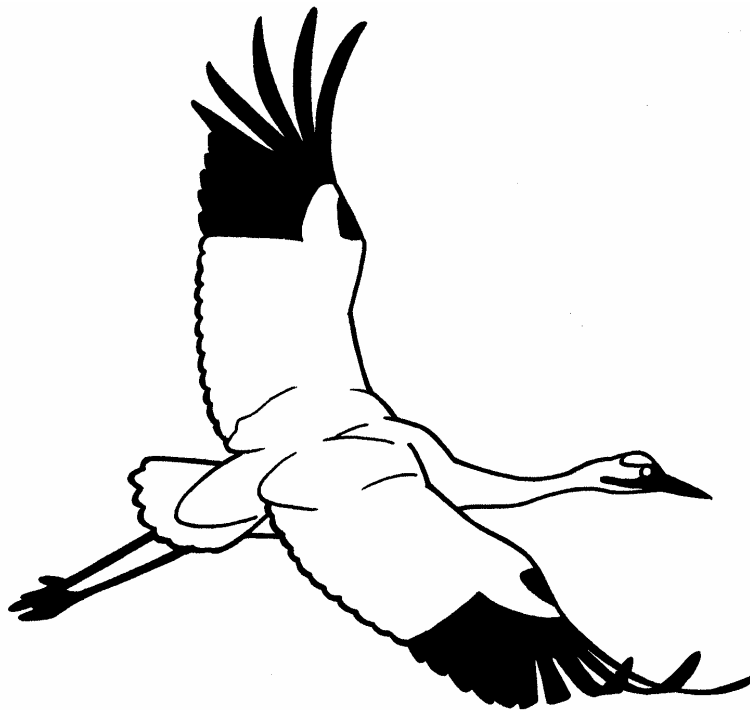


**RENEW
RECOVERY HANDBOOK
(ROMAN)**



2005-2006 Edition

For additional copies contact:

Recovery Secretariat
c/o Canadian Wildlife Service
Environment Canada
Ottawa, Ontario
K1A 0H3

Tel: (819) 953-9797

Fax: (819) 994-3684

e-mail: RENEW@ec.gc.ca
Français: RESCAPE@ec.gc.ca

RENEW Web site:

English: <http://www.speciesatrisk.gc.ca>
Français: <http://www.especesenperil.gc.ca>

Recovery Information Management System Website:

English: <http://www.recovery.gc.ca>
Français: <http://www.retablissement.gc.ca>

This handbook was developed by the National Recovery Working Group, which consists of representatives of: the Canadian Wildlife Service of Environment Canada, all provinces and territories, Fisheries and Oceans Canada and Parks Canada Agency.

Recommended citation:

National Recovery Working Group. 2005. Recovery Handbook (ROMAN). 2005-2006 Edition, October 2005. Recovery of Nationally Endangered Wildlife, Ottawa, Ontario. 71 pp. plus appendices.

RECOVERY HANDBOOK

TABLE OF CONTENTS

1. PREAMBLE	1
2. BACKGROUND	3
2.1 What is Recovery?	3
2.2 How Does Recovery Proceed?	4
2.3 What is RENEW?	4
2.4 Objectives of RENEW	5
2.5 Guiding Principles of RENEW	6
3. OVERVIEW.....	7
3.1 RENEW Governance	7
Table 1. Key Governance Structures of RENEW.....	7
3.2 RENEW Process	9
Figure 1. RENEW Process (Steps, Roles and Products).....	10
4. RECOVERY PLANNING.....	11
4.1 Planning at the National Level.....	11
4.1.1 <u>National Recovery Working Group -- Terms of Reference</u>	11
4.1.2 <u>Recovery Secretariat—Terms of Reference</u>	12
4.2 Planning at the Regional Level.....	13
4.2.1 <u>Species at Risk Coordinating Committees</u>	13
4.3 Planning at the Jurisdictional Level	15
4.3.1 <u>Responsible Jurisdictions -- Clarifying Terminology</u>	15
4.3.2 <u>Responsible Jurisdictions -- Terms of Reference</u>	16
4.3.3 <u>Recovery Planning Structure</u>	17
4.3.4 <u>When to Form a Recovery Team?</u>	18
4.4 Planning at the Recovery Team Level.....	19
4.4.1 <u>Process for Forming Recovery Team</u>	19
4.4.2 <u>Membership on Recovery Team</u>	19
4.4.3 <u>Maintaining Recovery Team Functionality</u>	20
4.4.4 <u>National Recovery Team -- Terms of Reference</u>	21
4.5 Recovery Planning Approaches	23
4.5.1 <u>Selection of Scale of Recovery</u>	23
Table 2. Summary of considerations for selection of scale of plan	24
Figure 2. Decision Tree: Approaches to Recovery	25
5. RECOVERY STRATEGY.....	26
5.1 Recovery Strategy -- Description.....	26
5.2 Timelines for Development of a Recovery Strategy	27
5.3 Process for Developing a Recovery Strategy	29
Table 3. Main process steps and timelines for developing a strategy	29
5.4 Meeting SARA’s Cooperation and Consultation Requirements for Recovery Planning	31
5.4.1 <u>Consultation on Recovery Strategies and Action Plans</u>	31
5.5 Approval of Recovery Strategies	32
5.6 Unsolicited Recovery Plans, Strategies or Action Plans.....	33

5.7 Guide for SARA-compliant National Recovery Strategy	34
6. HABITAT	44
6.1 Guidance in Identifying General Habitat	44
6.1.1 <u>Introduction</u>	44
6.1.2 <u>Defining Habitat</u>	44
6.1.3 <u>Identification of Habitat</u>	44
6.1.4 <u>Protection of Habitat</u>	48
7. RECOVERY IMPLEMENTATION	49
7.1 Recovery Implementation Groups (RIGs) - Terms of Reference	49
7.2 Action Plans	50
7.2.1 <u>Description and Content</u>	50
7.2.2 <u>Action Plan Guide</u>	52
7.3 Management Plans	58
7.3.1 <u>Procedure for Management Plan Development and Approval</u>	58
7.3.2 <u>Management Plan Guide</u>	60
7.4 Funding Opportunities	66
7.4.1 <u>Federal Fund -- Ecological Gifts Program</u>	66
7.4.2 <u>Federal Fund -- Endangered Species Recovery Fund (ESRF)</u>	66
7.4.3 <u>Federal Fund -- Great Lakes Sustainability Fund</u>	66
7.4.4 <u>Federal Fund -- Habitat Stewardship Program for Species at Risk</u>	66
7.4.5 <u>Federal Fund -- Interdepartmental Recovery Fund</u>	67
7.4.6 <u>Environment Canada --Funds for Aboriginal People</u>	67
7.4.7 <u>Environment Canada -- EcoAction Community Funding Program</u>	67
7.4.8 <u>Parks Canada Agency -- Species at Risk Funding</u>	67
7.4.9 <u>Provincial Funds</u>	67
8. PROGRAM MONITORING, EVALUATION AND REPORTING	69
8.1 Reporting Cycles	69
8.2 Performance Measures	69
8.3 Reporting	69
8.3.1 <u>RIMS (Recovery Information Management System)</u>	69
8.3.2 <u>RENEW Annual Report</u>	70
8.3.3 <u>Recovery Web Site</u>	70
8.3.4 <u>SARA Public Registry</u>	70
Table 4. Reporting requirements of RENEW and SARA	70
APPENDIX A. GLOSSARY OF TERMS	72
APPENDIX B. NATIONAL FRAMEWORK FOR THE CONSERVATION OF SPECIES AT RISK	75
APPENDIX C. ACCORD FOR THE PROTECTION OF SPECIES AT RISK	79
APPENDIX D. MEMBERSHIP OF NATIONAL RECOVERY WORKING GROUP	80
APPENDIX E: MATERIALS FOR RECOVERY PLANNING	82
1. Sample Team Member Appointment Letter	82
2. Fact Sheet Comparing Recovery Planning Documents	83
3. Formatting Specifications for SARA Recovery Planning Documents	84
APPENDIX F. WORKING WITH ABORIGINAL PEOPLE AND WILDLIFE MANAGEMENT BOARDS	87
1. Working with Aboriginal People	87

1.1 Consultation Guidelines	87
1.2 General Principles	87
2. Working with Wildlife Management Boards	88
Table 5. Wildlife management boards, responsibilities, contacts and species within land claims areas.....	88
Figure 3. Extent of wildlife management land claims areas in northern Canada	91
APPENDIX G. FEDERAL REQUIREMENTS OR GUIDELINES.....	92
1. Intellectual Property Rights Related to Recovery Documents	92
2. Environmental Assessment Best Practice Guide for Wildlife at Risk in Canada.....	92

1. PREAMBLE

The guidance provided in this handbook represents the current best practices for recovery. The recovery processes and program are continually evolving, to meet new jurisdictional legislative and policy requirements, and to adapt to experience gained by field-testing procedures.

In 1996, a *National Framework for the Conservation of Species at Risk* was developed to provide a coordinated national approach for the conservation of species at risk. Federal, provincial and territorial ministers responsible for wildlife committed to this national approach in the corresponding *Accord for the Protection of Species at Risk*.

The Recovery Handbook (ROMAN) describes the policies and operations of the national recovery program known as RENEW (acronym for REcovery of Nationally Endangered Wildlife). The handbook has been prepared, and will continue to be developed and maintained as a dynamic document, by the National Recovery Working Group (NRWG). RENEW was initiated in 1988 and evolved to become the recovery implementation component of the *National Framework for the Conservation of Species at Risk*. The handbook provides the conceptual and operational basis for the national recovery program. Its audience is primarily national recovery teams and recovery staff of the jurisdictions that are accountable for species recovery in Canada. Other organizations and individuals participating in, or interested in, the recovery of species at risk will also find it a useful resource.

The purpose of this handbook is to:

- Provide an overview of the roles and responsibilities, processes and products pertaining to the recovery of nationally endangered, threatened or extirpated species.
- Describe flexible guidelines for use by recovery practitioners such as recovery teams that can be adapted to fit specific situations.

For a glossary of terms and acronyms, refer to Appendix A.

The task of recovering species is challenging, due to the complexity of the factors (biological, legislative, socio-economic) involved. This handbook represents a general, multi-jurisdictional basis for recovery efforts; however, it will be necessary to adapt the processes described here to unique situations as they arise. Some alternatives to recovery planning structures and approaches are presented in the handbook. The search for cost-effective and biologically promising tools for species recovery continues to engender much discussion across the country.

Additional background materials and other documents relating to species recovery have been added as annexes to the handbook. The provincial and territorial government wildlife agencies are working with the three federal agencies

responsible for SARA (the federal *Species at Risk Act*), to harmonize the requirements for recovery arising from federal, provincial and territorial endangered species legislation and policies. The guidance in this document represents the integrated national recovery process to the extent that it has been worked out to date.

An edition of this handbook will be released annually.

2. BACKGROUND

2.1 What is Recovery?

This is a topic of much discussion. Formally:

*In the context of species at risk conservation, **recovery** is the process by which the decline of an endangered, threatened or extirpated species is arrested or reversed, and threats removed or reduced to improve the likelihood of the species persistence in the wild.*

*A species will be considered **recovered** when its long-term persistence in the wild has been secured.*

*The appropriate target level for persistence whereby a species would be considered **recovered** differs among species and depends on the current and historical context, including factors such as population abundance, the number of populations and threats. Persistence may range from:*

- *Precarious and limited occurrence – for example, species that have historically been rare or for which damages caused by threats are irreversible; to*
- *Highly viable and self-sustaining – for example, species for which formal downlisting to *Special Concern* or *Not at Risk* would be warranted.*

Less formally, recovery is a continuum from survival (maintaining current population size and distribution) to full recovery (restoring a species to a viable, self-sustaining population level, able to withstand stochastic events and other environmental variables of a non-catastrophic nature). The recovery goal will vary depending on the circumstances of each species; it may be directed towards survival, full recovery, or somewhere in-between. A goal of survival would be usual in cases in which Canadian populations occur in a zone of "periodic extinction and recolonization", or are extreme outliers of large healthy U.S. populations, or have such naturally small distributions or population sizes in Canada that they will always be at risk (e.g., southern maidenhair fern, Banff Springs snail, Lake Utopia dwarf smelt). When the recovery goal is full recovery, success would be documented by COSEWIC downlisting the species to *special concern* (SC) or *not at risk* (NAR).¹ For species that are already designated *special concern*, maintaining current population levels would also be appropriate.

¹ Examples of COSEWIC downlistings: Tundra Peregrine Falcon (T to SC, 1992); Ferruginous Hawk (T to SC, 1995); Baird's Sparrow (T to NAR, 1996); swift fox (XP to E, 1998), Anatum Peregrine Falcon (E to T, 1999), eastern population Harlequin Duck (E to SC, 2001).

“Doing recovery” is the process of planning and implementing priority actions to reduce the risk of extinction for species² designated as *endangered*, *threatened* or *extirpated* (E, T or XP) by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

2.2 How Does Recovery Proceed?

The national recovery process that is evolving under RENEW strives to balance consistency, flexibility and quality. It tries to avoid being too prescriptive (recognizing that every recovery effort has unique features), while offering sufficient guidance to achieve some level of consistency across recovery teams and establishing a minimum standard for various elements of RENEW. This "generic" process, described in detail in the next section, proceeds from formation of a national recovery team, through development of a national recovery plan (consisting of recovery strategy and action plan), to recovery implementation. Evaluation of progress and adaptation of the process are ongoing. Recovery actions may be undertaken at any point in the process, and should not be delayed until the strategy and action plan have been developed.

2.3 What is RENEW?

RENEW (Recovery of Nationally Endangered Wildlife) is the national program for recovery of species at risk, initially established by the Wildlife Ministers' Council of Canada in 1988. The program has been evolving since its inception. It started as a Strategy with a RENEW Committee and subcommittees, then was adapted to meet new commitments under:

- The 1996 *National Framework for the Conservation of Species at Risk* (Appendix B).
- The 1996 *Accord for the Protection of Species at Risk* (the Accord, Appendix C) in which federal, provincial and territorial jurisdictions committed to develop complementary legislation, policies and programs for species at risk, and to work towards their better integration.
- The federal *Species at Risk Act* (SARA), promulgated in June 2003, developed to complement existing legislative and policy tools to protect and recover endangered, extirpated and threatened species, and to manage species of special concern to prevent them from becoming endangered or threatened.
- New provincial and territorial species at risk legislation and policies.

Today it is a truly cooperative national program, relying upon the goodwill and collective efforts of federal, provincial and territorial government wildlife agencies, wildlife management boards, Aboriginal people, non-governmental organizations, industries, and other stakeholders and individuals.

Structurally, RENEW consists of a federal / provincial / territorial advisory committee (the National Recovery Working Group) supported by a secretariat, that develops

² Throughout the manual, “species” means the entity assessed by COSEWIC: species, subspecies, variety or geographically defined population.

guidance for the recovery teams engaged in improving the plight of individual species or groups of species. All species designated as endangered, threatened or extirpated by COSEWIC come under the purview of RENEW, though not all these species appear on the SARA “List of Wildlife Species at Risk” (referred to as the legal list). All species designated as special concern on the SARA legal list also come under RENEW.

2.4 Objectives of RENEW

The following five national objectives or statements were approved by the wildlife ministers in 1988.

1. No endangered species of wildlife will be allowed to become extirpated or extinct.
2. No species will be allowed to become threatened or move from threatened to endangered status.
3. Extirpated species will be reintroduced to Canada where feasible.
4. Recovery plans will be prepared for all threatened and endangered species [and also for extirpated species, as required under SARA]
5. Where feasible, recovery programs will be undertaken on a scale necessary to remove species from endangered, threatened or extirpated status.

As stated in *RENEW, A Strategy for the Recovery of Nationally Endangered Wildlife in Canada*, in September 1988:

These objectives are endorsed by all provinces, territories, the federal government, and major NGOs as those toward which all will work together. However, a key premise of this strategy is that the first line of responsibility and accountability remains with the governments responsible for the management of the population / species (i.e., the “range” jurisdictions); and, that the Canadian Wildlife Service will provide national coordination. Other parties such as universities and conservation organizations [and wildlife management boards, Aboriginal peoples, stakeholders, industries, universities, conservation organizations, and other groups and individuals] are invited to contribute to the extent of their interest and abilities...

Each province, territory, federal agency and wildlife management board with authority for management of species at risk and their habitat has its own policies, programs, legislation and regulations to implement in addition to participating in the national program. For this reason, maintaining flexibility and adaptability in the RENEW process is extremely important. Although wildlife management boards are not signatories to the Accord, their responsibilities for management of species at risk are set out in their land claims.

2.5 Guiding Principles of RENEW

The following 12 original guiding principles of RENEW continue to provide philosophy and direction for the program.

1. *ENGENDER DIRECT ACTION*: Species recovery ultimately depends on changing human behaviour to allow species to maintain self-sustaining populations. That all planning, research, and actions should engender this objective will be a primary measuring stick to gauge progress toward species recovery.
2. *RESPONSIBILITY*: Recovery is the responsibility of all Canadians but responsible jurisdictions are ultimately responsible for recovery plan implementation.
3. *MULTIPLE-JURISDICTIONAL RECOVERY*: Where multiple responsible jurisdictions are involved, the Federal government will be responsible for the initiation and facilitation of multi-jurisdictional recovery teams, and coordination to develop recovery plans.
4. *MULTI-PARTY INVOLVEMENT*: Recovery plan preparation and implementation should involve a wide range of stakeholders, Aboriginal peoples, and interested parties to ensure an open and transparent process that acknowledges their valuable role in the process. The primary interest of all participants should be to recover the species.
5. *KEY ROLE OF TEAMS*: Recovery teams should be established to lead the development and implementation of recovery actions. Recovery teams should report through the responsible jurisdictions to the CWDC, which will assist the CESCC in fulfilling its commitment to establish complementary legislation and programs that provide for effective protection of species-at-risk.
6. *ADAPTIVE MANAGEMENT*: Recovery planning and implementation should follow an adaptive management model. That is, recovery teams should regularly review and revise, as necessary, both the recovery strategy and action plan in response to new information gained and progress made. In so doing, recovery planning and implementation should focus on recovery actions with less emphasis on plan development and approval.
7. *RETAIN PROCESS FLEXIBILITY*: Recovery planning and implementation systems should be flexible to allow for the different needs of Canada's diverse flora and fauna and the wide variety of needs, issues and implications associated with the recovery of Canada's species-at-risk.
8. *TIME FRAME FOR ACTIONS*: Contingent on recovery priorities "at risk" designations should immediately trigger the recovery planning and implementation process, which should continue until the species is downlisted to vulnerable [SC] or de-listed.
9. *FOCUS ON APPROPRIATE SCALE*: Recovery planning and implementation will use broader ecosystem management and multi-species approaches where feasible.
10. *SOCIO-ECONOMIC VALUES*: The socio-economic context will be considered when deciding on the most appropriate recovery actions.
11. *OPTIMIZE RESOURCE USE*: To maximize species recovery, resources should be used wisely. This includes providing for increased funding, cooperative arrangements among agencies/groups/individuals, and efficient and prioritized allocation of resources.
12. *EVALUATE SUCCESS*: Recovery implementation should provide for assessment of the effectiveness of recovery actions, which should involve identification of performance measures and long-term monitoring, where appropriate.

3. OVERVIEW

3.1 RENEW Governance

The Canadian Endangered Species Conservation Council (CESCC) of wildlife ministers provides general direction on the preparation of recovery strategies and the preparation and implementation of action plans. It also coordinates the activities of the various governments represented on the CESCC relating to the protection of species at risk. The CESCC is supported by the Canadian Wildlife Directors Committee (CWDC), which oversees the operations of the program. Individual members of the CWDC are responsible, as responsible jurisdiction directors, for recovery of species at risk found within their jurisdictions. The National Recovery Working Group (NRWG) advises the CWDC and provides guidance to recovery teams (RTs) and others. It is supported by the Recovery Secretariat. Recovery teams may affiliate with one or more recovery implementation groups (RIGs) and with broader multi-species, ecosystem or landscape programs, in ensuring the survival and recovery of particular E, T and XP species. In some cases, the responsible jurisdiction may develop the recovery strategy and consult directly with affected parties.

Table 1 outlines some of the key governance structures of RENEW, along with their roles and responsibilities. Terms of reference for some of the groups are presented elsewhere in this document.

Table 1. Key Governance Structures of RENEW

Structure	Roles and Responsibilities in Relation to RENEW	Relationships
Canadian Endangered Species Conservation Council (CESCC) of wildlife ministers	<ul style="list-style-type: none"> • provides general direction on recovery planning and implementation • releases RENEW annual report 	<ul style="list-style-type: none"> • accountable to Parliament and Canadian public
Competent Minister under SARA (i.e., federal Minister of the Environment or of Fisheries and Oceans Canada)	<ul style="list-style-type: none"> • has specific responsibilities under SARA that are being accommodated by the RENEW process, and ultimate accountability for recovery strategies and action plans for all SARA-listed E, T and XP species 	<ul style="list-style-type: none"> • accountable to Parliament and Canadian public
Canadian Wildlife Directors Committee (CWDC)	<ul style="list-style-type: none"> • directs operations of the NRWG and RENEW program • dispute resolution 	<ul style="list-style-type: none"> • advises and reports to CESCC
Species at Risk Coordinating Committee	<ul style="list-style-type: none"> • regional coordination of recovery planning (director group & technical support group) 	<ul style="list-style-type: none"> • directors are members of CWDC
Responsible jurisdiction under Accord (director)	For SAR in the jurisdiction: <ul style="list-style-type: none"> • has specific responsibilities under own jurisdiction's policies/legislation 	<ul style="list-style-type: none"> • accountable to the public • member of

	<ul style="list-style-type: none"> • has management responsibility for recovery of the species within the jurisdiction • leads or participates in the development and endorsement of recovery strategies and action plans, or management plans in cooperation with other responsible jurisdictions and other groups or individuals who have a role • ensures species databases and RT records are maintained • fosters recovery action • contributes resources for operation of RT 	<p>CWDC</p> <ul style="list-style-type: none"> • usually appoints a staff member as one co-chair of the RT (or provides a contact person)
SARA Responsible Agency (SRA)	<p>The one federal jurisdiction (CWS region, DFO region, or PCA) with the most responsibility under SARA for recovery of a listed species:</p> <ul style="list-style-type: none"> • ultimately responsible for ensuring that a SARA-compliant recovery strategy and action plan are produced within SARA timelines • consults with the other responsible jurisdictions (F/P/T) to clarify their respective roles and responsibilities for recovery strategy and action plan development • coordinates external reviews, endorsement and publication of recovery strategies and action plans. 	
National Recovery Working Group (NRWG)	<ul style="list-style-type: none"> • provides technical process and policy advice to CWDC • produces technical advice / guidance for RTs (the recovery guidance handbook) • promotes balance of flexibility, consistency and quality in recovery process 	<ul style="list-style-type: none"> • advises and reports to CWDC • guidance to RTs
Recovery Secretariat	<ul style="list-style-type: none"> • coordinates the RENEW program • oversees recovery planning process • develops policy/guidance relevant to recovery • produces RENEW annual report • maintains recovery database & web site • provides training materials 	<ul style="list-style-type: none"> • supports NRWG, RTs • reports to the Canadian Wildlife Service
Wildlife management boards (authorized by land claims agreement) (WMB)	<p>For E, T & XP species within their land claims area:</p> <ul style="list-style-type: none"> • cooperate in developing recovery strategies and action plans, as appropriate • endorse or review recovery strategies and action plans according to terms of land claims settlement • advise in acquiring Aboriginal traditional knowledge (ATK) from community members, implementing action plans 	<ul style="list-style-type: none"> • accountable to their public
Aboriginal organizations	<p>For E, T & XP species within settled land claims areas, or in keeping with constitutional</p>	<ul style="list-style-type: none"> • accountable to their people

