority and other MEA national focal points occurs as a function of the day-to-day obligations of reciprocal information exchanges.

c) There are a number of committees through which Ramsar-related information may be shared between the Administrative Authority and other relevant federal, provincial and territorial ministries, departments and agencies, such as the Canadian Wildlife Directors Committee and the federal, provincial, territorial Biodiversity Steering Group.

16.7 Have Ramsar-branded World Wetlands Day activities (whether on 2 February or at another time of year), either government and NGO-led or both, been carried out in the country since COP12? {4.1.8}

A=Yes

16.7 Additional information

> World Wetlands Day falls during mid-winter in Canada. Many Ramsar Sites therefore do not host activities as site accessibility is limited. A few examples of activities include:

-In 2015, Ducks Unlimited Canada ran a social media contest that encouraged Canadians to share photographs of their winter wetland fun activities.

-In 2015, Canada's Minister of Environment and Climate Change shared a tweet for World Wetlands Day, receiving the highest number of likes and shares for one post on social media (505 likes and 104 shares) in Environment and Climate Change Canada's history.

-In 2015, Creston Valley Ramsar Site in British Columbia celebrated World Wetlands Day at its wildlife centre along with its annual Creston Valley Bird Festival to showcase the importance of wetland conservation for bird habitat.

- In 2016, Ducks Unlimited Canada launched a World Wetlands Day stewardship awareness campaign surrounding the theme of "Wetlands for our Future: Sustainable Livelihoods" campaign.

- In 2016, the Toronto Zoo held an event showcasing animals that rely on healthy wetland habitats.

- In 2016, the Oak Hammock Marsh Ramsar Site in Manitoba held a World Wetlands Day interpretative hike.

- In 2016, Environment and Climate Change Canada highlighted the Youth Environmental Leadership Program and wetland funding opportunities to educate the next generation of scientists about wetlands.

-In 2017, Brokenhead Wetland Ecological Reserve in Manitoba provided an opportunity for visitors to learn about peatlands, wildlife and cultural connections of the land and the Ojibway peoples.

- In 2017, the city of Hamilton, Ontario, offered two separate events: a wetlands walk at the Royal Botanical Gardens and a wetland conservation lecture from a wetlands specialist at McMaster University.

- In 2017, in Montreal, Quebec, the Technoparc Montreal celebrated World Wetlands Day with a birdwatching field tour in an endangered area located within Montreal.

-In 2017, Ducks Unlimited Canada organized a Young Scientist Day to learn all about wetlands in St. John's Newfoundland.

- In 2017, Watson Slough Wetland held a World Wetlands Day walk between Fort St. John and Hudson's Hope in Northern British Columbia.

- In 2017, the federal Minister of Environment and Climate Change used social media to raise public awareness of wetland values and benefits.

- In 2017, the British Columbia Waterfowl Society promoted World Wetlands Day by showcasing information about British Columbia's Ramsar Sites with interpretative walks providing information at the Reifel Bird Sanctuary.

16.8 Have campaigns, programmes, and projects (other than for World Wetlands Day-related activities) been carried out since COP12 to raise awareness of the importance of wetlands to people and wildlife and the ecosystem benefits/services provided by wetlands? {4.1.9}

A=Yes

16.8 Additional information

If these and other CEPA activities have been undertaken by other organizations, please indicate this

> Each year (2015, 2016, 2017) the North American Waterfowl Management Plan partners in Canada publish "Habitat Matters," a report presenting the annual accomplishments under the program. The report highlights success stories around the country showcasing Joint Venture projects for each region. For example, Habitat Matters 2017 showcased the Hogan family and their farm conservation efforts in the Prairie Habitat Joint Venture. Between 2003 and 2017, the farm's operations expanded and the family signed 18 conservation easements, permanently protecting 1,977 hectares of natural lands, including 817 hectares of wetlands. Environment and Climate Change Canada uses social media to promote funding opportunities and the benefits of conserving wetlands under various programs (e.g., National Wetland Conservation Fund, Eco Action).

In addition to signage and interpretive centres, many Ramsar Sites in Canada host awareness-raising

campaigns and programs. For example:

- In Cap Tourmente and Baie de l'Isle-Verte, exhibits increase public awareness of the importance of wetlands and other adjacent habitats. Modifications and improvements of these exhibits are planned in future.
- An awareness raising program is provided in Lac Saint-François National Wildlife Area by local partners in collaboration with Environment and Climate Change Canada. This program includes content on ecosystems such as marshes.

