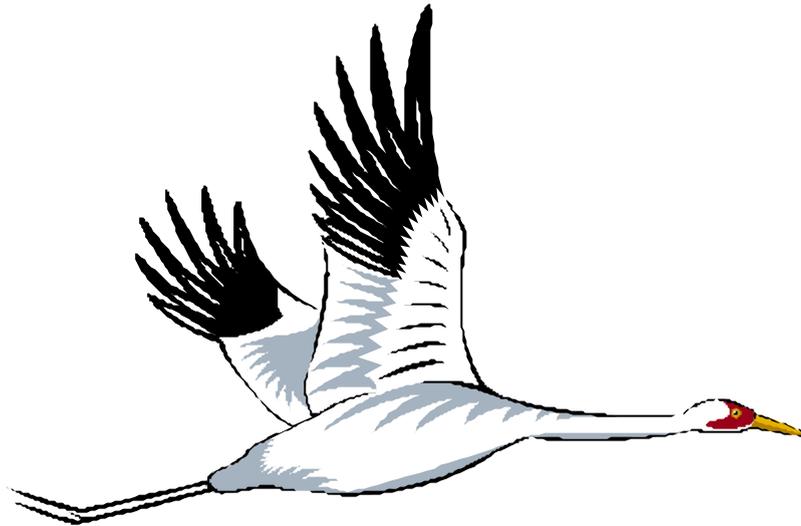


WORKING DRAFT



**RENEW
RECOVERY HANDBOOK
(ROMAN)**

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Working Draft
RECOVERY HANDBOOK

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PREAMBLE

The guidance provided in this handbook was approved as a work-in-progress by the Canadian Wildlife Directors Committee in May 2003. It 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*.

This guidance document describes the policies and operations of the national recovery program known as RENEW (Recovery of Nationally Endangered Wildlife). RENEW was initiated in 1988 and evolved to become the recovery implementation component of the *National Framework*. The handbook has been prepared, and will continue to be developed and maintained as a dynamic document, by the National Recovery Working Group (NRWG).

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 Annex I.

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.

I. BACKGROUND

1. What Is Recovery?

Recovery is defined as 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 set a target of 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 down-listing the species to *special concern* (SC) or *not at risk* (NAR).¹

"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. How Is Recovery Achieved?

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

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).

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

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.

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* (Annex II).
- The 1996 *Accord for the Protection of Species at Risk* (the Accord, Annex III) 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; see Annex IV) supported by a secretariat, who develop 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).

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.

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.

II. OVERVIEW OF 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 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 in Annex IV.

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 annual report • ultimate dispute resolution 	<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 	<ul style="list-style-type: none"> • advises and reports to CESCC
Species at Risk Coordinating Committee Responsible jurisdiction director	<ul style="list-style-type: none"> • regional coordination of recovery planning (director group & technical support group) <p>For E, T & XP species in the jurisdiction:</p> <ul style="list-style-type: none"> • has management responsibility for recovery • participates in development and endorsement of recovery strategies and action plans (in cooperation with others, and with broader public consultation) 	<ul style="list-style-type: none"> • directors are members of CWDC • accountable to the public • member of CWDC

Lead responsible jurisdiction director	<ul style="list-style-type: none"> • fosters recovery action • secures resources for operation of RT • for E, T & XP species found only in the jurisdiction, is responsible for preparing a recovery strategy, consultation, etc., • in the case of multi-jurisdictional species, coordinates with other responsible jurisdictions to develop and implement Part II response statements, recovery strategies and action plans, including meeting SARA cooperation and consultation requirements • ensures species databases and RT records are maintained • fosters recovery action • secures resources for operation of the RT 	<ul style="list-style-type: none"> • accountable to the public • member of CWDC • usually appoints a staff member as one co-chair of the RT (or team contact)
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 • coordinates peer reviews, endorsement and publication of recovery strategies and action plans [at present, but this may change] • produces RENEW annual report • maintains recovery database & web site • trains recovery team chairs 	<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 people	<p>For E, T & XP species within settled land claims areas, or in keeping with constitutional rights:</p> <ul style="list-style-type: none"> • cooperate with responsible jurisdictions in developing recovery strategies and action plans • advise in acquiring ATK 	<ul style="list-style-type: none"> • accountable to their people
Recovery team (RT)	<ul style="list-style-type: none"> • works to effect recovery of the species 	<ul style="list-style-type: none"> • advises

	<ul style="list-style-type: none"> • 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 	directors of responsible jurisdiction(s) <ul style="list-style-type: none"> • advises land users, developers, etc. • advises RIGs • is accountable to funding sources
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

III. OVERVIEW OF 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 (Table 2, 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.

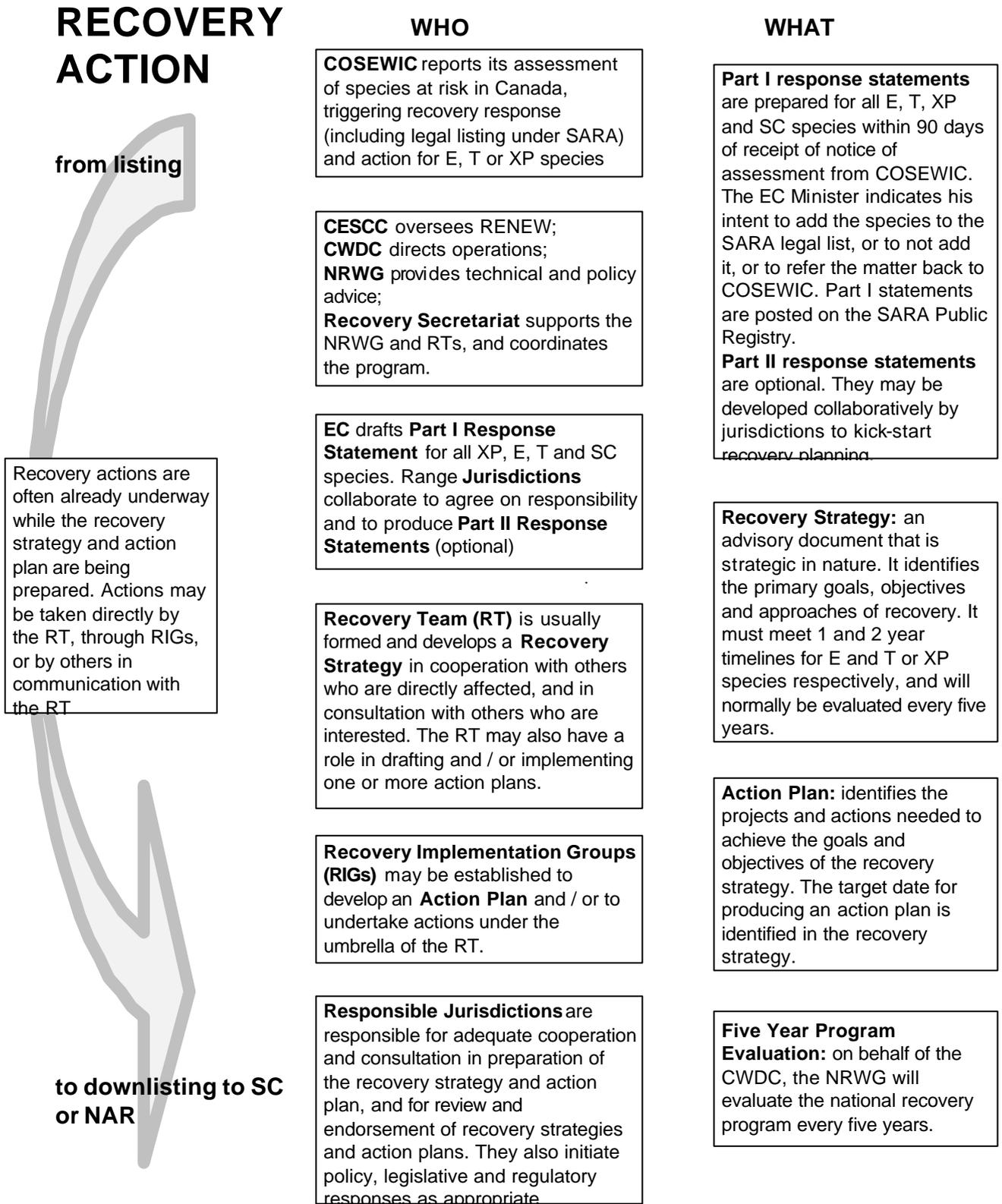
Recovering a species involves identifying the threats to the species, defining solutions that mitigate or eliminate these threats, *and* implementing actions to improve the species' status (i.e., reverse the decline in population size or distribution). Effective recovery planning supports these actions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

Table 2. Proposed Main Steps and Timelines of Recovery Process (draft)

The following timeline (slightly modified) for the main process steps was developed during a multi-jurisdictional process meeting in BC. It starts a year 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.

