



Evaluation of the Protected Areas Program

Final Report

Audit and Evaluation Branch April 2014



Report Clearance Steps

Planning phase completed
Report sent for management response
July 2012
November 2013

Report presented to the Departmental Evaluation Committee December 2013 / April 2014

Report approved by Departmental Evaluation Committee (DEC) April 2014

Acronyms used in the Report

AAFC Agriculture and Agri-Food Canada ACMC Area Co-Management Committee

CARTS Conservation Areas Reporting and Tracking System

CBRA Canadian Biosphere Reserve Association CCEA Canadian Council on Ecological Areas

CESD Commissioner of the Environment and Sustainable Development

COSEWIC Committee on the Status of Endangered Wildlife in Canada

CWA Canada Wildlife Act
CWS Canadian Wildlife Service
DFO Fisheries and Oceans Canada
DND Department of National Defence
DPR Departmental Performance Report

EC Environment Canada
G&C Grants and Contributions
HOTO Health of the Oceans Initiative

IAS Invasive Alien Species

IIBA Inuit Impacts and Benefits Agreement

IUCN International Union for the Conservation of Nature

MBCA Migratory Birds Convention Act
MBS Migratory Bird Sanctuary

NGO Non-Governmental Organization NLCA Nunavut Land Claims Agreement

NSA Nunavut Settlement Area

NTI Nunavut Tunngavik Incorporated

NWA National Wildlife Area

NWT-PAS Northwest Territories Protected Areas Strategy

PA Protected Area

PAA Program Activity Architecture RPP Reports on Plans & Priorities

SARA Species at Risk Act
SSP Sub-sub Program
TB Treasury Board

Acknowledgements

The Evaluation Project Team would like to thank those individuals who contributed to this project, particularly members of the Evaluation Committee as well as all interviewees and other contributors who provided insights and comments crucial to this evaluation. The Evaluation Project Team was led by Micheline Hanna, under the direction of the Evaluation Director, William Blois, and included TDV Global Inc. who was contracted to conduct the evaluation.

Table of Contents

Executive Summary Relevance Effectiveness Economy and Efficiency	i
1.0 Introduction	
2.0 Background	
3.0 Evaluation Design	6 6
4.0 Findings	10
5.0 Conclusions	24
6.0 Recommendations and Management Response	25
Annex 1 - PA Program Logic Model	
Annex 2 - Documents Reviewed	
Annex 3 - File Review Sites	
Annex 4 - Summary of Findings	

Executive Summary

This report presents the results of the evaluation of the Protected Areas Sub-sub Program (PA program) 1.1.4.2 of the departmental Program Alignment Architecture (PAA), the data collection for which was undertaken from January 2013 to October 2013.

The Protected Areas program strives to protect nationally important wildlife habitats whose loss would have a direct impact on the Canadian populations of one or more wild species. By establishing and designating protected areas, this program protects priority habitats from disturbances for the conservation of migratory birds, species at risk and other wildlife. The PA program comprises activities related to the planning, establishment, acquisition, maintenance and disposal of National Wildlife Areas (NWAs) and Migratory Bird Sanctuaries (MBSs), as well as to the Inuit Impacts and Benefits Agreement (IIBA) grants and contribution program. The program manages a network of 146 protected areas covering approximately 10 million hectares.

The evaluation scope covers a five-year period from 2008-2009 to 2012-2013 and examined core issues related to relevance and performance, in accordance with the Treasury Board (TB) *Policy on Evaluation* (2009). The evaluation excludes consideration of the North West Territories Protected Area Strategy (NWT-PAS) and Health of the Oceans (HOTO) initiatives, which have been evaluated separately, and the Canadian Biosphere Reserve Association (CBRA), whose EC funding was terminated in 2012. Total annual expenditures for all evaluated components of the PA program (i.e., core and other departmental supports) varied between roughly \$12 and \$17 million per year from 2008-2009 to 2012-2013.

Findings and Conclusions

Relevance

The PA program targets the continued need for the protection and preservation of habitat to support biodiversity and protect species at risk, as well as Aboriginal access and rights to manage the environment, and is intended to support legislated requirements of the *Canadian Wildlife Act (CWA)*, *Migratory Birds Convention Act* (MBCA) and the *Species at Risk Act*, as well as international efforts to protect migratory species.

The PA program is aligned to recent Government of Canada and departmental priorities and commitments (e.g., the Federal Sustainable Development Strategy and the Canadian Biodiversity Strategy), and is consistent with federal roles and responsibilities as identified in legislation and other agreements (e.g., the Nunavut Land Claims Agreement).

Effectiveness¹

The PA program is making progress toward the achievement of many of its intended outcomes, such as the establishment of a protected areas network, linking to global and continental networks, and access and benefit sharing for Aboriginals, although there is opportunity for improvement in each of these areas. Little evidence was found of the generation of significant new knowledge contributing to EC conservation needs, of the promotion of public understanding of the need for and role of protected habitat, or of the

¹ The protection of natural areas in Canada is a shared responsibility among various stakeholders, including other federal departments, provincial and territorial governments, environmental non-governmental organizations (ENGOs), and others. As such, Environment Canada is not solely responsible for all outcomes outlined in the program logic model. While the evaluation acknowledges the role of other stakeholders, it only assesses the relevance and performance of Environment Canada's activities in contributing to the achievement of these shared outcomes.

ongoing ecological management/protection of the PAs. There is also insufficient site monitoring to properly assess the level of compliance with regulatory requirements.

Economy and Efficiency

While roles, responsibilities, and governance for the program have been well articulated, the PA program has been unable to implement consistent management practices, including for performance measurement, across the various regions and/or sites. Land acquisition, a key function of the PA program, is a lengthy process and acquisition delays have impacted program effectiveness. The program's business model lacks the flexibility to enlarge protected areas or consolidate management of an area.

The PA program manages its sites with lower cost than other organizations performing similar roles, although differing mandates and site management activities renders such comparisons imperfect. While there is no evidence of significant waste, the program fails to perform all of the activities identified in its logic model.

Where possible, the PA program leverages resources from other organizations to enhance the achievement of its objectives, such as through the adoption of innovative site management practices (e.g., local partnerships to conduct species counts or manage surface water) to minimize investments while achieving the same results. There are, however, opportunities for the PA program to improve program efficiencies by implementing consistent processes across protected areas and more proactively engaging with a full range of stakeholders (within EC, ODGs, provincial/territorial governments, NGOs) to leverage partnerships.

Recommendations

The following recommendations are directed to the Assistant Deputy Minister, Environmental Stewardship Branch (ADM ESB), as the senior departmental official responsible for the management of the PA program:

Recommendation 1: Revisit and refine the program logic model and performance measurement strategy.

Recommendation 2: Develop and implement an approach for Environment Canada to more actively engage with all program stakeholders in order to enhance the ecological integrity of the department's Protected Areas and contribute to a national vision on the management and oversight of Protected Areas throughout Canada.

As demonstrated by the evaluation, such an approach should consider the need to:

- Strengthen the coordination of the overall activities of the Protected Areas program including, the research, monitoring and assessment functions.
- Complete Site Management Plans for specific protected areas according to their prioritized rankings.
- Enhance public understanding and support for the role and importance of Protected Areas in conserving and protecting wildlife.
- Open a dialogue with partners on how to work jointly toward the achievement of targets for protected areas in Canada.

The responsible ADM agrees with both recommendations and has developed a management response that appropriately addresses each of the recommendations. The full management response can be found in section 6 of the report.

1.0 Introduction

This report presents the results of the evaluation of the Protected Areas Sub-sub Program (PA program) 1.1.4.2 of the departmental Program Alignment Architecture (PAA), the fieldwork for which was undertaken from January 2013 to October 2013. This evaluation was part of Environment Canada's (EC's) 2012 Risk-Based Audit and Evaluation Plan. The intent of this evaluation is to inform management in EC of the continuing relevance and performance of the sub-sub program that may inform future program strategic directions.

This report summarizes the evaluation process, findings, conclusions and recommendations. The report is organized into five sections:

- **Section 2** provides background information on the Protected Areas Sub-sub Program, including the governance structure, allocated resources and expected outcomes;
- Section 3 indicates the evaluation objectives, scope, issues and approach taken;
- Section 4 documents the evaluation findings;
- Section 5 provides a summary of the evaluation conclusions; and
- Section 6 presents the evaluation recommendations and management response.

The report also includes a number of annexes that form the information base for the evaluation's key findings and conclusions, including a logic model, document list, a list of file review sites, and a summary findings table.

2.0 Background

2.1 Program Profile

2.1.1 Program Description

The Protected Areas Sub-sub Program 1.1.4.2 (hereinafter referred to as the PA program), delivered by the Canadian Wildlife Service (CWS) at EC, strives to protect nationally important wildlife habitats whose loss would have a direct impact on the Canadian populations of one or more wild species. The loss of species has a direct impact on the sustainability and health of ecosystems.² By acquiring and designating protected areas, this program protects priority habitats from disturbances for the conservation of migratory birds, species at risk and other wildlife.

The PA program aims to identify, designate, and cooperatively manage a network of marine and terrestrial National Wildlife Areas (NWAs) and Migratory Bird Sanctuaries (MBSs). As such, the three fundamental areas of activity of the PA program are to:

- plan the network of EC Protected Areas:
- · establish Protected Areas; and
- manage Protected Areas.

Together, these groups of actions support the departmental strategic outcome: "Canada's natural environment is conserved and restored for future generations" and are ultimately expected to contribute to the conservation of migratory birds and species at risk and the protection of rare and unique habitats, as well as to the maintenance or enhancement of

2

World Health Organization, http://www.who.int/globalchange/ecosystems/biodiversity/en/

attendant ecological goods and services.³ Details on these activities, their outputs and their expected contribution to direct, intermediate and final outcomes can be found in the logic model for the PA program (Annex 1).

The PA program operates under the authority of the *Canada Wildlife Act* and the *Migratory Birds Convention Act, 1994* for the development and management of NWAs and MBSs, respectively. Despite differing in terms of their legal authorities, purposes, and prohibited activities, NWAs and MBSs are similar in that they are both specifically designated and managed to protect wildlife and their habitat, and so contribute to the national network of protected areas. NWAs protect significant habitats that support wildlife or ecosystems at risk, and represent rare or unusual wildlife habitats and bio-geographic regions for the purposes of conservation, research and interpretation. The MBSs aim to protect migratory birds—as populations and individuals—and their nests.

There are currently 146 Protected Areas managed by EC (or through delegation of authority to other government departments): 54 NWAs cover 1 million hectares of habitat (of which about half is marine habitat) and 92 MBSs cover approximately 11.5 million hectares of migratory bird habitat. Many of these areas have been established for at least a decade: the first MBS was established in 1919, whereas the first NWAs were established after the *Canada Wildlife Act* was promulgated in 1973. Three NWAs, all within Nunavut, were created during the period under evaluation (2008-2009 to 2011-2012).

