AN EVALUATION OF THE CANADIAN RECOVERY PLANNING PROCESS FOR SPECIES AT RISK

by

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B.Sc., McGill University, 1995

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

in

THE FACULTY OF GRADUATE STUDIES

Resource Management and Environmental Studies

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

17 July 2003

Department of Resource Management and Environmental Studies

The University of British Columbia
Vancouver, Canada

Date July 23, 2003

ABSTRACT

Efforts to recover species that are nationally recognized as being at risk of extinction have been underway in Canada since 1988 as part of the program for the Recovery of National Endangered Wildlife (RENEW). The passage of federal species at risk legislation (i.e., the *Species at Risk Act*, or SARA) in December 2002 placed renewed emphasis on species recovery efforts in that the legislation imposed timelines on governments in relation to the preparation of recovery plans. SARA requires federal and provincial governments to prepare recovery strategies within three or four years for all 190 extirpated, endangered, and threatened species that are currently listed in Schedule 1 of the act. Recovery strategies outline the long term goals and short term objectives for a species' recovery and are meant to provide guidance to governments and other agencies regarding its recovery. In order to ensure that the strategies include all relevant information and respect the interests of those who could be affected by recovery actions, recovery strategies are to be prepared with the involvement of representatives from the relevant jurisdictions as well as other relevant stakeholders.

The purpose of this research was to assess the degree to which the decision-making approach used by a select group of recovery teams in preparing recovery strategies appeared to be consistent with what the literature considers to be "good processes" (i.e., processes that are most likely to lead to successful outcomes). To the extent that: (1) the processes did not conform to the literature, and/or, (2) the outcomes were deemed to be unsuccessful, my aim was to provide recommendations for ways in which the processes could be improved upon. I identified four specific objectives upon which to focus my efforts:

1. Determine the extent to which a select set of recovery teams followed the guidelines provided by RENEW (i.e., the Recovery Operations Manual) and found them to be useful.
2. Characterize and evaluate the decision-making processes recovery teams followed in terms of the degree to which they incorporated aspects of decision-making approaches that have been described in the literature as facilitating better outcomes.
3. Evaluate each recovery team's success in developing a "good" recovery strategy, defined as a strategy that meets the following criteria:
   (a) team members were satisfied with it;
   (b) it required few substantive revisions as a result of the peer review process (from which it can be inferred that the team had done an adequate job); and,

(c) it was approved by the responsible jurisdictions and RENEW (from which it can be inferred that it meets the needs of the species and fulfills the requirements of the *Species at Risk Act*).

4. Provide recommendations for ways in which the recovery teams' decision-making process could be improved upon with a view to making it more efficient and/or effective. Recommendations focused on potential changes to the guidelines outlined in the Recovery Manual or the adoption of new policies and/or programs to support the guidelines.

Information for this research was derived primarily from interviews with members of nine recovery teams that are currently active in British Columbia. Interviews were conducted between November 2002 and February 2003. The results of this study suggest a number of areas of improvement to the recovery planning process, among which perhaps the most critical is the need for RENEW to better define the purpose of recovery teams and the range of stakeholders that are meant to be involved. Improvements in the design of the process, the teams' access to resources in support of participants and process, and the management of the process were also noted. Teams were able to reach consensus on draft recovery strategies suggesting that they were successful in achieving a "good" outcome (i.e., a "good" recovery strategy). However, further analysis of the quality and legitimacy of the consensus revealed some flaws. Furthermore, the ability of teams (and/or recovery implementation groups) to sustain their level of success as they proceed with the development of recovery action plans was put into question.

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LIST OF ACRONYMS

CBD	Convention on Biological Diversity
CESCC	Canadian Endangered Species Conservation Council
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CORE	Commission on Resources and Environment
CWDC	Canadian Wildlife Directors Committee
CWS	Canadian Wildlife Service
ENGO	Environmental Non-Government Organization
ESRF	Endangered Species Recovery Fund
GOERT	Garry Oak Ecosystem Recovery Team (also referred to by the short-hand "Garry Oak team")
GSM	Giant Salamander
HSP	Habitat Stewardship Program
IRF	Interdepartmental Recovery Fund
LRMP	Land and Resource Management Plan
MSRM	Ministry of Sustainable Resource Management
MWLAP	Ministry of Water, Land and Air Protection
NRWG	National Recovery Working Group
OSF	Oregon Spotted Frog
PWS	Pacific Water Shrew
RAP	Recovery Action Plan
RENEW	Recovery of Nationally Endangered Wildlife
RIG	Recovery Implementation Group
RT	Recovery Team
SARA	Species at Risk Act
SPOW	Northern Spotted Owl
STS	Sharp-Tailed Snake
TBN	Tall Bugbane
USESA or U.S. ESA	United States Endangered Species Act
USFWS	United States Fish and Wildlife Service
VIM	Vancouver Island Marmot
WHWO	White-Headed Woodpecker

ACKNOWLEDGEMENTS

I would like to begin by thanking all of the people who took the time to take part in interviews with me. While my research was obviously dependent on the information they provided me with, I also benefited greatly from the enthusiasm they showed for my research and for recovery planning more generally. Similarly, my thanks to all of the people within the federal and provincial governments who provided me with information and data.

I also owe a lot to my colleagues at Environment Canada in the Pacific and Yukon Region who supported my decision to return to school to pursue a graduate degree. Not only did they provide me with the encouragement I needed to pursue graduate studies but they were always there to provide support and encouragement along the way.

I am of course also indebted to the members of my thesis committee and the other faculty whose advice and guidance greatly improved my learning experience and the quality of my thesis. I greatly relied on the advice of Dr. Terre Satterfield in working through the design of my interview questions and working out how to go about analyzing my results. Dr. Stephen Sheppard always had valuable comments to provide (often jotted down on international flights) with a constant eye on the big picture. Dr. Les Lavkulich was a constant source of support and a voice of reason throughout my academic program and I thank him for his patience and wisdom. For my supervisor Dr. Paul Wood I have only thanks and great admiration – for his ability to listen and make sense of my often rambling thoughts, for offering encouragement when I needed it, and for being an incredible source of strength and support throughout my program overall. I could not have asked for a better supervisor.

Finally I would like to thank my family and friends whose support I greatly relied upon. I feel I owe a particular debt of gratitude to Ewa and Holly for their support, encouragement, and friendship. I would also like to thank Coral who was always willing to listen to problems and help find solutions (my apologies to Jim for the hours of lost time with his wife). I am, as always, particularly indebted to David, the best lab partner any gal could ever hope for.

CHAPTER 1: INTRODUCTION

1.1 Overview

Since the early nineties, federal Ministers of the environment have been attempting to pass federal legislation for the protection of species at risk in Canada. After more than nine years of effort, the *Species at Risk Act* (SARA) received royal assent in December 2002 and came into effect on June 5 2003 (Environment Canada 2002c).[1] While the legislation has been acknowledged as an important step for species conservation efforts in Canada, it represents only the most recent chapter in a history of efforts focused on species at risk that extends back over more than two and half decades.

To begin with, a body of experts known as the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has been assessing the status of species in Canada since 1977 and has been publishing an annual list of species at risk of extinction (Scudder 1999). In addition, the national recovery program for species at risk (Recovery of National Endangered Wildlife or RENEW) has been in place since 1988 to facilitate the recovery[2] of species assessed by COSEWIC (Scudder 1999). The Canadian government has also entered into a number of international and national agreements addressing species at risk including the ratification of the Convention on Biological Diversity in 1992, the preparation of the Canadian Biodiversity Strategy in 1995,[3] and the commitments made by the federal and provincial governments under the Accord for the Protection of Species at Risk in 1998.

Nonetheless, the passage of SARA does mark the beginning of a new era in that efforts to recover species at risk are now legally mandated with requirements that must be met within specified timeframes. Federal and provincial governments are responsible for ensuring that

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[1] Enactment of the prohibitions in SARA (including critical habitat protection and enforcement of the law) have been delayed until June 1, 2004 in order to give governments time to set up the infrastructure needed to enforce and administer these aspects of the act (Environment Canada 2003b).

[2] Recovery is defined by RENEW as "the restoration of a species to a viable, self-sustaining population level, able to withstand stochastic events and other environmental variables" (National Recovery Working Group 2003: 47). Recovery is documented when COSEWIC changes the status of a species from extirpated, endangered, or threatened to special concern or not at risk (see also footnote #8).

[3] Both the Convention on Biological Diversity and the Canadian Biodiversity Strategy include sections committing governments to take action to protect species at risk (see Chapter 2).

recovery strategies[4] are prepared within three or four years of the Act having coming into effect (i.e., June 5, 2003) for the 190 extirpated, endangered, and threatened species that are currently legally listed.[5] Given that governments are meant to prepare recovery strategies and action plans through multi-stakeholder[6] processes in consultation with a number of interest groups (Environment Canada 2001), the preparation of these plans represents a significant challenge. As more species are assessed by COSEWIC and are added to the legal list,[7] demands on governments and partner agencies will increase. Agencies will be expected not only to lead the preparation of strategic plans, but will also be looked upon to implement recovery actions and ultimately demonstrate progress towards the recovery of species. As much as the sheer number of species for which recovery plans must be developed poses a significant challenge for governments, the complexity of the task of recovering species at risk should itself not be underestimated. According to the U.S. National Research Council:

> Decisions regarding endangered species are often characterized by insufficient data, probabilistic predictions regarding future events, considerable uncertainty regarding the accuracy of these predictions, conflicting management objectives, disagreement over the best course of action, and the need to justify whatever decision is made (National Research Council 1995b: 157).

If they are to successfully meet the new demands imposed by SARA, governments will need to ensure that the policies and programs put in place to support the recovery of species facilitate an approach that is as efficient and as effective as possible. To that end, attention should be given to evaluating the degree to which current approaches have in fact been successful and whether there are opportunities for improvement. While a few studies of the Canadian recovery process have been undertaken, these have tended to focus more broadly on the scope of the problem in Canada with respect to species extinction and the need for legislation

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[4] A recovery strategy outlines the long term goals and short term objectives for recovering a species at risk. A more complete description of a recovery strategy is found in Chapter 3, section 3.5.

[5] While SARA actually lists 233 species, 43 of these are listed as being of "special concern" such that recovery strategies do not need to be prepared for them (management plans are prepared for these species).

[6] The term "stakeholder" is used here to refer to those individuals who have an interest (or a stake) in the decision. Stakeholders include representatives of agencies or organizations but may also represent private interests (e.g., individual landowners). This definition is consistent with that provided by Hemmati (2002).

[7] This term is used to refer to the list of species designated under SARA, also referred to as Schedule 1 or the List of Wildlife Species at Risk (see Chapter 3).

to support efforts directed towards the protection of species at risk (cf: Wellington 1997; Scudder 1999; Rogers and Wilkinson 2000; Amos et al. 2001).

In contrast to the Canadian situation, the U.S. *Endangered Species Act* (ESA) has been studied quite extensively both at the broader policy level and in terms of the effectiveness of the act and related policies at affecting recovery (cf: National Research Council 1995a; Clark 1997; Miller et al. 2002; USFWS 2002). A number of these studies have focused on the process by which recovery plans are developed, given that these plans represent "the crucial link between classification as an endangered species and actual recovery" (Tear et al. 1993: 976). Among the more commonly studied aspects of recovery plans is the quality and adequacy of the science that was considered in their development, and the extent to which the recommendations they contain are likely to lead to species' recovery (cf: Rohlf 1991). Among some of the commonly cited concerns are that the population targets recommended in recovery plans for the delisting or up-listing[8] of species are not adequately supported by science (Schemske et al. 1994; Elphick et al. 2001), or that the population targets are set too low to adequately protect the species (Tear et al. 1995). Researchers have also found that recovery plans fail to adequately establish the link between the recommended monitoring activities and the way in which the information will prove useful in tracking the species' status (Schemske et al. 1994). Others have concluded that recovery plans failed to adequately address the monitoring needs of the species (Brigham et al. 2002; Campbell et al. 2002).

Some researchers have taken the approach of considering the extent to which particular features of the decision-making process used in the U.S. in the preparation of recovery plans have influenced the outcome of the recovery planning process (i.e., the quality of the recovery plan, the success of the plan's implementation, and/or the actual or likely recovery of the species). Among the features that have been considered are the diversity of stakeholders involved in the recovery planning process and the nature of the interpersonal and power dynamics among those stakeholders (Clark 1997; Snyder and Snyder 2000; Gerber and Schultz 2001; Crouse et al. 2002; Hatch et al. 2002), whether or not the team had the benefit of a coordinator or a team leader (Hatch et al. 2002, Lundquist et al. 2002), and the degree to which

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[8] The term "up-listing" is used to describe the situation in which a species' official status is upgraded by COSEWIC (e.g., endangered status changes to threatened). De-listing refers to the process wherein a species' status is upgraded to the point where it is no longer considered as being at risk (i.e., classified by COSEWIC as "not at risk").

sufficient support (e.g., funding, training) was available to team participants and in support of the process (Wondolleck et al. 1994). One review of the recovery planning process in the U.S. concluded that:

> While the use of appropriate biological tools is essential to successful recovery, other factors are also indispensable, [including] problem analysis and problem-solving strategies, organization design, work group effectiveness, effectiveness of interpersonal relationships, and clarity and specificity of goals and objectives (Clark and Cragun 1994: 9).

The relationship between decision-making processes and decision outcomes has also been explored in the broader decision-making literature. While much of this literature deals with case studies from the U.S., papers reporting on the results of Canadian experiences have also been published including a number of case studies from British Columbia (Andersen 1998, Duffy et al. 1998, Owen 1998, Penrose et al. 1998, Williams et al. 1998). Given the increased reliance on multi-stakeholder processes (see Chapter 4), these studies have increasingly focused on identifying elements of decision-making processes that are conducive to the achievement of good outcomes.

1.2 Research Objectives

Drawing on the studies of the USESA and the broader literature on decision-making processes, I chose to focus my research on the decision-making processes[9] used in the development of recovery strategies for species at risk in Canada. In particular, the purpose of this research was to assess the degree to which the decision-making approaches used by a select group of recovery teams appear to be consistent with what the literature describes as "good processes" (i.e., processes that are more likely to lead to good outcomes). To the extent that: (1) the processes did not conform to the literature; and/or, (2) the outcomes were deemed to be unsuccessful (i.e., teams were unable to produce a good recovery strategy), my aim was to provide recommendations for ways in which the processes could be improved. I identified four specific objectives upon which to focus my efforts:

[9] In this instance, the term decision-making process is meant to refer to the process that begins with the formation of the recovery team and extends all the way to the approval of a final recovery strategy (see Figure 3.1).

1. Determine the extent to which a select set of recovery teams followed the guidelines provided by RENEW (i.e., the Recovery Operations Manual) and found them to be useful[10]
2. Characterize and evaluate the decision-making processes recovery teams followed in terms of the degree to which they incorporated aspects of decision-making approaches that have been described in the literature as facilitating better outcomes
3. Evaluate each recovery team's success in developing a "good" recovery strategy, defined as a strategy that meets the following criteria:
   (a) team members were satisfied with it; and,
   (b) it required few substantive revisions as a result of the peer review process (from which it can be inferred that the team had done an adequate job);
   (c) it was approved by the responsible jurisdictions and RENEW (from which it can be inferred that it met the needs of the species and fulfilled the requirements of the *Species at Risk Act*).
4. Provide recommendations for ways in which the decision-making process engaged in by recovery teams in Canada could be improved upon with a view to making it more efficient and/or effective. Recommendations focused on potential changes to the guidelines outlined in the Recovery Manual or the adoption of new policies and/or programs to support the guidelines.

1.3 Key Assumptions

This research relied on three main assumptions.

1.3.1 Relationship between Process and Outcome

I assume in this research that a good process is more likely[11] to result in a good outcome (i.e., a "good" recovery strategy as defined above). As such, evaluating the extent to which processes are "good" is an important aspect of ensuring the quality of the outcome. This assumption is well supported in the literature (cf: Beierle and Cayford 2002) and appears to be the driving assumption behind many of the evaluative studies of decision-making. Wondolleck

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[10] The assessment of the "usefulness" of the Manual was based on the feedback provided by the recovery team members that were interviewed.

[11] It should be noted that there is no *guarantee* that a good process will lead to a good outcome, the literature merely states that the *likelihood* of achieving a good outcome is greater when a good process is followed.

et al. (1994: 308), for example, state that: "One of the underlying premises of dispute resolution[12] is that how one goes about making decisions – the process – has a direct bearing on the ultimate viability of the decisions reached." Having considered the importance of decision-making in the context of the recovery planning process in the U.S., they go on to say that "Paying attention to process is necessary in order to build good solutions to the problems presented by endangered species conservation" (Wondolleck et al. 1994: 308).

1.3.2 Relationship between the Recovery Strategy and the Species' Recovery

The second key assumption is that a "good" outcome (i.e., a recovery strategy that meets the criteria outlined in the third objective) represents appropriate guidance for the species' recovery (i.e., it is probable that the implementation of the strategy could lead to the species' recovery). While more direct measures of outcome success might consider the extent to which the plan was implemented, the extent to which the species status was improving, and ultimately whether or not the species had been successfully recovered, these measures have two key limitations. To begin with, the assessment of the success of implementation is limited in that there a number of factors unrelated to the quality of the outcome that can interfere with the success of implementation and the eventual success of the species' recovery (e.g., availability of funding and staff, regulatory power to implement various aspects of the recovery strategies, or changes in political priorities) (Beierle and Cayford 2002). In addition, the time scale of implementation (and species recovery) is a limiting factor given that the timeframe for this study is far shorter than the likely timeframe for the recovery of most species at risk (i.e., it is too soon to tell).

1.3.3 Appropriateness of public participation in recovery planning

My third assumption was that public participation is in fact appropriate in the context of recovery planning for species at risk. There is an extensive literature that discusses factors that should to be considered before embarking on public participation in order to determine whether or not public participation is appropriate, and, if deemed appropriate, what model is most suitable (cf: Thomas 1995). This discussion is beyond the scope of this research. I did not

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[12] Wondolleck et al. (1994) define the term dispute resolution as being synonymous with the terms environmental mediation, environmental negotiation, alternative dispute resolution, and environmental dispute settlement.

consider the extent to which RENEW's directive to pursue participatory approaches in the context of recovery planning is advisable.[13]

1.4 Outline of the Thesis

Prior to embarking on a detailed discussion of my study methods and a discussion of the results and recommendations, some relevant background information will be presented. I begin by discussing the context for endangered species conservation efforts in Canada, including both the policy context and a description of the current status of species' endangerment and recovery efforts in Canada. This is followed by a more detailed description of the Canadian approach to species recovery in Chapter 3. The trend toward increasing public involvement in decision-making is discussed in Chapter 4 along with a more in-depth discussion of the literature on characteristics of processes that are more conducive to achieving successful outcomes. I then go on to describe the methods I used in my research and discuss my findings. Included in the discussion are a number of specific recommendations for improvements to the recovery planning process.

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[13] Wondolleck et al. (1994) considered the appropriateness of participation approaches in the context of recovery planning in the U.S. The authors concluded that unilateral decision-making is not appropriate given the high level of uncertainty and the scientific, social, and political complexity of the issues. However, the presence of fundamental value disputes and other key challenges were identified as potentially insurmountable obstacles to successful processes.

CHAPTER 2: CONTEXT FOR SPECIES RECOVERY IN CANADA

As briefly discussed in the introduction, the *Species at Risk Act* is only the most recent development in a relatively long history of efforts related to the conservation of species at risk in Canada. Over the years, Canadian federal and provincial governments have entered into a number of international and national agreements, have instituted policies, and have established a number of bodies that collectively promote the protection and conservation of species at risk. The discussion that follows will briefly describe the context within which the Canadian recovery planning process for species at risk has evolved, and the degree to which the *Species at Risk Act* builds on pre-existing processes and bodies (see Figure 2.1). The current situation with respect to species at risk in Canada will also be considered briefly in terms of the number of species currently recognized as being at some level of risk by COSEWIC and the current status of the recovery efforts for those species.

2.1 Evolution of the Policy Context for Species at Risk

Figure 2.1: Policy Context for the Protection of Species at Risk in Canada - Historical Overview

COSEWIC (1977)
- *Species status assessment*

RENEW (1988)
- *Establishment of guidelines for the recovery planning process*

(INT'L) CONVENTION ON BIOLOGICAL DIVERSITY (1992)
- *Committed signatories (including Canada) to the development of legislation for the protection of species at risk*

CANADIAN BIODIVERSITY STRATEGY (1995)
- *Reaffirmation of the commitments made in the Convention on Biological Diversity*

ACCORD FOR THE PROTECTION OF SPECIES AT RISK (1998)
- *Committed federal and provincial governments to designate species at risk, protect their habitats, and develop recovery plans*

SPECIES AT RISK ACT (2002)
- *Federal legislation for the protection of species at risk*
- *COSEWIC established as a legal entity for the first time*

2.1.1 Committee on the Status of Endangered Wildlife in Canada

One of the first major developments in relation to efforts to protect species at risk in Canada was the creation of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 1977. COSEWIC was created by a joint decision of wildlife directors of the federal, provincial, and territorial governments in response to a proposal developed in co-operation with a number of Canadian non-government organizations (Freedman 2001).

The Committee's role is to assess the level of risk of extinction for wildlife species based on the best available scientific as well as aboriginal traditional and community knowledge, and to provide advice to governments on the status of wildlife species in Canada (Freedman 2001). There are seven categories of conservation risk recognized by COSEWIC (COSEWIC 2003):

1. Extinct: species of wildlife formerly indigenous to Canada but no longer survives anywhere
2. Extirpated: species or subspecies that was formerly indigenous to Canada but now only survives in the wild elsewhere
3. Endangered: indigenous taxa that are threatened with imminent extinction or extirpation throughout all or a significant portion of their Canadian range
4. Threatened: indigenous taxa that are likely to become endangered in Canada if factors affecting their vulnerability are not reversed.
5. Special concern (formerly "vulnerable"): indigenous taxa that are not currently threatened but are at risk of becoming so because of characteristics that make them particularly sensitive to human activities or natural events (e.g., small or declining numbers, occurrence at the fringe of their range or in restricted areas).
6. Not at risk: taxa that have been considered by COSEWIC and were not found to be at conservation risk in Canada
7. Data deficient: taxa for which there is insufficient scientific information for the designation of conservation status

COSEWIC has been using new, more refined assessment criteria based on those used by the International Union for the Conservation of Nature (IUCN) since November 2001 (COSEWIC 2003). A description of the criteria and a more detail description of the distinction between endangered, threatened, and special concern categories is included in Appendix I.