TIMELINE	PROCESS STEP
-12 months	COSEWIC candidate list is obtained and analyzed for implications
-6 months -2 months	COSEWIC interim status report is obtained and analyzed for implications SARCC technical working group does pre-work to prepare for new group of assessed species
0	[Outcome of COSEWIC assessment meeting]: new species are entered into the national responsibility table; lead SARCC is identified for each species
5-10 days	SARCCs meet to coordinate planning for the region’s new species
11-30 days	Core management teams of responsible jurisdictions meet to initiate species-specific recovery planning; each RT chair does team pre-work (e.g., preliminary drafting of recovery strategy, preparing RT letter of invitation and terms of reference...)
1-2 months 2-3 months	Cooperators are contacted; training session is held for potential or new recovery team members and chairs First recovery team (RT) meeting, resulting in a first draft of the recovery strategy (RS)
4-6 months	Second RT meeting, resulting in second draft RS
7-8 months	Jurisdictional, technical review of recovery strategy; contact potential peer reviewers and get their agreement to review
9-10 months	Consultation on / peer review of RS. If problems with strategy are apparent, communicate with SARCC as may need a heads-up memo to minister
11-13 months	Third RT meeting to respond to reviewers’ comments; third draft RS produced; commend RT for their efforts
15 months:	Responsible jurisdictions review third draft RS and acknowledge receipt of advice from RT
16-17 months	Editing and translation of RS; meanwhile, responsible jurisdictions develop briefing notes to recommend approval of the RS by the Competent Minister (or his/her delegate)
18-19 months	Inclusion of proposed RS on SARA public registry for 60 days
20 months	Comments are addressed over 30 day period (keep record of comments received). If comments are extensive, may need to resubmit strategy for approval. If there is a particular section that is problematic, might decide to pull that section and replace it with a proposed path forward on the issue. Strategy can be amended at any time.
21 months	Final RS is included in SARA public registry.

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



IV. RECOVERY GUIDELINES AND PROCESSES

1. Response Statement

The Canadian Wildlife Directors Committee approved amending the response statement template and process at their May 2003 meeting. There are now two parts to a response statement: a SARA Part I and a RENEW Part II. The process has been modified to meet timelines under SARA. The templates for the two parts of a response statement are provided in Annex VII.

i. Response Statement Part I: REQUIRED

Part I of the response statement corresponds to the requirement under SARA for the federal Minister of the Environment to publicly respond to species assessments by COSEWIC by including a report in the SARA Public Registry within 90 days of receiving the status assessments. Part I response statements are prepared by the Minister of the Environment, and are sent to the responsible jurisdictions and the relevant wildlife management boards for review and consultation, not for approval.

To fulfill the requirements under SARA, Part I response statements will be prepared for all species designated by COSEWIC as extirpated (XP), endangered (E), threatened (T) and special concern (SC).

ii. Response Statement Part II: OPTIONAL

Part II of the response statement provides the responsible jurisdiction(s) with a means of communicating what protection is already in place for a species, and what immediate actions and approach are planned to conserve and recover the species. It is a means of kick-starting recovery efforts. The development of Part II response statements by responsible jurisdictions is optional for all jurisdictions and for all E, T and XP species.

Although there is no fixed timeline for Part II response statements, the sooner they are prepared following assessment, the better. Jurisdictions should aim to have them ready within 90 days following the release of COSEWIC status assessments (i.e., the same timeline as Part I).

The responsible jurisdictions decide whether to publicly release Part II response statements, and by what means (e.g., by posting on the RENEW web site). Inclusion of Part II response statements on the SARA Public Registry would only occur at the request of the responsible jurisdictions.

Table 3: Process for Developing and Approving Response Statements

PART I

STEP	TIME	TIME
1 COSEWIC meets to assess species at risk.	Early May	Late November
2 The Minister of the Environment receives species assessments from COSEWIC, which triggers the 90 day timeline for developing and consulting on Part I response statements.	ASAP after trigger	ASAP after trigger
3 EC drafts Part I for all E, T, XP and SC species (individually or in groups). In each case the Minister will indicate the intent to consult on either a proposal to add the species to the legal list, not to add the species to the legal list, or to “refer the matter back to COSEWIC for further information or consideration.”	ASAP after trigger	ASAP after trigger
4 OPTIONAL: Responsible jurisdictions prepare a collective Part II for species designated XP, E or T, for sign-off at the director level.	ASAP after trigger	ASAP after trigger
5 EC sends the draft Part I Response Statements to the responsible jurisdictions (director level) for review/consultation (not for approval).	Within 60 days of trigger	Within 60 days of trigger
6 Part I Response Statements are ready for posting on the SARA Public Registry. At the request of jurisdictions, Part II Response Statements would also be posted on the SARA Public Registry at this time.	Within 90 days of trigger	Within 90 days of trigger
7 Possible release of a collection of Part II Response Statements by CESSC at its annual meeting (or other suitable venue).	September	

2. Recovery Planning - Regional

“Species at Risk Coordinating Committee” 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 are a number of stages at which regional strategic planning and cooperation are required:

1. Immediately after the COSEWIC meeting at which species are assessed as endangered, threatened, extirpated or special concern, the Recovery Secretariat identifies in a preliminary way, who will assume the roles of lead, co-lead or participant for development of the recovery strategy or management plan for each species. These determinations must be reviewed by regional coordinating bodies and a final agreement reached.

2. Also at the regional meetings, jurisdictions should assess the following key decision points, to the extent possible, for each species, or groups of species, as appropriate:
 - i) the feasibility of recovery;
 - ii) the overall approach to recovery (e.g., single species vs. multi-species vs. ecosystem; planned integration with other conservation programs at landscape scale, etc...);
 - iii) 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;
 - iv) an assessment of 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;
 - v) a determination of 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 decide not to form a team, who the recovery planners will be?
 - vi) an assessment of:
 - 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.
 - vii) establish a deadline for the preparation of the recovery strategy.

More than one regional team meeting may be necessary to assess all of the decision points referred to above (particularly number vi). In cases in which a regional team has insufficient information, some of the assessments may be deferred to the recovery team. Depending on the nature of the issues, a regional team 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 the assessment of decision points. 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 quickly as possible.

3. Recovery Planning - Species

"Recovery planners" is a generic term for those who undertake recovery planning for a given species, starting with development of a recovery strategy.

i. Models for Recovery Planning

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 term of reference for recovery teams appears in Annex IV. A discussion of recovery team membership follows. 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.

ii. Meeting SARA's Cooperation and Consultation Requirements for Recovery Planning

Draft guidelines for meeting the SARA requirements for cooperation and consultation in recovery planning have been developed and are available from the Recovery Secretariat upon request.

At the recovery strategy stage, cooperation and consultation help 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). At the action plan stage, cooperation and consultation are important for consideration of socio-economic issues.

In general, it is recommended that the responsible jurisdictions establish an advisory group of parties directly affected by recovery of a species, as a venue for cooperation. Other mechanisms such as public meetings could serve as consultation for a, for parties with an interest in recovery of the species. Note that participation of representatives of non-government groups on a recovery team does not mean those groups are being cooperated with. The recovery team is a non-political body responsible for developing a knowledge-based recovery strategy. It is not a forum for lobbying.

Cooperation will involve participation of representatives from all responsible jurisdictions, WMBs, Aboriginal peoples, major stakeholders, landowners, etc. -- whoever should be involved in recovery planning is invited to be a member of the advisory group. The same advisory group could be involved in advising on the development of more than one recovery strategy (e.g., if species are found in same geographic area or are impacted by the same threats). An advisory group would not meet with the recovery planners as frequently as a recovery 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.

iii. When to Form a Recovery Team?

With respect to decision point (v) under subsection 2.2.2 of this guidance document, the following criteria should 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 a 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.
- WMB / Aboriginal participation...

iv. 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 in Annex IV. 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 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.

v. Membership on Recovery Teams

Each recovery team members should be bringing a particular expertise to the table (e.g., scientific knowledge, traditional ecological knowledge or community knowledge of the species and/or its habitat; knowledge of industrial processes impacting on the species) in order to participate in recovery strategy development. They should not be there to lobby for socio-economic considerations, except perhaps at the action plan stage.

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
- 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 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 are 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.

vi. 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 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 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. Recovery Strategy

i. 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. It sets out a recovery program (not a research program) or approach based on biological considerations including Aboriginal traditional 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 ensure adequate review.

Generic templates for drafting a recovery strategy are in Annex VII.

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 updated 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 and objectives for recovery, 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). Other information from the status report can be referenced but should not be duplicated;
- if possible, characterizes the known, suspected and potential survival and / or recovery habitat of the species, or indicates what studies are needed to make this identification (this information should be linked with the recovery goal);
- fleshes out the structure for recovery recommended in the Part I response statement (e.g., the number and geographical coverage of recovery implementation groups, timelines for the production of recovery action plans).

ii. 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 draft template, Annex VII). 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 Secretariat has drafted a 'responsibility table' for all COSEWIC XP, E, T & SC species, that has a section indicating when recovery strategies and management plans are due for inclusion on the SARA public registry. The pattern of timelines is shown below.

Proposed Listings - New species assessed in Nov. 2002, May 2003 or Nov. 2003:

The SARA timelines for newly listed species are not triggered until the species have been added to the SARA legal list, a process that can take up to nine months from when official notification from COSEWIC of the outcome of the assessment meetings is received. This notification may occur just once per year, even though COSEWIC usually meets twice a year.

- 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

Proposed Listings - Species in Schedule 2 or 3, reassessed in Nov 2002, May 2003 or Nov. 2003:

- 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)

iii. When Is Recovery Feasible?