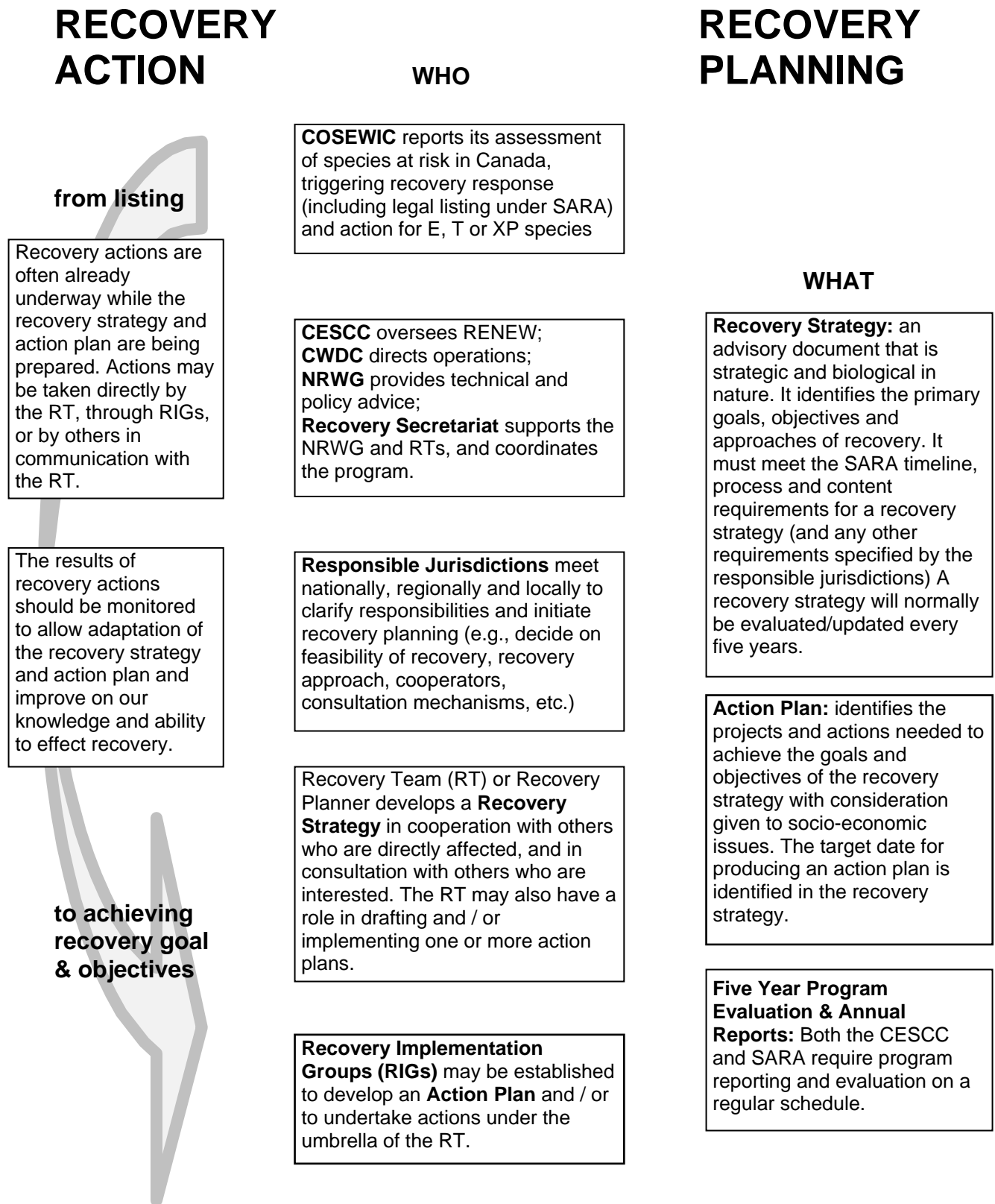
	rights: <ul style="list-style-type: none"> • cooperate with responsible jurisdictions in developing recovery strategies and action plans • advise in acquiring ATK 	
Recovery team (RT)	<ul style="list-style-type: none"> • works to effect recovery of the species • develops recovery strategy and sometimes the action plan • evaluates the success of recovery efforts • advises responsible jurisdiction(s) on recovery of the species, species group or ecosystem • coordinates activities of affiliated RIGs if there are any • may seek outside funding if needed 	<ul style="list-style-type: none"> • advises directors of responsible jurisdiction(s) • advises land users, developers, etc. • advises RIGs • is accountable to funding sources and range jurisdictions
Recovery implementation group (RIG)	<ul style="list-style-type: none"> • may develop a recovery action plan • participates in recovery implementation • may seek outside funding if needed 	<ul style="list-style-type: none"> • communicates with RT • is accountable to funding sources • may be accountable to RT and/or range jurisdictions

3.2 RENEW Process

The national recovery process provides a coordinated, national response to COSEWIC's designations of E, T and XP species. The release of COSEWIC's report on assessments (a process external to RENEW) triggers a non-linear sequence of events that includes immediate response, public consultation, drafting and implementation of recovery strategies and action plans, evaluation of progress and ongoing adaptation (Figure 1). Recovery actions may be started before a recovery strategy and action plan have been completed. As well, due to the unique recovery needs of each species at risk, individual recovery processes may differ from the general guidance and alternatives provided here.

Recovering a species involves identifying the threats to the species, defining solutions that mitigate or eliminate these threats, *and* implementing actions to improve the species' status (i.e., reverse the decline in population size or distribution). Effective recovery planning supports these actions but does not, in itself, restore species. The remainder of this manual provides detailed guidance for recovery planning, including guidelines for identification and conservation of species at risk habitat.

Figure 1. RENEW Process (Steps, Roles and Products)



4. RECOVERY PLANNING

“Effective recovery planning supports ... but does not, in itself, restore species”
Sherman Boates

4.1 Planning at the National Level

The National Recovery Program (RENEW) is developed by the National Recovery Working Group, assisted by the Recovery Secretariat housed within the Canadian Wildlife Service.

4.1.1 National Recovery Working Group -- Terms of Reference

Role

To provide Canadians and their governments with expert scientific, technical and policy advice on the national recovery program and process.

Structure and Composition

The National Recovery Working Group (NRWG) is composed of representatives of the 16 federal, provincial and territorial government agencies responsible for wild species (members are listed in Appendix D). The NRWG is co-chaired by the Chief of the Recovery Division of CWS-HQ and a provincial / territorial representative. Each co-chair serves for a renewable term of three years. The National Recovery Working Group aims to meet twice a year, in January in western Canada, and in October in eastern Canada. At the discretion of the chair, other recovery experts may attend National Recovery Working Group meetings as observers, but may not participate in discussions unless called upon. Decisions are made by majority vote (two-thirds of votes by members) or by consensus (defined as general agreement, i.e., all members accept the decision). An alternate should be identified by each member of the working group.

Ad hoc working groups: Ad hoc working groups may be formed to address special technical or regional issues for the National Recovery Working Group (e.g., habitat identification and delineation, captive breeding).

Secretariat: Administrative services and technical support are provided by a secretariat funded and directed by the Canadian Wildlife Service.

Recovery Forum: Every two years, one day of a National Recovery Working Group meeting will be open to all interested parties, and will be known as the Recovery Forum. There may be the opportunity to merge this forum with the round table of persons interested in the protection of species at risk that the federal Minister of the Environment is obliged to convene under S.127 of SARA.

Functions

1. Reports to and advises the CWDC and develops guidance for and advises recovery teams and RIGs on scientific, technical and policy matters pertaining to the national recovery process.
2. Develops guidelines, criteria, procedures and other tools to support the national

RECOVERY PLANNING

recovery process (compiled in this handbook) and develops policy or procedural recommendations (for consideration or approval by the CWDC) for improving the national recovery program.

3. Provides guidance where appropriate to improve recovery team processes and performance. Individual members also bring recovery team concerns pertaining to the national process back to the National Recovery Working Group for discussion and resolution.
4. Promotes training of recovery teams and others in the national recovery process and in scientific aspects of recovery.
5. Provides advice to the CWDC on effective integration of national, federal, provincial, territorial and independent recovery programs and processes (e.g., integration of stewardship and recovery programs).
6. Provides advice on any recovery matters at the request of the CWDC.
7. Immediately following COSEWIC assessment meetings decides on respective jurisdictional responsibilities for species assessed as Extirpated, Endangered, Threatened or Special Concern; ranks species nationally; and initiates recovery planning.

4.1.2 Recovery Secretariat—Terms of Reference

Role

The Recovery Secretariat supports the CWDC (in the context of its RENEW responsibilities), the National Recovery Working Group, national recovery teams and RIGs in developing and implementing the national recovery program. The Recovery Secretariat is housed within the Canadian Wildlife Service (CWS), and reports to the director of the Species at Risk Branch of CWS as well as to the National Recovery Working Group.

Functions

1. Provides technical (not financial) support to the CWDC, the National Recovery Working Group, recovery teams and RIGs.
2. Oversees the coordination of external review, interjurisdictional endorsement, bilingual publication and distribution of RENEW recovery strategies and action plans by SARA Responsible Agencies (SRA's).
3. Tracks recovery efforts for E, T and XP species, management efforts for SC species, and coordinates development of the RENEW annual report.
4. Advises responsible jurisdictions, recovery teams, RIGs and others on the national recovery process.
5. Develops recovery science and policy.
6. Maintains, with the National Recovery Working Group, a communications network among all Canadian recovery programs and links the national recovery program to other national and international conservation initiatives.

RECOVERY PLANNING

7. Maintains files, records and other archival materials pertaining to coordination of the national recovery program and National Recovery Working Group activities including maintaining the Recovery Information Management System (RIMS), a web-based, national database for the recovery community.
8. Maintains the RENEW Web site and disseminates program information to the public. Works with the SARA Public Registry manager to ensure that recovery documents are added to the registry.
9. Organizes, with responsible jurisdictions, training of recovery teams and others in the national recovery process and in scientific aspects of recovery.

4.2 Planning at the Regional Level

4.2.1 Species at Risk Coordinating Committees

“Species at Risk Coordinating Committee (SARCC)” is the general name given to regional jurisdictional bodies that coordinate and strategize recovery planning for all the species at risk found in the region. There may be both director level and technical level regional planning bodies; only the technical level is described here.

There are a number of stages at which regional strategic planning and cooperation are required. Soon after the COSEWIC meeting and national-level planning, jurisdictions should initiate planning for the region’s new group of species. The following are key decision points; guidance on many of these topics is available within this document.

1. Rank species at the regional level, for both planning and implementation.
2. Decide which species could be “fast-tracked” through the recovery planning process, and which will require greater levels of cooperation & consultation (e.g., species of cultural importance to Aboriginal peoples, species whose protection has the potential to conflict with industry...)
3. Decide which species would benefit from immediate action that should not be delayed by the recovery planning process.
4. For each species, decide whether recovery is technically and biologically feasible.
5. For each species, decide whether the concept of residence applies.
6. For each species, decide on the overall approach to recovery (e.g., single species vs. multi-species vs. ecosystem; planned integration with other conservation programs at landscape scale, etc...).
7. For each species, decide on the scope, complexity and type or extent of cooperation that will be necessary to fulfill requirements of S.39 (1) of SARA with respect to wildlife management boards, aboriginal organizations, and other persons or organizations.
8. For each species, to the extent possible, assess which threats are real and imminent, and which are speculative, to help focus effort and resources where needed most in identifying critical habitat and preparing the strategy.

RECOVERY PLANNING

9. For each species, decide whether or not to form a recovery team to prepare the strategy, and, if a decision is made to form a team, the type of team that is appropriate; if not decide who is responsible for recovery planning.
10. For each species, assess:
 - whether the responsible jurisdiction (independently or in cooperation with the team) will identify critical habitat and conduct the required consultation, as per S.39 (3) of SARA, within a time frame that would allow for such habitat to be addressed in the recovery strategy (i.e., by the SARA timeline for the strategy); or
 - whether the recovery team or planners will develop a schedule of studies to identify critical habitat, and the jurisdiction will defer the identification of critical habitat and associated consultation to the action plan stage;
- or
 - whether partial identification is possible with a schedule of studies required to complete the identification.
11. For each species, establish a deadline for the preparation of the recovery strategy.

Some of these decisions may need to be deferred to the recovery team or recovery planner. Depending on the nature of the issues, the regional planners may consider a recovery team's assessment and either take the advice provided by the team, or provide alternative direction to the team in a timely manner.

To help ensure transparency in the decision-making process, regional offices of CWS, DFO or PCA should maintain records of the rationales for any decisions that have been taken at the regional meetings.

Following regional meetings, other jurisdictional staff who are directly involved in recovery planning for a species, and particularly staff who will be assigned to the recovery team, should be informed about the results of relevant decisions. It may be appropriate to summarize all or part of the results of the assessment for inclusion in the letter of instruction or invitation for forming the recovery team. This information will have implications for: the type of team that should be formed (if a decision has been taken to form a team); the categories of cooperators who should be invited to participate; and other information that will help to provide an appropriate focus for the preparation of the strategy. In addition, it is important to distinguish between jurisdictional responsibilities, such as consultation with affected parties, and team responsibilities.

If it seems likely that critical habitat may be identified within a recovery strategy, based on early assessments of the adequacy of the available time frame, responsible jurisdictional staff should be alerted to the need to identify directly affected parties and initiate a consultation plan as quickly as possible.

4.3 Planning at the Jurisdictional Level

4.3.1 Responsible Jurisdictions -- Clarifying Terminology

Given that 16 jurisdictions have responsibilities for recovery planning under the 1996 *Accord for the Protection of Species at Risk*, and CWS, DFO and PCA have responsibilities for recovery planning under the 2002 *Species at Risk Act*, recovery planning for any given species at risk in Canada will rarely involve just one jurisdiction. The terms defined below are intended to generally clarify the roles and responsibilities of jurisdictions at the recovery planning table. Good communication among all parties is essential for coordinated "Accord + SARA" recovery planning. The responsible jurisdictions need to discuss lead and participant roles prior to SARA listing of a species, and agree by consensus on allocations of roles and responsibilities.

Under the Accord - Lead (L): The federal/provincial/territorial (F/P/T) jurisdiction with the most responsibility under the Accord for protection of a species (e.g., for CWS a migratory bird, for PCA a species found mostly within a national park, for DFO a marine species, for P/T a non-federal species found mostly within the province or territory.) [Co-Lead (Co-L): two jurisdictions with similar/equal responsibility under the Accord for a species. DFO and a province or territory are often co-leads for freshwater fish found in one province or territory.]

Under the Accord - Participant (P): Jurisdiction(s) with some responsibility under the Accord for a species, but either there's another jurisdiction with more responsibility, or there are >2 jurisdictions with similar/equal responsibility. If it's a federal species, all provinces and territories within the range of the species would be participants in recovery. If it's a provincial/territorial species, all SARA agencies with responsibility for federal lands within the range of the species would be participants.

SARA Responsible Agency (SRA): the one federal jurisdiction (CWS region, DFO region, or PCA) with the most responsibility under SARA for recovery of a species, which is ultimately responsible for ensuring that a SARA-compliant recovery strategy and action plan are posted on the SARA public registry within SARA timelines. The SRA consults with the other responsible jurisdictions to clarify their respective roles and responsibilities for recovery strategy and action plan development for a given species.

SARA Participating Agency (SPA): other federal jurisdictions (CWS regions, DFO regions, or PCA) with some responsibility under SARA for recovery of a species (e.g., due to responsibility for federal land within range of the species). These agencies should be involved to a greater or lesser extent in recovery planning, depending on the proportion of their land that's within the range of the species, etc. As a minimum, these agencies should be invited to participate in recovery planning, asked to review key drafts, and to approve the final strategy and action plan.

RECOVERY PLANNING

4.3.2 Responsible Jurisdictions -- Terms of Reference

Role

Once the SARCC has met to pre-plan recovery at the regional level, the jurisdictional contacts for the species (the core management group for the species) should meet to initiate recovery planning for the species. Ultimately, decision-making and accountability for decisions pertaining to recovery of species at risk rest with the responsible jurisdiction(s). Under the *Accord for the Protection of Species at Risk*, the wildlife ministers agreed to provide for the development and implementation of recovery plans for E and T species. Under SARA, the two federal competent ministers are responsible for preparing recovery strategies (and action plans where recovery is feasible) for all E, T and XP species on the SARA legal list. Bilateral and multi-lateral agreements may be drawn up between the federal and provincial / territorial governments and wildlife management boards in certain cases, to clarify more explicitly the roles and responsibilities of the different parties.

Functions

1. Establish the recovery team, or the recovery planning structure (see section on recovery team formation).
2. Coordinate the recovery planning process until a recovery strategy and an action plan have been developed and approved.
3. Oversee recovery implementation.
4. Evaluate the recovery strategy every five years from the date of publication, to see if it needs to be updated. Under SARA (S. 46), the competent minister must report on implementation of the recovery strategy and progress toward meeting its objectives, within five years of posting on the SARA Public Registry.

Generally:

- Clarify for the recovery team items of provincial, territorial or federal policy, programming or legislation.
- Respond to the advice submitted by the recovery team and coordinate implementation accordingly.
- Help resolve conflicts among recovery team members.
- Address social and economic issues pertaining to recovery.
- To the extent possible, contact individuals or groups likely to be significantly affected by recovery efforts.
- Ensure maintenance of databases and recovery team files such as recovery team minutes.
- Document all contact or consultation activities: who was contacted, when, where, what information was exchanged, and the outcome of the interaction.

RECOVERY PLANNING

- Report progress in recovery planning and implementation to RENEW (through RIMS).

4.3.3 Recovery Planning Structure

Recovery planner is used as a generic term to describe the individual or group of individuals who are undertaking recovery strategy planning and/or action planning for a particular species at risk. *Recovery planner* could refer to a recovery team, jurisdiction(s) or consultant.

Recovery planning structures can take a variety of forms, including the following:

1. Traditional recovery team (RT): The concept of a recovery team does not appear in SARA. Nevertheless, forming a recovery team is the traditional approach for development of a recovery strategy. It is recommended that a recovery team be formed whenever jurisdictions intend to actively recover a species, when the species is wide-ranging, and when there is a high level of public interest in the species. A generic terms of reference for recovery teams appears below, as does a discussion of recovery team membership. Recovery teams often grow in size to the detriment of their productivity, but broad participation on a team is encouraged, because the resultant buy-in enables recovery planning and implementation to proceed more smoothly. A core group of more committed individuals tends to form to ensure that work plans are implemented, and often "recovery implementation groups" (RIGs) form to take on specialized tasks.
2. Short-term recovery team: While the traditional recovery team has a long-term role, an alternative model is the more constrained establishment of a recovery team for the development of the recovery strategy only (one to two years). After achieving this task, the team might no longer exist as such, or might have a changed role and membership. A short-term team might be charged with making recommendations on implementation, but would not be directed to oversee or evaluate the implementation as such. While members of the team may be involved in the implementation stage, their role would be separate from their mandate as a member of the recovery team.
3. Jurisdictional planning team: When a particular jurisdiction has most of the responsibility for recovery planning (e.g., the species is only found in one province, or is a marine mammal, or is a migratory bird under the MBCA, or is only found in a national park), or when the species is not a high priority for recovery implementation, jurisdictions may decide to form a recovery planning "team" of only one or a few government agents. These individuals might contract someone else to develop the recovery strategy, but would ensure the involvement of other interested parties in the strategy development, as well as oversee the public consultation process.

RECOVERY TEAM

4.3.4 When to Form a Recovery Team?

The following criteria could be considered in determining whether to form a recovery team and the type of team to be formed:

- In how many Canadian range jurisdictions does the species occur? If the species has substantive occurrences in more than one jurisdiction, and if the species is under consideration by more than one regional team, all jurisdictions/regional teams should participate in the decision respecting whether or not to form a recovery team. In the case of multijurisdictional species, the formation of a core team, at least, may be necessary to demonstrate interjurisdictional cooperation.
- What is the degree of urgency of the threats facing the species? In cases in which the threats are of such a serious nature that immediate intervention is required, jurisdictions could consider forming a recovery implementation group (RIG) or management team to prepare an emergency work plan, and defer the preparation of a full recovery strategy.
- Are there contentious issues? Cooperation by various parties within the forum of a recovery team may help to resolve certain issues.
- How many species occurrences are there in Canada? If there is a very small number of landowners and other affected parties, the formation of a recovery team may not be necessary, depending on the issues involved. A large number of landowners or other affected parties would normally be indicative of the need for a recovery team.
- What is the protection status of the lands on which the species occurs? If the species occurs entirely on public lands, and if those lands can be demonstrated to receive adequate protection, the formation of a broad recovery team with non-jurisdictional representation may not be necessary. However, jurisdictions should consider potential impacts on adjacent landowners before making this decision, as those landowners may become affected parties if the size of the occurrence increases as a result of management of the species on public lands.
- What is the global status of the species? If the species is globally at risk, a recovery team would normally be formed; however, this factor should be considered in conjunction with the previous questions on this list.
- Does the species hold special significance for Aboriginal people? If so, what can be done to involve them early in the process?

4.4 Planning at the Recovery Team Level

4.4.1 Process for Forming Recovery Team

1. The wildlife directors of the responsible jurisdictions identify jurisdictional representatives to form a core team and oversee establishment of a broader recovery team. These individuals may also be charged with recommending an approach for recovery planning (i.e., single vs. multi-species). The core team then identifies and invites other individuals or organizations to consider participating on the team (see membership section below).
2. Each prospective team member is sent a letter of invitation or instruction and an orientation package outlining the role and responsibilities of the team, the terms of reference, the deliverables and the timelines. (The generic terms of reference for recovery teams appears below. A generic letter of instruction and examples of terms of reference drafted for particular teams are available from the Recovery Secretariat upon request).
3. An inaugural recovery team meeting is then held, to establish team membership and identify the chair or co-chairs. It is recommended that there be one co-chair from among the responsible jurisdiction representatives, and a second co-chair from the broader membership of the recovery team.
4. The terms of reference, chairmanship and membership of the recovery team may be refreshed at any time, to meet new responsibilities or to conform with changes in the governance structure or processes of RENEW.

4.4.2 Membership on Recovery Team

In order to participate in recovery strategy development, each recovery team member should be committed to recovery of the species and bring a particular expertise to the table (e.g., knowledge of the species, closely related species, or the ecosystem; traditional ecological knowledge or community knowledge of the species and/or its habitat; expertise in relevant disciplines such as local planning, ecology or genetics; knowledge of the threats contributing to decline of the species or related industrial processes; or expertise in recovery planning or implementation). They should not be there to lobby for socio-economic considerations, although such considerations can be brought forward at the action plan stage in an effort to work towards sustainable practices.

Members are invited at the discretion of the ministers or wildlife directors of the responsible jurisdictions. Members are usually appointed by the responsible jurisdiction directors for a three-year, renewable term. Decisions respecting support for attendance of non-government members at recovery team meetings will be made by the individual responsible jurisdictions on a case-by-case basis.

The recovery team may recommend potential members to the directors, such as:

- representatives of Aboriginal communities and wildlife management boards whose land claims area is within the species' range

RECOVERY TEAM

- species specialists in the academic or conservation or zoological communities
- specialists associated with major zoo facilities (e.g., in cases in which captive breeding may be necessary to achieve recovery goals)
- enforcement specialists (e.g., in cases in which illegal harvest is an issue)
- affected landowners or stakeholders on whose property a species occurs
- government departments or municipalities (e.g. municipal planners) with client groups that may constitute affected parties
- major utilities (hydro, water)
- individual businesses or industries (e.g., forestry, aggregates, mining, prospecting, oil and gas) and the associations that represent them
- farmers, and agricultural, rural or ranching associations, commercial fishers, fur harvesters and wild plant collectors, and the organizations that represent them
- persons who engage in certain types of recreational activities (e.g., hunting, fishing, snowmobiling, biking, hiking, cottage owners) and the organizations that represent them.

Individuals who have particular expertise regarding the species or issues that affect it and who wish to participate on the recovery team for the species should be encouraged to submit a résumé and letter of interest outlining their knowledge, skills and commitment to recovery of the species, to the director of the wildlife agency with lead responsibility for the species.

