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Horizontal Evaluation of the Species at Risk Program

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The evaluation was conducted in accordance with the 2009 Treasury Board Policy on Evaluation¹ requirement to evaluate all ongoing programs of grants and contributions and direct program spending at least once every five years. It was identified in the 2014 Departmental Risk-Based Audit and Evaluation Plan.

This report was approved by the Deputy Heads of Environment and Climate Change Canada on May 9, 2018, by the Deputy Minister of Fisheries and Oceans Canada on June 22, 2018, and by the Chief Executive Officer of the Parks Canada Agency on June 28, 2018. It is available on the Environment and Climate Change Canada website in both official languages.

This report was prepared by the Evaluation Division of the Audit and Evaluation Branch.

¹ In 2016, the [Policy on Results](#) replaced the 2009 Policy on Evaluation.

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List of acronyms and abbreviations

ADM	Assistant Deputy Minister
AFSAR	Aboriginal Fund for Species at Risk
CBD	Convention on Biological Diversity
CESCC	Canadian Endangered Species Conservation Council
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
DFO	Fisheries and Oceans Canada
DG	Director General
ECCC	Environment and Climate Change Canada
EET	Extirpated, Endangered or Threatened
F/P/T	Federal/Provincial/Territorial
FSDS	Federal Sustainable Development Strategy
GiC	Governor in Council
G&C	Grants and Contributions
HSP	Habitat Stewardship Program
IK	Indigenous Knowledge
IRF	Interdepartmental Recovery Fund
MOU	Memorandum of Understanding
NACOSAR	National Aboriginal Council on Species at Risk
O&M	Operations and Maintenance
PCA	Parks Canada Agency
SAR	Species at Risk
SARA	Species at Risk Act
SARAC	Species at Risk Advisory Committee
SARPAL	Species at Risk Partnership on Agricultural Lands

Executive summary

This report presents the results of the Horizontal Evaluation of the Species at Risk (SAR) Program. Environment and Climate Change Canada's (ECCC) Audit and Evaluation Branch conducted the evaluation in collaboration with Fisheries and Oceans Canada (DFO) and the Parks Canada Agency (PCA). The evaluation covers the period from the fiscal year (FY) 2011 to 2012 to FY 2015 to 2016.

In 2004, the federal [Species at Risk Act](#) (SARA) came fully into force, providing mechanisms to allow for legal protection for listed extirpated, endangered and threatened species and their critical habitat. The purposes of the Act (section 6) are to “prevent wildlife species from being extirpated² or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened”.

The implementation of SARA through the SAR Program is a shared responsibility of ECCC, DFO and PCA, collectively referred to as the “competent departments”. These competent departments implement the SAR Program through a range of interconnected activities that occur over the five stages of the species at risk conservation cycle: assessment, protection, recovery planning, implementation and monitoring and evaluation.

The evaluation examined the five-year timeframe from April 2011 to March 2016, with more recent information for FY 2016 to 2017 incorporated, where available. Federal expenditures dedicated to this program were approximately \$444 million over the five-year evaluation period.

The evaluation team collected and analyzed data from the three competent departments. However, the evaluation looked at the overall SAR Program and not at individual departments. As such, the findings reflect the overall results for the program.

Methodologies used in the evaluation included a document and literature review, a review of administrative data, 64 key informant interviews with internal and external stakeholders, an online survey of 38 partners and stakeholders and three case studies that examined SAR Program implementation in South of the Divide, Saskatchewan (ECCC), Ausable and Sydenham Rivers, Ontario (DFO) and Night Birds Returning, British Columbia (PCA).

Findings and conclusions

Relevance

The evaluation found that the SAR Program is relevant. Numerous factors negatively impact biodiversity in Canada, including residential, agricultural and commercial and industrial development, resource use and invasive species. Biodiversity is important for environmental, social and economic well-being. As such, ongoing attention is required to protect and recover at-risk

² “Extirpate” means to eradicate or destroy completely. In the case of wildlife species, it means that they no longer exist in the wild in Canada, but exist elsewhere in the wild.

species. Reports also indicate that the number of species ranked as extirpated, endangered and threatened at the national level in Canada has increased.

SAR Program objectives are aligned with federal priorities on the environment and biodiversity. These priorities were outlined in the federal ministers' mandate letters, policy and budgetary announcements and commitments made in Canada's 2020 Biodiversity Goals and Targets. The SAR Program supports the strategic outcomes of the competent departments and is the primary instrument for the government to implement the requirements of SARA.

Efficiency

The SAR Program is appropriately designed for achieving its intended outcomes, and is generally well managed. A committee at the director general (DG) level involving the three competent departments actively oversees the program. There is also evidence of relationships at the working level. The program has made efforts to improve efficiency by streamlining recovery documents, developing and using templates, and engaging in online consultation approaches. There is also broad support for the current move to using multi-species or ecosystem-based approaches. Despite the identified improvement in templates, consultations and the use of different approaches, it was noted that more work is needed to improve program efficiency. Suggestions included better integration of the stages of the conservation cycle and increased use of multi-species or ecosystem-based approaches, as appropriate.

Additionally, limited resources impact the ability to fully implement the program and comply with the requirements of SARA. This ability is particularly affected as program workload builds. Certain mandatory activities, such as regulatory approaches for protection, are resource intensive.

Collaboration and consultation are significant requirements of SARA. There is evidence that collaboration with federal, provincial and territorial (F/P/T) partners is taking place, as well as engagement with other partners. Nevertheless, partners continue to call for greater F/P/T collaboration, particularly to encourage seamless protection of terrestrial species across federal and non-federal lands. As well, the need for increasing engagement of Indigenous peoples will be a priority and a significant resource demand for the program in the coming years.

While there is a horizontal logic model for the SAR Program, the competent departments use separate logic models and performance measurement strategies. Although some common performance measures are brought together in reporting, there are identified gaps, particularly in later stages of the conservation cycle. The SAR Program is meeting some of the reporting requirements of the Act. It is also collecting additional information to monitor deliverables to inform senior management. Performance reporting related to progress on the implementation of recovery strategies has not always been timely; however, DFO has produced progress reports.

Achievement of expected results

The performance of the SAR Program was evaluated against expected results for each of the five stages of the conservation cycle.

- **Assessment:** The assessment of at-risk species is based on a rigorous process that is perceived to be well-supported by the competent departments. However, the integration of Indigenous Knowledge (IK) in species assessments is uneven and lacks an adequate framework or protocol to be conducted in a more predictable and effective manner.
- **Protection:** Protection of critical habitat of listed terrestrial and, to a lesser degree, aquatic species is occurring in federal protected areas. However, on other federal lands³, protection of critical habitat (protection assessments, protection statements or orders) is being met only to a limited degree. The federal government has issued emergency protection orders for two species where the Minister of Environment and Climate Change found that there was an imminent threat to the species' survival or recovery. The Act also identifies conservation agreements as a non-regulatory tool that can be used under certain conditions. However, to date, there has been a limited use of this tool.
- **Recovery planning:** Backlogs in the development of recovery planning documents at ECCC and DFO have been addressed through dedicated resources and attention. The success in addressing the recovery planning backlog will create new pressure on the next recovery planning step, namely the development and publishing of action plans. During the evaluation period, action plans were published by PCA and, to a limited extent, by ECCC and DFO. A number of the published plans feature a multi-species or ecosystem-based approach. While there appeared to have been an increase in understanding among partners of the objectives of species conservation through recovery planning, there was a perceived lack of understanding for those not involved with program delivery at the national level.
- **Implementation:** Primarily, grants and contributions (G&C) are being used to support recovery activities by partners and stakeholders, although funding for operations and maintenance (O&M) can also be used. While capacity and implementation of recovery actions have increased, the G&C programs are viewed as underfunded. In some cases, they may require greater flexibility to direct funds to address capacity issues and better support multi-species or ecosystem-based approaches.
- **Monitoring and evaluation:** Some required reporting is occurring through SARA Annual Reports, and there are some monitoring mechanisms in place to track, and publicly post, the progress on the conservation status of species. However, resource constraints negatively impact the ability to adequately report on progress in the implementation of recovery strategies, action plans and management plans for all listed species, as well as the ability of the program to quantify the effectiveness of recovery actions.

The SAR Program's end goal is the recovery of species. It is acknowledged, however, that the process to reach this long-term objective can take decades for some species. According to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessments, 10 years after

³ In the context of protection of critical habitat, reference to federal lands refers to those lands under federal jurisdiction .

listing, most species (65%) remain at the same listing status. However for 16% of assessed species, there is evidence of progress towards meeting objectives, and 6% are no longer at risk.

A negative unintended result of the program has been to introduce challenges in balancing community infrastructure and economic development activities with conservation outcomes on [Indian Act](#) reserve lands. Moreover, reserves are often considered “hot spots” for at-risk species and their habitat. There are, however, opportunities for working cooperatively and collaboratively under SARA, including the use of section 11 on conservation agreements or section 10 on administrative agreements.

Recommendations

Based on the nature of this evaluation, which focused on the overall SAR Program, and the varying responsibilities of the three competent departments, the recommendations reflect observations that were common to all or most federal partners. As such, the recommendations are broadly worded. They generally apply across the three departments, but the management responses specify the actions each applicable federal partner can take to best contribute to addressing each recommendation.

The following recommendations are directed to the Assistant Deputy Minister (ADM) of the Canadian Wildlife Service (ECCC), the ADM of Aquatic Ecosystems (DFO) and the Vice-President (VP) of Protected Areas Establishment and Conservation (PCA). They agree with the recommendations and have developed management responses that appropriately address them.

Recommendation 1

Take steps to address the backlog that is developing related to commitments for publishing action plans and accumulating protection requirements for critical habitat for federal species and species on federal lands (SARA section 58).

Recommendation 2

Seek ways to enhance (a) the effectiveness of consultation and engagement of Indigenous peoples in the conservation and protection of at-risk species and (b) the integration of available Indigenous Knowledge (IK) into species assessment and recovery planning.

Recommendation 3

Clarify and communicate to stakeholders the role and use of non-regulatory tools in supporting conservation outcomes for at-risk species, including the related resource requirements.

Recommendation 4

Address the capacity challenges to support the Species at Risk Program in meeting its legislated requirements.

More details on the recommendations and the complete management responses can be found in [Conclusions, recommendations and management response](#) of the report.

1. Context

In Canada, more than 520 plant and animal species at risk are listed under the [Species at Risk Act](#) (SARA). The reasons can be as varied and complex as the species themselves; however, many are included as a result of human activity.

Plants, animals and microorganisms are essential to the natural processes that keep the Earth's atmosphere, climate, landscape and water in balance. They help ensure our health and economic prosperity, now and for the future. The Government of Canada introduced the [Species at Risk Act](#) (SARA) in 2002 to protect endangered and threatened species.

SARA is the key federal government commitment to:

- prevent wildlife species from being extirpated (no longer existing in the wild in Canada) or becoming extinct
- provide for the recovery of wildlife species that are extirpated, endangered or threatened
- manage species of special concern to prevent them from becoming endangered or threatened

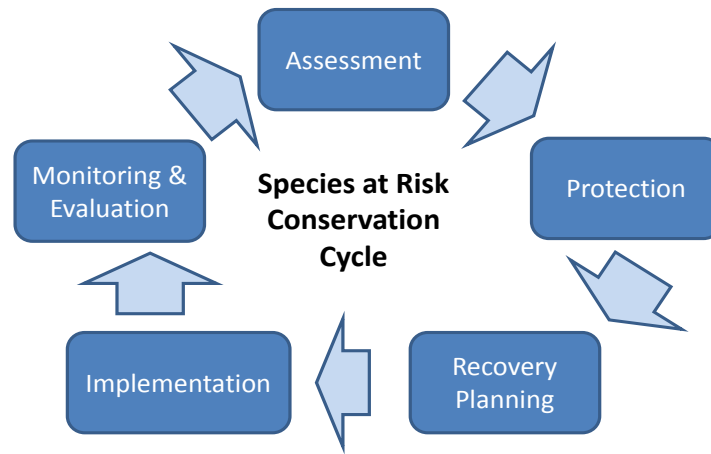
The implementation of SARA through the Species at Risk (SAR) Program is a shared responsibility of Environment and Climate Change Canada (ECCC), Fisheries and Oceans Canada (DFO) and the Parks Canada Agency (PCA), referred to as the “competent departments”.

- ECCC has lead responsibility for administration of the Act and is responsible for all terrestrial species at risk on federal lands⁴ (other than those on PCA's land) and on non-federal lands, as well as the protection of migratory birds anywhere they are found in Canada.
- DFO is responsible for aquatic species at risk wherever they occur in Canada (except when individuals of a species are within waters managed by PCA).
- PCA is responsible for species in or on federal lands and waters under the administration of the Agency (that is, national parks, national park reserves, national historic sites, national marine conservation areas and other protected heritage areas as defined under the [Parks Canada Agency Act](#)).

The Species at Risk Program

The SAR Program includes a range of interconnected activities to support the implementation of SARA. These activities cover all five stages of the SAR Conservation Cycle illustrated in [Figure 1](#).

⁴ For the purposes of this evaluation, reference to “federal lands” refers to both federal lands and waters.

Figure 1: species at risk conservation cycle

- Assessment:** Competent departments provide the monitoring and assessment information to support the assessment process of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). COSEWIC evaluates the national conservation status of a wildlife species, based on the best available scientific, Indigenous traditional and community knowledge. The Government of Canada must then determine whether or not the species should be added to the SARA Schedule 1 of listed species.⁵
- Protection:** Once a species has been added to Schedule 1 of the Act, listed aquatic species, migratory birds anywhere in Canada and other species listed as extirpated, endangered and threatened (EET) and their critical habitats on federal lands are protected through automatic prohibitions and other tools. Provinces and territories are responsible for protecting listed species that are not aquatic or migratory birds and their habitats on provincial, territorial and private lands. However, if the laws of a province or territory do not effectively provide protection for listed terrestrial species, the Minister of Environment and Climate Change is required to recommend that an order be put in place to provide protection on non-federal lands.
- Recovery planning:** Develop, make public and put in place a recovery strategy and one or more action plans for a listed EET species; develop, make public and put in place a management plan for a species of special concern that specifies the goals, identifies critical habitat to the extent possible and describes research and management activities, where needed. These recovery documents need to be completed within one to three years, dependent on when the species was listed on Schedule 1 of SARA and the status of the species on the list (that is, EET or special concern).

⁵ The Act establishes Schedule 1 as the official list of wildlife species at risk that receive legal protection under SARA. It classifies those species as being extirpated, endangered, threatened, or a special concern. The decision to list a species is the decision of the Governor in Council, on the recommendation of the Minister.

- **Implementation:** Carry out the priority actions identified in the recovery strategy, action plan and management plan, to improve the conservation status of the species. Leadership for the implementation of actions varies depending on the species. It may be the responsibility of the federal, provincial or municipal government, landowners or other partners or stakeholders, where feasible.

To support the implementation, the SAR Program includes four funding programs that enable individuals, communities, Indigenous peoples and other federal government departments in Canada to engage in stewardship actions: three grants and contributions (G&C) programs, namely the Habitat Stewardship Program (HSP), the Aboriginal Fund for Species at Risk (AFSAR) and the Species at Risk Partnerships on Agricultural Lands (SARPAL), and the Interdepartmental Recovery Fund (IRF), which uses memoranda of understanding (MOU) to transfer operations and maintenance (O&M) funds between departments.

- **Monitoring and evaluation:** Report on the overall implementation of SARA, assess changes in the conservation status of species and track species conservation goals.

Partners and stakeholders are involved throughout the conservation cycle. The engagement and co-operation of stewards are critical to obtaining desired results for species at risk. Partners and stakeholders may include:

- individual Canadians
- landowners and rights holders
- provincial, territorial and municipal governments
- resource industries (for example, fisheries, forestry, agriculture, mining, oil and gas and hydroelectricity) and other industries, companies and associations
- environmental non-governmental organizations
- museums (to provide information and education to the public)
- zoos (to assist with recovery work)
- universities

The expenditures for the SAR Program for the period from FY 2011 to 2012 to FY 2015 to 2016 totalled \$444.2 million. The distribution of resources across the three departments is as follows: 60% for ECCC, 27% for DFO and 13% for PCA.

A detailed description of the SAR Program and its activities can be found in [Appendix A](#). A table of the program's expected results is presented in [Appendix B](#).

About the evaluation

The evaluation covers the period from FY 2011 to 2012 to FY 2015 to 2016. More recent information for FY 2016 to 2017 was incorporated, where available.

The evaluation is an assessment of the program activities that support SARA. It is not an evaluation of the Act itself. The scope of the evaluation includes the SAR Program activities for the three departments and for all stages of the conservation cycle, with the exception of activities related to the following:

- regulatory compliance promotion and enforcement⁶
- statutory and advisory committees, because they are external to the program itself
- the Species at Risk Public Registry, because it falls under the authority of Treasury Board Secretariat of Canada policy and standards over government communications and web accessibility

The evaluation team collected and analyzed data from all three departments. However, the evaluation looked at the overall SAR Program and not at individual departments. As such, the findings reflect the overall results for the program.

The evaluation team used a mixed-method approach, integrating quantitative and qualitative evidence, to assess issues related to the relevance and performance of the program:

- a review of various types of documents pertaining to the program, the department and the Government of Canada, a limited literature review on the continued need for the SAR Program and a comparative analysis of programs for species at risk in other jurisdictions
- a review of administrative data, including financial data and program performance data
- a review of 40 G&C project final reports from the HSP, AFSAR and SARPAL programs
- interviews with 64 key informants, including departmental executives, program management and external stakeholders
- an online survey sent to 138 individuals representing program partners and stakeholders, with a response rate of 28% (38 respondents)
- three case studies of the implementation of the SAR Program

A detailed description of the evaluation approach is included in [Appendix D](#).