Under SARA, the contents of recovery strategies and any subsequent response (including the need to prepare action plans) differs significantly depending on whether

or not recovery of the species is determined to be technically and biologically feasible [s.40]. Although the national policy for determining whether recovery of an E, T or XP species is biologically and technically feasible is still under development, here are some working definitions:

1. Biological and technical feasibility refers to whether the species has the biological potential to recover, and whether the scientific technology and methodology currently exist to recover the species.
2. Recovery is technically and biologically feasible when the possibility exists to maintain or increase the species' probability of persistence (i.e., when a realistic recovery goal lies within the continuum from survival to full recovery).
3. Recovery is not technically and biologically feasible when it is not technically or biologically possible to arrest the decline of the species' probability of persistence or, in the case of an extirpated species, to reintroduce it. This small number of species will continue to decline no matter what you do. There is no prospect of recovery, because the risk of extinction cannot be reduced in any meaningful way. In some cases there is no genetic material (individuals) to work with (e.g., greater prairie-chicken), or no habitat (e.g., Prairie population of the grizzly bear).

Determinations of feasible / not feasible are based on current knowledge and should be reevaluated as new relevant information becomes available. If recovery is deemed not feasible, the species will still benefit from broader conservation programs, it will not be 'written off' as a lost cause. For example, reports of sightings of the Eskimo curlew and Eastern cougar are routinely followed up, even though recovery of these species is considered not feasible at this time, given that there are no known individuals.

iv. Endorsement of Recovery Strategies

The generic process for obtaining jurisdictional endorsement of draft recovery strategies was outlined previously in Table 2, 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. A web-based national database is under development for tracking progress in developing recovery strategies and action plans. 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. **Peer review** (can be concurrent with internal jurisdictional review): Once the jurisdictions feel the document is ready, it is submitted to the "Federal lead" jurisdiction for independent peer review, along with a list of three potential reviewers supplied by

the recovery team (experts who were not involved in developing the document.) The "Federal 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) do not need to be made if the team does not feel they will enhance recovery planning.

4. **Endorsement by responsible jurisdictions:** Once the team has responded to the peer review, the final draft recovery document is submitted to the SARA federal agency for transmittal to the responsible jurisdictions. Each jurisdiction is asked to formally acknowledge receipt of the recovery team's advice; however, this acknowledgment does not necessarily constitute agreement with the advice or commitment to act on the advice.
5. **Posting on SARA (and other) public registries.** The SARA federal agency has the endorsed document 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. Input may be sought from the recovery team in responding to the comments.
6. **Publication:** the federal agency will be responsible for publishing the final strategies or action plans that have successfully passed through the SARA public registry process.

v. 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 lead SARA federal agency. A collective decision will be made on whether or not to accept the document as a RENEW or jurisdictional document; the federal lead 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.

vi. 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 4). 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 cover the entire 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. From drafting of the response statement on, 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 template for recovery strategy, Annex VII).

International Species

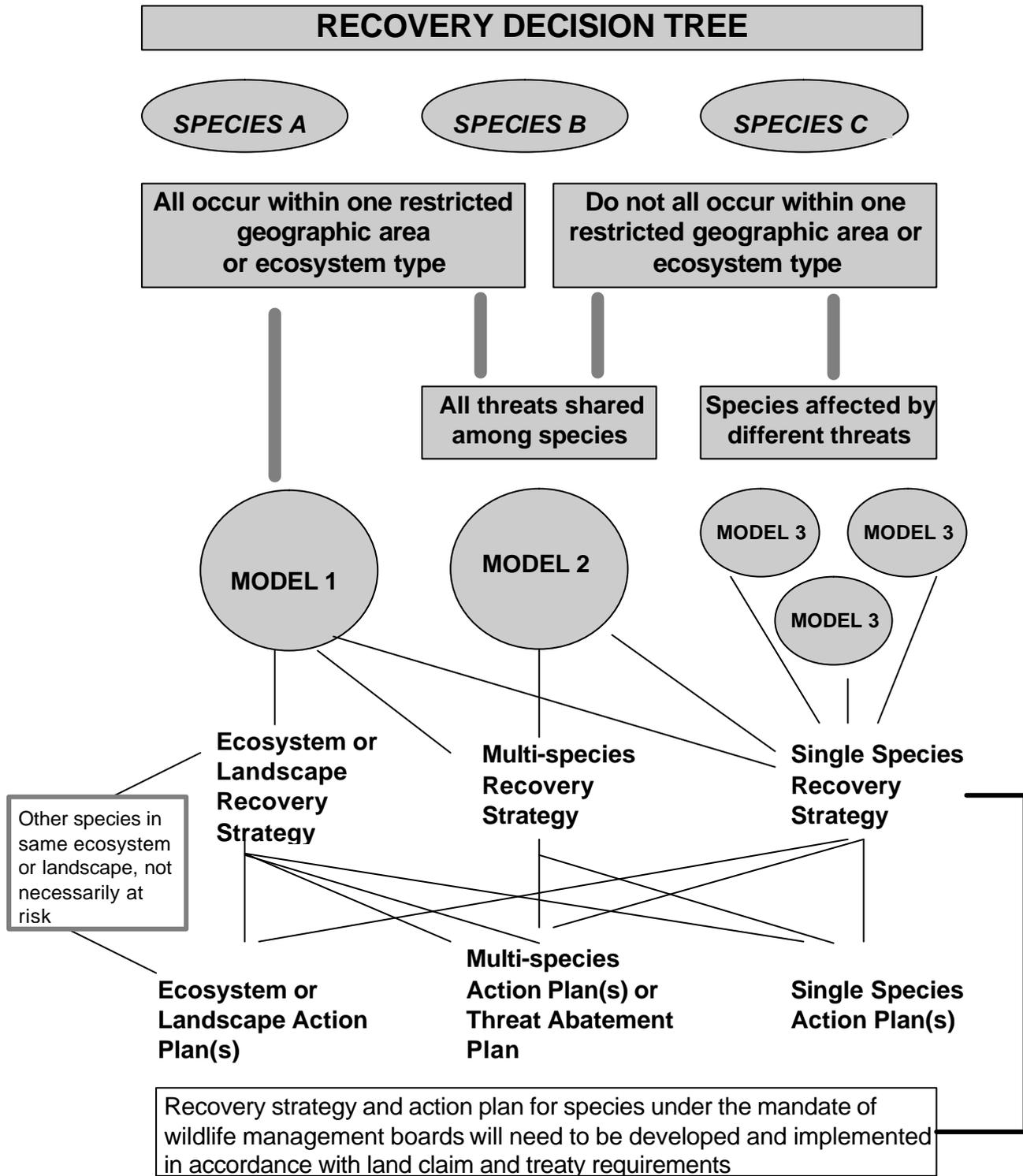
Where a species' range extends beyond Canada's borders and the species has been listed by a neighboring country, it may be advisable to develop an international recovery plan (e.g., Whooping Crane) or to develop a Canadian recovery strategy that represents the Canadian component of an international approach 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 4. 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, American Badger (<i>jeffersonii</i> & <i>jacksoni</i> subsp.)
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.

Figure 2. Decision Tree: Approaches to Recovery



5. National Guidelines for the Identification and Conservation of Species at Risk Habitat (DRAFT)

This section was drafted by the habitat subgroup of the National Recovery Working Group, February 2001. Comments from the National Recovery Working Group review have been inserted for consideration by the subgroup. This section is presented as general guidance for completion of the habitat section of a recovery strategy. Several jurisdictions have legislative requirements or policies for identification and protection of habitat. Recovery teams are encouraged to contact the relevant jurisdictional representatives in Annex V for more information about the jurisdiction's specific requirements.

Note regarding critical habitat: Work is currently underway by critical habitat working groups, led by Environment Canada and Fisheries and Oceans, to develop guidelines for recovery teams for the identification and protection of critical habitat as required under the *Species at Risk Act*. Identification of critical habitat by recovery teams would be considered advice by the responsible jurisdictions. The responsible jurisdictions would then be responsible for evaluating this advice and making decisions with regard to identification of critical or other habitat in regulations under their respective pieces of legislation. The jurisdictions might decide that it is not possible to identify habitat under regulations at this time, but the advice provided by the recovery team would still be useful in guiding decisions about funding of stewardship, proposed projects undergoing environmental assessment, monitoring, research and other recovery proposals. Under SARA, the competent minister must ensure that critical habitat is identified in a recovery strategy or an action plan, if it is possible to do so.

i. 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.

ii. 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.

iii. 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.

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

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, 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 will 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 (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) for the species

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.

Other considerations: need to add more on habitat connectivity; spatial arrangement of sites should 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. These criteria are species-specific and will be developed by the recovery team.

- a. Numbers present - the site contains a significant proportion of a species' regional, provincial or national population, or a significant number of individuals.
- 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). *Other considerations: Priority sites may not meet or exceed the productivity estimated to maintain stable populations.*
- 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 considered to be any location that currently maintains individuals or populations 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 will 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.

Other considerations: Some provinces have habitat mapping guidelines; to avoid conflict with provincial legislation and policies, the mapping should take place under the direction of the province, where appropriate; also, add discussion on landowner contact required prior to undertaking mapping.

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 repertoires.

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 (See definition of potential habitat above.)

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;
- where not all areas with suitable habitat attributes may have been surveyed, and no information is available to confirm occupancy; if additional populations are located their significance would need to be evaluated. (*These areas should remain as candidates and not be included at this stage?*)

A potential site is considered to be any location that possesses the basic habitat attributes required to maintain populations of a listed species, but that are currently unoccupied.

Comment: Introduction of a category of unoccupied sites is unwarranted and potentially confusing. There could be overlap with recovery habitat. Clearly distinguish sites that require further assessment and the sites to which SARA could apply. Sites that have attributes that warrant further consideration should be identified by teams as candidates.