COSEWIC was established as a legal entity for the first time under the *Species at Risk Act* and will report to the Canadian Endangered Species Conservation Council (Environment Canada 2002a). Under the changes articulated in SARA, COSEWIC will consist of 29 voting

members appointed by the Minister of the Environment in consultation with the Canadian Endangered Species Conservation Council and appropriate experts and expert bodies.

A more significant (and controversial) change under SARA relates to the legal listing process. COSEWIC continues to be responsible for undertaking species assessments and will publish its assessments in the SARA public registry (Species at Risk Public Registry 2003). However, the government has the authority to amend COSEWIC's list prior to putting forward the list of species to which the provisions of SARA will apply (i.e., species listed in Schedule 1 of SARA, also referred to as the List of Wildlife Species at Risk – see section 2.1.6). Once COSEWIC publishes its list on the public registry, the government has ninety days to issue a response regarding how they intend to respond to COSEWIC's assessments (e.g., no changes, add a wildlife species, reclassify a species, or remove a listed species).[14] The Governor-in-Council then has nine months to make a decision on whether to amend the list provided by COSEWIC as per the recommendations of the government. In cases where COSEWIC's advice is not adhered to (i.e., if changes are made to the list), the government is obliged to publish the reasons for the changes in the public registry established by SARA (Boyd 2003). The involvement of the government in the legal listing process is meant to recognize the potentially "serious economic and social implications for Canadians" that can result from adding species to the legal list (Environment Canada 2002a: 2).

2.1.2 Recovery of Nationally Endangered Wildlife

The national recovery program for endangered wildlife (RENEW) was established by the Wildlife Ministers' Council of Canada in 1988 and was reaffirmed under the Accord for the Protection of Species at Risk. All species designed by COSEWIC as endangered, threatened, or extirpated come under the purview of RENEW such that the mandates of RENEW and COSEWIC are complementary in establishing a national program for recovering wildlife at risk in Canada (Environment Canada 2001). The objectives of RENEW include:

- No endangered species of wildlife will be allowed to become extirpated or extinct;
- No species will be allowed to become threatened or move from threatened to endangered status;
- Extirpated species will be reintroduced to Canada where feasible;

[14] Failure to make a decision contrary to that of COSEWIC's within the ninety day timeframe results in the automatic acceptance of COSEWIC's status assessments (Environment Canada 2002a).

- Recovery plans will be prepared for all threatened and endangered species; and,
- Where feasible, recovery programs will be undertaken on a scale necessary to remove species from threatened, endangered, or extirpated status.

RENEW's key role in the context of this research relates to the provision of guidelines for recovery teams, described in more detail in Chapter 3.

2.1.3 The Convention on Biological Diversity

While there are a number of international treaties, conventions, and declarations that form the international context of biodiversity law and policy (Attridge 2000), the Convention on Biological Diversity (CBD) is arguably the most pertinent of these in relation to the conservation of biodiversity in general, and efforts to protect threatened and endangered species in particular. The CBD was adopted on May 22, 1992 and was signed by 156 States and one regional economic integration organization (i.e., the European Community) at the UN Conference on Environment and Development less than a month later (Glowka et al. 1994).[15] Since its adoption, 180 countries (including Canada) ratified or otherwise agreed to the Convention such that it has been credited as being "one of the most significant international agreements" (UNEP 2001: 3).[16]

The objectives of the Convention are the conservation of biological diversity, the sustainable use of components of biological diversity, and the fair and equitable sharing of the benefits arising out of the use of genetic resources (UNEP 2001). Articles 8 and 9 are of particular relevance in the context of efforts to conserve and protect endangered species (Glowka et al. 1994). According to Article 8k, signatory countries must "Develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations." Similarly, Article 9c commits signatories to adopt measures for the recovery and rehabilitation of threatened species and for their reintroduction into their natural habitats under appropriate conditions.

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[15] Canada signed the Convention on June of 1992 and was the first industrialized country to ratify it in December of the same year (Environment Canada 1995). The Convention entered into force on December 29, 1993 (Glowka et al. 1994).

[16] The CBD marked the first time that biodiversity was comprehensively addressed in an international agreement and was also the first time that the conservation of biodiversity was recognized as the common concern of humankind (Glowka et al. 1994).

2.1.4 Canadian Biodiversity Strategy

As part of its efforts to fulfill Canada's obligations under the Convention on Biological Diversity, the federal government prepared the Canadian Biodiversity Strategy in 1995. The Strategy outlines the measures required to meet Canada's obligations under the Convention and emphasizes the importance of enhancing the coordination of national efforts with respect to both the conservation of biodiversity and the sustainable use of biological resources. Among the five key goals outlined in the Strategy is included a commitment to "Maintain or develop incentives and legislation that support the conservation of biodiversity and the sustainable use of biological resources" (Environment Canada 1995: 3).

2.1.5 Accord for the Protection of Species at Risk

The federal, provincial, and territorial wildlife ministers also committed to undertaking a national approach to protecting species at risk in agreeing to the Accord for the Protection of Species at Risk in 1998.[17] The Accord outlines the governments' commitments to designate species at risk, protect their habitats, and develop recovery plans (Environment Canada 2002b). Federal, provincial, and territorial governments also agreed to co-ordinate activities by creating the Canadian Endangered Species Conservation Council (Environment Canada 2002b).

2.1.6 Federal Species at Risk Legislation

The federal government has been engaged in the development of legislation targeting species at risk since the early nineties, with the first attempt (i.e., Bill C-65) dating back to October 1996 (an overview of the major landmarks in the development of federal species at risk legislation is provided in Appendix II). The final iteration of the legislation, Bill C-5 or the *Species at Risk Act*, received royal assent in December 2002 and several of its provisions came into force on June 5 2003 (Environment Canada 2002c).[18]

Although a full description of the Act is beyond the scope of this discussion, a few of the key highlights include the following:

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[17] The Accord was preceded by the National Framework for the Conservation of Species at Risk developed in 1996. The federal, provincial, and territorial ministers with responsibilities for wildlife committed to the national approach in adopting the Accord in 1998 (National Recovery Working Group 2003).

[18] See footnote # 1

- *Schedule 1*: Schedule 1, also referred to as the List of Wildlife Species at Risk, is the legal list of species that the provisions in SARA apply to. The 233 species that were included in Schedule 1 at the time the Act came into effect (i.e., June 5 2003) include all of the species that COSEWIC had assessed to the end of 2001 with the new IUCN criteria (Environment Canada 2003b). As new species are assessed by COSEWIC, more species are likely to be included on the legal list (see section 2.1.1 regarding changes to the listing process).
- *Recovery planning:* As discussed in greater depth in Chapter 3, SARA requires that recovery strategies and recovery action plans be prepared within one year for endangered species and within two years for threatened or extirpated species (Environment Canada 2003b).
- *Basic Prohibitions*:[19] Two prohibitions apply to all species that are listed as endangered, threatened, or extirpated in Schedule 1 of SARA: (1) you cannot kill, harm or trade in the species (Section 32); and, (2) you cannot damage or destroy the species' "residence"[20] (Section 33). These prohibitions only apply to federal jurisdictions (i.e., federal lands, aquatic species, and migratory birds under the *Migratory Birds Convention Act*) (Smallwood 2003) unless the federal government invokes the "safety net" (see below).
- *Prohibition against the destruction of critical habitat:*[21] Where critical habitat[22] is identified in recovery plans (either in the recovery strategy or the recovery action plan), it must be protected through legislation, regulation or other means when it occurs on federal or provincial Crown land. Critical habitat occurring on private land will be protected through voluntary stewardship where possible. When combined federal, provincial, territorial and private stewardship efforts are not sufficient to protect critical habitat, a "safety net" provision applies to prohibit the destruction of critical habitat (Environment Canada 2002a). SARA outlines specific timelines within which critical habitat must be protected.

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[19] As a result of the phased approach to SARA's implementation, prohibitions will only apply after June 1, 2004 (Environment Canada 2003b).

[20] Residence is defined in SARA (Section 2) as "a dwelling place, such as a den, nest or other similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating."

[21] See footnote #19.

[22] Critical habitat is defined in Section 2(1) of SARA 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."

- *Safety net*: The safety net is a mechanism that allows the federal government to take action in cases where a province or territory is failing to protect a listed species or its critical habitat. The safety net provision applies to both the basic prohibitions and the provisions that relate to the protection of critical habitat. However, the safety net is discretionary in nature such that the federal government is not required to invoke it (Smallwood 2003).
- *Compensation*: SARA contains provisions to provide compensation in cases where the application of certain aspects of the Act will result in an "extraordinary impact." When certain prohibitions are applied (e.g., application of the critical habitat protection or the critical habitat safety net), individuals will be able to apply for compensation for losses (Environment Canada 2002a; Smallwood 2003). Guidelines for compensation are currently being developed.
- *Permits*: SARA allows for the issuance of permits for certain activities that may adversely impact a listed species, any part of its critical habitat, or the residences of its individuals (Smallwood 2003). The Act describes the conditions under which permits will (and will not) be issued.
- *Compliance/Enforcement*: SARA includes a number of provisions to ensure compliance with the Act including fines of up to one million dollars and imprisonment for up to five years for each offence once these provisions come into effect (i.e., June 1, 2004) (Environment Canada 2003b).
- *Public registry*: SARA requires that all SARA-related documents and decisions be posted on a public registry[23] (e.g., SARA regulations and orders, recovery strategies, action plans, COSEWIC classification criteria, COSEWIC status reports) (Environment Canada 2003b).

2.2 Bodies Responsible for Species at Risk Policies and Programs

There are a number of committees and other bodies that have been established to develop policies and to generally oversee the Canadian approach to protecting species at risk. Some of these are briefly considered below in order to provide the appropriate context for information provided in latter chapters. The emphasis is on the bodies of relevance to RENEW given the focus of this research.

[23] The public registry is available on-line at http://www.sararegistry.gc.ca/gen_info/default_e.cfm.

2.2.1 Canadian Endangered Species Conservation Council

The Canadian Endangered Species Conservation Council (CESCC) comprises federal ministers of environment, fisheries and oceans, and heritage, and the provincial and territorial ministers with responsibilities for wildlife species. The authority of the CESCC includes providing national leadership for the protection of species at risk, including providing general direction in implementing the RENEW program. The CESCC also serves as a forum for resolving any disputes that may arise out of implementation of the Accord for the Protection of Species at Risk and has ultimate authority over RENEW (National Recovery Working Group 2003).

2.2.2 Canadian Wildlife Directors Committee

The Canadian Wildlife Directors Committee (CWDC) supports the CESCC and is responsible for the operation of the RENEW program. The CWDC is comprised of directors from the federal, provincial, and territorial government agencies with responsibilities for the management of wildlife (National Recovery Working Group 2003).

2.2.3 The RENEW Committee

The RENEW Committee[24] was established in 1998 by the Canadian Wildlife Directors Committee to develop a new framework for recovery (the Committee was known at the time as the National Recovery Working Group). Membership on the Committee includes the 16 federal, provincial and territorial ministers responsible for wildlife. Other recovery experts may attend RENEW Committee meetings as observers at the discretion of the co-chairs but are not permitted to participate in discussions unless called upon (National Recovery Working Group 2003).

Of particular relevance to this discussion is the Committee's role in providing guidance to recovery teams and recovery implementation groups on scientific, technical, and policy matters pertaining to the national recovery process. In particular, the Committee is responsible for the development of the guidelines outlined in the Recovery Operations Manual as well as other policy or procedural recommendations related to the national recovery program(National Recovery Working Group 2003). The Committee is also responsible for monitoring recovery team processes and performance and providing guidance where appropriate including overseeing

[24] The RENEW Committee was previously known as the National Recovery Working Group.

training of recovery teams and others in the national recovery process and in scientific aspects of recovery (National Recovery Working Group 2003).

2.2.4 Recovery Secretariat

The Secretariat supports the Canadian Wildlife Directors Committee (CWDC), the RENEW Committee, recovery teams, and recovery implementation groups in developing and implementing the national recovery program (National Recovery Working Group 2003). The Secretariat's key role is to provide national co-ordination for RENEW. The Secretariat's role in facilitating the approval of recovery plans is described in Chapter 3.

2.3 Current Status of Species at Risk in Canada

2.3.1 Major Threats to Species in Canada

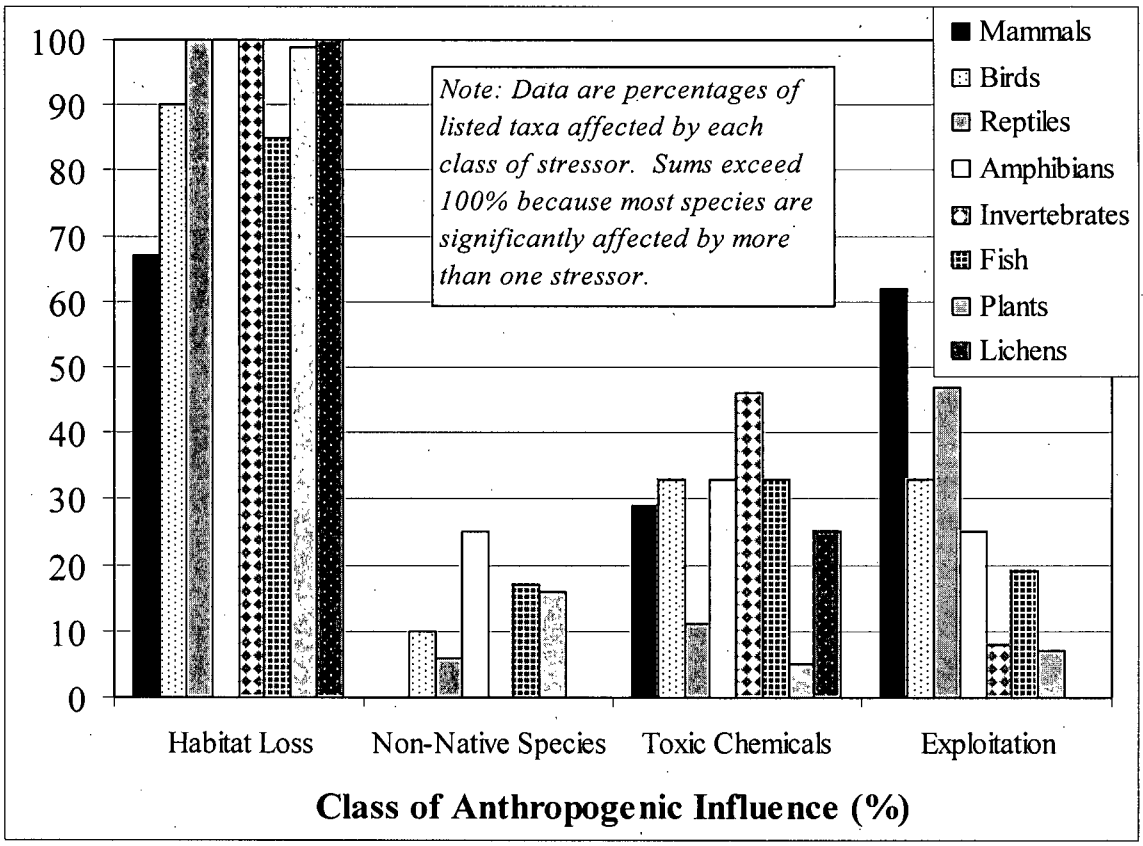
According to Freedman et al. (2001), anthropogenic stressors are the cause of almost all cases of conservation risk to indigenous species in Canada. In particular, the physical destruction or alteration of habitat is thought to be a key factor in the listing of over 80% of all taxa listed by COSEWIC (see Figure 2.2). Other important causative factors of conservation risk include: invasive non-native species that damage the habitat of many taxa or affect them via intensive predation or competition; physiological stress by anthropogenic emissions of toxic chemicals; and, harvesting, particularly in relation to populations that are of economic value (Freedman et al. 2001). A disproportionate fraction of species at risk are found in the southern regions of Canada where the number of indigenous species is high, habitat loss has been most extensive, and the intensity of other anthropogenic stressors is greatest (e.g., pollution and harvesting) (Freedman et al. 2001).

The threats described above are consistent with those cited in other parts of the world, particularly in relation to the significance of habitat loss and fragmentation as a contributing factor in the loss of biological diversity (Biodiversity Science Assessment Team 1994; Orians and Soulé 2001). According to the International Union for the Conservation of Nature (2002), habitat loss and degradation affected 89% of all threatened birds, 83% of mammals, and 91% of threatened plants assessed in 2002.

2.3.2 Current Status of COSEWIC Assessments

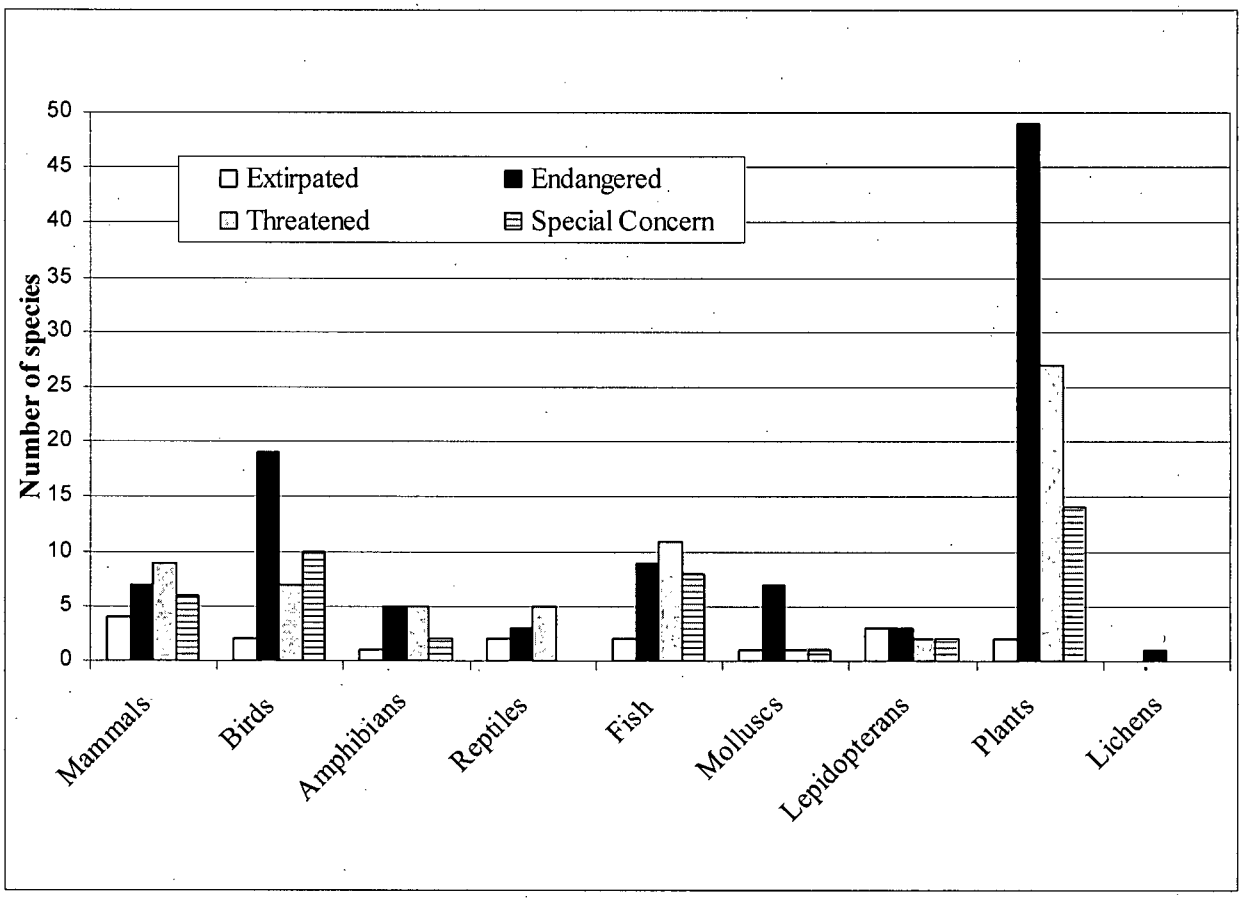
As of May 2003, COSEWIC identified 431 species as extinct (12), extirpated (21), endangered (153), threatened (102), or of special concern (143). One hundred and thirty-three of these 431 listed species are known to occur in BC (COSEWIC 2003). COSEWIC recognized a further 227 candidate species, which are species that are suspected of being in one of the COSEWIC categories of risk but have yet to be examined through the status assessment process (COSEWIC 2003).

Figure 2.2: Classes of Anthropogenic Influences Causing Stress to COSEWIC-listed Species (based on May 2000 data) (Freedman et al. 2001).



Of the 431 species assessed by COSEWIC to date, 233 were listed in Schedule 1 of SARA at the time the act came into force (Figure 2.3). Eighty-seven of those species occur in British Columbia, of which 3 are listed as extirpated, 42 are listed as endangered, 28 are listed as threatened, and 14 are listed as being of special concern (see Appendix III for a complete list).

Figure 2.3: Number of COSEWIC-listed Species in Schedule 1 According to Taxonomic Category and COSEWIC status



2.3.3 Current Status of Recovery Efforts

As of May 2003, only 22 recovery plans had been approved in Canada, of which 6 were for mammal, 13 for bird, and 2 for reptile and amphibian species (Environment Canada 2003a). There are currently about twenty-eight recovery teams active in British Columbia (see Appendix IV).

CHAPTER 3: THE RENEW RECOVERY PLANNING PROCESS

As outlined in Chapter 2, the recovery planning process in Canada is overseen by the national recovery program for endangered wildlife (RENEW). One of RENEW's key roles is to provide process-related guidelines to recovery teams. The discussion that follows summarizes the guidelines provided by RENEW by way of the Recovery Operations Manual (hereinafter referred to as the Recovery Manual). The discussion reflects the guidelines provided by RENEW as per the November 2001 version of the Recovery Manual as it was the most current at the time the interviews with recovery chairs and recovery team members were conducted (see Chapter 5) and, more significantly, was the version that teams were using at the time (see section 3.1).[25] Where relevant to the discussion, changes reflected in the most current draft (June 3, 2003) and/or in the *Species at Risk Act* are described in footnotes or highlighted in inset-boxes entitled "Changes since the November 2001 Recovery Manual."