Target 17

Financial and other resources for effectively implementing the fourth Ramsar Strategic Plan 2016 – 2024 from all sources are made available. {4.2.}

17.1a Have Ramsar contributions been paid in full for 2015, 2016 and 2017? {4.2.1} KRA 4.2.i

A=Yes

17.1b If 'No' in 17.1 a), please clarify what plan is in place to ensure future prompt payment

> Ramsar contributions have been paid in full for 2015, 2016, and 2017.

17.2 Has any additional financial support been provided through voluntary contributions to non-core funded Convention activities? {4.2.2} KRA 4.2.i

A=Yes

17.2 Additional information

If 'Yes' please state the amounts, and for which activities

> \$40,000 in 2015 and \$44,000 in 2017 was provided to support COP12 and COP13 preparations, respectively, to strengthen international collaboration in the implementation of the Ramsar Convention.

17.3 [For Contracting Parties with a development assistance agency only ('donor countries')]: Has the agency provided funding to support wetland conservation and management in other countries? {3.3.1} KRA 3.3.i

A=Yes

17.3 Additional information

If 'Yes', please indicate the countries supported since COP12

> Numerous initiatives are supported by Global Affairs Canada and its multilateral partners that are directly and indirectly related to wetland conservation and management. In addition to providing core funding to the Global Environment Facility, Canada's 2015-16 Official Development Assistance Report includes expenditures from supporting initiatives relating to water resource protection, and wetlands resources for training materials and other resources. Canada's International Development Research Centre has supported Wetlands International South Asia and the Chilika Development Authority to work with stakeholders and organizations for assessing how people and ecosystems are vulnerable to climate change in coastal hotspots. Canada invested \$2.65 billion over five years (2015-2020) to help build a more environmentally sustainable future through the G7 Africa Renewable Energy Initiative, the G7 Initiative on Climate Risk Insurance and for financing for urgent adaptation projects through the Least Developed Countries Fund.

17.4 [For Contracting Parties with a development assistance agency only ('donor countries')]: Have environmental safeguards and assessments been included in development proposals proposed by the agency? {3.3.2} KRA 3.3.ii

A=Yes

17.4 Additional information

> An environmental assessment is required for all of Global Affairs Canada's international development assistance initiatives. The depth of the environmental assessment that is required for an initiative is determined based on a risk approach, based on the initiative's potential environmental opportunities and risks, taking into account the sector, context and scale.

17.5 [For Contracting Parties that have received development assistance only ('recipient countries')]: Has funding support been received from development assistance agencies specifically for in-country wetland conservation and management? {3.3.3}

Z=Not Applicable

17.6 Has any financial support been provided by your country to the implementation of the Strategic Plan?

B=No

17.6 Additional information

If "Yes" please state the amounts, and for which activities

> No direct funding has been provided to implement the strategic plan; however, actions in Canada contribute to implementing the strategic plan through the wise use of wetlands, specifically through actions of the North American Waterfowl Management Plan and funding programs like the National Wetland Conservation Fund program.

Target 18

International cooperation is strengthened at all levels {3.1}

18.1 Are the national focal points of other MEAs invited to participate in the National Ramsar/Wetland Committee? {3.1.1} {3.1.2} KRAs 3.1.i & 3.1.iv

B=No

18.1 Additional information

> Canada does not have a National Ramsar Committee, however, the North American Wetlands Conservation Council (Canada) acts as a national wetland committee and is comprised of federal, provincial, territorial and non-governmental organization representatives.

National focal points of other MEAs are not invited to participate as it is beyond the mandate of the Council. The federal co-chair of the Council serves to make sure that other MEAs participate in wetland-related discussions as required

18.2 Are mechanisms in place at the national level for collaboration between the Ramsar Administrative Authority and the focal points of UN and other global and regional bodies and agencies (e.g. UNEP, UNDP, WHO, FAO, UNECE, ITTO)? {3.1.2} {3.1.3} KRA 3.1.iv

A=Yes

18.2 Additional information

> Canada has a number of mechanisms at the federal level to ensure there is collaboration between the Ramsar Administrative Authority and the national focal points of other UN, global and regional bodies. These mechanisms include coordination groups among senior management (Director General Committee on International Affairs at Environment and Climate Change Canada as an example) and interdepartmental fora (Federal Biodiversity Committee as an example) for sharing information and developing policy on various MEAs.

18.3 Has your country received assistance from one or more UN and other global and regional bodies and agencies (e.g. UNEP, UNDP, WHO, FAO, UNECE, ITTO) or the Convention's IOPs in its implementation of the Convention? {4.4.1} KRA 4.4.ii.