When assessing potential recovery team members, the responsible jurisdictions should consider whether the individual has the ability to:

- i) contribute scientific or biological expertise or knowledge that will facilitate the work of the team in fulfilling its mandate to recover species; or
- ii) contribute knowledge or expertise about the specific land / habitat on which a species occurs for purposes of helping the team to fulfill its mandate to recover the species; or
- iii) contribute expertise or knowledge respecting the interests and concerns of affected parties that will enable teams to develop options for addressing issues at the action plan stage before they become contentious, and facilitate federal, provincial or territorial consultation with those parties; or
- iv) help to liaise with affected landowners or other persons or groups directly affected by the strategy, or governments of other countries, in a manner that will facilitate federal, provincial or territorial government consultation with those parties; or
- v) help to produce timely positive results for the recovery of the species; and
- vi) work towards establishing and maintaining an atmosphere of goodwill within the team and with other individuals or groups.

4.4.3 Maintaining Recovery Team Functionality

The letter of invitation that is sent out to prospective team members would have indicated that *all* recovery team members are expected to work towards the development of goals and objectives for the recovery of the species. Should the

RECOVERY TEAM

chair of a recovery team determine that a member is unable to focus on these goals and objectives and is disruptive to the work of the team, the chair should first remind the individual (in a private discussion) of the primary purpose of the recovery team as set out in the letter of invitation. If the problem is not resolved, the chair may discuss the matter with the appropriate jurisdictional authority, and determine whether, and under what circumstances, the offer of membership may be retracted.

Circumstances may arise in which persons or organizations express an interest in participating on a recovery team, but their interests and expertise are not considered pertinent to the work of the recovery team. In such cases, it may be appropriate to suggest alternative opportunities for engagement. For example:

- participation on an advisory group or recovery implementation group
- participation in discussions with appropriate jurisdictional authorities on subjects that are of a consultative nature
- representation by an umbrella organization that can bring a range of interests to the table
- participation on an “as needed basis”, when expertise is specialized.

4.4.4 National Recovery Team -- Terms of Reference

Role

The primary role of a recovery team is to effect recovery of the species in a timely manner. The team provides advice to the responsible jurisdictions, in the form of a recovery strategy and action plan, on how to recover the species in question. Once implementation is underway, the team may also be involved in:

- a) advising on progress and success in meeting the recovery objectives; and
- b) adapting or updating the recovery strategy or action plan as needed.

The primarily advisory function does not preclude recovery team members from being directly involved in recovery implementation.

Members

Members are invited at the discretion of the ministers or wildlife directors of the responsible jurisdictions. The recovery team may recommend potential members to the directors, as discussed in the section on formation of recovery teams. Members are expected to work in support of species recovery.

Chair

A recovery team has, as a minimum, a chair provided by the lead jurisdiction. The team may elect a co-chair from its membership, in which case the roles and responsibilities of each co-chair need to be clearly identified. Chairs and co-chairs serve a renewable term of three years, but the team may vote to have a leadership review at any time.

RECOVERY TEAM

Operations

The team-specific letter of instruction or invitation from the responsible jurisdictions may outline how a recovery team should meet its responsibilities. The following are a few "default" operations, for use by teams in the absence of such instructions.

- Decisions are made on a consensus basis (i.e., general agreement) or by a majority vote.
- Recovery teams should communicate regularly with all RIGs engaged in recovery activities for the species.
- Recovery teams should also communicate regularly with all other recovery teams, RIGs and other groups doing conservation work in the same geographic area, or who are working on the same species in another area.

Conflict Resolution

If potential conflicts of interest arise for a co-chair, he or she could defer to the other co-chair if there is one, or temporarily appoint another team member as chair. The directors of the responsible jurisdictions could be called upon to resolve more serious conflicts. Some creativity is usually needed in resolving conflict. For example, within a recovery strategy, it might be possible to incorporate differing opinions, with the supporting arguments. Since the recovery strategy represents advice to government, providing management options may be the best approach.

Functions

1. Produce a recovery strategy for one or more species, utilizing the best ecological information available (science + Aboriginal or traditional ecological knowledge + community knowledge), following the RENEW guidelines, and meeting the timelines specified by the responsible jurisdictions. The recovery strategy may be drafted either by the teams themselves or by third parties (consultants), provided the teams review third-party drafts for quality.
2. Provide advice to the responsible jurisdiction directors on evolving issues related to recovery or conservation of the species.
3. Provide input or advice on research, monitoring, threats or management proposals related to the species.
4. Provide information to the Recovery Secretariat as requested for the RENEW annual report (through RIMS), and to the responsible jurisdiction directors as requested for any other reporting requirements.
5. Advise responsible jurisdiction directors on the progress and success of recovery efforts and, as necessary, propose amendments to the recovery strategy or action plan to accommodate new information or build on experience. As a minimum, review the need for updating the recovery strategy every five years.
6. Oversee one or more Recovery Implementation Groups (RIGs), if appropriate.

Note that some provinces and territories may add additional details or address additional topics such as reporting lines, length and renewal of terms, speaking for the

RECOVERY TEAM

team, members costs, specific requirements of the species, species covered by the team or species priority.

4.5 Recovery Planning Approaches

4.5.1 Selection of Scale of Recovery

Selection of scale of recovery (e.g., single-species, multiple species at risk, ecosystem or landscape-based) is mostly based on biological "inherent qualities of the system", such as geographical distribution, species characteristics and threats (see Table 2). However, there may be other considerations that influence selection of approach, such as limited availability of expertise. For example, a group of snake and lizard experts in southern Ontario recently formed a network to consider common recovery goals and approaches, resolve common issues, improve communication and coordination, etc.

Regardless of the approach taken, specific biological targets for recovery of individual species must be identified so that progress in recovering the species can be evaluated. There is always the risk with multi-species approaches that the recovery program will help many species to some extent, but not recover any of them. Another concern is that a recovery strategy or action plan developed for more than one species will not adequately cover the range of each of the species, and thus will not meet legal requirements for a recovery strategy or action plan for the species.

Figure 2 is a decision tree to guide selection of possible approaches. As with other aspects of the recovery process, flexibility is key. Different jurisdictions or RIGs may use different but coordinated approaches for recovery of the same species. The scale may differ between recovery strategy development, action plan development and recovery implementation. The responsible jurisdictions and recovery team should consider the options and modify the approach as common sense dictates. As a default, and especially in the case of emergency listings and other urgent situations, starting with a single-species approach will usually be faster and more effective in the short-term than pursuing one of the more complex approaches. Nevertheless, SARA does allow for adopting a multi-species or an ecosystem approach when preparing the recovery strategy [see S.41 (3)].

When developing a multi-species recovery strategy, it is recommended to group background information to the extent possible, but to provide species-specific goals and objectives for each of the species being covered (see guide for recovery strategy, below)

International Species

Where a species' range extends beyond Canada's borders and the species has been listed by a neighboring country, it may be advisable to develop an international recovery plan (e.g., Whooping Crane) or to develop a Canadian recovery strategy

RECOVERY APPROACHES

that represents the Canadian component of an international approach to recovery (e.g., Piping Plover). If there is an expected direct effect of a Canadian recovery strategy or action plan on the species in another country, even if not listed in the other country, SARA (S.39(3)) requires that the recovery strategy or action plan be prepared in consultation with the government of the other country.

Table 2. Summary of considerations for selection of scale of plan

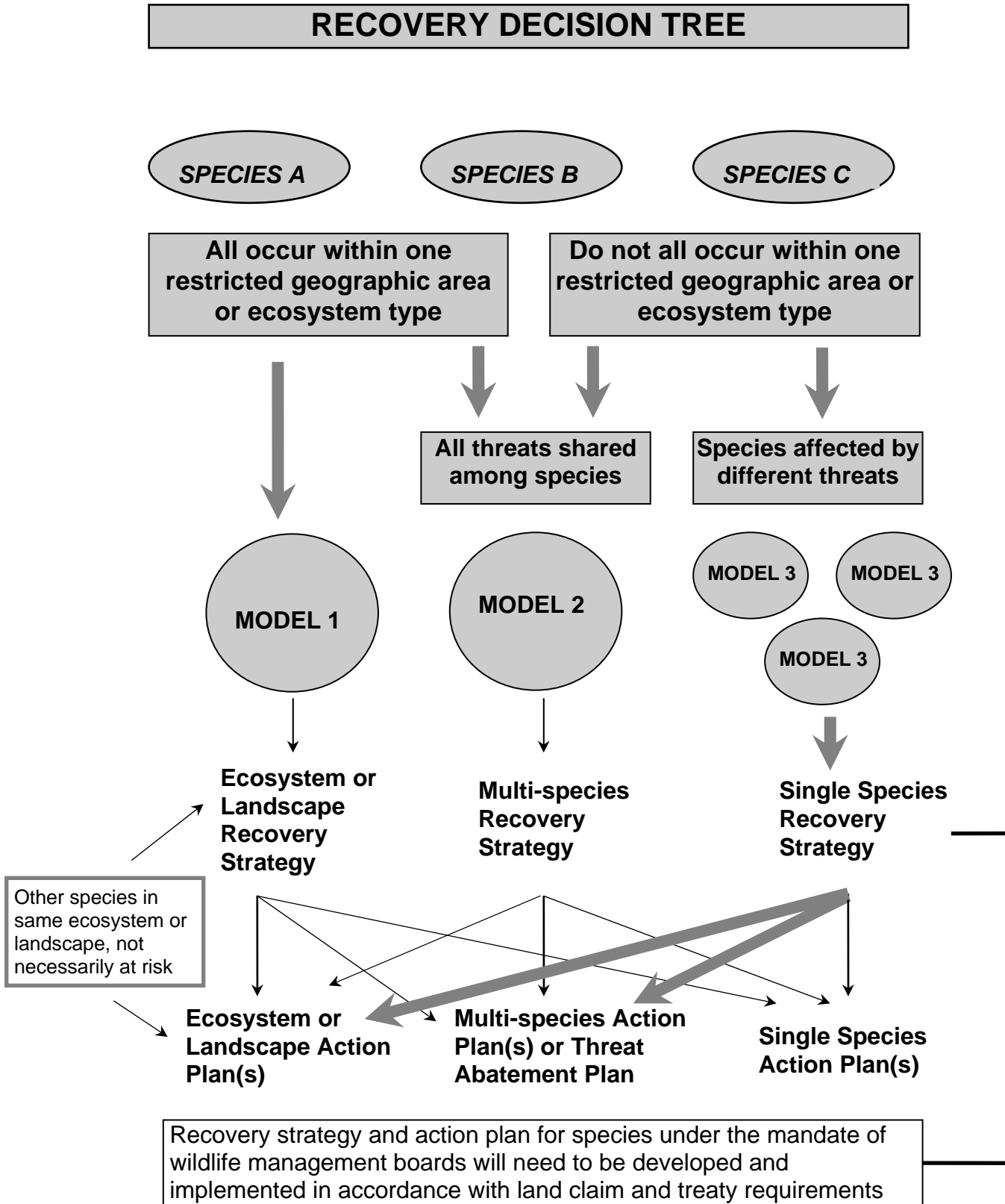
Approach (scale)	Some considerations and qualities	Example
Single species	<ul style="list-style-type: none"> - distinct species with respect to habitat requirements and threats - only listed species in geographical area 	Vancouver Island Marmot
Multiple species at risk or threat abatement*	<ul style="list-style-type: none"> - two or more species at risk in same taxonomic group or same geographical region - species share a common threat 	Acadian Flycatcher & Hooded Warbler, Soapweed and Yucca Moth
Ecosystem-based*	<ul style="list-style-type: none"> - deals with select sites of the same ecosystem type, not necessarily contiguous within an ecologically defined area - considers the integrity of the ecosystem as a whole; is not limited to species at risk (i.e., is broader than RENEW's mandate) 	Garry Oak Ecosystems
Landscape-based*	<ul style="list-style-type: none"> - deals with the multitude of ecosystems contiguous within a given geographically defined area - is not limited to species at risk (i.e., is broader than RENEW's mandate) 	South Okanagan-Similkameen Conservation Program

* Species-specific goals and objectives still need to be identified and addressed in order to be able to evaluate recovery progress.

RECOVERY APPROACHES

Figure 2. Decision Tree: Approaches to Recovery

(Original date: November 2002 Revised Date: March 2005)



5. RECOVERY STRATEGY

5.1 Recovery Strategy -- Description

The recovery strategy is the first part of the two-part national recovery plan. It establishes the framework for development of the recovery action plan—the second part of the two-part recovery plan—and recovery implementation. The specific content requirements depend on whether or not the recovery of the species is deemed feasible. It sets out a recovery program (not a research program) or approach based on biological considerations including traditional ecological knowledge. Socio-economic considerations are brought into the implementation phase of recovery, as identified in the recovery action plan.

The recovery strategy is normally prepared by the recovery team or by a RIG of a multi-species team, as biological advice to the responsible jurisdictions. In cases where it is drafted by one individual, or by persons external to the team (i.e., contracted out), the recovery team will oversee its development and provide adequate review (See IV, 3, iii. Recovery Planning Structure for other models of strategy preparation).

The federal competent minister is ultimately responsible for ensuring that all SARA requirements are met prior to the document being posted on the SARA Public Registry. Similarly, the ministers of non-federal responsible jurisdictions are ultimately responsible for ensuring that the recovery strategy meets their respective legislative or policy requirements. Of course, ensuring recovery planning is biologically sound and conducive to species' recovery is a top priority for all jurisdictions.

The recovery strategy:

- is dynamic—normally reviewed and updated as necessary on a five-year cycle or more frequently (through amendments) as experience or new information warrants;
- is strategic, based on biological knowledge;
- provides the rationale and identifies the goals, objectives and opportunities for recovery, and the threats and the key approaches to overcome them, and the opportunities;
- for the sake of continuity, summarizes basic information about the species and the rationale for the COSEWIC status designation (referred to as the “box” from the COSEWIC status report cover sheet). The information presented should be relevant to recovery and presented in the context of its implications. Other information from the status report can be referenced but should not be duplicated;
- if possible, characterizes the known, suspected and potential critical habitat of the species, or indicates what studies are needed to make this identification (this information should be linked with the recovery goal);

RECOVERY STRATEGY

- provides more information on the structure for recovery (e.g., the number and geographical coverage of recovery implementation groups, timelines for the production of recovery action plans).

5.2 Timelines for Development of a Recovery Strategy

The timelines for developing a recovery strategy vary among the different federal, provincial and territorial policies and legislation. The "clock starts ticking" on recovery strategy timelines when the species is added to the legal list or regulations under the legislation that imposes the shortest timeline. However, regional recovery planning should begin as soon as species appear likely to be assessed as being at risk, or timelines will never be met. The annual cycle of wildlife management board meetings must be considered when board approvals are required.

For species where recovery is considered not biologically or technically feasible, a recovery strategy should still be prepared, but it could be much shorter (see guide). As a minimum, it should include a description of the species and its needs, identification of the species' survival habitat to the extent possible, and the reasons why its recovery is not feasible.

Recovery Strategy Timelines With Respect to SARA

The Recovery Information Management System (RIMS) is set up to track SARA timelines for when recovery strategies are due for inclusion on the SARA public registry. The pattern of timelines is shown below.

Triggering the Timelines

The SARA timelines for newly assessed species are not triggered until the species have been added to the SARA legal list. There are three steps to this process:

1. COSEWIC provides the Minister of the Environment with an official notice of the outcome of the assessment meetings. There may be a delay while the status reports are finalized and translated. This notification occurs once per year.
2. The Ministers of the Environment and Fisheries and Oceans consult on the proposed listing of species for which they are the competent minister. The federal process includes posting a consultation document on the SARA public registry for a 60 day comment period, followed by a 30 day consideration of comments received. As well, responsible jurisdictions, wildlife management boards, affected Aboriginal people and other identified concerned groups are contacted directly.
3. The Minister of the Environment presents COSEWIC's assessments to the Governor in Council, with a recommendation to list some or all of the species. This triggers the **nine month** period allowed for preparing a Regulatory Impact Analysis Statement (RIAS), developing regulatory proposals, and publishing these in the Canada Gazette Part 1. Once newly-assessed species have been added to Schedule 1, the legal list, the timelines for preparing a recovery strategy are:

RECOVERY STRATEGY

New species assessed by COSEWIC:

- E - 1 year from being added to the SARA legal list
- T, XP – 2 years from being added to the SARA legal list
- SC - 3 years from being added to the SARA legal list

Species in Schedule 2 or 3, reassessed by COSEWIC: Once reassessed species have been added to Schedule 1, the legal list, the timelines for preparing a recovery strategy are:

- E - 3 years from being added to the SARA legal list
- T, XP - 4 years from being added to the SARA legal list
- SC - 5 years from being added to the SARA legal list

Schedule 1 Species (Legal List, as proclaimed in June 2003):

- E - 3 years from June 2003 (June 2006)
- T, XP - 4 years from June 2003 (June 2007)
- SC - 5 years from June 2003 (June 2008)

Species added to Schedule 1 in January 2005 (73 species)

New species assessed after Schedule 1 was published in Dec.2002 (1/2/3 years):

- E: 01 / 2006
- T, XP: 01 / 2007
- SC: 01 / 2008

Reassessed species from Schedule 2 or 3, reassessed in May 2002, Nov. 2002 or May 2003 (3/4/5 years):

- E: 01 / 2008
- T, XP: 01 / 2009
- SC: 01 / 2010

Note that DFO held back an additional 12 spp. for extended consultation on listing

Species listed in July 2005 (39 species)

Timelines

New species assessed after Sch. 1 was published in Dec.2002 (1/2/3 years):

- E: 07 / 2006
- T, XP: 07 / 2007
- SC: 07 / 2008

Reassessed species from Schedule 2 or 3, reassessed in Nov. 2003 or May 2004 (3/4/5 years):

- E: 07 / 2008
- T, XP: 07 / 2009
- SC: 07 / 2010

RECOVERY STRATEGY

Why some targets in RIMS do not yet have a SARA timeline:

Newly-assessed species not yet consulted on for listing.

Schedule 2 or 3 species not yet reassessed.

Ecosystem and Multi-species recovery strategies: No SARA timelines can apply, unless it is the shortest timeline of all the species that are covered in the strategy. The whole range of each species will need to be covered off by one or more recovery strategies.

A decision has been made not to list the species under SARA or to delay listing.

5.3 Process for Developing a Recovery Strategy

[September 2004 draft] The following timeline for the main process steps for developing a national recovery strategy starts about 9 months before COSEWIC officially notifies the Minister of the Environment of the outcome of its assessment meeting(s), and requires “pre-work” on the part of the responsible jurisdictions to expedite recovery planning. The schedule is designed to produce a recovery strategy for an endangered species within the timeline of one year from legal listing under SARA. This is a total of 21 months from notification of assessment by COSEWIC, since the listing process can take up to 9 months. This is a “fast-track” schedule that will be difficult to achieve if the species has special importance for Aboriginal peoples, industry, and so on.

Table 3. Main process steps and timelines for developing a strategy

Process Step	Timeline for Process Step		Who	Comments
	END.	THR. or XP		
1. Receipt of COSEWIC report on outcome of Nov. & May assessments	May each year	May each year	Recovery Secretariat prepares first draft resp. table	Recovery Secretariat drafts responsibilities in RIMS
2. Finalize jurisdictional responsibilities for species; decide on approach for multi-region species	immediately after COSEWIC meeting	immediately after COSEWIC meeting	NRWG	Changes at a later date are possible as more is learned about the species' distrib.
3. For SARCC's group of species, decide if recovery is feasible; decide if residence concept applies; decide on approach (e.g., single vs multi).	Within 1 month from May COSEWIC meeting	Within 1 month from May COSEWIC meeting	Technical SARCC or Resp. Jurs + SARA Responsible Agency (SRA)	SARCC does first cut for region, then Resp. Jurs + SRA look at individual spp. that are problematic
• <i>Parallel process:</i> COSEWIC officially notifies Minister of assessments	June? each year	June? each year		
• <i>Parallel process:</i> Minister officially notifies GIC of assessments	July? each year	July? each year		This is “SARA timeline + 9 months”
4. Cooperators are identified and contacted	Within 1 month from COS May mtg	Start immediately after listing	Technical SARCC or Resp. Jurs + SRA	Policy is to start recovery planning for End spp. before listing, but could delay start for T&XP species
5. First draft strategy prepared using status report info & SARA-compliant guide	Within 3 months from COS May mtg	Within 3 months from listing	Resp. Jurs	Prepared as a head start for recovery team / recovery planners
6. Recovery planners or team in	Within 3	Within	Resp. Jurs +	At first team meeting,

RECOVERY STRATEGY

place & trained	months from COS May mtg	3months from listing	SRA	discuss team's ToR & first draft RS
7. Second draft strategy prepared using additional information	Within 7-8 months from COS May mtg	Within 7-8 months from listing	Recovery planner or team / Resp. Jurs	
• <i>Parallel process</i> : Listing of species under SARA	0	0		End of 9 month listing period; start of SARA timeline for RS (Time 0)
8. Internal & inter-jurisdictional review of strategy / check for SARA-compliance	Within 1 month after listing		SRA / Resp. Jurs	
9. Strategy is revised as necessary (= 3 rd draft)			Recovery planner or team	
10. Third draft strategy sent for external review and consultation	2 months		SRA / Resp. Jurs	
11. Strategy revised following external review & consultation (= 4 th draft)	4 months		Recovery planner or team / Resp. Jurs	
12. Approval of fourth draft sought from all responsible jurisdictions	5-6 months		SARA Responsible Agency (SRA)	
13. Final draft of strategy is prepared, meeting any conditions necessary for approval	7 months		"	
14. Editing of English version	8 months		"	
15. Sent for translation; translation reviewed	9 months		"	Translation reviewed by HQ?
16. Briefing note prepared	9 months		"	
17. HQ check for national consistency; Briefing Note transmitted to Minister	9 months		SRA-HQ	
18. Approved by Minister	11 months		HQ	
19. Proposed RS posted on the registry for 60 d comment period	12-14 months	24-26 months	Public registry	Proposed RS is posted for 60 days
20. Package of comments sent to SRA	ASAP after end of 60 d comment period	ASAP after end of 60 d comment period	Public registry	RS must be finalized within 30 days of end of 60 day period
21. Comments analyzed and response developed	"	"	SRA (in collaboration with RT if warranted)	
22. May need Minister's approval of changes	"	"	SRA-HQ	
23. Response sent for translation	"	"	SRA	
24. Translation reviewed	"	"	SRA-HQ	
25. Final posted on the registry	Within 30 days from end of 60 d comment period	Within 30 days from end of 60 d comment period	Public registry	RS must be finalized within 30 days of end of 60 day period

RECOVERY STRATEGY

5.4 Meeting SARA's Cooperation and Consultation Requirements for Recovery Planning

Draft guidelines for meeting the SARA requirements for cooperation (s.39(1)) and consultation (s.39.3)) in recovery planning are in development.

Cooperation during recovery strategy and action plan development

Cooperation **during** the development of a strategy helps to ensure buy-in of a knowledge-based planning document (i.e., one incorporating the best science as well as Aboriginal or traditional knowledge and community knowledge, as appropriate). Similarly, involving key affected and interested parties **during** the development of an action plan is necessary in order to integrate socio-economic factors into the plan, and to facilitate and encourage buy-in to the implementation of the plan.

Cooperation could involve (but not necessarily be limited to) the participation of (1) representatives from all responsible jurisdictions, (2) wildlife management boards, (3) Aboriginal communities, (3) landowners and municipalities, (4) industries or private companies with an interest in or who could be directly affected by the recovery of the species. A range of mechanisms could be considered to involve these parties in the development of a strategy or action plan, including participating on a recovery team or in a Recovery Implementation Group (RIG), developing an advisory group, conducting site visits or community workshops, holding community information sessions, conducting one-on-one meetings or telephone calls, or developing an online presence with a discussion board.

In general, for species where there are a large number of parties interested in cooperating in recovery planning, it is recommended that the responsible recovery planners establish an advisory group of parties directly affected by recovery of a species, as a venue for cooperation. Other mechanisms such as public meetings or workshops could serve as means to involve parties with an interest in recovery of the species, and could be identified and/or explored by the advisory group. An advisory group would not meet with the recovery team as frequently as the team would meet, and would not participate in the detailed work. Instead, the group would be called upon for advice in setting the goals, objectives, approaches and actions for recovery, and in reviewing significant drafts of the recovery strategy or action plan. Note that participation of representatives of parties on a recovery team does not necessarily mean those parties are being appropriately involved in the development of a strategy or action plan. Note also that the scale of cooperation should be commensurate with the level of interest, the potential effects of the proposed recovery activities and the strategic importance of early involvement to ensure recovery success.