3.1 Evolution of the Guidelines for the Recovery Planning Process

An important consideration in relation to the RENEW process is that the guidelines provided to recovery teams have evolved over time (and continue to evolve). This is particularly relevant in the context of this research given that teams formed at different times will have had access to different types and amounts of guidance. The evolution of the Recovery Manual can be summarized as follows:

- 1988: the RENEW Strategy was developed;
- 1989: an 11-page RENEW operating procedures document was developed;
- 1994: guidelines for preparing recovery plans were prepared; and,
- 1999: the various documents were compiled into A Renewed National Recovery Program (RENEW): Processes, Responsibilities and Products (Spring 1999).

There have been many drafts of this document since the 1999 version was released. An Environment Canada (Canadian Wildlife Service) employee in Ottawa estimated that there have been at least twenty versions of the Recovery Manual over the past three years with the document getting larger and more comprehensive each time.[26] There have in fact been a number

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[25] The November 2001 version of the Recovery Manual was the most current version of the Manual until the January 30, 2003 version was released.

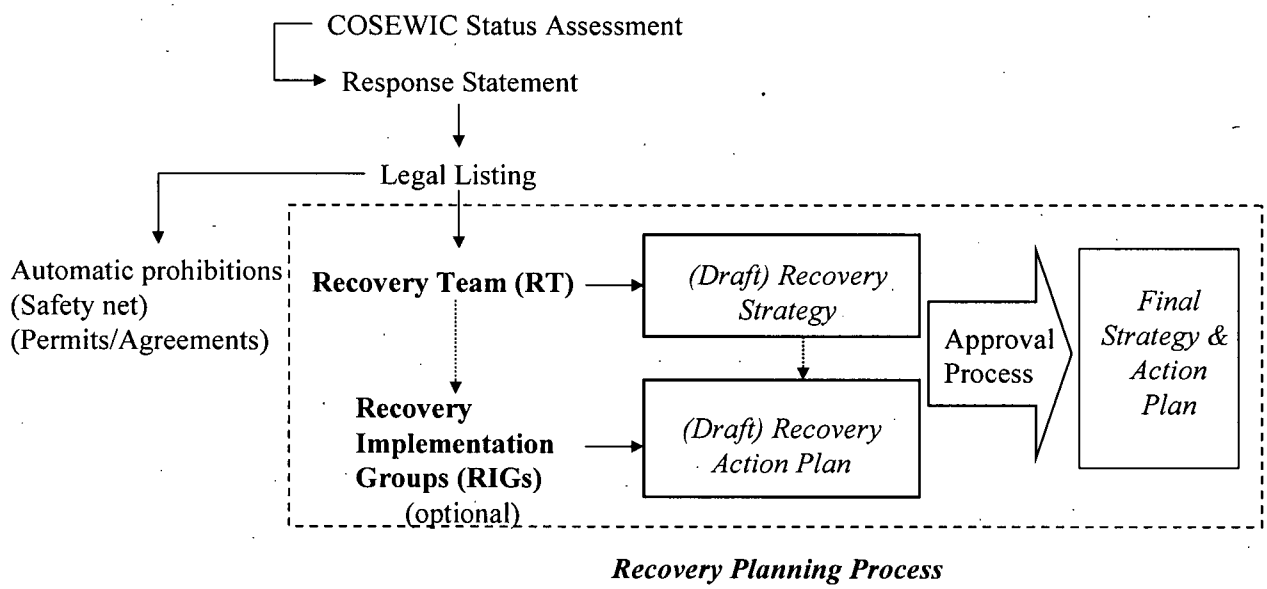
[26] (Mary Rothfels, Recovery Biologist Secretariat, Environment Canada, March 2003)

of new versions of the Recovery Manual since the end of January of this past year, due in large part to the need to reflect the legal dimensions of the recovery planning process that have emerged with the passage of the *Species at Risk Act*. The most current version of the Recovery Manual at the time of writing was dated June 3, 2003 (National Recovery Working Group 2003).

3.2 From Assessment to Recovery Planning

Once a species is assessed by COSEWIC, the lead jurisdiction is responsible for the preparation of a "response statement." Response statements indicating the feasibility and priority of the species' recovery are required for all species that are designated as extirpated, endangered, or threatened.[27] The response statement also initiates the formation of a recovery team by identifying the lead agency and jurisdictional representative(s) that will form the core of the team (Environment Canada 2001).[28] Once the response statement is prepared (or while it is

Figure 3.1: Overview of the Recovery Planning Process (including changes under SARA)



[27] Species designated by COSEWIC as being of "special concern" require the preparation of a management plan within three years of the species being included on the List of Wildlife Species at Risk (5 years for species listed at the time the act comes into force; see footnote #30).

[28] The role of the response statement has changed somewhat in order to meet some of the new requirements under SARA. In addition to the requirements described in the text, the Response Statement is meant to articulate the

being prepared), a recovery team responsible for the preparation of a recovery strategy is formed. According to the timelines provided by RENEW, the recovery team has one year to prepare a recovery strategy for endangered species and two years for threatened or extirpated species from the time the response statement is released (Environment Canada 2001).[29,30] Once the recovery strategy has been completed (or while it is being prepared), recovery action plans (RAPs) are developed.[31] RAPs outline the specific projects that need to be undertaken to achieve the goals and objectives of the recovery strategy and can be prepared by either the recovery team or by one or more recovery implementation groups (RIGs)[32] that report to (and have their activities coordinated by) the recovery team.[33] The recovery strategy and recovery action plan(s) together comprise the "recovery plan."

Changes since the November 2001 Recovery Manual

Once species are legally listed as threatened, endangered or extirpated, two key aspects of the Act apply (see Figure 3.1): (1) endangered and threatened species automatically receive some protection by way of the automatic prohibitions;[34] and, (2) the recovery planning process is initiated (Figure 3.1).

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governments' response in relation to whether or not changes will be made to COSEWIC's status assessments (see section 2.1.1) (National Recovery Working Group 2003).

[29] The timelines provided by RENEW are reflected in the *Species at Risk Act* such that they are now legally binding. The timelines in SARA extend from the species' inclusion on Schedule 1 to the posting of the "proposed" recovery strategy on the public registry (see section 3.5). Once the proposed recovery strategy is posted on the public registry, the government has another ninety days to make revisions and post a final version on the public registry.

[30] There is an exception to the one- to two-year timeline for those species that were listed in Schedule 1 on the day SARA came into force (i.e., June 5 2003). For this initial list of species, a recovery strategy is required within three years for endangered species and four years for threatened and extirpated species from the date the act came into force. The 90 day revision period described in the previous footnote also applies.

[31] SARA does not prescribe a particular timeline within which recovery action plans must be completed although a timeline is to be provided in the recovery strategy. Governments are expected to report on their progress on the preparation of recovery action plans in accordance with that timeline.

[32] RIGs were formerly known as Recovery Action Groups or RAGs (National Recovery Working Group 2003).

[33] Recovery actions (i.e., actions taken by groups or individuals to recovery the species) can be undertaken at any point in the process and do not have to be delayed until the recovery strategy and action plan have been developed.

[34] The automatic prohibitions do not come into effect until June 1 2004 (Environment Canada 2003b). See also section 2.1.6.

RENEW outlines a number of different approaches to recovery planning that range from single-species plans to landscape based plans (Table 3.1).[35] Teams are meant to choose among the various approaches based on such factors as geographical distribution, species characteristics, and threats.

Table 3.1: Summary of Approaches to the Preparation of Recovery Strategies
(Environment Canada 2001: 37)

Approach (scale)	Considerations and qualities
Single species	• distinct species with respect to habitat requirements and threats • only listed species in geographical area
Recovery units	• species occurs in two or more distinct geographical areas • loss of any of the areas diminishes capacity to survive or recover
Multiple species or threat abatement*	• two or more species in same genus or same geographical region • species share a common threat
Ecosystem based*	• deals with select sites of a common 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
Landscape based*	• 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)
International	• species' range extends beyond Canada's borders and species has been listed by neighboring country(s)

* Species-specific goals and objectives still need to be identified and addressed

3.3 Description of a Recovery Team

The role of the recovery team (RT) is to develop the recovery strategy; advise range jurisdictions on the recovery of the species, species group or ecosystem; and, coordinate the activities of the recovery implementation groups (as appropriate) (Environment Canada 2001). The recovery team is directed to make decisions on a consensus basis[36] or by a two-thirds majority vote. The team's decision is provided to the government (and sometimes to non-

[35] Section 41(3) of SARA allows for multi-species or ecosystem approaches to recovery plan preparation.

[36] Consensus is defined in the Recovery Manual (Environment Canada 2001: 66) as "general agreement, i.e., all members can accept the decision."

government groups) as advice. The responsible jurisdictions retain final decision-making authority and accountability (Environment Canada 2001).

The November 2001 Recovery Manual stipulates that recovery team membership will include representatives from all jurisdictions responsible for the species in Canada (including wildlife management boards authorized under a land claims agreement). Jurisdictional representatives then "invite species or issue experts from other agencies, universities, conservation groups, aboriginal groups, and stakeholder groups to sit on the recovery team as appropriate," with the ultimate team composition representing a "balance between science, management and stakeholder interests" (Environment Canada 2001: 66). The template for recovery strategies provided in the Recovery Manual further suggests that: "to the extent possible, resolve conflicts by including stakeholders on the recovery team and by consulting with landowners and other interested parties to work out an acceptable approach to recovery prior to drafting the recovery strategy" (Environment Canada 2001: 33).

Changes since the November 2001 Recovery Manual

The *Species at Risk Act* (Section 39(1)) specifies that recovery strategies are to be prepared "to the extent possible" in co-operation with the responsible jurisdictions described by RENEW including wildlife management boards where relevant (i.e., when the species is found in an area in which a wildlife management board is authorized to perform functions related to the protection of wildlife species). SARA also stipulates that strategies will be prepared to the extent possible with "every aboriginal organization that the competent minister considers will be directly affected by the recovery strategy" as well as "any other person or organization that the competent minister considers appropriate" (Section 39(1)). The Act further outlines that "To the extent possible, the recovery strategy must be prepared in consultation with any landowners and other persons whom the competent minister considers to be directly affected by the strategy, including the government of any other country in which the species is found" (Section 39(3)). The exact meanings of the phrases "in co-operation with" and "consultation" and the distinction between these two is, however, not defined more fully in the Act such that it is not clear to what extent the implication is that all (or any) of these organizations are meant to be represented on the team itself (and/or how extensively the government must "consult" with these organizations) (see section 6.5). A similar issue arises in relation to the recovery action plans (see below). Furthermore, while *suggesting* the existence of recovery teams (and recovery implementation

groups) by way of describing a process of involvement and/or consultation with broader constituents, SARA does not refer specifically to either of these bodies referring only to their "end products" (i.e., recovery strategies and recovery action plans).

3.4 Description of a Recovery Implementation Group

The main role of recovery implementation groups (RIGs) is to produce recovery action plans (RAPs) that are consistent with the recovery strategy, and to implement projects or programs outlined in the recovery action plans. RIGs may be established as specialist groups to address specific activities (e.g., habitat protection, disease control, outreach) or to represent jurisdictional sub-groups of larger teams (e.g., in cases where species cross provincial borders). RIGs report to (and their activities are coordinated by) the recovery team. In cases where recovery teams elect not to establish RIGs, the roles that would otherwise have been undertaken by the RIG (preparation and implementation of recovery action plan(s)) fall within the team's scope of responsibilities.

According to the Recovery Manual, it is at the level of the RIG where "interested individuals such as landowners, academics, aboriginal people, industry representatives and local conservation groups can actively participate in recovery efforts" (Environment Canada 2001: 69). In cases where RAPs are developed by the recovery team, RENEW suggests that recovery team membership may need to change and/or expand in accordance with the shift in emphasis in the team from strategic planning to more detailed project planning and implementation.

Changes since the November 2001 Recovery Manual

SARA suggests that action plans be prepared "to the extent possible" in cooperation with the relevant provincial and territorial ministers, federal ministers, wildlife management boards, aboriginal organizations, and other "person or organization that the competent minister considers appropriate" (Section 48(1)). The Act further stipulates that "to the extent possible" the action plan be prepared "in consultation with any landowners, lessees and other persons whom the competent minister considers to be directly affected by, or interested in, the action plan, including the government of any other country in which the species is found" (Section 48(3)).

3.5 Overview of a Recovery Strategy

The Recovery Strategy is the first part of a two-part national recovery plan (of which the other part is the recovery action plan). The minimum requirements of a recovery strategy as described in the template for recovery strategies in the November 2001 version of the Recovery Manual are that the strategy specify the following:[37]

- the recovery goal (requirements to meet recovery) including the expected timeframe for recovery to be achieved;
- the short-term recovery objectives (where possible these should be measurable; e.g., increasing population size to "x" individuals per population);
- the approaches/strategies required to effect species recovery (this should include: a discussion of how each approach could directly effect species recovery, a level of priority for each approach, and an estimate of the cost of the approach where possible);
- a statement of when one or more recovery action plans will be completed;
- the identification of potential effects of each proposed recovery approach on other species or ecological processes;
- the identification of performance measures for evaluation of the success of the approaches to recovery set out in the strategy;
- 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;
- the identification of the species' habitat requirements;[38]
- a description of the socio-economic considerations (see inset-box);

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[37] There may be cases in which recovery is deemed not to be feasible (e.g., when the species has such naturally small distributions or population sizes in Canada that they will always be at risk). In such cases, a brief recovery strategy that includes a description of the species and its needs, an identification of its critical habitat requirements to the extent possible, and the reasons why recovery is not feasible is required (Environment Canada 2001).

[38] This includes *recovery habitat* ("habitat required by a species to achieve and sustain a viable population") and *survival habitat* ("habitat currently occupied by a species, that is needed to maintain the current population size") but does refer specifically to *critical habitat* (defined in footnote #40) (Environment Canada 2001: 32).

- a discussion of the recovery potential and rationale (ecological and technical feasibility of the species' recovery and anticipated conflicts or challenges to the realization of recovery goals and objectives);
- a rationale for the approach selected (i.e., single species versus multi-species or ecosystem approaches);
- the identification of knowledge gaps that are impacting the team's ability to accurately define recovery objectives and approaches (e.g., survey requirements, biological research requirements); and,
- a description of the extent to which the species occurs on significant amounts of private, federal, provincial, territorial, or First Nation lands (including providing key contacts).

Changes since the November 2001 Recovery Manual

The directives in relation to the content of recovery strategies have undergone some changes in the June 3, 2003 version of the Recovery Manual.[39] Teams are generally required to provide less detailed information according to the revised version. For example, the requirement to list threats originally included a directive to "where possible, rank threats by relative impact, ...and characterize their spatial scale and temporal nature, ...qualify the certainty with which each threat is believe to be a cause of population decline" (Environment Canada 2001: 32). The revised version does not require the ranking or uncertainty estimates to be considered. There have also been changes to the teams' involvement in the designation of critical habitat. Whereas the November 2001 version of the Manual stipulated that teams (and/or RIGs) would identify critical habitat,[40] the June 3 2003 version suggests that teams will provide *advice* to the jurisdictions in relation to its designation. There have also been changes to the way in which socio-economic considerations are described and the way in which they are to be addressed by teams. Socio-economic considerations were described in the November 2001 version of the

[39] The revised version of the Recovery Manual specifies which components of the templates are required under SARA and which ones are "common-sense minimum requirements for good recovery planning" (National Recovery Working Group 2003: 24).

[40] Critical habitat is defined under SARA as: "that 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." Once the critical habitat is identified in the action plan (or recovery strategy) and is posted on the public registry, responsible jurisdictions have 180 days to protect it (Sections 56-64).

Recovery Manual as one of the elements that should be included in the recovery strategy. The Manual directed the teams to "Provide information on the value of the species as a resource (food, clothing, medicine, cultural use or revenue), the extent of the area where the species is important for people, the possibility of replacing the species with another species or resource, and possible conflicts with land users" (Environment Canada 2001: 33). The June 2003 also directs teams to undertake this type of analysis but characterizes the information requirements differently and also defers the discussion of socio-economic issues to the recovery action plan. The June 2003 version suggests that the *recovery action plan* include a section wherein teams/RIGs "Evaluate the socio-economic costs of the action plan, and the benefits to be derived from its implementation" (National Recovery Working Group 2003: 40).

3.6 Overview of a Recovery Action Plan

The November 2001 draft of the Recovery Manual does not provide a template for a recovery action plan, providing instead a specific example (i.e., the action plan for the Long's Braya and Fernald's Braya). Categories included in the sample action plan provided (in lieu of a template) include:

- Research and monitoring actions (including specific projects to be undertaken)
- Management actions
- Implementation schedule (which includes areas where linkages between specific projects and the objectives from the strategy are to be made; information on the priority of the proposed recovery action is also meant to be included)

The Manual also provides a very generic description of the scope and content of action plans, stating that the action plan may outline a number of research, monitoring, and management actions that correspond to the objectives, strategic approaches, and priorities identified in the recovery strategy.

Changes since the November 2001 Recovery Manual

The content of recovery action plans described in SARA (Section 49(1)) include the following:

- species information that is consistent with information provided by COSEWIC;
- identification of knowledge gaps (e.g., survey requirements, biological and ecological research requirements, and, threat clarification research requirements);
- identification of the species' critical habitat, to the extent possible, based on the best available

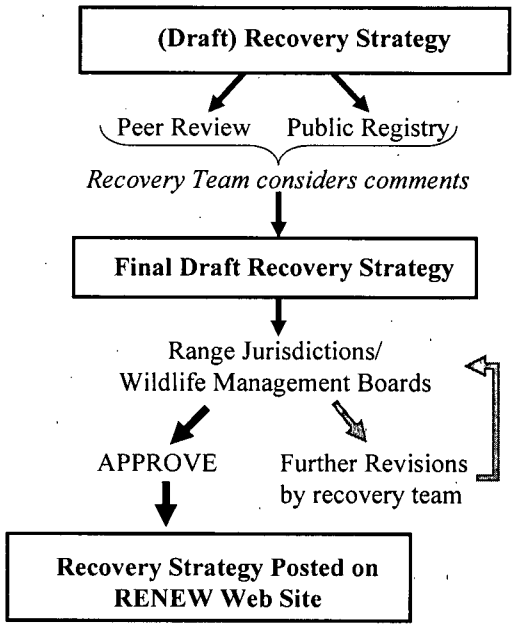
information and consistent with the recovery strategy, and examples of activities that are likely to result in its destruction;

- 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; and,
- other matters that are prescribed by the regulations.

3.7 Approval Process for Recovery Strategies and Recovery Action Plans

Once recovery teams finalize their draft recovery strategy it is sent to three to five peer reviewers (see Figure 3.2). Concurrent with the peer review process, the draft recovery strategy is posted on the relevant jurisdictions' public registries for public review. Comments from the peer review and the public (via the public registry) are considered by the recovery team and changes are made as the team deems appropriate. The final draft is then submitted to the Recovery Secretariat who forwards it to each of the responsible jurisdictions and authorized wildlife management boards for approval. Jurisdictions and boards have one month to indicate whether they will approve the draft or if further revisions are required. Recovery teams make changes as deemed necessary and re-submit the strategy for approval. Once the strategy has been approved by the jurisdiction and by RENEW it is

Figure 3.2: Approval Process for Recovery Strategies



posted on the RENEW web site. The same approval process applies to recovery action plans (Environment Canada 2001).[41] Note that the following statement appears on the inside cover of every published recovery plan:

> The National Recovery Plan for [species name] has been prepared by members of the [team name] Recovery Team, in consultation with others, to define recovery actions that are deemed necessary to protect and recover the species. It does not necessarily represent official positions of the agencies and/or views of individuals involved in the plan's formation. The goals, objectives, and recovery actions identified in the recovery document are subject to appropriations, priorities, and budgetary constraints of the participating jurisdictions and organizations, as well as to modifications resulting from changed objectives or new findings (cf: Goossen et al. 2002: 2).

Changes since the November 2001 Recovery Manual

The June 3, 2003 version of the Recovery Manual includes a number of changes to the approval process (National Recovery Working Group 2003). To begin with, the jurisdictions no longer "approve" recovery strategies but rather "endorse" them. It also appears that two versions of the recovery strategy may be produced: one that is endorsed by RENEW and (possibly) another that includes some additions from the responsible jurisdiction(s). Some of the specific changes that are evident include the following:

- An internal jurisdictional review precedes the peer review although it can also be undertaken concurrently (see Figure 3.2). Peer review proceeds as described in Figure 3.2 once the jurisdictions feel that the document is ready for peer review.
- Once the team has responded to the peer review comments, the final draft recovery strategy is submitted to the responsible jurisdictions for *endorsement* (currently described as "approval" in Figure 3.2). The endorsed recovery strategy is published as the RENEW recovery strategy representing the team's advice
- Jurisdictions may then append additional legal or policy requirements in an appendix to the recovery strategy as required (e.g., critical habitat identification). Jurisdictions will be responsible for publishing the documents they are releasing under their respective legislation (i.e., if they decide to produce a recovery strategy with an appendix).

[41] Under the new guidelines, the peer review process can be undertaken by the recovery team in cases where the action plan was produced by a RIG.

CHAPTER 4: PARTICIPATORY DECISION-MAKING

The central tenet in this research is that the design of decision-making processes has a bearing on the quality of the decision outcome. The purpose of this chapter is to describe the trend towards greater public involvement in natural resource management and to briefly consider some of the commonly cited benefits and drawbacks of this approach. The discussion will then focus specifically on the identification and explication of the elements of successful processes according to the literature. This discussion is of central importance to this thesis in that it outlines the criteria that form the basis of the evaluation of the recovery planning process.

As will be discussed briefly below, there are a wide-array of approaches to public participation, ranging in scope and complexity from public meetings to public advisory committees (see Figure 4.1). The differing processes involve differing levels of involvement and commitment by the participants and responsible authority (i.e., the organization that retains the decision-making power) such that they have differing requirements in terms of their design and the level of support they require. For example, pubic information seminars are generally far less resource intensive (e.g., time and money) than a formal round table process wherein participants are afforded decision-making authority. Similarly, more intensive processes generally also require other types of resources to be made available, including training for participants and facilitation of discussions. Discussions of benefits and drawbacks of participation as well as the identification of elements of success must therefore be considered within the context of the type of approach being considered. Therefore, these discussions will be preceded by a characterization of the recovery planning process based on my analysis of the features of the process prescribed by RENEW (as per the Recovery Manual).