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:

- condition - whether severe degradation of the site has occurred or whether ecological processes and communities exist to support populations or individuals;
- size - whether the area of remaining suitable habitat is sufficient for supporting populations or individuals;
- landscape context - quality of biotic and abiotic features within surrounding ecosystems (connectivity to similar habitat types).

iv. 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, 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 have the most potential for 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.

6. Recovery Action Plan

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 have one all-encompassing action plan as opposed to several project-specific ones.

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 template provided in Annex VII 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, recovery efforts should be integrated into landscape-level recovery or conservation planning 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 RENEW.

i. 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 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.

ii. Endorsement of Action Plan

The endorsement process for action plans is the same as that for recovery strategies, with one exception. If a RIG has developed the action plan, the recovery team will undertake the peer review.

7. Recovery Implementation and Evaluation

i. National Prioritization Scheme for Recovery

A national system for prioritizing species at risk for recovery implementation has been under development for several years. It has been difficult to develop a scheme that works for everyone. The proposed scheme is a rough tool that will be simple to use, will not over-burden staff, and will help to set national conservation priorities. Since there are not adequate resources to implement full recovery for all species, an open and transparent system is required to determine which species are most in need of recovery effort.

The six rather basic criteria used in the system consider both biological and socio-economic factors. The result is a coarse filter grouping of species into three priority levels. This outcome could be useful in guiding allocations of federal funds such as the federal Habitat Stewardship Program and the Interdepartmental Recovery Fund, and in evaluating our success in targeting the right species for recovery action.

At the September 2003 CESCC meeting, the environment ministers agreed to pilot the proposed national prioritization system for 2 years before considering it for approval.

Individual jurisdictions may want to consider additional criteria in setting their priorities for investment in species recovery. The national prioritization scheme could serve as a common starting point.

ii. Criteria for Prioritizing Recovery Actions

In 1999, the National Recovery Working Group proposed criteria and a ranking system to aid recovery teams in ranking proposed actions in a recovery plan. Although rather preliminary, the draft scheme might be a useful starting point for recovery teams; copies are available from the Recovery Secretariat.

iii. Performance Measures

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

- 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. Management Plans for Special Concern Species

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 (or five years from June 2003, for SC species on Schedule 1).

A draft procedure for developing management plans has been developed by the province of Alberta and is included here, in modified form, as a starting point until the National Recovery Working Group is able to produce a national version. Similarly, Alberta’s template for management plans is provided in Annex VII. 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), which might be of interest as models. The province of Nova Scotia has produced a very attractive and informative management plan for the wood turtle that would also serve as a good model.

i. Procedure for Management Plan Development and Approval

Process

Draft plans are prepared by responsible government personnel and circulated for technical and peer 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 will 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 population size, trends and habitat use. Specific population targets and/or location-specific inventory and management recommendations may be appropriate for some species, however for most species, targets and recommendations will be general in nature.

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 may be included, but estimated costs of implementation are considered inappropriate because management plans are guidance documents.

9. RENEW Communications Products

i. Recovery Strategy

A recovery strategy consistent with the intent of the guidelines in this recovery handbook as they existed at the time the strategy was being written, and which has been approved or endorsed as "receipt of advice" by the responsible jurisdictions. A SARA-compliant recovery strategy would meet all the requirements indicated in the template for recovery strategies and the summary provided in Annex VII.

ii. Action Plan

An action plan consistent with the intent of the guidelines in this recovery handbook as they existed at the time the action plan was being written, and which has been approved or endorsed as "receipt of advice" by the responsible jurisdictions. A SARA-compliant action plan would meet all the requirements indicated in the template in Annex VII.

iii. 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. 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.

iv. RENEW Web Site

The RENEW Web site provides links to approved recovery plans, RENEW annual reports and issues of the *Recovery* newsletter, links to the national species at risk Web site for general species biology 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

ANNEX I. 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 Annex III.)

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, Fisheries and Oceans, and Canadian Heritage (Parks Canada Agency).

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: DEFINE? Is it different from SEA?

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 (referred to in Annex VIII) 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.

Lead jurisdiction: a federal, provincial or territorial responsible jurisdiction that facilitates development of a response statement, a recovery strategy or an action plan, either because it is the only jurisdiction with authority for the species, or because all responsible jurisdictions for the species agreed it would act as the lead jurisdiction and coordinate efforts.

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

Participating jurisdiction: a federal, provincial or territorial agency with accountability for recovery of a species at risk and working with other responsible jurisdictions, under the facilitation of a lead jurisdiction.

PCA (Parks): Parks Canada Agency of the federal Department of Canadian Heritage

Peer review: define?

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: the continuum from survival (maintaining current population size and distribution) to full recovery (restoration of a species to a viable, self-sustaining population level, able to withstand stochastic events and other environmental variables).

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

Recovery team (RT): one or more 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: a federal, provincial or territorial wildlife agency with 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, and will become law when it is proclaimed in 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>

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 recovery is feasible. Under SARA, recovery of species at risk includes all extirpated species.

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

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.

ANNEX II. NATIONAL FRAMEWORK FOR THE CONSERVATION OF SPECIES AT RISK

Note that some sections not pertaining 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 CESSC 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 CESCC. 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

ANNEX III. 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.

ANNEX IV. RENEW GOVERNANCE & TERMS OF REFERENCE

1. Species at Risk Coordinating Committees (proposed)

Role

The need for regional coordination of recovery planning efforts has led to the concept of SARCCs – Species at Risk Coordinating Committees. Other names may be used, but the functions are similar. Bilateral agreements are being developed that more clearly identify the structure and functions of each of these bodies. In general, the SARCC would include representatives from all F/P/T jurisdictions in the region and would operate at two levels; there would be a technical working group, that advises a director level decision-making group.

Functions

1. Immediately after each COSEWIC assessment meeting, agree upon the jurisdictional responsibility for individual species and strategize on the best approach for recovery of the new species (e.g., identifying opportunities to include species in existing multi-species recovery efforts).
2. Decide on the feasibility of recovery of individual species if the information base is adequate. Otherwise, the determination of feasibility should occur later in the process, e.g., at the recovery strategy development stage.
3. Prioritize species at the regional level, for both planning and implementation.
4. 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...)
5. Decide which species would benefit from immediate action that should not be delayed by the recovery planning process.
6. Identify the jurisdictional contacts for each species, so that core management teams can begin planning for individual species recovery.
7. Working cooperatively with other SARCCs responsible for the same species.

2. Responsible Jurisdictions

Role

Once the SARCC has met to pre-plan recovery, 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 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.

3. 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 is composed of representatives of the 16 federal, provincial and territorial government agencies responsible for wild species (see list of members following this section). The current chair is the director of the Species at Risk Branch of CWS-HQ. In future there may be two co-chairs, one

federal and one provincial / territorial. Each chair or co-chair would serve for a renewable term of three years. The National Recovery Working Group aims to meet twice a year, in January and October. 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 committee.

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). One such group is developing options for involving wildlife management boards and Aboriginal peoples directly in developing the national recovery process, through membership with the National Recovery Working Group or some other mechanism.

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 the CWDC and advises the CWDC, 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 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. Supports 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.

4. National Recovery Working Group—Membership

As the National Recovery Working Group, the following representatives of the 17 jurisdictions (and the Recovery Secretariat) with responsibility for recovery of species at risk have participated in developing this handbook.

<p>ALBERTA http://www.gov.ab.ca/env/fishwl.html Steve Brechtel Fisheries and Wildlife Management Division Dept. of Sustainable Resource Development Government of Alberta 7th Floor, O.S. Longman Bldg, 6909 - 116 Street EDMONTON AB T6H 4P2 Steve.Brechtel@gov.ab.ca Tel: (780) 422-9535 // Fax: (780) 422-9685</p>	<p>BRITISH COLUMBIA Dave Fraser Endangered Species Specialist, Wildlife Branch Ministry of Environment, Lands and Parks Government of British Columbia 2975 Jutland Road P.O. Box 9374 Stn. Prov. Govt. VICTORIA BC V8W 9M4 Dave.Fraser@gems8.gov.bc.ca Tel: (250) 387-9756 // Fax: (250) 356-9145</p>
<p>MANITOBA www.gov.mb.ca/natres/cdc James Duncan 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 Pascal Giasson Fish and Wildlife Branch Department of Natural Resources and Energy Government of New Brunswick P.O. Box 6000 FREDERICTON NB E3B 5H1 Pascal.Giasson@gnb.ca Tel: (506) 453-2440 Fax: (506) 453-6699</p>
<p>NEWFOUNDLAND AND LABRADOR Joe Brazil Endangered Species and Biodiversity Section Inland Fish and Wildlife Division Department of Tourism, Culture, Recreation Government of Newfoundland and Labrador P.O. Box 2006, Fortis Tower CORNER BROOK NF A2H 6J8 joebrazil@mail.gov.nf.ca Tel: (709) 637-2356 Fax: (709) 637-2461</p>	<p>NORTHWEST TERRITORIES 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 Sherman Boates Manager, Biodiversity Programme Wildlife 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 Settingington Ecosystem Monitoring Biologist Department of Sustainable Development Government of Nunavut PO Box 120 ARVIAT, NU X0C 0E0 msettingington@gov.nu.ca Tel : (867) 857-2828 // Fax : (867) 857-2986</p>
<p>ONTARIO Senior Biologist, Species at Risk Ministry of Natural Resources Government of Ontario</p>	<p>PRINCE EDWARD ISLAND http://www.gov.pe.ca/fae/faw-info/index.php3 Rosemary Curley Fish and Wildlife Division</p>