Limitations were encountered while conducting the evaluation and strategies were put in place to mitigate their impact, as follows.

⁶ Both PCA and DFO have recently completed evaluations on compliance or enforcement for their respective departments. An evaluation of ECCC's Wildlife Compliance Promotion and Enforcement Program was completed in FY 2017 to 2018.

Limitations	Mitigation strategies
<p>The SAR Program is a complex initiative that involves five stages of the conservation cycle, a diverse set of activities and three federal partners, each with unique responsibilities and performance measures. These conditions made it challenging to present a coherent performance story.</p>	<ul style="list-style-type: none"> • While multiple lines of evidence were used, the breadth of the program meant that it was not possible, within the scope of this evaluation, to gather in-depth evidence on all program aspects. • Areas of focus for the evaluation were narrowed through a scoping exercise at the start of the project. Limited attention (G&C programs) or no attention (compliance promotion and enforcement) was devoted to areas that had been a focus of previous evaluations.
<p>Only 38 of 138 partners and stakeholders completed the online survey. Provincial, territorial and Indigenous respondents were underrepresented within the respondent group.</p>	<ul style="list-style-type: none"> • Due to the small sample size and the possible lack of representation from some groups, caution was used when interpreting the survey findings. • Other sources of evidence were used to support summary conclusions.
<p>The available program performance and financial reporting does not allow for a quantitative analysis of the efficiency of the program or trends in efficient implementation of recovery actions over time.</p>	<ul style="list-style-type: none"> • The efficiency issue was assessed largely using qualitative data.

Key findings are presented in the next three sections. A rating is provided for each core issue assessed, based on a judgment of the evaluation findings. A summary of the ratings for the evaluation questions is provided in [Appendix C](#).

Statement

Definition

Expectations met

The intended outcomes or goals have been achieved.

Further work required

Considerable progress has been made to meet the intended outcomes or goals, but attention is still needed.

Priority attention required

Insufficient progress has been made to meet the intended outcomes or goals and attention is needed on a priority basis.

Unable to assess

Insufficient evidence is available to support a rating.

2. Findings: relevance

This section summarizes the evaluation findings related to the relevance of the Species at Risk (SAR) Program. It does this by exploring the demonstrable need for the program, its alignment with government priorities and its consistency with the roles and responsibilities of the federal government.

Relevance criteria	Expectations met	Further work required	Priority attention required	Unable to assess
1. Continued need for the program	•			
2. Alignment with federal government priorities	•			
3. Consistency with federal roles and responsibilities	•			

2.1 Continued need for the program

Findings: A variety of factors are threatening species in Canada. As biodiversity is important for environmental, social, and economic well-being, ongoing attention is required to protect and recover at-risk species. The SAR Program is the primary federal instrument to support recovery of at-risk species listed under SARA.

The [Wild Species 2015](#) report estimates that there are about 80,000 known species in Canada. Of 29,848 species assessed, 1,659 species (5.6%) were ranked as extirpated, endangered or threatened at the national level. While there are methodological and sample size differences over time, this number represents a substantial increase since 2010, when a total of 806 species (or 6.7% of 11,950 assessed) were ranked as “may be at risk”.

Recent literature indicates that there are a number of drivers of the loss of biological diversity, including residential, agricultural and commercial and industrial development, resource use and invasive species.⁷ Evidence from academic and other sources also confirms the impact of the planet’s rapidly changing climate and the accelerated decline and disappearance of many species.⁸

There is significant evidence that biological diversity has benefits in terms of food security, human health, the provision of clean air and water and contribution to economic development.⁹ Canadians recognize that wildlife species are a critical component of the country’s ecosystems, and that Canada’s renewable resources, including wildlife, contribute significantly to Canada’s economic,

⁷ This literature is summarized in the [Smart Prosperity Institute’s](#) Complementary approaches and policy instruments for improving Species at Risk outcomes in Canada: Technical Report, 2017.

⁸ Canadian federal, provincial and territorial governments. [Canadian biodiversity: ecosystem status and trends 2010](#)

⁹ Government of Canada, [Canada’s 5th National Report to the Convention on Biological Diversity](#), March 2014; Convention on Biological Diversity, [Key Elements of the Strategic Plan 2011-2020](#). Accessed: February 2017.

social and environmental well-being through domestic and international trade and the provision of food and water security.

While all competent departments have other programs related to conservation that may also impact species at risk, the SAR Program is the primary federal instrument to support recovery of at-risk species listed under SARA.

2.2 Alignment with government priorities

Findings: The SAR Program is aligned with federal government priorities relating to the environment and biodiversity as outlined in federal policy and budgetary commitments, as well as commitments made in the 2016 to 2019 Federal Sustainable Development Strategy (FSDS). The program objectives are aligned to the strategic outcomes of the competent departments.

The [2015 Speech from the Throne](#) laid the groundwork for a renewed commitment to the prioritization of environmental goals by linking them with economic goals under the heading "A Clean Environment and a Strong Economy". Within the speech, the government committed to providing sound environmental stewardship, minimizing environmental impact, and relying on scientific evidence in making decisions that affect Canada's environment.

The [2015 Ministerial Mandate Letter for the Minister of Environment and Climate Change](#) identified a number of top priorities to be addressed, including:

- the need to enhance the protection of Canada's endangered species by completing robust species-at-risk recovery plans in a timely way
- the need to develop Canada's National Parks system
- the need to increase the proportion of protected marine and coastal areas to Convention on Biological Diversity (CBD) commitment levels by 2020, which is also mentioned in the [Mandate Letter for the Minister of Fisheries, Oceans and the Canadian Coast Guard](#)

[Budget 2014](#) and [Budget 2015](#) contained specific references to investments on species at risk, including a commitment of \$75 million in 2015 to continue to support the implementation of the Act. [Budget 2016](#) included a strong focus on protecting and restoring Canada's ecosystems, and a renewed commitment to meet Canada's United Nations CBD 2020 conservation goals and targets, one of which addresses species at risk recovery.

The [Federal Sustainable Development Strategy 2016 to 2019](#) identified 13 long-term goals including "all species have healthy and viable populations". Implementing SARA is identified as a key strategy in the action plan to achieve that goal, as is actively partnering with the provinces, territories and Indigenous peoples in Canada.

Table 1 summarizes the alignment of the SAR Program to the departmental strategic outcomes for each of the competent departments.

Table 1: alignment of the Species at Risk Program with competent department strategic outcomes

Competent Department	Departmental Strategic Outcome
ECCC	Canada's natural environment is conserved and restored for present and future generations
PCA	Canadians have a strong sense of connection to their national parks, national historic sites, heritage canals and national marine conservation areas, and these protected places are experienced in ways that leave them unimpaired for the enjoyment of present and future generations
DFO	Sustainable aquatic ecosystems

2.3 Consistency with federal roles and responsibilities

Findings: The SAR Program is consistent with the federal roles and responsibilities outlined in SARA and in complementary Acts and conventions. The program plays a coordination role in its collaboration with the provinces and territories and with key partners, including Indigenous peoples. The SAR Program supports Canada's participation in various international agreements.

The SAR Program is aligned with federal government jurisdictional responsibilities to support the implementation of SARA and other complementary Acts and conventions with similar or overlapping objectives, including the [Federal Sustainable Development Act](#), the [Canada National Parks Act](#), the [Canada Wildlife Act](#), the [Fisheries Act](#), the [Oceans Act](#) and the [Migratory Birds Convention Act](#). The [Species at Risk Act](#) assigns specific responsibility the Government of Canada for the implementation of its provisions on federal lands, including First Nations reserve lands, and for the protection of migratory birds and aquatic species, including sea coast and inland fisheries.

The Act is complementary to legislation in provinces and territories regarding at-risk species. The Act includes provisions allowing for the protection of species on non-federal lands if provincial and territorial laws do not effectively protect the species.

The Act and the SAR Program directly support federal jurisdictional responsibilities related to international agreements on biodiversity and ecosystem conservation to which Canada is a signatory, including the United Nations Convention on Biological Diversity, the North American Waterfowl Management Plan and the North American Bird Conservation Initiative.

3. Findings: program efficiency

This section summarizes the evaluation findings related to the efficiency of the SAR Program. It includes an assessment of program design, governance and management, program efficiency and performance measurement.

Efficiency criteria	Expectations met	Further work required	Priority attention required	Unable to assess
1. The extent to which the program design is appropriate for achieving its intended outcomes		•		
2. The extent to which the governance structure is clear, appropriate and effective for achieving expected results	•			
3. The extent to which the program is being delivered in an efficient and economic manner		•		
4. The extent to which performance data is being collected, reported and used to inform senior management and decision makers		•		

3.1 Program design

Findings: The design of the SAR Program is generally appropriate for achieving its intended outcomes. During the evaluation period, there have been some key advancements, including the development of tools, templates, and best practice guides for identifying critical habitat. However, the current program resources are not viewed as being commensurate with the cumulative program workload. The stages of the conservation cycle could be better integrated.

Internal program key informants generally view the program design as appropriate to achieve objectives. The program has addressed the recommendations from the 2012 evaluation, most notably by dedicating a team and resources to address the backlog in recovery documents and streamlining some aspects of program delivery (for example, consultations). The development of tool kits, templates and best practice guides for identification of critical habitat is also viewed positively. In 2016, several draft policies were posted on the SAR Public Registry for public, partner and stakeholder comment. Once finalized, these policies will provide much needed clarification and guidance for key elements under SARA.

The draft policies were developed to support predictable, clear and consistent implementation of the Act. These guidelines address key areas of the SARA cycle. They are designed to provide clarity for jurisdictions, Indigenous organizations and communities and stakeholders on the requirements of the Act and to clarify how the Government of Canada or Environment and Climate Change Canada meets their obligations under SARA. The proposed policies include:

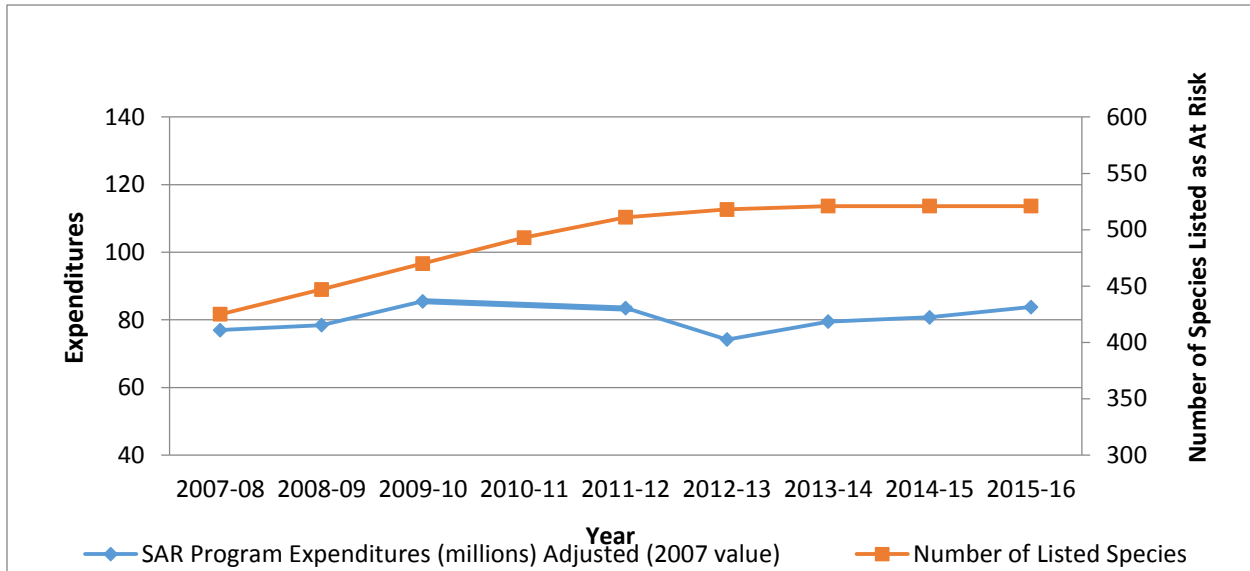
- [Policy on Critical Habitat Protection on Non-federal Lands](#)
- [Policy on Protecting Critical Habitat with Conservation Agreements under Section 11 of the Species at Risk Act](#)
- [Policy on Survival and Recovery](#)
- [Policy Regarding the Identification of Anthropogenic Structures as Critical Habitat under the Species at Risk Act](#)
- [Approach to the Identification of Critical Habitat under the Species at Risk Act when Habitat Loss and Degradation is Not Believed to be a Significant Threat to the Survival or Recovery of the Species](#)
- [Species at Risk Act Permitting Policy](#)
- [Listing Policy for Terrestrial Species at Risk](#)

The evaluation identified two areas of concern related to program design, namely insufficient resourcing of the program and lack of integration among conservation cycle stages.

Insufficient resourcing of the program: SAR Program resources have remained fairly stable over the last decade. As illustrated in Figure 2, program expenditures have ranged from \$77 million in FY 2007 to 2008 to \$84 million (expressed in 2007 dollars) in FY 2015 to 2016. However, while few species were added to the list during the evaluation period, the total number of listed species has grown from 233 species at the time of the proclamation to 425 species in FY 2007 to 2008, 521 in FY 2015 to 2016 (see [Figure 2](#)), and 526 species listed as of January 2017 (see [Appendix E](#)). According to internal interviewees, this has created a gap between available resources and the ability to maintain compliance with the legislated requirements and associated timelines of the Act for all listed species. This has, in turn, made the federal government vulnerable to litigation¹⁰, which reportedly places further pressure on internal resourcing as program staff responds to court-ordered actions. It was also noted that there is a lack of resources to support regulatory, legislative and constitutional consultations with Indigenous peoples in a manner that reflects the federal government's reconciliation and nation-to-nation mandate.

¹⁰ Since SARA came into force in 2004, there have been at least seven cases of litigation against the Government of Canada regarding SARA. This does not count cases that may have settled out of court. ECCC was unsuccessful in two of the four cases against it, unsuccessful for the most part in a third case, and successful in the fourth case. DFO was unsuccessful in all three of the cases against it. None of the cases was against PCA.

Figure 2: comparison of Species at Risk Program expenditures and number of species listed



Lack of integration among conservation cycle stages: Internal key informants noted that the SAR conservation cycle has led to some artificial separation of species conservation tasks. Examples include:

- lack of strategic bundling of species at the assessment stage to support later ecosystem-based action planning
- missed opportunities to use science conducted at the assessment stage for recovery planning when recovery planning is delayed or protracted, thus requiring a need to refresh the science
- engaging stakeholders a number of times during the different stages of the conservation cycle, rather than holding one series of consultations to simultaneously address recovery planning, protection actions and implementation

3.2 Governance and management

Findings: Governance of the SAR Program is supported by working level collaboration and regular and improving senior-level efforts. Active collaboration with other federal government departments will be important to support future efforts in the protection of species on federal lands.

Program governance is supported by regular Director General (DG)-level committee meetings of the competent departments. While the Assistant Deputy Minister (ADM)-level committee did not meet between 2013 and 2015, meetings between the ADMs of the competent departments started again in 2016. Management and strategic guidance and oversight by committees are supplemented by collaborations and ad hoc mechanisms at the program delivery level.

Feedback from a few key internal informants suggests that while collaboration among competent departments could always be improved (for example, through active communities of practice, shared templates), governance for the SAR Program generally appears to be sound.

Relationships with other government departments or entities are managed through different mechanisms, such as:

- an MOU signed in February 2011 with the Department of National Defence
- through more informal bilateral arrangements such as with Indigenous and Northern Affairs Canada
- through committees such as the Canadian Wildlife Directors Committee (CWDC) and the Federal, Provincial and Territorial ADM Conservation, Wildlife and Biodiversity Steering Group (CWBSG)¹¹

Despite this, some key informants noted that strengthening the relationships between ECCC and other federal government departments, including federal land holders such as Agriculture and Agri-Food Canada, remains an important priority for the future, as the SAR Program moves more fully into protection of species on federal lands.

3.3 Program efficiency

Findings: Efficiency of the SAR Program could not be assessed quantitatively. Qualitative feedback indicates that during the evaluation period, efforts were made to improve efficiency in a number of areas. Some program activities, while labour intensive, are required by the Act or jurisprudence and, therefore, are outside the control of the program. The use of multi-species or ecosystem-based approaches for species, under appropriate conditions, has the potential to improve efficiency. Some improvements to funding programs were also suggested.

Program expenditures and efficiency

Overall, program expenditures are within 5% of the budget for the period from FY 2011 to 2012 to FY 2015 to 2016, with some underspending by all competent departments (see Table 2). At PCA, underspending by 19% was reportedly due to Budget 2012 workforce reductions, which resulted in delays in SAR Program activities. These funds were carried over to the following years for the implementation of projects for at-risk species.

¹¹ The CWDC is composed of federal, provincial and territorial wildlife directors, including representatives from all three competent departments. As an advisory body on wildlife issues, the CWDC provides leadership in the development and coordination of policies, strategies, programs and activities that address wildlife issues of national concern and help conserve biodiversity. The CWBSG oversees the work of the CWDC and provides strategic advice and direction to federal, provincial and territorial ministers responsible for conservation, wildlife and biodiversity.