4.1 Defining Public Participation

The decision-making literature has adopted a number of terms to characterize decision-making approaches whose aim is to move away from unilateral or "managerial style"[42] decision-making. The approach taken in this thesis is to use terms that represent broad concepts and approaches, relying on more precise terms when a more specific meaning is intended. I use the

[42] Defined as a decision-making approach wherein government administrators are entrusted to make decisions without seeking the input from other stakeholders (Beierle and Cayford 2002: 2). This approach to decision-making has also been referred to by Cormick et al. (1996: 9) as "decision-making by authorities."

terms "public involvement" and "public participation" interchangeably in a manner that is consistent with Renn et al.'s (1995: 2) definition: "forums for exchange that are organized for the purpose of facilitating communication between government citizens, stakeholders and interest groups, and businesses regarding a specific decision or problem." This definition is meant to include the broad array of mechanisms that together constitute public participation (e.g., public/town meetings, citizen surveys, advisory committees, formal negotiations). This will be discussed in more detail in the context of the characterization of the recovery planning process in section 4.3 below.

4.2 Emergence of Participatory Decision-Making

The transition from the managerial decision-making model towards participatory or collaborative processes in environmental planning and management is well documented in British Columbia (Owen 1998; Williams et al. 1998) as it is in Canada (Skogstad and Kopas 1992; Cormick et al. 1996) and the rest of the world (Thomas 1995). Referred to by Selin et al. (2000: 735) as the "new mantra among politicians, natural resource managers, and community activists," public participation is increasingly seen as an important component of the effective management of natural resources. Participatory approaches are also gaining prominence in the arena of international law with a number of conventions and agreements now specifically acknowledging the importance of public involvement in decision-making. The Aarhus Convention,[43] for example, states in its preamble that "improved access to information and public participation in decision-making enhances the quality and implementation of decisions" (Appelstrand 2002: 284). According to Appelstrand (2002), this convention is one of the most notable developments in international law with respect to public involvement.

The increased emphasis on participatory models of decision-making has resulted from a number of factors, among which some of the most frequently cited include:

- *A greater capacity for the general public to be involved in decision-making*[44]
  The public's increased access to information (i.e., via education, media coverage, and the Internet) has resulted in a greater awareness and knowledge of issues, and, consequently, an

[43] The United Nations Economic Commission for Europe Convention on Access to Information, Public Participation and Decision-Making and Access to Justice in Environmental Matters was adopted in Aarhus (Denmark) on 25 June 1998 (Appelstrand 2002).

[44] Some have argued that members of the public are often more knowledgeable than governments about certain issues as a result of their background and/or experience (cf: BCRTEE 1994).

increased interest in having a stronger role in decision-making (Filyk and Cote 1992). This is described by Thomas as being the "root cause" of the growing imperative to involve the public in decision-making (Thomas 1995: 5).

- *The emergence of public interest groups with the relevant expertise*

  Interest groups have increasingly argued that they not only have an interest, but also a legitimate *right*, to be involved in certain decision-making processes (Filyk and Cote 1992). Many have argued that public participation is a fundamental component of democracy (Appelstrand 2002).

- *A general lack of faith among stakeholders in decision-makers and major social institutions*

  The erosion of the public's faith in decision-makers and major social institutions has resulted from the lack of transparency in relation to how decisions have been (and are) made (BCRTEE 1994; Thomas 1995).[45]

- *The centralization of environmental programs at the national level combined with an increasing population*

  The centralization of programs and the growing population have often resulted in a decreased opportunity for effective public participation in decision-making, the consequence of which has been a widening gap between the public's *expectation* and its actual *ability* to influence decisions (Fiorino 1996). Others have argued that decision-making contexts are becoming more complex in that they suggest the need to consider and integrate a wide-array of values, interests, and other sources of information that traditional decision-making approaches do not readily accommodate (Cardinall and Day 1998). A number of authors have in fact suggested that the achievement of the societal goal of "sustainability" requires the adoption of participatory approaches to decision-making in order to ensure the diverse sets of values held by all of the interest groups in society can be integrated and the ultimate decisions can be acceptable to all (cf: VanderZwaag and Duncan 1992; Cormick et al. 1996; Renn et al. 1997; Owen 1998; Hemmati 2002). According to the BC Round Table on the Environment and Economy (1994: 5):

  > The nature of governance has been evolving in response to this pressure [from the public]. Our model of representative democracy – wherein elected officials make decisions based on the views of their respective electorate – is taking on more a *participatory* format wherein the electorate takes a more active role in advising their elected representatives.

[45] This observation is felt to be true of western democracies and is based on public opinion surveys (Fiorino 1996).

4.3 Recovery Planning as Public Participation

As noted in the introduction to this chapter, in order to consider the extent to which teams are pursuing "good" processes in preparing recovery strategies it is important to appreciate the type of process that is being prescribed by RENEW. Once this process is understood, greater insight can be gained into the way in which the process should be designed in order to achieve the best outcome. The focus of this section is therefore to characterize the decision-making process that recovery teams (and recovery implementation groups) are meant to follow on the basis of the guidelines provided in the Recovery Manual.[46] This will be undertaken by considering the range of approaches generally described as constituting public involvement (see Figure 4.1) and situating the process prescribed by RENEW within this range.

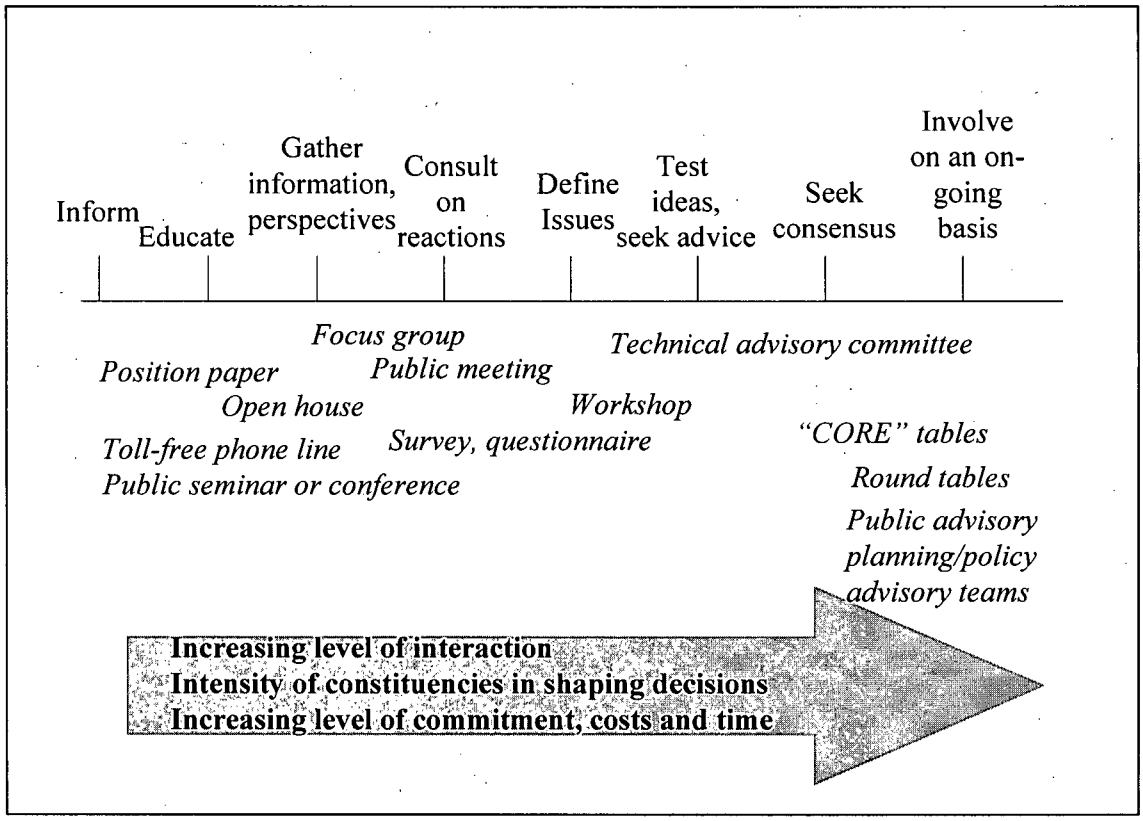
Several authors have described the range of approaches to public participation (Arnstein 1969, Thomas 1995, Buchy and Hoverman 2000, Beierle and Cayford 2002). The BC Round Table on the Environment and Economy (1994), for example, describes a "constituency involvement spectrum" wherein various approaches to public participation are presented along a continuum of increasing interaction among participants and an increasing role for the public in relation to shaping the decision (Figure 4.1). A number of specific examples are also included (e.g., position paper versus public advisory teams).

Within this range of approaches, the recovery planning process (as described by the Recovery Manual) is best characterized as falling within the more inclusive models of public involvement. In relation to Figure 4.1, the recovery planning process would best be placed among the approaches described on the right hand size of the diagram, falling somewhere between "seek consensus" and "involve on on-going basis." This assessment is based largely on the scope of the public's involvement in decision-making. As outlined in section 3.3, recovery team members have considerable opportunity to influence the scope and content of the recovery strategy. Team members are involved in the negotiations and ultimately have the power to approve (or disapprove) of the draft recovery strategy. The fact that the Recovery Manual suggests that decisions reached by the recovery team are to be made on the basis of consensus (or by a supra-majority if consensus is not possible) further underlines each team member's power to influence the decision. In cases where teams pursue consensus outcomes, decisions will only be reached if all team members are in agreement (see definition of consensus provided

[46] The discussion below will focus on recovery teams but many of the same conclusions are true of RIGs given that they operate on a similar basis to the teams.

in footnote #36). While decisions reached by recovery teams are presented to the decision-makers (i.e., the responsible jurisdictions and RENEW) as decision *advice* (i.e., teams do not have decision *making* authority),[47] both the team and implementation groups have an on-going role in the process in that they retain some authority to decide whether or not (and to what extent) to incorporate comments provided through the peer review process and at other stages in the approval process (see Chapter 3). In addition, both teams and RIGs tend to be involved during the implementation stages, thereby further extending the scope of their influence.

Figure 4.1: Constituency Involvement Spectrum (BCRTEE 1994)



4.4 Benefits and Drawbacks of Participatory Approaches

The literature on public participation describes both benefits and drawbacks of participatory approaches to decision-making. Some of the most frequently mentioned will be considered briefly below, with an emphasis on those processes that are most similar to that engaged in by recovery teams.

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[47] As outlined in section 3.7, the strategy that teams agree to (the draft recovery strategy) is subject to a peer review process and approvals by those with the final decision making authority (i.e., the responsible jurisdictions).

4.4.1 Benefits

The most frequently cited benefits of participatory approaches relate to the quality of the resulting decision and the extent to which it is likely to be successfully implemented (cf: Thomas 1995; Hemmati 2002). Allowing for the incorporation of a wider range of interests and values in the decision-making process is felt to result in decisions that are more balanced, better informed, and more stable (Owen 1998; Appelstrand 2002; Beierle 2002). This is often discussed in the context of the idea of an "organizational culture" that recognizes that individuals from the same organization tend to think and act in a similar manner over time (i.e., they adopt the "culture" of the organization) (Clark and Harvey 1991). Involving stakeholders outside the organization is seen as a means by which to break out of this somewhat narrow line of thinking, potentially leading to more innovative and creative solutions. Similarly, participatory process are also seen as providing an opportunity for groups that are typically un- or under-represented in formal governance structures to have their say in policy-making. As a result, the decisions generated are more likely to incorporate the interests of these groups and better address their needs (Hemmati 2002).

Involving the public in decision-making is also felt to increase the likelihood that the decision will be accepted and will be seen as legitimate by those affected by it (Fiorino 1996; Renn et al. 1997; Duram and Brown 1999; Appelstrand 2002). This is thought to minimize the extent to which decisions will be overturned or challenged in the future (e.g., in the courts or through other means) (Cardinall and Day1998)[48] and is also thought to improve the chances that the decision will be successfully implemented (Wondolleck and Yaffee 1994; Cardinall and Day 1998).

In addition to the benefits that relate to the quality and implementability of the decision, a number of broader benefits of participatory approaches are frequently cited. Proponents of participatory approaches suggest that they can lead to the development of new relationships and generally improve communication, cooperation, and collaboration among stakeholders that had not traditionally worked together (as well as contributing to relationship-building among those groups that had worked together in the past) (Williams et al. 1998; Duram and Brown 1999;

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[48] The authors also argue that developing decision-making capacities at the local level can reduce expenditures of time and money on legal disputes and other efforts to influence policy and management decisions.

Wondolleck and Yaffee 2000). Public participation is also seen to engender civic competence by "building democratic skills, overcoming feelings of powerlessness and alienation and contributing to the overall legitimacy of the political system" (Fiorino 1996: 199). In their 1993 document outlining the key principles of the Land and Resource Management Planning process, BC's Integrated Resource Management Planning Committee suggested that participatory planning contributes to community capacity building and provides a mechanism for the public to become more involved in resource management (British Columbia 1993).

The diversity of benefits associated with public participation is perhaps best captured in the following statement:

> There may be many ways to produce decisions of high technical quality, but there are relatively few methods that do so while also educating the public, eliciting public values, resolving conflict, and building trust in agencies, as many stakeholder processes do. That society can make some headway on these more 'political' features of decision making and not sacrifice quality is indeed a positive endorsement for engaging stakeholders in environmental decision making (Beierle 2002: 748).

4.4.2 Drawbacks

Despite the widely cited benefits of public participation, a number of disadvantages of these approaches have been documented. Among the most common criticisms is that public participation tends to be resource intensive both in terms of being time consuming and costly to implement (cf: Buchy and Hoverman 2000; Appelstrand 2002). This criticism is in fact generally accepted among critics and proponents alike. However, proponents generally suggest that if done properly, public participation can result in more stable and acceptable decisions such that the solutions are frequently *less* costly in the long-term (both in terms of time and money) (Kasperson 1986; Thomas 1995). Perhaps more significantly in relation to the decision outcome are arguments that these processes can result in increased conflict and ultimately lead to increased opposition to the resulting decision (Buchy and Hoverman 2000; Appelstrand 2002); outcomes which are clearly at odds with one of the key objectives of these approaches. Issues of representation and, in particular, issues related to the degree to which all members have an equal opportunity to influence the decision outcome, are other common concerns. Several authors suggest that the more vocal and organized groups (e.g., industrial interests) are often able to overshadow the viewpoints of the weaker and more disparate groups (e.g., environmental interests) (Hoberg 1993; Buchy and Hoverman 2000). Others question the ability of certain groups to effectively and legitimately represent the views of the broader community. For

example, Hoberg (1993) questions whether environmental groups can represent "environmental interests" given the fragmentation that can be typical of environmental organizations.

Many of the criticisms of public participation focus specifically on certain types of processes, among which perhaps the most commonly discussed are those that emphasize the achievement of a consensus outcome. These are briefly summarized below in light of the emphasis on the achievement of consensus among recovery team members (see section 3.3).

4.4.3 Benefits and Drawbacks of Consensus

Most of the benefits cited in relation to decision-processes whose goal is the attainment of consensus are consistent with the benefits described above in relation to public participation more broadly. Generally speaking, the benefits cited above are felt to be particularly pronounced in consensus-based approaches (e.g., decisions are balanced, better informed and stable). In contrast, a number of criticisms specific to consensus-based process are often discussed in the literature, a number of which are summarized below.

Perhaps the most serious criticisms of consensus-based processes are those suggesting that they do not in fact result in good decisions. Several authors claim that striving for consensus causes people to avoid discussing contentious issues or raising conflicting viewpoints on issues in order to avoid conflict and create a barrier to the achievement of consensus. As a result, it is felt that the ultimate decisions are of poorer quality and are less powerful than they could have been (Coglianese 1999; Poncelet 2001). This is referred to by some authors as the achievement of "premature consensus" in that the decision represents an agreement that is *acceptable*, but it does not represent the resolution of all of the relevant issues (Gregory et al. 2001: 429). As concluded by Coglianese (1999: 31): "Consensus-building shifts the ultimate goal away from reaching a quality decision and moves it toward reaching an agreeable one." Poncolet (2001) underlines the significance of this criticism by suggesting that the failure to engage in serious debate about environmental issues in society will result in a lack of innovation and, therefore, a promulgation of the status quo.

Criticisms of processes emphasizing the attainment of consensus also stem from questions of the legitimacy of the shift in power or control to the stakeholders involved. Given that the concept of consensus is one wherein all stakeholders have an equal role in determining the outcome, a number of authors suggest that the role of the responsible authority is effectively diluted in consensus-based processes (Poncelet 2001). Hoberg (1993: 322), for example, suggests that participatory processes lead to a blurring of state authority and private interests by

virtue of the fact that the state can be seen as a "mere stakeholder" in the process. Poncelet (2001: 14) comments that "governmental actors are relinquishing at least some control and authority over environmental governance issues to the major wielder of global capital [resulting in the] de-legitimization of states." By the same token, striving for consensus is seen as affording individual stakeholders an inappropriate amount of control over the decision outcome in that the need to achieve consensus effectively gives each stakeholder "veto power" of the decision (Poncelet 2001). According to Hoberg (1993: 322), consensus decision-rule favours those who benefit from the status quo because it is "easier to block action than to change the status quo."

4.5 Elements of Successful Processes

There is an ongoing debate in the literature in relation to the extent to which public participation is appropriate, particularly in relation to the extent to which it is more (or less) likely to lead to good decisions. In many cases, proponents of public participation suggest that the criticisms of these processes are the result of poorly planned or badly implemented public participation processes and are not inherent to the approaches themselves (Buchy and Hoverman 2000). As agencies move more and more towards involving the public in decision-making and devote more of their resources to participatory processes, there is a growing interest in ensuring that these processes generate high quality decisions that are acceptable to the people impacted by them. As a result, there is an emerging body of research that focuses on identifying the elements or characteristics of decision-making processes that appear to be conducive to the achievement of successful outcomes. As outlined in section 1.2, the focus of this research was to consider the extent to which a select set of recovery teams appeared to be reflecting these "elements of success" in the way in which they are proceeding with recovery planning (i.e., preparing recovery strategies).

As discussed in the introduction to this chapter, the achievement of success requires differing levels of resources and other forms of support depending on the type of process/mechanism that is used. Evaluating the extent to which recovery teams engaged in "good" processes (i.e., the second objective of my research) must therefore be based on criteria derived from decision-making processes of a similar nature. I therefore examined the literature pertaining to public participation processes wherein the public is afforded a significant role in influencing the decision outcome (see section 4.3). As a result, particular attention was paid to the following types of studies:

- Evaluations of the USESA, particularly the national review of recovery plans for species listed under the USESA undertaken by the Society for Conservation Biology in partnership with the USFWS and the National Center for Ecological Analysis and Synthesis in 1998;[49]
- Evaluations of the major land-use planning initiatives in British Columbia, including the Land and Resource Management Plans (LRMPs) and the Commission on Resources and Environment (CORE);
- Recommendations provided by overarching bodies including both the British Columbia and National Roundtables on the Environment and Economy; and
- Evaluations of participatory approaches that considered a number of different case studies and sought to identify common themes.

Within these studies, a number of issues influencing the success of public participation processes are considered, including relatively broad factors such as the socio-political climate or institutional context (cf: Clark and Harvey 1991; Clark 1997; Beierle and Cayford 2002; Wallace 2003). While these broader issues are important to consider, the discussion below (and the evaluation of the recovery planning process) focuses on features that deal with the operation and design of participatory processes. The discussion of the literature is presented according to four main themes which are reflected in the sections that follow; the same themes are used in the results/discussion chapter.

4.5.1 Stakeholder Involvement

One of the key challenges in designing multi-stakeholder teams is deciding who should (and who should not) be involved, as well as how and at what stage in the process to involve various stakeholders (Thomas 1995; Cormick et al. 1996; Susskind 1999). The centrality of this issue to participatory decision-making is not surprising given that the majority of the benefits cited in relation to participatory approaches focus on the benefits stemming from the diversity of interests involved. Involving the "right people" is seen as lending credibility to the process,

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[49] This project was a collaborative effort involving nineteen public and private universities in the United States. Overall, 325 researchers participated in the recovery plan review project. A large representative sample of recovery plans were systematically reviewed (181 plans representing 21% of all recovery plans approved by the USFWS by December 1998 were reviewed). The primary goals of the project were to: gather data about the content and characteristics of each sampled recovery plan; analyze data to identify important differences, patterns, and trends among plans; and, use results to inform recommendations for how recovery planning process could be improved upon (Hoekstra et al. 2002).

ensuring that the interests and insights of all relevant stakeholders are considered in the decision, and increasing the chances that the decision will be accepted by those who it affects and will be successfully implemented (particularly if implementation depends on the cooperation of other stakeholders) (Cormick et al. 1996). Evaluations of recovery planning processes in the U.S. and, to a lesser extent, Australia, have cited the following benefits of involving a wide array of stakeholders: greater success in implementation (particularly in cases where local government and non-government representatives were involved) (Lundie-Jenkins 1996), improved use of science in recovery plans (Gerber and Schultz 2001), and more frequent revisions of recovery plans (Lundie-Jenkins 1996).

While almost all evaluations of public participation consider the importance and complexity of deciding who should be involved in the decision-making process, none provides definitive "rules" around who should or should not be involved. However, a number of authors have articulated some of the key considerations that can guide agencies in making decisions around the issue of stakeholder involvement (cf: BCRTEE 1994; Thomas 1995; Pearce et al. 2003). Wondolleck and Yaffee (1994; 2000), for example, recommend that the following questions be considered by agencies or individuals contemplating participatory approaches:

- What information is needed and how is it going to be acquired (i.e., does the information required suggest that a certain individual or organization ought to be involved – and in what capacity)?
- Who will be affected and should therefore be involved?
- Whose actions are necessary to ensure effective decision making and implementation? Or, conversely, who can block these efforts and should therefore be involved?
- Who cares enough to devote time and energy to the effort?
- Who has formal responsibility or jurisdiction over the issue at stake?
- Who controls the resources?

Efforts to identify those with an interest in the issue and/or who will be affected by the decision outcome (i.e., those with a "stake" in the decision) are also referred to as "stakeholder analysis" (Brown et al. 2000, Pearce et al. 2003).

Generally speaking, the challenge in making decisions around who to involve seems to involve striking a balance between involving as many of the "relevant" individuals and organizations as is possible (where relevant is defined in relation to the considerations outlined above) while ensuring that the group's ability to engage in effective discussions and decision-making is not compromised. A number of authors have described some of the constraints on a

group's ability to engage in effective and efficient decision-making, among which the most commonly cited is the fact that larger groups tend to be more difficult to manage effectively. Cormick et al. (1996), for example, describe the logistical difficulties that can arise in groups involving large numbers of people (e.g., arranging meeting times and locations that are convenient for all group members). Similar concerns have been raised in relation to recovery planning in particular (Lundie-Jenkins 1996). According to Clark and Cragun (1994: 22):

> As the number of team members increases, so does the challenge to keep things coordinated. With larger numbers, it becomes much easier for things to 'slip by,' and team members find it easier to avoid responsibility by 'passing the buck.'