<p>P.O. Box 7000 300 Water Street, 2nd Floor, North Tower PETERBOROUGH ON K9J 8M5 Tel: (705) 755-1208 // Fax: (705) 755-1201</p>	<p>Dept. of Fisheries, Aquaculture and Environment Government of Prince Edward Island P.O. Box 2000, 11 Kent Street CHARLOTTETOWN PE C1A 7N8 frcurley@gov.pe.ca Tel: (902) 368-4807 // Fax: (902)368-5830</p>
<p>QUEBEC - For Animals: Michel Lepage Vice-président du développement et de l'aménagement de la faune Direction du développement de la faune Faune et Parcs, Québec Gouvernement du Québec 11^e étage, Boîte 92 675, boul. René Lévesque, est QUÉBEC QC G1R 4Y1 michel.legape@fapaq.gouv.qc.ca Tel: (418) 521-3875 // Fax: (418) 646-6863</p>	<p>QUEBEC - For Plants: Line Couillard Direction de la conservation et du patrimoine écologique Ministère de l'Environnement Gouvernement du Québec 10^e étage, Boîte 21 675, boul. René Lévesque, est QUÉBEC QC G1R 4Y1 line.couillard@mef.gouv.qc.ca Tel: (418) 521-3907 Fax: (418) 646-6169</p>
<p>SASKATCHEWAN Paul James / Kevin Murphy Manager, Ecosystem Science Unit / Head, Aquatic Ecosystem Science Fish and Wildlife Branch Government of Saskatchewan 3211 Albert Street REGINA SK S4S 5W6 pjames@serm.gov.sk.ca kmurphy@serm.gov.sk.ca Tel: (306) 787-9058 / 787-2941 Fax: (306) 787-9544</p>	<p>YUKON TERRITORY Thomas Jung Senior Biologist (Biodiversity) Fish and Wildlife Branch Department of Renewable Resources Government of the Yukon Territory P.O. Box 2703 10 Burns Road WHITEHORSE YT Y1A 2C6 thomas.jung@gov.yk.ca Tel: (867) 667-5671 Fax: (867) 393-6405</p>
<p>FISHERIES AND OCEANS CANADA Don Fraser National Coordinator, Species at Risk Fisheries and Oceans Canada 12th Floor, 200 Kent Street OTTAWA ON K1A 0E6 Fraserd@dfo-mpo.gc.ca Tel: (613) 990- 0417 Fax: (613) 954-0807</p>	<p>PARKS CANADA AGENCY Peter L. Achuff Species-at-Risk Botanist Ecological Integrity Branch Parks Canada Agency 25 Eddy Street, 4th Floor, 25-4-S Peter.Achuff@pc.gc.ca Hull, QC K1A 0M5 Tel: (819) 956-3698 Fax: (819) 997-3380</p>
<p>ENVIRONMENT CANADA – CANADIAN WILDLIFE SERVICE Robert Décarie Chief, Recovery Division Species at Risk Branch Canadian Wildlife Service Environment Canada OTTAWA ON K1A 0H3 Robert.Decarie@ec.gc.ca Tel: (819) 953-4389 Fax: (819) 994-3684</p>	<p>RECOVERY SECRETARIAT Mary Rothfels A/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>

5. 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. Usually coordinates the peer review, interjurisdictional endorsement, bilingual publication and distribution of RENEW recovery strategies and action plans
3. Tracks recovery efforts for E, T and XP species and coordinates development of the RENEW annual report.
4. Advises responsible jurisdictions, recovery teams, RIGs and others on the national recovery process.
5. 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.
6. Maintains files, records and other archival materials pertaining to coordination of the national recovery program and National Recovery Working Group activities.
7. 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.
8. Organizes, with the National Recovery Working Group, training of recovery teams and others in the national recovery process and in scientific aspects of recovery.

6. National Recovery Teams—Terms of Reference

Role

The primary role of a recovery team is to effect recovery of the species. 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.

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.

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 knowledge-based 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, 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, 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 RIGs, if appropriate.

7. Recovery Implementation Groups (RIGs)—Terms of Reference

Role

RIGs are established or recognized (if formed independently) by the responsible jurisdictions, usually following 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 can be identified in Part II response statements and/or 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 (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.

ANNEX V. FUNDING FOR RECOVERY

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.

1. Federal Funds

i. 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 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

ii. 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/>

iii. 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>

iv. 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/>.

v. 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/>

vi. 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

vii. 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://parkscanada.gc.ca/nature/eep-sar/>.

2. Provincial Funds - examples [to be completed]

- NL: a conservation fund was recently established but the funding mechanism hasn't been worked out yet.
- PEI: Wildlife Conservation Fund for fish and wildlife projects (<http://www.gov.pe.ca/infopei/oneListing.php3?number=18642>)
- 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>)
- NB: Wildlife Trust Fund (<http://www.gnb.ca/elg-egl/0373/0002/0001-e.html>); Environmental Trust Fund does not have a Web site but information can be obtained from: The New Brunswick Wildlife Council, P.O. Box 23019, Fredericton NB, E3B 7B3, Tel: 506 453-6655
- QC: Fondation de la Faune du Québec (<http://www.fondationdelafaune.qc.ca/>)

Programme de soutien financier aux projets à caractère faunique (<http://www.fapaq.gouv.qc.ca/fr/faune/protection/protection.htm#projet>)
- ON: Ontario's Living Legacy Trust (<http://www.livinglegacytrust.org/>)

ANNEX VI. COSEWIC'S QUANTITATIVE CRITERIA

COSEWIC's revised criteria to guide the status assessment of species. These were in use by COSEWIC by November 2001, and are based on the revised IUCN Red List categories (IUCN 2001). An earlier version of the quantitative criteria was used by COSEWIC from October 1999 to May 2001. For definitions, see COSEWIC's Glossary of Definitions and Abbreviations (http://www.cosewic.gc.ca/eng/sct0/Assessment_process_tbl6_e.cfm).

Endangered

Threatened

A. Declining Total Population

Reduction in population size based on any of the following 4 options and specifying a-e as appropriate:

$\geq 70\%$ $\geq 50\%$

(1) population size reduction that is observed, estimated, inferred, or suspected in the past 10 years or 3 generations, whichever is longer, where the causes of the reduction are clearly reversible AND understood AND ceased, based on (and specifying) any combination of a-e below.

$\geq 50\%$ $\geq 30\%$

(2) population size reduction that is observed, estimated, inferred or suspected over the last 10 years or 3 generations, whichever is longer, where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any combination of a-e below.

(3) population size reduction that is projected or suspected to be met within in the next 10 years or 3 generations, whichever is longer (up to a maximum of 100 years), based on (and specifying) any combination of b-e below.

(4) population size reduction that is observed, estimated, inferred, projected or suspected over any 10 year or 3 generation period, whichever is longer (up to a maximum of 100 years), where the time period includes both the past and the future, AND where the reduction or its causes may not have ceased OR may not be understood OR may not be reversible, based on (and specifying) any of a-e below.

-
- a)** direct observation
 - b)** an index of abundance appropriate for the taxon
 - c)** a decline in area of occupancy, extent of occurrence and/or quality of habitat
 - d)** actual or potential levels of exploitation
 - e)** the effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites

	Endangered	Threatened
B. Small Distribution, and Decline or Fluctuation		
1. Extent of occurrence	$< 5,000 \text{ km}^2$	$< 20,000 \text{ km}^2$
Or		
2. Area of occupancy	$< 500 \text{ km}^2$	$< 2,000 \text{ km}^2$
For either of the above, specify at least two of a-c:		
(a) either severely fragmented or known to exist at # locations	≤ 5	≤ 10
(b) continuing decline observed, inferred or projected in any of the following:		
	i) extent of occurrence	
	ii) area of occupancy	
	iii) area, extent and/or quality of habitat	
	iv) number of locations or populations	
	v) number of mature individuals	
(c) extreme fluctuations in any of the following:	> 1 order of magnitude	> 1 order of magnitude
	i) extent of occurrence	
	ii) area of occupancy	
	iii) number of locations or populations	
	iv) number of mature individuals	

C. Small Total Population Size and Decline

Number of mature individuals	$< 2,500$	$< 10,000$
and 1 of the following 2:		
(1) an estimated continuing decline rate of at least:	20% in 5 years or 2 generations (up to a maximum of 100 years in the future)	10% in 10 years or 3 generations (up to a maximum of 100 years in the future)
(2) continuing decline, observed, projected, or inferred, in numbers of mature individuals and at least one of the following (a-b):		
(a) fragmentation--population structure in the form of one of the following:	(i) no population estimated to contain >250 mature individuals	(i) no population estimated to contain $>1,000$ mature individuals
	(ii) at least 95 % of mature individuals in one population	(ii) all mature individuals are in one population
(b) extreme fluctuations in the number of mature individuals		

D. Very Small Population or Restricted Distribution

(1) # of mature individuals	< 250	< 1,000
(2) Applies only to threatened: Population with a very restricted area of occupancy or number of locations such that it is prone to the effects of human activities or stochastic events within a very short time period in an uncertain future, and thus is capable of becoming highly endangered or even extinct in a very short time period.	(not applicable)	area of occupancy typically < 20 km ² or number of locations \leq 5

E. Quantitative Analysis

Indicating the probability of extinction in the wild to be at least:	20% in 20 years or 5 generations, whichever is longer (up to a maximum of 100 years)	10% in 100 years
--	--	------------------

Special Concern:

those species that are particularly sensitive to human activities or natural events but are not endangered or threatened species.