The IOPs are: BirdLife International, the International Water Management Institute (IWMI), IUCN (International Union for Conservation of Nature), Wetlands International, WWF and Wildfowl & Wetland Trust (WWT).

B=No

18.4 Have networks, including twinning arrangements, been established, nationally or internationally, for knowledge sharing and training for wetlands that share common features? {3.4.1}

A=Yes

18.4 Additional information

If 'Yes' or 'Partially', please indicate the networks and wetlands involved

> Under the North American Waterfowl Management Plan there are regional networks between Canadian, United States and Mexican partners for knowledge sharing specifically related to wetlands that support waterfowl.

Canada is a member of the Arctic Council, an intergovernmental forum for cooperation, coordination and interaction among Arctic States with involvement of Indigenous communities.

The Western Hemisphere Shorebird Reserve Network facilitates communication and sharing of technical resources among a network of sites in North and South America. The Canadian Shorebird National Working Group represents Canada on the Network.

Ducks Unlimited Canada is involved in twinning and knowledge sharing internationally. For example, Oak Hammock Marsh Ramsar Site is linked as a sister marsh with similar wetland in Israel.

Additionally, Hay-Zama Lakes has been twinned with Dalai Lake in Mongolia, China.

Canada and China established a collaborative partnership on peatland management and restoration. The main goal is to transfer the knowledge and skill of Canadian peatland scientists for the conservation and restoration of critical northern peatlands in China.

The Agricultural Wetland Research Network through the International Institute for Sustainable Development has research and information sharing partnerships with institutions in Israel, Paraguay and Mexico.

The University of Saskatchewan is working with national and international partners to investigate hydrological and ecological responses in wetlands to changing environmental conditions for Northern climates as part of

the changing cold regions network through participation in international projects.

18.5 Has information about your country's wetlands and/or Ramsar Sites and their status been made public (e.g., through publications or a website)? {3.4.2} KRA 3.4.iv

A=Yes

18.5 Additional information

> Many websites make information available on Canada's wetlands and/or Ramsar Sites.

For example, WetlandNetwork.ca (www.wetlandnetwork.ca) was launched in 2012 with the goal of helping Canadians to discover, access and share wetland knowledge and experience. The site provides access to a range of tools and resources.

In addition, many governments (federal, provincial, territorial and municipal), non-governmental organizations, academia and private organizations maintain websites that provide resources and information on Canada's wetlands and Ramsar Sites. For example, the website www.WetlandsAlberta.ca was developed by Alberta Environment, Ducks Unlimited Canada and the Alberta North American Waterfowl Management Plan Partnership to provide resources for educators, landowners and the public on the value of wetlands and actions for conservation in the province.

Ramsar Sites that are part of Environment and Climate Change Canada's Protected Areas network (including National Wildlife Areas and Migratory Bird Sanctuaries) are profiled at <https://www.canada.ca/en/environment-climate-change/services/wildlife-habitat.html>. Other Ramsar Sites associated with national or provincial parks and wildlife areas are also profiled on government websites (e.g. Point Pelee National Park <http://www.pc.gc.ca/eng/pn-np/on/pelee/plan.aspx>; and Hay-Zama Lakes <http://www.albertaparks.ca/hay-zama-lakes/information-facilities.aspx>). Non-government organizations managing Ramsar Sites and surrounding lands may also provide limited information regarding site characteristics and management (e.g. Matchedash Bay Provincial Wildlife Area <http://www.mtmconservation.org/>; Creston Valley <https://www.crestonwildlife.ca/>).

18.6 Has information about your country's wetlands and/or Ramsar Sites been transmitted to the Ramsar Secretariat for dissemination? {3.4.3} KRA 3.4.ii

A=Yes

18.6 Additional Information

> A range of activities on World Wetlands Day are submitted each year by Canadians to the Ramsar Secretariat for promotion on its website and highlights map (<http://www.worldwetlandsday.org/map>). Several examples are included in section 16.7.

A case study for the Peace-Athabasca Delta and Whooping Crane Summer Range Ramsar Sites was developed for use by the Ramsar Secretariat to communicate how communication, education, participation, and awareness activities carried out within the sites have contributed to successful management (<http://www.ramsar.org/news/how-cepa-activities-carried-out-within-ramsar-sites-contribute-to-their-successful-management>).