Inuit Impact and Benefits Agreement (IIBA)

The Nunavut Land Claims Agreement (NLCA) states that an IIBA must be negotiated every seven years⁴ between the Government of Canada and Inuit (unless otherwise agreed) before any new NWAs or MBSs are established in the Nunavut Settlement Area (NSA). A key overarching objective of the IIBA is to promote the economic self-reliance and cultural and social well-being of Inuit and as such, it aims to address all matters related to NWAs and MBSs within the NSA that could reasonably confer a benefit or have a detrimental impact on the Inuit To this end, the IIBA provides a mechanism for the co-management of NWAs and MBSs within the NSA by Inuit and CWS in accordance with the NLCA. The IIBA aims to specify procedures that ensure that decision-making for MBSs and NWAs is substantially informed and influenced by Inuit Qaujimajatuqangit (Inuit traditional knowledge), as well as by local Inuit involvement in the planning and management of NWAs and MBSs, while fulfilling the requirements of the Canada Wildlife Act and the Migratory Birds Convention Act. In accordance with the NLCA, an IIBA was concluded on August 22, 2008, between EC, Nunavut Tunngavik Incorporated (NTI) and four Designated Inuit Organizations / Regional Inuit Associations (DIO/RIA).

In administering the IIBA, EC is responsible for: establishing and administering nine Area Co-Management Committees (ACMCs) for its protected areas in the Nunavut Settlement Area; implementing protected area management plans; administering Inuit hiring programs that provide the Inuit with opportunities to gain experience in the field of wildlife conservation; and developing and implementing a National Wildlife Area Strategy for Nunavut. The NTI for its part is responsible under the IIBA for the establishment and administration of the Inuit Tourism Providers Fund, as well as other funds for the development of cultural resource inventories,

³ Attendant ecological goods and services comprise the spectrum of potential benefits to be derived from the protection of natural areas, including ecological, economic, recreational, cultural and aesthetic benefits.

⁴ Article 8.4.7 of the NLCA states that "Except where an IIBA in good standing indicates otherwise, every agreement shall be re-negotiated at least every seven years."

such as Inuit oral history and archaeological projects, Wildlife Areas of Importance to Inuit, and Cultural Sites of Importance to Inuit.⁵

2.1.2 Partners and Stakeholders

Within EC, organizations that contribute to activities relating to this program include the Enforcement Branch, Science and Technology Branch, Strategic Priorities Branch, Corporate Services Branch (Real Property Management Division - Environmental Programs), and Regional Directors General.

The federal government actively pursues the protection of habitat through the activities of EC, Parks Canada, Aboriginal Affairs and Northern Development Canada (for the IIBA), and Natural Resources Canada (NRCan). Other departments, such as the Department of National Defence (DND), Agriculture and Agri-Food Canada (AAFC) and Transport Canada, may manage sites designated by EC under a Delegation of Authority, as is the case with DND's management of the Canadian Forces Base Suffield NWA.

The PA program involves the support of the public and requires close collaboration with Aboriginal groups, wildlife management agencies, natural resource agencies, non-governmental organizations (NGOs) and private property owners. Specifically, EC collaborates with several environmental NGOs and professional societies⁶ to plan and implement protected areas. The Canadian Council on Ecological Areas (CCEA)⁷ is also among EC CWS' key partners.

In addition, PA program stakeholders also include industry, namely fishing, tourism and resource companies (e.g., oil and gas, forest products, mining), and Aboriginal and First Nations groups (e.g., Inuit Tapiriit Kanatami, First Nations Environmental Network, Centre for Indigenous Environmental Resources).

2.1.3 Program Outcomes and Logic Model

The logic model of the PA program was developed by the CWS and includes all components of sub-sub program 1.1.4.2. This logic model, attached at Annex 1, provides a visual depiction of the manner in which program activities and outputs are expected to lead to the achievement of intended direct, intermediate and long-term or final outcomes. Stakeholders and beneficiaries of these services and products are also included in the logic model.

As noted previously, the protection of natural areas in Canada is a shared responsibility among various stakeholder groups, including other federal department, provincial and territorial governments, environmental non-governmental organizations (ENGOs), and others. The focus of the current evaluation is on the relevance and performance of EC activities in contributing to the achievement of these shared outcomes. The three classes of direct, intermediate and final outcomes are summarized as follows:

 Direct Outcomes are those that are most quickly observed and easily attributed to program activities. The PA program has 12 intended direct outcomes related to

⁵ Inuit Impact And Benefit Agreement For National Wildlife Areas And Migratory Bird Sanctuaries In The Nunavut Settlement Area, Article 6, December 13 2006.

⁶ Including the Nature Canada [includes the Suffield Coalition and Canadian Nature Network], Nature Québec, Ontario Nature, Bird Studies Canada, Canadian Parks and Wilderness Society, Canadian Wildlife Federation, Sierra Club of Canada, EcoJustice, David Suzuki Foundation, Ducks Unlimited Canada, World Wildlife Fund Canada, Nature Conservancy of Canada, Boreal Songbird Initiative, Canadian Boreal Initiative, and the Canadian Environmental Law Association

⁷ See: http://www.ccea.org/en_partners.html

establishing networks of protected areas, engaging stakeholders, generating information for site management, and improving the health of wildlife and wild areas.

- The program's Intermediate Outcomes are longer-term results that are expected to stem from the achievement of direct outcomes, and include the development of a national network of protected areas which is complemented by continental and global networks, access and benefits sharing of biodiversity by Aboriginal peoples, public understanding and support for the role and importance of protected areas, and the maintenance of the ecological integrity⁸ of protected areas.
- Long term outcomes of the program relate to the conservation of priority habitats for the conservation of migratory birds, species at risk and other wildlife, as well as maintenance and enhancement of attendant ecological goods and services, including ecological, economic, recreational, cultural/spiritual, and aesthetic benefits.

The inter-relations among program outputs, activities and outcomes are presented in greater detail in the program logic model, presented in annex 1.

2.2 Governance

Overall accountability for work completed under PA program rests with the Assistant Deputy Minister (ADM) of the Environmental Stewardship Branch (ESB), with the Director General (DG) of the CWS providing direct program oversight. Two sub program co-leads (the Executive Director of Habitat and Ecosystem Conservation and the Director of Quebec Region, CWS) work on the DG's behalf for the PA program.

For the IIBA, Area Co-Management Committees (ACMC) are established for each NWA, MBS or group within the NSA that is identified in the IIBA. The first ACMC was established in 2009, and five ACMCs have since been established for NWAs and MBSs. Three more ACMCs are currently in the process of being established, for a total of nine ACMCs, as per the Agreement. Each ACMC includes a CWS staff member and two Inuit members from the local community appointed by EC's CWS on behalf of the Minister of the Environment and three Inuit members from the local community appointed by the relevant Regional Inuit Association.

2.3 Resources

Table 1 presents total expenditures for both the core PA program operations and the IIBA over the five year study period, excluding expenditures related to activities which fall outside the scope of the evaluation (i.e., HOTO, NWT-PAS, and CBRA). Relatively stable expenditures of between roughly \$15 and \$17 million annually are observed for the program overall, with the exception of 2008-2009.

⁸ A protected area has ecological integrity when its natural components (plants, animals, and other organisms) and processes (such as growth and reproduction) are intact. (Report of the Commissioner of the Environment and Sustainable Development, Chapter 4: Protected Areas for Wildlife, Fall 2013).

⁹ These are: Ninginganiq ACMC (Clyde River for Ninginganiq NWA); Sululiit ACMC (Qikiqtarjuaq - for Qaqulluit and Akpait NWA); Nivvialik ACMC (Arviat for McConnell River MBS); Ahiak ACMC (Cambridge Bay, Gjoa Haven and Umingmaktok for Queen Maud Gulf MBS); Isulijarnik ACMC (Cape Dorset for Dewey Soper MBS).

Between 2008-2009 and 2012-2013, expenditures for the IIBA totalled \$1,397,746 for EC and \$3,638,850 for NTI,¹⁰ thus falling short of the total funding of \$7.502¹¹ million allocated to EC (\$2.152 M) and the Nunavut Tunngavik Inc. (NTI) (\$5.35M) over this time frame. Total IIBA expenditures of approximately \$5 million over this period show substantial fluctuation, from a low of \$226,000 in 2008-09 and increasing every year to a high of \$1.6 million in 2011-12, followed by a decline to \$1.15M in 2012-13.

Table 1: Expenditures in Support of the PA Program: 2008-09 to 2012-13 (including IIBA but excluding HOTO, NWT-PAS and CBRA)

Protected Areas Operations & Management - CWS

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Total
Salary	2,987,357	4,685,753	4,493,170	4,581,801	4,513,876	21,261,957
O&M	2,387,503	2,364,440	2,443,852	2,424,720	2,159,565	11,780,080
Capital	988,846	895,622	1,311,432	423,281	1,147,613	4,766,794
Contributions	735,043	1,162,000	1,212,309	1,694,500	1,604,390	6,408,242
VNR O&M	345,550	325,640	317,420	273,508	394,052	1,656,170
Total PA	7,444,299	9,433,455	9,778,183	9,397,810	9,819,496	45,873,243

Inuit Impact Benefit Agreement - CWS

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Total
O&M	30,637	175,603	318,925	315,998	556,583	1,397,746
G&C	195,610	525,000	950,000	1,368,986	599,254	3,638,850
Total IIBA	226,247	700,603	1,268,925	1,684,984	1,155,837	5,036,596
Total CWS	7,670,546	10,134,058	11,047,108	11,082,794	10,975,333	50,909,839

Other EC Expenditures

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Total
Other ESB*	3,219,037	3,205,524	4,136,396	5,004,108	3,327,776	18,892,841
S&T Branch	1,056,905	1,448,850	1,233,955	841,926	724,009	5,305,645
RDG Branch	57,222	0	223,303	63,830	9,430	353,785
Total Other EC	4,390,387	4,654,374	5,816,959	5,973,694	4,070,645	24,906,059
Grand Total	12,060,933	14,788,432	16,864,067	17,056,488	15,045,978	75,815,898

Notes:

- 1. 2008-2009 to 2012-2013 data extracted from EC's financial reporting tool DISCOVERER, May 2013.
- 2. For all years, expenditures related to the following were excluded: Canadian Biosphere Reserve Associate, HOTO, NWT PAS.
- 3. *Other PA program costs from within the ESB include some of the costs of delivering Habitat Conservation Partnerships (SSP 1.1.4.1), SAR (SSP 1.1.2), Migratory Birds (SSP 1.1.3), and other ancillary EC programs.

In addition to the PA program's operations and management, Table 1 presents departmental expenditures not related to the core program's delivery (e.g., regulatory support, scientific support) that the department incurs to support the work of the PA program. The PA program also receives support from the Enforcement Branch, however, enforcement-related

While expenditures under the IIBA contribution agreement have not kept pace with original budget allocations, the PA program is currently negotiating a one-year extension to the IIBA and reprofiling funds to 2014-15 in order to allow sufficient time for all IIBA funding to be expended.