Table 2: Species at Risk Program budgeted and expended amounts, FY 2011 to 2012 to FY 2015-2016 (in millions)

Department	Budget (A)	Expenditures (B)	Variance amount(C=B-A)	Variance % (D=C/B)
ECCC	\$276,264	\$268,367	-\$7,897	-2.9%
DFO	\$120,494	\$118,530	-\$1,964	-1.7%
PCA	\$68,308	\$57,267	-\$11,041	-19.3%
Total	\$465,066	\$444,164	-\$20,902	-4.7%

Source: Extracted from each competent department's financial system. Figures include salary and benefits, O&M, G&C and capital expenditures.

Due to the complexities in the data related to program delivery and outputs, cost per output or cost per outcome cannot be calculated for the SAR Program to determine efficiency or trends over time. Therefore, efficiency is examined qualitatively based on views of key informants on factors that enhanced or detracted from efficient delivery of the program.

During the evaluation period, the competent departments reported that they made a number of improvements in the area of program delivery.

- **Rectifying the inefficiencies in recovery planning:** early recovery documents were reportedly often overly detailed and used a species-by-species approach. Protracted processes to identify critical habitat and backlog-related delays periodically led to the need to update species science. Efforts to address these issues include additional guidance for critical habitat identification and addressing the recovery strategy backlog.
- **Streamlining time-consuming engagement and consultation processes:** consultations with partners and stakeholders are required by the Act, and in the case of Indigenous peoples, by the Constitution. They are perceived to be important for successful conservation. As recommended in the 2010 evaluation, resource-intensive consultation processes have been streamlined through the introduction of online consultation approaches. DFO's recovery team approach, which required a significant investment that is not sustainable for every species, is being employed more strategically.
- **Prioritizing recovery efforts:** in response to resource constraints and to adopt a more proactive stance, competent departments are devising strategies to prioritize SAR Program efforts, focusing on priority places, threats and species. This approach is similar to other jurisdictions such as Australia, which are also moving towards the prioritization of species conservation efforts.¹²

¹² Australia's Threatened Species Strategy was launched in July 2015. It sets out an action-based approach to protecting and recovering threatened animals and plants. Specifically, it includes a commitment to improve by 2020 the trajectory of 20 priority birds and 20 priority mammals from the list.

- **Developing standardized templates:** during the evaluation period, many SARA products were developed or are being developed for the first time (emergency protection orders, critical habitat protection orders and progress reports on recovery strategies). As these products are more widely circulated and refined, initial investments in their development will realize a return in future efficiencies.
- **Integrating related efforts:** due to the role and authority of the PCA for the management of federal protected areas, efficiencies have been realized through the integration of initiatives related to species at risk into existing programs, guidance, policy, and processes.

The evaluation noted two issues with respect to efficiency of delivery that are largely outside the control of the SAR Program.

- **Using regulatory approaches for protection:** when ministerial orders are required to be used to protect critical habitat on federal lands and waterways (effectively mandatory for aquatic species according to jurisprudence, which has cited the lack of legal equivalence of the [Fisheries Act](#)), departmental regulatory processes are engaged. They are often lengthy, accompanied by legal scrutiny and subject to broader regulatory-related restrictions.
- **Issuing emergency protection orders:** during the evaluation period, two emergency protection orders issued at ECCC were reportedly labour intensive for the department and diverted resources from other program activities. The use of emergency protection orders is not viewed as an ideal measure by some key informants, because they have limited landscape and species benefits (highly localized, single species). As well, the South of the Divide case study noted that the sage grouse emergency protection order implemented in this area had the unintended negative effect of undermining trust between the department and some stakeholders who did not feel adequately informed of or prepared for the order.

Use of multi-species or ecosystem-based approaches

According to the literature and key informants, multi-species or ecosystem-based approaches can be as effective as single species approaches under certain conditions. For instance, the literature suggests that single species approaches are found to be more effective in addressing urgent threats. They also have the advantage of being more straightforward to prepare (important from a timeliness perspective). Multi-species approaches can have similarly effective outcomes to single species action plans when there are similar threats, similar or overlapping ranges and habitat needs, complementarities in potential recovery actions (assuming that such plans are adequately resourced, have an appropriate design and sound oversight), and are monitored in order to facilitate adaptive management.

Competent departments are frequently using multi-species or ecosystem-based approaches. During the evaluation period, 17 of the 44 proposed action plans addressed more than one species or were ecosystem-based. This approach is also being used internationally (for example, in the United States and Australia). Internal and external key informants were generally of the view that multi-species

and ecosystem-based approaches will be important to future improvements to the efficiency of the program. Key informants further noted that multi-species approaches need to be appropriately scaled (that is, landscapes should be defined to include species 'hot spots', while being sufficiently bounded so that partnerships are manageable). A practical challenge noted by key informants and in the case studies is that individual species have different legislated timelines for the development of recovery documents which can be difficult to accommodate within a multi-species plan. As well, they noted that the process for developing and finalizing the recovery documents can be quite lengthy due to the number of species and stakeholders involved.

Case studies of species recovery initiatives, namely South of the Divide and Ausable-Sydenham Rivers, and departmental documentation illustrate some best practices in developing and implementing a multi-species approach, including:

- a detailed review of site potential to address the population and distribution objectives of multiple species, including consideration of a range of perspectives to inform decisions and prioritize recovery and education activities
- early and continued engagement with stakeholders, which was reported to be fundamental to the successful implementation of recovery plans
- adopting a long-term perspective to address issues, which allowed for the development of multi-year plans and the steady implementation of those plans using consistent and reliable data

Funding programs

Funding programs (G&C and O&M interdepartmental transfers) support direct recovery actions on federal lands and waters and on non-federal lands. The evaluation gathered a number of suggestions for improvement to the program from other reviews of SAR Program G&C and other funding programs. In addition, feedback from key informant interviews and case studies, as well as the review of documents and files, suggested the following improvement strategies:

- increasing resources for these programs to support the SAR Program: the AFSAR program, in particular, is significantly over-subscribed with a total funding ask exceeding the actual value of funded agreements by almost double (1.77) during the evaluation period, compared to 1.23 for HSP (see Table 7)
- increasing flexibility to direct funding, to support identified program priorities such as multi-species, area-based and threat-based approaches
- continuing to streamline application and reporting processes, to address capacity barriers to participation and improve timeliness of funding notification overall

- continuing to use multi-year agreements, to address challenges associated with time- or weather-sensitive projects and delays in release of funds associated with G&C programs

3.4 Performance measurement

Findings: The SAR Program is meeting some of the reporting requirements of the Act, as well as collecting additional information to monitor deliverables of interest and to inform senior management. Performance reporting related to progress on the implementation of recovery strategies has not always been timely, however, particularly for ECCC. The expansion of measures related to program performance in the later stages of the conservation cycle provides an opportunity for improvement for ECCC as the program moves fully into this area of activity.

A number of performance reporting requirements are embedded within SARA:

- Annual report: The evaluation found that competent departments are generally producing the Annual Report in a regular and timely fashion.
- Report on status of wildlife species: Section 128 of SARA stipulates that “five years after this section comes into force and at the end of each subsequent period of five years, the Minister must prepare a general report on the status of wildlife species”.¹³ Reports have been published for 2000, 2005, 2010 and 2015.
- Report on recovery strategy implementation: Within five years after a recovery strategy is included in the Public Registry, a report on the implementation must be produced. It must be updated every five years thereafter, until its objective has been achieved. Ministers of the competent departments must report on the implementation and progress towards achieving objectives, including management and action plans (section 55). While about 100 recovery strategies were finalized before FY 2011 to 2012, from April 2011 to March 2017, DFO had produced 24 such reports, while no reports were published by ECCC.¹⁴ Three of the reports produced by DFO are due to be updated, since the last update covered the period from 2006 to 2011.

In addition to the reporting required by the Act, the Canadian Environmental Sustainability Indicators on species population trends and tracking for the FSDS provide additional information on performance. As well, ECCC, DFO and PCA have provided public reporting on progress to reduce the backlog of recovery documents. There are also examples of program impact reporting through special studies, including case studies of conservation implementation projects.

A challenge for the horizontal evaluation of the SAR Program was telling a coherent performance story. Each of the competent departments has its own distinct context, which is evident in their

¹³ The commitment to regularly monitor species was first articulated in the Accord for the Protection of Species at Risk in 1996.

¹⁴ PCA is not responsible for leading the reporting on recovery strategy implementation unless the species is only found on PCA lands. However, PCA will provide data to ECCC and DFO so that all data is available to report back on the entire range of the species.

separate Performance Measurement Strategies (ECCC and DFO) and performance measures. While some common performance measures are brought together in the SARA Annual Report, there are some gaps in performance reporting, especially related to the later stages of the conservation cycle. For instance, while PCA and DFO internal data systems track recovery documents, as well as spending and recovery actions implemented by species, region and activity. However, ECCC metrics have largely remained focused on recovery planning, with fewer measures related to later stages of the conservation cycle, where there has been less activity to date. As mentioned previously, there has been no reporting on the implementation of recovery strategies.

ECCC is currently engaged in efforts to improve performance measurement for the SAR Program. To meet the requirements of the 2016 Treasury Board [Policy on Results](#), a departmental result and associated indicator for the program have been specified in the Departmental Results Framework (DRF) (May 2017), and a Performance Information Profile (PIP), which includes a program logic model and performance indicators, is under development. Similarly, DFO is specifying performance indicators for its DRF and Species at Risk PIP. While there are no departmental results specific to species at risk in PCA's DRF (May 2017), the SAR Program is considered to be part of the Agency's Heritage Places Conservation Program. Draft PIPs (to be completed by March 2018) include specific performance indicators related to species at risk .

4. Findings: expected results

This section summarizes the evaluation findings related to the achievement of the SAR Program's expected outcomes.

Expected results	Expectations met	Further work required	Priority attention required	Unable to assess
1. Authorities have the information they need to determine if a species is at risk		•		
2. Listed species, including individuals, their residences and critical habitat, are legally protected within legislated timelines			•	
3. Competent departments, partners (including Indigenous peoples) and stakeholders have a clear and timely understanding of the objectives and measures to take to conserve and recover a listed species and maintain and improve its critical habitat		•		
4. Increased awareness by competent departments, partners (including Indigenous peoples) and stakeholders of their responsibilities to recover and conserve a listed species and its critical habitat		•		
5. Implementation of priority recovery actions by competent departments, partners (including Indigenous peoples) and stakeholders to recover and conserve a listed species and its critical habitat		•		
6. Increased capacity of partners (including Indigenous peoples) and stakeholders to implement priority recovery actions		•		
7. Recovery activities are on track to reach overall and individual species conservation goals		•		
8. Species at risk are recovered				•

4.1 Authorities have the information they need to determine if a species is at risk

Findings: The role of the SAR Program in supporting the assessment and listing of species is well-regarded overall. The competent departments provide satisfactory science support and consultations with partners and stakeholders during this stage of the conservation cycle. However, not unlike the assessment of species in general, integration of Indigenous Knowledge (IK) in the species assessment process under SARA requires improvement.

Twice yearly, COSEWIC typically assesses species in batches. During the period from FY 2011 to 2012 to FY 2016 to 2017, COSEWIC assessed or reassessed 366 species. Currently, there are 23 species identified for future assessment (COSEWIC Candidate List) because they are suspected of being at some risk of extinction or extirpation. The [Wild Species 2015](#) report identified 231 species that could be prioritized as potential candidates for detailed assessments by COSEWIC.

Key informants perceive the species assessment process led by COSEWIC to be rigorous and science-based. According to documentary sources, competent departments provide a variety of supports to the COSEWIC assessment process, including:

- secretariat support by ECCC
- membership on the committees and subcommittees by ECCC, DFO and PCA scientific staff
- departmental and commissioned studies related to species, such as population distribution and threats to species and their habitat; this includes, for example, scientifically peer-reviewed recovery potential assessments¹⁵ (150 reports during the evaluation period) and science advice reports (32 reports), pre-COSEWIC assessments produced by DFO's Canadian Science Advisory Secretariat during the evaluation period, as well as species data contributed by PCA from its BIOTICS database¹⁶
- consultations with stakeholders on species assessment; over the evaluation period, ECCC and DFO, with input from PCA, each engaged with stakeholders with respect to over 90 species, to inform the listing process

The majority (75%) of the species assessed by COSEWIC since its inception were found to be at risk. About 19% of species have been assessed as not at-risk and only a small proportion of assessed species (6%) has been found to be data deficient (half are fishes), suggesting sound selection of species for assessment and, for most taxonomic groups, robust science supporting the analysis.

The integration of Indigenous Knowledge (IK) in species assessment appears to be low. The [Preamble to SARA](#) requires that “traditional knowledge of the aboriginal peoples of Canada should

¹⁵ Evaluations of the likelihood of recovery of threatened, endangered or extirpated species under various assumptions about how human activities that affect the species would be managed.

¹⁶ The BIOTICS database includes information on which species are found in Parks Canada managed areas, as well as the species at risk that Parks Canada is working to help protect and recover.

be considered in the assessment of which species may be at risk and in developing and implementing recovery measures.” In total, COSEWIC assessments had gathered or referred to IK for 24 of the 366 species assessed.

Key informants (program representatives, Indigenous peoples and stakeholders) were of the view that the SAR Program should be acknowledged for its efforts to integrate valuable IK in species assessment. However, they also noted that the process could be improved with an agreed-upon framework or strategy with sufficient detail to systematically guide the gathering, dissemination and incorporation of IK for species assessment.

4.2 Listed species are legally protected within legislated timelines

Findings: SARA provides automatic protection of individuals and residences, as applicable, of EET species on federal lands and species under federal jurisdiction upon listing. However, during the evaluation period, a limited number of species were considered for listing, and a small number of species were added to the SARA Schedule 1. As well, legal protection of critical habitat occurred in protected federal areas during the evaluation period; however, protection of critical habitat on other federal lands and reporting on habitat protection on non-federal lands within legislated timelines were limited. Permitting processes to manage impacts on listed species appear to be satisfactory and have been the subject of additional policy work. Alternatives to regulatory mechanisms for protection (when permissible) were not used extensively during the evaluation period, although there is interest in further developing such complementary measures.

Findings related to protection are presented in the following subsections:

- legislated protection for listed species
- identification of critical habitat
- process for protection of critical habitat
- protection of habitat in federally protected areas
- protection of habitat on other federal lands
- protection of individuals, residences, and critical habitat on non-federal lands
- overall protection challenges
- permitting

Legislated protection for listed species

When a species becomes listed as EET on Schedule 1 of SARA, general prohibitions of SARA come into place. These prohibitions apply to listed aquatic species and migratory birds anywhere they

are found in Canada and to all other EET species¹⁷ on federal lands. These prohibitions apply to the 396 species that are listed as EET on Schedule 1 of the Act. Those species listed under the “special concern” designation do not benefit from the general prohibitions.

Over the evaluation period, few species were added to the SARA Schedule 1 list¹⁸. Only 54 species were listed during the five-year evaluation period, with just 10 listed between 2013 and 2015. Furthermore, over 200 species were assessed by COSEWIC as being at-risk during the evaluation period, but have not yet received a listing decision.

There are a number of reasons why a species may not be listed, including economic impact as a result of implementing the protections. For instance, according to a DFO guidance document¹⁹ and DFO’s listing policy and directive for listing advice,²⁰ the department is required to conduct an analysis of economic and administrative costs and benefits, in consultation with partners and stakeholders, to identify regulatory (SARA) and non-regulatory options. A decision not to list a species must be accompanied by a rationale that is posted on the Species at Risk Public Registry. Alternative actions under the [Fisheries Act](#) may factor into the decision regarding whether to list a species under SARA.²¹ ECCC prepared a draft parallel listing policy for terrestrial species as part of the new SARA policy suite.

Of note, the literature indicated a bias against listing of marine fishes: “Endangered and threatened marine fishes (that is, those most at risk) face the greatest bias and receive the least protection; their SARA decisions are typically delayed, with almost five years usually passing between their COSEWIC assessment and the listing decision; most (70.6%) are then denied listing”.²² Other research indicated that delayed or denied listing is often due to the assessed regional economic impact of listing.²³

Identification of critical habitat

Once a species has been listed on Schedule 1 of SARA, the recovery planning stage begins. Critical habitat is identified during the recovery planning stage. For a species listed as extirpated, endangered or threatened, the competent department must prepare a recovery strategy that identifies critical habitat, to the extent possible, based on the best available information. Due to the broad range of potential habitat for some species, critical habitat may cross multiple jurisdictions.

¹⁷ Note that the residences of extirpated species are protected only when the recovery strategy recommends the reintroduction of the species.

¹⁸ The decision to list a species is made by the Governor in Council, on the recommendation of the Minister.

¹⁹ DFO. National Guidance for Developing Management Scenarios for Aquatic Species at Risk Listing Decisions. December 2012.

²⁰ DFO. Fisheries and Oceans Canada Species at Risk Act Listing Policy and Directive for “Do Not List” Advice (no date).

²¹ Since FY 2012 to 2013, Section 35 of the [Fisheries Act](#) contains the following prohibition “No person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery or to fish that support such a fishery.”

²² McDevitt-Irwin, J.M, Fuller, S.D., Grant, C. and Baum, J.K. 2015. [Missing the safety net: evidence for inconsistent and insufficient management of at-risk marine fishes in Canada](#). Canadian Journal of Fisheries and Aquatic Sciences. 72(10): 1506-1608.

²³ Schultz, J. A., E. S. Darling and I. M. Côté. 2013. [What is an endangered species worth? Threshold costs for protecting imperiled fishes in Canada](#). Marine Policy 42: 125-32.