18.7 Have all transboundary wetland systems been identified? {3.5.1} KRA 3.5.i

A=Yes

18.7 Additional information

> Canada is in the process of updating mapping and inventory information regarding wetland systems. Large transboundary wetland systems have been identified, but no extensive transboundary wetland system list has been published.

According to the International Joint Commission, for those transboundary regions that fall under its purview, most transboundary wetlands between Canada and the United States have been identified, however, characterization between watersheds is uneven.

Additionally, within the Great Lakes/St. Lawrence River Basin, Canada and the United States have identified five binational areas of concern that contain varying amounts of coastal/riverine wetlands (St. Mary's River, St. Clair River, Detroit River, Niagara River and the St. Lawrence River).

18.8 Is effective cooperative management in place for shared wetland systems (for example, in shared river basins and coastal zones)? {3.5.2} KRA 3.5.ii

C=Partially

18.8 Additional information

If 'Yes' or 'Partially', please indicate for which wetland systems such management is in place

> Four Canadian Habitat Joint Ventures integrate planning, science, governance, partnerships, and management to achieve North American Waterfowl Management Plan goals in Canada. A science-based implementation plan is created to address local, regional and continental goals for each Joint Venture. Joint Venture partners effectively cooperate to research, monitor and evaluate waterfowl populations, and deliver

habitat conservation programs at a regional level. This partnership also cooperatively manages shared wetlands.

For example, in British Columbia, the Pacific Birds Habitat Joint Venture works closely with partners in the United States. *Spartina* spp. removal along the south coast of British Columbia is ongoing with the assistance of the State of Washington the British Columbia Ministry of Environment and Climate Change Strategy.

In the Great Lakes, Ontario has established a number of cooperative management partnerships to facilitate the restoration and conservation of shared wetland systems, and has contributed to the wetland inventory and monitoring tools of the Canada-U.S. Great Lakes Coastal Wetland Consortium.

Yukon First Nations Land Claim agreements are in place for the majority of the Yukon Territory, and in addition to this, the Yukon also partners on inter-provincial agreements (British Columbia, Alberta and Northwest Territories) and international agreements with the United States of America. Combined, these agreements represent an effective cooperative management for shared wetland systems (e.g. in shared river basins and coastal zones).

18.9 Does your country participate in regional networks or initiatives for wetland-dependent migratory species? {3.5.3} KRA 3.5.iii

A=Yes

18.9 Additional information

> The North American Waterfowl Management Plan is an international partnership between Canada, the United States and Mexico with the goal of conserving and protecting wetland and upland habitats and associated waterfowl populations. Canada implements the plan through four regional Habitat Joint Ventures made up of a variety of cooperative public and private partners.

The North American Waterfowl Management Plan was revised in 2012 as a new 'call to action' identifying an integrated vision and defining goals and measurable objectives for waterfowl populations, habitat and people. A separate Action Plan provides further guidance for implementation (<http://nawmp.wetlandnetwork.ca/nawmp-revision-2012/>).

Target 19

Capacity building for implementation of the Convention and the 4th Ramsar Strategic Plan 2016 – 2024 is enhanced.

19.1 Has an assessment of national and local training needs for the implementation of the Convention been made? {4.1.4} KRAs 4.1.iv & 4.1.viii

B=No

19.1 Additional information

> No assessment of national or local training needs for the implementation of the Convention has been made due to limited resources. Networks are in place to share information through continued communication with Ramsar Site managers and the Administrative Authority. Opportunities also exist for information sharing through the North American Wetlands Conservation Council (Canada) and the Canadian Wetlands Roundtable.

19.2 Are wetland conservation and wise-use issues included in formal education programmes?

C=Partially

19.2 Additional information

If you answer yes to the above please provide information on which mechanisms and materials

> Wetland conservation and wise use issues are included in provincial and territorial formal education programs to varying degrees.

19.3a How many opportunities for wetland site manager training have been provided since COP12? {4.1.5} KRA 4.1.iv

a) at Ramsar Sites

X=Unknown

19.3b How many opportunities for wetland site manager training have been provided since COP12? {4.1.5} KRA 4.1.iv

b) at other wetlands

X=Unknown

19.3 Additional information

including whether the Ramsar Wise Use Handbooks were used in the training

> a) at Ramsar Sites

No official training opportunities were reported for the past 3 years at Ramsar Sites nor was there a request

for training opportunities from the Site managers.

b) at other wetlands

No official training opportunities or information for wetland site managers were identified.