This figure does not reflect funding for the final year of the IIBA in 2013-14, as this year falls outside the scope of the evaluation and 2013-14 expenditures were not available at the time of this report. A total of \$8.3 million in funding was allocated to the IIBA between 2008-2009 and 2013-2014.

expenditures are not tracked separately by program in departmental financial systems and so are not presented here.

As was observed for the IIBA, other departmental expenditures in support of the PA program show a moderate rise from about \$4.4 M in 2008-09 to nearly \$6M in 2011-12, but subsequently fall to a low of roughly \$4M in 2012-13.

3.0 Evaluation Design

3.1 Purpose and Scope

In accordance with the Treasury Board (TB) Policy on Evaluation (2009), the evaluation examined the relevance (i.e., continued need, alignment with government priorities and federal roles and responsibilities) and performance (i.e., achievement of expected outcomes, demonstration of efficiency and economy) of EC's PA program activities¹² over a five-year period from 2008-2009 to 2012-2013..

This evaluation was part of EC's 2012 Risk-Based Audit and Evaluation Plan. The evaluation responds to requirements of both the Financial Administration Act (i.e., to evaluate 100% of all ongoing programs of grants and contributions every five years ¹³), and the Policy on Evaluation (i.e., to evaluate 100% of direct program spending every five years ¹⁴).

The scope of the evaluation includes the overall PA program and the IIBA G&C program, but excludes the HOTO, NWT-PAS, and CBRA.¹⁵ The inclusion of the IIBA within the evaluation's scope fulfills specific evaluation commitments set out at the inception of this agreement.

3.2 Evaluation Approach and Methodology

This section describes the evaluation methodology, which was balanced to meet the evaluation timeframe and budget requirements, as well as to ensure triangulation of findings for each evaluation question across multiple lines of evidence. The following six core methods were used for the evaluation, divided between:

- Primary data sources, including key informant interviews, and case studies; and
- Secondary data sources, including a document review, file review, a review of performance/financial data, and a literature review.

Reviews of Primary Data Sources

Key Informant Interviews

Key informant interviews generated qualitative data on the views and experiences of both internal and external stakeholders of the PA program. French and English semi-structured

funding for the CBRA component has been terminated, this component was also not evaluated.

-

¹² The protection of natural areas is a shared responsibility among various stakeholder groups (e.g., other federal departments, provincial and territorial governments, ENGOs). The focus of the current evaluation is limited to the relevance and performance of EC's activities in contributing to the achievement of these shared outcomes.

¹³ TB Policy on Transfer Payments (2008). Retrieved from: http://www.tbs-sct.gc.ca/pol/doc-

TB Policy on Transfer Payments (2008). Retrieved from: http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?section=text&id=15024
TB Policy on Evaluation (2009). Retrieved from: http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?section=text&id=15024

¹⁵ While the PA program also includes HOTO and the NWT-PAS, these initiatives fall outside of the scope of this evaluation as they have been evaluated separately due to their horizontal nature. Given that Environment Canada

interview guides were developed to reflect the experiences of each respondent group, and addressed all relevant issues/questions outlined in the evaluation framework. This semi-structured approach ensured that similar information was collected from all respondents, while allowing respondents to provide information or opinions on issues not specifically identified in the interview protocol. Interviews were conducted with:

- 32 **internal stakeholders** who have played a significant role in the design and delivery of the PA program, including EC senior management, program managers, and regional stakeholders, including regional managers and program staff; 16 and
- 9 external stakeholders who are knowledgeable about the PA program, including NGOs/subject matter experts, IIBA stakeholders (including First Nations representatives), and representatives from international jurisdictions.

Case Studies

Protected Areas site reviews were performed using a multiple-case study design,¹⁷ which allowed for the collection of both qualitative and quantitative data at a high level of detail for specified NWAs or MBSs. Data collection for the case studies included the review of site-level files and data, as well as the interviews with three to five internal and external stakeholders, for a total of 19 interviews across all five case studies.¹⁸

Case study selection involved the initial identification of ten candidate sites by program staff, which was further narrowed to five sites that reflected as broad a variety as possible according to such criteria as their type, region, age, and size. Based on these criteria, the following five sites were reviewed:

- Four Protected Areas (2 MBSs and 2 NWAs), including Cap Tourmente (Quebec), CFB Suffield (Alberta), Last Mountain Lake (Saskatchewan), and Long Point (Ontario); and
- One NWA established under the IIBA; Akpait in Nunavut.²⁰

The review of site-level files involved the systematic analysis of all documents, files and data generated from each site since its inception, with a focus on more recent sources produced during the four-year evaluation period. This information was obtained from EC program representatives. Case study evidence was analyzed to identify patterns and differences across and between the types of sites and assist in identifying lessons learned.

_

¹⁶ Additional regional staff members were interviewed for the case studies

¹⁷ Yin, R. (2003). Case study research: Design and methods (3rd ed.). Applied Social Research Methods Series, Beverly Hills, CA: Sage Publishing.

¹⁸ These interviews are in addition to the key informant interviews, bringing the total number of interviews for this evaluation to 60.

evaluation to 60.

Site selection considered the following criteria: **type** (i.e., two MBSs, two WMAs, and one site established under the IIBA); **International Union for the Conservation of Nature** (IUCN) **classification** (i.e., Wilderness Areas and habitat/species management areas); **region** (i.e., Central, Northern and Western Canada); **year of establishment** (i.e., after 1990, between 1950 and 1990, and older than 1950); **size** (i.e., greater than 40,000 ha., between 5,000 and 40,000 ha., and less than 5,000 ha); **range of partners** (i.e., a site that are registered under the Ramsar Convention, that includes wetlands, or that has multiple designations (e.g. a biosphere, or IBS)); and **other criteria** (i.e., marine habitat, open or restricted public access, endangered flora and fauna, invasive alien species concerns, and other interesting conditions, such as unusual or high profile species, or unusual histories).

Only one case study was proposed under the IIBA given the limited number of Protected Areas (NWA or MBS) under the IIBA available for review, as well as the recently completed IIBA 5-year review (May 2012) which had already examined each of the three large ecotourism projects funded via the IIBA G&C (e.g., Arviat, Gjoa, and Cape Dorset). Documents and several interviews with project participants collected as part of the 5-year IIBA review were also reviewed for this evaluation.

Reviews of Secondary Data Sources

The document review, file review, performance/financial data review, and literature review all followed similar approaches. To begin, for each method an inventory was identified by evaluation committee members, through the scoping interviews, and as part of the evaluation fieldwork. These documents, files and performance / financial data were systematically reviewed to extract and analyze information relevant information for all evaluation questions, which was then integrated by indicator and/or evaluation question in an evidence table.

Document Review

This review focused on the analysis of information contained in a wide range of policy and planning documents, such as acts and regulations, policies and procedures, program documentation, IIBA documents, documents from NGOs and material from other sources. A detailed list of the documents reviewed is contained at Annex 2.

File Review

A sampling of the files of 20% of protected areas was performed. Protected areas were selected to provide a representative sample across several variables: type (NWA or MBS); region; size in hectares; and year of establishment. The file review sites are outlined in Annex 3. The file review included consideration of contribution agreements, annual/progress reports pertaining to these agreements (including financial files, where available), management plans and other files pertaining to individual sites, such as permits, species inventories, and site visit reports.

Performance/Financial Data

Performance and financial data were used to evaluate the performance of the PA program and its components, especially its effectiveness (e.g., the achievement of outputs and outcomes), performance management, and efficiency (e.g., the production of outputs in relation to costs, leveraging of G&C). Key external sources of relevant performance and financial data included the Conservation Areas Reporting and Tracking System (CARTS) maintained by the CCEA, the Nature Conservancy of Canada Conservation Blueprints, and Nature Canada reports.

Literature Review and International Comparison

The literature review examined relevant policy articles and journals, as well as protected area strategies, activities and outcomes in two comparable international jurisdictions: the United States and Australia. These countries were selected following an initial scan that considered the similarities in federal/national involvement (e.g., role, authority, governance model) in protected areas; Aboriginal land rights considerations (e.g., agreements, legislation/policies); and geographical and/or environmental similarities (e.g., size of area, important habitats for birds and/or wildlife). The information analyzed during the literature review and international comparison supported an assessment of alternative program models, as well as the PA program's efficiency by comparing activities and products with those delivered by other similar initiatives.

Note that the US, Australia, New Zealand and Russia had been suggested as potential countries of interest for this review. Norway, Sweden and Finland were also considered, as they share a similar climate with Canada and have their own Aboriginal populations (the Sami). To complement the review, one Australian and two United States representatives were interviewed as key informants.

3.3 Limitations

This section outlines the challenges experienced during the conduct of the evaluation, as well as the related limitations and strategies used to mitigate their impact. While each challenge has the potential to impinge upon the reliability of findings, care was taken to address evaluation questions and issues using multiple lines of evidence wherever possible in order to enhance the robustness of research conclusions. Key challenges for the evaluation of the PA program included:

Inconsistency in File and Financial Information: File content and level of detail is not consistent from one region and/or site to the next, as there is no consistently applied definition of what constitutes a file for a PA. Financial data, likewise, is limited and not consistent from one region and/or site to the next with respect to the type or detail of the information. The information gaps due to a lack of consistent data were mitigated or filled in part through detailed interviews with CWS regional staff.

Lack of Performance Data: The Performance Management Framework is limited to only four indicators and there was no consistent performance data on the sites. The only performance data collected from the file review related to the size of sites and their date of establishment. The impact of the paucity in performance data was mitigated to some extent by the use of multiple alternative data sources.

Difficulty Comparing to Other Organizations: The performance data available from outside sources varied in its publication date and hence it was difficult to compare, for example, OECD data with CARTS data and with data from NGOs. In addition, financial data from the PA program were difficult to compare for efficiency purposes with data from other organizations, such as Parks Canada, because these different stakeholders involved in protecting lands do so for different purposes and under different constraints. For example, the Nature Conservancy of Canada and the US National Wildlife Refuge System make extensive use of volunteers; Parks Canada deals with significantly larger numbers of visitors to their sites which incur costs not typically associated with PAs. To enhance the comparability of these sources, only expenses related to site management were examined and compared. Further, the potential shortcomings of this analysis are clearly articulated when presenting these results.

Difficulty Obtaining International Data: International comparison data that was not publicly available, was difficult to obtain and sparse. The latest set of OECD environment indicators, for example, dated from 2008. Further, it was very challenging to identify appropriate contact names in the selected jurisdictions and once identified, the contacts were very difficult to reach and/or could not provide the required information/data. Use of this line of evidence was limited as direct comparisons with programs in the US and Australia was only possible at a national level, rather than at the program level examined in this evaluation. Limitations in this line of evidence were mitigated to some extent by outlining the limitations of these comparisons, as appropriate, throughout the report, and triangulating these findings with other lines of evidence.