This is one reason that identifying critical habitat can be a complicated and intensive task that can take considerable time. Because critical habitat can cross multiple jurisdictions, each competent department may assist the responsible authority in the identification of critical habitat on lands for which it is responsible. For example, if critical habitat for a species spans across lands which are under PCA's jurisdiction, as well as some lands under ECCC's jurisdiction, both organizations would play a role. When the available information is inadequate to complete the identification of critical habitat, the recovery strategy must include a schedule of studies to complete the identification. The identification of critical habitat can be completed in a revised recovery strategy or an action plan.

Table 3 provides data on the number of species²⁴ for which critical habitat was identified in a recovery strategy by each of the three competent departments from FY 2011 to 2012 to FY 2016 to 2017. Beyond the species noted in Table 3, there are other species for which a schedule of studies is outlined in a recovery strategy. These are species for which critical habitat is in the process of being identified. Within this timeframe, PCA identified a schedule of studies to identify the critical habitat for one species. Resource constraints and limited data management tools meant that ECCC and DFO were unable to provide data for the number of species that currently have a schedule of studies to identify critical habitat.

Table 3: number of species for which critical habitat was identified in a recovery strategy, FY 2011 to 2012 to FY 2016 to 2017

Description	ECCC	DFO	PCA	Total
Number of species for which critical habitat was fully or partially identified in a final recovery strategy	93	22	24	139
Number of species for which no critical habitat was identified in a final recovery strategy	15	7	2	24

Source: Departmental records as of March 2017.

Process for protection of critical habitat

Once identified and described in a recovery document, there are various approaches to protect critical habitat depending on where it is located.

- If the critical habitat is found to be within certain types of federal protected areas, within 90 days after the final recovery strategy or action plan is included on the Public Registry, the competent minister must publish a description of the critical habitat in the Canada Gazette (sections 58(2) and 58(3) of SARA). Protection under section 58(1) of SARA comes

²⁴ Note that Tables 8, 9, 10 and 11 refer to "species", without distinguishing entire species that are listed as EET from species populations listed as EET. COSEWIC, and as a result Schedule 1 of SARA, identifies EET species populations as well as EET species, and the program creates recovery documents based on the species or species population designated on Schedule 1 of SARA. Also, Tables 8 to 11 incorporate data for one year beyond the core evaluation timeframe (2011–12 to 2015–16) because data for 2016–17 was available in time to include in the evaluation report.

into effect 90 days after the publication of the description of critical habitat in Canada Gazette.

- Within 180 days after the final recovery strategy or final action plan that identified critical habitat is included on the Public Registry, the competent minister must, with respect to all of the critical habitat or any portion of the critical habitat referred to in section 58(2) (that is, critical habitat on federal lands), the competent minister must take one of the two following actions:
 - Make the order referred to in section 58(4) if the critical habitat or any portion of the critical habitat is not legally protected by provisions in, or measures under, this or any other Act of Parliament, including agreements under section 11
 - If he or she does not make the order, include on the Public Registry a statement setting out how the critical habitat or portions of it, as the case may be, are legally protected
- For critical habitat on non-federal lands, the Minister of Environment and Climate Change must make an order to protect the critical habitat if the Minister, after having consulted the appropriate provincial or territorial minister, is of the opinion that there are no federal, provincial or territorial laws to effectively protect this habitat. If the critical habitat is not considered to be protected, the Minister must post a report on the Public Registry on the steps being taken to protect it.

Protection of critical habitat in federal protected areas

The publication of a description of critical habitat in the Canada Gazette must be used for protected areas under SARA section 58(2), which include national parks named and described in Schedule 1 of the [Canada National Parks Act](#), the Rouge National Urban Park established by the [Rouge National Urban Park Act](#), marine protected areas under the [Oceans Act](#), migratory bird sanctuaries under the [Migratory Birds Convention Act, 1994](#), or national wildlife areas under the [Canada Wildlife Act](#). Table 4 provides details on the protection of habitat in federally protected areas, by number of species.

Table 4: protection of critical habitat in federally protected areas, FY 2011 to 2012 to FY 2016 to 2017

Description	ECCC	DFO	PCA
Number of species for which critical habitat is protected in federally protected areas	21	8	41
Number of species for which critical habitat has been identified and protection is pending in federally protected areas	1	0	0

Note: It is not possible to compute a total because the competent departments sometimes publish protection statements jointly for species in federally protected areas. Source: Departmental records as of March 2017.

Protection of critical habitat on other federal lands²⁵

For critical habitat identified on other federal lands, there were 10 species in total with proposed or final critical habitat orders published in Canada Gazette from April 2011 to March 2017, namely the Roseate Tern, a migratory bird, and nine aquatic species. Seven of these were published as final orders in Canada Gazette II in 2016. On other federal lands under the administration of Parks Canada, protection against the destruction of critical habitat for six species was accomplished using provisions in, and measures under, the [Canada National Parks Act](#), made pursuant to SARA section 58 (5) (b).

For ECCC, protection is overdue for 50 of the 51 species with critical habitat identified on other federal lands and for which a protection statement has not been posted on the SAR Public Registry, protection (see Table 5). For one species with critical habitat identified (the Roseate Tern), protection was put in place after the 180-day period had passed.

For DFO, seven of the 27 aquatic species with critical habitat published in final recovery strategies or action plans for which protection was due or overdue between April 2011 and March 2017 received protection via a ministerial order after the 180-day period had passed. Protection was overdue for 20 species.

For PCA, four of the six species with a protection statement published between April 2011 and March 2017 received protection after the 180-day period had passed. Between April 2011 and March 2017, protection was due or overdue for 30 species with critical habitat identified on other federal lands.

Table 5: protection of critical habitat on other federal lands, FY 2011 to 2012 to FY 2016 to 2017

Description	ECCC	DFO	PCA
Number of species with critical habitat protected on other federal lands*	1	7	6
Number of species for which protection on other federal lands is overdue	50	20	30

*Critical habitat on other federal lands is protected through a section 58 (4) order, or through the publication of a statement on the Public Registry, made pursuant to section 58 (5) (b). Source: Departmental records as of March 2017.

Protection of individuals, residences and critical habitat of other listed species on non-federal lands

On non-federal lands, under the [Accord for the Protection of Species at Risk](#), provinces²⁶ and territories are committed to the protection of individuals and residences for terrestrial species

²⁵ Other federal land as identified by SARA section 58 (1).

(which does not include aquatic species or migratory birds). However, if the competent minister is of the opinion that the laws of the province or territory do not effectively protect EET species or the residences of the individuals or critical habitat, he or she must recommend to the Governor in Council that a protection order be made.²⁷

The federal government has seldom used its authority to order protection of the individuals and residences of listed species not under federal responsibility or the critical habitat of listed species on non-federal lands. The exception is the case of two emergency protection orders, following litigation, for wildlife species that were deemed to be facing imminent threats to their survival or recovery: Sage Grouse on federal and provincial lands in Alberta and Saskatchewan in 2014 and Western Chorus Frog on private lands in Quebec in 2016.

Protection challenges

According to key informants, there have been a number of challenges in protecting critical habitat of species on both federal and non-federal lands. These included a lack of program capacity and resources, legal drafting issues and the protracted process involved with putting in place regulatory orders for protection. Key informants also noted challenges, particularly in identifying critical habitat, which results in challenges in ensuring protection. These included challenges in identifying critical habitat for some species in general, and challenges with identifying critical habitat on some Indigenous lands. Additionally, there is the complexity related to protecting critical habitat for wide-ranging species or situations where habitat protection involves significant consideration of socio-economic impacts and use of Indigenous lands.

SARA provides for only one alternative to regulatory approaches for protecting critical habitat through voluntary stewardship: conservation agreements (section 11). These types of agreements are intended to support the implementation of conservation measures, although they can only be used in specific circumstances, depending on the type of species and type of land. For aquatic species, for instance, the use of alternative protection measures is inhibited by a 2010 Federal Court Decision that clarified that alternate legal protection must be of the same kind, degree and scope as a ministerial order; no alternative approaches have been identified by DFO as meeting that test. To date, agreements of this nature, when they are permitted, have not been used extensively. According to key informants, these agreements are challenging for a variety of reasons, including that they tend not to come with any attached funding commitments, which makes them difficult to negotiate and implement.

However, key informants indicate a desire to pilot and use alternatives to regulatory measures, if possible, to protect critical habitat (for example, agreements, industry certification programs, land

²⁶ The province of Quebec is not a signatory to the Accord.

²⁷ [Species at Risk Act](#), section 61, applies to critical habitat not on federal lands. This section also specifies that competent ministers come to the opinion on whether protection is adequate after consultation with the appropriate provincial or territorial minister. In addition, section 80 of SARA can apply to non-federal lands and sections 34 and 35 apply to individuals and residences in the provinces and territories.

use management plans, offsets²⁸). Interviewees perceive the limited use of alternatives and delayed actions to be creating apprehension and uncertainty for landowners, Indigenous communities and industry about their responsibilities and the implications of recovery actions for their development projects and future investments. The South of the Divide case study identified stakeholders' frustration with the lack of adequate guidance on the use of conservation agreements, although results-based agreements are currently being piloted with landowners in the area.

Issuing permits

Section 73 of SARA on agreements and permits addresses the issue of activities that may be permitted that otherwise would be offences under the provisions and protections of species and critical habitat in the Act. Conditions and restrictions on the circumstances under which a permit may be issued are contained in SARA and in the draft policy on permitting.

During the evaluation period, the three competent departments issued over 1,000 permits, and this number is increasing each year. Internal key informants noted that most permits were to enable scientific research activities.

Permitting processes have been integrated with other permit issuance activities at DFO and PCA. However, at ECCC, SARA permitting follows a separate process from other departmental permitting activities. In their permitting process, ECCC and DFO maintain a service standard consistent with regulations made under the Act. Since FY 2014 to 2015, more than 90% of ECCC permits and more than 98% of DFO permits have been issued within service standards.²⁹

While the permitting system in the three competent departments was found to be active, the effectiveness of permits in ensuring that activities are conducted in a way that continues to protect at-risk species was not assessed as part of this evaluation.

Key informants and surveyed stakeholders were generally positive regarding the effectiveness of permitting; 61% indicated it is working well, with some saying permitting should be used more. Guidelines on the use of offsets in the context of permitting have been included in the draft policy on permitting, although there is no experience yet with the extent to which the current conditions of use will allow for their implementation.

²⁸ As stated in the draft [Species at Risk Act Permitting Policy](#): Offsets have been described as “[providing] measurable conservation outcomes through implementation of project-based actions [and providing] a balancing effect by establishing new environmental features (such as habitat or ecosystem types) to compensate for those that have been impacted.” [From: [Operational Framework for Use of Conservation Allowances](#), Environment Canada, 2012].

²⁹ Because PCA issues permits under section 74 of SARA, it is not obligated to report on adherence to service standards, as is required under section 73.

4.3 Clear and timely understanding of the objectives and measures to take

Findings: The competent departments have successfully addressed their backlog in recovery planning documents during the evaluation period. However, recovery documents for some species remain overdue, particularly for ECCC and DFO. While there has been increased understanding of the objectives for species conservation among some partners and stakeholders, there are perceived gaps in understanding, particularly for those not involved in the delivery of the program at the national level.

Under SARA, the competent minister or ministers must publish a recovery strategy on the Species at Risk Public Registry within one year of listing a species as endangered on Schedule 1 of SARA and within two years of listing a species as extirpated or threatened. A management plan must be published within three years for a species listed as of special concern. The competent minister or ministers must publish one or more action plans on the Species at Risk Public Registry based on the recovery strategy, for those species for which recovery is feasible. The stages of the recovery planning process are presented in Figure 3.

In the last few years, the competent departments have made a concerted effort and significant progress in addressing the majority of the backlog of proposed recovery documents. All three competent departments have published plans on the SAR Public Registry (ECCC and PCA in FY 2014 to 2015, and DFO in FY 2016 to 2017) to eliminate their remaining recovery document backlogs.

Overall, key informants noted that learning and capacity has been built to more efficiently develop recovery documents. However, a few stakeholders noted some minor concerns with the quality of the recovery documents produced under the revised and accelerated process.

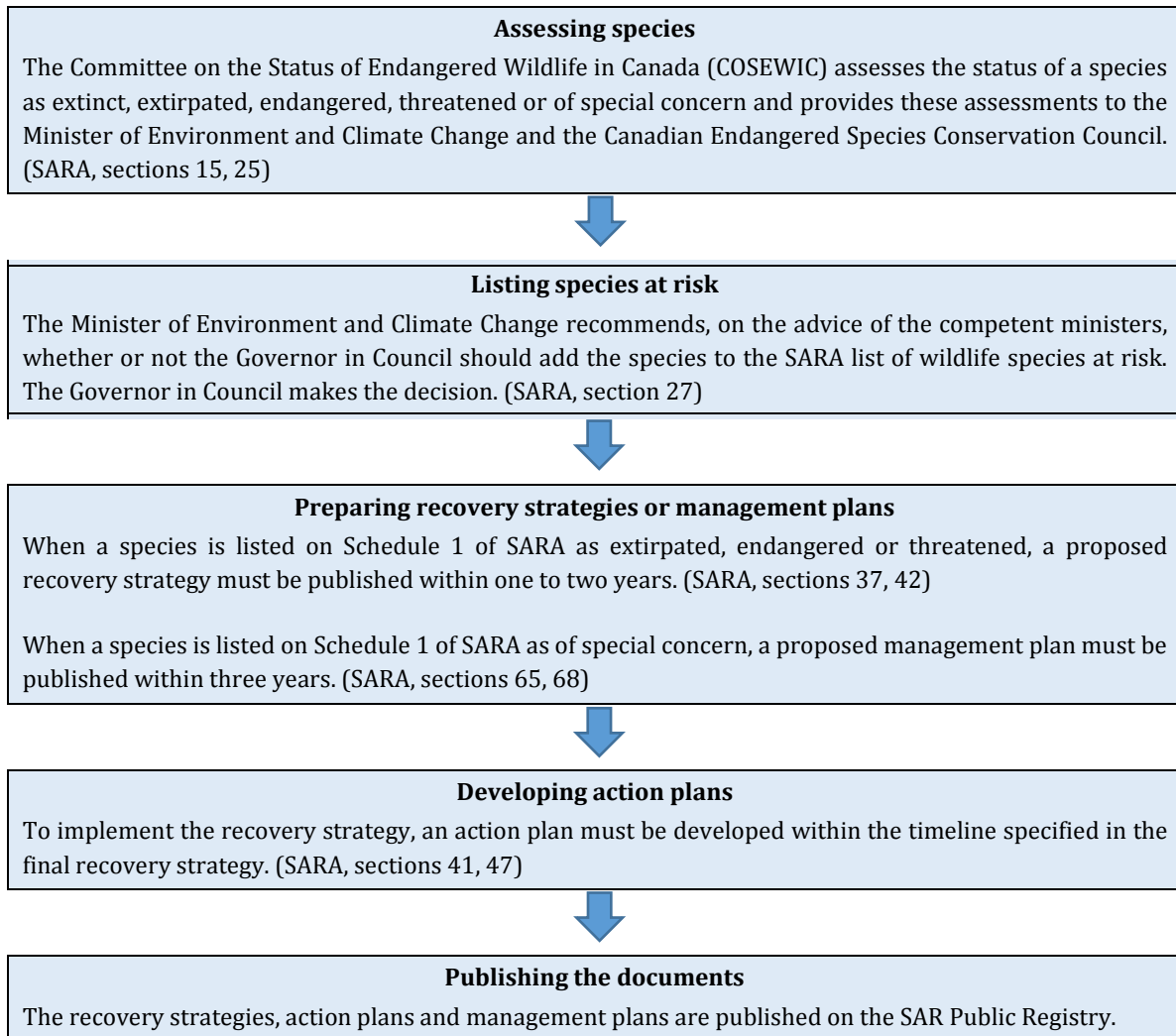
The timeline for publishing proposed recovery strategies is determined from the date of listing. SARA requires that final recovery strategies be published within 90 days of the publication date of the proposed recovery strategy. Between April 1, 2011 and March 31, 2017, final recovery strategies were published for 106 EET species by ECCC, 22 species by DFO and 26 species by PCA. During the same period, proposed recovery strategies were overdue for 201 EET species for ECCC, 62 species for DFO and 25 species for PCA, including those that became overdue prior to FY 2011 to 2012 (see Table 6).

As final recovery strategies are published, there are subsequent requirements to develop action plans. The timeline for publishing an action plan is stated in the final recovery strategy for the species. Measures contained in action plans are more specific than those contained in recovery strategies and therefore, communicate more clearly what needs to be done to recover at-risk species.

Between April 1, 2011 and March 31, 2017, final action plans were published for 11 EET species by ECCC, seven species by DFO and 93 species by PCA (see Table 6). Note that this latter figure for PCA includes a number of species that are also included in action plans by ECCC and DFO. PCA's action plans do not necessarily address the full range of types of a species, thus requiring additional action

plans by ECCC or DFO. Between April 1, 2011 and March 31, 2017, final action plans were overdue for 59 species for ECCC and 30 species for DFO, including those that became overdue prior to FY 2011 to 2012.

Figure 3: recovery planning process



With respect to a species of special concern, between April 1, 2011 and March 31, 2017, final management plans were published for a total of 76 species: 54 species by ECCC, 18 species by DFO and four species by PCA (see Table 6). During the same period, proposed management plans were overdue for 71 species for ECCC, 31 species for DFO and four species for PCA, including those that became overdue prior to FY 2011 to 2012.