5.4.1 Consultation on Recovery Strategies and Action Plans

In addition to cooperation, the text in SARA requires consultation to the extent possible with any landowners and other persons whom the competent minister

RECOVERY STRATEGY

considers to be directly affected by the strategy..." (S.39(3), and imposes a similar requirement for action plans (S.48(3)). Legal precedent also requires consultation with affected aboriginal communities. In practice, then consultation of some form must occur **after** the strategy or action plan has been completed by a recovery team, and prior to acceptance by the competent Minister. This form of consultation is a responsibility that can be shared federally and provincially, but which is largely a federal responsibility under SARA, and will be greatly facilitated where the recovery team or planner has made strong cooperative efforts during recovery strategy or action plan development.

As a consultation minimum, recovery strategies and action plans will be posted for comment on the SARA public registry, but other mechanisms could include: (1) a formal review by Wildlife Management Boards, (2) direct consultations with affected aboriginal communities, (3) consultation sessions with affected parties such as industry or non-government organizations in major centers in Canada, or (4) consultations in areas of high biodiversity where there are strategies or action plans for multiple species at risk.

5.5 Approval of Recovery Strategies

The generic process for obtaining jurisdictional endorsement of draft recovery strategies was outlined previously in Table 3, and is described in more detail below. Endorsement of recovery action plans follows the same steps, except that peer review may be done by the recovery team and individuals actively engaged in recovery action, when a RIG has produced the action plan. The process will likely be fine-tuned over time by individual SARCCs as the development of bilaterals progresses. The development of recovery documents (recovery strategies, action plans and management plans) is tracked in RIMS. Implementation of the recovery strategy should take place concurrently and not be delayed by the endorsement process.

1. **Recovery team quality control:** The recovery team determines when the draft recovery strategy is ready for internal jurisdictional review.
2. **Internal jurisdictional review:** The recovery team chair submits the draft recovery strategy to all the responsible jurisdictions for internal review.
3. **External (peer) review** (can be concurrent with internal jurisdictional review): Once the jurisdictions feel the document is ready, it is submitted to the SARA Responsible Agency for independent external review, along with a list of three to five potential reviewers supplied by the recovery team (experts who were not involved in developing the document.) It is recommended that one of the reviewers be from a recovery team dealing with a related species or similar issues. If there are controversial science issues, specific advice on these should be sought. The SARA lead arranges for two of these experts to review the draft document over a one-month period, and also examines the document to ensure it is consistent with the guidelines in the RENEW recovery handbook and with the requirements of SARA. The results of the peer/SARA review are conveyed to the recovery team chair and the team's jurisdictional contacts for consideration in revising the document. Suggested changes (other than those required by SARA)

RECOVERY STRATEGY

do not need to be made if the team does not feel they will enhance recovery planning.

4. **Approval by responsible jurisdictions:** Once the team has responded to the external review, the final draft recovery document is submitted to the SARA Responsible Agency for transmittal to the responsible jurisdictions. Each jurisdiction is asked to approve the recovery strategy. Approval may be conditional on some changes, or may not apply to some sections of the document. The nature of the approval should be documented, and reflected in the disclaimer or preamble at the start of the recovery strategy. Approval does not constitute commitment to implementing the strategy.
5. **Posting on SARA (and other) public registries.** The SARA Responsible Agency has the endorsed document edited and translated before including it in the SARA public registry by the required date. Once the public review period of 60 days is over, the strategy is revised within an additional 30 days, then the final version is included in the public registry. Other individual jurisdictions may also have a requirement to post recovery documents on a public registry for a public review period. Ideally, these jurisdictions would coordinate with the federal agency to ensure that the public registry periods coincide. The jurisdiction may choose to add a covering letter to the document, stating what the jurisdiction is or is not committing to. The strategy or plan would not be considered final until comments stemming from all the public registries have been addressed. Comments will be compiled and submitted to the SARA Responsible Agency for consideration. Input may be sought from the recovery team in responding to the comments.
6. **Publication:** the SARA Responsible Agency will be responsible for publishing the final strategies or action plans that have successfully passed through the SARA public registry process.

5.6 Unsolicited Recovery Plans, Strategies or Action Plans

Any unsolicited recovery plan, recovery strategy or action plan received by a CESSC minister or CWDC director will be distributed for review to all jurisdictions with responsibility for the species, along with the SARA Responsible Agency. A collective decision will be made on whether or not to accept the document as a RENEW or jurisdictional document; the SARA Responsible Agency will decide if it meets the SARA requirements and can be included in the SARA public registry. Planning documents that do not meet the SARA requirements for content (e.g., critical habitat) and process (i.e., cooperation and consultation) may be published by one or more of the jurisdictions responsible for the species, but will not be considered RENEW national strategies or action plans.

5.7 Guide for SARA-compliant National Recovery Strategy

October 2004 draft (revised April 2005)

SARA-Compliant Recovery Strategy GUIDE

Style and formatting: see Appendix E for guidelines

Notes:

1. This guide is intended to ensure SARA-compliance, effective recovery planning, and national consistency. The letter of invitation / instruction to recovery teams from the responsible jurisdictions may expand upon the guide to meet the needs of one or more given species or the jurisdiction. All the elements required by SARA must be included in the strategy.
2. Recovery strategies should be short and concise (10-20 pp. in length), knowledge-based, strategic in nature, with clear logical flow from threats to setting of goal (population or distribution target) to approaches to identification of measurable objectives to address the threats and attain the goal.
3. Summarize relevant information from the COSEWIC status report. Be sure to avoid plagiarism and to state sources explicitly. Include new data and any other relevant information that was not included in the status report, supported by references.
4. Further guidance is available from individual jurisdictions, for when to consider multi-species and ecosystem/landscape recovery planning.
5. The corresponding section of SARA is indicated for elements required for compliance with SARA. Additional elements are shown as 'recommended' or 'optional'.
6. The order in which you write or present sections is entirely flexible. For example, elements such as critical habitat and goal or population / distribution objectives are logically linked and might be written or placed together.
7. Keep in mind that the audience for recovery strategies includes members of the public and landowners. Plain and sensitive language should be used wherever possible. For example, when you write about approaches that involve landowners, think about how the section reads from a landowners' point of view.
8. SARA 83(4) allows recovery strategies to permit exemptions from certain prohibitions for authorized persons. Guidance on this is still being developed. Contact Recovery Secretariat for more information.
9. If the competent minister has determined that recovery of the species is NOT biologically or technically feasible, there are fewer required content elements in the recovery strategy (as indicated in the guide).

PRELIMINARY PAGES

SARA Recovery planning documents: the SARA Responsible Agency will apply the official SARA cover and use the SARA template to prepare the preliminary pages.

For RENEW documents, use the following as a guide:

Outside cover: Indicate the stage of development (e.g., first draft, second draft) and the date on both the cover and on a footer throughout the document. The RENEW cover design may be copied from a published RENEW recovery plan and adapted as necessary. Either a black and white illustration or photo of the species (credited accordingly) may be used, as long as it photocopies well.

Title: Recovery Strategy for the Common Name (*Scientific Name*), *specify population or other COSEWIC sub-category of assessment as appropriate, specify “in Canada” when the strategy is the Canadian component of a joint Canada-US recovery effort, specify geographic area when the strategy is for part of the range of a COSEWIC species* [DRAFT, PROPOSED, or FINAL]

Inside cover: cataloguing information will be provided by the SARA responsible agency, but please provide the **Recommended Citation** (authors of the strategy in appropriate order or where applicable, originating jurisdiction).

Recovery Team Members: Names and affiliations

Disclaimer: Use the following as a guide or see recently published strategies for other examples.

This (draft) National Recovery Strategy for Species X has been prepared in cooperation with the members of the Species X recovery team, Jurisdictions Y and Z and in consultation with (as appropriate). It defines the recovery goals, approaches and objectives that are deemed necessary to protect and recover the species. It does not necessarily represent the views of individual members of the recovery team, or the official positions of the organizations with which the individual team members are associated. The goals, objectives and recovery approaches identified in the strategy are based on the best existing knowledge and are subject to modifications resulting from new findings and revised objectives. Implementation of the plan is subject to appropriations, priorities, and budgetary constraints of the participating jurisdictions and organizations. Further details will be provided in one or more associated action plans.

Acknowledgments: It is customary to acknowledge those who assisted in developing the strategy, e.g., reviewers, sources of funding, support of landowners, etc. Those who were consulted or who cooperated in the process should also be thanked.

RECOVERY STRATEGY GUIDE

Species Information ("COSEWIC assessment summary," as it appears on the COSEWIC web site <http://www.cosewic.gc.ca>, e.g., for May 2004 assessments: http://www.cosewic.gc.ca/htmlDocuments/Detailed_Species_Assessment_e.htm—do not alter.)

<p>Common Name (population): Scientific Name: Status: Last Examination and Change: Canadian Occurrence: Reason for designation:</p> <p>Status history:</p>

Executive Summary (usually 1 page): Summarize the highlights of the strategy in one or two sentences per section. Specify the time period covered by the strategy.

Table of Contents: Use the ToC tool provided by Word; please avoid complex numbering systems.

BACKGROUND

1. Description. *A description of the species and its needs that is consistent with the information provided by COSEWIC [SARA, S.41(1)(a)].* Throughout the strategy, clearly differentiate new information from information based on the status report.

a) Description of the species

i) The species

How will a landowner, for example, recognize the species? Describe it briefly in plain language. Briefly convey any other descriptors from the status report that will provide context for recovery, such as general information on the species' ecology or the value of the species as an economic or cultural resource (food, clothing, medicine, ceremonial or symbolic, ecotourism...).

ii) Populations and distribution

Briefly summarize the current global and Canadian distribution and abundance of the species. Summarize G-rank and S-ranks in states and provinces in which the species occurs. Estimate the percent of the species' global distribution and/or abundance currently found in Canada (Recovery Secretariat has estimate of % range for most species). Estimate the rate of change in geographical distribution and/or populations in Canada over a given period (e.g., percent of historical range lost in the last 50 years; percent difference between historical and current abundance in the last 10 years or 3 generations; proportion of populations that have been extirpated within the historical record). **[Recommended]:** Provide a map of the current global distribution and a map of the current and historical Canadian distribution. Refer to the technical summary from the COSEWIC report regarding extent, area, population information and rescue effect.

b) Description of the species' needs

i) Biological needs, ecological role and limiting factors

RECOVERY STRATEGY GUIDE

Outline any key, intrinsic characteristics of the species' life history or ecology, focusing on those that may influence recovery potential (e.g., by making the species particularly susceptible to disturbance). Are there any biologically limiting factors (i.e., intrinsic / evolved characteristics of the species' life history or ecology that may influence recovery potential, e.g., late age of maturity, biennial reproduction, pollinator dependency, vector-reliant dispersal, intermittent juvenile recruitment, rigid behaviour pattern)?

ii) Habitat needs

Briefly describe the biotic and abiotic features of the habitat that provide for the basic needs of the species (space, food and cover) throughout its life cycle (egg / embryo / seed / propagule; sub-adult / immature, adult...) and annual cycle (territory, staging, reproduction, migration, overwintering...)

iii) Residence. SARA defines residence as:

“a dwelling-place, such as a den, nest or other similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating” [SARA S2(1)].

Residence (if an applicable concept) may already have been identified for this species – check with the SARA Responsible Agency (CWS, DFO or PCA). Include the approved residence description here. If there is new information that may justify altering the residence description, it should be discussed with the SARA Responsible Agency. If there is no residence description yet, leave this section blank and advise the reader to check for it on the SARA public registry.

2. Threats: *An identification of the threats to the survival of the species and threats to its habitat that is consistent with information provided by COSEWIC, and a description of the broad strategy to be taken to address those threats. [SARA, S.41(1)(b)]*

Optionally, threats to the survival of the species and threats to habitat can be discussed in separate sections. In either case it is critical that both types of threats are addressed.

Identify by sub-heading and brief description, the threats that affect the species at the population level (e.g., important predation or disease, loss of prey base, loss or degradation of habitat) or affect the species habitat (e.g. urban or agricultural development, forestry, invasive species, resource extraction)..

Number / order the threats by significance, starting with what poses the greatest threat to survival of the species based on the strongest evidence. Evidence for the severity of a threat should be referenced. Specify whether the threat is to the species, its habitat or both and where possible specify which areas or populations are affected. Assess the severity of each threat and its extent (e.g. threat is widespread or is only known to affect a few populations). Also identify any significant potential threats that are known (e.g., an introduced disease agent that is spreading through a population of the species or a planned development project that would have a significant affect on the habitat of the species). Be sure to address all threats discussed in the COSEWIC status report but do not be limited by these.

3. Critical Habitat: *An identification of the species' critical habitat, to the extent possible, based on the best available information, including the information provided by COSEWIC, and examples of activities likely to result in its destruction [SARA, S.41(1)(c)]*

Separate guidance is available from the Recovery Secretariat on critical habitat and should be consulted before developing this section. The recovery goal or population / distribution objective should be determined before proceeding with Critical Habitat identification.

a) Identification of the species' critical habitat (proposed*).

Critical habitat is defined in SARA as “the habitat that is necessary for the survival or recovery of a listed wildlife species...” It should relate to the recovery goal: if the goal is survival (maintaining existing population size and distribution), then the critical habitat would be the habitat currently occupied by the species. If the recovery goal is full recovery, then the critical habitat would be the habitat needed by the species in order to maintain a self-sustaining and viable population level. In most cases, the recovery goal and the identified critical habitat will fall somewhere within the continuum from survival to full recovery.

*Note that critical habitat is not formally identified until the recovery strategy or action plan for the species that contains the critical habitat identification has been included as the final in the SARA public registry. Until that time, the identification of critical habitat should be developed to the extent possible, but be considered a proposal only (as advice to the competent minister).

The critical habitat proposal should be developed with reference to population and distribution goals, particularly with respect to the amount, distribution and connectivity of habitat patches. Where data are incomplete, critical habitat identification should be done in stages. Identify what you can in well studied areas now and develop a schedule of studies (see below) for areas that are more poorly known.

b) Examples of activities that are likely to result in destruction of the critical habitat. Referring to the portion of critical habitat identified above, and from what is known of the needs of the species and the threats that are affecting it, identify the types of activities that would be expected to result in destruction of the critical habitat of the species (e.g., cultivation of native grassland, harvesting of old growth forest, building of dam for hydro-electric development, expansion of city limits). Where possible provide references.

c) Existing and recommended approaches to habitat protection

[Optional]: Starting with information from the COSEWIC status report, and updating it as necessary, identify which portions of the habitat are currently protected. Recommend priority habitat areas for stewardship and other conservation incentive programs (include this information also in the Strategies for Recovery Table); recommend priority areas for acquisition by direct purchase or other permanent means; and indicate, for the purpose of land-use planning or similar activities, areas in which specific development should not be allowed.

RECOVERY STRATEGY GUIDE

d) Schedule of studies. *A schedule of studies to identify critical habitat where available information is inadequate [SARA S. 41(1)(c.1)]* If sufficient information/data are not available to complete the required determination of critical habitat at this time then a schedule of studies is required. This should outline the actions to be taken to identify the critical habitat of the species. The schedule of studies must include a list of studies to be undertaken (e.g., survey work, preliminary mapping, habitat viability analysis, development of an action plan) and a timeline. Indicate that these actions could become incorporated into the action plan for the species.

4. Actions already completed or underway [Optional]: Briefly summarize the relevant recovery or management actions that have been conducted or initiated to date, and indicate which of those should be continued. Consider which actions were most beneficial and which, in hindsight, could have been done differently. If the recovery strategy is an update of a previous recovery plan, it would be useful to report on the implementation of the previous plan in a separate document (which could be referenced), rather than try to cover all past actions within the new strategy document.

5. Knowledge Gaps. *A statement about whether additional information is required about the species [SARA, S.41(f)].* Briefly state what additional information is required about the species to accurately identify recovery objectives and activities. The Strategies for Recovery Table should include measures to address the most important gaps.

RECOVERY

6. Recovery Feasibility *In preparing the recovery strategy, the competent minister must determine whether the recovery of the listed species is technically and biologically feasible. The determination must be based on the best available information, including information provided by COSEWIC. [SARA S.40]*

If the competent minister determines that the recovery of the listed wildlife species is not feasible, the recovery strategy must include a description of the species and its needs, an identification of the species critical habitat to the extent possible, and the reasons why its recovery is not feasible. [SARA S.41(2)].

For most species, feasibility will already have been determined in consultation with the provinces or territories – check with the SARA Responsible Agency (CWS, DFO or PCA). They will provide you with:

Either: A brief explanation of why recovery of this species is considered technically and biologically feasible (as it will be for most species, in keeping with the precautionary principle and the intent of the Accord and SARA).

Or: If this is one of the few species for which recovery is considered to be NOT technically and biologically feasible *at this time*, the rationale for this decision. For

example, it addresses whether the species exists in the wild in Canada, in captivity or in the wild outside Canada and whether there is existing or potential habitat for reintroduction. A recovery strategy is still required for species for which recovery is considered not feasible, but only to this point in the guide.

If there is new information that may justify a change in determination, recovery planners should discuss this with the SARA Responsible Agency and other jurisdictions.

-----**STOP HERE IF RECOVERY IS NOT FEASIBLE**

7. Recovery goal, objectives and corresponding approaches. *A statement of the population and distribution objectives that will assist the recovery and survival of the species, and a general description of the research and management activities needed to meet these objectives. [SARA, S.41(1)(d)]*

a) Recovery Goal: What is the long-term recovery goal for the species (i.e., what can realistically be achieved over the next 20 or so years?) In essence, the recovery goal defines what ‘recovery’ means for each species—it represents the ultimate end-point of what we are trying to achieve for the species. If possible, set a measurable target such as specific population size, change in distribution, or level of habitat protection. Attempt to set recovery goals through population & habitat viability modeling. Although such methods have the reputation of being data intensive, they can help establish the framework for recovery (i.e., identify knowledge gaps, priorities, objectives, etc.), even in the absence of comprehensive data. First and foremost, the recovery goal should reflect an ecologically appropriate level of viability for the species (e.g., in terms of its historical context and intrinsic biological limiting factors), but where appropriate should link back to the COSEWIC assessment criteria and the known threats to the species. It could include such concepts as reducing the rate of decline, abating threats or increasing the probability of long term persistence, number of populations, the area of occurrence, the area of habitat or the overall distribution. Avoid statements such as: "The goal is to have the species down-listed to special concern." An example of a quantitative goal might be "to attain >95% probability of exceeding 3000 females by the year 2025, <10% probability of dropping below a quasi-extinction level of 20 females through 2025". Further guidance on goals and objectives is being developed.

What is the short –term goal that is achievable in 5 years and necessary to accomplish the long-term goal?

b) Recovery Objectives (including population and distribution objectives): List measurable, achievable objectives that: 1) will contribute to achieving the recovery goal(s) by addressing the known threats and COSEWIC assessment criteria; and 2) should be undertaken within the next five years. For example, "to improve the public's understanding of the conservation needs of the species" is more measurable when expressed as "to engage the cooperation of 70% of implicated landowners, in habitat protection within five years." Population and distribution objectives should be established within the context of the overall

RECOVERY STRATEGY GUIDE

recovery goal for the species, and where possible, should detail the number of individuals and/or populations and their distribution across the species range that are needed in order to achieve the recovery goal. Refer to the relevant COSEWIC assessment criteria in setting recovery objectives (the criteria are on the COSEWIC web site at <http://www.cosewic.gc.ca/index.htm>). Consider whether achieving all the objectives would be sufficient to accomplish the short-term goal.

c) Rationale for Goals and Objectives [Recommended]: For the benefit of the reader, explain the thinking behind setting these particular goals and objectives.

d) Broad strategy to be taken to address threats [SARA S.41 (b)]. For each of the threats identified in 2 and 3a) above, indicate the general approach that will be taken to mitigate or eliminate the threat (e.g., stewardship; land acquisition; development of guidance, or public outreach materials, research, monitoring, captive propagation, etc.) and the specific steps recommended (e.g., specify types of stewardship activities; what sectors need guidance of what type, etc). Each approach should be directly linked to specific objectives and threats and a level of priority should be indicated.

Discuss which, if any, of the threats identified earlier are not being addressed by these broad strategies and explain why.

Highlight measures that should not be postponed despite lack of full scientific certainty [**SARA S.38** - precautionary principle].

Example: Strategies for Recovery

Priority	Obj . No.	Broad Approach / Strategy	Threat addressed	General Steps	Outcomes or Deliverables (identify measurable targets)
Urgent	I & II	Habitat Protection-Stewardship	Habitat Loss	<ul style="list-style-type: none"> • Prioritize private sites for urgency • Identify and contact owners at high priority sites Determine ideal protection strategy (easement, acquisition, stewardship) for each site	<ul style="list-style-type: none"> • Prioritized list of candidate sites for securement • Protection strategies identified and implemented for minimum of 1 high priority site
Necessary	I & II	Habitat Protection-Stewardship	Habitat Loss	<ul style="list-style-type: none"> • Identify and contact landowners at other sites 	<ul style="list-style-type: none"> • Groundwork laid for future stewardship activities

RECOVERY STRATEGY GUIDE

Urgent	I & II	Site Management	Habitat Degradation	<ul style="list-style-type: none"> • Assess threats at all sites • Develop site-specific management plans to reduce threats and maintain or increase populations • Monitor sites to assess the effects of actions and adapt management in response to observed results • Report on management actions and outcomes 	<ul style="list-style-type: none"> • All sites assessed to quantify threats • Management plans developed and implemented for a minimum of 5 most significant sites • Sites monitored to assess threat reduction and response of populations • Habitat restored and populations maintained or increased at managed sites
Urgent	I & II	Inventory and Monitoring	N/A	<ul style="list-style-type: none"> • Develop and implement standardized monitoring protocol • Report monitoring results annually and assess trends in populations, area of occupancy and habitat condition every 5 years • Submit all data to CDC 	<ul style="list-style-type: none"> • Regular, standardized monitoring of sites range-wide • Central database • Annual summary of monitoring results by site and assessment of trends in populations, area of occupancy and habitat conditions every 5 years • Ability to assess status of populations and effects of recovery actions

e) Effects on other species [Required]: Identify the anticipated effects (positive or negative) of the proposed recovery activities on non-target species, natural communities or ecological processes. Indicate the probability of each effect being realized (e.g., probable, possible or unlikely) and significance of such effects. Identify other recovery teams, RIGs or recovery plans that could be affected.

The following questions may be used to guide your thinking:

- Would there be any effects on non target species; land, air or water; natural communities; or ecological processes?
- Would any of these effects be compounded by existing or likely future sources of stress, or concerns such as population declines?
- If any adverse effects are identified, can they be mitigated, and to what extent? What effects would remain after mitigation?
- Does this analysis raise any uncertainties about effects on non-target species, communities or processes? If so, these should be addressed in the section on Knowledge Gaps for design of appropriate follow up studies in keeping with the adaptive management principle.

f) Evaluation: *The Competent minister must report on the implementation of the recovery strategy, and the progress towards meeting its objectives, within five years after it is included in the public registry...* **[SARA, S.46]:** Identify performance measures for evaluating success in meeting the stated recovery objectives.

Performance measures should refer both to each objective and to individual broad approaches. Address both process (i.e. the carrying out of the action) and biological (i.e. the effect of the action) perspectives. Evaluation should consider the extent to which the goals and objectives have been met, any changes in population size, trend or productivity and why, the extent to which critical habitat has been identified and protected, success in mitigating threats, the extent of consultation, indicators of success from outreach, awareness or education programs and the level of public support for the recovery program. Further guidance on this topic is being developed.

8. Recommended Approach for Recovery [Optional]: Provide advice to responsible jurisdictions regarding existing or potential opportunities for integrating species-specific recovery into other recovery or conservation efforts (e.g., multiple species at risk, natural community, ecosystem, threat abatement or landscape-level planning), need for RIGs, and opportunities for cooperating with other recovery teams, RIGs or conservation groups. See section on approaches to recovery planning for considerations and options.