Difficult to Conduct Northern Interviews: Northern key informant interviewees were difficult to reach given their geographic remoteness and possibly due to interview fatigue, as many of the potential northern interviewees had already been interviewed as part of the 2011/12 IIBA 5-year review. The use of technological solutions (e.g., group teleconferences) were not feasible to implement given limitations in the availability of these technologies and the geographic dispersion of potential respondents. Attempts to gather input from Inuit stakeholders in-person proved to be equally ineffectual, as a plan to hold a focus group with all of the relevant stakeholders at the Meeting of the Parties in Iqaluit was scuttled when the meeting was postponed to occur outside the timelines for this evaluation. Care was taken to identify limitations in the number of northern respondents when reporting on these results.

4.0 Findings

This section outlines evaluation findings for each of the defined evaluation issues and questions. Findings and ratings are presented by evaluation issue for the PA program, with specific comments included under each evaluation question.

For each evaluation question, a rating is provided based on a judgment of the evaluation findings. The rating statements and their significance are outlined below in Table 2. A summary of ratings for the evaluation issues and questions is presented in Annex 4.

Table 2: Definitions of Standard Rating Statements

Statement	Definition
Acceptable	The intended outcomes or goals have been achieved or met
Opportunity for	Considerable progress has been made to meet the intended outcomes or
Improvement	goals, but attention is still needed
Attention Required	Little progress has been made to meet the intended outcomes or goals and attention is needed on a priority basis
Not applicable	A rating is not applicable

4.1 Relevance

4.1.1 Continued Need

Evaluation Issue: Relevance	Overall Rating
Is there a continued need for the PA program overall and its components?	Acceptable

There is a continued need for the PA program and its components, given documented evidence of continued pressures on species and habitats, the importance of protecting these areas for Aboriginal cultures, and the alignment of PA program activities to international commitments for the preservation of ecosystems.

- The Species at Risk Public Registry lists 911 species or populations of species, as of May 30, 2013, with 570 of these listed in the three schedules of the Species at Risk Act (SARA). Likewise, provinces maintain lists of endangered flora and fauna. Additionally, various publications from international organizations, such as the International Union for the Conservation of Nature (IUCN), and Canadian organizations, such as the Nature Conservancy of Canada (NCC), demonstrate a universal acceptance of the criticality of preservation of habitat in order to preserve species. A review of site plans and descriptions show that virtually all protected areas identify either species at risk within their boundaries or substantial percentage of populations of a major North American species (e.g., Snow Goose). All cases studied had habitats or species of special interest.
- Interviewees and documents also noted that economic development activities (e.g., farming, urban growth, forestry, etc.) apply pressure on important habitats, especially those south of the 60th parallel. The file review also found that some sites that were once rural are now situated within urban areas, thereby increasing the impact on habitats and endangered species.

•

- Aboriginal organizations report a need to protect claimed lands to maintain ecological, cultural, spiritual and archaeological traditions. Aboriginal communities have also expressed the desire to be involved in the management of lands, especially in the Nunavut Settlement Area. The IIBA references the need for Aboriginal involvement and is the direct government response to that need as a legal obligation under the Nunavut Land Claim Agreement in the Nunavut Settlement Area.
- International agreements commit Canada to preserve ecosystems. Canada participates in, or is a signatory to, such agreements as the Ramsar Convention, the North America Marine Protected Area Network (NAMPAN), the International Union for the Conservation of Nature (IUCN), the North American Waterfowl Management Plan and the Convention on Biological Diversity. The Convention on Biological Diversity sets a target of 17% for protection of land mass and 10% for protection of marine areas. Canada has not yet achieved these targets, as it protects just over 10% of terrestrial landmass and 0.7% of marine areas.

4.1.2 Alignment with Federal Government Priorities

Evaluation Issue: Relevance	Overall Rating
2. Is the PA program and its components aligned to federal government priorities?	Acceptable

The objectives of the PA program and its components correspond to recent federal and departmental commitments, as stated in national agreements, strategies, departmental RPPs, and speeches from the throne.

- The Canadian Biodiversity Strategy lists protected areas as a key component which fulfills some the Government of Canada's obligations.
- The 2012-13 Report on Plans and Priorities (RPP) links the PA program to the Canadian Government strategic outcome of a "Clean and Healthy Environment." The PA program supports Strategic Activity SO 1: Sustainable Environment: Canada's natural environment is conserved and restored for present and future generations."²³
- Interviewees noted that the PA program provides a mechanism for departments with land holdings to meet SARA obligations.
- The June 2011 Speech from the Throne identifies protected areas as a government commitment by stating "In this, the 100th anniversary year of our national parks system, our Government will create significant new protected areas."²⁴
- The IIBA represents a federal obligation that derives from the Nunavut Land Claims Agreement (NLCA) which states "In addition to Parks, other areas that are of particular significance for ecological, cultural, archaeological, research and similar reasons require special protection." (NCLA Article 9.2.1). IIBA principles include the recognition that "NWAs and MBSs make an important contribution to wildlife and wildlife habitat conservation in the NSA, Canada and the world. They shall be co-managed by Inuit and CWS..." (IIBA Article 2.1.2).

²⁴ June 3, 2011 Speech from the Throne

²² CCEA-CARTS Report (as published on CCEA website), 2012

²³ Environment Canada Report on Plans and Priorities 2012-13.

4.1.3 Consistency with Federal Roles and Responsibilities

Evaluation Issue: Relevance	Overall Rating
3. Is the PA program and its components consistent with federal roles and responsibilities?	Acceptable

The PA program meets several federal legislative mandates, addresses needs on federal lands within the Minister of the Environment's purview, complements other federal, provincial/territorial and NGO programs, and is consistent with federal roles in other countries.

The *Migratory Birds Convention Act (MCBA)* clearly identifies migratory birds as being under federal jurisdiction. The *Canada Wildlife Act (CWA)* stipulates that the Governor in Council may authorize the Minister of the Environment to "purchase or acquire any lands or any interests or rights in any lands, for the purpose of ... conservation."

- There are numerous Acts that outline the federal role in the protection of areas for habitat, migratory birds, and species at risk. The PA program is supported by unambiguous legislation: the Canada Wildlife Act (CWA), the Migratory Birds Convention Act (MCBA), and the Species at Risk Act (SARA). The MBCA places responsibility for migratory birds on the federal government and negotiations on these issues are carried out between nations. Only EC can establish an NWA.
- Many of the PAs represent the federal government exercising its environmental stewardship responsibility. NWAs are located on federal crown lands where the Minister of the Environment has stewardship responsibility.
- The PA program is complementary to programs in other government departments (e.g., Fisheries and Oceans, Parks Canada Agency, AAFC), in provincial, territorial, and municipal governments, and in other non-government organizations (e.g., Ducks Unlimited, Nature Conservancy of Canada).
- The Canadian federal role is consistent with United States and Australia where biodiversity, conservation, and protected areas are significant public policy issues that require federal government leadership and programming. Both the United States and Australia have federal organizations with similar responsibilities to the PA program.

4.2 Performance

4.2.1 Achievement of Intended Outcomes

Evaluation Issue: Performance	Overall Rating
4. To what extent have intended outcomes been achieved	Attention Required
as a result of the PA program?	Attention Required

The PA program has met a number of its intermediate outcomes²⁶ related to the creation of a national network, linkages to international networks, and access and benefits sharing by Aboriginal peoples. Although not the sole responsibility of the department, national networks were not found to provide resiliency and redundancy of priority

Environment Canada 12

²⁵ Canada Wildlife Act, 1985, R.S., 1985, c. W-9, s. 9; 1994, c. 23, s. 11(F); 2004, c. 25, s. 115.

²⁶There exists significant overlap between the 12 Direct Outcomes and the 5 Intermediate Outcomes contained in the Program Logic Model. Findings for the Direct Outcomes have been captured under the appropriate Intermediate Outcome except for Direct Outcome #4 which supports several, if not all intermediate outcomes.

habitats, and were proportionately smaller than those of the US and Australia. The PA program is not making adequate progress toward its intended outcomes related to the ecological management of PAs, the development of new knowledge and data contributing to EC's needs and objectives, and the public's understanding and support of the role and importance of PAs.

Intermediate Outcome 1: Opportunity for Improvement "A national network of protected areas incorporating all partners is established that provides resilience²⁷ and redundancy in priority habitats"

The PA program makes an important contribution to the overall network of protected areas in Canada. Although no national targets or commitments have been established for the percentage of terrestrial landmass and marine areas to protect, the current national network was found to fall short of international averages and does not provide adequate redundancy of some priority habitats.

- The PA program has created a network of 146 Protected Areas managed by EC or, in the case of Suffield NWA, through delegation of authority to DND, with pan-Canadian management and appropriate linkages to international networks.
- As of 2011, the PA program protects a total of 1,958,900 hectares of marine habitat and 10,490,061 ha of terrestrial biome, representing approximately 10% of the 102.7 M ha protected in Canada or 1% of Canada's overall landmass. The federal government overall (including Parks Canada, EC and Aboriginal Affairs and Northern Development Canada) is responsible for the protection of just less than half (49%) of all lands currently protected in Canada. 28
- A 2009 comparison suggests that the overall proportion of land and marine protected areas set aside in Canada (8%)²⁹ is considerably less than that protected in the United States and Australia (14.8% and 10.5%, respectively). This is also less than the 2008 OECD countries' and world averages for percentage landmass protected (13% and 12% respectively).31
- Evidence from the document review suggests that many PAs are a patchwork of noncontiguous lands, which can potentially create management issues (e.g., control of invasive species, flood waters, etc.), and so affect the resiliency of sites. For example, three of the five NWAs in New Brunswick (Tintamarre, Shepody and Portobello Creek) have non-contiguous areas.32
- The PAs do, however, leverage partner resources to influence landscapes that by virtue of their larger sizes are more resilient and have a better chance of protecting species. For instance, many of the EC PAs form the nucleus that allows other partners to establish a larger area of protection (e.g., the Long Point NWA anchors the much larger

²⁷ Resilience refers to the ability of an ecosystem to withstand disturbance without changing self-organized processes and structures. Environment Canada Protected Areas Strategy, April 2011.

28 Canadian Council on Ecological Areas, CARTS Reports, 2011/05/01, accessed at http://www.ccea.org/tools-

resources/carts/carts-reports/
²⁹ This figure includes areas protected by federal, provincial/territorial, NGOs, and private partners.

³⁰ Environment Canada, Protected Areas, International Comparison, http://www.ec.gc.ca/indicateursindicators/default.asp?lang=en&n=9DD79AE8-1

³¹ OECD Key Environmental Indicators 2008, the most current set of indicators available

³² Environment Canada, Network of Protected Areas, accessed at http://www.ec.gc.ca/appa/default.asp?lang=En&n=989C474A-1#_001.

Long Point Conservation Area). EC also leverages the PA program's efforts by contributing funds to and collaborating with the NCC³³ and Ducks Unlimited.³⁴ Although the PA program does not co-ordinate its acquisition decisions with these NGOs, as each develops its own habitat protection strategy, the PA program works with these NGOs as appropriate to provide input into planning activities.

Intermediate Outcome 2: Acceptable

"Continental and global networks complement and thereby enhance the conservation value of the national network"

There is evidence of PA linkages to continental and global networks, although there was no evidence that these networks enhance the conservation value of the national network. This suggests that participation in international networks may not be well-aligned to program goals and may need to be reconsidered in the context of the PA program model.