As of March 31, 2017, far fewer recovery documents were still overdue for the competent departments.

- For ECCC, proposed recovery strategies were still overdue for 22 species, final action plans were still overdue for nine species and proposed management plans were still overdue for two species.
- For DFO, proposed recovery strategies were still overdue for three species, final action plans were still overdue for 20 species and proposed management plans were still overdue for four species.
- For PCA, proposed recovery strategies were still overdue for one species, no final action plans or proposed management plans were still overdue.

Table 6: number of species with final and overdue recovery strategies, action plans and management plans, FY 2011 to 2012 to FY 2016 to 2017

Competent Department	Number of species with a recovery strategy (extirpated, endangered or threatened)		Number of species with action plans (extirpated, endangered or threatened)		Number of species with a management plan (special concern)	
	Finalized	Overdue*	Finalized	Overdue*	Finalized	Overdue*
	A final recovery strategy was published	A proposed recovery strategy was overdue	One or more final action plan was published	A final action plan was overdue	A final management plan was published	A proposed management plan was overdue
ECCC	106	201	11	59	54	71
DFO	22	62	7	30	18	31
PCA	26	25	93	0	4	4
Total	154	288	N/A	N/A	76	106

*Figures refer to the number of species for which a document was either (1) overdue within the FY 2011 to 2012 to FY 2016 to 2017 timeframe or (2) overdue prior to FY 2011 to 2012 and remained overdue at some point within the FY 2011 to 2012 to FY 2016 to 2017 timeframe. For a recovery strategy or management plan, “overdue” means the proposed recovery strategy or the proposed management plan was not published with the legal timelines specified in SARA sections 42 and 68. For an action plan, “overdue” means that at least one final action plan had not been published within the timeline specified in the final recovery strategy for that species. Note that while this interpretation of “overdue” for an action plan conforms with the legal timeline in accordance with SARA sections 41 (1) (g) and 50, it is an underestimate of overdue work related to action planning because of the significant number of recovery strategies that were themselves overdue.

Source: Departmental records, 2017.

Internal and external key informants indicated that there has been an increase in understanding of the objectives and measures needed to conserve and recover at-risk species over the last few years. However, timeliness of recovery documents remains an issue. Understanding was perceived to be the strongest among those most engaged in recovery planning, while other groups, and in particular those not involved in the delivery of the program at the national level, may lack full comprehension of the program complexities. It was noted that a lack of policy guidance and communication had previously impaired understanding. As such, the draft policies developed in 2016, which were intended to support predictable, clear, and consistent implementation of the Act, provide an opportunity to help enhance broader understanding.

Just under half of surveyed partners and stakeholders (48%) indicated that ensuring that Canadians understand their responsibilities to comply with SARA is not working well. This is the lowest rating of the aspects of the program that were tested.

4.4 Increased awareness of responsibilities

Findings: Engagement and collaboration with partners and stakeholders has occurred through multiple mechanisms to increase the awareness of responsibilities for recovering at-risk species. However, engagement and coordination with provinces, territories and Indigenous peoples could be improved.

The SAR Program has used a variety of means to engage with stakeholders and partners through the recovery process. Internal communications data indicated expenditures on a variety of methods of engagement and communications, such as print and electronic letters and emails, meetings and social media. The Species at Risk Public Registry is a key vehicle for individuals and groups to receive information and provide comments on recovery documents and strategies. For example, during the evaluation period, ECCC received over 3,000 comments on posted recovery documents and over 45,000 comments related to the boreal caribou recovery strategy.

- Nearly two-thirds of surveyed partners and stakeholders (65%) indicated that they were satisfied with outreach and opportunities to participate in the SAR Program. One-quarter (25%) indicated that they were not satisfied. These respondents noted that adequate time was not given to provide feedback to the federal government related to species at risk, that greater transparency is needed in the decision-making processes at multiple levels, and that their feedback, when provided, is not well reflected in final documents.

During the evaluation period, five round table discussions were held to gather feedback from stakeholders (for example, government, environmental organizations, Indigenous peoples, wildlife management boards, landowners and industry groups) on areas where the federal government can increase collective success in conserving species at risk and improve the implementation of SARA. A sixth round table discussion was held in April 2017.

Internal key informants noted that, for areas of high impact (for example, where critical habitat is identified), departments need to plan for early and substantive consultations, to facilitate awareness of responsibilities, buy-in and implementation by all responsible parties.

For the majority, internal key informants viewed collaboration between competent departments positively, noting effective committee structures and collaborative relationships within the regional offices and between the regions and HQ. However, several of the interviewees also noted that horizontal collaboration across the departments is negatively impacted by a lack of regularly held horizontal meetings.

Several key internal informants noted that the program is actively working to improve its partnership with other government departments (for example, Department of National Defence

and Indigenous and Northern Affairs Canada). While the efforts have been working well, continued effort is needed to strengthen relationships.

Collaboration with the provinces and territories is important, given the shared responsibility for at-risk species on non-federal lands. Currently, more than half of the provinces and territories have at-risk species legislation in place, while others manage protection through other legislation or various strategies, policies or regulatory measures. The federal government has four bilateral agreements in place with provinces (Ontario, Saskatchewan, Quebec and British Columbia).

Regional internal and external key informants view the collaboration with the provinces and territories as positive and effective and shared many examples of shared work on recovery planning and species research. As well, there was evidence of multiple mechanisms for national collaboration, such as the Minister's Roundtable, F/P/T meetings and the Canadian Wildlife Directors Committee, which plays a role in inter-jurisdictional co-operation on species at risk.

- Some partners and stakeholders indicated that despite these mechanisms, there is need for more jurisdictional-level coordination. Stakeholders who were surveyed as part of the evaluation viewed F/P/T coordination as an important area for improvement, especially around the protection of species. Several key informants noted the lack of an active role for the Canadian Endangered Species Conservation Council.

Key informants and case studies highlighted many examples of positive and productive collaboration with Indigenous peoples around recovery planning and implementation. The PCA Night Birds Returning project, for example, was based on a successful collaboration between PCA and the Haida Nation. It involved collaboration with the Archipelago Management Board which includes representatives from the Government of Canada and Haida Nation, as well as engagement with the local Haida people. However, internal key informants also noted that Duty to Consult processes with Indigenous peoples whose rights may be infringed by SARA implementation can sometimes be complex and protracted. It can be challenging due to lack of trust, limited experience in considering IK and limited community capacity to participate in consultations, document reviews and planning processes. The use of contribution funding to support the participation of Indigenous peoples in the SAR Program was seen by key informants as critical for ensuring their effective engagement as partners in SARA implementation.

With respect to landowners, most surveyed partners and stakeholders (12 of 15) who indicated that the management of their property was impacted by federal legal or other protections for species at risk and their critical habitat reported that they understand their responsibilities, but noted that they lack time to prepare for compliance.

4.5 Implementation of priority recovery actions

Findings: Funding programs have been the key vehicles used by competent departments to support recovery actions and enable partners and stakeholders to undertake recovery actions on the ground. However, the current programs are already over-subscribed, and departments are just beginning to undertake work in this area.

The [Preamble to SARA](#) states that “the conservation efforts of individual Canadians and communities should be encouraged and supported, [and] stewardship activities contributing to the conservation of wildlife species and their habitat should be supported to prevent species from becoming at risk”. Funding programs for at-risk species are administered by ECCC and DFO, as identified in Table 7, and co-managed by the three competent departments³⁰, to foster action on the ground and engagement of partners for species recovery.

Key informants and stakeholders were generally satisfied with the delivery of the funding programs and indicated that the importance of these programs will increase as more action plans are approved. The case studies highlighted the need for this resource. They identified that action plans for the South of the Divide and Ausable and Sydenham Rivers will require significant and long-term funding to implement recovery actions in these vast and complex ecosystems.

In addition, funding programs appear to be considerably over-subscribed. There are circumstances in which a project may not be funded or not fully funded, such as projects that did not meet the objectives of the program or those that were able to acquire some funding from another source. However, the amount of over-subscription indicates that there is an increasing demand to engage in projects to support the implementation of the SAR Program.

The previous evaluation of the Habitat Stewardship Program (HSP) indicated that funded projects are achieving intended habitat protection, restoration and threat mitigation and education results. Similarly, the current administrative data, file review and case studies provided examples of project activities and impacts on species recovery as a result of project funding (for example, knowledge production, outreach and awareness-raising, habitat improvement and protection and human impact mitigation). The file review confirmed that funded projects are linked to planned recovery actions and often take a multi-species approach.

At PCA, there is direct implementation of activities and action plans to recover at-risk species on lands and water administered by the Agency, and no opportunities for improvements were identified.³¹ As of March 2017, PCA had completed 10 final multi-species action plans, which will address 93 EET species and cover a significant number of the PCA sites. Funds from the internal Conservation and Restoration Program, which includes SAR Program funds, are used to supplement recovery actions on the ground. A number of examples of successful recovery actions have resulted

³⁰ With respect to funding programs, PCA participates in the review and approval of project submissions as a member of the National Steering Committee and encourages partners, stakeholders and other federal departments to submit projects.

³¹ Unlike ECCC, PCA is in total control of its land base to deliver on implementation.

from internally funded projects (for example, restoration of Garry oak habitats supporting multiple species at risk and Gulf Islands and Pacific Rim sand dune restorations to protect threatened plant species). The case study of the Night Birds Returning project found that the initiative featured the implementation of an innovative conservation method (ground-based and aerial eradication of invasive rats) in a park setting, which resulted in the early stage recovery of native seabird species and restoration of ecological balance.

Table 7: overview of species at risk funding programs, FY 2011 to 2012 to FY 2015 to 2016

Description	Habitat Stewardship Program (SAR Stream)	Aboriginal Fund for Species at Risk (SAR Stream)	Species at Risk Partnerships on Agricultural Lands	Interdepartmental Recovery Fund
Lead department	ECCC	ECCC and DFO	ECCC	ECCC
Eligible recipients	NGOs, Indigenous organizations and communities, individuals, private corporations and businesses and P/T governments	Indigenous organizations and communities	Agricultural industry	Federal departments other than the three competent departments under SARA, agencies and crown corporations
Program objective	Contribute to the recovery of endangered, threatened and other species at risk and prevent other species from becoming a conservation concern	Support Indigenous organizations and communities in building their ability to participate in the protection and recovery of species at risk, preventing species from becoming a conservation concern and recovering and protecting important habitat on Indigenous lands and waters	Manage and enhance habitat for the benefit of at-risk species	Implement recovery activities and surveys for listed species
Eligible lands	Private lands, provincial Crown lands, Indigenous lands or in aquatic and marine areas across Canada	Indigenous lands and waters	Agricultural landscapes	Federal lands (including waters) or, when on other lands, must be activities conducted under the mandate of the federal organization requesting funding.
Number of projects proposed	981	530	-	207
Total funding requested (in millions)	\$71.1	\$29.9	-	\$7.8
Total funding provided (in millions)	\$57.6	\$16.9	\$3.8	\$5.1
Number of projects funded	898	416	22	151
Over-subscription (funds requested/funds provided)	\$1.23	\$1.77	N/A	\$1.53

4.6 Increased capacity to implement priority recovery actions

Findings: The capacity of partners, including Indigenous peoples, and stakeholders has increased to some degree, particularly due to funding and engagement provided through funding programs. However, greater capacity is needed, particularly among Indigenous peoples, to implement substantive recovery actions moving forward.

The implementation of actions (other than protection, where SARA is brought directly into force) is the responsibility of the management jurisdiction or organization for a particular species. Other than the stewardship funds, which are intended to be seed money to provide an incentive for action, not to fund implementation in general, the SAR Program budget was never intended to be used for the implementation of recovery actions.

Most external key informants indicated that capacity to implement recovery actions has increased over time and the funding programs were effective to build capacity and experience for SAR Program implementation. External stakeholders particularly mentioned HSP as having slowly improved capacity over time. However, provincial, territorial and industry interviewees still identified capacity challenges to implement current and upcoming recovery actions, because of the complexity of SARA and the anticipated volume of information and recovery actions.

With respect to capacity of Indigenous peoples to implement priority actions, AFSAR and other internal funds within PCA have provided support to build capacity for species recovery and foster engagement in the recovery process. A number of positive examples exist, such as the James Bay Cree work on migratory birds and Haida Nation work on the return of night birds to British Columbian islands. Despite these positive examples, internal and external key informants also noted that capacity-building through AFSAR has limitations. The fund is over-subscribed, the range of participants has not expanded significantly and there are barriers to applying for funding for Indigenous communities, including the need to bring matching funds. Indigenous key informants also noted that the funding programs are too species-specific, underfunded, short-term, and process-heavy to be of broader value to them. A more holistic approach to funding is desired, which would tie into broader community needs.

4.7 Recovery activities are on track to reach conservation goals

Findings: Some mechanisms for monitoring the conservation status of species are in place to track and publicly post progress on species recovery. However, capacity is lacking to monitor all listed species and to quantify the effectiveness of recovery actions. Geographic mapping capabilities at DFO and PCA show promise for enhanced monitoring. As to whether recovery activities are on track, FSDS indicators show that population trends are clearly consistent with population objectives for about one third of the species examined.

There are diverging views on whether there is a requirement under SARA to monitor all listed species, or to monitor and report only on the implementation of recovery strategies, action plans

and management plans. This is distinct from the biological monitoring of the species themselves, which some argue is the responsibility of the jurisdiction or organization that manages the species.

In the view of key informants, there are not enough resources to adequately monitor all species at risk and assess the effectiveness of recovery strategies. Because the program has focused efforts on recovery planning, the monitoring stage of the conservation cycle has so far been less of a priority. Recovery strategy progress reports are a required element of SARA to assess the implementation of recovery actions and progress towards meeting objectives, but have been slow to be produced, particularly at ECCC.

From a data perspective, national-level geographical mapping of terrestrial at-risk species and their critical habitat was mentioned by a few interviewees as being a desirable improvement to assist with decision making. At DFO, a National Species at Risk Mapping Tool has been developed and is currently in use internally to support program decisions such as permitting. Externally, static maps are available that display spatially referenced data of aquatic SARA listed species, allowing stakeholders to more easily locate the range and distribution of at-risk species, habitat and residences in their project areas. This data can be used to assess the potential impacts of works, undertakings and activities, project reviews and the issuing of permits. At PCA, the Information Centre on Ecosystems database stores monitoring data for all species on federally protected lands that are managed by PCA. The ArcGIS management platform is used as a mapping tool for critical habitat.

There is some tracking of progress towards meeting individual species conservation goals through the FSDS. FSDS indicators published in May 2016 show, for instance, that of the 123 recovery strategies that had population-oriented objectives and had been re-assessed by COSEWIC, 43 species (35%) had population trends clearly consistent with objectives, whereas 46 species (37%) had population trends that were inconsistent with objectives. Additionally, 11 species (9%) had mixed evidence and 23 species (19%) had insufficient data.

4.8 Species at risk are recovered

Findings: Most species appear to remain at the same listing status after 10 years as recovery can be a decades-long process. However, reassessment of species shows some improvement for a minority of listed species.

COSEWIC reassessments of 447 listed and non-listed species after 10 years, as of May 2016, show that many species (65%) remain at the same listing status, 16% of species have improved their listing status, 6% have been reassessed as no longer at risk, and 19% of species have been reassessed at a higher risk category (see Table 8). Note that stability in listing status may mask a halt in decline, improvement or deterioration in the species population that is not sufficiently significant to trigger a change in status.

A similar analysis, which focused only on listed species as of December 2013, is less encouraging: of the 369 listed species included in the analysis, 55% saw no change, 31% had worsened, and 14% of species saw an improvement in listing status, with 5% being assessed as no longer at risk.³² The study also found no relationship between listing and species recovery, and between species recovery and the number of generations since listing. The authors suggest that lack of progress on species recovery may be due to a lack of full implementation of the law.

Key informants acknowledge that recovery can be a decades-long process, particularly for species with slow reproduction rates. As a result, requiring sustained recovery actions are needed by multiple jurisdictions over an extended period of time. Still, they cited many examples of species where improvements in populations and distribution have been observed, including the striped bass and Humpback whale (North Pacific population), as well as initial improvements in some populations of the Western Chorus Frog, the Sage Grouse, Blanding's Turtle, and the Piping Plover. In the case study of the Night Birds Returning project, for example, while restoration efforts have been successful, impacts on the night birds (Ancient Murrelets) are not yet evident, since they were eradicated from the islands and have to re-colonize. However, there are early recovery signs from acoustic monitoring data and indicators that other seabirds are already recovering (for example, higher fledging success rates and an increased number of nests) and other short-lived species are rebounding (for example, shrews).

Table 8: changes to risk of wildlife species disappearance from Canada, taken from COSEWIC 10-year reassessment results as of May 2016 (all species reassessed) and as of December 2013 (listed species only)

As of May 2016, all species reassessed by COSEWIC	Status change based on 10-Year assessment of listed and non-listed species			
	Higher risk	No change	Lower risk	Total
Extirpated and extinct	1	29	0	30
Endangered	45	127	1	173
Threatened	33	48	16	97
Special concern	7	74	30	111
Not at risk	0	11	25	36
Total (species)	86 (19%)	289 (65%)	72 (16%)	447
Favaro et al., as of December 2013, listed species reassessed by COSEWIC	115 (31%)	202 (55%)	52 (14%)	369

Source: [Changes in Wildlife Species Disappearance Risks](#)

³² Favaro, B, D. Claar, C. Fox, C. Freshwater, J. Holden, A. Roberts. [Trends in Extinction Risk for Imperiled Species in Canada](#), November 2014.