Species may be classified as being of Special Concern if:

- (a) the species has declined to a level of abundance at which its persistence is increasingly threatened by genetic, demographic or environmental stochasticity, but the decline is not sufficient to qualify the species as Threatened; or
- (b) the species is likely to become Threatened if factors suspected of negatively influencing the persistence of the species are neither reversed nor managed with demonstrable effectiveness; or
- (c) the species is near to qualifying, under any criterion, for Threatened status; or
- (d) the species qualifies for Threatened status but there is clear indication of rescue effect from extra-limital populations.

Examples of reasons why a species may qualify for "Special Concern":

- A species that is particularly susceptible to a catastrophic event (e.g., a seabird population near an oil tanker route)
- A species with very restricted habitat or food requirements for which a potential threat to that habitat or food supply has been identified (e.g., a bird that forages primarily in old-growth forest, a plant that grows primarily on undisturbed sand dunes, a fish that spawns primarily in estuaries, a snake that feeds primarily on a crayfish whose habitat is threatened by siltation)
- A recovering species no longer considered to be Threatened or Endangered but not yet clearly secure

Examples of reasons why a species may not qualify for "Special Concern":

- A species existing at low density in the absence of recognized threat (e.g., a large predatory animal defending a large home range or territory)
- A species existing at low density that does not qualify for Threatened status for which there is a clear indication of rescue effect

ANNEX VII. TEMPLATES FOR RESPONSE STATEMENTS, RECOVERY STRATEGIES AND ACTION AND MANAGEMENT PLANS

1. Template for Two-part Response Statement

Title (Response Statement for...)

PART I (SARA)

(to be completed by competent department, for consultation with all relevant jurisdictions)

Common name:

Scientific name:

Status assessment by COSEWIC and history of assessment:

Reason for current assessment *(as provided by COSEWIC):*

Occurrence:

Wildlife Management Board(s): *(if applicable)*

Relevant jurisdiction(s):

Competent Minister(s):

How the EC Minister intends to respond to the assessment: *(i.e., indicate if the Minister has consulted and made a decision on whether to recommend listing, and if any concrete recovery actions are taking place)*

Time lines for action *(to the extent one can be certain, e.g., timelines for strategy development or for specific actions):*

PART II (Recovery)

(All sections are optional; could be completed by one or more relevant jurisdictions as appropriate; only one response per species or group of species should be developed, collaboratively.)

Immediate Conservation and Protection Measures *(listed by relevant jurisdiction)*

- Proposed or current legal designation in Canada, and automatic prohibitions that will apply
- Current or immediate Recovery Actions

Preliminary Recovery Information

- Recovery feasibility
- Recovery approach

- Lead jurisdiction / director / representative:
- Other responsible jurisdictions / directors / representatives:
- Wildlife Management Board and other organizations or individuals who will be invited to participate on the recovery team:

Deadline for the production of the national recovery strategy:

Example of Part I Response Statement

Response Statement for Yucca Moth

PART I (SARA)

Common Name Yucca Moth
Scientific Name *Tegeticula yuccasella*

Status assessment by COSEWIC and history of assessment: Assessed Endangered by COSEWIC in May 2002. Assessment based on new status report.

Reason for current assessment: Only one viable population of the moth persists in an extremely small and restricted area; another small population may have been lost recently. The moth has an obligate mutualism relationship with its host plant, the soapweed, which is threatened by ungulate herbivory and loss of plants to human activities.

Occurrence: AB

Authorized Wildlife Management Board(s): *(not applicable)*

Relevant jurisdiction(s): AB

Competent Minister(s): EC

How the EC Minister intends to respond to the assessment: Before making a recommendation to the GIC, the Minister will consult with the Government of Alberta, stakeholders and the public on a proposal to add this species to the legal list.

Time lines for action: The Minister will make his recommendation to the GIC within nine months of receiving the status assessment by COSEWIC. A recovery strategy will be prepared within one year of listing under the *Species at Risk Act*.

2. Template for Recovery Strategy for a Single Species

i. Notes

1. This template is intended as a guide 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 template to meet the needs of one or more given species, but 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 target) to identification of measurable objectives to address the threats and attain the goal.
3. Summarize relevant information in 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. The corresponding section of SARA is indicated for elements required for compliance with SARA. Additional elements are shown as 'recommended' or 'optional'.
5. 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 (see template for "Recovery is not feasible").

ii. Preliminary Content

Outside cover: if possible, please provide a black and white illustration of the species, or suggest a source for one

Inside cover: cataloguing information and national report number will be provided, but please provide the **Recommended Citation** (authors of the strategy in appropriate order)

Recovery Team Members (names and affiliations)

Acknowledgement of Receipt of Advice by Responsible Jurisdictions (provide the names and addresses of responsible directors of range jurisdictions and wildlife management boards)

Disclaimer (see standard from a recently published strategy)

Acknowledgments (it is common to acknowledge those who assisted in developing the strategy, e.g., reviewers, sources of funding, support of landowners, etc.)

Species Information ("COSEWIC box," as it appears in the COSEWIC web site

<http://www.cosewic.gc.ca>, e.g., for November 2003 assessments:

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

—do not alter.)

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

Table of Contents (use the ToC tool provided by Word; please avoid complex numbering systems)

iii. Content of SARA-compliant recovery strategy

National Recovery Strategy for the Common Name (*Scientific Name*), specify population or other COSEWIC sub-category of assessment as appropriate

I. BACKGROUND

1. Description. *A description of the species and its needs that is consistent with the information provided by COSEWIC [SARA, S.41(a)].* When appropriate, use and reference the scope and scale quantification used in COSEWIC / IUCN listing criteria.

a) Description of the species

How will a landowner, for example, recognize the species? Describe it briefly in laymen's terms, and provide a map showing the historical and current distribution of the species in Canada or North America (at appropriate scale). **[Recommended]:** Briefly convey any other descriptors from the status report that will provide context for recovery, such as population and distribution trend information; Canada's responsibility for the species (e.g., % of global range in Canada); and general information on the value of the species as an economic or cultural resource (food, clothing, medicine, ceremonial or symbolic, ecotourism...).

b) Description of the needs of the species

Describe in general terms the biological needs of the species. For example, identify the biotic and abiotic features of the habitat that provide for the basic survival 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). What is the role of the species in the ecosystem (its ecological niche)? 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)?

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(b)]*

a) Identification of the threats to the survival of the species.

Starting with the information contained in the COSEWIC status report, identify by sub-heading and brief description, the threats that are currently impacting on the species at the population level (e.g., important predation or disease, loss of prey base, global warming, acid rain, loss or degradation of habitat). Don't go into details about threats to

habitat, as these should appear in the habitat section (3b), below. Order the threats by significance, starting with what poses the greatest threat to survival of the species. Also identify any significant potential threats that are known (e.g., an introduced disease agent that is spreading through a population of the species).

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(c)]*

a) Identification of the threats to the habitat of the species.

Starting with the information contained in the COSEWIC status report, identify by sub-heading and brief description, the threats that are currently impacting on the survival of the habitat of the species (e.g., urban or agricultural development, forestry, invasive species, resource extraction). Also identify any significant potential threats to habitat that are known (e.g., a planned development project that would have a significant impact on the habitat of the species).

b) 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).

Separate guidelines are available from the Recovery Secretariat for identifying critical habitat.

c) Examples of activities that are likely to result in destruction of the critical habitat. From what is known of the needs of the species and the threats that are impacting the species at the population level, identify the sorts 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).

d) Schedule of studies. If the required information/data are not available to make the required determination of critical habitat, then an accurate determination may not be possible at this time. In these instances, create a schedule of studies which

outlines the actions to be taken to identify the critical habitat of the species (e.g., survey work, preliminary mapping, habitat viability analysis, development of an action plan). Indicate that these actions could become incorporated into the action plan for the species.

II. RECOVERY

4. 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]*

Draft policy guidelines have been developed to interpret this provision of SARA, and are summarized in the recovery strategy section of ROMAN presented earlier.

Either: Provide 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*, provide the rationale for this decision. A recovery strategy is still required for species for which recovery is considered not feasible, but only to this point in the template (i.e., description of species and its needs, identification of the species' critical habitat to the extent possible, and the reasons why its recovery is not feasible [see **SARA S.41 (2)**].

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

5. Recovery Goal, objectives and corresponding activities. *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(d)]*

a) Recovery Goal: What is the long-term recovery goal for the species—what can realistically be achieved over the next 20 or so years? If possible, set a measurable target such as specific population size, change in distribution, or level of habitat protection. Attempt to set population and distribution goals through population viability modeling, which can help establish the framework for recovery (i.e., identify knowledge gaps, priorities, objectives, etc.) even in the absence of solid data. The recovery goal should link back to the COSEWIC assessment criteria, the known threats to the species and biological limiting factors. Avoid statements such as: "The goal is to have the species downlisted to special concern." Instead, the goal statement might identify the population target that would, in the opinion of the recovery team, justify delisting; or it might identify some other biological target that the team could work toward, even though the target might change over time as better information is obtained.

b) Recovery Objectives (including population and distribution objectives): List measurable, mostly knowledge-based 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." Refer to the relevant COSEWIC assessment criteria (Annex VII) in setting recovery objectives.

c) Broad strategy to be taken to address threats [SARA S.41 (b)]. For each of the threats identified in 2a) and 3a) above, indicate the general approach that will be taken to mitigate or eliminate the threat (e.g., stewardship to enhance habitat; land acquisition to protect key habitat; development of mitigation measures to reduce impact from industrial activities; development of public outreach materials targeting misconceptions of landowners, etc.)

d) General description of the research and management activities needed to meet the objectives: Describe what would need to be done to achieve each objective. Although a table format may be appropriate to summarize the research and management activities (as in the example below), it would also be useful to have some descriptive text to guide development of the more detailed action plan that will follow. At the strategy stage, the level of detail should enable, rather than prescribe, specific actions. Assign a numerical level of priority to each activity (i.e., 1, 2, 3...) if helpful. Recovery efforts already underway that make a clear contribution toward objectives should be incorporated into the planning.