Identify existing management plans that could influence species recovery (e.g., Parks Canada or Fisheries and Oceans management plans, First Nations resource council plans) and recommend opportunities to coordinate actions with existing activities and policies.

9. Statement of When One or More Action Plans in Relation to the Recovery Strategy Will Be Completed [SARA, S.41(1)(g)]. The decision on the number, focus and timeline for actions plans should be made in consultation with the relevant jurisdictions and in particular the SARA Responsible Agency. The responsible jurisdictions will need to identify a target date for the action plan(s) prior to posting the strategy on the SARA public registry. **[Recommended]:** If possible, identify the need for and roles of RIGs (Recovery Implementation Groups).

10. References Cited [Recommended]: List the references cited in the recovery strategy. Providing a bibliography of key references neither cited in the recovery strategy nor found in the COSEWIC status report would be useful for environmental assessment practitioners and others directly or indirectly involved in recovery.

6. HABITAT

6.1 Guidance in Identifying General Habitat

This section is presented as guidance for completion of the general habitat needs section of a recovery strategy (section 1,b,ii of the recovery strategy guide). Separate guidance is available on identification of critical habitat, usually a portion of general habitat. Contact Recovery Secretariat for more information.

6.1.1 Introduction

Habitat is often key to the recovery of endangered and threatened species. A sound biological approach to defining and conserving habitat ensures effective recovery efforts for species at risk. This section provides guidance for defining habitat in a biological context appropriate for the species being recovered.

Recovery teams play a key role in defining a species' habitat in the broad sense, as well as in describing and delineating occupied and potential habitats. Recovery teams must endeavor to complete this work as soon as possible in the recovery planning process, given that protection of habitat and other recovery actions are typically closely linked. For species threatened by habitat-related issues, recovery teams should document as thoroughly as possible the species' basic habitat requirements, areas currently occupied, and sites that have the potential to be occupied.

6.1.2 Defining Habitat

Habitat can be defined generally as the place where an organism normally lives, and is often characterized by dominant plant forms or physical characteristics. *Recovery habitat* is the habitat needed by a species to achieve and maintain a population level that is self-sustaining and viable. In most cases this is more than the *survival habitat*, defined as the habitat needed to maintain the current population size (usually the habitat occupied by the species at the time it was assessed by COSEWIC). Recovery habitat usually also includes *potential habitat*—historically occupied habitat that is still available for use or which could be restored to its historical state, or habitat not known to be historically occupied that would be or could be rendered suitable for the species.

6.1.3 Identification of Habitat

Complete a review of the most current species information available to summarize habitat requirements and species distribution. Reference should be made to the COSEWIC status report(s) where appropriate.

There are five recommended steps for an effective approach to habitat identification:

1) Develop a general description of habitat, including key habitat attributes

Habitat attributes are the key biotic and abiotic features of a habitat that provide for the basic survival needs of a species. These features often are the central focus of conservation efforts for a species. Habitat attributes normally include the specific components of an ecosystem that provide for such needs as space (e.g. territory,

HABITAT

staging, migration sites, spawning, nursery and overwintering sites), food and cover. Recovery teams should focus on identifying the relevant habitat characteristics where habitat is a limiting factor.

To the extent possible, recovery teams should prepare an overview of habitat requirements as relevant to recovery programs. This should identify general as well as specific habitat requirements, including attributes associated with all parts of a species' life cycle (egg / embryo / seed / propagule; sub-adult / immature, adult) and annual cycle (reproduction, migration, wintering / overwintering). Definition of habitat attributes should focus on identifying the main, potentially unique biotic and abiotic features of sites that make them suitable for occupancy.

2) Develop the site concept for the species (e.g., patch, corridor or other geographical reference of habitat relevant to the species that will be used as a basis for focusing conservation effort)

Adequate habitat for a species will typically occur in discrete patches. Once defined spatially, these patches can be referred to as occupied or potential sites. To be effective for conservation, sites need to be defined at the appropriate scale in space and time. For instance, it is unrealistic to define all marine areas frequented by humpback whales during a year as a site. Conversely, sites for interior forest birds will need to encompass an area of preferred habitat that is larger than territory size, since the territory itself is inadequate without a forested buffer area.

The recovery team should propose a site concept for the species, including identification of constituent components of a site based on the general habitat description (i.e., one or more habitat attributes). Consideration should be given to different scales (localized and a broader ecosystem context) if relevant. Also consider habitat connectivity; the spatial arrangement of sites that would allow species access to and use of all necessary sites to complete their life cycle.

3) Establish the species-specific criteria that will be used to determine how priority sites are identified

Not all sites have the same significance. Therefore, determining the relative significance of sites will help focus conservation work where it is most needed. Priority sites are generally those where the largest concentrations of a species are found, that are the most productive or that for some other reason are significant to the survival of a species. Secondary sites are areas that do not readily fit into the priority site criteria; however, they remain significant to species recovery efforts (i.e., sites that are occupied infrequently). Consideration should also be given to the fact that the significance of specific sites will vary over time, as some species tend to shift habitats according to successional stage requirements.

The following criteria may assist in distinguishing priority habitat from other sites; ideally, a priority site should meet one or more of these criteria, depending on the species.

- a. Numbers present - the site contains a significant proportion of a species' regional, provincial or national population, or a significant number of individuals.

HABITAT

- b. History of use - the site has a demonstrated history of use valid to the life history of the species (and continues to possess the features or characteristics that support occupancy by the species).
- c. Productivity of site - for sites where reproduction occurs, the productivity of the site meets or exceeds the productivity estimated to maintain a stable population or has the potential to be productive (i.e., site acts as a source of individuals rather than a sink).
- d. Total number of occupied sites - the number of sites occupied is critically small (i.e., if five or fewer sites exist, or number that is relevant to a species).
- e. Restricted habitat type - habitat is of limited availability so there are few alternative sites for occupancy, especially for listed species with strict habitat requirements. The presence of rare or unique features makes a site particularly important for a listed species.
- f. Significance of site for maintaining current species distribution - the loss of a site would result in a significant range contraction with little chance of reoccupation.
- g. Significance of site for maintaining population links - the site is important for maintaining contact between individuals from different sites that would otherwise be isolated. *Other considerations: include migratory routes, corridors.*
- h. Maintenance of ecological processes - a site exhibits the biotic and abiotic characteristics that will sustain the ecological processes necessary for maintenance of habitat at the appropriate successional stage required by a listed species.
- i. Threats to habitat type - uncontrollable threats exist to all but a few sites (i.e., exotic or alien species competition).

Other considerations: Priority sites may be vital for a particular life stage of a species. Priority sites may not support high numbers of individuals or may only support individuals seasonally (e.g., priority sites for marine mammals shift with weather, season, food supply, population size and life stage). Also, should sites that are unique to Canada be considered priority sites?

4) Identify known occupied sites

An occupied site is any location that currently maintains individuals or a population of a species. Species-specific conditions for considering a site to be occupied will need to be developed by the recovery team. Sites that are occupied periodically or seasonally should be considered and included if appropriate.

To the extent possible, recovery teams should prepare a map at an appropriate scale; identify all known occupied sites; define limits and boundaries of individual sites; and include an indication of timing when a site is used. Be aware that some provinces have habitat mapping guidelines and landowner contact guidelines. To avoid conflict with provincial legislation and policies, the mapping and any contacts with landowners should take place under the direction of the province, where appropriate.

HABITAT

Key information to be included:

Site Name - site name as identified on topographical sheets, or closest town, city or other recognized feature with distance and direction. Names should appear in official gazetteers or other repertories.

Site Description - delineate boundaries of site based on key elements identified. This could include characteristics of the waterway, navigable, shipping route, jurisdiction over fishing area, marine protected areas.

- a. Include a technical description encompassing Universal Transverse Mercator (UTM), latitude and longitude and relevant zone to delineate the area, which is included in the site.
- b. Include a written site description based on ecological features, key elements, estimate of approximate area of the site, reference to parcel numbers of land / lot / county of occurrence and ownership (private, Crown, First Nation reserves) where relevant and the information is available.
- c. Biological significance of the site - include information that will allow evaluation of significance of a site for a species. Should summarize site-specific information such as current population estimates, history of occurrence and productivity and other relevant data.

5) Identify potential sites A potential site is any location that possesses the basic habitat attributes required to maintain individuals or a population of a listed species, but that is currently unoccupied.

Potential habitat would be mapped in the following circumstances:

- where the habitat currently occupied is not sufficient to recover the species;
- where species do not consistently return to a site year after year;
- where a site may not provide a species' habitat requirements every year;
- where historical sites are unoccupied despite having apparently suitable habitat;
- where previously occupied sites have been degraded, but are restorable;

To the extent possible, recovery teams should describe potential habitat in much the same way as currently occupied sites. Potential habitat should be identified using the general habitat description and its associated habitat attributes as well as historical or other evidence of possible use.

Considerations of potential habitat will include evaluating the likelihood of populations utilizing or being restored to areas of potential habitat, since some sites may have a higher probability of being reoccupied. In evaluating sites, three criteria should be considered:

1. condition - whether severe degradation of the site has occurred or whether ecological processes and communities exist to support populations or individuals;
2. size - whether the area of remaining suitable habitat is sufficient for supporting populations or individuals;

HABITAT

3. landscape context - quality of biotic and abiotic features within surrounding ecosystems (connectivity to similar habitat types).

6.1.4 Protection of Habitat

Make recommendations for habitat protection requirements at sites identified, in consultation with responsible jurisdictions.

Mechanisms to protect habitat include legislation, policy and regulations, formal protection programs, changes to land use practices, partnership agreements and stewardship. Use of existing protection mechanisms, where they are adequate, is most efficient and desirable, rather than employing new mechanisms that may be expensive and time-consuming to put in place.

Ultimately, recommendations for habitat conservation should address requirements to maintain habitat quality and quantity in priority habitats, and measures to enhance habitat in sites of secondary significance or potential habitat, where appropriate. Activities that may cause destruction or degradation of any habitat regardless of overall significance should also be identified.

The most appropriate method of addressing habitat conservation needs will be determined on a case-by-case basis. However, ideally, habitat conservation efforts for species at risk should be focused on priority sites since they will contribute the most to ensuring long-term species recovery. Conservation measures recommended for secondary sites or potential habitat may be different from priority areas and might be less restrictive, allowing for complementary land uses in concert with recovery actions. In cases where species do not habitually return to a same general area, identification of potential habitat and recommendations for protective actions in those areas would be a suitable approach. In any case, protection measures recommended should focus on conserving key habitat attributes.

Habitat conservation objectives will be linked to population recovery goals as these goals establish, to the best of knowledge, what is required to achieve the conservation / recovery target for the species. Consideration should be given also to a species' propensity to shift habitats in relation to natural environmental changes (e.g., natural successional stages, shifting prey or pest distribution). Habitat conservation recommendations may range from site-specific management needs to broad-scale modifications of land-use practices to support longer-term conservation goals. These recommendations will be for the consideration of wildlife agencies with legislated responsibility for species at risk.

7. RECOVERY IMPLEMENTATION

7.1 Recovery Implementation Groups (RIGs) - Terms of Reference

Role

RIGs are established or recognized (if formed independently) by the responsible jurisdictions, usually in consideration of advice from recovery teams, and are very flexible in both function and composition. In general, RIGs work on one or more specific projects, areas or programs under the auspices of or in communication with the recovery team. National recovery teams could have one or more RIGs or might not have any, depending on the complexity of the recovery work, the extent of the species' geographical range, and the number of species being covered by the strategy. For example, the Garry Oak Ecosystems Recovery Program is partitioned among eight RIGs that are responsible for particular taxonomic groups or types of activities. The need for RIGs may be identified in the recovery strategy.

Where RIGs exist, they may be specialist groups to address specific needs such as habitat protection, disease control, fundraising or public outreach. These groups normally report to the responsible jurisdictions through the recovery team. RIGs may also be jurisdictional subgroups of a larger team (e.g., the Alberta RIG of the boreal woodland caribou national recovery team), who report directly to the appropriate responsible jurisdictions.

Composition

Depending on the range of the species and the nature of their project or program, RIGs may be organized at the regional, provincial / territorial or local level. This is often the level at which interested individuals such as landowners, academics, Aboriginal people, industry representatives and local conservation groups can actively participate in recovery efforts. The size, number and composition of RIGs are recommended by the recovery team and approved by the responsible jurisdictions. One RIG could serve the needs of several recovery teams.

Chair

The chair may be appointed by the responsible jurisdictions, identified by the recovery team, or selected by majority vote or by consensus of the RIG membership. The chair will usually be or become a member of the national recovery team.

Functions

1. Where a recovery action plan for a proposed project or program is not already in place, produce such a plan within the framework established by the recovery strategy, to be vetted by the recovery team.
2. Provide advice to the responsible jurisdiction directors regarding socio-economic considerations affecting recovery and on evolving issues related to recovery or conservation of the species.
3. Implement a recovery project, program, action plan or part of a more comprehensive recovery action plan in accordance with the RENEW process

RECOVERY IMPLEMENTATION – ACTION PLAN

(e.g., by ensuring that affected parties are consulted and involved as appropriate).

4. Integrate activities with those of the recovery team's other RIGs, and with other teams, RIGs or conservation groups operating in the same ecosystem or geographical area or on the same specialist issue.
5. Document activities and report to the recovery team.

7.2 Action Plans

The second part of a two-part national recovery plan consists of one or more recovery action plans that outline what needs to be done to achieve the recovery goals and objectives identified in the recovery strategy (the first part of the two-part plan.) Action plans are developed by the recovery team, or by a recovery implementation group working with the recovery team, or by other recovery planners (as discussed in the recovery planning section). It is generally preferable to avoid project-specific action plans, however, it is permitted to have distinct action plans for different topic areas (research, stewardship etc) if a single all-encompassing action plan is too cumbersome.

Stand-alone action plans are a new feature of the RENEW + SARA program. Previously, recovery plans encompassed both strategic planning and action planning, but it is now recognized that knowledge-based, strategic thinking about what is needed for recovery of a species should not be influenced by socio-economic considerations; socio-economic considerations should come into play later, at the implementation / action plan stage. As a result of the two-part recovery planning process, the recovery team membership may change over time to correspond to the task at hand.

The action plan guide provided below is for an individual species—primarily to ensure that SARA requirements are met for the species, and to enable evaluation of progress made in recovering the species. However, it may be adapted to multi-species or ecosystem action planning. Recovery efforts should be integrated into landscape-level recovery or conservation planning, where appropriate, to ensure effective and efficient delivery of conservation efforts. The Recovery Secretariat can provide examples of action plans that have been drafted; none have been published to date under either RENEW or SARA.

7.2.1 Description and Content

- The biological scale of an action plan will vary (e.g., throughout a species' range, or within a province or community), but the proposed activities should correspond to goals, objectives, approaches and priorities identified in the recovery strategy and should be developed in consultation with the recovery team or strategic planners. The actions should be doable, and timeframes and responsibilities should be identified.
- The initial action plan might outline a number of research, monitoring, stewardship and management actions that must be taken immediately, depending on the species' range, priorities of the responsible jurisdictions

RECOVERY IMPLEMENTATION – ACTION PLAN

involved, and the diversity and complexity of socio-economic issues. Additional or updated recovery action plans might subsequently be developed to achieve individual recovery objectives, perhaps by individual RIGs charged with specific aspects of recovery.

- An action plan that outlines a suite of projects could cover a five-year period, whereas a plan for a particular project might cover a shorter time period. An “adaptive management” approach should be taken, whereby evaluation and revision are ongoing.
- All action plans should be supported by annual work plans that should be updated frequently.
- Each species requires an action plan that addresses critical habitat identification and protection.
- Each action plan requires a socio-economic evaluation.

7.2.2 Action Plan Guide

October 2004 draft (revised April 2005)

SARA-Compliant Action Plan GUIDE

Style and formatting: see APPENDIX E for guidelines

Notes:

1. This guide is intended as to ensure SARA-compliance, effective recovery planning, and national consistency. The letter of invitation / instruction to recovery teams from the responsible jurisdictions may expand upon the guide to meet the needs of one or more given species or the jurisdiction, but the Action Plan elements required by SARA must be included. Any given action plan may be part of a suite of plans which together meet the SARA requirements.
2. Action Plans should be short and concise and should centre on the implementation table. Explanatory text should be minimized.
3. Keep in mind that the audience for recovery strategies includes members of the public and landowners. Plain and sensitive language should be used where ever possible. For example, when you write about approaches that involve landowners, think about how the section reads from a landowners' point of view.
4. An action plan may relate to more than one recovery strategy.
5. The corresponding section of SARA is indicated for elements required for compliance with SARA. Additional elements are shown as 'recommended' or 'optional'. The order in which elements appear is flexible.
6. Consult the appropriate provinces and territories regarding additional legislative requirements they may have.

TYPES OF ACTION PLANS

While in some cases a single action plan will be written in association with one single-species recovery strategy, there is considerable flexibility in this regard. The decision of how many and what types of Action Plans to write should be addressed in the relevant Recovery Strategies and explained in the introduction to each Action Plan. Where a change in approach has occurred after the Recovery Strategy is published, this should be explained as well.

1. Single plan for a single species – In this case the plan should cover the full geographic range of the species, refer to all the relevant elements of the table of “Strategies for Recovery” from the Recovery Strategy and meet all the SARA requirements for Action Plans described herein.
2. Multiple Action Plans for a single species divided geographically – Where a species is found in more than one jurisdiction, each jurisdiction may write its own action plan, addressing relevant elements of the table of “Strategies to Effect Recovery” from the Recovery Strategy, and meeting all the SARA requirements for Action Plans described herein.
3. Multiple Action Plans for a single species divided thematically – It would also be possible to write individual action plans for various themes such as stewardship,

ACTION PLAN GUIDE

site management, monitoring, research, outreach, or critical habitat. In this case, these plans together should meet all the SARA requirements for Action Plans described herein (i.e., address all elements of the table). However, each individual plan will require a socio-economic evaluation.

4. Action Plans for multiple recovery strategies, or for multi-species, ecosystem or landscape recovery strategies – Any of the above types of actions plans can cover the requirements of more than one species. For example, there could be a single action plan for reducing illegal harvest and trade in Ontario turtles, another for public outreach and species specific action plans for research, monitoring and critical habitat. Each plan requires a socio-economic evaluation and the together all plans must address the full geographic range of each species, implementation of the associated recovery strategies and other SARA requirements for action plans for each individual Endangered, Threatened and Extirpated species. Ecosystem and Landscape plans may also meet the needs of Special Concern species or other species of conservation concern.
5. Additional action plans – After SARA requirements are met, there may still be additional action plans that recovery planners, implementation groups or responsible jurisdictions require. If the socio-economic implications are negligible, these need not be posted on the SARA public registry and need not contain a socio-economic evaluation.

PRELIMINARY PAGES

SARA Recovery planning documents: the SARA Responsible Agency will apply the official SARA cover and use the SARA template to prepare the preliminary pages.

For RENEW documents, use the following as a guide:

Outside cover: Indicate the stage of development (e.g., first draft, second draft) and the date on both the cover and on a footer throughout the document. The RENEW cover design may be copied from a published RENEW recovery plan and adapted as necessary. Either a black and white illustration or photo of the species (credited accordingly) may be used, as long as it photocopies well.

Title: There is no set title format for action plans but the following elements should appear: the category of actions covered, the species, multi-species group, ecosystem or landscape covered, and the geographic range if appropriate.

Examples: *Critical Habitat Identification and Protection Action Plan for Acadian Flycatcher and Hooded Warbler*, or *Provincial Action Plan for Boreal Woodland Caribou in Alberta*.

Inside cover: cataloguing information will be provided by the SARA responsible agency, but please provide the **Recommended Citation** (authors of the strategy in appropriate order or where applicable, originating jurisdiction).

Recovery Team Members: Names and affiliations

Disclaimer: Use the following as a guide or see recently published strategies for other examples.

ACTION PLAN GUIDE

This (draft) Action Plan for Species X has been prepared in cooperation with the members of the Species X recovery team (or RIG), Jurisdictions Y and Z and in consultation with (as appropriate). It is one of A action plans that outline measures required to implement the following recovery strategy(ies). It does not necessarily represent the views of individual members of the recovery team, or the official positions of the organizations with which the individual team members are associated. The actions identified in the action plan are based on the best existing knowledge and are subject to modifications resulting from new findings and revised objectives. Although an effort has been made to identify who might undertake these actions, implementation will occur through existing structure in partner organizations and is subject to appropriations, priorities, and budgetary constraints of the participating jurisdictions and organizations.

Acknowledgments: It is customary to acknowledge those who assisted in developing the action plan, e.g., reviewers, sources of funding, support of landowners, etc. Those who were consulted or who cooperated in the process should also be thanked.

Species Information ("COSEWIC assessment summary," as it appears on the COSEWIC web site <http://www.cosewic.gc.ca>, e.g., for May 2004 assessments: http://www.cosewic.gc.ca/htmlDocuments/Detailed_Species_Assessment_e.htm—do not alter.)

<p>Common Name (population): Scientific Name: Current status and most recent date of assessment: Reason for designation: Assessment Criteria: Occurrence: Status history:</p>
--

Executive Summary (usually 1 page): Summarize the highlights of the action plan in one or two sentences per section. Specify the time period covered by the action plan.

Table of Contents: Use the ToC tool provided by Word; please avoid complex numbering systems.

1. Introduction [Recommended]

Provide a brief explanation of the legal and biological context of the action plan. What is its scope? What particular objectives of the recovery strategy(ies) are being addressed? With reference to the Recommended Approach for Recovery (see associated Recovery Strategies), explain how this action plan fits in to the set of action plans for the species. What other species will benefit. Identify which populations are under greatest threat and most in need of immediate action. List the goal and relevant objectives from the recovery strategy(ies). This may be an appendix if more than one strategy is involved.

2. Implementation Measures

Statement of the measures that are to be taken to implement the recovery strategy, including those that address the threats to the species and those that help to achieve the population and distribution objectives, as well as an indication as to when these measures are to take place [SARA S.49 (1)(d)].

ACTION PLAN GUIDE

Using the following table as a model, list the proposed actions in order of priority (making reference to the corresponding objective from the recovery strategy). Indicate which organizations may lead / participate in the actions, and when over five years the actions will be taken (from project initiation to completion). Include text to explain where identification of agencies or individuals on the table is a recommendation rather than a commitment. This table may be prepared in landscape format if necessary. Estimated costs may be included but are optional.

Action	Objective #	Priority (1,2,3)	Threat addressed	Responsibility		Target Date for Starting & Completion					Evaluation
				Lead	Other	Year 1 2004/2005	Year 2	Year 3	Year 4	Year 5	

Address the threats to achieve population and distribution objectives. There should be a logic flow with direct linkages from threats through to goals, objectives, and approaches in the recovery strategy, and recommended actions in the action plan. Include any narrative detail that will clarify the proposed actions, including which populations it applies to and why, and which threats it addresses (this may be done in the implementation schedule if there is space), but avoid repeating information that appears in other sections of the action plan. Make reference as necessary to information contained in the recovery strategy and status report for the species, to avoid overlap with those documents as well. The above table supports this section. While it does not replace the need for descriptive / explanatory text, explanation should be minimized.

In addition to addressing threats, three other areas should be addressed as appropriate.

2a. Address information gaps [*recommended, but not required*]

After considering the best available information, identify actions needed to address gaps in information of direct relevance to recovery. Note that gaps in understanding need not preclude recovery teams from making ecologically sound recommendations for high-priority recovery actions that are expected to improve the species' conservation status.

i. Survey Requirements: Briefly specify the distribution areas or populations that should be surveyed more thoroughly, and explain why this information is required for species recovery.

ii. Biological / Ecological Research Requirements: Briefly identify those aspects of the species' biology and / or ecology that require further investigation, and explain why this information is required for species recovery.

iii. Threat Clarification Research Requirements: Briefly identify those threat factors that require further analysis and empirical investigation.

2b. Implementation of critical habitat schedule of studies [*if appropriate*]

ACTION PLAN GUIDE

If this action plan addresses the critical habitat schedule of studies from the recovery strategy(ies) articulate the actions required.