As more individuals are involved in the process and represent a greater diversity of interests, it also becomes more challenging to integrate all of these interests into a solution that is mutually acceptable. Many of the criticisms of consensus-based processes discussed above regarding the extent to which these processes do in fact result in the integration of all relevant interests and generate meaningful solutions reflect this view. An important consideration in this regard is the extent to which all participants do in fact have an equal ability and opportunity to engage in discussions and influence the decision outcome. Questions of equity among participants are of key importance in stakeholder involvement, particularly those involving consensus-based decision-making. Decisions that reflect only some of the groups' interests and views are not consistent with the intent of consensus-based approaches (Cormick et al. 1996). Issues around equality and power relationships among stakeholders are generally addressed by ensuring that the process is effectively managed and that adequate support is provided to participants. This is described in more detail in sections 4.5.2 and 4.5.3.

The extent to which individuals demonstrate an affinity for the decision-making and collaboration that are typical of multi-stakeholder approaches is also being increasingly recognized as an important consideration. Selin et al. (2000), for example, discuss the importance of the participants' open-mindedness, dedication, and their willingness to collaborate. Clark and Westrum (1989: 665) make a similar observation in the context of recovery planning processes, commenting that:

> Ideally, teams should consist of professionals with long formal training and experience. Members should be mature, well socialized, and dedicated to high standards of ethics and performance. Professionals should have extensive knowledge and the ability to work without supervision or extensive rules and regulations. Team members should be selected for their problem-solving ability and willingness to deal with the uncertain and ambiguous situations presented by

> recovery and re-introductions. ...The ability to operate effectively in a group context is not a universal trait and demands prior experience and skills.

Similarly, in their evaluation of almost 250 environmental decision-making processes, Beierle and Cayford (2002: 51) found that one of the most important predictors of the process' success[50] was the participants' motivation, which they define as the "optimism and ambition that carry the public forward in a public participation process." Participant motivation considers the skills and abilities that people bring to the public participation process, including the skills that help them cope with adversity and keep them motivated to see a process through to completion. It also recognizes the importance of the participants' views of the value of the process itself in terms of the extent to which they feel they will be able to influence the outcome (i.e., the decision). Beierle and Cayford (2002) found that processes wherein participants were highly motivated tended to achieve greater success as a result of the high level of enthusiasm participants displayed and their commitment to ensuring a successful outcome. In contrast, processes that received low motivational scores typically had attrition and poor attendance at meetings with groups tending to accomplish less than expected. Evaluations of the Land and Resource Management Planning (LRMP) processes in British Columbia further support the importance of participants' motivation. Duffy et al. (1998: 14), for example, commented that "the attitudes of the various players in the LRMP process determine the nature of their participation and will affect the long-term success of citizen participation in land use planning."

4.5.2 Process Design

The decision literature suggests that an important part of public participation is ensuring that the way in which the process will unfold is clear and has been designed in a collaborative manner with those involved in the process (Fiorino 1990; Renn et al. 1995; Owen 1998; Hemmati 2002). Renn et al. (1997), for example, describe the importance of the following:

- a clear mandate for the discourse participants (i.e., what is the topic of discussion and what is the expected product);
- a clear understanding of options and permissible outcomes of process;

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[50] Success is defined by Beierle and Cayford (2002) as the extent to which public participation efforts achieve a number of societal goals, including: incorporating public values into decisions, improving the substantive quality of decisions, resolving conflict among competing interests, building trust in institutions, and education and informing the public.

- a predefined timeline; and,
- a clear understanding of how the results of the process will be integrated into the regulatory agency's decision-making process.

In addition to the factors described by Renn et al. (1997) above, Cormick et al. (1996) and others (cf: Susskind et al. 1999) also recommend that teams establish rules of procedure or "behavioural rules"[51] as well as outlining clear policies around the resolution of conflict. Hemmati (2002) recommends formalizing this information into an agreement (e.g., a Memorandum of Understanding) that is signed by all participants. This is felt to be particularly important in decision-making processes that are likely to generate conflict among participants (Bentrup 2001, Hemmati 2002).

In addition to ensuring that participants are comfortable with the decision-making process, the establishment of the types of "ground rules" described above is seen as providing an opportunity for participants to get to know each other, to gain experience negotiating issues, and to begin to establish the working relationships that will be important as they get into more substantive issues (Cormick et al. 1996). Furthermore, it is generally recognized that establishing procedures to deal with conflict is easier when it is done prior to encountering these types of situations (Cormick et al. 1996). Having a comprehensive and effective procedural framework which provides realistic time lines, appropriate process rules, and clear fall-back mechanisms are all seen as influencing the likelihood of achieving success in public participation processes (Duffy et al. 1998, Penrose et al. 1998, Williams et al. 1998).

4.5.3 Participant Support

As introduced briefly above, an important component of public participation is ensuring that all participants have an equal opportunity to participate in the process and therefore have an equal opportunity to influence the decision outcome (Renn et al. 1997; Williams et al. 1998; Buchy and Hoverman 2000; Webler et al. 2001). This is characterized by Renn et al. (1997) as the need to ensure that each group has sufficient power to prohibit another group from taking

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[51] Behavioural rules include outlining what team members feel are appropriate (and/or inappropriate) ways in which to interact. Examples provided by (Susskind 1999) include: listen when someone else is speaking to encourage respect among all members; give others a chance to express their views; describe your own views, rather than the views of others; and, encourage discussion, not speeches; speak to the point, not the person.

unilateral action. Cormick et al. (1996) describe three main areas where participants typically have varying degrees of access to resources and are therefore differentially advantaged: financial resources, technical information and specialized expertise, negotiating skills and acumen, and other organizational resources. Lack of access to these resources can impede participation and ultimately favour certain parties in the process over others, resulting in a superficial or "false" consensus wherein the decision does not reflect the interests of all stakeholders involved (Duffy et al. 1998).

Several authors (cf: BCRTEE 1994; Cormick et al. 1996; Buchy and Hoverman 2000) provide a number of specific recommendations in relation to the type of support that should be provided,[52] focusing on ensuring that all participants have equal access to resources, information, and expertise. It is generally recognized that the extent to which this type of support is required varies in relation to the complexity of the decision at hand and the relative skill levels of the participants involved in the process (BCRTEE 1994).

Financial Support for Participants

Multi-stakeholder processes often involve individuals whose time and expenses (e.g., travel expenses) are paid for by an employer (e.g., government employees for whom participation is part of their job) as well as those who do not receive any form of compensation for their time and other expenses (i.e., individuals participating on a volunteer basis). In order to address this inequity, a number of authors recommend that the lead agency provide funding to reimburse direct meeting costs (e.g., travel expenses) as well as an honoraria to compensate participants for lost work time (BCRTEE 1994; Cormick et al. 1996; Buchy and Hoverman 2000).

Information/Knowledge

Equality among participants is also a factor of the participants' relative abilities to understand and make use of the information of relevance to the decision, and therefore contribute effectively to the discussion. This discussion is often presented in the context of the imbalance that can result from involving highly-trained representatives from industrial interests with access to considerable financial resources alongside community groups with little access to funding and

[52] It is generally acknowledged that the agency with primary responsibility for the process is responsible for ensuring the processes is sufficiently resourced (BCRTEE 1994).

no formal training in the areas of relevance to the decision-making process (Hoberg 1993). Some of the commonly cited recommendations in this regard include providing intervenor funding to hire individuals with the appropriate expertise, developing protocols for full information sharing, creating technical working groups, and providing a common information base (Cormick et al. 1996).

Training

The importance of ensuring that participants in multi-stakeholder processes have the requisite negotiation and consensus-building skills to participate effectively is also discussed in the literature (Thomas 1995, Susskind et al. 1999, Wondolleck and Yaffee 2000). Proponents of participatory approaches often discuss the importance of providing team members with training in negotiation and consensus-building in order to ensure that they posses the requisite skills to participate effectively in these decision-making contexts. Dorcey (1988) for example underlines the importance of providing training in negotiation to individuals involved in natural resource governance, suggesting that individuals tend to be poorly skilled in these areas. Cormick et al. (1996) similarly recommend that participants in participatory processes be provided with "how to" books for home study and suggests that lead agencies provide special training workshops for participants.

The importance of training has also been specifically discussed in the context of recovery planning. A number of authors that have considered the U.S. recovery planning experience have underlined the fact that the individuals that are typically involved in these processes (e.g., biologists, ecologists) are not always appropriately skilled in negotiation, conflict resolution, and consensus-building. Providing training in these areas is described as being of key importance to the recovery teams' success in particular (Clark and Westrum 1989; Westrum 1994; Wondolleck et al. 1994). Miller et al. (1994: 638) underline the importance of this type of training in stating: "...conservation biologists must develop the scientific capacity necessary to collect and evaluate technical information, but this must be combined with the skill to effectively inject that knowledge into the planning and implementation process."

The value placed on training in various aspects of decision-making is further underlined in the argument put forward by a number of authors regarding the need to incorporate this type of training in the formal academic training provided to resource management professionals (cf: Dorcey 1988; Miller et al. 1994). According to Dorcey (1988: 16), "University and college

students should be required to take courses covering not only substantive knowledge and analytical techniques but also negotiation principles and practice relevant to their chosen field."

4.5.4 Process Management

It is generally recognized that participatory processes need to be effectively managed in order for the various interests involved to engage in effective discussions and achieve success in reaching an agreement that represents the integration of the interests of all involved. Beierle and Cayford (2002), for example, note that a large part of the work in more inclusive models of public involvement centers around managing interactions among participants. They observed that seeking consensus is particularly challenging in that regard in that it requires opposing interests to come together to develop solutions that are acceptable to all. Among the factors related to the management of processes that have been found to influence the success of participatory processes are the effectiveness of the facilitation support and decisions around meeting logistics.

Facilitation Support

The presence of a qualified and neutral process manager (e.g., convenor, mediator, coordinator, facilitators) to guide discussions and ensure that all participants have an equal opportunity to contribute to the process is widely cited as important to ensuring the success of processes involving diverse interests (BCRTEE 1994, Cormick et al. 1996, Schuett et al. 2001). While the presence of a process manager is generally recognized as beneficial, the extent to which an independent facilitator is *required* varies to a large extent on the basis of the particular context. Most researchers agree that having an independent process expert (facilitator) is most appropriate when the issues are complex and process objectivity is of primary concern (BCRTEE 1994). On the other hand, a senior public servant may be appropriate in situations in which the subject matter is within her/his purview, the range of issues are fairly narrow, there is general agreement on values and facts involved, and the matter is basically one of finding the best solution (BCRTEE 1994).

> Groups of stakeholders can sometimes reach consensus on their own. But as the complexity of disputes and the numbers of parties involved increase, it becomes harder for agreement to happen without someone whose principal and exclusive interest is in seeing a fair and effective process take place (Cormick et al. 1996: 106).

Several authors of studies evaluating the USESA discussed the importance of having a neutral facilitator to chair the discussions. Having another organization with their own interests in the outcome acting in the capacity of chair was seen as problematic given that it afforded them an inappropriate level of influence over the process (Snyder and Snyder 2000). These authors focused in particular on the problems associated with team chairs from state or federal organizations given the limitations on their independence.

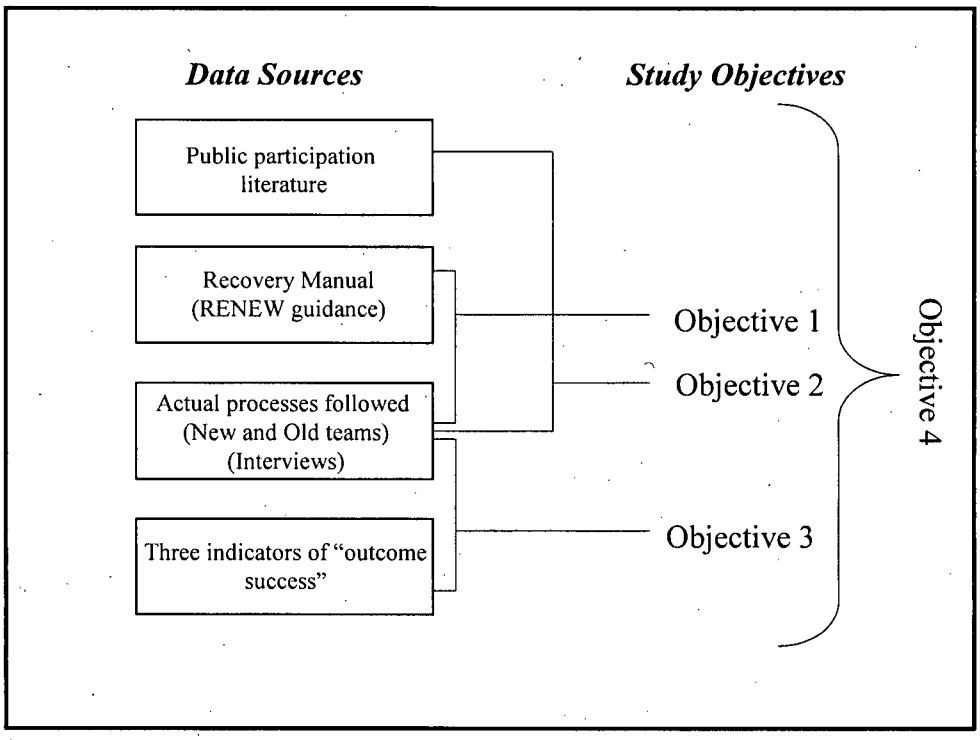
Fostering Equity Through Process Logistics

Several authors discuss the importance of ensuring that the logistical arrangements in relation to the process do not exclude certain parties from participating (Thomas 1995, Buchy and Hoverman 2000). Where and when meetings are held, how input is sought, and the timeframe allocated for the process can influence the extent to which certain parties are able to participate. It is generally recognized that particular care should be given to considering the needs of groups whose input is deemed particularly important or who have a greater likelihood of being impacted by the outcome. Thomas (1995), for example, suggests that consideration be given to providing childcare during meetings if the input of single parents is deemed to be important. Similarly, certain groups may require longer timeframes to secure approval to participate in the process and to consult with their members on decisions such that longer timeframes should be allowed for feedback in order to facilitate participation from these groups.

CHAPTER 5: METHODS

The key objectives of my research focused on identifying the strengths and weaknesses of the recovery planning process through an evaluation of several existing recovery teams in British Columbia. The emphasis was on considering the extent to which teams incorporated aspects of decision-making processes that have been described in the public participation literature as facilitating better outcomes (see section 4.5). Furthermore, I considered the extent to which teams were successful in developing a "good" recovery strategy, defined as one that met the following three criteria: (a) team members were satisfied with it; (b) it required few substantive revisions as a result of the peer review process; and, (c) it was approved by the responsible jurisdictions and RENEW. Consideration was also given to the extent to which recovery teams found the guidelines provided by RENEW to be useful. The relationship between my research objectives and methods (or sources of information) is illustrated in Figure 5.1. This is described in addition detail in section 5.4.

Figure 5.1: Relationship Between the Key Sources of Data and the Research Objectives



The information for this analysis was derived primarily from interviews with members of a select group of recovery teams in British Columbia. Interviews were favoured over less in-depth approaches that allowed for more broad-based and representative sampling (e.g., surveys)

because a full understanding of the team members' opinions on the issues of interest required an iterative approach and a flexibility that a survey or other method would not provide. The approach also allowed interviewees to provide illustrative examples of their experiences and raise issues that the interviewer would not have anticipated (Silverman 1993). However, the choice to conduct in-depth interviews limited the number of teams and individual team members that could be considered in the analysis. As a result, only nine recovery teams were considered in detail (six New Teams and three Old Teams – the differences between these teams and the approaches to the interviews is outlined below). Given this small sample size (nine of approximately twenty-three teams that were active at the time the teams were selected),[53] I was unable to consider my results as being representative of the broader array of recovery teams in British Columbia or in Canada.

5.1 Selection of Recovery Teams

Pilot interviews and discussions with individuals involved in the recovery planning process revealed that not all of the objectives outlined in my study could be addressed by considering the three "case studies" alone (i.e., studies of teams with completed or nearly-completed recovery strategies in place). In particular, it was evident that teams that had been involved in recovery planning for several years had a lesser degree of recall of various aspects of the process (e.g., "design" of the decision-making process, or how the approval process was undertaken) and, more significantly, did not have access to the current version (or in most cases any version) of the Recovery Operations Manual for most of their history. Therefore, I considered two different "groups" of teams in order to gain insight into: (a) the Recovery Manual and its prescribed process; and, (b) aspects related to the later stages of the recovery planning process (e.g., approval process). In order to differentiate between these two "groups" of teams, I use the short-hand "New Teams" and "Old Teams" throughout this thesis (the terms are capitalized throughout to differentiate the terms from more general references to new or old teams). The key differences between these groups are outlined in more detail below.

The selection of teams on which to base my analysis as well as the choice of particular team members to interview was purposive in that recovery teams (and team members in particular) were specifically chosen on the basis of their experience with the recovery planning

[53] See Appendix IV for a list of recovery teams that are currently active in British Columbia. The list includes more teams than were active at the time the teams for this study were selected.

process as well as other specific characteristics (see below for more detail on the specific criteria used for selecting teams and team members) (Morse and Richards 2002).

5.1.1 New Teams

"New Teams" consisted of recovery teams that had access to the November 2001 version of the Recovery Operations Manual for all or most of their history (i.e., teams formed at about the time the Recovery Operations Manual was released or thereafter). As described above, these teams were specifically selected on this basis in order to solicit feedback about the Recovery Manual. However, because these teams were relatively new to the recovery planning process, most had not made much progress in relation to the development of recovery strategies and recovery action plans. As a result, New Teams could generally not be expected to provide feedback on anything beyond the early stages of the recovery planning process (i.e., the utility of the Recovery Manual and the way in which they went about designing their particular team/process). Similarly, the "success" of New Teams could not be ascertained given that they had generally not progressed to that stage of the process (i.e., had not yet produced a recovery strategy). However, an added benefit of interviewing New Teams was that it provided insight into how the recovery planning process may be evolving over time, particularly in response to the emerging pressures stemming from the passage of the *Species at Risk Act* and the revisions to the guidelines provided to recovery teams by RENEW (as described in Chapter 3).

The selection of New Teams to consider in this analysis was to a large extent opportunistic. Employees of federal and provincial agencies as well as chairs of Old Teams recommended a number of team chairs that would be in a position to provide information of relevance to this analysis, including a number of teams that were newly forming (e.g., September 2002 and thereafter). Nine New Teams were considered in this analysis (see section 5.3.1).

5.1.2 Old Teams

This second group of recovery teams was analyzed in more detail in that both team chairs and select team members were interviewed. Old Teams tended to be more established in that they had been in place for several years and had consequently made more progress toward the development of recovery strategies and/or recovery action plans. Three Old Teams were selected for this study (see section 5.3.2). The number of Old Teams to consider in the analysis (as well as the number of interviewees from each team to consider) reflected a balance between

considering a relatively diverse set of teams, while ensuring to keep the amount of "data" to be considered in the analysis at a scale that was realistic and manageable for a thesis project.

Old Teams were chosen on the basis of the degree to which they met the following criteria (presented in order of declining importance):

That the team was working on a species that was designated as threatened or endangered

Given the relationship between species' designations and the priority and urgency in relation to preparing a recovery strategy (see section 3.2), only those teams working on threatened or endangered species were considered.

That the team had made some progress toward the development of a recovery strategy

It was important that recovery teams had at least a draft recovery strategy in place since the evaluation of "outcome success" for this study revolved around the draft recovery strategy (see section 1.2).

That team members resided in areas easily accessible to the researcher

Face-to-face interviews were preferred over telephone interviews[54] as they were more conducive to the development of a positive rapport between the interviewer and interviewee resulting in a more free-flowing discussion. Priority was therefore given to teams whose members were largely concentrated in the Lower Mainland and on Vancouver Island.

That team members (particularly team chairs) expressed an interest in participating in the research

Given the reliance on feedback from recovery team members, their interest and willingness to participate was crucial in the choice of teams. In particular, the support and involvement of the team chair was critical given her/his integral role in the team. Furthermore, the participation of the chair was critical in providing me with recommendations regarding who from the team to interview (see section 5.2.2).

5.2 Selection of Interviewees

5.2.1 New Teams

Only team chairs were interviewed given that they were the primary "users" of the Recovery Manual and were also in the best position to provide information on the process. While a diverse set of viewpoints can be valuable in interview-based research, the questions

[54] Note that some interviews were conducted via telephone at the request of the interviewee.

focused on describing the process as compared to soliciting opinions on the process, thereby justifying the exclusive focus on team chairs as the interviewees (Leach 2002).

5.2.2 Old Teams

Once teams were selected, the team chair was contacted to request an interview.[55] The team chair was always the first person to be interviewed as they were the best source of information regarding the team's history, its formation, and its current status (e.g., when the team was formed, by whom it was formed, whether or not the team had an approved recovery strategy in place).

Interviews were subsequently conducted with four or five other team members recommended by the chairs. Chairs were asked to recommend team members that had participated on the recovery team for a significant length of time as longer-term team members were more experienced and could therefore respond to questions more comprehensively and with greater insight. Team chairs were also asked to consider the range of interests represented by the team members they recommended with a view to selecting a group that was representative of the different interests (i.e., stakeholders) on the team. Where relevant, chairs were asked to put forth names of recovery team members that had also participated in or chaired recovery implementation groups (RIGs) in order to gain insight into how RIGs operated or made decisions.

The selection of team members to interview reflects a "stratified purposeful" design in that the emphasis was on identifying particular stakeholder groups within teams to interview (Miles and Huberman 1994). Interviewing a representative group of recovery team members was felt to important in this case (as compared to New Teams) given that the information solicited was of a more subjective as compared to "factual" nature (e.g., soliciting team members' views on situations/events) (Leach 2002). Leach (2002) underlines the importance of soliciting a diversity of viewpoints in observing that chairs or coordinators of participatory processes tend to have more trust in other stakeholders, have stronger environmental values, and view the team's accomplishment in a more positive light in comparison to team members. As a result, the chairs' views may not be representative of those of the broader team.