Example:

Obj. No.	Priority	Threat Being Addressed	Broad Strategy	Research Activities	Management Activities
1 – to...	1				
2	1				
3	2				
4	2				
5	3				
6	3				

e) Effects on non-target species [Recommended]: In a brief, general manner, 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 impacted.

f) Evaluation [Recommended]: Identify performance measures for evaluating success in meeting the stated recovery objectives (from both process and biological perspectives).

6. 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.

7. Statement of When One or More Action Plans in Relation to the Recovery Strategy Will Be Completed. This section could be left blank by the recovery team, though it would be helpful if the team could recommend an approach and reasonable timeframe to action plan development. The responsible jurisdictions will need to identify a target date for the action plan prior to posting the strategy on the SARA public registry. **[Recommended]:** If possible, identify the need for and roles of RIGs (Recovery Implementation Groups).

8. Recommended Scale for Recovery [Optional]: If not already covered in the response statement for the species, 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 Annex X 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. 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.

3. Template for Action Plan

Note: A more complete template for action plans is under development. Meanwhile, the following list of minimum SARA requirements should be used as a starting point for drafting action plans. The Recovery Secretariat or responsible jurisdictions can provide examples of action plans that would serve as good models.

Species Information ("COSEWIC box" available from COSEWIC web site; the same one that appeared in the response statement and recovery strategy – for continuity)

<p>Common Name (population): Scientific Name: Current status and most recent date of assessment: Reason for designation: Assessment Criteria: Occurrence: Status history:</p>
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1. 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)].

1a. 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, 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. A table such as appears below supports this section, but does not replace the need for descriptive text.

1b. Identify and 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.

1c. Implementation Schedule

Using the following table as a model, list the proposed actions in order of priority (making reference to the corresponding objective). Indicate which organizations will lead / participate in the actions, and when over five years the actions will be taken (from project initiation to completion).

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

2. Critical Habitat

2a. 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 (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.

2b. 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 (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?)

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.

2c. Unprotected critical habitat

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

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

3. 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 (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.

4. Monitoring

Describe *the methods to be used to monitor the recovery of the species and its long-term viability [SARA S.49 (d)].* How will you determine if the recovery objectives are being met, and if the situation of the species is improving?

5. References Cited

4. Template for Management Plan for Species of Special Concern

This draft template was developed by the province of Alberta, and is provided as a model until the National Recovery Working Group has the opportunity to work on this section of ROMAN.

Preface

- Explain purpose of management plans in general and provincial or federal obligation to species of special concern; discuss plan development/review process and outline agency involvement (this will be a standard preface used in all management plans)

1. Introduction

- Explain rationale for status
- Refer to, and highlight appropriate points from, the Response Statement for the species.

I. BACKGROUND

1.1 Breeding biology

- Brief outline of life history and habitat requirements

1.2 Threats to populations

- Include population limiting factors and threats to habitat

1.3 Monitoring history

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

II. MANAGEMENT

2. Goals and Objectives

2.1 Goal(s)

2.2 Objectives

- identify specific, achievable objectives

3. Management Actions

3.1 Inventory, monitoring and assessment

- List required minimum activities and timelines
- Refer to standardized inventory protocol if applicable
- Include data capture (e.g., BSOD) and report requirements and distribution

- Include location specific recommendations if appropriate; provide specific activities for known or selected populations with rationale

3.2 Habitat protection

- Identify habitat protection actions (e.g., PNTs)
- Discuss current industrial guidelines and practices and identify problems or weaknesses and possible solutions to ensure maintenance of habitat and populations

3.3 Other Management Actions

- Discuss any management actions that were not included in habitat protection activities
- Include agency responsibilities and timelines

3.4 Education and communication

- Examples of actions to include: landowner education and incentives; public education strategies; publications

Summary

- Highlight important considerations and reiterate timelines
- Indicate when this plan will be reviewed in the future (and by whom?)

References

- Include contact information for key personnel in addition to citations

Appendices

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

ANNEX VIII. WORKING WITH ABORIGINAL PEOPLE AND WILDLIFE MANAGEMENT BOARDS

1. Working with Aboriginal People

i. Consultation Guidelines

A manager's guide to consulting with Aboriginal people, developed by Environment Canada, is available on the internet at:

http://infolane.nrc.ec.gc.ca/aa/Eng/consult_e.html

ii. General Principles

1. Invite Aboriginal peoples 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 [1 or 2?]	Robert Bell, Chair Box 2120 Inuvik, NT X0E 0T0	?
Gwich'in Renewable Resources Board [1]	Robert Charlie, Chair P.O. Box 2240 105 Distributor St. Inuvik NWT, X0E 0T0	<i>Anatum peregrine</i> Eskimo curlew
Hunting, Fishing and Trapping Coordinating Committee [2]	Jean Comtois, Chair 383 St. Jacques Street, Suite C220, Mezzanine Level Montreal QC H2Y 1N9	<i>Anatum peregrine</i> Beluga (St. Lawrence) Beluga (Ungava Bay) Boreal caribou Bowhead (E. Arctic) Wolverine (Eastern)
Labrador Inuit Association [2]	Ms. Judy Rowell P.O. Box 909, Stn B 215 Hamilton River Rd. Happy Valley Goose Bay, NL A0P 1E0	<i>Anatum peregrine</i> Boreal caribou Wolverine (Eastern)
Nisga'a Lisims Government [2]	Mr. Harry Nyce Sr. Director of Fisheries & Wildlife P.O. Box 231 New Aiyansh, BC V0J 1A0	Eskimo curlew N. abalone
Nunavut Wildlife Management Board [1]	Ben Kovic, Chairman P.O. Box 1379 Iqaluit NU X0A 0H0	<i>Anatum peregrine</i> Beluga (SE Baffin-Cum.) Bowhead (E. Arctic) Peary caribou (High & Low Arctic pops)

		Right whale
Sahtu Renewable Resources Board [1]	Paul Latour, Interim Chair P.O. Box 134 Tulita, NT X0E 0K0	<i>Anatum</i> peregrine Boreal caribou Eskimo curlew
Wildlife Management Advisory Council (North Slope) [2]	Lindsay Staples, Chair P.O. Box 31539 Whitehorse Yukon Y1A 6K8	<i>Anatum</i> peregrine
Wildlife Management Advisory Council (NWT) [2]	Larry Carpenter, Chair P.O. Box 2120 Inuvik, NWT X0E 0T0	<i>Anatum</i> peregrine Boreal caribou Eskimo curlew Peary caribou (3 pops)
Yukon Fish and Wildlife Management Board [2]	Gerry Couture, Chair 410 D Jarvis Street Whitehorse, YK Y1A 2H5	<i>Anatum</i> peregrine Eskimo curlew Wood bison

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



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

[find a better map that shows areas of all WMBs]

ANNEX IX. FEDERAL REQUIREMENTS OR GUIDELINES

1. SARA Recovery Provisions

Table 6. Sections of SARA that pertain directly to recovery

Step	Section in SARA	Description	Critical Path
1.	25 (1)	COSEWIC provides EC Minister with a copy of species assessments	start of process (0)
2.	25 (3)	EC Minister responds to the assessment	within 0-90 days
3.	27 (1.1)	GIC adds species to legal list	within 0-9 months
4.	37	Competent Minister (CM) must prepare a recovery strategy for E,T, XP species:	within 1&2 (new spp) or 3&4 (Sch. 1 spp) years, for E & T, XP spp, from date when species was added to the legal list <i>Note: if the recovery strategy includes identification of CH, step #10 may precede step #7</i>
	39 (1)	- in cooperation with other responsible jurisdictions / WMB(s) / Aboriginal organization(s) / others as appropriate	
	39 (2)	- in accordance with provisions of WMB land claims agreement	
	39 (3)	- in consultation with landowners, foreign governments, others...directly affected by the strategy	
	40	CM must determine if recovery is feasible	
	41	Minimum contents of recovery strategy are specified (recovery feasible vs recovery not feasible, see below)	
	42	CM must include a proposed recovery strategy in the public registry within specified time periods	
5.	43 (1)	Public comment period (public registry)	60 days
6.	43 (2)	CM finalizes recovery strategy and includes it in public registry	within 30 more days
7. -	47	CM must prepare one or more action plans based on the recovery strategy:	by date stated in recovery strategy
	48 (1)	- in cooperation with other responsible jurisdictions / WMB(s) / Aboriginal organization(s) / others as appropriate	
	48 (2)	- in accordance with provisions of WMB land claims agreement	
	48 (3)	- in consultation with landowners, foreign governments, others...directly affected by the action plan	