2c. Monitoring

Describe the methods to be used to monitor the recovery of the species and its long-term viability [SARA S.49(1)(d.1)]. How will you determine if the recovery objectives are being met, and if the situation of the species is improving? Identify what variables and which populations will be monitored, at what frequency and with what methods. Include monitoring actions in the implementation schedule. In deciding on monitoring requirements, keep in mind the need to report on the implementation, ecological and socio-economic impacts of the action plan.

3. Critical Habitat

If critical habitat identification is part of a different action plan this should be made clear in the introduction.

3a. Identification of the species' [proposed] critical habitat

Provide an identification of the species' critical habitat, to the extent possible, based on the best available information and consistent with the recovery strategy, and examples of activities that are likely to result in its destruction [SARA S.49(1)(a)]

Under SARA, the competent minister must ensure that critical habitat is identified in an action plan, if it is possible to do so, and if it has not already been identified in the recovery strategy for the species. The recovery team or RIG may be charged with advising the minister about critical habitat, including providing examples of activities that are likely to result in its destruction. The identification of critical habitat should be consistent with the recovery strategy (i.e., what habitat is needed to attain the recovery goal and objectives?)

Until the competent minister has accepted the critical habitat advice by including the action plan containing the identification of critical habitat on the SARA public registry, it should be considered a proposal. Draft guidelines for critical habitat identification are available from the Recovery Secretariat.

3b. Critical habitat protection measures

Provide a statement of the measures that are proposed to be taken to protect the species' critical habitat, including the entering into of agreements under section.11 [SARA S.49(1)(b)]

Once critical habitat has been identified in a final recovery strategy or action plan included in the SARA public registry, it will need to be protected. On non-federal land, there is the opportunity to provide voluntary (non-regulatory) protection on portions of the critical habitat, through the entering into of stewardship and other conservation agreements that meet the requirements of S.11 of the Act.

To what extent is the proposed critical habitat of the species protected (i.e., what portions of the critical habitat have been protected, and by what measures?)

ACTION PLAN GUIDE

What measures are proposed to protect the remainder of the critical habitat? Try to be specific (e.g., portions 1 and 4 are targeted for stewardship agreements, portion 6 will be acquired, etc., and all remaining portions will be protected through regulations). Guidance is being developed on what measures are considered to provide adequate habitat protection.

What actions may be permitted in critical habitat and under what conditions?

3c. Unprotected critical habitat

Provide *an identification of any portions of the species' critical habitat that have not been protected [SARA S.49(1)(c)].*

What portions of the species' critical habitat currently remain unprotected by voluntary, regulatory or other measures?

4. Socio-economic Evaluation

Provide *an evaluation of the socio-economic costs of the action plan and the benefits to be derived from its implementation [SARA S.49(1)(e)].*

The responsibility for the S-E evaluation rests with the SARA responsible agency, but the recovery planners may be asked for advice. Guidance is being developed. The level of detail in the socio-economic evaluation will differ depending on the types of actions addressed by the action plan. For example, more detailed evaluation is needed for plans that address critical habitat as compared with public outreach.

5. Reporting

The competent minister must monitor the implementation of an action plan and the progress towards achieving its objectives and assess and report on its implementation and its ecological and socio-economic impacts five years after the plan comes into effect [SARA S55].

Identify performance measures for evaluating progress towards meeting the recovery strategy objectives addressed by this action plan. Performance measures should refer both to each action and to the total effect on the species. Address both process (i.e., was the action carried out as intended) and biological (i.e., the effect of the action) perspectives.

Identify measure for monitoring and evaluating the socio-economic impacts of the action plan.

6. References Cited [Recommended]: List the references cited in the recovery strategy. Providing a bibliography of key references neither cited in the recovery strategy nor found in the COSEWIC status report would be useful for environmental assessment practitioners and others directly or indirectly involved in recovery.

7.3 Management Plans

Although species of special concern do not fall within the historical scope of RENEW, SARA requires that management plans be developed for all special concern species within specified timelines. The management plan for the species and its habitat “*must include measures for the conservation of the species that the competent minister considers appropriate and it may apply with respect to more than one wildlife species*” [SARA S.65]. Conservation management plans for species of Special Concern under SARA must be developed within three years of listing for new species, by June 2008, for SC species on Schedule 1, and 5 years from listing for species from Schedule 2 and 3 after being reassessed and listed as SC.

There are some examples of management plans, though none have been published under RENEW. Alberta has prepared management plans for 9 species (Black-throated Green Warbler, Bull Trout, Harlequin Duck, Loggerhead Shrike, Long-billed Curlew, Long-toed Salamander, Prairie Falcon, Sprague's Pipit, White-winged Scoter), and the province of Nova Scotia has produced a management plan for the wood turtle that would also serve as a good model.

7.3.1 Procedure for Management Plan Development and Approval

Process

Draft plans are prepared by responsible government personnel and circulated for technical and external review (i.e., species experts, forestry and species at risk staff). Where appropriate, draft plans will be distributed to stakeholders for review. After the draft plan is amended to reflect reviewers' comments, it is submitted to the responsible jurisdictions for review and approval. Ultimately it must pass the “SARA compliancy test” and be approved by the competent minister for inclusion on the SARA public registry. It is unlikely that management plans will be printed for wide distribution, but the final version will be available through the public registry.

Management plans are dynamic documents that will be amended as conditions require. They should be subject to a brief, annual review by implementing staff and updated accordingly. Updates will be included in the SARA public registry. An in-depth review will occur within five years of the plan's inception.

Content

Management plans need to provide an appropriate level of background information regarding rationale for the species listing, threats to populations and habitat, breeding biology, and research and inventory/monitoring history. The initial ministerial response can be included in the Appendices. Results from recent and/or current research and range maps may be included if appropriate.

A goal(s) and objectives are identified as per the recovery plan process and should encompass: inventory, monitoring and research needs; habitat requirements and conservation; management activities; and other considerations, such as public education initiatives. There will be considerable variation in the nature and specificity of objectives depending on the species and current state of knowledge regarding

MANAGEMENT PLAN

population size, trends and habitat use. Specific population targets and/or location-specific inventory and management recommendations should be included where appropriate for the species.

Actions and recommendations for management must be extremely clear, have a direct impact on species' populations and/or habitat, and be easy to implement. Recommendations are species-specific and based on current knowledge and the need to fill specific information gaps, and should address relevant land-use activities. While it is not the place of a management plan to advocate policy or guideline changes regarding industrial activity, it is important to state how and why current guidelines are contributing to the decline of a species, or how they are failing to ensure maintenance of a species over the long term. Suggested guidelines that offer a direct effect on conservation of species and habitat may be appropriate. Timelines and estimated costs of implementation are optional.

7.3.2 Management Plan Guide

October 2004 draft (revised April 2005)

SARA-Compliant Management Plan GUIDE

Style and formatting: see Appendix E for guidelines

Notes:

1. This guide is intended as to ensure SARA-compliance, effective management planning, and national consistency. The letter of invitation / instruction to recovery teams/planners from the responsible jurisdictions may expand upon the guide to meet the needs of one or more given species or the jurisdiction. The SARA requirements for Management Plans for Species of Special Concern are much less prescriptive than for Recovery Plans. They must include measures for the conservation of the species and management of its habitat; they must be prepared with appropriate cooperation and consultation and be written in such a way that subsequent evaluation is possible. Beyond that there is considerable flexibility. Therefore, in addition to addressing SARA compliance, this guide provides recommended guidelines for promoting good management planning.
2. In contrast to recovery plans, the focus of management plans is prevention of further decline, range loss or worsened status. However, where the recovery planner or jurisdiction considers it likely that the species will be uplisted in the near future, it may be appropriate to include details that would be required in a recovery strategy.
3. Keep in mind that the audience for management plans includes members of the public and landowners. Plain and sensitive language should be used where ever possible. For example, when you write about approaches that involve landowners, think about how the section reads from a landowners' point of view.

Types of Management Plans

There are a number of ways that management plans can be produced and in general multi-species, ecosystem or landscape planning and implementation are encouraged although the plan must address the conservation needs of each individual species of Special Concern and its habitat. For example:

1. For species found in National (or Provincial) Parks or National Wildlife Areas, park (or NWA) management plans that clearly address the conservation needs of individual species and their habitat can be considered as meeting the SARA requirements for that portion of the species range *if* appropriate consultation and cooperation requirements are met and the plans are posted on the SARA public registry.
2. Multi-species, ecosystem or landscape recovery strategies or action plans that clearly address the conservation needs of individual species of Special Concern and their habitat can be considered as meeting the SARA requirements for the portion of the species range covered.

MANAGEMENT PLAN GUIDE

Preliminary Pages

SARA Recovery planning documents: the SARA Responsible Agency will apply the official SARA cover and use the SARA template to prepare the preliminary pages.

For RENEW documents, use the following as a guide:

Outside cover: Indicate the stage of development (e.g., first draft, second draft) and the date on both the cover and on a footer throughout the document. The RENEW cover design may be copied from a published RENEW recovery plan and adapted as necessary. Either a black and white illustration or photo of the species (credited accordingly) may be used, as long as it photocopies well.

Title: There is no set title format for management plans but the following elements should appear: the species, multi-species group, ecosystem or landscape covered, and the geographic range if appropriate.

Example: *[Draft] Management Plan for Plants at Risk in Grasslands National Park, or Alberta Grizzly Bear Management Plan*

Inside cover: cataloguing information will be provided by the SARA responsible agency, but please provide the **Recommended Citation** (authors of the strategy in appropriate order or where applicable, originating jurisdiction).

Recovery Team Members: Names and affiliations

Disclaimer: Use the following as a guide or see recently published plans for other examples.

This (draft) Management Plan for Species X has been prepared in cooperation with the members of the Species X recovery team, Jurisdictions Y and Z and in consultation with (as appropriate). It defines the recovery goals, approaches and objectives that are deemed necessary to protect and recover the species. It does not necessarily represent the views of all individual members of the recovery team, or the official positions of the organizations with which the individual team members are associated. The goals, objectives and management recommendations identified in the plan are based on the best existing knowledge and are subject to modifications resulting from new findings and revised objectives. Implementation of the plan is subject to appropriations, priorities, and budgetary constraints of the participating jurisdictions and organizations.

Acknowledgments: It is customary to acknowledge those who assisted in developing the plan, e.g., reviewers, sources of funding, support of landowners, etc. Those who were consulted or who cooperated in the process should also be thanked.

Species Information ("COSEWIC assessment summary," as it appears on the COSEWIC web site <http://www.cosewic.gc.ca>, e.g., for May 2004 assessments:

http://www.cosewic.gc.ca/htmlDocuments/Detailed_Species_Assessment_e.htm

—do not alter.)

MANAGEMENT PLAN GUIDE

Common Name (population): Scientific Name: Current status and most recent date of assessment: Reason for designation: Assessment Criteria: Occurrence: Status history:

Executive Summary (usually 1 page): Summarize the highlights of the management plan in one or two sentences per section. Specify the time period covered by the plan.

Table of Contents: Use the ToC tool provided by Word; please avoid complex numbering systems.

Introduction

Explain the rationale for status for each species covered. If more than two species are included, summarize this information here and provide individual species information in an appendix. Refer to, and highlight appropriate points from, the Response Statement(s) for the species and the technical summary from the COSEWIC status report(s).

I. BACKGROUND

1. Biology

- Identify the species addressed by the management and describe where each is found.
- Provide a brief outline of life history and habitat requirements.

2. Threats

- Identify threats to populations and threats to habitat for each species.
- Assess the relative importance of each threat and where appropriate and possible describe regional variation. Where this is not possible, a threat assessment should be included in the action table.
- Identify limiting factors for each species
- Identify conservation needs indicating which ones apply to which species.

3. Monitoring history

- Summarize relevant inventory, monitoring and research efforts.
- Include names of researchers and agencies.

4. Knowledge gaps

- Briefly state what additional information is required about the species to accurately identify recovery objectives and activities.

II. MANAGEMENT

5. Goals and Objectives

5.1 Goal(s)

- What are the long-term goals (maintenance or recovery) for the species (and ecosystem or landscape) addressed by this management plan? What would be an achievable, measurable result over the next 5 years; next 20 years or so?

5.2 Objectives

- Identify specific, achievable objectives
- Refer to the technical appendix from the COSEWIC status report to address the thresholds that would lead to downlisting or uplisting. How would achievement of the objectives be measured?

5.3 Rationale

- For the benefit of the reader, explain the thinking behind setting these particular goals and objectives.

6. Management Actions

The competent minister must prepare a management plan for the species and its habitat. The plan must include measures for the conservation of the species [SARA, S.65]

- Identify and briefly described the measures that would conserve the species and address the threats. Indicate which species would benefit from each measure.

What actions would address the threats to the species? What actions are required to prevent up-listing? What indicators will be monitored over time to determine if the status of the species has (have) changed? The following headings are a suggestion. More may be added.

6.1 Habitat protection

- Identify habitat protection actions
- Discuss current industrial guidelines and practices and identify problems or weaknesses and possible solutions to ensure maintenance of habitat and populations
- Which species are being addressed

6.2 Other Management Actions

- Discuss any other management actions required to address threats to the species that were not included in habitat protection activities
- Identify which species are being addressed

6.3 Outreach and communication

- Examples of actions to include: working with landowners and providing resources , public education strategies, publications

6.4 Research

- What research is required to fill knowledge gaps? Research should be clearly linked to threats or conservation requirements of the species.

6.5 Inventory, monitoring and assessment. *The competent minister must monitor the implementation of the management plan and assess its implementation five years after the plan is included in the public registry, and in every subsequent five-year period, until its objectives have been achieved.*
[SARA, S.72]

- List required minimum activities and timelines
- Refer to standardized inventory protocol if applicable
- Include data capture (e.g., Biodiversity Species Observation Database), report requirements and distribution and population trend
- Include location specific recommendations if appropriate; provide specific activities for known or selected populations with rationale
- Monitor implementation: when identifying measures to implement, ensure that these are sufficiently clear and specific that their implementation can be measured (i.e., were they implemented as planned?). Monitoring the effects of implementation should be built in to the summary table.
- Keep in mind the needs for reassessment of species status at 10-year intervals.

6.6 Evaluation

- Identify performance measures for evaluating success in meeting the stated management objectives. Performance measures should refer both to each objective and to individual actions. Address both whether the action was carried out as intended and the biological or ecological effect of the action. Further guidance on this topic is being developed (contact Recovery Secretariat).

7. Summary Table

Priority	Obj. No.	Broad Approach / Strategy	Threat addressed	Specific Steps/Actions	Outcomes or Deliverables (identify measurable targets)
High	III	Threat Assessment	N/A	<ul style="list-style-type: none"> • Review published and gray literature and survey experts to assess relative importance of threats in each region. 	<ul style="list-style-type: none"> • Threat Assessment Table

8. Implementation Schedule

Action	Objective #	Lead	Other	Year 1 2004/2005	Year 2	Year 3	Year 4	Year 5

MANAGEMENT PLAN GUIDE

--	--	--	--	--	--	--	--	--

9. References

10. Contact list

- Include contact information for key personnel in addition to citations

Appendices

- Relevant maps (e.g., species distribution, key habitat, location of populations which are most at risk)

FUNDING

7.4 Funding Opportunities

Species recovery programs require adequate funding for success. Agencies participating in the national recovery program may fund specific recovery actions according to their areas of responsibility, interest and budgetary capabilities. Recovery teams may look to other sources for funding, for example, stewardship funds or community support (such as in-kind contributions) from conservation groups. Examples of funds that may support recovery activities are listed below.

Jurisdictions are expected to cover the participation costs of their representatives in recovery team meetings. Non-jurisdictional members may receive travel assistance or allowances for their participation on the team, but this will not be the norm. Jurisdictions will allocate resources to the operation of RIGs as determined by budgetary capabilities, and by the level of priority assigned by teams to the work proposed to be undertaken. RIGs may also seek funding independently for specific actions approved by the main team.

7.4.1 Federal Fund -- Ecological Gifts Program

The federal Ecological Gifts Program may provide an incentive for private and corporate landowners to make donations of ecologically valuable land (such as endangered species habitat), or interests in these lands, without taxation penalties. General information is available at <http://www.cws-scf.ec.gc.ca/ecogifts/>

7.4.2 Federal Fund -- Endangered Species Recovery Fund (ESRF)

In partnership with World Wildlife Fund Canada, the federal government sponsors this fund for high-priority conservation projects that assist the recovery and protection of "at risk" Canadian wildlife and their habitats. Application documents and guidelines are available at:

<http://www.wwfcanada.org/NewsAndFacts/Resources.asp?type=funding>

7.4.3 Federal Fund -- Great Lakes Sustainability Fund

The Great Lakes Sustainability Fund (GLSF) is a component of the Great Lakes Program's Great Lakes Basin 2020 Action Plan. The GLSF, which has evolved from the Great Lakes 2000 Cleanup Fund, was announced in July 2000 and aims to significantly accelerate work to restore the environmental quality of Canada's remaining 16 Areas of Concern (AOCs).

For more information visit: <http://sustainabilityfund.gc.ca/>

7.4.4 Federal Fund -- Habitat Stewardship Program for Species at Risk

As part of the [National Strategy for the Protection of Species at Risk](#), the federal government established the Habitat Stewardship Program (HSP) for Species at Risk. The HSP became operational in 2000-2001 and allocates up to \$10 million per year to projects that conserve and protect species at risk and their habitats.

The overall goal of the HSP is to "contribute to the recovery of endangered, threatened, and other species at risk, and to prevent other species from becoming a

FUNDING

conservation concern, by engaging Canadians from all walks of life in conservation actions to benefit wildlife."

The HSP provides funding to "stewards" for implementing activities that protect or conserve habitats for species designated by COSEWIC as E, T or SC. These activities must take place on private lands, provincial Crown lands, Aboriginal lands, or in aquatic and marine areas across Canada. The program also fosters partnerships among organizations interested in the recovery of species at risk. As such, it supports many organizations and individuals in their efforts to meet the requirements of the National Recovery Program and the new Species at Risk Act.

The program is delivered by five Regional Implementation Boards. For more information, contact: http://www.cws-scf.ec.gc.ca/hsp-pih/default_e.cfm

7.4.5 Federal Fund -- Interdepartmental Recovery Fund

The Interdepartmental Recovery Fund (IRF) provides funding to federal departments and departmental corporations for implementing recovery activities for species designated by COSEWIC as nationally extirpated, endangered or threatened that are on **federal lands** or **under federal jurisdiction**. As such, it supports federal organizations in their efforts to meet the requirements of the *Species at Risk Act*. This program also fosters partnerships among federal organizations and with other organizations interested in the recovery of species at risk. More information about the program is available on the Internet at: http://www.speciesatrisk.gc.ca/support/irf_fir/default_e.cfm

7.4.6 Environment Canada –Funds for Aboriginal People

Capacity Building fund supports aboriginal communities to build capacity to deal with species at risk issues; Critical Habitat fund helps aboriginal communities to define and protect critical habitat pertaining to Species at Risk.

7.4.7 Environment Canada – EcoAction Community Funding Program

EcoAction is an Environment Canada funding program which supports projects that protect, rehabilitate or enhance the natural environment, and build the capacity of communities to sustain activities into the future (including recovery work if it is community-based). The national Web site is: <http://www.ec.gc.ca/ecoaction/>

7.4.8 Parks Canada Agency -- Species at Risk Funding

Funding is available for strong scientific projects that help to recover species at risk found within national parks and national historic sites and the areas surrounding them. In 2001, new projects were funded, addressing the needs of 30 species in 23 national parks and national historic sites. Visit the Parks Species at Risk Web site at: <http://pc.gc.ca/nature/eep-sar/>

7.4.9 Provincial Funds

NL: A conservation fund was recently established but is not yet operational.

FUNDING

PEI: PEI Wildlife Conservation Fund

<http://www.gov.pe.ca/infopei/onelisting.php3?number=18642>; Watershed Management Fund <http://www.gov.pe.ca/infopei/index.php3?number=18643>

NS: Nova Scotia Habitat Conservation Fund

(<http://www.gov.ns.ca/natr/wildlife/habfund/>); NS Museum annual rare species grant (<http://museum.gov.ns.ca/grants/raresp.htm>) ; Species at Risk Fund has been created and is administered by the NS Species at Risk Working Group but the architecture for disbursement of funds has not yet been decided.

NB: Wildlife Trust Fund (<http://www.nbwtf.ca/index.asp>); Environmental Trust Fund www.gnb.ca/0009/0373/0002/0001-e.asp

QC: Fondation de la Faune du Québec (<http://www.fondationdelafaune.qc.ca/>)

MB: Manitoba Sustainable Development Innovations Fund (SDIF)

<http://www.gov.mb.ca/conservation/pollutionprevention/sdif/index.html> ; The Special Conservation Fund unfortunately has no website, but an application can be attained by contacting the branch as follows: Special Conservation Fund Manitoba Conservation, Sustainable Resource Management Branch (204)-945- 6662.

SK: Saskatchewan Fish and Wildlife Development Fund

<http://www.se.gov.sk.ca/fishwild/FWDFfactSheet220031.pdf>

BC: Habitat Conservation Trust Fund: <http://www.hctf.ca/>

Public Conservation Assistance Fund: <http://www.hctf.ca/pubcon/>

Forest Investment Account: <http://www.for.gov.bc.ca/hcp/fia/>

Brodge-Coastal Restoration Program: <http://bchydro.com.bcrp/>

Columbia Basin Trust Environmental Initiatives:

<http://www.cbt.org/programsemain.asp?ProgramID=271&fl=5>

8. PROGRAM MONITORING, EVALUATION AND REPORTING

8.1 Reporting Cycles

The Minister of Environment must report to parliament on the preparation and implementation of recovery strategies, action plans and management plans once each year.

The Competent Minister must monitor and report on the implementation of each recovery strategy, action plan and management at five-year intervals beginning with their publication on the public registry. These reports must be included on the registry.

8.2 Performance Measures

Two kinds of evaluation are necessary in recovery: reporting on planning and implementation, and evaluating progress in recovery from a biological perspective. Guidance on evaluating progress from a biological perspective requires more attention by the National Recovery Working Group. The following are suggestions for evaluating the success of recovery planning and efforts.

- The extent to which the goals and objectives outlined in the recovery strategy have been met.
- Changes in population size, trend, productivity (with explanations for the reasons for the changes).
- Identification of recovery / survival habitat.
- Proportion of identified recovery / survival habitat that has been protected.
- Success in mitigating threats.
- The extent to which stakeholders have been consulted with or have become involved in recovery activity.
- Success of public outreach, awareness and education programs initiated by the recovery team.
- Level of public support for recovery work (e.g., number of favourable or unfavourable media reports; change in level of public funding being invested in recovery of the species).

8.3 Reporting

8.3.1 RIMS (Recovery Information Management System)

The Recovery Information Management System (RIMS) is a web-based data management system for collecting and organizing information from the recovery community, and providing updated guidance documents and summary reports to its users. It is available to staff from jurisdictions and to recovery team chairs and members and can be accessed at <http://www.recovery.gc.ca>. Information gathered in RIMS is used to produce the RENEW annual reports and the recovery component of the species at risk profiles, both of which are available to the public from the SAR website (www.speciesatrisk.ca).

8.3.2 RENEW Annual Report

The RENEW annual report released by CESSC each fall is produced by the Recovery Secretariat in cooperation with responsible jurisdictions and recovery team chairs. Each year in early spring a call letter goes out to recovery teams and responsible jurisdictions requesting data and the report is released in September. The report covers the year's accomplishments and summarizes the status of national recovery plans and teams, and the resources allocated to the recovery of endangered and threatened species. Past reports are available on the recovery web site: http://www.speciesatrisk.gc.ca/recovery/default_e.cfm

8.3.3 Recovery Web Site

The Recovery Web site provides links to approved RENEW recovery plans, RENEW annual reports, species profiles containing biological and recovery information, a list of recovery team chairs and species contacts, and other recovery-related material. The Web site address is: http://www.speciesatrisk.gc.ca/recovery/default_e.cfm

Recovery teams are encouraged to submit short articles for posting on the web site, to the CWS/SAR Marketing and Outreach Contact:
Hélène Gaulin: (819) 997-1687; Helene.Gaulin@ec.gc.ca

8.3.4 SARA Public Registry

Recovery strategies, action plans and management plans are posted on the SARA Public Registry both for a 60-day comment period prior to finalization and on final approval. Identified critical habitat, residence descriptions and other relevant documents are also posted there. The registry is accessible at: <http://www.sararegistry.gc.ca/>

Note that some provinces and territories also have websites for soliciting public comment on recovery documents.