- Many sites bear international network designations, such as Ramsar, Man and Biosphere and Important Bird Areas. There is evidence of effective North American partnerships such as the North American Waterfowl Management Plan and the North American Marine Protected Areas Network (NAMPAN). Five protected areas form part of the Western Hemisphere Shorebird Reserve Network.³⁵
- It was noted that while many of these designations confer international recognition, visibility and demonstrate Canadian support of international efforts, they do not themselves confer any greater degree of habitat protection; the PA program utilizes the CWA, SARA and MCBA for its authorities.

Intermediate Outcome 3: Acceptable

"Access and benefits sharing of biodiversity by Aboriginal peoples"

Although this outcome is relevant for the entire EC network of protected areas, access and benefits sharing of biodiversity by Aboriginal peoples occurs primarily for Inuit in Nunavut. South of the sixtieth parallel, CWS staff report that they do not receive many requests for access to PAs from Aboriginal groups, and this finding was validated by the results of the file review. Local Nunavut communities have supported the establishment of new PAs and are actively involved in their management. Inuit partners have reservations about the student and apprenticeship programs.

• The IIBA is being implemented and procedures are in place for its management. Establishment of the Area Co-Management Committees (ACMCs) is somewhat behind schedule (only five of six planned ACMC were established by the end of FY 2011-2012). Under the current IIBA, Inuit groups are engaged in the management of sites within the Nunavut Settlement Area. Since 2008 there has been a ramping up of O&M expenditures and contributions granted under the IIBA. ³⁶ The 5-year review noted that

_

³³ Although much of NCC's funding comes from Environment Canada, the NGO operates at an arm's length from the Department and utilizes contributions from private citizens

Ducks Unlimited operates as a not-for profit charitable organization. Its Natural Areas Conservation Project received federal funding of \$225M in 2007, according to the Ducks Unlimited website, www.ducks.ca http://www.whsrn.org/sites/list-sites

³⁶ Overall IIBA expenditures grew from \$226K in 2008-09 to \$1.6 M in 2011-12, with a subsequent decline to \$1.15M in 2012-13. The IIBA O&M envelope grew from \$30 K in 2008-09 to \$556K in 2012-13. The majority of the increase in IIBA expenditures is attributable to the G&C portion of the agreement, which grew from \$195K in 2008-09 to \$1.36 M in 2011-12, with a subsequent decline to about \$600k in 2012-13.

NTI maintains procurement processes to ensure that there is preferential treatment to qualified Inuit contractors when IIBA contracts go to tender. ^{37 38}

- Requests for access to PAs from all Aboriginal groups are typically granted throughout the network, although they are not frequently requested south of the sixtieth parallel where there is less dependence on hunting.
- In Nunavut, it was felt that some local communities were very supportive of the establishment of new PAs and are actively involved in their management through ACMCs. This statement is based on a small sample (n=3) of Inuit stakeholders interviewed and is only valid for those with direct involvement with the PA program.
- Aboriginals have unlimited access to PAs North of the 60th parallel where a high degree of collaboration among stakeholders was observed. Case studies suggest a high level of satisfaction from Inuit stakeholders in the activities performed (all sites are currently at the planning stage), despite the difficulties encountered with performing work in Nunavut (e.g. complex approvals and logistics barriers, weather impacts, limited communications infrastructure with various communities). Additionally, respondents to case studies noted that community members have expressed strong support for the creation of the Akpait NWA as they see it providing a measure of protection to a natural resource vital for the survival of the community. The site is almost exclusively accessed by local Inuit, who hunt on the land while respecting the wildlife.
- The program requirements do not meet the expectation of Inuit partners in areas such as student and apprentice programs, as federal staffing processes for engaging Inuit students and field assistants for the North are not well suited to Northern challenges. Specifically, O&M vote funding only allows for the hiring of Inuit Student Mentors and Field Research Assistants under the Federal Student Work Employment Program (FSWEP) or the Research Assistant Program (RAP), both of which are limited to school registered individuals and, in the case of RAP, those registered at a post-secondary institution. Candidates in Nunavut do not meet these conditions generally. As well, many individuals in the North must travel for their work and the American Express cards offered to pay for students' travel expenses are not accepted in most locations in Nunavut.

Direct Outcome 4: Attention Required "New knowledge and data contributing to EC needs and objectives are available"

No evidence was found that the PA program is generating significant new knowledge and/or data contributing to EC conservation needs and objectives. No evidence was found of the PA program directing research or maintaining reliable database of findings from research efforts of other units within EC, such as Species at Risk, Migratory Birds, or Science and Technology Branch. Interviews and a review of permits issued suggest that PA program staff assist other EC sub-programs, such as Migratory Birds or Species at Risk, by helping to obtain permits and occasionally participating in field work.

³⁷ Year Five Review of the Inuit Impact and Benefit Agreement, May 3rd 2012

The NLCA Article 8.4.8 grants that "Where Government intends to contract for the establishment, operation or maintenance of park facilities in the Nunavut Settlement Area, Government shall: (a) give preferential treatment to qualified Inuit contractors where Government proposes to tender such contracts; and (b) ensure that all contractors give preferential treatment to Inuit.

- Knowledge on PA wildlife content is necessary when aligning site management plans
 to the achievement of specific target population levels. Little evidence was found of the
 generation of significant knowledge and data (e.g. site visit reports that could be used
 to adjust site management plans on a periodic basis) that could contribute to EC site
 management needs.
- The Long Point site is the only PA site where new knowledge was generated by clearing an area to establish benchmarks for the impact of human activity. Practitioners do meet periodically to share best practices, but no evidence was found of best practices presentations or datasets.

Intermediate Outcome 4: Attention Required

"Public understands and supports the role and importance of protected areas in conserving and protecting wildlife"

The PA program has done little nationally to generate public understanding and support of the role and importance of PAs in conserving and protecting wildlife. The individual sites that promote understanding through engagement in the surrounding communities have demonstrated the benefits which can be attained through this type of activity.

- The PA program does not appear to effectively or sufficiently communicate the importance and role of EC's PAs to the broader public. There is no evidence gathered and no performance data collected to show whether the general public understands the role and importance of EC's protected areas network in conserving and protecting wildlife. CWS interviewees noted that the public has a very poor understanding of EC's protected areas in general and confuses them with national parks. There is no formal communications or marketing role and/or function within the PA program.
- Public understanding and support for the role and importance of PAs can be greatly
 enhanced by nearby tourism or local sites of interest. As an example, the Cape
 Jourmain NWA, sits at the base of the Confederation Bridge, which makes it an
 unintended tourist attraction and destination. The PA program has established an
 Information Centre on the site and is capitalizing on this high volume destination to raise
 the public profile of protected areas.
- Case studies and interviews show that communities adjacent to protected areas understand and support the role of PAs. The presence of an active PA provides benefits to local farmers (e.g., aid in controlling invasive alien species). The Last Mountain Lake case study shows, for example, how lure crops were planted to direct waterfowl to the site and away from nearby farms. CWS regional staff also reported that they assist in invasive alien species (IAS) management and some reported that they conduct seminars for local landowners, all with the intent of broadening the understanding of the Protected Areas program to adjacent properties.

Intermediate Outcome 5: Attention Required "Ecological integrity of protected areas is maintained or enhanced."

The PA program protects sites from trespass and illegal activities, but the program's capacity to maintain the ecological integrity (i.e., ensuring natural components and processes remain intact) of sites appears to be weak, with inconsistent application of site management plans, lack of site management plans, the lack of established species population targets, and the existence of sites which no longer require active management.

- The ecological integrity of PAs is only marginally maintained with low levels of site management activity being performed. A 2013 CESD audit³⁹ found "more than 70 percent of national wildlife areas and about 55 percent of migratory bird sanctuaries are considered to have less than adequate ecological integrity." ⁴⁰.
- In 2013, the CESD concluded "Without regular monitoring, the Department cannot properly track whether the ecological integrity of its areas is improving ... or ... identify early new or potential threats to local species so that it can react in an appropriate and timely manner."
- Interviewees indicate there is insufficient site monitoring to assess the level of
 compliance with regulatory requirements. Site visits for enforcement purposes are
 described as too infrequent and not systematic enough to gauge the effectiveness of site
 protection efforts. Some sites were visited with insufficient frequency (e.g., once or twice
 a year or not at all) to enable the identification of patterns of trespassing or ecological
 degradation. CWS staff described other efforts, such as the installation of surveillance
 cameras, as not having much impact. Co-ordination with enforcement was described as
 good, but limited due to the budgets constraints.
- It was found that the majority (90%) of EC national wildlife areas did not have adequate management plans, in that the plans were either not based on ecological principles or being implemented, and concluded that "without such plans to support decision making to achieve specific goals and objectives, it is difficult to effectively manage or assess progress in its protected areas." This is consistent with feedback from two key informants who reported that without an up-to-date plan, managers have no performance targets to strive for and no incentive to collect performance data, or that ecological integrity cannot be measured against targets.
- Only roughly a third of sites for the file review had either a draft (n=8 of 30) or approved (n=1 of 30) site management plan, despite the existence of a thorough site management plan template and evidence of its use in draft plans. This finding is consistent with the views of interviewees who suggest that between a third and half of all NWAs have site management plans that are in draft form. This finding may be explained in part by the approval process for site management plans, which was described as onerous with many levels of review.
- In response to a 2008 CESD audit, EC conducted an Operational Review in April 2008, which concluded that, without the current level of funding as well as additional funding, it would not be possible to improve the management of all of EC's existing protected areas, and gaps would remain in responding to the 2008 CESD recommendations.⁴²
- Staff also attributes low levels of site management to limited resources. Regional CWS staff stated that they were under-resourced to meet ecological integrity activity needs (e.g., control of animal populations, erosion and surface water, invasive alien species).
 The 2008 and 2010 review of sites did suggest a slight improvement from 2008 to 2010

_

³⁹ While this report falls somewhat outside of the timeframe under investigation for this evaluation, it was decided to report these findings here since they reflect an update to a 2008 audit that does fall within the study timeframe.

⁴⁰ Report of the Commissioner of the Environment and Sustainable Development, Chapter 4: Protected Areas for Wildlife, Fall 2013.

⁴¹ ibid.

⁴² Environment Canada, Operational Review of Environment Canada's Protected Areas Network, PowerPoint Presentation, December 18th, 2008.

with regard to their overall ecological integrity (i.e., rose from 2.75 to 2.95 on a 5-point scale from poor to excellent), although the subjective nature of these indicators suggests this information may be unreliable.⁴³

- Despite that one of the program's intended outcomes is that "Populations of managed species in protected areas are within target ranges", there is no evidence of targets being established or data being gathered for populations of species of interest within the PA program. There is evidence that an understanding of acceptable and unacceptable levels does exist, as the file review showed that all of the sites control overpopulation through special measures, such as hunting and controlled burns. Also, all of the file review sites reported the presence of invasive alien species, but the majority of the sites were restricted in their efforts to control them due to limited resources.
- The ecological need for sites can change. The Vaseux Bighorn NWA, for example, was developed to protect California bighorn sheep that are no longer endangered. According to a 2013 CESD report, since 2008 "the Department has identified 6 national wildlife areas and 22 migratory bird sanctuaries that no longer meet the criteria for protected areas (for example, sites that are located in urban areas and have little value for wildlife)" but that no action had been taken to delist them. A number of interviewees within CWS also stated that they were aware of sites that are not actively managed and may no longer need protection.