19.4 Have you (AA) used your previous Ramsar National Reports in monitoring implementation of the Convention? {4.3.1} KRA 4.3.ii

A=Yes

19.4 Additional information

If 'Yes', please indicate how the Reports have been used for monitoring

> The preparation of the 3-year Ramsar Report provides a mechanism for communication and updates to evaluate the progress among government agencies, non-government organizations and others regarding the status of wetland conservation and management in Canada.

Section 5: Optional annex to allow any Contracting Party that so wishes to provide additional information regarding any of all of its designated Wetlands of International Importance (Ramsar Sites)

Guidance for filling in this section

1. Contracting Parties can provide additional information specific to any or all of their designated Ramsar Sites, given that the situation and status of individual Ramsar Sites can differ greatly within the territory of a Contracting Party.
2. The only indicator questions included in this section are those from Section 3 of the COP13 NRF which directly concern Ramsar Sites.
3. In some cases, to make them meaningful in the context of reporting on each Ramsar Site separately, some of these indicator questions and/or their answer options have been adjusted from their formulation in Section 3 of the COP13 NRF.
4. Please include information on only one site in each row. In the appropriate columns please add the name and official site number (from the Ramsar Sites Information Service).
5. For each 'indicator question', please select one answer from the legend.
6. A final column of this Annex is provided as a 'free text' box for the inclusion of any additional information concerning the Ramsar Site.

A final column of this Annex is provided as a 'free text' box for the inclusion of any additional information concerning the Ramsar Site.

Canada

Baie de l'Isle-Verte (362)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Beaverhill Lake (370)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

B=No

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Cap Tourmente (214)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Chignecto (320)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Columbia Wetlands (1463)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Creston Valley (649)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Delta Marsh (238)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

A=Yes

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

C=Partially

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Any additional comments/information about the site

> 11.3 and 11.4 based on draft management planning

Dewey Soper Migratory Bird Sanctuary (249)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Any additional comments/information about the site

> 11.3 and 11.4 based on draft management planning

Fraser River Delta (243)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

D=Planned

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

B=No

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

B=No

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Grand Codroy Estuary (364)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

A=Yes

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Hay-Zama Lakes (242)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar

Site?

B=No

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

C=Partially

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Lac Saint Pierre (949)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Lac Saint-François (361)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Last Mountain Lake (239)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

A=Yes

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Long Point (237)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

A=Yes

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Malpeque Bay (399)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

Mary's Point (236)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Matchedash Bay (866)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

B=No

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

B=No

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

McConnell River (248)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Any additional comments/information about the site

> 11.3 and 11.4 based on draft management planning

Mer Bleue Conservation Area (755)

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

D=Planned

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Minesing Swamp (865)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

A=Yes

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Musquodoboit Harbour (369)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Oak Hammock Marsh (366)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Old Crow Flats (244)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Peace-Athabasca Delta (241)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

A=Yes

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Point Pelee (368)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Polar Bear Pass (245)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Any additional comments/information about the site

> 11.3 and 11.4 based on draft management planning

Polar Bear Provincial Park (360)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Queen Maud Gulf (246)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Any additional comments/information about the site

> 11.3 and 11.4 based on draft management planning

Quill Lakes (365)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the

year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

B=No

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Rasmussen Lowlands (247)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Shepody Bay (363)

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

B=No

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

B=No

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

B=No

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Southern Bight-Minas Basin (379)

5.7 Has a cross-sectoral site management committee been established for the site?

B=No

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

C=Partially

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Southern James Bay (367)

5.7 Has a cross-sectoral site management committee been established for the site?

D=Planned

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

B=No

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

Z=No Management Plan

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

B=No

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

St. Clair (319)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

A=Yes

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes

Tabusintac Lagoon and River Estuary (612)

5.7 Has a cross-sectoral site management committee been established for the site?

A=Yes

5.9 If an assessment of the effectiveness of Ramsar Site management has been made please indicate the year of assessment, which assessment tool did you use (e.g. METT, Resolution XII.15), the result (score) of the assessment and the source of the information in the box for additional information.

A=Yes

11.1 Has an assessment been made of the ecosystem benefits/services provided by the Ramsar Site?

B=No

11.3 Have socio-economic values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

11.4 Have cultural values of wetlands been included in the management planning for the Ramsar Site?

A=Yes

16.3a Is stakeholder participation in decision-making promoted, especially with local stakeholder involvement in the management of the Ramsar Site?

A=Yes

16.6a Have communication mechanisms been established to share information between the Ramsar Administrative Authority and the Ramsar Site manager(s)?

A=Yes