Table 4. Reporting requirements of RENEW and SARA

RENEW or SARA	Description	Frequency
RENEW	Annual report on species recovery (backed by web site of species fact sheets), released by CESSC; available to recovery community and to public by request or on the recovery website, not required by any agreement	Annually September
SARA, S.126	EC Minister must report to Parliament on administration of SARA, including the preparation and implementation of recovery strategies, action plans and management plans	Annually
SARA, S.46	Competent Minister's report on recovery strategy implementation (progress towards meeting recovery objectives), every 5 years until objectives	Within 5 years of posting on registry, and

PROGRAM MONITORING, EVALUATION AND REPORTING

	have been met; posted on registry	every 5 years thereafter
SARA, S.55	Competent Minister's 5 year assessment and report on action plan implementation (progress towards meeting its objectives; ecological and socio-economic impacts); posted on registry	5 years after plan comes into effect
SARA, S.63	EC Minister must report on unprotected portion of CH every 180 days (after the first 180 days after the recovery strategy or action plan that identified CH was included in the public registry), until the portion is protected or no longer identified as CH; posted on registry	Every 180 days after first 180 days since CH was identified
RENEW	Recovery program evaluation	Periodic

With careful planning, it should be possible to reduce the time and effort expended on meeting reporting requirements. Reports could serve several purposes, if they avoid unnecessary detail and if they are developed in collaboration with other aspects of the species at risk program (e.g., HSP).

APPENDIX A. GLOSSARY OF TERMS

Accord (*Accord for the Protection of Species at Risk*, 1996): an agreement among all provinces and territories and three federal departments to commit to a national approach for species at risk. (see Appendix C.)

CEAA: The Canadian Environmental Assessment Act (or Agency)

CESCC: Canadian Endangered Species Conservation Council, composed of federal and provincial ministers responsible for the management of wild species. Federal ministers are the ministers of Environment (EC and PCA), and Fisheries and Oceans

Competent minister: the federal minister (of the Environment or Fisheries and Oceans) with authority under SARA for a given species at risk.

COSEWIC: Committee on the Status of Endangered Wildlife in Canada, responsible for determining the national status of wild species, subspecies, varieties and nationally significant populations that are considered to be at risk in Canada.

Critical habitat: this term is defined in SARA (the federal *Species at Risk Act*), as "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 the recovery strategy or in an action plan for the species." The federal competent minister is ultimately responsible for identification of critical habitat in a recovery strategy or action plan.

CWDC: Canadian Wildlife Directors Committee, composed of jurisdictional directors responsible for the conservation of wildlife generally or of species at risk in particular.

CWS: Canadian Wildlife Service of Environment Canada, Canada's national wildlife agency with responsibility for federal wildlife matters including the protection and management of migratory birds and nationally important wildlife habitat, endangered species, research on nationally important wildlife issues, control of international trade in endangered species, and international treaties.

DFO: Fisheries and Oceans Canada (formerly Department of Fisheries and Oceans)

EA: Environmental Assessment.

E species: an endangered species as designated by COSEWIC; a species facing imminent extirpation or extinction.

EC: Environment Canada

ESRF: Endangered Species Recovery Fund (funded by EC and WWF, administered by WWF)

G Rank: the Nature Conservancy ranks for species' global endangerment are available online through NatureServe (formerly the Association for Biodiversity Information) at:

<http://www.natureserve.org/explorer/servlet/NatureServe?init=Species>

GIC: Governor in Council of Parliament

HSP: Habitat Stewardship Program of the federal government, aimed at protection of critical habitat as identified in recovery strategies and action plans.

IRF: Interdepartmental Recovery Fund of the federal government, aimed at funding actions identified in recovery strategies and action plans for species at risk where they occur on federal lands.

IUCN: The World Conservation Union (International Union for Conservation of Nature and Natural Resources)

IUCN Red List: a widely recognized, comprehensive and apolitical approach for evaluating the global conservation status of plant and animal species.

APPENDIX A – GLOSSARY

Legal list: the “List of Wildlife Species at Risk” as established under SARA; not equivalent to the COSEWIC list of species at risk.

NAR species: a species that has been evaluated by COSEWIC and found to be not at risk.

National Recovery Working Group: a committee of technical advisors to the Canadian wildlife directors, with representation from all jurisdictions.

Nature Conservancy (see also G Rank): <http://nature.org/>

NGO: non-governmental organization

PCA (Parks): Parks Canada Agency (under the responsibility of the Minister of Environment).

External (peer) review: review of a recovery document by individuals not involved in its development. Often scientists with expertise on the species or members of recovery teams working on similar species or issues are invited to provide an external review.

Potential habitat: historically occupied habitat that is still available for use or which could be restored to its historical state, or habitat not known to be historically occupied that would be or could be rendered suitable for the species.

Recovery: In the context of species at risk conservation, **recovery** is the process by which the decline of an endangered, threatened or extirpated species is arrested or reversed, and threats removed or reduced to improve the likelihood of the species persistence in the wild.

A species will be considered **recovered** when its long-term persistence in the wild has been secured..

Recovery habitat: the habitat needed by a species in order to maintain a self-sustaining and viable population level.

Recovery planner: a generic term to describe the individual or group of individuals who are undertaking recovery strategy planning and/or action planning for a particular species at risk; could refer to a recovery team, jurisdiction(s) or consultant.

Recovery team (RT): A diverse group of individuals charged with effecting recovery of an E, T or XP species, including development of a recovery strategy.

RENEW (Recovery of Nationally Endangered Wildlife): the national recovery program and process that has been evolving since its inception in 1988 by the Wildlife Ministers Council of Canada.

Responsible jurisdiction (Accord Lead / Accord Participant): a federal, provincial or territorial wildlife agency with the most / with some management responsibility and public accountability for a species at risk found within its jurisdictional borders.

RIG: recovery implementation group (formerly RAG); a group of people working on specific actions or projects under the umbrella of a national recovery team.

SARA: federal *Species at Risk Act*, received Royal Assent on 12 December 2002, came into force when it was proclaimed in June 2003.

SARA Public Registry: established under section 120 of SARA by the federal Minister of the Environment “for the purpose of facilitating access to documents relating to matters under this Act.” (SARA S.120). The SARA Public Registry homepage is: <http://www.sararegistry.gc.ca>

SARA Responsible Agency (SRA): the unofficial term used by the Recovery Secretariat to identify the one federal jurisdiction (CWS region, DFO region, or PCA)

APPENDIX A – GLOSSARY

with the most responsibility (on behalf of the competent minister) for ensuring that SARA-compliant recovery planning documents are posted on the SARA public registry within the mandatory timelines.

SARA Participating Agency (SPA): the unofficial term used to identify any other federal jurisdiction with some but not most responsibility for recovery planning under SARA (e.g., due to responsibility for federal land within range of the species).
SARAC, Species at Risk Advisory Committee: A committee of industry, non-governmental organizations and academics invited to advise the Minister of Environment Canada on the implementation of SARA.

SARCC, Species at Risk Coordinating Committee (proposed): F/P/T regional planning structure for species at risk, to coordinate general status monitoring, assessment and recovery.

SEA: Strategic Environmental Assessment, e.g., of a recovery planning document.

SC species: a species of special concern (formerly “vulnerable”) as designated by COSEWIC, because of characteristics that make it particularly sensitive to human activities or natural events.

Species: in this handbook, a species is “any indigenous species, subspecies, variety or geographically defined population of wild fauna or flora” assessed by COSEWIC.

Species at risk: under RENEW, these include nationally endangered and threatened species, and extirpated species where reintroduction is planned. Under SARA, recovery of species at risk includes all extirpated species and species of special concern.

Stewardship: voluntary action by landowners and others in a landscape that is of conservation benefit (particularly with respect to species at risk habitat).

Survival: maintaining current population size and distribution.

Survival habitat: the habitat currently occupied by a species.

T species: a threatened species as designated by COSEWIC; a species likely to become endangered if limiting factors are not reversed.

U.S. Endangered Species Act: species legally protected under this Act are listed at: <http://endangered.fws.gov/wildlife.html#Species>

Wildlife: in this document, wildlife refers to species of the taxa that COSEWIC assesses: mammals (terrestrial and marine), birds, reptiles, amphibians, fishes, lepidopterans, molluscs, vascular plants, mosses and lichens.

Wildlife management board: any board or other body established by a land claims agreement that is authorized by the agreement to perform functions in respect of wildlife species (SARA definition).

WWF: World Wildlife Fund (Canada)

XP species: an extirpated species as designated by COSEWIC; a species no longer existing in the wild in Canada, but occurring elsewhere.

APPENDIX B. NATIONAL FRAMEWORK FOR THE CONSERVATION OF SPECIES AT RISK

Note that some sections not pertinent to recovery have been omitted from this document.

PURPOSE

To provide a coordinated national approach for the conservation of species at risk.

GOAL

To prevent any species from becoming extinct as a consequence of human activities.

UNDERLYING PRECEPTS

1. Canadians share responsibility for ensuring that species are not lost to extinction as a result of human activities. Governments have a leadership role in providing sound information and appropriate structures within which this responsibility can be met.

2. For the purpose of this agreement the parties acknowledge that:

(a) the provinces and territories exercise primary legislative responsibility for wildlife in Canada; but

(b) Canada exercises primary legislative responsibility for migratory birds and primary legislative responsibility for sea coast and inland fisheries.

This framework is not intended to resolve division of power issues between the provinces and territories on the one hand and the federal government on the other.

3. The involvement of Canadians in the implementation of a national framework for the conservation of species at risk is essential.

4. A national cooperative approach for the management of species at risk is required to reflect and support the roles and responsibilities of federal and provincial/territorial governments. Species conservation initiatives should be approached through complementary federal and provincial/territorial legislation, regulations, policies, and programs.

5. An effective and complete national framework for the conservation of species at risk must be able to address indigenous non-domestic flora and fauna.

6. The conservation of species at risk is a key contributor to a broader strategy to maintain biological diversity. It requires that all jurisdictions cooperate to sustain ecosystems, and prevent species from becoming at risk. It further requires jurisdictions to evaluate the general status of all species, to identify and designate those at risk, and to respond with appropriate actions at both the national and local/regional scales.

7. Where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize a threat.

APPROACH

1. **COOPERATION AND MANAGEMENT AT THE APPROPRIATE SCALE**

Species do not respect jurisdictional boundaries. Conservation of species at risk will be addressed through a national partnership which recognizes, harmonizes and co-ordinates the responsibilities and interests of all jurisdictions responsible for wildlife management in Canada. The approach will function at two scales or levels of interest. Species which are at risk when considered across their range in Canada (nationally) will be dealt with through a cooperative national approach involving all affected jurisdictions. Species which are not at risk nationally but are provincially/regionally at risk will be dealt with at the provincial/regional level by the jurisdiction(s) within which the species is at risk.

The Canadian Endangered Species Conservation Council (CESCC), comprised of Ministers responsible for the management of wild species, would be responsible for the National framework and its implementation, and would resolve issues for the protection of species at risk in Canada. The Council will be assisted by a permanent Secretariat provided by the federal government and the Canadian Directors Committee responsible for Wildlife.

The CESCC will:

- a) Periodically review the structure and function of the National Framework to ensure its effectiveness;
- b) recommend an independent committee of experts to assess the status of species which may be at risk nationally. This committee will be designated as the Committee on the Status of Endangered Wildlife In Canada (COSEWIC);
- c) provide ongoing direction and terms of reference for COSEWIC, including endorsing the species assessment criteria;
- d) review progress related to the recovery planning and implementation for species at risk nationally;
- e) serve as a forum for resolving any disputes that may arise in implementing the framework; and
- f) provide credible information in a timely manner on the status and needs of species at risk in Canada.

To implement the National Framework for the Conservation of Species at Risk, all jurisdictions will:

- a) establish the necessary legislative authority over wild species under their jurisdiction and the capacity to designate species at risk;
- b) establish the authority to protect, manage, and restore species and their habitats which are under their jurisdiction including authorities for regulation or prohibitions respecting the killing, injuring, possessing, and trafficking in designated species, and the protection of critical habitat on Crown lands;
- c) consider within their respective designation processes, species listed by CESCC as nationally threatened or endangered within the jurisdiction's territory.
- d) apply the prohibitions and recovery actions the jurisdiction considers necessary for each species designated under the relevant legislation;
- e) establish the authority to fund and/or enter into agreements for the management of designated species;
- f) cooperate with one another to ensure a compatible approach to the protection of listed species at risk; and

- g) actively cooperate with interested parties to prevent species from becoming at risk, and to encourage the restoration of designated species.

2. PREVENTION

All jurisdictions will place emphasis on preventing species from being placed at risk as a consequence of human actions, and will:

- a) manage species, habitats, and ecosystems using principles of sustainability; and pursue efforts to maintain the biological diversity under their jurisdiction.

(Sections 3 and 4 omitted)

5. RECOVERY OF SPECIES AT RISK NATIONALLY

All jurisdictions agree:

- a) that a National Recovery Plan will be developed by Responsible Jurisdictions within one year of designation for endangered species, and within two years for threatened species will be prepared and tabled with the CESSC. Plans will be periodically revised and updated;
- b) that Recovery Plans will be developed cooperatively by teams with representation from all jurisdictions which share responsibility for the species;
- c) the federal government will be responsible for the initiation and facilitation of multi-jurisdictional Recovery Teams, and for coordinating the development of recovery plans for species requiring the involvement of more than one jurisdiction;
- d) the federal government will be responsible for fostering international cooperation needed to facilitate recovery planning and implementation;
- e) that jurisdictions will be responsible for the implementation of Recovery Plans; The federal government may assist provinces/territories in provincial projects and vice-versa; and
- f) that to the extent possible, each jurisdiction will ensure that all its agencies and departments shall act in a manner which protects and restores the designated species.

Recovery Plans will include items such as:

- a) Identification of key biological and land use issues affecting a listed species, group of species or their critical habitat (e.g. range, status of populations, limiting factors, key habitats, etc.);
- b) description and assessment of the relative importance of the socio-economic problems affecting the species recovery;
- c) achievable objectives for population numbers and distribution for species to be recovered, against which progress can be objectively measured;
- d) a detailed description of the specific research and management activities necessary to restore the species to the target level identified;
- e) a description of the recovery activities that are technically and economically feasible, and are achievable by the responsible jurisdictions;
- f) an estimate of cost and probability of success for each recovery activity identified;

- g) broader ecosystem management and multi-species approaches where feasible;
- h) indicators to be used to monitor the recovery of the species or group of species, as well as indicators for monitoring long term viability; and
- i) a mechanism for review and evaluation of the effectiveness of the recovery plan.

6. ASSESSMENT, DESIGNATION AND RECOVERY OF SPECIES AT RISK PROVINCIALY / REGIONALLY

Responsibility for the assessment, designation, and recovery of species which are not at risk nationally but are at risk provincially/regionally rests with the appropriate responsible jurisdiction(s). Categories of designations in each jurisdiction across Canada will be compatible and will include, but not necessarily be limited to, Endangered or Threatened designations. Each jurisdiction will:

Provide independent scientific assessment and designation of the jurisdictions' species at risk:

- a) Establish the ability to select, for each provincially/regionally designated species, the regulation, prohibitions and authorities which are necessary; and
- b) prepare and implement recovery plans.

National Framework for the
Conservation of Species at Risk
September 30, 1996

APPENDIX C. ACCORD FOR THE PROTECTION OF SPECIES AT RISK

Federal, provincial and territorial ministers responsible for wildlife commit to a national approach for the protection of species at risk. The goal is to prevent species in Canada from becoming extinct as a consequence of human activity.

We recognize that:

- i) species do not recognize jurisdictional boundaries and cooperation is crucial to the conservation and protection of species at risk;
- ii) the conservation of species at risk is a key component of the Canadian Biodiversity Strategy, which aims to conserve biological diversity in Canada;
- iii) governments have a leadership role in providing sound information and appropriate measures for the conservation and protection of species at risk, and the effective involvement of all Canadians is essential;
- iv) species conservation initiatives will be met through complementary federal and provincial/territorial legislation, regulations, policies, and programs;
- v) stewardship activities contributing to the conservation of species should be supported as an integral element in preventing species from becoming at risk; and
- vi) lack of full scientific certainty must not be used as a reason to delay measures to avoid or minimize threats to species at risk.

We agree to:

- i) participate in the Canadian Endangered Species Conservation Council in order to coordinate our activities and resolve issues for the protection of species at risk in Canada;
- ii) recognize the Committee on the Status of Endangered Wildlife in Canada as a source of independent advice on the status of species at risk nationally; and,
- iii) establish complementary legislation and programs that provide for effective protection of species at risk throughout Canada, and that will:
 - a. address all native wild species;
 - b. provide an independent process for assessing the status of species at risk;
 - c. legally designate species as threatened or endangered;
 - d. provide immediate legal protection for threatened or endangered species;
 - e. provide protection for the habitat of threatened or endangered species;
 - f. provide for the development of recovery plans within one year for endangered species and two years for threatened species that address the identified threats to the species and its habitat;
 - g. ensure multi-jurisdictional cooperation for the protection of species that cross borders through the development and implementation of recovery plans;
 - h. consider the needs of species at risk as part of environmental assessment processes;
 - i. implement recovery plans in a timely fashion;
 - j. monitor, assess and report regularly on the status of all wild species;
 - k. emphasize preventive measures to keep species from becoming at risk;
 - l. improve awareness of the needs of species at risk;
 - m. encourage citizens to participate in conservation and protection actions;
 - n. recognize, foster and support effective and long term stewardship by resource users and managers, landowners, and other citizens; and
 - o. provide for effective enforcement.
- iv) refer any disputes that may arise under this Accord to the Canadian Endangered Species Conservation Council for resolution.

Additional guidance on the implementation of this approach is provided in the evolving national framework for the conservation of species at risk.

APPENDIX D. MEMBERSHIP OF NATIONAL RECOVERY WORKING GROUP

As the National Recovery Working Group, the following representatives of the 16 jurisdictions (and the Recovery Secretariat) with responsibility for recovery of species at risk have participated in developing this handbook.

<p>ALBERTA http://www3.gov.ab.ca/srd/fw/index.html Steve Brechtel Fish and Wildlife Division Dept. of Sustainable Resource Development Government of Alberta 2nd Flr, Great West Life Bldg., 9920 – 108 Street EDMONTON AB T5K 2M4 Steve.Brechtel@gov.ab.ca Tel: (780) 422-9535 // Fax: (780) 422-9557</p>	<p>BRITISH COLUMBIA http://www.gov.bc.ca/bvprd/bc/channel.do?action=ministry&channelID=-8395&navId=NAV_ID_province Dave Fraser Endangered Species Specialist, Wildlife Branch Ministry of Water, Land and Air Protection Government of British Columbia 2975 Jutland Road, 4th Floor P.O. Box 9338 Stn. Prov. Govt. VICTORIA BC V8W 9M1 Dave.Fraser@gems8.gov.bc.ca Tel: (250) 387-9756 // Fax: (250) 356-9145</p>
<p>MANITOBA www.gov.mb.ca/conservation/wildlife/ James Duncan (Co-Chair, NRWG) Manager, Biodiversity Conservation Conservation Wildlife and Ecosystem Protection Branch, Government of Manitoba Box 24, 200 Saulteaux Crescent WINNIPEG MB R3J 3W3 jduncan@gov.mb.ca Tel: (204) 945-7465 // Fax: (204) 945-3077</p>	<p>NEW BRUNSWICK http://www.gnb.ca/0078/fw/index_fw.asp Pascal Giasson Renewable Resources Branch Department of Natural Resources Government of New Brunswick P.O. Box 6000, 1350 Regent St. FREDERICTON NB E3B 5H1 Pascal.Giasson@gnb.ca Tel: (506) 453-2440 // Fax: (506) 453-6699</p>
<p>NEWFOUNDLAND AND LABRADOR http://www.env.gov.nl.ca/env/ Joe Brazil Endangered Species and Biodiversity Section Inland Fish and Wildlife Division Department of Environment & Conservation Government of Newfoundland and Labrador P.O. Box 2007, 117 Riverside Drive CORNER BROOK NF A2H 7S1 joebrazil@gov.nl.ca Tel: (709) 637-2356 // Fax: (709) 637-2004</p>	<p>NORTHWEST TERRITORIES http://www.nwtwildlife.rwed.gov.nt.ca/ Suzanne Carrière Ecosystem Management Biologist Wildlife & Fisheries Division Department of Resources, Wildlife & Economic Development Government of the Northwest Territories 600, 5102 - 50th Avenue YELLOWKNIFE NT X1A 3S8 suzanne_carriere@gov.nt.ca Tel: (867) 820-6327 // Fax: (867) 873-0293</p>
<p>NOVA SCOTIA http://www.gov.ns.ca/natr/wildlife/index.htm Sherman Boates Manager, Wildlife Resources Renewable Resources Division Department of Natural Resources Government of Nova Scotia 136 Exhibition Street KENTVILLE NS B4N 4E5 boatesjs@gov.ns.ca Tel: (902) 679-6146 // Fax: (902) 679-6176</p>	<p>NUNAVUT Michael Settington Ecosystem Monitoring Biologist Department of Sustainable Development Government of Nunavut PO Box 120 ARVIAT, NU X0C 0E0 msettington@gov.nu.ca Tel : (867) 857-2828 // Fax : (867) 857-2986</p>

<p>ONTARIO http://www.ontarioparks.com/english/sar.html Karen Hartley Species at Risk Ministry of Natural Resources Government of Ontario P.O. Box 7000 300 Water Street, 4th Floor S, PETERBOROUGH ON K9J 8M5 karen.hartley@mnr.gov.on.ca Tel: (705) 755-1763 // Fax: (705) 755-1788</p>	<p>PRINCE EDWARD ISLAND http://www.gov.pe.ca/infopei/onelisting.php3?number=67794 Rosemary Curley Conservation and Management Division Dept. of Environment, Energy & Forestry Government of Prince Edward Island P.O. Box 2000, 11 Kent Street CHARLOTTETOWN PE C1A 7N8 rcurley@gov.pe.ca Tel: (902) 368-4807 // Fax: (902) 368-5830</p>
<p>QUEBEC – For Animals : http://www.mrnfp.gouv.qc.ca/faune/index.jsp Daniel Banville Coordonnateur, Ministère des Ressources naturelles, de la Faune et des Parcs, secteur Faune Québec Direction du développement de la faune 675 boul. René-Lévesque Est, 11^e étage QUÉBEC QC G1R 5V7 daniel.banville@fapaq.gouv.qc.ca Télép.: (418) 521-3875, poste 4479 Télééc.: (418) 521-6863</p>	<p>QUEBEC - For Plants: Line Couillard Direction de la conservation et du patrimoine écologique Ministère de l'Environnement Gouvernement du Québec 4^e étage, Boîte 21 675, boul. René Lévesque, est QUÉBEC QC G1R 5V7 line.couillard@menv.gouv.qc.ca Tel: (418) 521-3907 poste 4766 Fax: (418) 646-6169</p>
<p>SASKATCHEWAN Kevin Murphy Head, Aquatic Ecosystem Science Fish and Wildlife Branch Government of Saskatchewan 436-3211 Albert Street REGINA SK S4S 5W6 kmurphy@serm.gov.sk.ca Tel: (306) 787-2941 // Fax: (306) 787-9544</p>	<p>YUKON TERRITORY Thomas Jung Senior Biologist (Biodiversity) Fish and Wildlife Branch Department of Environment Government of the Yukon Territory P.O. Box 2703 10 Burns Road WHITEHORSE YT Y1A 2C6 thomas.jung@gov.yk.ca Tel: (867) 667-5766 // Fax: (867) 393-6263</p>
<p>FISHERIES AND OCEANS CANADA Karolyne Pickett SARA Secretariat Department of Fisheries and Oceans 200 Kent Street OTTAWA ON K1A 0E6 pickettk@dfo-mpo.gc.ca Tel: (613) 990-9052 // Fax: (613) 998-8158</p>	<p>PARKS CANADA AGENCY Lindsay Rodger Senior Advisor, Recovery Parks Canada Agency 25 Eddy Street, 4th Floor, Lindsay.Rodger@pc.gc.ca Hull, QC K1A 0M5 Tel: (819) 953-6575 // Fax: (819) 997-3380</p>
<p>ENVIRONMENT CANADA – CANADIAN WILDLIFE SERVICE – RECOVERY DIVISION Doug Hyde (Co-Chair, NRWG) A/Chief, Recovery Division Species at Risk Branch Canadian Wildlife Service Environment Canada OTTAWA ON K1A 0H3 Doug.Hyde@ec.gc.ca Tel: (819) 934-153949 // Fax: (819) 994-3684</p>	<p>ENVIRONMENT CANADA – CANADIAN WILDLIFE SERVICE – RECOVERY SECRETARIAT Mary Rothfels Head, Recovery Secretariat Recovery Division, Species at Risk Branch Canadian Wildlife Service Environment Canada OTTAWA ON K1A 0H3 Mary.Rothfels@ec.gc.ca Tel: (819) 994-2365 // Fax: (819) 994-3684</p>

APPENDIX E: MATERIALS FOR RECOVERY PLANNING

1. Sample Team Member Appointment Letter

I am pleased to re-appoint you as a member to the Newfoundland Marten Recovery Team effective immediately. Recovery Teams are formally recognized under the Province of Newfoundland and Labrador's Endangered Species Act. The primary functions of the Team are to prepare and periodically revise recovery plans, strategies and action plans, define and identify critical and recovery habitat, advise the Inland Fish and Wildlife Division and the Department of Environment and Conservation on matters related to recovery and monitor the implementation of the Recovery Plan/Strategy. Overall guidance for the structure of recovery and action plans as well as the recovery planning process will be taken from the Recovery Handbook (May 2005 edition) prepared by the National Recovery Working Group. The Province is under strict legislated deadlines for the development of a Recovery Plan and therefore this should be the Team's first priority if it is not already done. The Team will periodically be asked to review proposals related to recovery. The Team will also be able to form working groups for specific or ongoing issues. While the Team is not expected to implement the Plan/Strategy, members may individually or collectively be involved in some aspect of the species recovery.