4.2.2 Appropriateness of Design

Evaluation Issue: Performance	Overall Rating
5. Is the program design appropriate for achieving expected program results?	Opportunity for Improvement

Comprehensive procedures and standards to support understanding of roles and responsibilities within the program and the consistent national delivery of program activities exist, but do not appear to be used in a consistent manner.

A draft program guide specifies procedures to establish and maintain PAs in a manner that is appropriate to the objectives of the PA program and covers all activities in the logic model. There is also a document titled Protected Area Strategy (2011) which details the vision, mission, goals, and strategic approaches of the PA program. A template exists for developing site management plans, along with other tools, such as checklists, consultation guidance and process diagrams. Documents discussing sites for consideration, procedural reviews and other reports show that the PA program does take significant consideration in the identification of sites in need of protection. Criteria exist for new site creation.

• Regional staff felt they were clear on the roles and responsibilities of regional and headquarters staff and that they were well informed of national policies. Stakeholders such as DND and NGO partners indicated that they were aware of the role of CWS staff. Despite this, some respondents observed a lack of coordination (e.g., inconsistency in national program delivery; lack of information sharing and use; lack of use of existing guidelines and templates), which could be indicative of a need for greater clarity, communication and understanding of the respective roles and responsibilities of the various stakeholders both within the program, CWS, and EC, and among the various external partners. There are no national mechanisms and processes for effective

⁴³ Environment Canada, 2010 Update of Operational Review, 2010.

coordination, collaboration, communication, and information exchange of relevant program activities among all key stakeholders.

4.2.3 Performance Measurement

Evaluation Issue: Performance	Overall Rating
6. Are appropriate performance data being collected, captured, and safeguarded? If so, is this information being used to inform senior management/ decision- makers?	Attention required

The department's Performance Measurement Framework has been implemented, but with only four PA program indicators that provide insufficient detail to inform PA program management activities. Performance data is very limited and there are very few documented, well recognized and/or accepted specific performance indicators.

The departmental Performance Measurement Framework for 2010-11 covered only four indicators for 1.1.4.2 (e.g., increase in total area protected, unspecified indicators of ecological integrity; number and size of areas co-managed; and percentage of sites with site management plans), with no performance indicators present for the majority of the program logic model components. The program uses no other quantitative performance indicators.

- Indicators have not been identified for certain important components of the logic model, such as level of public understanding, characteristics of ecological integrity of the sites, level of access by Aboriginals, and level of compliance by individuals to regulations.
- No evidence exists of ecological benchmark data being collected, other than at one site (Long Point). No consistent data for ecological indicators is collected across all sites.
- The international review showed that a comparable US program, the US National Wildlife Refuge System, has a more comprehensive set of 16 performance indicators across all sites and reports them for multiple years.44
- The PA program has previously assessed program performance using a subjective set of performance indicators. Operational reviews were performed twice; first in 2008 and then updated in 2010. 45 In each instance, sites were scored by their site managers for seven factors: Operational Health and Safety (employees), Safety (visitors), Ecological integrity, Management (capacity and management plans), Surveillance and permitting, Equipment, and Facilities. The 2010 follow-up to the review showed modest improvements in most sites, although the subjective nature of these indicators suggests they may be unreliable. Some interviewees have expressed that information obtained during the 2008 review was invaluable to management decision making, while others were concerned that the indicators were subjective.

4.2.4 Unintended Outcomes

Evaluation Issue: Performance	Overall Rating
7. Have there been any unintended (positive or negative) outcomes? Were any actions taken as a result of these unexpected/ unintended outcomes?	Not applicable

No significant unintended outcomes were observed.

US National Wildlife Service Budget Justification and Performance Information 2012, page NWR-1
 Environment Canada, 2010 Update of Operational Review, 2010

4.2.5 Program Efficiency

Evaluation Issue: Performance	Overall Rating
8. Is the PA program undertaking activities and delivering products in the most efficient manner? How could the efficiency of the PA program's activities be improved? Are there alternative, more efficient ways of delivering the PA program?	Opportunity for improvement

The PA program manages its sites with an expenditure of less than \$1 per hectare, which is much lower than other organizations performing similar roles. There is no evidence of significant waste, but the program fails to perform all of the activities identified in the logic model.

As reported previously in Table 1 (see section 2.3), core PA program expenditures increased from \$7.6 M in 2008-09 to roughly \$11M a year between 2010-11 and 2012-13. Similarly, salary expenditures for core program operations remained at around \$4.5M between 2009-10 and 2012-13, while indirect expenditures in support of the PA program (i.e., expenditures from other EC program areas) ranged from \$4 to \$6 million over this same period. When all direct and indirect program costs are considered, overall expenditures rose from approximately \$12M in 2008-2009 to peak at \$17M in 2011-12. Expenditures subsequently fell in 2012-2013 to \$15M.

• Between 2008-09 and 2012-13, the total average cost per hectare for the ongoing management of EC protected areas was \$1.24 per hectare. The analysis revealed a steady increase in management costs, from a low of \$1.01 per hectare in 2008-09 to a high of \$1.37 per hectare in 2011-12 (see Table 3). Costs per hectare subsequently declined to \$1.21 per hectare in 2012-13, although it is unclear whether the lower cost per hectare was associated with increased operational efficiency or simply less active site management overall due to resource reductions.

Table 3
Cost per Hectare for Ongoing Management of PAs: 2008-09 to 2012-13

Year	Overall Expenditures	Hectares Managed*	Cost/ha
2008-09	12,060,933	11,993,975	\$1.01
2009-10	14,788,432	11,993,975	\$1.23
2010-11	16,864,067	12,448,961	\$1.35
2011-12	17,056,488	12,448,961	\$1.37
2012-13	15,045,978	12,448,961	\$1.21
Average	15,163,180	12,266,966.6	\$1.24

^{*} The 2011-13 figure is taken from current CARTS data summing terrestrial and marine biomes and used for 2011and 2012 when no new PAs were created and none were delisted. The size of the three NWAs created in 2010 is subtracted from that amount to get 2008-9 and 2009-10 figures.

• Table 4 below presents a comparison of PA program site management costs with those of other jurisdictions and organizations. It should be noted that the costs per hectare presented below are not strictly comparable, as there are differences in mandate and activities undertaken by the various organizations for the ongoing management of the areas within their control. These differences are explained in the table. The comparison does, however, provide a rough gauge of relative cost-efficiency, although the evaluation is unable to distinguish cost-efficiencies reflecting operational efficiencies from those

reflecting differences in the amount and nature of site management activity undertaken by the various organizations.

Table 4 suggests that resources for the management of protected areas within EC's purview (\$1.24 per hectare) are much lower on average than those of other roughly comparable organizations in Canada and the US, whose ongoing management costs range from about \$5 to \$16 per hectare.

Table 4 Comparison of Cost per Hectare for Ongoing Management of Protected Areas

Organization	Area Protected (ha)	Annual Budget	\$/ha*	Mandate/Role
PA program	12,448,961	\$15.163M	\$1.24	Planning and site management activities. No new sites acquired during that year
Parks Canada – Heritage Resources Conservation	32,187,860 ⁴⁶	\$172.1M	\$5.35	From 2013-14 RPP, activity corresponds to site management. Parks Canada has a mandate that involves expenses related to managing site visitors.
US National Wildlife Refuge System	60,700,000 ⁴⁷	\$492M ⁴⁸	\$8.11	Costs are for refuge operations and maintenance. The US National Refuge System accommodates 46 million visits annually and receives \$27M worth of volunteer hours from over 35,000 volunteers. ⁴⁹
Nature Conservancy of Canada	1,000,000 ⁵⁰	\$16.3M ⁵¹	\$16.3	Costs are for "property management", the closest description to the PA program site management activities.

^{*} Dollars per hectare is calculated by dividing the annual budget by the total number of hectares protected.

The PA program could enhance the achievement of its intended outcomes by playing a greater co-ordination role among the various stakeholders. Efforts to better coordinate program activities with both internal and external stakeholders may help the program to better leverage stakeholder activities and ensure they complement the PA mandate.

The Canada Wildlife Act authorizes the Minister of the Environment to "coordinate and implement wildlife policies and programs in cooperation with the government of any province having an interest therein." Some challenges were identified with regard to the PA program's coordination of activities with other EC programs and external stakeholders. Although program staff regularly cooperates with partners, opportunities exist to improve the coordination.

The logic model identifies activities, such as landscape planning, species at risk management and enforcement, which are addressed in other EC programs that are not directly under the auspices of this PA program. Regional personnel responsible for managing PAs are often unaware of the outcomes of activities, such as species counts, done by other units on their sites. Likewise, such studies are not planned in

⁴⁶ CARTS for protected areas and 2013-14 RPP for costs for site management activities. Does not include land acquisition costs.

47 Based on US Fish and Wildlife Service description of maintaining 150,000,000 acres.

⁴⁸ US Fish and Wildlife Service Budget Justification for 2012, page NWR-1

⁴⁹ 2008 Report from the US Fish and Wildlife Service, quoted in Wikipedia.

⁵⁰ 2012 Annual Report of the NCC, report provides an estimate only

⁵¹ ibid

- consideration of PA program needs such that the PA program is unable to leverage these efforts to the program's benefit. No evidence was found of proactive coordination between these other departmental programs and the PA program.
- Regional staff noted that prior to 2008, PA program staff used to conduct enforcement
 activities and that this arrangement enabled them to better manage the timing of site
 visits. An enforcement official reported that he believes CWS personnel do not inform
 them of all potential infractions, such as when they observe a duck blind on the site.
- Other programs routinely contact the PA program for permission to conduct studies on site and there is evidence of the PA program issuing permits for activities such as migratory or species at risk studies and bird banding. There appear to be opportunities for greater cooperation (e.g., closer working relationships, sharing of data and information) between the various units within CWS and other areas of EC.
- Many PA program outcomes are aligned to those of other external stakeholders. On a national level, however, there is little evidence of the PA program playing a national leadership role in coordinating the creation of new PAs. For example, no interviewees or documents suggested that the PA program has had any influence or input on recent land acquisition activities of the NCC or Ducks Unlimited, even though these NGO's are protecting lands and helping build the same national network of PAs to which the PA program also contributes. It was also noted that the PA program's work with other EC units, such as Waterfowl Management or Species at Risk, is reactive, and typically occurs only when the PA program responds to a request from another unit.

Lengthy approval processes make expansion of the PA network difficult to perform in a timely manner, although these processes are outside of the program's control.