	49 (1)	Minimum contents of action plan are specified (<i>see below</i>) - includes an evaluation of S-E costs and benefits of implementation of action plan	
	50 (1)	CM must include a proposed action plan in the public registry	
8.	50 (2)	Public comment period (public registry)	60 days
9.	50 (3, 4)	CM finalizes action plan and includes it in public registry (or, if not finalized in the time set out in the strategy, must include a summary of what has been prepared wrt the plan)	30 days
10.	58 (2)	CM must publish, in the <i>Canada Gazette</i> , a description of the CH that is in a federal park, NWA, MBS or marine protected area	Within 90 days after recovery strategy or action plan that identifies CH has been included in public registry
11.	58 (5)	CM must make an order or statement re. measures that are in place to protect the identified CH that is not in a federal park, NWA, MBS or marine protected area and is not protected under provisions, measures or conservation agreements under any Act of Parliament	Within 180 days after recovery strategy or action plan that identifies CH has been included in public registry

Other sections of SARA of interest to recovery

S.11: CMs may enter into conservation agreements that provide for conservation measures supporting recovery planning and implementation, and protecting species habitat (including CH)

S.29 (1): emergency listing of species

S.44 (1): an existing plan may be adopted by the CM as the proposed recovery strategy for a species; it must be included in the public registry

S.44 (2): any part of an existing plan may be incorporated into a proposed recovery strategy for a species

S.45 (1): recovery strategy may be amended at any time; amendment must be included in the public registry (and S.39 & 43 apply, unless the CM considers the amendment to be minor)

S.45 (2): if the amendment relates to the time for completing an action plan, CM must provide reasons for the amendment and include them in the public registry

S.51 (1): an existing plan may be adopted by the CM as the proposed action plan for a species; it must be included in the public registry

S.51 (2): any part of an existing plan may be incorporated into a proposed action plan for a species

S.52 (1): action plan may be amended at any time; amendment must be included in the public registry (and S.48 applies, unless the CM considers the amendment to be minor)

S.53: CM must make any regulations necessary to implement measures included in an action plan for federal species (except for CH regulations, made under S.59); there are consultation requirements

S.80-83: emergency protection order for species or its survival / recovery habitat

S.83 (3): a person engaged in activities in accordance with conservation measures for wildlife species under a land claims agreement, is exempt from general prohibitions (individuals, residences, CH)

S.83 (4): a person engaged in activities that are permitted by a recovery strategy, action plan or management plan and who is authorized under an Act of Parliament (e.g., MBCA) to engage in that activity, is also exempt from general prohibitions (individuals, residences, CH).

2. Contents of a Recovery Strategy

i. If recovery is determined to be feasible

S.41.(1) If recovery is determined to be feasible, the recovery strategy must include:

- a description of the species and its needs that is consistent with information provided by COSEWIC;
- 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;
- an identification of the species' critical habitat (to the extent possible), based on the best available information, and examples of activities that are likely to result in its destruction;
- a schedule of studies to identify critical habitat, where available information is inadequate;
- a statement of the population and distribution objectives that will assist the survival and recovery of the species, and a general description of the research and management activities needed to meet those objectives;
- any other matters that are prescribed by regulations, should regulations prescribing matters to be included in a recovery strategy be made
- a statement about whether additional information is required about the species
- a statement of when one or more action plans in relation to the recovery strategy will be completed.

ii. If recovery is determined to not be feasible

S.41.(2) If recovery is determined to be not feasible, the recovery strategy must include a description of the species and its needs, an identification of its critical habitat (to the extent possible), and the reasons why its recovery is not feasible.

3. Contents of an Action Plan

S.49.(1) An action plan must include:

- 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;
- a statement of the measures proposed to protect the species' critical habitat;
- identification of any portions of the critical habitat that have not been protected;
- a statement of the measures that are to be taken to implement the recovery strategy and when they are to take place;
- the methods to be used to monitor the recovery of the species and its long-term viability;
- an evaluation of the socio-economic costs of the action plan and the benefits to be derived from its implementation;
- any other matters that are prescribed by the regulations.

4. Management Planning for Species of Special Concern

The new SARA responsibility for preparing management plans for species of special concern and their habitat is outside the traditional scope of RENEW, which covers E, T and some (recoverable) XP species. Consequently, there are no existing guidelines for what constitutes an adequate management plan. The description in SARA is quite general. The preferred approach would be to develop management plans that cover off a group of SC species, or to modify existing management plans to include conservation measures for SC species in the area. As with recovery planning, there is a need to ensure that the management plan will benefit the species throughout its Canadian range.

Ultimate accountability for management planning for "CWS default" SC species rests with the CWS regional directors, though not necessarily with the SAR chiefs. In the case of migratory bird SC species, the responsibility for management planning could perhaps be assumed by the migratory birds program.

SARA Requirements

S. 65: CM must prepare a management plan for a listed SC species and its habitat that includes measures for the conservation of the species. It may apply to more than one wildlife species (presumably, not necessarily SAR).

S.66: Consultation requirements are similar to those for recovery planning. To the extent possible, the management plan must be prepared in cooperation with: P/T and federal ministers, WMBs, Aboriginal organizations, and others the CM considers appropriate. It must be prepared in consultation with anyone directly affected by, or interested in, the management plan.

S.68. Timelines (for details, see section "*SARA Timelines for Recovery and Management Planning*"): CM must include a proposed management plan in the

public registry within 3 years of listing (for new SC species), within 5 years of June 2003 (for SC species on Schedule 1), and within 5 years of being reassessed and added to the legal list (for species on Schedule 3).

As with recovery planning, there is a 60 day public comment period after the management plan is included in the public registry, and then the CM has 30 days to finalize the plan. Existing plans may be adopted (S.69); amendments may be made (S.70).

5. Reporting Requirements

Table 7. Reporting requirements of RENEW and SARA

RENEW or SARA	Description	Critical Path
RENEW	Annual report on species recovery (backed by web site of species fact sheets), released by CESSC, are not committed to by any agreement(?)	Annually, end of each FY
SARA, S.126	EC Minister must report to Parliament on administration of SARA, including (b) the preparation and implementation of recovery strategies, action plans and management plans (very high level, not detailed)	Annually, after each calendar year
SARA, S.46	CM's report on recovery strategy implementation (progress towards meeting recovery objectives), every 5 years until objectives have been met	within 5 years of posting in registry, and every 5 years thereafter
SARA, S.55	CM's 5 year assessment and report on action plan implementation (progress towards meeting its objectives; ecological and socio-economic impacts)	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	every 180 days after first 180 days since CH was identified
RENEW	Five-year program evaluation	Every five years, from...?

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).

6. 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.

7. Strategic Environmental Assessment

Federal departments involved in developing recovery strategies and action plans have an obligation to ensure, at the peer review stage, that the document gets reviewed by EA specialists. The guidelines for developing a recovery strategy and action plan in this handbook have the Strategic Environmental Assessment (SEA) requirements incorporated, as these constitute best practice for recovery planning.

It is not necessary to prepare a separate report of the SEA. A section of the recovery strategy or action plan should refer to the Cabinet Directive and provide key features of the analysis and conclusions. Reference can be made to other sections of the report where relevant analyses have been made.

Strategic Environmental Assessment (SEA) is a systematic process of evaluating the environmental effects of a policy, plan or program. It is designed to improve decision-making by identifying both the positive and negative environmental effects of a policy, plan or program; and by providing information on the means to accentuate the positive effects, and reduce or avoid the negative ones.

The *1999 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* requires that a SEA be conducted when

- the proposal is submitted to an individual Minister or Cabinet for approval; and,

- implementation of the proposal may result in important environmental effects, either positive or negative.

The Cabinet Directive applies to regulatory initiatives and in fact the "Guidelines for Implementing the Cabinet Directive" (CEAA, 2000) state that "if a Regulatory Impact Analysis Statement is prepared on an initiative, departments and agencies should reflect the findings of the strategic environmental assessment".

For more information on the Cabinet Directive, consult the Web site of the Canadian Environmental Assessment Agency at http://www.ceaa.gc.ca/0011/0002/dir_e.htm#Guidelines

Issues to be addressed

To identify the issues that should be addressed, it may be helpful to consider the likely outcomes of the components of the strategy or action plan, and link those outcomes to potential impacts. It is also important to determine whether any existing SEAs may be useful, such as earlier assessments of similar recovery strategies, or action plans, or environmental assessments of projects that affected the species under consideration.

For each recovery option or approach, consider the following:

- Would there be any effects on non-target species; land, air or water; natural communities; or ecological processes? (section IV.2, template for recovery strategy)
- 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, identify these uncertainties about the potential impacts, and carry forward to recovery strategy template sections on Conflicts or Challenges and Knowledge Gaps for design of appropriate follow-up studies in keeping with the adaptive management principle.
- Would any of the changes to non-target species, natural communities or ecological processes affect:
 - i) health and socio-economic conditions,
 - ii) physical and cultural heritage,
 - iii) the current use of lands and resources for traditional purposes by Aboriginal persons, or
 - iv) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.
- Could any of these indirect effects be mitigated? What impacts would remain after mitigation (residual effects)?
- Would any of the direct or indirect impacts lead to public concern?

? Would any proposed recovery approaches require assessments under CEAA??
Are there any other impacts, either positive or negative, that have not been addressed in the SEA or in the Recovery Strategies?

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

An Environmental Assessment (EA) guide for wildlife at risk is being 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)
 - key contacts and their roles
 - sources of information
 - glossary
 - references

Copies of the draft guide are available from:

Canadian Wildlife Service HQ
Program Integration Branch
Tel: (819) 997-1362
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