Members are appointed for their expertise, knowledge, resource management responsibility or as a representative of a group or organization which may have a significant influence on or interest in the species recovery. Members are expected to base their decisions on what is best for the species. Members are encouraged to suggest amicable solutions to resource conflicts which will not compromise the species survival and recovery. Members are also expected to actively participate on the Team. The membership of the Team will be periodically reviewed and modified depending on changing needs and direction. The Team should meet at least once a year and during meetings should reach decisions by consensus or majority vote. A chair and/or co-chair will manage the operations of the Team. The chair will normally be appointed by the Inland Fish and Wildlife Division while the Team may also select a co-chair from its membership.

Generally financial support to participate on the Team will be limited to those members who do not necessarily represent a particular government or management agency, or major stakeholder. If you require assistance to participate you should contact the chair as soon as possible to make the appropriate arrangements.

Finally I would like to thank you for agreeing to offer yourself as a member and wish you and the Team the best of luck.

Sincerely,
Jim Hancock
Director

2. Fact Sheet Comparing Recovery Planning Documents

**Comparing SARA-Compliant Recovery Documents
FACT SHEET**

SARA sets requirements for three different types of documents: recovery strategy, action plan and management plan. The purpose of this fact sheet is to help distinguish among these (e.g., when each applies, its purpose, where the timeline comes from and the appropriate level of detail). More detailed guides for each individual document are available in ROMAN and should be consulted by those involved in writing them.

Note that the term “recovery plan” refers to a single document containing both a recovery strategy and its associated action plans (e.g. the old RENEW recovery plans). A management plan combines many of the qualities of a recovery strategy and action plan.

Deciding which to use:

	Recovery Strategy	Action Plan	Management Plan
Document Type			
Which species	Endangered, Threatened and Extirpated	Endangered, Threatened and Extirpated	Special Concern
Timeline	Fixed by SARA	Set in Recovery Strategy	Fixed by SARA
Purpose	Describe what needs to be done and why to address biological needs of the species	Explain how the RS will be implemented and its goals and objective achieved Consider Socio-economic issues	Describe what needs to be done and how to maintain the species
Recommended Approach	Single species recommended, multi-species/ecosystem optional	Multi-species/ecosystem recommended, single species optional	Multi-species/ecosystem or landscape recommended, sometimes single species
Goal Type	On a continuum from maintenance to full recovery	Set in Recovery Strategy	Preventative (usually addresses a threat)
Level of Detail	<ul style="list-style-type: none"> • Strategic/ Conceptual • General • Describe desired biological outcomes • Long term thinking • Provide direction (e.g., maintain connectivity between local populations of species X) • Describe threats which may include socio-economic issues 	<ul style="list-style-type: none"> • Operational • More detailed • Describe what needs to/can be done to achieve recovery strategy outcomes • How to do it, when it will be done, who will do it (may suggest but not commit partners, may estimate costs) • May specify populations or pieces of land • Socio-economic evaluation 	<ul style="list-style-type: none"> • Strategic and operational • Combines attributes of both, but primarily focused on an ecosystem or landscape scale of activity • needs of listed species must be met
Use	<ul style="list-style-type: none"> • Guide action planning • Identify Critical Habitat or a Schedule of Studies 	<ul style="list-style-type: none"> • Guide individual and agency work plans, funding proposals • Critical Habitat identification and protection 	<ul style="list-style-type: none"> • Guide conservation effort within ecosystem/ landscape
Method	Jurisdiction(s); recovery team/planner(s)	Jurisdiction(s); recovery team/planner(s) or Recovery Implementation Group (RIG)	Jurisdiction(s) using recovery team/planner(s) or Recovery Implementation Group (RIG)

3. Formatting Specifications for SARA Recovery Planning Documents

This document prescribes a number of technical and organizational formatting standards for SARA recovery strategies, action plans and management plans to ensure a national common look and feel. Examples are available that reflect these standards.

Typeface, line spacing, and common numbering system

One blank line above and below all headings and paragraphs except for HEADING 1. HEADING 1 has two blank lines above and one blank line below.

A common numbering system for headings will facilitate intra-section organization and ease of reference (see below for example). Subdivision of text beyond five levels is discouraged.

Body text Arial regular 12 point.

Header Arial regular 10 point. Add the title of the document and the month and year. Until the document is the final version approved by the Minister, add [Draft] or [Proposed] at the end of the title.

Footer (page numbers) Arial regular 10 point, flush right alignment. Page numbering starts on the page with the Disclaimer as page i in Roman numerals until the Table of Contents. Page numbering starts at 1 in regular numerals from the page beginning with Species Information.

Footnotes Arial regular 10 point. Use the footnote tool provided in Word (Insert/Reference/Footnote)

1. HEADING 1 Arial bold 14 point, uppercase, flush left alignment.

APPENDIX A Heading 1 formatting should be applied to appendix titles.

1.2 Heading 2 Arial bold 12 point, flush left alignment.

1.2.1 Heading 3 Arial regular 12 point, underlined, flush left alignment.

Headings can be automatically formatted in the templates for recovery strategies, actions plans and management plans by selecting the heading level on the formatting toolbar before typing. Body text can be formatted by selecting 'Normal'.

Further section titles should follow the format below, but should not be numbered or included in the table of contents (and therefore should not be designated as headings).

Heading 4 Arial italic 12 point, flush left alignment

APPENDIX E -- MATERIALS FOR RECOVERY PLANNING

Heading 5 Arial regular 12 point, flush left alignment.

Margins

All margins should be: 1" (2.54 cm)

Table of Contents

The font is Arial regular 12 point, uppercase for the first level of headings and lowercase for the remainder of the headings. Use the Table of Contents tool available in Word (Insert/Reference/Index and Tables/Table of Contents)

TABLE OF CONTENTS

PREFACE.....iii
 EXECUTIVE SUMMARY 1
 1. RECOVERY2
 1.1 Recovery goal.....3
 1.2 Recovery objectives4
 1.3 Approaches to meet recovery objectives.....5
 1.3.1 Monitor population size, distribution, movement, and productivity.....6
 2. BACKGROUND.....8
 2.1 Species information.....10
 APPENDIX A. Biological Suitability Criteria (BSC) developed by the US Roseate Tern Recovery Team for choosing colony restoration sites.....15

Tables

Table heading Arial bold 11 point, flush left alignment. (See example below)

Table subhead Arial bold 10 point, flush left alignment. (See example below)

Table text Arial regular 10 point. (See example below)

Table 1. This is an example of the formatting (Table heading)

Table subhead	Table subhead	Table subhead	Table subhead
Monitor population size, distribution, movement and productivity	Necessary	All	Count adults, measure productivity
Enhance nesting habitat	Urgent	1,2,4,5	Manage predators
Manage additional colonies	Urgent	3	Establish additional predator-free colonies

APPENDIX E -- MATERIALS FOR RECOVERY PLANNING

Please note that for tables exceeding one page, you must repeat table headings and subheadings on each page.

Photos, Illustrations, and Figures

The documents will be posted on the Web in PDF, therefore the photos and illustrations must be provided in EPS format in order to have quality printing and viewing. The recommended resolution is 300 dpi.

The captions for all photos, illustrations, and figures should be indicated as follows: Figure 1, Figure 2, etc. It should be placed under item. The typeface is Arial regular 10 point.

Naming Electronic Documents

Based on naming conventions required for posting documents on the Public Registry, the following file naming format is required for documents being submitted as either proposed or final versions:

2-3 letter descriptor_species_name_mmyy_language

Descriptors: rcs = recovery strategy; ap = action plan; mp = management plan

Language: e = English; f = French

Example: rcs_roseate_tern_proposed_0805_e
 rcs_roseate_tern_0805_e

Other Style Issues

Define all acronyms and abbreviations the first time they are used.

APPENDIX F. WORKING WITH ABORIGINAL PEOPLE AND WILDLIFE MANAGEMENT BOARDS

1. Working with Aboriginal People

1.1 Consultation Guidelines

Guidance on consulting with Aboriginal people is in development; contact the Recovery Secretariat.

1.2 General Principles

1. Invite Aboriginal people to be involved early in the recovery process.
2. Determine where the range of the species overlaps with Aboriginal land and interests.
3. Become familiar with the administrative processes that have already been established under land claims agreements and follow them when they apply.
4. Determine existing and previous contacts (e.g., author of the COSEWIC status report, other recovery teams or government agents working in the area such as provincial or territorial people involved in other programs).
5. To the extent possible, combine efforts with other recovery teams, status report authors, etc., to garner traditional knowledge and to seek involvement in developing a recovery strategy or action plan, rather than approaching Aboriginal people on a species-by-species basis.
6. Initial contact could be by letter (expressing a welcoming attitude), followed by a visit to a community or environmental /governing organization to which the community subscribes. Subsequent contacts should be by the same staff person in order to foster good interpersonal relationships.
7. Identify, through consultation, how Aboriginal people within the range of the species could participate in recovery activities, including monitoring of the species, enhancing the habitat or providing animals/plants for re-location, communicating the need for protection or enforcing restricted access to a critical area. Observations made by the people in touch with the habitat and nature of the species, its uses by humans and others, will prove to be important for recovery.
8. In some cases, Aboriginal people in the range of the species being recovered may provide human resources and/or technical assistance. Training may have to be provided to the Aboriginal group to maintain a standard across all the recovery processes. Other recovery teams working in the same area might share this training effort. It would be useful to provide training on general techniques rather than on species-specific techniques, to build capacity for employment opportunities in the future.
9. Document all consultation efforts: who was contacted, how, when, and the outcome.

2. Working with Wildlife Management Boards

Wildlife management boards are considered to be “the main instrument of wildlife management” within their respective land claim settlement areas. The advice and/or approval of the boards is required for all significant wildlife policy and management issues relating to their respective settlement areas.

Table 5. Wildlife management boards, responsibilities, contacts and species within land claims areas

WILDLIFE MANAGEMENT BOARD	CONTACT	SPECIES
Fisheries Joint Management Committee [2]	Robert Bell, Chair Box 2120 Inuvik, NWT X0E 0T0 e-mail: jfmc@jointsec.nt.ca	Bering Cisco Bowhead whale (Bering-Chukchi-Beaufort)
Gwich'in Renewable Resources Board [1]	Robert Charlie, Chair P.O. Box 2240 105 Distributor St. Inuvik, NWT X0E 0T0 e-mail: Jari.heikkila@grrb.nt.ca Website: www.grrb.nt.ca	Eskimo curlew Grizzly bear (Northwestern) Peregrine falcon (<i>anatum</i>) Peregrine falcon (<i>tundrius</i>) Polar bear Short-eared Owl Woodland caribou (Boreal) Wolverine (Western)
Hunting, Fishing and Trapping Coordinating Committee [2]	Gilles Harvey, Chair 383 St. Jacques Street, Suite C220, Mezzanine Level Montreal, QC H2Y 1N9 e-mail: hftcc@bellnet.ca Website: www.cccpp-hftcc.com	Barrow's goldeneye (Estern) Beluga (Eastern Hudson Bay) Beluga (Ungava Bay) Beluga (Western Hudson Bay) Blue Whale (Atlantic) Eastern Wolf Harbour Seal (<i>Lacs des Loups Marins</i>) Harlequin Duck (Eastern) Monarch Narwhal Peregrine falcon (<i>anatum</i>) Peregrine falcon (<i>tundrius</i>) Polar Bear Short-eared Owl Wolverine (Eastern) Woodland caribou (boreal) Yellow Rail
Labrador Inuit Association [2]	Ms. Judy Rowell P.O. Box 909, Stn B 215 Hamilton River Rd. Happy Valley	Peregrine falcon (<i>anatum</i>) Wolverine (Eastern) Woodland caribou (boreal)

APPENDIX F -- WORKING WITH ABORIGINAL PEOPLE AND WMBs

	Goose Bay, NL A0P 1E0 Website: http://www.inuit.pail.ca/lia.htm	
Nisga'a Wildlife Committee [2] – mostly terrestrial wildlife	Mr. Harry Nyce Sr. Director of Fisheries & Wildlife P.O. Box 231 New Aiyansh, BC V0J 1A0 e-mail: eagle1@nisgaa.net Website: www.nisgaalisims.ca	Eskimo curlew Grizzly Bear (Northwestern) Northern abalone Wolverine (Western)
Nisga'a Joint Fisheries Management Committee [2] – mostly marine & aquatic wildlife	Mr. Harry Nyce Sr. Director of Fisheries & Wildlife P.O. Box 231 New Aiyansh, BC V0J 1A0 e-mail: eagle1@nisgaa.net Website: www.nisgaalisims.ca	Blue Whale (Pacific) Green Sturgeon Grey Whale (North Pacific) Killer Whale (Northeast Pacific southern resident) Killer Whale (Northeast Pacific transient) Northern Abalone Sei whale (Pacific) Stellar Sea Lion
Nunavut Wildlife Management Board [1]	Harry Flaherty, A/Chairman P.O. Box 1379 Iqaluit, NU X0A 0H0 e-mail: igalipeau@nwmb.com Website: www.nwmb.com	Barren Ground Caribou (Dolphin and Union) Beluga (Cumberland Sound) Beluga (Eastern High Arctic and Baffin Bay) Beluga (Eastern Hudson Bay) Beluga (Ungava Bay) Beluga (Western Hudson Bay) Blue whale (Atlantic) Bowhead (Bering-Chukchi-Beaufort) Eskimo Curlew Grizzly Bear (Northwestern) Harbour Porpoise (Northwest Atlantic) Ivory gull Narwhal Peary caribou Peregrine falcon (<i>anatum</i>) Peregrine falcon (<i>tendrius</i>) Polar Bear Porsild's Bryum Ross' gull Short-eared Owl Wolverine (Western)
Sahtu Renewable Resources Board [1]	Walter Bayha, Chair P.O. Box 134 Tulita, NT X0E 0K0 e-mail: director@srrb.nt.ca Website : www.srrb.nt.ca	Eskimo curlew Grizzly Bear (Northwestern) Peregrine falcon (<i>anatum</i>) Peregrine falcon (<i>tundrius</i>) Short-eared Owl Wolverine (Western) Woodland caribou (boreal)

APPENDIX F -- WORKING WITH ABORIGINAL PEOPLE AND WMBs

<p>Wildlife Management Advisory Council (North Slope) [2]</p>	<p>Lindsay Staples, Chair P.O. Box 31539 Whitehorse Yukon Y1A 6K8 e-mail: wmacns@web.ca Website: www.taiga.net/wmac</p>	<p>Grizzly Bear (Northwestern) Ivory Gull Peregrine falcon (<i>anatum</i>) Peregrine Falcon (<i>tundrius</i>) Polar Bear Short-eared Owl Wolverine (Western) Wood bison</p>
<p>Wildlife Management Advisory Council (NWT) [2]</p>	<p>Larry Carpenter, Chair P.O. Box 2120 Inuvik, NWT X0E 0T0 e-mail: wmacnwt@jointsec.nt.ca</p>	<p>Barren-ground Caribou (Dolphin and Union) Eskimo curlew Grizzly Bear (Northwestern) Ivory Gull Peary caribou Peregrine falcon (<i>anatum</i>) Peregrine falcon (<i>tundrius</i>) Polar Bear Short-eared Owl Wolverine (Western) Woodland caribou (boreal)</p>
<p>Yukon Fish and Wildlife Management Board [2]</p>	<p>Pat Van Bibber, Chair 2nd Floor, 106 Main Street Burns Building Box 31104 Whitehorse, YK Y1A 5P7 e-mail: cclaghorn@yknet.ca Website: www.yfwmb.yk.ca</p>	<p>Bering Cisco Grizzly Bear (Northwestern) Peregrine falcon (<i>anatum</i>) Peregrine Falcon (<i>tundrius</i>) Polar Bear Short-eared Owl Wolverine (Western) Wood bison</p>

[1], [2]: WMB has [1] approval authority, or [2] advisory powers with respect to recovery plans for species occurring within the land claims area.

APPENDIX F -- WORKING WITH ABORIGINAL PEOPLE AND WMBs

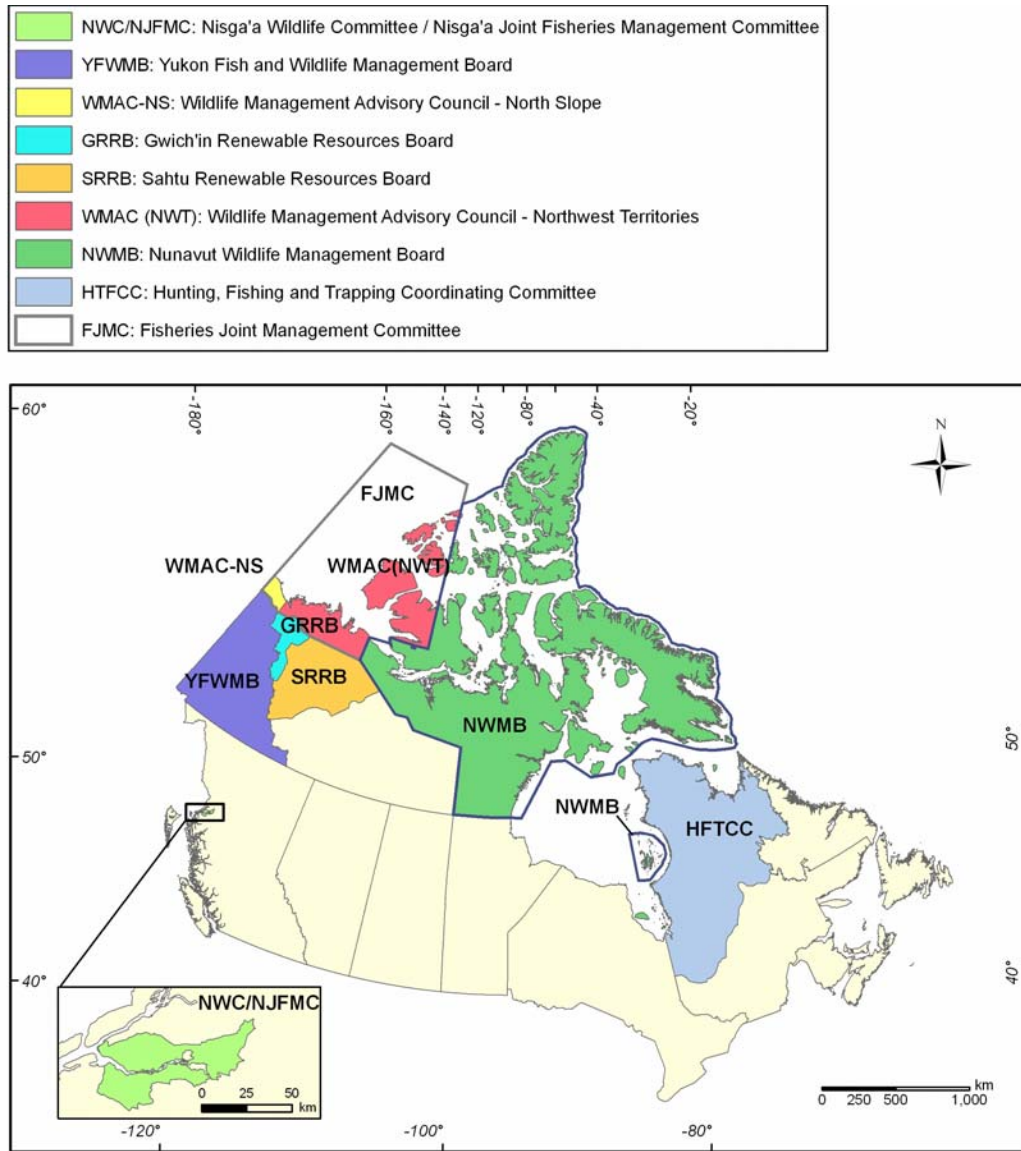


Figure 3. Extent of wildlife management land claims areas in northern Canada

APPENDIX G. FEDERAL REQUIREMENTS OR GUIDELINES

1. Intellectual Property Rights Related to Recovery Documents

The question of **intellectual property and moral rights** (IP, MR) of recovery strategies and action plans has yet to be resolved. The recovery team writes the core advisory document (sometimes through contract to another party), then individual responsible jurisdictions may add appendices to meet additional legal or policy requirements. Recovery documents are "living documents" that are subject to revision and additions as new information becomes available, and they will be updated systematically every five years.

In order for the documents to be posted on the SARA Public Registry as required under SARA, the IP must vest in the Crown. If not, under the *Copyright Act*, the terms of use would have to be negotiated for every strategy and action plan. Other jurisdictions may have similar requirements to own IP for documents required under their legislation. COSEWIC's solution to this problem is to establish within the contract with the author that IP contained in status reports is owned by the Crown and MR are waived by the writers to the Crown. The situation with recovery documents is more complicated, because several recovery team members and more than one jurisdiction will likely have been involved in producing the document, and because RENEW does not commission recovery plans the way COSEWIC commissions status reports.

2. Environmental Assessment Best Practice Guide for Wildlife at Risk in Canada

An Environmental Assessment (EA) guide for wildlife at risk has been developed by the federal government, with input from the provinces and territories, for use by EA practitioners across the country. The attention to "wildlife at risk" is broader than just the nationally extirpated, endangered and threatened species that fall under the mandate of RENEW.

The challenge with EA lies in addressing cumulative effects, which so often are difficult to deal with when they occur by insignificant increments. Here the recovery plans and objectives developed by recovery teams will be invaluable for EA practitioners.

The guide covers:

- principles of best practice for all species at risk
- an approach to effectively address species at risk issues in EA
- key background information that practitioners need to know
- appendices with additional information on:
 - relevant legal requirements of CEAA
 - relevant legal requirements of SARA
 - other requirements (e.g., United Nations Convention on Biological Diversity)

APPENDIX G -- FEDERAL REQUIREMENTS OR GUIDELINES

- key contacts and their roles
- sources of information
- glossary
- references

Copies of the guide are available from:

<http://www.cws-scf.ec.gc.ca/publications/AbstractTemplate.cfm?lang=e&id=1059>