4.9 Other considerations

Findings: A negative unintended outcome of the Act and the SAR Program is the potential for a challenging burden on Indigenous communities for recovery of at-risk species.

Key informants noted that the challenge of balancing protection of at-risk species on reserve lands with social and economic development within Indigenous communities is an important unintended outcome of the SAR Program and the Act itself. For reserves that are hot spots for listed species and under the authority of SARA and other federal Acts (for example, [First Nations Land Management Act](#)), there is the potential for Indigenous communities to be expected to assume the responsibility for species recovery, at the expense of advancing their other social and economic interests, particularly if SARA protection measures are not applied concurrently with those on non-federal lands. While socio-economic factors are taken into consideration by the Governor in council as part of the listing process, information on these types of impacts on individual Indigenous communities is frequently unavailable.

5. Conclusions, recommendations and management response

5.1 Conclusions

During the evaluation period, there have been important strides in the implementation of the SAR Program, including for example, the development of a complementary draft policy suite for SARA, dedicated resources and attention to address the backlog of recovery strategies, and protection of at-risk species in federally protected areas by the three competent departments. Operationally, the competent departments have developed and increased the use of templates for key program outputs. As well, the use of multi-species or ecosystem-based approaches is widely supported.

While program activities further the overall goals of SARA, there remains a significant gap between resources available to the program and the requirements of the Act. Moreover, given the cumulative workload (due to the fact that listing of species triggers a cascade of downstream deliverables and actions) and the limited activity that has taken place to protect species on federal and non-federal lands to date, it continues to be a challenge to meet the requirements of the Act throughout the SAR cycle.

Relevance

The evaluation confirmed that there is a continued need for the program to protect biodiversity, which research has shown to be critical to overall environmental sustainability, as well as having other social and economic benefits. The SAR Program is aligned with federal priorities as outlined in recent federal statements and Ministers' mandate letters, and is responsible for implementing the requirements under SARA. While at-risk species are an area of shared jurisdiction, the federal government is responsible for migratory birds, aquatic species and all other listed species on federal lands. In addition, the Act identifies that provincial and territorial governments are responsible for the protection of all listed species on non-federal lands. If provincial and territorial laws do not effectively protect the species or residences, the federal government is responsible to act as a "safety net" for the protection of these listed species. While there are bilateral agreements in place between the federal government and some provinces, the protection of species on non-federal lands is uneven across Canada, with a patchwork of legislation and strategies. F/P/T efforts appear to be uncoordinated by some stakeholders.

Efficiency

The elements for the delivery of the SAR Program are generally perceived to be in place, although the full implementation of the program and legislative compliance are hampered by limited resources. Governance of the program appears to be effective, with a DG-level committee involved in the management and oversight of the SAR Program. There is also evidence of relationships at the working level.

An analysis of program expenditures indicates that ECCC and DFO have fully spent their SAR Program budget allocation. Delays in staffing positions involved in federal protected land

management has led to underspending at PCA. Past inefficiencies in delivery are being addressed by streamlining recovery documents and using templates and online consultation approaches. However, during the evaluation period, litigation and the requirement for ECCC and DFO to protect species through labour-intensive emergency protection or other orders were identified as negatively impacting the ability of the program to address other regular priorities.

Collaboration and consultation are significant requirements of SARA. A good example of F/P/T collaboration, particularly at the regional working group level, is co-operation on species research and joint efforts to accelerate the publication of recovery plans through the F/P/T Recovery of Nationally Endangered Wildlife Committee. There were regular (biannual) Ministers' round table discussions and F/P/T meetings convened during the evaluation period. Nevertheless, stakeholders continue to call for greater F/P/T collaboration, particularly to encourage seamless protection of species across federal and non-federal lands. As well, the continued engagement of Indigenous peoples will be a priority for the program in the coming years.

The design of the SAR Program is appropriate for achieving its intended outcomes. No significant alternative approaches to the overall program design were suggested. There is a high degree of support for the direction the SAR Program is taking towards using multi-species or ecosystem-based approaches.

Performance measurement for the program occurs through the separate strategies and logic models for each competent department. This information is combined for SARA Annual Reports.

Achievement of expected results

During the evaluation period, progress towards achieving intended outcomes included:

- **Assessment:** The assessment of at-risk species is based on a rigorous process that is perceived to be well-supported by the competent departments. However, the integration of Indigenous Knowledge (IK) in species assessments is uneven and lacks an adequate framework or protocol to be conducted in a more predictable and effective manner.
- **Protection:** Protection of critical habitat of listed terrestrial and to a lesser degree, aquatic species is occurring in federal protected areas. However, on other federal lands, the requirement for protection of critical habitat (protection assessments, protection statements or orders) is being met only to a limited degree. The federal government has issued emergency protection orders for two species where the Minister of Environment and Climate Change found that there was an imminent threat to the survival or recovery of the species. The Act also identifies conservation agreements as a non-regulatory tool which can be used in certain conditions. However, to date, there has been a limited use of this tool.
- **Recovery planning:** Backlogs in the development of recovery planning documents at ECCC and DFO have been addressed through dedicated resources and attention. The success in addressing the recovery planning backlog will create new pressure on the next recovery planning step, namely the development and publishing of action plans. During the evaluation

period, action plans were published by PCA and, to a limited extent, by ECCC and DFO. A number of the published plans feature a multi-species or ecosystem-based approach. While there appeared to have been an increase in understanding among partners of the objectives of species conservation through recovery planning, there was a perceived lack of understanding for those not involved with program delivery at the national level.

- **Implementation.** Primarily, grants and contributions (G&C) are being used to support recovery activities by partners and stakeholders, although funding for operations and maintenance (O&M) can also be used. While capacity and implementation of recovery actions have increased, the G&C programs are viewed as underfunded. In some cases, they may require greater flexibility to direct funds to address capacity issues and better support multi-species/ecosystem-based approaches.
- **Monitoring and evaluation:** Some required reporting is occurring through SARA Annual Reports, and there are some monitoring mechanisms in place to track and publicly post the progress on the conservation status of species. However, resource constraints negatively impact the ability to adequately monitor all listed species, as well as the ability of the program to quantify the effectiveness of recovery actions.

The SAR Program's end goal is the recovery of species. It is acknowledged, however, that the process to reach this long-term objective can take decades for some species. According to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessments, 10 years after listing, most species (65%) remain at the same listing status. However for 16% of assessed species, there is evidence of progress towards meeting objectives and 6% are no longer at risk.

A negative unintended result of the program has been to introduce challenges in balancing community infrastructure and economic development activities with conservation outcomes on [Indian Act](#) reserve lands. Moreover, reserves are often considered 'hot spots' for at-risk species and their habitat. There are, however, opportunities for working cooperatively and collaboratively under SARA, including the use of section 11 on conservation agreements or section 10 on administrative agreements.

5.2 Recommendations and management response

Based on the nature of this evaluation, which focused on the overall SAR Program, and the varying responsibilities of the three competent departments, the recommendations reflect observations that were common to all or most federal partners. As such, the recommendations are broadly worded. They generally apply across the three departments, but the management responses specify the actions each applicable federal partner can take to best contribute to addressing each recommendation.

The following recommendations are directed to the Assistant Deputy Minister (ADM) of the Canadian Wildlife Service (ECCC), the ADM of Aquatic Ecosystems (DFO) and the Vice-President

(VP) of Protected Areas Establishment and Conservation (PCA). They agree with the recommendations and have developed management responses that appropriately address them.

Recommendation 1

<p>Recommendation 1: take steps to address the backlog that is developing related to commitments for publishing action plans and accumulating protection requirements for critical habitat for federal species and species on federal lands (SARA section 58).</p>		
<p>The large number of recovery strategies finalized over the past six years suggests a potentially increasing bottleneck for developing associated action plans for species on federal lands and for the mandatory legal protection of critical habitat for federal species anywhere and on all critical habitats on federal lands. Between April 2011 and March 2017, at ECCC and DFO, several final action plans were overdue (for 59 species and 30 species, respectively), though far fewer were still overdue as of March 31, 2017. PCA is responsible for completing action plans for species occurring on Agency-administered lands. The Agency has taken a multi-species site-based approach, prioritizing sites with more than three species at risk; action plans for sites with fewer species occurrences remain outstanding. In this same timeframe, protection of critical habitat on other federal lands was overdue for 50 species at ECCC, 20 species at DFO and 30 species at PCA. The success of the competent departments in addressing the backlog of recovery strategies during the period under study has provided some approaches that could be used to streamline other steps in the conservation cycle, while continuing to maintain high levels of quality and consultation with stakeholders. In some cases, ecosystem and multi-species recovery strategies and action plans and lessons learned about streamlined processes could contribute to resolving backlogs.</p>		
<p>Statement of agreement or disagreement</p>		
<p>The Assistant Deputy Minister (ADM) of the Canadian Wildlife Service (ECCC), the ADM of Aquatic Ecosystems (DFO) and the Vice-President (VP) of Protected Areas Establishment and Conservation (PCA) agree with the recommendation.</p>		
<p>Management response</p>		
<p>The Departments and the Agency will move forward with action planning and protection, in line with the strategic direction and priorities set out in the Natural Legacy for Canada initiative proposed in Budget 2018, including advancement of multi-species, ecosystem approaches for priority places, species, threats and sectors, where applicable.</p>		
<p>Deliverables</p>	<p>Timeline</p>	<p>Responsible party</p>
<p>ECCC, DFO and PCA will identify priority areas, threats and species and adopt multi-species, ecosystem-based approaches to guide SARA implementation efforts in line with the Natural Legacy initiative. The development of action plans will reflect this prioritization.</p>	<p>April 1, 2019</p>	<p>ADM-CWS (ECCC), VP-PAEC (PCA) and ADM-AE (DFO)</p>

ECCC, in co-operation with PCA, will develop a plan to achieve compliance with critical habitat protection obligations for terrestrial species on federally administered lands.	April 1, 2019	ADM-CWS (ECCC) and VP-PAEC (PCA)
In co-operation and consultation with First Nations and Crown-Indigenous Relations and Northern Affairs, ECCC will develop an approach to achieving conservation outcomes on First Nations reserves, including through the use of co-operation agreements and/or administrative arrangements that, for example, could recognize environmental management regimes under the First Nations Land Management Act .	December 31, 2019	ADM-CWS (ECCC)
In support of the Natural Legacy initiative, DFO will identify aquatic species at risk priorities for the implementation of recovery in collaboration with stakeholders and Indigenous peoples.	April 1, 2019	ADM-AE (DFO)

Recommendation 2

Recommendation 2: seek ways to enhance (a) the effectiveness of consultation and engagement of Indigenous peoples in the conservation and protection of at-risk species and (b) the integration of available Indigenous Knowledge (IK) into species assessment and recovery planning.

Given the interest of Indigenous peoples in species conservation and protection, and the federal government’s commitment to renewed nation-to-nation relationships, the importance of partnering with Indigenous peoples in SAR conservation will continue to be significant. Although there have been examples of productive collaboration with Indigenous peoples on recovery planning and implementation, the evaluation suggests several areas for improvement: investments to increase the capacity of Indigenous peoples to participate effectively throughout the SAR conservation cycle; establishment of a strategy or framework for better integration of IK in species assessment and recovery (given that COSEWIC gathered or referred to IK for only 24 of 366 species assessed); and building internal program capacity and support for consultation and co-operation requirements (including the constitutional Duty to Consult and Accommodate) across all stages of the SAR cycle.

Statement of agreement or disagreement

The Assistant Deputy Minister (ADM) of the Canadian Wildlife Service (ECCC), the ADM of Aquatic Ecosystems (DFO) and the Vice-President (VP) of Protected Areas Establishment and Conservation (PCA) agree with the recommendation.

Management response		
<p>The Departments and the Agency recognize the value of building internal and Indigenous capacity, to better meet SARA’s consultation and co-operation obligations across the program cycle (assessment, listing, recovery, protection, permitting and reporting). An important part of this is supporting Indigenous peoples in achieving capacity to participate meaningfully in SARA implementation. ECCC, in co-operation with DFO and PCA, will enhance its efforts in this regard, as set out in the Natural Legacy initiative. Many PCA places are managed with Indigenous Cooperative Management Boards. PCA will continue to work collaboratively with Indigenous representatives on the management of species at risk in protected heritage places. PCA also regularly consults on multi-species action plans and will continue this best practice. DFO will augment existing programming related to Indigenous partnering in species conservation through further investments in capacity building. DFO will also facilitate the involvement of Indigenous groups in recovery implementation efforts in priority areas, for priority species and with respect to priority threats. ECCC will lead engagement with the recently re-established National Aboriginal Council for Species at Risk (NACOSAR) and bilateral committees in place or to be created with each of the three National Indigenous Organizations, to ensure that initiatives are aligned with the needs and interests of Indigenous communities. A key objective will be to work towards ensuring that species at risk are protected on Indigenous lands considered as federal lands under SARA, including self-administered arrangements where First Nations agree.</p> <p>The conservation and recovery of species at risk depend on having the best available science, traditional and local knowledge and information on species when the status of species is assessed and as recovery and action plans for a species are articulated. COSEWIC, via the Aboriginal Traditional Knowledge Sub-Committee, prepares annual work plans that articulate priorities related to IK gathering. The Departments and the Agency will work with Indigenous peoples to discuss how IK can be better incorporated into all processes under SARA.</p>		
Deliverables	Timeline	Responsible party
NACOSAR re-established and meetings reconvened.	December 2018	ADM-CWS (ECCC)
Building on the model of the First Nations Advisory Council on Species at Risk (FNACSAR), additional bilateral committees established with National Indigenous Organizations, as needed.	March 31, 2019	ADM-CWS (ECCC)
Guidance and tools for CWS staff outlining a nationally consistent approach for meeting SARA engagement and consultation obligations more effectively with available resources and in line with the Natural Legacy priorities.	March 2020	ADM-CWS (ECCC)

Recommendation 3

Recommendation 3: clarify and communicate to stakeholders the role and use of non-regulatory tools in supporting conservation outcomes for at-risk species, including the related resource requirements.

There are potential non-regulatory tools (for example, conservation agreements mentioned in SARA or other alternatives such as land use management plans and certification mechanisms) that could contribute to the conservation outcomes for species. To date, these instruments have been challenging to negotiate, although there is significant interest among partners and stakeholders. These tools, if appropriate and resourced, could provide effective incentive-based alternatives to regulatory protections that are more easily tailored to the needs of the species in a specific situation.

Statement of agreement or disagreement

The Assistant Deputy Minister (ADM) of the Canadian Wildlife Service (ECCC), the ADM of Aquatic Ecosystems (DFO) and the Vice-President (VP) of Protected Areas Establishment and Conservation (PCA) agree with the recommendation.

Management response

The Departments and the Agency recognize that non-regulatory tools provide opportunities to generate conservation outcomes. Agreements and stewardship funding initiatives have been in use for many years with organizations and landowners, for the conservation and recovery of species at risk. To date, ECCC has signed over 40 section 11 conservation agreements with either First Nations or agricultural producers. ECCC will consider lessons learned from these agreements as additional agreements are advanced. In addition, policy statements and guidance materials will be completed to guide decision making and implementation of approaches related to the use of certification programs, codes of practice and other alternative measures to achieve conservation outcomes. DFO will continue to pursue the use of non-regulatory tools to advance conservation and recovery objectives.

Progress in developing additional agreements for some specific purposes depends on the availability of appropriate financing. In this regard, Budget 2018 highlighted the government's commitment to a Nature Fund, which supports partnerships with corporate, not-for profit, provincial, territorial and other partners. Among its goals, the Fund will make it possible to secure private land, support protection of species at risk and their critical habitat on other non-federal lands, and help build Indigenous capacity to conserve land and species.

Deliverables	Timeline	Responsible party
Establish an implementation plan for the Nature Fund, aimed at delivering conservation outcomes through stewardship actions focused on priority places, species and threats.	March 2019	ADM-CWS (ECCC) and VP-PAEC (PCA)
DFO will assess best practices and policy approaches, to determine applicability in the context of aquatic species.	March 31, 2019	ADM-AE (DFO)

Recommendation 4

<p>Recommendation 4: address the capacity challenges to support the Species at Risk Program in meeting its legislated requirements.</p>		
<p>The evaluation findings demonstrate that resource constraints are having an adverse impact on the SAR Program’s capacity to meet its legislated requirements and make progress towards achieving its intended outcomes. While program resources have remained stable over the last decade, the total number of listed species has grown from 425 in FY 2007 to 2008 to 526 in FY 2016 to 2017, and will continue to grow, creating challenges for the program’s ability to comply with its legislated requirements and respond to associated litigation. Moreover, the need to support consultation and collaboration with Indigenous peoples in a manner compatible with the federal government’s reconciliation and nation-to-nation mandate places further strain on resources. In light of these challenges, the Departments and the Agency must take steps to ensure that resources are used most efficiently and effectively to address capacity issues.</p>		
<p>Statement of agreement or disagreement</p>		
<p>The Assistant Deputy Minister (ADM) of the Canadian Wildlife Service (ECCC), the ADM of Aquatic Ecosystems (DFO) and the Vice-President (VP) of Protected Areas Establishment and Conservation (PCA) agree with the recommendation.</p>		
<p>Management response</p>		
<p>On February 27, 2018, the Government of Canada announced funding of \$1.3 billion over five years to support Canada’s biodiversity and protect species at risk. Implementation plans will be developed to ensure that capacity challenges are addressed to the extent possible, with particular emphasis placed on achieving conservation outcomes related to priority areas, threats and species. Additional capacity will also be invested in core functions required to maintain compliance with legislative and regulatory requirements, including to support consultation and co-operation with Indigenous peoples.</p>		
Deliverables	Timeline	Responsible party
<p>Implementation plans established for Budget 2018, including plans for delivery of SARA outcomes through the strategic approach set out in the Natural Legacy initiative and focused on priority places, species and threats.</p>	<p>March 2019</p>	<p>ADM-CWS (ECCC), VP-PAEC (PCA) and ADM-AE (DFO)</p>

Appendix A: program description

In Canada, more than 520 plant and animal species at risk are listed under the [Species at Risk Act](#) (SARA). Plants, animals and microorganisms are essential to the natural processes that keep the Earth's atmosphere, climate, landscape and water in balance. They help ensure our health and economic prosperity, now and for the future. The Government of Canada introduced SARA to protect endangered and threatened species.