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[55] Names and contact information for all recovery team chairs is provided by RENEW and is available on the web at http://www.speciesatrisk.gc.ca/species/efforts/TeamChairs_e.cfm

Given Leach's comments on the potential bias evident in team chairs, it warrants noting that a potential drawback of having team chairs recommend team members is that they may have provided me only with the names of individuals they felt would portray the process in a positive light. Although this was something I could have verified by interviewing team members not recommended by the chair, I did not feel this scenario to be likely and did not warrant the time and effort required for this type of independent evaluation.

5.3 Description of Selected Recovery Teams and Interviewees

5.3.1 New Teams

Four individuals who had chaired one or more recovery teams that met the criteria outlined above for New Teams were interviewed. Three of the four chairs were from the provincial government while the other was a representative of a federal department. A total of six recovery teams were represented in the interviews, all of which were single-species teams. The Sharp-tailed Snake and White-headed Woodpecker Teams are both considered Recovery Implementation Groups within broader ecosystem or landscape-level teams although both were preparing recovery strategies (i.e., Garry Oak Ecosystem Recovery Team and the South Okanagan-Similkameen Recovery Team, respectively) (see Appendix IV). Information on other recovery teams gleaned through discussions with team chairs was also included in the analysis where appropriate (i.e., chairs that had participated on recovery teams not included in this analysis).

Interviews lasted between one and one-and-a-half hours and were conducted in person with the exception of one telephone interview. Summary information on the recovery teams is included in Table 5.1.

5.3.2 Old Teams

The three Old Teams chosen for this study were the Garry Oak Ecosystem Recovery Team (GOERT), the Oregon Spotted Frog Recovery Team (ORFRT), and the Vancouver Island Marmot Recovery Team (VIMRT) (summary information on the three Old Teams is found in Appendix VIII). Four or five members of each team were interviewed (including the chair(s)) such that a total of 14 recovery team members were interviewed (4 chairs/co-chairs and 10 team members) (see Table 5.2). Of all team members invited to participate in an interview only one

person declined.[56] The composite of interviewees (i.e., interviewees from all Old Teams combined) is representative of the diversity of organizations/individuals that participated on the Old Teams (see Figure 6.1) including federal and provincial governments, First Nations members, industry groups, members with academic affiliations, consultants, environmental non-government organizations (ENGOs), and local community groups. The major gap in representation in terms of the interviewees were the local governments (see footnote #56). Some of the recovery team members interviewed had participated in other recovery teams and provided feedback on those teams, particularly by way of comparing their experiences on the different teams. In cases where it was deemed appropriate, some of this feedback was also included in the analysis.

Table 5.1: Summary Information for New Teams

Recovery Team	# Team members	Team in place since	Species COSEWIC Status	Affiliation of Chair	RIGs (Yes/No)	Draft Recovery Strategy Prepared
Spotted Owl	10	Sept-02	Endangered	Provincial government	Yes (planned)	No
Tall Bugbane	13	Dec-02	Endangered	Provincial government	No	No
Pacific Giant Salamander	12	Dec-02	Threatened	Provincial government	No	No
Pacific Water Shrew	10	Dec-02	Threatened	Provincial government	No	No
Sharp-Tailed Snake	8	April-01	Endangered	Provincial government	No	Draft almost completed
White-headed woodpecker	10	June-01	Endangered	Federal government	No	Draft currently in the approval process

[56] The person who declined was a local government official who stated that s/he was not interested in participating because s/he did not have sufficient time and felt that they did not have sufficient experience with the process to provide meaningful feedback.

Table 5.2: Summary Information on Interviewees from Old Teams

Agency	RIG Member	Date Joined Team	Involved with other RTs
Garry Oak Ecosystem Recovery Team			
Federal Government*	Yes	1999	Yes (GOERT first one)
Provincial Government	Yes	2001	Yes (GOERT first one)
"Corporate" environmental non-government organization[57]	Yes	2000	No
Consultant	Yes	1999	No
Local environmental Non-government organization[58]	Yes	1999	No
Oregon Spotted Frog Recovery Team			
Consultant*	N/A	1999	Yes
Academic*	N/A	1999	Yes (OSFRT first one)
Federal	N/A	1999	No
Provincial government	N/A	1999	Yes
First Nation	N/A	1999	No
Vancouver Island Marmot Recovery Team			
Provincial Government*	N/A	1988	No
Academia	N/A	1999	Yes
Industry	N/A	1998	Yes
Local environmental Non-government organization	N/A	1990	No

*Denotes that the individual was the chair (or co-chair) of the team at the time the interview was conducted.

5.4 Development of Interview Questions

Interview questions were a combination of specific questions (i.e., on the extent to which teams incorporated particular characteristics/elements of decision making processes that the literature suggests lead to successful outcomes) and more open-ended questions (what worked/what didn't work). The interview format was semi-structured in that I did have a pre-defined set of questions (see Appendices V, VI, and VII) but I also followed-up on issues raised by the interviewee. I chose to depart from a more structured interview format in order to provide the interviewee with an opportunity to discuss aspects of the recovery planning process that I had

[57] The term "corporate" environmental non-government organization (ENGO) is used here to describe ENGOs that are national or international in scope and have budgets and paid staff (e.g., the World Wildlife Fund, Ducks Unlimited). In contrast, the term "local ENGOs" is used here to refer to ENGOs whose efforts tend to be regional or local in scope, whose membership is generally volunteer-based, and who have little or no base-funding.

[58] See footnote #57.

not considered in the design of the interview questions. This approach offered the interviewee with the opportunity to discuss a broader array of strengths and weaknesses as compared to focusing only on those previously identified in the literature or that I was able to envision prior to the interviews (Silverman 1993).

Additional detail in relation to the relationship between my research objectives and the interview questions follows below (see also Figure 5.1). As alluded to above, different questions were posed of New and Old Teams in recognition of the differences in the extent of their experience with the recovery planning process. In particular, most of the New Teams had not progressed as far as having a recovery strategy in place (i.e., "outcome success" could not be assessed for these teams). Furthermore, since only team chairs were interviewed, assessing other team members' satisfaction with the recovery strategy was not possible. Interviews with chairs of New Teams focused on deriving feedback of relevance to research objectives 1 and 2.

Objective 1: Determine the extent to which a select set of recovery teams followed the Recovery Operations Manual and found it useful

The degree to which teams followed the Recovery Manual and found it useful was gauged through questions to chairs of New Teams as well as chairs and team members from Old Teams. New Teams were asked about the degree to which they were finding the Recovery Manual useful and how they were implementing the guidelines. Interviews with members of Old Teams focused on soliciting feedback in relation to the type of guidance that they would have wanted.

Objective 2: Characterize and evaluate the decision-making processes recovery teams followed in terms of the degree to which they incorporated aspects of decision-making approaches that have been described in the literature as facilitating better outcomes

Team chairs and team members were asked a number of questions about various aspects of the recovery planning process. Interview questions focused on determining the extent to which teams had incorporated elements of decision-making processes that several authors have argued facilitate better outcomes (see section 4.5). The key themes considered in the interviews are summarized in Table 5.3.

Table 5.3: Evaluation Criteria for Recovery Teams' Decision-Making Process[59]

Criteria	Description
Process Design	
Clarity of process to participants	The extent to which the team had: a clear mandate which was scoped appropriately such that the process was manageable (including appropriate timelines); clear roles, responsibilities, and authority for all participants.
Participatory design	The extent to which participants were involved in tailoring the process in order to accommodate all interests.
Comprehensive and effective procedural framework	The extent to which teams had developed a comprehensive procedural framework that clearly delineated: a participant code of conduct; organization, roles, and authority of subgroups; how teams would reach agreement (e.g., consensus); and, a dispute settlement process.
Support for Process	
Resources in support of participants	The extent to which all team members had sufficient and timely funding, training and information to participate.
Process management	The extent to which process managers – convenors, coordinators, facilitators, mediators, administrators – were committed, neutral, skilled in process management and communication, knowledgeable, and available for consultation with participants. The appropriateness of the timing and location of meetings to participants was also considered as well as the extent to which teams had sufficient funds to hire consultants or undertake other tasks that they felt were important.
Stakeholder Involvement	
Inclusive representation of interests	The extent to which all "relevant" parties were invited to participate. Relevance was gauged by comparing the decisions teams made regarding team membership against the guidelines provided in the literature on stakeholder involvement. Feedback from interviews regarding their views on the team's composition was also considered.
Effective and equitable representation of interests	The extent to which people appeared willing and able to participate in good faith and contribute to the process. Issues around power imbalances were also considered (the extent to which all stakeholders had an equal opportunity to influence the decision outcome).

Objective 3: Evaluate each recovery team's success in developing a "good" recovery strategy, defined as a strategy that meets the following criteria:

(a) team members were satisfied with it

Team members and team chairs were asked about their satisfaction with the recovery strategy, including whether or not they felt that the Strategy met the needs of the species/ecosystem. Satisfaction was also inferred through questions regarding whether or not the

[59] This framework is based on those provided by Duffy et al. (1998) and Penrose et al. (1998) as well as the decision-making literature described in Chapter 4.

team came to consensus on the strategy (i.e., failure to come to a consensus on the recovery strategy would have been interpreted as indicating some level of dissatisfaction with the strategy by some team members).

(b) it required few substantive revisions as a result of the peer review process (from which it can be inferred that the team had done an adequate job); and,

Team chairs and team members were asked about their recollection of the "extensiveness" and "character" of the peer review comments. The emphasis was on appreciating the extent to which peer review comments required the team to make significant changes to the recovery strategy, particularly where the changes were of a substantive nature (as compared to changes to formatting or organization of the document). The need to make significant changes to the content of the recovery strategy as a result of the peer review process was used as an indicator of the quality of the initial strategy.

(c) it was approved by the responsible jurisdictions and RENEW (from which it can be inferred that it met the needs of the species and fulfilled the requirements of the Species at Risk Act).

The strategy's approval by the responsible jurisdiction and RENEW was seen as a confirmation that the recovery strategy was perceived to be appropriate for the recovery of the species (i.e., fulfills the intent of SARA).

Objective 4: Provide recommendations for ways in which the decision-making process engaged in by recovery teams in Canada could be improved in order to make it more efficient and/or effective.

The recommendations were based on a synthesis and analysis of the information gleaned through the interviews as well as the findings from the relevant literature.

5.5 Analysis of Interviews

Interviews typically lasted an hour and a half (range: 45 minutes to 2 hours) and were generally conducted in person with the exception of three interviewees whose schedules or residence (e.g., Ottawa) did not permit the interviewee and interviewer to meet in person. In these cases, interviews were conducted over the telephone. Interviews were conducted between November 2002 and February 2003.

Almost all interviews were tape recorded (with the written permission of the interviewee)[60] for the purposes of verifying responses and filling in details that the interviewer missed in taking notes. Interviews were not transcribed in full but a relatively detailed summary of each interview was prepared. Summation of the tape-recorded conversations was completed within 48 hours (and generally within 24 hours) of completion of the interview. Two interviews conducted by telephone were not taped but extensive notes were taken throughout the conversation and a summary was prepared immediately afterward so as to minimize the extent to which relevant information could be lost or misrepresented (Miles and Huberman 1994).

In order to facilitate the analysis of each interviewee's comments and, more importantly, the composite of responses provided by all interviewees, each interviewee's summarized comments were organized according to a consistent set of categories (often referred to as "codes") (Miles and Huberman 1994). This process is often referred to as "structuring" the interview responses and is generally the first step in the analysis of responses (Kvale 1996). The categories I used reflected the specific questions or themes of relevance to my research objectives such that they were consistent with the themes used in organizing the questions posed during the interview (e.g., stakeholder involvement, funding support, process design) (see Appendices V, VI and VII). In some cases novel categories were created reflecting issues raised by interviewees that were not the specific focus of interview questions (e.g., interpersonal dynamics).

Analysis of interview responses followed the approach described by Kvale (1996) as "ad hoc meaning generation" which he characterizes as the most frequent form of interview analysis. This approach involves the use of a number of different methods of meaning generation[61] including reading through interviews to get an overall impression of the feedback, going back to specific passages, quantifying certain aspects (e.g., counting the number of individuals or teams that made a particular statement or described a particular phenomena), and making deeper

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[60] All interviewees were given a "subject consent form" in advance of the interview (usually the day before) in accordance with the requirements of UBC's Behavioural Research Ethics Board. Prior to commencing the interview, interviewees were asked if they had any questions or concerns with the consent form and were then asked to sign it. None of the interviewees had any concerns with having the interview recorded although one subject asked to see a copy of the summary of the conversation (which was provided).

[61] Meaning generation is a term used by Kvale to describe the process of developing the meanings of the interviews. He describes this process as involving appreciating the subjects' understanding on the phenomena as well as providing new perspectives from the researcher (Kvale 1996: 190).

interpretations of certain statements (Kvale 1996). All of these techniques were reflected in my analysis of interviews.

5.5.1 Limitations of this Analytical Approach

While this approach to analyzing the interviews was felt to represent a reliable means by which to structure my analysis, some weaknesses of the approach can be identified. A key challenge in organizing responses according to categories was resolving some of the redundancy of themes that emerged (deciding whether a comment belonged in one category over another). Similarly, care had to be taken not to lose sight of the "connections" between some of the themes given that an accurate appreciation of comments made at one stage of the interview often required several other comments to be considered. These challenges were resolved by assigning comments to more than one category if appropriate and including footnote commentary in instances where important linkages or other considerations were important to the accurate interpretation of comments. Nonetheless, some overlap and cross-referencing was unavoidable and is reflected in the text of the results/discussion (Chapter 6).

A related consideration was the possibility that I would inappropriately impose my own themes and categories on the comments made by interviewees (e.g., attribute a comment to a certain theme when the individual would not have meant it to be interpreted that way). This concern was largely minimized by virtue of the fact that I had organized my interview questions along certain themes, an approach to coding recommended by Miles and Huberman (1994) which they describe as the use of a "start list" of codes (as compared to the themes emerging after the interviews had been completed and responses being coded within these emergent themes). In cases where new themes emerged from the research (i.e., comments made that were not specifically in response to one of my questions), careful attention was paid to honouring the context within which comments were made (see above) in order to minimize the extent to which comments would be inappropriately coded. Interview summaries and, in some cases, the tape of the interview were used to verify the context of the comment when necessary.

The other consideration in analyzing interview responses is the possibility that interviewees may not always have accurately portrayed their experience, either as a result of intentional or unintentional omissions or misrepresentations on the part of the interviewee. Interviewees may have deliberately misrepresented certain aspects of their experience in order to protect their own interests (e.g., characterizing the recovery plan as scientifically robust in order not to jeopardize potential funding), or they may have taken the opportunity to negatively impact

somebody else (e.g., making negative comments about a team member with whom they have a personality conflict). Interviewees' recollection of events may also have been inaccurate or incomplete. The risk of incorporating these types of errors into the analysis was minimized by cross-referencing responses with those of other interviewees and looking for inconsistencies. In cases where an interviewee's response was felt to be inaccurate or in any way self-serving or mean-spirited, the response was not considered in the analysis.

A final consideration in analyzing interview responses related to interpreting interviewee's responses to questions wherein they were asked to provide their views on the impacts of a change in the process (e.g., impact of having provided training). While interviewees can provide their opinions on these topics, it was important to consider the fact that it may have been difficult for interviewees to provide well-informed responses on issues or situations that they had not themselves experienced. As a result, their views may not be based on a realistic appreciation for the potential impact(s) of changes to the process (e.g., the impact of having had training in consensus-building). The potential for these sources of error would be less significant with team members who had participated in a number of recovery teams and/or multi-stakeholder processes given that this experience would have provided them with a richer pool of experience upon which to draw.

5.6 Interviewee Confidentiality

In accordance with the requirements of the university's Behavioural Research Ethics Board, interviewees were assured that appropriate steps would be taken to ensure their confidentiality. Interviewees' names were kept confidential and their affiliation was generally not provided in this thesis apart from instances where a linkage could not be made between a particular individual and specific comments (e.g., Tables 4.1 and 4.2). Recovery team membership lists which include the member's affiliation are not kept confidential (they are available in published recovery strategies as well as on web sites put together by teams) such that individuals can often be identified on the basis of their affiliation.[62] Particular care was given to protecting interviewees' identities in cases where they made negative comments about the process or particular team members in order to ensure that the results of this research did not negatively impact on the team's future efforts. In the rare cases in which it was possible that the interviewee's anonymity could be compromised, the interviewee was contacted to ensure that

[62] This is particularly true of teams that have only one member of a particular affiliation.

they were comfortable with the characterization of their comments and the fact that the comments could be linked back to them. Although some direct quotes are provided in the results section (i.e., Chapter 6), comments were not attributed to a particular individual or affiliation in order to protect their anonymity. Similarly, interview summaries are not included in the thesis aside from the summary material presented in the results/discussion chapter (Chapter 6).

5.7 Other Sources of Information

Although the bulk of the information for this research was derived from the sources described above, additional information was derived from the following sources when available:

- Minutes of recovery team meetings
- Terms of reference for recovery teams and RIGs including the roles and responsibilities of chairs and coordinators and other relevant policy documents
- Web sites created for some of the recovery teams
- Recovery strategies/Recovery action plans
- Peer review comments

In cases where these sources of information were used in the analysis they were specifically cited so as to distinguish these sources of information from the information gleaned through the interview process.

CHAPTER 6: RESULTS & DISCUSSION

The purpose of this chapter is to present and discuss the results of the research. The discussion is based largely on comments made by interviewees (often referred to as "team members" or "chairs" in the discussion) as well as my analysis of these comments. Findings in the relevant literature are also discussed and are compared against the findings from this research as appropriate. A series of recommendations based on the feedback provided during interviews, my analysis of this feedback, and insight provided in the relevant literature are also included at the end of each thematic section (e.g., section 6.1). With the exception of section 6.1, the results and discussion presented below are organized according to the same major themes described in Chapter 4, section 4.5: process design, participant support, process management, and stakeholder involvement.

6.1 Evaluation of the Recovery Manual

The first objective of this research was to assess the usefulness of the November 2001 version of the RENEW Recovery Operations Manual to teams (hereinafter referred to as the Recovery Manual, or the Manual). The assessment was based in large part on the views of team chairs/co-chairs (Old and New Teams; n=8) and team members from Old Teams that had experience using and applying the Manual (n=10) (see Chapter 5, section 5.4). To that end, interview questions focused on determining:

- whether people were familiar with and were using the Recovery Manual;
- whether they found the guidelines provided (including templates) useful; and,
- whether there were other issues that needed to be addressed in the Recovery Manual.

It should be noted that other sources of information were available to team members in relation to the recovery planning process. To begin with, most teams received a presentation from a provincial or federal employee when their team was initiated that described the recovery planning process and the relevant policy context. Some of the provincial and federal employees involved with recovery teams (usually via team membership) also provided teams with updates on developments in the broader policy context (i.e., developments with the federal species at risk legislation or RENEW policies). Nonetheless, I focused on the Recovery Manual as a source of guidance to teams because it was the most comprehensive source of information (all aspects of the recovery planning process are described therein) and it was a key source of guidance for team chairs.

6.1.1 Familiarity with the Recovery Manual

Team Chairs

All four of the chairs interviewed from New Teams were familiar with the Recovery Manual in that they had seen a copy of it and saw it as a key source of guidance (e.g., providing direction in relation to creating recovery teams and implementation groups and how to go about preparing recovery strategies and action plans). However, chairs were not always familiar with the details of the Recovery Manual in that they had either only read certain sections (i.e., only those sections of relevance to the stage they were at in the recovery planning process) or had not read the most recent drafts (see section 3.1). In cases where consultants had been hired to write recovery strategies (see section 6.4.4), they had been given explicit instructions to follow the Recovery Manual. As a result, some chairs may not have felt as great an urgency to read the Manual in detail. Interviewee responses also suggested that people recognized that the Recovery Manual was a draft document subject to relatively frequent change such that they felt it was not worth spending much time reading it. Chairs of New Teams all commented that the Recovery Manual was very lengthy making it difficult to find the time to read (particularly given that it changed so frequently).

Chairs/co-chairs of Old Teams (n=4) were also familiar with the Recovery Manual although none had access to it at the time their team was formed. Nonetheless, all of these chairs had read the Recovery Manual, primarily in order to ensure that the approach adopted by their team was relatively consistent with the Manual (e.g., consistency of the recovery strategy with the templates provided). Chairs were unanimous in commenting that having something like the Recovery Manual would have been valuable to them as they had been frustrated by the lack guidance they were provided with in the past. Despite seeing the Recovery Manual as a valuable contribution, Old Team chairs echoed the sentiments of New Team chairs in that they felt that the Recovery Manual was lengthy and was revised so frequently that its value was reduced.

Team Members

While all but one of the ten recovery team members interviewed (i.e., team members from Old Teams) knew of the Recovery Manual, only two interviewees had read it in detail.[63] Most team members felt that the Recovery Manual was primarily intended for team chairs, with one team member commenting: "for the rest of us, it is just one more thing we haven't gotten around to reading." Team members echoed the comments made by team chairs in relation to the document's length and draft status.

One team member commented that having something like the Recovery Manual would have been very useful to another[64] recovery team that s/he had been involved with (a team formed prior to the release of the Manual). This team had experienced conflict at the outset due in large part (according to the interviewee) to a lack of clarity around the team's purpose and key goals. The interviewee felt that having something like the Recovery Manual that articulated recovery teams' key goals and objectives would have been of great benefit.

Although chairs of New Teams said they had made the Recovery Manual available to team members, most were skeptical that team members would have read it in detail (if at all). This was felt to be particularly true of those team members participating on a volunteer basis who would not likely have had the time or inclination to read it. While the extent to which members of the New Teams had in fact read the Manual could not be determined,[65] the chairs' assumptions were consistent with the responses provided by members of Old Teams (see above).

Anecdotal information from a member of a recovery team not included in this research (i.e., not one of the Old or New teams) suggested that some teams are not providing copies of the Recovery Manual to team members. Given that the Recovery Manual is not otherwise accessible to team members (or others with an interest in the recovery planning process), the failure of team chairs to distribute copies to team members means that it is highly unlikely that team members had access to it. While other sources of information on the recovery planning process are available to team members, the Recovery Manual represents the only comprehensive and documented (versus verbal) source of information on the recovery planning process.

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[63] One team member had read the Recovery Manual because s/he had used it in writing recovery action plans for the team. The other team member revealed that s/he had only read the Recovery Manual because the letter I had sent out inviting her/him to participate in the interview suggested that some of the interview questions would focus on the Recovery Manual.

[64] The team being discussed here was not one of the nine teams considered in this research.