• Procedures for land purchase approval and acquisition are lengthy and time consuming, resulting in delays and lost acquisition opportunities. The process usually requires an Order in Council to change NWA boundaries or allow for creation of a new NWA, and timing for this is outside of the PA program's control. Other mandatory steps outside of the PA program's control include consultations, environmental assessments and/or departmental/Ministerial approval, all of which can take up to a year. In one example of a complex situation, the arrangement of a memorandum of understanding (MOU) with DND for CFB Suffield, the process took in excess of 15 years from inception to realization, but this is an exceptional case. In the event that land is acquired that is already within the boundaries of the NWA, however, acquisition can be accomplished in as short as four months.

Inconsistent standards for information management were observed in the regions.

Site management data was not easily retrieved and was not consistent from one site to the next or from one region to the other. For example, some regions maintain electronic records of permits while others keep paper copies and do not have an electronic record. The file review revealed inconsistent reporting across sites in terms of important program management information, such as ecological observations, site visits or PA correspondence, despite the existence of a detailed Protected Areas Manual which provides a wide range of templates and standardized forms. Two interviewees also raised the same concern regarding their inability to retrieve information (e.g. species counts) needed to effectively manage their sites. Various stakeholders perceive that other opportunities may exist to improve the efficiency of program delivery including a more consistent application of standard templates and tools, and simplifying IIBA funding agreements.

- Program staff from EC, Nunavut Tunngavik Incorporated (NTI), and the Regional Inuit Associations commented that the current IIBA contribution agreement includes detailed requirements for annual work planning and financial expenditure information that undermines the spirit and intent of the NLCA, and that the process for securing funds under the agreement is cumbersome, time consuming and not conducive for providing funding to large projects. All signatory parties have emphasized that the subsequent IIBA needs to provide greater financial flexibility to the signatory parties. Both EC and NTI interviewees agreed that improved financial flexibility within the confines of TB Policies for grants and contributions would enhance the efficiency and effectiveness of the IIBA activities by reducing the administrative burden to program staff and increasing their ability to maximize investments for primary and secondary projects.⁵²
- Interviewees in regional offices explained that information management is a challenge and that the CWS lacks an effective information management system. This point was reiterated by regional staff who experienced difficulties in assembling the required documents given the inconsistent formats for documents received. Greater program efficiencies could be realized through the use of common templates that exist for site visits, site management plans and a variety of program processes (e.g., inventories, application of monitoring criteria, environmental assessments applications).

4.2.6 Program Economy

Evaluation Issue: Performance	Overall Rating
9. Is the PA program achieving Its intended outcomes in the most economical manner?	Opportunity for Improvement

The PA program performs appropriate and essential activities, but does not adequately address all of its objectives. Innovative site management practices have been adopted to minimize investment while maximizing the achievement of program outcomes.

- Interviewees both within and external to the PA program believe that the program is underfunded to accomplish the expected results, with some describing budgets as sufficient only to "keep the lights on". For example, there is neither proactive public education nor performance measurement of target populations despite that these are identified as outcomes in the logic model. This finding remains consistent with the CESD's 2008 observation that: "According to its own analyses, Environment Canada has allocated insufficient human and financial resources to address urgent needs or activities related to the maintenance of sites and enforcement of regulations in protected areas." 53
- Regional and headquarters interviewees indicated that most resources expended on protected areas are focussed on ensuring sites are safe for employees and visitors. This includes maintenance of facilities, repairs and installation of signage and management of fencing. Interviewees observed that once those activities are performed, there are few resources left to support ecological integrity management or site visits.

_

⁵² Year Five Review of the Inuit Impact and Benefit Agreement, May 3rd 2012, p. 30

⁵³ Status Report of the Commissioner of the Environment and Sustainable Development to the House of Commons, Chapter 4: Federal Protected Areas for Wildlife, March 2008.

- Innovative site management practices are adopted to minimize investment while achieving the same program outcomes. In an estimated 25-30% of active sites, local staff is able to share resources and specialist skills among partners located in proximity to the protected areas. For example, two sites (Cap Tourmente and Portobello Creek) reported that local biologists conduct a regular "bioblitz", where they perform extensive species counts of fauna and flora. Sites that are part of the North American Waterfowl Management Plan have active surface water management activities carried out by Ducks Unlimited. Most case study sites collaborate with local NGO partners to develop regional activity plans to maximize the benefit. At CFB Suffield, habitat management planning and expenses are shared with DND, resulting in the PA program benefiting from the local expertise of the onsite DND biologist and providing greater value for the EC investment of human resources.
- The PA program benefits from local assistance in site monitoring due to the involvement of local residents in site management activities. In the Maritimes, for example, local biologists volunteer to perform bird and insect counts.

5.0 Conclusions

Relevance

- The program targets an ongoing need for habitat protection and is intended to fulfill commitments under the Canada Wildlife Act, the Migratory Birds Convention Act and the Nunavut Land Claims Agreement.
- The program objectives and its components are consistent with current federal and departmental priorities.
- The program fulfills an appropriate federal government role, addresses needs that are appropriate to the federal jurisdiction and is complementary to efforts/programs of other EC units, federal departments, provincial/territorial/municipal governments, and to nongovernment organizations.

Performance

- The PA program has made progress toward a number of its objectives related to the
 creation of a national network of protected areas, linkages to international networks,
 and access and benefits sharing by Aboriginal peoples, although improvements can
 be realized in each of these areas (e.g., greater resiliency and redundancy of priority
 habitats).
- The PA is not making adequate progress toward its intended outcomes related to the
 management of the ecological integrity of protected areas, monitoring and/or
 benchmarking to assess impacts on wildlife, the development of new knowledge and
 data contributing to EC's needs and objectives, and the public's understanding and
 support of the role and importance of PAs. There are sites that should be considered
 for de-listing.
- Certain management requirements, such as site management plan development and approval, are too time consuming and lengthy to meet program objectives. Land acquisition, a key function of the PA program, is a lengthy process and acquisition delays beyond the program's control have impacted program effectiveness.

- Performance data is very limited and there are very few documented, well recognized and/or accepted specific targets for performance; of particular importance is the lack of indicators of ecological integrity. Furthermore, there appears to be little or no program activity in support of several outcomes, thus suggesting a need to re-evaluate whether these outcomes should be retained.
- The program manages sites with expenditures of less than \$1 per hectare per year, which is much lower than other organizations performing similar roles. While there is no evidence of significant waste, the program fails to perform all of the activities for which it is responsible, and as identified in the program's logic model. A few areas where efficiency could be enhanced have been identified (e.g., greater coordination and collaboration, enhanced communication). The PA program does not work closely enough with the full range of stakeholders to leverage partnerships in order to make a greater impact.

6.0 Recommendations and Management Response

The evaluation identified the following proposed recommendations that would help address identified program challenges.

The following recommendations are directed to the Assistant Deputy Minister, Environmental Stewardship Branch (ADM ESB), as the senior departmental official responsible for the management of the PA program:

Recommendation 1 – Revisit and refine the program logic model and performance measurement strategy

The evaluation found that not all program outcomes are supported or being achieved (e.g., ecological integrity, public awareness), and that performance measurement data is very limited and not being collected, monitored, tracked or reported in a consistent manner. It also found that documentation practices are not consistent across regions or sites and that tools and templates are not consistently and universally used. It is recommended that the program revisit the program theory via the logic model to ensure a clear understanding of their accountability (e.g., what they should be focussing on, what they should no longer do or is not essential to the program or department's mandate). It is recommended that the following areas require specific focus:

- **The Logic Model:** Revisit the program theory and renew the program logic model to ensure a clear understanding of the PA's accountability; the renewed logic model should be sustainable given the mandate assigned and the resources available.
- The Performance Measurement Strategy: The program should refine the performance management strategy and plan for measuring, capturing and reporting relevant program performance data/information necessary to enable effective decision-making across all protected area sites across Canada. Currently, there is very little information available on level of activity across all Protected Areas managed by EC, and more importantly, there is little information available on intermediate outcome achievement and final outcomes achievement.

Management Response

The ADM, ESB agrees with the recommendation and will revisit the program logic model to confirm the program's focus and ensure program objectives are well-aligned to current priorities and resources. Once completed, a renewed performance measurement strategy will be developed and implemented to support the efficient and timely tracking of key performance indices to support ongoing program decision-making and reporting.

Timeline	Deliverable(s)	Responsible Party
September 2014 – Logic model and performance measurement strategy	Protected Areas Program Logic Model Performance Measurement Strategy	ESB, Canadian Wildlife Service, Director, Habitat Conservation Management,
December 2014	3. Implementation of performance measurement strategy – baseline data collection	

Recommendation 2: Develop and implement an approach for Environment Canada to more actively engage with all program stakeholders in order to enhance the ecological integrity of the department's Protected Areas and contribute to a national vision on the management and oversight of Protected Areas throughout Canada.

As demonstrated by the evaluation, it is within the Minister of the Environment's purview to coordinate and implement wildlife policies and programs in cooperation with the government of any province, and the program is designed to achieve its objectives through such coordination. An approach to engage with stakeholders should consider the need to:

- Strengthen the coordination of the overall activities of the Protected Areas Program including, the research, monitoring and assessment functions. Species monitoring and research that is conducted within Environment Canada Protected Areas is managed by the CWS, however, this information is neither well-coordinated nor disseminated, which in turn may impede the program's achievement of intended outcomes related to encouraging the establishment of protected areas by partners and ensuring the resilience and redundancy of priority habitats. National mechanisms and processes for effective coordination, collaboration, communication, and information exchange of all relevant program activities with all key stakeholders need to be developed. Greater clarity, communication and understanding of the respective roles and responsibilities of the various stakeholders are also required to strengthen the coordination.
- Complete Site Management Plans. The CESD noted in 2013 that Site Management Plans were lacking and that the few that existed were out-of-date. Site management plans should be developed for specific Environment Canada protected areas according to their prioritized rankings (with timelines for completion based on the Operational Reviews of 2008 and 2010) and in a manner that is commensurate to the importance and significance of each Protected Area. Consideration should also be given to developing a standard set of ecological integrity performance measures (e.g., flora and fauna inventories, etc.).
- Enhance public understanding and support for the role and importance of Protected Areas in conserving and protecting wildlife. The PA program is doing little to fulfil outcomes associated with public awareness of the need for protected areas. The state of public understanding, support and engagement should be further assessed and a communication plan developed in order to address this outcome.

• Open a dialogue with partners on how to work jointly toward the achievement of targets for protected areas in Canada. There is no clear national target for protected areas and no clear direction on how Canada would reach such targets. In collaboration with key stakeholders (e.g., other CWS and EC units, First Nations, OGDs, other levels of government, NGOs). EC should encourage and support a national discussion on how such targets could be established and achieved, including the identification of specific approaches and timelines.

Management Response

The ADM, ESB agrees with the recommendation.

The protected areas program will revisit and update the Protected Areas Strategy, which will include a roadmap to achieve specific targets for Environment Canada's protected areas, as outlined in the program's logic model and performance measurement strategy.