Legislative background

In 1992, Canada became a signatory to the United Nations Convention on Biological Diversity (CBD), which committed the federal government to “[conserve] biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources”³³. Coordinated action on the conservation of at-risk species in Canada began in 1996 with the federal/provincial/territorial (F/P/T) Accord for the Protection of Species at Risk to prevent species in Canada from becoming extinct³⁴ as a consequence of human activity.

The federal [Species at Risk Act](#) was enacted in 2002 and came fully into force in 2004, providing legal protection for listed species and their critical habitat. The purposes of the Act are to prevent Canadian indigenous species, subspecies and distinct populations from becoming extirpated or extinct, to provide for the recovery of endangered or threatened species, and to manage species of special concern to prevent them from becoming endangered or threatened. While the Act pertains to all listed wildlife species, key areas of federal jurisdiction and responsibility include migratory birds protected by the [Migratory Birds Convention Act, 1994](#), aquatic species wherever they occur, and all other species on federal and non-federal lands.³⁵

The Act establishes a process for conducting scientific assessments of the status of individual wildlife species and a mechanism for listing species as extirpated, endangered, threatened, or special concern. SARA also includes provisions for the protection, recovery, and management of listed wildlife species and their critical habitat.

For listed species other than aquatic species, migratory birds and species on federal land, the provinces and territories have the responsibility to provide effective protection. If a province or territory does not provide effective protection, the Governor in Council (GiC) may order, on the recommendation of the Minister of Environment and Climate Change, that SARA general prohibitions be applied for a given species in a province or territory. These prohibitions include

³³ [United Nations Convention on Biological Diversity, Article 1: Objectives](#). 1992.

³⁴ Species at risk are listed in one of five categories: extinct: a wildlife species that no longer exists; extirpated: no longer exists in the wild in Canada, but exists elsewhere in the wild; endangered: faces imminent extirpation or extinction; threatened: likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction; and special-concern: may become threatened or endangered because of a combination of biological characteristics and identified threats.

³⁵ Federal lands include, among others: federal protected areas (for example, national parks, national wildlife areas, some migratory bird sanctuaries, etc.); Prairie Farm Rehabilitation Administration pastures; First Nations reserve lands; and military training areas.

section 61 (destruction of critical habitat), and sections 32 and 33 of SARA, which make it an offence to:

- kill, harm, harass, capture or take an individual of a species that is listed as extirpated, endangered or threatened
- possess, collect, buy, sell or trade an individual of a species that is listed as extirpated, endangered or threatened, or any of its parts or derivatives
- damage or destroy the residence of one or more individuals of a species that is listed as endangered or threatened, or of a species listed as extirpated if a recovery strategy has recommended its reintroduction into the wild in Canada

Program overview

The implementation of SARA through the Species at Risk (SAR) Program is a shared responsibility of ECCC, DFO, and PCA, collectively referred to as the competent departments.

The responsibilities of each of the competent departments are as follows:

- ECCC has lead responsibility for administration of the Act and is responsible for all terrestrial species at risk on federal lands (other than those on PCA's land) and non-federal lands, as well as the protection of migratory birds anywhere they are found in Canada.
- DFO is responsible for aquatic species at risk wherever they occur in Canada (except when individuals of a species are within waters managed by PCA).
- PCA is responsible for species in or on federal lands and waters under the administration of the Agency (that is, national parks, national park reserves, national historic sites, national marine conservation areas, and other protected heritage areas as defined under the [Parks Canada Agency Act](#)).

Governance and management

Overarching governance structures

The Minister of Environment and Climate Change has overall lead responsibility for the administration of SARA, in co-operation with the Minister of Fisheries, Oceans and the Canadian Coast Guard and the Minister responsible for the Parks Canada Agency (currently the Minister of Environment and Climate Change). Federal coordinating structures include:

- The Assistant Deputy Ministers (ADM) Committee, which includes one official representative from each competent department, is responsible for the overall management of SARA implementation.

- The Director General (DG) Operations Committee, which comprises DG-level managers from the competent departments, is chaired by the ADM of ECCC's Canadian Wildlife Service. The Committee makes decisions with respect to operational issues and provides advice on program direction to the ADM Committee.

In addition to these horizontal committees, competent departments establish internal Director-level coordinating committees and working groups as necessary. There is also a strong presence of field staff in the regions supporting the SAR Program within each of the competent departments. The staff is responsible for leading many of the recovery activities, including engagement with local partners, Indigenous communities, and stakeholders. Regional staff also lead on and/or contribute to advice regarding the listing of a species under SARA.

Advisory and supporting structures

In addition to internal governance structures, there are a number of groups that play a supporting or advisory role in the administration of the Act. While not active during the period under study, the Canadian Endangered Species Conservation Council (CESCC)³⁶ is to provide national leadership for the protection of species at risk, including the provision of general direction to the Committee on the Status of Endangered Wildlife in Canada on activities and general directions in respect of the development, coordination and implementation of recovery efforts.

There are three advisory bodies to guide the implementation of the Act:

- The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is an independent body identified in SARA that the national status of wild Canadian species, subspecies, varieties or other designatable units that are suspected of being at risk of extinction or extirpation. COSEWIC uses a process based on science and Indigenous Knowledge (IK) or community knowledge to assess wildlife species at risk.
- The National Aboriginal Council on Species at Risk (NACOSAR), created under section 8.1 of SARA, is composed of representatives of Indigenous peoples in Canada. The mandate of this council is to advise the Minister of Environment and Climate Change on the administration of the Act and to provide advice and recommendations to the CESCC.
- The Species at Risk Advisory Committee (SARAC) is enabled by section 9.1 of SARA. This informal advisory committee provides advice to government officials on the implementation of SARA. It consists of 30 members drawn from non-governmental bodies, industry, and other parties.

³⁶ The Canadian Endangered Species Conservation Council (CESCC) was formed under the Accord for the Protection of Species at Risk in Canada. The Council is composed of federal, provincial and territorial ministers with responsibilities for wildlife species.

While not designated within the Act, F/P/T Ministers' Meetings on Conservation, Wildlife and Biodiversity are also convened periodically for joint planning work on stewardship and protection of species at risk.

Program activities

The SAR Program includes a range of interconnected activities to support the implementation of SARA.

Assessment

COSEWIC evaluates the national conservation status of wildlife species based on the best available scientific knowledge and IK or community knowledge. Competent departments support the assessment process which determines if a species is currently or becoming “at risk”. Competent departments provide monitoring and assessment information to support this assessment process and ECCC provides secretariat support to the committee. COSEWIC designates the species’s status as EET, of special concern, or not at risk. Within 90 days of the COSEWIC report, SARA requires the Minister of Environment and Climate Change to publish a report on the Species at Risk Public Registry indicating the intended responses to be provided by the competent departments to the assessment and, to the extent possible, timelines for action. As specified in the Act, following a period of consultation and analysis, the Minister of Environment and Climate Change forwards the assessment and its recommendation to the Governor in Council, who may accept the assessment and add the species to the SARA Schedule 1 of listed species or decide not to add the species to the list; or refer the matter back to COSEWIC for further information or consideration (section 27).³⁷

Protection

Typically, protection begins under SARA once a species is added to Schedule 1 of the Act. Upon listing, there are automatic prohibitions protecting individuals and their residences for listed aquatic species, migratory birds anywhere they are found in Canada, and for listed (EET only) terrestrial³⁸ species when they occur on federal lands. Provinces and territories have the primary responsibility to protect listed species that are not aquatic or migratory birds, and their identified critical habitat, on provincial, territorial and private land. However, SARA states that the Minister is required to recommend that the Governor in Council put in place an order to protect a species if the laws of a province or territory do not effectively provide protection for listed terrestrial species.³⁹

SARA also provides authority to protect critical habitat, that is, the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species’ critical habitat in

³⁷ The Act establishes Schedule 1 as the official list of wildlife species at risk which receive legal protection under SARA. It classifies those species as being extirpated, endangered, threatened, or a special concern.

³⁸ “Terrestrial species” means all wildlife species that are migratory birds that are protected under the [Migratory Birds Convention Act, 1994](#) (MBCA) as well as all species that are managed by provincial and territorial governments. This includes birds that are not protected under the MBCA and species such as mammals, reptiles, amphibians, terrestrial molluscs, plants and insects. Source: ECCC. [Terrestrial Species at Risk: proposed listing policy](#). 2016.

³⁹ Canada. ECCC. [Species at Risk Act – Annual Report for 2015](#).

the recovery strategy or action plan. SARA provides competent ministers with several tools to establish legal protection of critical habitat. One or a combination of the following tools could be used, depending on the type of species (aquatic, terrestrial, migratory bird) and the location of the critical habitat (in a federal protected area, on other federal lands, or non-federal lands):

- publication of a description in Canada Gazette Part I as per specific lands identified under SARA sections 58(2 and 3)⁴⁰
- publication of a Critical Habitat Order in Canada Gazette Part II under SARA sections 58(4 and 5), 59(1 and 2) and 61(4)
- publication of an Emergency Order to protect habitat in Canada Gazette Part II under SARA section 80
- publication of a Protection Statement in the SAR Registry as a result of using provisions in, or measures under, SARA (such as sections 53 or 59 regulations, a section 61 order on non-federal lands, and agreements under section 11 of SARA) or any other Act of Parliament.

Critical habitat can also be protected through provincial laws (on non-federal land) or stewardship measures (for example, on private lands).

Recovery planning

The requirement for recovery planning starts once a species is listed under SARA. A recovery strategy and one or more action plans are required for EET species; and a management plan is required for species of special concern. Part of the recovery planning step is the identification of critical habitat. If critical habitat is not identified or only partially identified in a recovery strategy, it must then be identified in an action plan. Competent departments must post a recovery strategy or management plan within legislated timelines (within one to three years), dependent on when the species was listed on Schedule 1 of SARA, and the status of the species on the list. The timeline for the completion of action plans is variable and set out in the species recovery strategy.

⁴⁰ A national park of Canada listed in Schedule 1 of the [Canada National Parks Act](#) (Administered by PCA); the Rouge National Urban Park established by the [Rouge National Urban Park Act](#) (Administered by PCA); a marine protected area under the [Oceans Act](#) (Administered by DFO); a migratory bird sanctuary under the [Migratory Birds Convention Act, 1994](#) (Administered by ECCC); or a national wildlife area under the [Canada Wildlife Act](#) (Administered by ECCC). Note, however, that DFO publishes statements for aquatic species that occur in National Wildlife Areas and Migratory Bird Sanctuaries, because DFO is responsible for aquatic species in those areas.

Table 9: document timelines for species added to the list of wildlife species (Schedule 1) after June 5, 2003

Document	Definition	Timeline
Recovery strategies for endangered species	Identify goals, objectives and approaches to recover endangered species	Within one year, as per SARA
Recovery strategies for threatened or extirpated species	Identify goals, objectives and approaches to recover threatened or extirpated species	Within two years, as per SARA
Management plans for species of special concern	Include measures for the conservation of species of special concern and their habitat	Within three years, as per SARA
Action plans	Identify the measures to take to implement the recovery strategy for threatened, endangered and extirpated species	As set out in the recovery strategy

Implementation

Implementation is the stage where priority actions identified in recovery strategies, management plans and action plans are carried out to improve the conservation status of the species. Implementation of actions can be done by competent departments, where the action is under their jurisdiction. For example, PCA implements priority actions on its lands and DFO implements priority actions and conservation measures for aquatic species. SAR Program and other departmental resources are used to directly and indirectly support implementation, often in collaboration with other responsible jurisdictions, landowners and other partners and stakeholders, where feasible.

To support the implementation, the SAR Program also includes four funding programs that enable individuals, communities, Indigenous peoples, and other federal government departments in Canada to engage in stewardship actions, that is, three Grants and Contributions (G&C) programs – the Habitat Stewardship Program (HSP), the Aboriginal Fund for Species at Risk (AFSAR) and the Species at Risk Partnerships on Agricultural Lands (SARPAL); and one interdepartmental program, the Interdepartmental Recovery Fund (IRF), that uses Memoranda of Understanding (MOUs) to transfer operations and maintenance (O&M) funds between departments.

Monitoring and evaluation

Monitoring is undertaken to report on the overall implementation of SARA, assess changes in the conservation status of species following the implementation of recovery activities, and to track species conservation goals. As part of the Act's reporting and review requirements, the Minister of Environment and Climate Change must, at least every two years, hold a Roundtable on Species at Risk with persons interested in matters respecting the protection of wildlife species at risk in Canada. Finally, evaluations of the implementation of the Act and related activities are conducted to assess if commitments have been met.

Partners and stakeholders

The Act recognizes the importance of working cooperatively with others who have an interest in species at risk and engage in one or more of the conservation steps. Engagement of partners such as Indigenous authorities, communities, groups, wildlife management boards and Nature Serve Conservation Data Centres is integral to the program. Partners also include other federal departments and agencies that are responsible for federal lands that are subject to SARA and provincial and territorial (P/T) governments that are responsible for many listed species whose ranges include provincial, territorial and private lands.

Partners and stakeholders are involved throughout the conservation cycle. Competent departments engage in consultations with directly affected partners, Indigenous peoples and stakeholders as part of the species listing and protection activities; as part of recovery planning and activities; and in support of stewardship activities. Competent departments also consult partners and stakeholders more informally at other stages, such as implementation, monitoring, and evaluation. Additionally, a Species at Risk Public Registry, as required under SARA (section 72), is maintained by the competent departments to facilitate access to documents relating to matters under the Act. The engagement and co-operation of stewards are critical to obtaining desired species at risk results. Partners and stakeholders include, but are not limited to:

- individual Canadians
- landowners and rights holders
- provincial, territorial and municipal governments
- resource industries, such as fisheries, forestry, agriculture, mining, oil and gas and hydroelectricity, and other industries, companies and associations
- environmental non-governmental organizations
- museums (for information and public education)
- zoos (to assist with recovery work)
- universities

Program resources

A summary of the expenditures for the SAR Program for the period from FY 2011 to 2012 to FY 2015 to 2016, by competent department, is provided in Table 10.

The approximate distribution of resources across the three departments is:

- ECCC – 60%
- DFO – 27%
- PCA – 13%

Table 10: Species at Risk Program expenditures, FY 2011 to 2012 to FY 2015 to 2016

Budget lines	FY 2011 to 2012	FY 2012 to 2013	FY 2013 to 2014	FY 2014 to 2015	FY 2015 to 2016	Total FY 2011 to 2012 to FY 2015 to 2016
Environment and Climate Change Canada						
O&M	\$11,846,086	\$10,309,211	\$10,787,474	\$11,351,218	\$10,480,016	\$54,774,005
Salary*	\$19,926,574	\$21,779,012	\$23,995,276	\$25,459,272	\$26,953,222	\$118,113,356
Capital	\$985,543	\$464,606	\$53,138	\$83,392	\$480,477	\$2,067,156
G&C**	\$17,296,469	\$14,883,696	\$17,491,661	\$21,018,359	\$22,722,329	\$93,412,514
Subtotal	\$50,054,672	\$47,436,525	\$52,327,549	\$57,912,241	\$60,636,044	\$268,367,031
Fisheries and Oceans Canada						
O&M	\$9,252,641	\$7,080,969	\$7,086,954	\$6,100,345	\$7,425,793	\$36,946,702
Salary*	\$16,358,889	\$15,267,614	\$15,288,576	\$14,289,086	\$13,834,874	\$75,039,039
Capital	\$0	\$0	\$0	\$0	\$49,932	\$49,932
G&C**	\$1,044,825	\$1,186,598	\$1,071,146	\$1,617,937	\$1,573,602	\$6,494,108
Subtotal	\$26,656,355	\$23,535,181	\$23,446,676	\$22,007,368	\$22,884,201	\$118,529,781
Parks Canada Agency						
O&M	\$10,211,562	\$6,787,023	\$8,500,651	\$7,224,719	\$8,144,208	\$40,868,163
Salary*	\$3,276,728	\$3,058,489	\$3,149,928	\$3,367,468	\$3,546,364	\$16,398,977
Subtotal	\$13,488,290	\$9,845,512	\$11,650,579	\$10,592,187	\$11,690,572	\$57,267,140
Total	\$90,199,317	\$80,817,218	\$87,424,804	\$90,511,796	\$95,210,817	\$444,163,952

Source: Figures extracted from each competent department's financial system. Figures exclude expenditures for corporate support services (\$8,898,959) and Public Services and Procurement Canada accommodation costs (\$9,777,792).

* Salary figures include expenditures for the Employee Benefits Plan.