[65] As outlined in the Methods chapter, only chairs (as compared to team members) of New Teams were interviewed.

6.1.2 Specific Comments on Content

The sections of the Recovery Manual described below were those that were most frequently commented on in response to questions about what interviewees found was/was not useful in the Manual. However, it should be noted that most of the team members interviewed did not feel that they had sufficient familiarity with the Recovery Manual to answer more detailed questions about it (see comments about team members in 6.1.2). Consequently, the feedback on the Recovery Manual described in this section reflects comments made by team chairs (i.e., three chairs of New Teams and the chairs of two of the Old Teams).

Context Piece

All of the New Team chairs interviewed felt that the background or context section was very helpful to their understanding of how their recovery team fit into the overall policy context for species recovery. While some felt that this was information they already had through other sources, it was felt to be well summarized and articulated in the Recovery Manual. One of the interviewees commented that the background information would be particularly useful for team members or chairs who would have less access to this information (i.e., chairs that are not affiliated with the provincial or federal government).

Terms of Reference[66]

All of the New Team chairs that provided more detailed commentary on the Recovery Manual (see above) commented that the terms of reference for recovery teams had been of value to them. It was clear that the chairs had used the terms of reference as a source of guidance in the establishment of the team as well as in instituting procedural rules (e.g., decision-making by consensus or majority). However, New Team chairs also seemed to rely to a large extent on the advice of their colleagues and peers in making decisions about team membership and process. One chair suggested that the chairs relied on the advice of their colleagues in cases where the guidelines in the Recovery Manual were not sufficiently clear or detailed (e.g., who should and should not participate on teams) (see also section 6.5.1).

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[66] The terms of reference for recovery teams outlines the team's role, its composition, the role of the chair, the functions, and the way in which teams should reach decision (i.e., consensus or majority vote). Similar guidance is provided in the terms of reference for recovery implementation groups (Environment Canada 2001).

Templates

Interviewees were specifically asked to provide feedback on the utility of the template for recovery strategies provided in the Recovery Manual. One chair that had written a portion of the recovery strategy him/herself commented that certain aspects of the template for the recovery strategy were not clear. In particular, s/he felt that the sections wherein the team's "goal" and "objectives" were to be articulated were unclear in that it was not clear what the difference between the two terms was. As a result, it was not clear to this chair how teams should go about setting goals and outlining objectives. S/he commented that a clearer description of the concepts and some guidance in terms of how to proceed in defining them would have been valuable. In particular, s/he suggested that providing references to documents outlining basic planning methodology would be valuable for chairs that are relatively inexperienced with recovery planning or even strategic planning in general. The chair revealed that s/he had sought out this type of reference material on her/his own in the absence of guidance from RENEW.

The distinction between the content and scope of the recovery strategy as compared to the recovery action plan was also felt to be unclear (what belongs in one document as compared to the other), primarily as a result of the fact that the template for recovery action plans was not yet available in the November 2001 version of the Recovery Manual (see Chapter 3).[67] While this comment was made by only one interviewee, s/he commented that similar concerns had been raised by chairs of other recovery teams, including chairs of teams that were in the process of writing recovery action plans.

Chairs of Old Teams commented that while the template for recovery strategies provided in the Recovery Manual needed to be modified slightly to suit their specific needs (i.e., not all categories in the template were relevant), they recognized the fact that these types of templates would need to be somewhat generic in order to be relevant and useful to the diverse teams/species. The Garry Oak team appeared to have had the most difficulty working with the template because the one provided at the time was based on a single-species approach as compared to the ecosystem-level plan that was being prepared by the team. However, the chair commented that the Recovery Manual has now been revised to better address multi-species, ecosystem and landscape-level planning.

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[67] These comments were made by the same interviewee described in the preceding paragraph.

It should be noted that all of the teams that had progressed to the stage of writing a recovery strategy (and/or recovery action plan) had considered published RENEW recovery strategies/plans as models in addition to the templates provided by the Manual. However, the templates had only limited value in that the scope and content of recovery strategies (i.e., what is required) has changed over time.

Gaps in the Recovery Manual

Chairs commented that several sections of the Recovery Manual were incomplete making it difficult for teams to know how to deal with certain key issues, therefore impeding their progress. The gaps most frequently mentioned by chairs included:

- the absence of an adequate description of what the designation of "critical habitat" was meant to entail (e.g., a generic description of certain habitat features as compared to the identification of specific parcels of land that need to be protected) and what the policy implications of its designation would be (i.e., once critical habitat is defined, to what extent does it all need to be protected); and,
- the lack of clarity in terms of what was expected of teams in terms of the socio-economic analysis (including the lack of guidelines in relation to how to proceed in addressing this issue).

Recommendations:

- ***Information in the Recovery Manual of relevance to team members should be summarized in an Executive Summary order to make it more accessible to them.***
- ***Changes to the Recovery Manual should be made explicit (i.e., in an addendum) so as to make it evident to readers where changes have been made.***
- ***The Recovery Manual should be posted on the Internet in order to make it accessible to team members and others with an interest in the recovery planning process.***
- ***The templates for recovery strategies and action plans should provide more detailed descriptions of key terms (e.g., goals and objectives) in order to provide teams with sufficient guidance to allow them to include information of the appropriate scope and level of detail. Reference documents providing guidance on strategic planning ("how to" guides) should also be made available to chairs (or, at minimum, references to such documents should be provided) (see also the recommendations at the end of section 6.3 regarding the importance of training).***

- ***Templates for recovery action plans are needed in order to provide guidance to teams writing action plans but also to clarify the level of detail that is expected in the recovery strategy (i.e., how much detail to provide in the recovery strategy as compared to the action plan).***
- ***Templates for multi-species, ecosystem, and landscape level plans need to be reviewed to ensure that they provide adequate guidance to teams that are writing these types of plans.***
- ***The definition and policy implications of critical habitat need to be better articulated in the Recovery Manual as well as a better description of the expectations of teams in terms of the socio-economic analysis.***

6.2 Process Design

As discussed in Chapter 4 (section 4.5.2), the public participation literature suggests the importance of the design of participatory process to their success. In particular, authors discuss the importance of ensuring that the process is clear to all involved in that it clearly articulates: how the process will unfold (i.e., the goal and the role the team plays in influencing the decision outcome), the participants' roles and responsibilities, the expectations in relation to how participants will interact (i.e., behavioural rules), and fall-back mechanisms in cases where conflicts arise. Furthermore, it is felt to be important to ensure that the individuals that will be involved in the process (i.e., the process participants) have the opportunity to be involved in its design.

Recovery team members were asked to describe the process their team followed and to provide feedback in relation to their satisfaction with it. Of particular interest was the extent to which they felt that the team's process was clear, and the extent to which they were comfortable with the procedural framework that was established (both in terms of their involvement in its design and the extent to which it was adequate for the team's needs). Consideration was also given to the adequacy of the timeframe allowed by SARA in relation to the preparation of a recovery strategy.

6.2.1 Clarity of Process to Participants

Despite the fact that they appeared not to have read the Recovery Manual, team members were aware of the basic stages of the recovery planning process and their role in that process. In particular, teams seemed to understand that their role was to prepare a recovery strategy and that

the team's draft would be presented to the responsible jurisdictions as decision advice (i.e., they did not have decision-making authority). Team members all stated that they were comfortable with the fact that the draft strategy had to go through an approval process that included both a peer review process and the need to secure approval by the relevant jurisdiction(s) (see section 3.7).[68]

However, when this issue was further pressed it appeared that there was some confusion among team members about certain aspects of the process. In particular, while team members all stated that they were comfortable with the approval process, some team members' comments suggested that they viewed it as being somewhat routine (e.g., a "rubber stamp"). It also appeared that the Garry Oak team experienced some difficulty throughout the process (although most notably at the outset) as a result of inconsistencies among team members in relation to their views of the team's overarching goal (i.e., the team's mandate).

Approval Process

Comments from four team members suggested that they perceived the approval process as being somewhat inconsequential in that they did not feel that it was likely to result in the need to make significant changes to the recovery strategy (i.e., very few substantive comments would be generated).[69] When asked what impact the receipt of significant comments from the peer reviewers or the responsible jurisdictions would have (or would have had) (i.e., comments that would require significant changes or even re-drafting of the Recovery Strategy), these team members commented that it would be (would have been) very difficult for the team to accept. One team member commented that it would have "put a big hole in the boat...would have been demoralizing" and questioned why individuals with significant input to the recovery strategy would not have participated on the team itself. Two of the interviewees commented that the need to make significant changes would be particularly difficult to accept given that their teams had put so much time and energy into the strategy and had taken steps to ensure that the format and process were consistent with the guidelines provided by RENEW.

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[68] This description of the approval process was accurate at the time the interviews were conducted but has since been changed somewhat (see Chapter 3). Despite the changes to the process this discussion remains relevant in that it provides insight into the extent to which teams are truly satisfied with their advisory role (as compared to being granted decision-making authority).

[69] These comments were made by team members from all three of the Old Teams, most of whom were not affiliated with a government agency.

Overall these comments suggest that despite acknowledging the fact that the draft recovery strategy had to go through an approval process, some team members did not anticipate this process to require major changes to the draft recovery strategy (i.e., the strategy that the team had agreed to). Team members' comments further suggest that the receipt of negative feedback from the responsible jurisdiction could influence certain team member's motivation and their interest in being involved in recovery planning efforts in the future (i.e., involvement in future teams). Given the interest in involving diverse interests in the preparation of recovery strategies and the importance of the involvement of recovery team members in implementing the recovery strategy (and recovery action plan), this could significantly compromise the species' recovery potential.

Clarity of Mandate

Members of the Garry Oak team described some confusion and conflict early in the team's history in relation to the team's key goals. Several members of the team commented that there were differing views in relation to the team's mandate among team members early on in the process, stemming from the focus on species at risk on the one hand and a broader focus on "ecosystem integrity" or "landscape conservation" on the other. Team members commented that this duality of focus generated some tension among team members when it came to establishing priorities and making decisions regarding the allocation of funds. The crux of this tension was resolving whether priorities should be established on the basis of the presence/absence of species at risk as compared to considering larger ecosystem units and concepts like ecological integrity. While it appeared that this tension continues to surface periodically, particularly around issues of funding, it did not appear to be a major obstacle to the team's progress. Nonetheless, it is an issue that needs to be considered by teams considering ecosystem or even landscape approaches to recovery planning, particularly in situations wherein many of the stakeholders may have interests (and therefore place priority on issues) that are broader than species at risk.

6.2.2 Participatory Design

While many of the aspects of the decision-making process were pre-determined in that they were dictated by the guidelines provided in the Recovery Manual (e.g., decision-making by consensus/majority voting, the role of teams in influencing the decision), none of the ten recovery team members interviewed expressed any concerns about this and seemed to perceive this level of control by RENEW as being consistent with processes led by government agencies.

All of the teams spent some time at the outset discussing aspects of the process (including both reviewing the elements of the process that were pre-determined by RENEW and making decisions regarding aspects that were not) and team members all stated that they were satisfied with the extent of their involvement in the design of the process.

6.2.3 Comprehensive and Effective Procedural Framework

While teams discussed the procedural framework for the team's decision-making process (e.g., ground rules, terms of reference), they did not always formalize these into written policy documents. Some notable changes were evident between Old and New Teams.

Old Teams

Old Teams varied in the extent to which they addressed various procedural issues at the outset as well as the extent to which they formally documented procedural discussions and decisions (see Table 6.1). The Garry Oak team, for example, prepared a number of policy documents in support of the recovery planning process although most of these policies relate to recovery implementation groups rather than the recovery teams. While the team did discuss issues related to the decision-making process such as the use of consensus and what would constitute a quorum, these policies were never included as part of a formal terms of reference or other written documentation.

However, the Garry Oak team did prepare a terms of reference for the chair of their team and also prepared a conflict of interest policy for team and implementation group members (Table 6.1). According to the team chair and team members, the conflict of interest policy was prepared in response to concerns that were raised about the fact that many of the team members who were making decisions about the team's directions and priorities were the same people who stood to benefit financially from those decisions (e.g., decisions regarding awarding contracts in situations where they were among the bidders). As such, the emphasis in the policy is to provide guidelines to deal with situations in which team members could potentially find themselves in these conflict of interest situations. Many of the recovery teams established since the Garry Oak team was formed have also instituted conflict of interest policies (or at least discussed the issue), most of which are modeled on the one produced by the Garry Oak team.[70]

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[70] The policy is currently provided upon request to new recovery teams by the RENEW Secretariat as a model to consider.

As mentioned above, the Garry Oak team also developed a number of policies to provide more specific direction to the RIGs. In particular, the team prepared a terms of reference for RIGs which describes the reporting structure, outlines the "decision-rule" (consensus or majority vote), outlines the main issues to be addressed in the action plans (based largely on the recovery strategy), and describes RENEW's requirements regarding approvals of the action plans.

Neither of the other two Old Teams had formalized their policies by way of a terms of reference or other written documentation although both had discussed aspects of the process to differing extents (see Table 6.1).[71] Of the three Old Teams considered, none had outlined a conflict resolution mechanism nor had they established the type of "behavioural rules" or "rules of conduct" often recommended by proponents of public involvement (see section 4.5.2).

When chairs and team members were asked whether more formal policies around process would have been beneficial to their team, with the exception of the specific case described below, they all felt that the informal process they were using was appropriate and sufficient for their needs. For example, when specifically asked whether they felt that they would have benefited from a conflict resolution policy, team members said they had not encountered conflicts that they were unable to talk their way through, making such a policy of little value to them. The chair of one of the Old Teams did comment that having a terms of reference for team members that clearly outlined their roles and responsibilities (i.e., what was expected of them) could have been valuable. This comment was made in reference to the chair's disappointment in the contribution made by certain team members, an issue that is addressed in more detail in the discussion on stakeholder involvement in section 6.5.5.

While team members indicated that they were comfortable with their relatively informal procedural rules (with the minor exceptions noted above), teams were not without their conflicts and challenges. In particular, interviewees from all three of the Old Teams described some form of interpersonal conflict among team members. Team members described situations in which they felt that other team members had used the recovery process to further their own agenda by directing funding towards projects of interest to them as compared to those that reflected the team's priorities. Members of another team also described a situation in which a team member

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[71] The Vancouver Island Marmot team had something comparable to a terms of reference for each of their "RIGs" (i.e., the Science Advisory Group and the Marmot Recovery Foundation) although the focus of both of these documents was the administration of funds and the relationship between the "RIGs" and the recovery team as compared to outlining decision-making rules or other details of the groups' decision-making process.

was overly aggressive in his/her approach to negotiation and attempted to manipulate the team to direct their efforts towards avenues of research that would personally benefit her/him. According to members of this team, several team members threatened to leave the team if the individual continued to participate (in this particular instance the individual stepped down from the team).[72] A chair of one the New Teams similarly commented that one prospective team member refused to join the team if another individual was asked to be a member.

While team members often attributed these problems to interpersonal conflicts rather than having resulted from weaknesses in the decision-making process, it could be argued that better conflict resolution mechanisms and the institution of behavioural rules may have served to ameliorate if not completely avoid some of these situations.

Table 6.1: Process Design – Old Teams

	Garry Oak Team	**Vancouver Island Marmot Team**	**Oregon Spotted Frog Team**
Terms of Reference (ToR): Chair	Formal	Informal	Informal
Terms of Reference: Recovery Team	Informal	No	No
Terms of Reference: RIG(s)	Yes	Yes (see note)	N/A
Details discussed...			
Rules around quorum/eligibility to vote	Informal for the team. Part of the ToR for RIGs.	No	Yes – informal
Conflict of Interest Policy (guidelines)	Yes	Informal discussion	Informal discussion
Operated on a consensus-basis	Yes (Formally documented in the ToR for RIGs)	Yes	Yes
Defined consensus	Yes (Formally documented in the ToR for RIGs)	No	No
Conflict resolution strategy	No	No	No
Behavioural rules	No	No	No

Explanation of terms used in the table

- Formal: documented (written)
- Informal: discussed by the team but not documented
- No: not discussed by the team

[72] There were conflicting accounts of whether the individual left of his/her own accord or whether another team member asked him/her to leave.

New Teams

In contrast to the Old Teams, New Teams (particularly teams formed since September 2002) spent more time at the outset discussing and formalizing their decision-making process (see Table 6.2) suggesting that greater importance is being placed on process design (as compared to the older teams considered in this analysis). It is noteworthy that the Spotted Owl team, a team developed around a species with a history of conflict in BC[73] as in other parts of North America (Yaffee 1994), appears to have spent the most time discussing the process up front (the Spotted Owl team spent the first few recovery team meetings discussing process and developing a terms of reference). This may reflect a recognition of the importance of a clearly defined process in cases where the level of conflict is likely to be pronounced. This is consistent

Table 6.2: Process Design – New Teams

	White-headed woodpecker	**Sharp-tailed snake**	**Spotted Owl**	**Pacific Water Shrew, Pacific Giant Salamander, and Tall Bugbane[74]**
Terms of Reference: Chair	No	No	Yes	No
Terms of Reference: Recovery Team	No	No	Yes	Being developed
Terms of Reference: RIG(s)	N/A	N/A	N/A	N/A
Details discussed...				
Rules around quorum/voter eligibility	No	Unclear	Yes	Not in draft available at time of interview
Conflict of Interest Policy	No	Yes (informal discussion)	Yes	Not in draft available at time of interview
Agreed to operate on a consensus-basis	Yes	Yes	Yes	Yes
Defined consensus	No	No	Yes	Yes
Conflict resolution strategy	No	No	No	Not in draft available at time of interview

[73] The conflict surrounding the recovery efforts for the Spotted Owl was mentioned by a number of interviewees as well as other provincial and federal government staff.

[74] These three recovery teams are combined in this table because they are chaired by the same individual and are being set up according to the same process.

with Wondolleck et al.'s (1994) assessment of the importance of carefully articulated processes in the context of endangered species recovery efforts that are likely to be complex and result in conflict among different interest groups represented on the recovery team.

6.2.4 Appropriateness of Timelines for Preparing Recovery Strategies

As introduced in section 4.5.2, one of the factors felt to be important to the success of participatory processes is ensuring that the timeframe allowed is appropriate. Timelines should allow sufficient time for participants to engage in discussions and come to a decision (Renn et al. 1997) and must also be developed with due consideration to participants that are representing broader constituencies that may need to consult with them prior to making decisions (Hemmati 2002). On the other hand, the value of providing groups with an impetus to come to a decision is also recognized. Failure to provide a timeline can often result in participants loosing focus and incurring large ongoing expenses (Hemmati 2002). Some authors also discuss the fact that the absence of a firm deadline can provide groups that favour the status quo with the opportunity to drag out the decision-making process, particularly when the group's objective is to reach a consensus outcome (Wondolleck et al. 1994). As described by Cormick et al. (1996), "Without a 'negotiated' sense of urgency, reflected in agreed-upon deadlines, each party's focus on their priority topics could have drawn out of the process significantly." Hemmati (2002) describes the need to strive for an effective balance between allowing participants sufficient time to learn, consult, and negotiate, and having sufficient pressure to develop a solution.

The appropriateness of the timeframes within which recovery strategies are to be developed (see section 3.2) can be gauged to some degree by the length of time that recovery teams have taken to prepare them to date. However, the design of my study does not allow for a broad enough sample to be considered to support the generation of broad conclusions about the appropriateness of the timelines for recovery teams. The intent here is to provide an indication of their appropriateness on the basis of the experiences of my small sample of teams. The analysis is further complicated by the fact that assessing the time taken to produce a draft recovery strategy (i.e., a strategy that is approved by the recovery team) is not straightforward. The information I collected allows for two approximations of the timeframe to be made: (1) the length of time between the team's formation and the production of a draft recovery strategy; and (2) the average number of meetings it took to produce a draft recovery strategy (Table 6.1). In both cases, the results are approximations only and do not account for the fact that teams may have engaged in activities other than writing the recovery strategy (see section 6.5.2). The

calculations also do not consider the time team members may have spent writing, reviewing, and revising the strategy between meetings. Furthermore, they represent the amount of time the teams *took* rather than the amount of time that was *required* (i.e., it is possible that teams could have completed the writing of the recovery strategy much earlier if they were pressured to do so).

Despite these limitations, some broad generalizations can be made about the adequacy of the timelines according to the experiences of the Old and New teams that I considered that had recovery strategies in place (n=4). The amount of time taken to produce recovery strategies was highly variable ranging from 4 to 26 meetings (with a few of the New Teams planning on completing strategies within a few months) (see Table 6.3). In terms of the number of years teams took, a large range was also evident ranging from less than 2 years to 4 years (although three of the New Teams were hoping to have recovery strategies written within 4 months). Not surprisingly, the Garry Oak team's strategy, prepared by 24 team members and encompassing over 21 different COSEWIC-listed species (see Appendix VIII) took the longest to prepare in terms of the number of meetings. On the other hand, the chair of the teams where strategies were to be prepared within a few months commented that s/he expected the preparation of the recovery strategy to be relatively straight forward (i.e., it was quite clear what needed to be done to protect the species) such that only two meetings would likely be required.

The calculations above account only for the time taken to produce a draft recovery strategy (i.e., one that is approved by the team). However, the timelines in SARA relate to when the draft and final versions of the recovery strategy are posted on the public registry (see section 3.2). The time required for achieving final approval of the recovery strategy should therefore be considered. Unfortunately, only one of the teams I considered had gone through the approval process (i.e., the Vancouver Island Marmot recovery team). According to the chair, it took the team two years to secure approval for both the original recovery strategy as well as the 5-year update. The Garry Oak team's experience also suggests that the approval process can be rather lengthy. The team had completed a "draft" recovery strategy in May 2001 and was still in the process of incorporating peer review comments at the time the interviews were conducted (i.e., January 2003), with an anticipated completion date (according to interviewees) of spring/summer 2003. Although the problem of having a small sample size is even more pronounced in this case, the experience of these two teams does suggest that the approval process can take several years.

Table 6.3: Time Taken to Prepare Draft Recovery Strategies (Old and New Teams)

Team	Recovery Strategy Approved by team	Meeting Frequency (average)	Time before draft strategy produced		Team in place since
			# Months	# Meetings	
New Teams					
Spotted Owl	N/A	1/month	N/A	N/A	September 2002
Tall Bugbane	N/A	1 (see note)	4*	2*	December 2002
Pacific Giant Salamander	N/A	1 (see note)	4*	2*	December 2002
Pacific Water Shrew	N/A	1 (see note)	4*	2*	December 2002
Sharp-Tailed Snake	N/A	1/month	N/A	N/A	April 2001
White-headed woodpecker	Winter 2002	2/year	18	4	June 2001
Old Teams					
Garry Oak Ecosystem	May 2001[75]	1/month	24	24	May 1999
Oregon Spotted Frog	January 2003[76]	2-4/year	43	11	November 1999
Vancouver Island Marmot	1992[77] (and 1998 update)	2-4/year	48	12	1988

*This represents the chair's *intent* (as compared to a description of what actually transpired).