The Aichi and the proposed Canadian biodiversity targets are intended to guide and track the collective efforts of all Canadians. Approaches to supporting the targets will vary widely across jurisdictions, sectors and for partners and individuals across the country. As such, Environment Canada will not define the specific actions required for all of Canada, but will work jointly with relevant partners towards the achievement of targets for protected areas in Canada, identify and highlight leading examples of the kinds of key actions and initiatives that are underway or could be undertaken to achieve Canada's 2020 biodiversity goals and targets. The intention is that each contributor will identify the specific actions and initiatives that are appropriate to their own responsibilities and interests. Environment Canada will also identify its own contributions to this effort by developing consistent goals with respect to Canada's 2020 biodiversity goals and targets, updating the Protected Areas Status Report, and updating the Protected Areas Strategy.

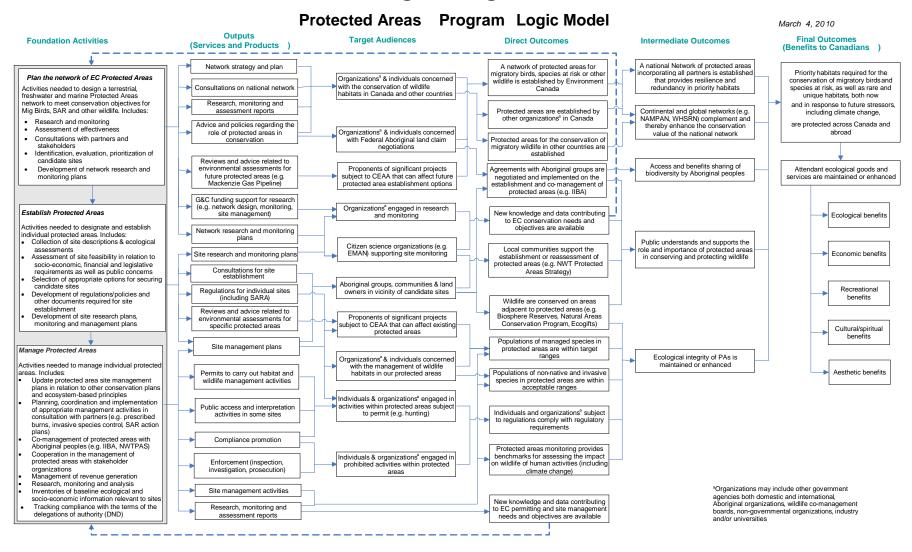
Environment Canada's protected areas program will also examine how it coordinates and communicates on its activities with other federal departments and agencies, provincial and territorial governments, and NGOs to allow EC to build on their work and so that others can leverage from the EC work. It is important to emphasize, however, that protected areas managed by other federal departments, FPT partners and NGOs are beyond the department's direct purview.

Environment Canada's protected areas program will also outline an approach to completing site management plans, as well as assess the capacity to strengthen research, monitoring, and assessment functions, with the understanding that the department does not currently have the human or financial capacity to fully realize these improvements.

As Environment Canada develops its logic model as per recommendation 1, and should the importance of the enhancement of public understanding and support for the protected areas be retained as an outcome, the program would establish a communications approach.

Timeline	Deliverable(s)	Responsible Party
December 2015	Strategic Approach for the Protected Areas	ESB, Canadian Wildlife Service, Director, Habitat Conservation Management
December 2018	100% of Management plans for National Wildlife Areas will be completed by December, 2018. 50% of plans will be completed by December, 2015. Management plans for Migratory Bird Sanctuaries that are located on federal land and/or those for which EC has the primary responsibility for management of habitat and the conservation and protection of migratory birds and their eggs and nests will also be completed by December, 2018.	ESB, Canadian Wildlife Service, Director, Habitat Conservation Management

Annex 1 PA Program Logic Model



Environment Canada 29

Annex 2 Documents Reviewed

Category	Document Title	Date
Acts and	Canada Wildlife Act	June 15, 2011
Regulations	Migratory Birds Convention Act (1984)	July 27, 2011
	Wildlife Area Regulations	June 11, 2011
	Nunavut Land Claims Agreement	Undated
	Inuit Impact Benefits Agreement	Dec. 13, 2006
Policies and	MBS Policy, Criteria and Procedures	June 30, 2011
Procedures	E-Permitting Phase 2 Scope	Mar. 25, 2011
	Criteria for Selecting Candidate National Wildlife Areas (web)	Sept. 8, 2011
	EC Protected Areas manual	Dec. 2005
Program	Performance Measurement Framework 2010-11	June 2009
Documentation	CCEA-CARTS Report (as published on CCEA website)	Sept. 2011
	2009-10 Estimates – Environment Canada Part III – Report on	undated
	Plans and Priorities	
	2008-09 Estimates – Environment Canada Part III – Report on Plans and Priorities	undated
	Protected Areas Pre-Evaluation Assessment	May 2011
	Protected Areas Program Logic Model	Feb. 2009
	2010-11 Program Activity Architecture - DRAFT	March 9, 2013
	Accounting for EC Protected Areas (Summer 2011)	2011
	Protecting Canada's Treasures – EC's Protected Areas	Undated
	(PowerPoint presentation) – Environment Canada	Oridated
	CWS Strategic Plan 2000- 2010	2000
	Environment Canada Protected Areas Strategy	2011
	Eleanor Island NWA NWS Management Plan	2011
	Nistulin River Delta Management Plan	Aug. 19, 2010
	Prince Edward Point NWA Management Plan	2011
	Planning For A Sustainable Future: A Federal Sustainable	Oct. 2010
	Development Strategy For Canada	
	2008 Operational Review	2008
	2010 Update of Operational Review	2010
	Capital Investments In Protected Areas And The Update To The Operational Review	Undated
IIBA	ACMC Activity Tree for Management Planning	undated
Documents	Backgrounder, Inuit Impact and Benefit Agreement	Aug. 2008
	Final Action Items From meeting of the parties Dec 2009	Feb. 2010
	Meeting Summary (from above)	Feb. 2010
	Issue: Payment of small goods and services transactions	Nov. 8, 2010
	under the IIBA for MBS and NWA in the Nunavut Settlement Area	
	Issue: Hiring Inuit beneficiaries under the IIBA for MBS and	Nov. 8, 2010
	NWA in the Nunavut Settlement Area	
	NTI-CWS Monitoring template for mutual obligations -	undated
	conservation areas IIBA	
	IIBA- Govt Announces Protection for Arctic Wildlife	Aug. 23, 2008
	IIBA RMAF-RBAF Final Version	April, 2009
	IIBA Media Release 3 New NWAs	June 30, 2011

Category	Document Title	Date
	IIBA for NWS and MBS in the NSA	Dec. 13, 2006
	Inuktitut Terminology for ACMC - Screen	2009
	List of ACMC members appointed by CWS	undated
	Management Plans and the ACMC - 110929	Sept. 2, 2011
	Meeting of Parties CA IIBA FINAL	May 26, 2009
	Meeting Summary Parties Telecon meeting 3 June	April 9, 2011
	2010summary	
	MTASDM IIBA 117 Carryover	Mar. 11 2011
	Notes from IIBA implementation planning meeting	July 2008
	Outstanding Items From Meeting Of The Parties	Dec. 2009
	Participants Manual - final	June 2009
	Requirements for a PSC IIBA hiring program	Dec. 15, 2010
	Status Of Action Items From October 2010 Meeting	Oct. 2010
	Summary Notes meeting of parties 21 Oct. 2010	Oct. 2010
	Terms and Conditions-IIBA	May 2009
	RFP - Request for Proposals - Five Year Review IIBA for NWS	Feb. 8, 2011
	and MBS in the NSA	
	Year 5 review of the IIBA for NWAs and MBS in the NSA	Undated
Documents	Conserving Wildlife on a Shoestring Budget - Canadian	2002
from NGOs	Nature Federation	
Other Sources	The List of Wetlands of International Importance (from web)	Mar. 15, 2013
	OECD Key Environmental Indicators (from web)	May 5, 2013
	2011 - 2012 Report to Our Donors, Nature Conservancy of	2012
	Canada	
	2011-12 Audited Financial Statements, NCC	2012
	Status Report of the Commissioner of the Environment and	2008
	Sustainable Development to the House of Commons. Chapter	
	4 Federal Protected Areas for Wildlife and Chapter 5,	
	Protection of Species at Risk, Office of the Auditor General	
	Convention on Biological Diversity and Aichi Targets (web)	Mar. 29, 2013
	Summary of COSEWIC's assessment results (web)	May 2013
	http://www.cosewic.gc.ca/rpts/Full_List_Species.htm	
	Principles and Guidelines for Ecological Restoration In	Undated
	Canada's Protected Natural Areas – Parks Canada	

Annex 3 File Review Sites

Migratory Bird Sanctuaries	Province/Territory	Established	Hectares
Beckett Creek	Ontario	1969	179
Big Glace Bay Lake	NS	1939	393
Brador Bay	Quebec	1925	561
Bylot Island	Nunavut	1965	1,282,731
Carillon Island	Quebec	1937	465
Dewey Soper	Nunavut	1957	816,599
Gros Mécatina	Quebec	1996	2,189
Inglewood	Alberta	1968	111
Inkerman	NB	1998	16
Kendall Island	NWT	1961	61,241
Lenore Lake	Saskatchewan	1925	7,481
Nechako River	BC	1944	183
Philipsburg	Quebec	1972	757
Rideau	Ontario	1957	754
Sable Island	NS	1977	3,100
Scent Grass Lake	Saskatchewan	1948	647
Trois-Saumons	Quebec	1986	224
Wascana Lake	Saskatchewan	1956	117
Watshishou	Quebec	1925	11,778

National Wildlife Areas	Province/Territory	Established	Hectares
Big Creek	Ontario	1978	776
Boot Island	NS	1979	107
Cape Jourimain	NB	1980	662
Mohawk Island	Ontario	1976	2
Nirjutiqavvik (Coburg Island)	Nunavut	1995	178,328
Nisutlin River Delta	Yukon	1995	5,483
Pointe de l'Est	Quebec	1986	24
Pointe-au-Père	Quebec	1978	1,050
Spiers Lake	Alberta	1980	64
Tway	Saskatchewan	1971	250
Vaseux-Bighorn	BC	1979	753

Annex 4 Summary of Findings

RELEVANCE Evaluation Question	Acceptable	Opportunity for Improvements	Attention Required	N/A
1. Is there a need for the PA program? Is there a need for the program to continue?	•			
2. Is the PA program aligned with federal government priorities?	•			
3. Is the PA program and its components consistent with federal roles and responsibilities?	•			

PERFORMANCE Evaluation Question	Acceptable	Opportunity for Improvements	Attention Required	N/A
4. To what extent have intended outcomes been achieved as a result of the PA program?			•	
5. Is the PA program design appropriate for achieving expected program results?		•		
6. Are appropriate performance data being collected, captured, and safeguarded?			•	
7. Have there been any unintended (positive or negative) outcomes?				•
8. Is the PA program undertaking activities and delivering products in the most efficient manner?		•		
Is the PA program achieving its intended outcomes in the most economical manner?		•		

Environment Canada