** Some G&C funding was transferred from ECC to DFO, and this is reflected in the figures presented in the table.

Expected results

The SAR Program horizontal logic model, which links the outputs and activities of the program to its direct, intermediate and final intended outcomes, is included in [Appendix B](#). For the purpose of the evaluation, program performance was assessed against a more streamlined set of thematic outcome statements developed by the Horizontal Evaluation Committee, representing a

combination of immediate and intermediate outcomes. A mapping of the program's outcomes from the horizontal logic model to the thematic outcome statements used in the evaluation is also included in [Appendix B](#).

Appendix B: program expected results

The SAR Program has a logic model that sets out the expected results for the program. This is presented in the table below. However, for the purposes of this evaluation, the Horizontal Evaluation Committee developed a more streamlined set of thematic expected results (see Table 11).

Stage of Conservation Cycle	Activities	Outputs	Immediate Outcomes (SAR Program Partners and Aboriginal Peoples)	Intermediate Outcomes (SAR program stakeholders)	Final Outcome
Assessment	COSEWIC (arms-length organization) <ul style="list-style-type: none"> Assess the conservation status of wildlife species based on the best available biological information, ITK and community knowledge 	<ul style="list-style-type: none"> COSEWIC Status Reports 			To conserve and protect species at risk in Canada
	Competent departments <ul style="list-style-type: none"> Provide professional, technical, secretarial services to COSEWIC (ECCC) Monitor the status of wildlife species Establish and maintain federal SAR assessment policies and guidelines 	<ul style="list-style-type: none"> Secretariat support to COSEWIC Report on the general status of species Federal species at risk (SAR) assessment policies and guidelines 			
Protection	Competent departments <ul style="list-style-type: none"> Undertake listing consultations with partners, Indigenous peoples and stakeholders Issue permits for eligible activities Post statements of rationale for permitting decisions on the Public Registry Develop and implement compliance promotion strategies, plans, tools and policies Develop and implement enforcement tools, policies and capacity Establish and maintain federal SAR protection policies and guidelines 	<ul style="list-style-type: none"> Listing consultations Permits Statements of rationale⁴¹ Compliance promotion strategies, plans, tools and policies Enforcement tools and policies Trained enforcement officers Enforcement activities / investigative reports Federal SAR protection policies and guidelines 	<ul style="list-style-type: none"> Engagement by partners and Indigenous peoples in SAR assessment and protection activities Identification of SAR priorities through a coordinated early detection system based in science, ITK and risk ranking of species 	<ul style="list-style-type: none"> Engagement and support by stakeholders in the development of SAR assessment 	
	Minister of the Environment	<ul style="list-style-type: none"> Response statements 	<ul style="list-style-type: none"> Legislative 		

Stage of Conservation Cycle	Activities	Outputs	Immediate Outcomes (SAR Program Partners and Aboriginal Peoples)	Intermediate Outcomes (SAR program stakeholders)	Final Outcome
	<p>and Climate Change</p> <ul style="list-style-type: none"> • Coordinate responses to COSEWIC Assessments • Complete recommendations to GiC for listing SAR or for other orders/regulations to protect SAR, based on input from core departments • Make orders to protect critical habitats • Make statements regarding the level of protection of critical habitats <p>Governor in Council (GiC)</p> <ul style="list-style-type: none"> • Make decisions for listing SAR and for other orders to protect SAR • Make regulations to protect critical habitat on federal lands 	<ul style="list-style-type: none"> • Minister's recommendations • Statements that support decisions • Orders to legally protect critical habitat • Ministerial opinions on effective protection <ul style="list-style-type: none"> • GiC listing order • Orders, other than listing orders • Regulations to protect critical habitat on federal lands 	<p>frameworks collectively provide protection to species at risk, their residence and critical habitats</p>	<p>and protection activities</p> <ul style="list-style-type: none"> • Critical habitat is protected 	
<p>Recovery Planning</p>	<p>Competent departments</p> <ul style="list-style-type: none"> • Develop recovery strategies, action plans and management plans, including the identification of critical habitat, within legislated timelines • Undertake consultations with partners, Indigenous peoples and stakeholders on recovery strategies, action plans and management plans • Establish and maintain federal SAR recovery planning policies and guidelines 	<ul style="list-style-type: none"> • Recovery Strategies, • Recovery Action Plans • Management Plans • Recovery Planning Consultations • Federal SAR recovery planning policies and guidelines 	<ul style="list-style-type: none"> • Engagement by partners and Indigenous peoples in SAR recovery strategies, action plans and management plans 	<ul style="list-style-type: none"> • Engagement and support by stakeholders in recovery strategies, action plans and management plans 	
<p>Implementation</p>	<p>Competent departments</p> <ul style="list-style-type: none"> • When on their lands, implement priority recovery actions as identified in recovery strategies, action plans and management plans • Provide support to program partners, Indigenous peoples and stakeholders (through G&C programs) to implement actions identified in the recovery strategies, action plans and management plans, for example, other government departments actions on federal lands (IRF) • Stewardship actions on non-federal land (HSP) 	<ul style="list-style-type: none"> • Core departments' implementation of priority actions • G&C Funding Support • Funding agreements • CEAA recommendations • Federal SAR implementation policies and guidelines 	<ul style="list-style-type: none"> • Implementation of priority recovery actions by partners and Indigenous peoples • Increased Indigenous capacity to participate in SAR planning and implementation 	<ul style="list-style-type: none"> • Implementation of priority recovery actions by stakeholders • Stakeholders have the information necessary to contribute to the protection of species at risk and their habitat 	

Stage of Conservation Cycle	Activities	Outputs	Immediate Outcomes (SAR Program Partners and Aboriginal Peoples)	Intermediate Outcomes (SAR program stakeholders)	Final Outcome
	<ul style="list-style-type: none"> Indigenous community capacity development and habitat protection activities Review projects that require environmental assessments under Canadian Environmental Assessment Agency (CEAA) Establish and maintain federal SAR implementation policies and guidelines 		<ul style="list-style-type: none"> Inclusion of SAR, their residence and/or critical habitat, in environmental assessments 		
Monitoring and Evaluation	<p>Competent departments</p> <ul style="list-style-type: none"> Monitor actions identified in recovery strategies, action plans and management plans and compare results to-date against expected progress Monitor and report on SARA administration, for example: <ul style="list-style-type: none"> COSEWIC's assessments and the Minister's responses Preparation and implementation of recovery strategies, action plans and management plans Administrative and funding agreements Agreements and permits Enforcement and compliance actions taken Regulations and emergency orders Mitigation measures identified in projects' environmental assessments (CEAA monitoring requirement) Establish and maintain federal SAR monitoring and evaluation policies and guidelines 	<ul style="list-style-type: none"> SAR 5-year recovery implementation reports Annual report to Parliament on the administration of SARA Federal SAR monitoring and evaluation policies and guidelines 	<ul style="list-style-type: none"> Improved species monitoring Improved administration of SARA 	<ul style="list-style-type: none"> Engagement and support for species monitoring 	
	<p>Minister of the Environment and Climate Change</p> <p>Convene and facilitate a round table of SAR Program partners, Aboriginal people and stakeholders</p>	<ul style="list-style-type: none"> Round table meetings Responses to round table recommendations 			

Table 11: immediate and intermediate outcomes, taken from the horizontal logic model

Thematic intended outcomes (immediate and intermediate)	Immediate and intermediate outcomes from horizontal logic model
<p>Assessment</p> <p>1. Authorities have the information they need to determine if a species is at risk</p>	<p>IM1: Engagement by partners and Indigenous peoples in species at risk assessment and protection activities</p> <p>IM2: Identification of species at risk priorities through a coordinated early detection system based in science, ITK and risk ranking of species is outside the scope of the evaluation, as it is undertaken primarily by COSEWIC</p>
<p>Protection</p> <p>2. Listed species, including individuals, their residences and critical habitat, are legally protected within legislated timelines</p>	<p>IM3: Legislative frameworks collectively provide protection to species at risk, their residence and critical habitats</p> <p>INT1: Engagement and support by stakeholders in the development of species at risk assessment and protection activities</p> <p>INT2: Critical habitat is protected</p>
<p>Recovery planning</p> <p>3. Competent departments, partners (including Indigenous peoples) and stakeholders have a clear and timely understanding of the objectives and measures to take to conserve and recover a listed species and maintain and improve its critical habitat</p>	<p>IM4: Engagement by partners and Indigenous peoples in species at risk recovery strategies, action plans and management plans</p> <p>INT3: Engagement and support by stakeholders in recovery strategies, action plans and management plans</p>
<p>Implementation</p> <p>4. Increased awareness by competent departments, partners (including Indigenous peoples) and stakeholders of their responsibilities to recover and conserve a listed species and its critical habitat</p> <p>5. Implementation of priority recovery actions by competent departments, partners (including Indigenous peoples) and stakeholders to recover and conserve a listed species and its critical habitat</p> <p>6. Increased capacity of partners (including Indigenous peoples) and stakeholders to implement priority recovery actions</p>	<p>IM5: Implementation of priority recovery actions by partners and Indigenous peoples</p> <p>IM6: Increased Indigenous capacity to participate in species at risk planning and implementation</p> <p>IM7: Inclusion of species at risk, their residence and/or critical habitat, in environmental assessments**</p> <p>INT4: Implementation of priority recovery actions by stakeholders</p> <p>INT5: Stakeholders have the information necessary to contribute to the protection of species at risk and their habitat</p>
<p>Monitoring and evaluation</p> <p>7. Recovery activities are on track to reach overall and individual species conservation goals</p>	<p>IM8: Improved species monitoring</p> <p>INT6: Engagement and support for species monitoring</p>
<p>Long-term outcome</p> <p>8. Species at risk are recovered</p>	<p>Long-term outcome: To conserve and protect species at risk in Canada</p>

* IM=Immediate Outcome; INT=Intermediate Outcome

** Low priority in thematic outcomes

*** IM9: "Improved administration of SARA" has not been included in the thematic/grouped outcomes and was addressed as an efficiency and economy issue in the evaluation.

Appendix C: summary of findings

A rating is provided for each core issue assessed, based on a judgment of the evaluation findings.

Statement	Definition
Expectations met	The intended outcomes or goals have been achieved.
Further work required	Considerable progress has been made to meet the intended outcomes or goals, but attention is still needed.
Priority attention required	Insufficient progress has been made to meet the intended outcomes or goals and attention is needed on a priority basis.
Unable to assess	Insufficient evidence is available to support a rating

Relevance

Relevance criteria	Expectations met	Further work required	Priority attention required	Unable to assess
1. Continued need for the program	●			
2. Aligned with federal government priorities	●			
3. Program consistent with federal roles and responsibilities	●			

Program efficiency

Efficiency criteria	Expectations met	Further work required	Priority attention required	Unable to assess
4. Program design is appropriate for achieving its intended outcomes		●		
5. Governance structure is clear, appropriate and effective for achieving expected results	●			
6. Program is being delivered in an efficient and economic manner		●		
7. Performance data is being collected, reported and used to inform senior management / decision-makers		●		

Achievement of expected results

Expected results	Expectations met	Further work required	Priority attention required	Unable to assess
8. Authorities have the information they need to determine if a species is at risk		●		
9. Listed species, including individuals, their residences and critical habitat, are legally protected within legislated timelines			●	
10. Competent departments, partners, including Indigenous peoples and stakeholders have a clear and timely understanding of the objectives and measures to take to conserve and recover a listed species and maintain and improve its critical habitat		●		
11. Increased awareness by competent departments, partners, including Indigenous peoples, and stakeholders of their responsibilities to recover and conserve a listed species and its critical habitat		●		
12. Implementation of priority recovery actions by competent departments, partners, including Indigenous peoples and stakeholders to recover and conserve a listed species and its critical habitat		●		
13. Increased capacity of partners, including Indigenous peoples, and stakeholders to implement priority recovery actions		●		
14. Recovery activities are on track to reach overall and individual species conservation goals		●		
15. Species at risk are recovered				●

Appendix D: evaluation strategy

Purpose and scope

This report presents the results of the Horizontal Evaluation of the Species at Risk (SAR) Program, which was led by Environment and Climate Change Canada's (ECCC), Audit and Evaluation Branch, in collaboration with Fisheries and Oceans Canada (DFO) and the Parks Canada Agency (PCA). The evaluation covers the period from fiscal years (FY) 2011 to 2012 to FY 2015 to 2016. More recent information for FY 2016 to 2017 has also been incorporated, where available. The evaluation is an assessment of the program activities and outputs in support of the [Species at Risk Act](#) (SARA), and is not an evaluation of the Act itself. The scope of the evaluation includes the SAR Program activities for the three competent departments and for all stages of the conservation cycle, with the exception of activities related to the following:

- regulatory compliance promotion and enforcement⁴²
- statutory and advisory committees (COSEWIC, NACOSAR and SARAC), since they are external bodies
- the Species at Risk Public Registry, as this falls under the authority of Treasury Board Secretariat of Canada policy and standards over government communications and web accessibility

Although data was collected and analyzed from all three competent departments, this was an evaluation of the overall SAR Program, as opposed to an evaluation of individual competent departments. As such, the findings presented reflect the overall results for the program.

The evaluation builds on the previous Evaluation of the Program and Activities in Support of the Species at Risk Act, conducted by ECCC in collaboration with DFO and PCA and approved in September 2012, as well as a performance audit of the program tabled in 2013 by the Commissioner of the Environment and Sustainable Development.

Evaluation approach and methodology

Six data collection methodologies were used to address the evaluation questions and issues. Evidence drawn from these methods informed the findings and conclusions⁴³.

⁴² Both PCA and DFO have recently completed evaluations on compliance and/or enforcement for their respective departments. An evaluation of ECCC's [Wildlife Compliance Promotion and Enforcement Program](#) was completed in March 2018.

⁴³ A Data Collection Instruments Technical Appendix is available upon request.

Document and literature review

A review of documents was conducted that included descriptive program information, departmental and Government of Canada publications related to policy and priorities, and other internal strategic, operational planning and evaluation documents. Documents related to the IRF program were reviewed under this line of evidence. In addition, a limited literature review was conducted related to the continued need for the SAR Program, as well as a comparative analysis of programs in other jurisdictions for at-risk species.

Review of administrative data

Administrative data related to the SAR Program was reviewed, including financial data and program output and performance data (for example, number of recovery strategies and action plans).

Grants and contributions file review

A review of a total of 40 grants and contributions (G&C) project final reports was completed to examine project activities, outputs, and outcomes of the Habitat Stewardship Program (n=26), the Aboriginal Fund for Species at Risk (n=12) and the Species at Risk Partnership on Agricultural Lands (n=2) programs. The sample of projects was selected to ensure diversity in terms of the following criteria: region; species type (terrestrial and aquatic); multi-year/single year; and agreement amount. Within these criteria, projects involving a multi-species approach were selected given the priority and interest in this approach.

Key informant interviews

In total, 64 individual or group key informant interviews were conducted to address relevance and performance issues. All relevant stakeholder perspectives were considered in the key informant interview analysis⁴⁴, to bring a variety of views on program performance. The distribution of interviews by respondent category is as follows:

- internal senior and program managers (n=29)⁴⁵
- external stakeholders (non-governmental organizations, industry, Indigenous groups, provinces and territories, committee members, academia) (n=35)

Online survey of partners and stakeholders

An online survey of SAR Program partners and stakeholders was conducted. The survey gathered respondents' perspectives on the efficiency and effectiveness of the SAR Program. In total, 138

⁴⁴ In summarizing the degree of consensus for key interview findings, the following guidelines were used: no interviewees (0%); a few (less than 25%); some/a minority (25 to 44%); approximately half (45 to 55%); a majority (56 to 75%); most (76 to 94%); almost all (95 to 99%); and all (100%).

⁴⁵ The distribution of interviews was: ECCC (9); DFO (9); and PCA (11).

individuals identified by the competent departments were contacted by email to participate. Of these, 38 individuals completed the survey, resulting in a response rate of 28%.

Case studies

Case study methodologies included a document review and three to five key informant interviews for each case study. Case study interviews were in addition to the key informant interviews described previously. Three case studies of the implementation of the SAR Program were conducted in the following locations:

- The South of the Divide (Saskatchewan) (ECCC): case study provided an example of a multi-species action plan to recover at-risk species in an important ecosystem. The South of the Divide includes critical habitat that was subject to an emergency protection order (for the Sage Grouse) during the time period.
- The Ausable and Sydenham Rivers (Ontario) (DFO) case study looked at two action plans developed by local recovery teams targeting aquatic species. The Ausable River Action Plan targets five mussel species and three fish species, while the Sydenham Action Plan pertains to seven species of mussels and two species of fish
- The Night Birds Returning (British Columbia) (PCA) case study looked at this project that was launched in 2009 with the Haida Nation to restore nesting seabird habitat throughout the Gwaii Haanas national park reserve

Appendix E: snapshot of assessed and listed species

Assessment	Total
Species added to Schedule 1 at proclamation	233
Number of species assessed by COSEWIC as at risk as of November 2016	
Extirpated	23
Endangered	324
Threatened	173
Special Concern	213
TOTAL	724
Number of species assessed by COSEWIC as not at risk as of November 2016	
Not at risk	182
Data deficient ⁴⁶	57
TOTAL	239
Number of species listed in Schedule 1 as of January 2017	
Extirpated	23
Endangered	246
Threatened	127
Special Concern	130
TOTAL	526
Total number of species listed in Schedule 1 by a competent department and requiring recovery planning, 2015	
ECCC	334
DFO	111
PCA	76
TOTAL	521

Source: COSEWIC website, Species at Risk Public Registry

⁴⁶ Of 57 species that were found to be data deficient, 29 were fishes.

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