When the timeframe for the preparation of a draft recovery strategy and having it approved by the responsible jurisdiction(s) and RENEW is considered, it appears that at least two of the teams considered in this analysis would have had difficulty meeting the timeline imposed by SARA for the species currently listed in Schedule 1. All of the four teams in my analysis with draft recovery strategies in place would have been unable to meet the more stringent timeline (i.e., the timeline that will apply for species added to the legal list; see section 3.2). As per the limitations of this analysis discussed above, the results of this study do not lend themselves to drawing broad conclusions. However, the results do suggest that government agencies should reflect on the timelines and consider ways in which to make the process more

[75] This is the date on the draft recovery strategy (Fuchs and Garry Oak Ecosystem Recovery Team 2001).

[76] Team members characterized the recovery strategy as being "as good as approved" by the team and required only minor editorial changes.

[77] The chair could not recall exactly when the team had reached agreement on the recovery strategy (i.e., when they had submitted it for peer review and approval) but stated that it had taken about two years to secure approval of the draft on both occasions (the 1994 version and the 2000 update). I have assumed that the team's draft was therefore completed two years prior to the date on which the strategy was published (1994).

efficient – whether at the level of the recovery team (i.e., the preparation of recovery strategies) or in terms of streamlining the approval process. This is likely to be particularly important for species where issues and/or the approach are complex (i.e., ecosystem- or landscape-approaches and/or species for which there are high levels of uncertainty).

Recommendations:

- ***Attention should be paid to providing team members with realistic expectations in terms of the level of revisions that are likely to result from peer review and approval from the responsible jurisdictions.***
- ***Chairs of multi-species, ecosystem or landscape-level teams should clearly articulate the team's mandate at the beginning of the process in order to minimize future confusion and conflict among team members.***
- ***Teams should consider instituting behavioural rules and conflict resolution mechanisms to assist them in resolving disputes and conflicts if and when they arise. This is likely to be particularly important for teams wherein conflicts are likely to arise.***
- ***RENEW should review the timelines outlined in SARA in accordance with the experience of recovery teams to date. Changes may need to be made to the approval process in order to make it more efficient. Alternatively, consideration may need to be given to making the process by which recovery strategies are prepared more efficient (e.g., providing funding to hire consultants to write the recovery strategies on behalf of the teams; see also section 6.4.4).***

6.3 Resources in Support of Participants

As discussed in section 4.5.3, providing participants with adequate resources is thought to promote equity among participants in relation to their opportunity and power to influence the decision outcome. Team members were specifically asked whether they felt that they had adequate resources to participate effectively in the process, where resources included information and knowledge, money (compensation for team members' time and travel expenses), and training. They were also asked for their views on whether other team members seemed to have adequate access to these resources and whether there appeared to be any difficulties within the team related to imbalances of power (i.e., inequalities).

Table 6.4: Availability of Support to Recovery Team Members

Funding for:	SPOW	WHWO	GSM	TBG	PWS	STS	GOERT	OSF	VIM
Per diem for team members	No	No	No	No	No	No	No	No	No
Travel expenses*	No	No	Yes	Yes	Yes	Yes	Yes**	No	No***
Training provided	No	No	No	No	No	No	No	No	No

*In cases where teams provided funding it was only provided to those members who did not have access to travel funds through their jobs.

**Provision of funding was subject to availability such that funding requests were not always fulfilled.

***The team chair did provide funding for volunteer members when the team held a workshop in Vancouver and the expenses of attendance were more significant.

6.3.1 Information/Knowledge

Lack of knowledge/information was not perceived by most interviewees as having constrained their ability to contribute to the recovery planning process. While team members acknowledged that there were certain discussions wherein they did not have sufficient expertise to participate, this was not generally perceived as having significantly impacted their ability to participate and contribute to the process overall and was seen as a natural product of being part of a team wherein members have differing sets of skills and knowledge. Moreover, with one exception (see below), team members did not feel that there were any inequalities among team members in relation to their ability to provide input or influence the decision.

As alluded to above, one interviewee did feel that s/he lacked the requisite knowledge to participate effectively in the process resulting in his/her need to rely to a large extent on the expertise of others. It is worthy of note that the interviewee that made this comment was a representative from a First Nation organization. S/he felt that the capacity of his/her community to participate effectively in recovery planning (as well as other decision-making processes related to environmental management) was somewhat limited as a result of a lack of trained staff within her/her organization. The individual commented that most of the key decisions (i.e., input to and writing of the recovery strategy) were being made "in Vancouver," a reference to the fact that the key scientific authorities were based out of Vancouver (e.g., government officials and members of the academic community). However, s/he viewed the recovery planning process as an important opportunity to build the capacity of his/her community such that her/his participation appeared to be motivated in part by the opportunity to build this capacity. The individual did, however, feel that his/her interests (and the interests of her/his community) were reflected in the recovery strategy.

Despite the fact that most interviewees did not feel that their ability to engage in discussions and influence the decision outcome was significantly constrained by a lack of knowledge, comments made by a number of interviewees regarding their experience with the preparation of recovery strategies and recovery action plans suggested that knowledge gaps did come into play for some teams. In particular, it was clear that not all team members had equal experience with and/or capacity to undertake strategic planning. While this is not itself unexpected or even problematic, it became evident that some teams were relying on team members with little skill and experience in strategic planning to undertake these tasks. According to several interviewees this situation arose primarily as a result of the fact that the people with the experience and skills in strategic planning (e.g., government employees) generally did not have the time to devote to these activities. Conversely, the people with the time available often did not have the appropriate experience and/or expertise to carry out the job.

Perhaps the clearest illustration of this situation arose in one team's experience with the preparation of both the recovery strategy and the recovery action plans. Although the original intent was for team members to undertake most of the writing of these plans themselves, members either had insufficient time or lacked the requisite expertise to undertake the work. This role was therefore taken on by the team coordinator/chair who, while skilled in strategic planning, was already over-committed such that s/he had only a limited amount of time to devote to the writing of the recovery strategy. While the team members were satisfied that the strategy was a well-written and defensible document, a number of team members (including the coordinator) commented that the writing of the recovery strategy took longer than it should have as a result of his/her inability to devote sufficient time to it.

In the case of the RAPs, the intent was similarly to have the RIGs collectively write the documents but it again became apparent that this model was not feasible. The team eventually decided to pay one of the team members to write four of the eight RAPs in consultation with the RIGs.[78] This process was characterized as highly unsatisfactory by team members interviewed. Interviewees felt that the individual did not have the appropriate skills to facilitate the discussion and write the type of planning document that was required resulting in the development of RAPs

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[78] RAPs were only prepared for the "non-species" species RAPs (Restoration and Management; Research; Conservation Planning and Site Protection; and, Inventory, Mapping and Plant Communities) as the preparation of RAPs for the "species" RIGs was seen as the responsibility of the province. The RIGs felt that undertaking the writing of the "species" RAPs would allow the province to abrogate its responsibilities and they were unwilling to facilitate this.

that were of poor quality. The RT/RIGs in fact intend to prepare new RAPs once the RIGs have had a bit of a break from the last attempt. According to several team members, the process of writing the RAPs was so frustrating that it caused several people to step down from the RIGs.[79]

6.3.2 Compensating Participants

Teams provided varying amounts of financial compensation to their participants (Table 6.4). None of the recovery team members received any form of compensation for the time they devoted to the recovery planning process (e.g., per diem) other than the compensation the individual members would have received from their employer (i.e., an individual whose participation on the team was part of their job). Some of the New Teams provided limited travel expenses to team members who did not have access to travel funding through their employers.[80] Of the Old Teams considered, only the Garry Oak team provided any travel funding to attend meetings and this was a very limited amount available only when the team had access to some discretionary funding. Other Old Teams provided travel expenses to certain team members in the rare instances where costs were higher than usual (i.e., travel to attend a conference) with funding generally coming from the budgets of individual team members (e.g., budgets of provincial government staff).

When team members were asked about the extent to which the lack of funding support impacted on their ability to participate effectively in the process it did not appear that this was a significant impediment. Interviewees whose time and travel expenses were not covered by an employer commented that it would have been nice to have some of their expenses reimbursed (particularly travel expenses since, as one person pointed out, they were essentially paying to participate on the team) but said it was not a factor they felt had significantly limited their involvement. Interviewees' comments suggested that the issue was less a matter of the expenses themselves and had more to do with having their contribution to the team recognized through

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[79] Other teams, including the New Teams in particular, had access to funding to hire a consultant with the appropriate expertise to undertake the strategic planning. This not only allowed teams to hire individuals with the appropriate expertise and experience but also ensured that they had sufficient time to dedicate to these activities (see section 6.4.4).

[80] Several of the newly formed teams led by the provincial government have been provided with Forestry Investment Account funding to be used by the team chairs in support of various activities related to the recovery planning process. The funding is limited to species deemed to be forest-dependent (Kari Nelson, Species at Risk Biologist, Ministry of Water, Land and Air Protection, January 2003).

some form of compensation, even something as insignificant as having travel expenses reimbursed. The issue of equality in relation to having team members who were paid to participate on the team and whose travel expenses were covered on the one hand and others who volunteered their time (and were arguably *paying* to participate) was also raised by a few interviewees although this again did not appear to be significant enough of a concern to impact participation. However, given that I did not interview people who chose *not* to participate on teams, it remains plausible that the cost of participation (both the "lost revenue" resulting from the time required and/or the travel expenses) was impacting people's choice regarding whether or not to participate on recovery teams (and/or RIGs). Individuals may also have chosen not to participate on teams because they disagreed in principle with a participatory approach wherein certain team members acted as "volunteers" while others were paid to participate.

Almost all interviewees commented on the challenge of finding sufficient time to devote to the recovery team (i.e., attend meetings, provide feedback on material). In cases where individuals were volunteering their time to participate in the process, providing a per diem or some other form of compensation would likely allow them to spend more time on activities of relevance to the recovery team (e.g., attending meetings and reviewing/providing feedback on relevant material). However, the costs associated with compensating volunteer team members' time is likely to be considerable (see section 6.5.7 wherein the reliance on volunteer effort in recovery teams is discussed) such that it is unlikely to be a solution that is financially feasible. However, volunteer members should at least be reimbursed for travel expenses if for no other reason than to acknowledge the individual's contribution to the team and to remove the *disincentive* that may be associated with participation in some cases.

6.3.3 Training for Team Members

None of the teams considered in this analysis (including both Old and New Teams) received any training in negotiation, conflict resolution, or other aspects of decision-making.[81] When asked whether they felt it would have been useful to have this type of training, most interviewees commented that it probably would not have greatly contributed to the team's overall success. Only one interviewee felt that training in conflict resolution or negotiation could

[81] This does not account for any training that individual team members would have received independently of their involvement in the recovery team. Only one person interviewed mentioned having received specific training in conflict resolution.

have benefited her/his team,[82] although s/he also expressed some skepticism about the likelihood that training would have significantly altered team members' approaches to negotiations.

Another interviewee commented on the need for team members to have some form of cross-cultural training in order to increase the respect for and awareness of the culture and traditions of First Nations people and government. The individual's comment was based on his/her experience in the recovery process but was also raised in relation to multi-stakeholder processes in general. While the individual's overall experience with the team remained positive, s/he commented that there were a number of incidents[83] that could have been avoided had the team member(s) had a greater familiarity with First Nation culture. The individual's comments may warrant added consideration given that almost all teams interviewed felt that one of the significant gaps in membership related to the need to increase the involvement of First Nations peoples in recovery planning and implementation (see section 6.5.4). In their evaluation of seventeen Land and Resource Management Plans (LRMP) in British Columbia, Duffy et al. (1998) also found that First Nations representatives interviewed felt that the LRMP processes tended to demonstrate a lack of understanding of First Nations interests. Duffy et al. (1998) similarly found that one of the most consistent gaps in representation were First Nations representatives.

Nonetheless, responses provided by the majority of interviewees reflect their view that providing training to team members in various aspects of decision-making is unlikely to have had a significant influence on their teams' "success." This finding may be explained by a number of factors. Perhaps most notably, the teams considered in this analysis appear to have experienced little serious conflict (although some conflict was evident as discussed below). Old Teams were all able to come to consensus on a recovery strategy relatively easily (according to interviewees) such that they did not appear to have had challenges in relation to negotiation or consensus building. Several interviewees commented that participants tended to have relatively similar interests and goals such that it was "relatively clear what needed to be done." Furthermore, almost all (80%) recovery team members interviewed (including chairs) had participated in multi-stakeholder decision-making processes in the past (including recovery

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[82] This interviewee had prior training in conflict resolution and felt it had been useful to him/her in resolving a situation involving interpersonal conflict that developed on the team he participated on.

[83] The specifics of the incidents are not described here given that they would reveal the identity of the interviewee and are not felt to be integral to the discussion at hand.

teams in some cases) such that they had some prior experience in these processes and with negotiation and consensus-building in general. As such, the fact that teams had such a clear and consistent view of their goal combined with the requisite skills in decision-making may have made the provision of further decision-making training of little value. Beierle and Cayford (2002) similarly found that participants in more intensive processes tended to have more experience with participatory efforts such that participants were often more effective in participating and solving problems.

However, a number of factors suggest that the views expressed by interviewees in relation to the low potential benefit of training may warrant further examination. To begin with, it was apparent that the teams considered (Old Teams) were not without their challenges. In particular, several team members referred to having experienced "personality conflicts" that led to difficulties coming to agreement and resulted in two team members leaving one of the teams (see also section 6.2.3). Other interviewee comments suggested that the "consensus" that was achieved may not in fact reflect a "true" consensus of the team (see section 6.6). While it cannot be determined whether and to what extent training in negotiation, consensus-building or other aspects of decision-making may have improved upon these situations, it should not be overlooked as a possible mechanism to address these concerns. It should also be noted that individuals that had not received training in negotiation, consensus-building or other aspects of decision-making would have difficulty gauging the potential benefits associated with it (see also section 5.5.1).

Secondly, the extent to which the conflict experienced by the nine teams I considered was typical of all recovery teams must also be more closely examined. Generally speaking, it seems reasonable to assume that it is unlikely that all recovery teams operate in the low conflict environments that appear to be characteristic of the teams I considered in my analysis. Teams wherein the needs of the species are in more direct conflict with economic opportunities (i.e., forestry or agriculture) have in fact been characterized by clashes in value systems and significant levels of conflict (cf: Wondolleck et al. 1994, Yaffee 1994). Wondolleck et al. (1994: 307) in fact characterize endangered species conservation efforts as being "ripe for prolonged and antagonistic conflict." Providing training in negotiation, consensus-building and conflict resolution in these situations may therefore prove useful. Several interviewees in fact commented that while training would not have been useful in their experience (i.e., to their team), it would likely be beneficial to teams dealing with species/ecosystems where more

explicit conflict was likely to be present and/or where the level of uncertainty regarding the best course of action in relation to the species' recovery was higher. One team chair commented:

> We haven't had much [*sic*] political overtones or interference with the biology of what had to be done here as compared to some other recovery teams. Obviously if we did there would be a need to have some formal training sessions with all the members, facilitation workshop, or those kinds of skills. There's a role there but we haven't really seen the need.

Two interviewees that had also been (or were currently) members of other recovery teams wherein the conflict was more pronounced suggested that training would have proven valuable in those cases.

The future decision-making context for the recovery teams and the degree to which future decision-making scenarios faced by teams are likely to be contentious must also be considered. While teams reported coming to consensus on the recovery strategy relatively easily, it is likely that much of the difficult decision-making was still ahead of them. In particular, the identification of critical habitat, the prioritization of recovery actions, and a concerted effort[84] to deal with socio-economic issues had not yet been undertaken by most teams since these activities are either new under SARA or are dealt with at the action plan stage. Furthermore, the timeline pressures imposed by SARA are likely to place added pressure on teams given that they will have less time to discuss issues in the depth that is required and have less time overall to reach decisions (see sections 6.2.3 and 6.6.4). As such, the value of training in negotiation, consensus-building and other aspects of decision-making is likely to increase in the future.

Recommendations:

- ***Development of strategic documents should be undertaken by individuals skilled in these areas in order to ensure the quality of the end-product. The ideal model is one wherein an impartial individual is hired to lead the discussion and write the strategic plans (see also 6.4.4).***
- ***Teams should, at minimum, offer to reimburse participants for their travel expenses.***
- ***Training in consensus-building, negotiation and other aspects of decision-making should be available to recovery teams. This training will be particularly important for teams***

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[84] Some teams had described the socio-economic context very vaguely in recovery strategies but none had gone very far in addressing this issue. All of the chairs interviewed commented that it was not clear how the socio-economic context was meant to be addressed in recovery strategies and recovery action plans.

dealing with species whose recovery is more likely to involve conflicting values and interests. Training is also likely to be more valuable for those participants who have had less experience with multi-stakeholder decision-making.

- ***Teams in which First Nation participation is deemed important should be encouraged to obtain cross-cultural training.***

6.4 Process Management

Another factor believed to be important to the success of decision-making processes is the extent to which the process is effectively managed. The presence of process managers (e.g., facilitators, mediators) that are effective and neutral has been shown to be important to the success of the type of decision-making process that is typical of recovery teams (see section 4.5.4). The importance of decisions regarding when and where to hold meetings has also been shown to influence the success of the process in that it can influence stakeholders' ability to attend meetings and participate in the process. In the case of recovery teams, consideration was also given to the extent to which teams had access to sufficient funds to hire the type of support staff that they felt was required (e.g., consultant to write a recovery strategy).

6.4.1 Logistical Arrangements

Most teams appeared to be considering the needs of their team members in making decisions around team meetings. In particular, meetings locations were often chosen to minimize travel costs for members whose travel expenses were not compensated. However, one interviewee's comments suggested that one of the teams may have had better success in having representation from certain stakeholders if they had made different choices around where to hold meetings. In this case, the interviewee commented that the team s/he participated on held the majority of their meetings in Vancouver. S/he commented that the species is not actually found in the Greater Vancouver area such that many of the relevant interests (most notably the local government representatives) also did not live there making it inconvenient for them to attend meetings. Given that several interviewees from this team commented that one of their key weaknesses in terms of representation was the lack of involvement of local government representatives, the choice of meeting locations appears to have represented a weakness.

6.4.2 Team Chair

The chair plays a critical role in recovery teams. In addition to the usual chairpersonship duties (e.g., organizing meetings, setting agendas, ensuring minutes were recorded and distributed, and maintaining the flow of information among team members and between the team and the relevant jurisdictions/RENEW), many chairs took on various duties in support of project implementation including seeking out sources of funding, preparing funding proposals, managing contracts (and contractors), and reporting on progress to the funding agencies. Chairs also frequently performed facilitation roles and were often involved in drafting parts of the recovery strategy.

Chairs also appeared to play a key leadership role on teams with several team members attributing much of their team's momentum and progress to the leadership demonstrated by the chair. In addition, the chair of some teams seemed to play a key role in attracting and retaining members. One team member commented that her/his involvement on the team resulted from the trust relationship established with the chair. Interviewees from a different team commented that their continued participation in team meetings, despite the significant time requirements it represented, was due in large part to the skill and leadership demonstrated by the chair and her/his ability to keep team members interested and engaged in the process. It was clear that the team's chair had the potential to significantly impact the team's overall success. This is consistent with comments made by Clark and Westrum's (1989: 669) regarding recovery teams: "A relatively well-defined team is needed and its major problem will center around the dynamics of group members who work closely together. The team leader's job is to effect productive inter-group dynamics."

Given the wide-range of tasks that chairs typically take on and their leadership position within the team, consideration should be given to the skill set of individuals being considered for the role of the chair. While some individuals may have the requisite experience and expertise, some form of training might need to be considered for others. In particular, one of the team chairs interviewed felt that training for chairs in strategic planning and general chairperson duties would have been very valuable. S/he had expressed some confusion in relation to some of the terminology employed in the templates for recovery strategies and recovery action plans (e.g., the difference between a goal and an objective) as well as a general confusion about how to proceed with strategic planning (see section 6.1). The individual also commented that chairing teams is a skill in and of itself and that it would be useful to provide guidance to those people that had little or no prior experience with it. According to the interviewee, a number of

provincial government employees had expressed similar confusion around the planning terminology and had also expressed an interest in receiving some training in planning as well as in chairpersonship.[85]

It is worthy of note that some of training needs identified by the chair being described above are available in the U.S. In particular, the U.S. Fish and Wildlife Service provides two separate training courses on recovery planning at their National Training Center in Washington D.C.: recovery planning, and endangered species recovery implementation (USFWS 2003). The recovery planning course focuses on the purpose of the recovery planning process and the steps involved, the legal background, the relevant policies and guidance, and the relationship of recovery planning to all parts of the U.S. *Endangered Species Act*. The implementation course focuses on strategies that are useful for accomplishing particular recovery objectives, describes the use of scientific tools, provides guidance in relation to the identification of potential partners and methods of partnership development, and discusses how to identify a goal and evaluate whether it was reached (USFWS 2003). Furthermore, the U.S. FWS' response to an extensive study of the USESA recovery planning process recently undertaken by the Society for Conservation Biology suggests that consideration is being given to providing additional training to staff and others involved in the recovery planning process (Crouse et al. 2002).

The role of chair can also represent a relatively significant time commitment, particularly on teams with large numbers of members and complex organizational structures. Given that many team chairs have other job-related responsibilities – either directly related to the team (e.g., researcher on the species) or more broadly (e.g., employee of a government organization with responsibilities extending beyond the recovery team) – they all felt challenged to effectively carry out their role as chair. The most common complaint among team members was that chairs did not have sufficient time to devote to facilitating effective communication among team members between team meetings. In teams where the chair undertook much of the writing of the recovery strategy, team members and team chairs also commented that the recovery strategy would have been completed much sooner if the chair had more time to devote to it (see section 6.2.3).

[85] I did not confirm this with other team chairs.

6.4.3 Facilitation Support

In contrast to Old Teams, New Teams seemed to be relying more on an independent facilitator in assisting their negotiations as well as in taking the lead in drafting the recovery strategy. All of the New Teams I considered had been successful in securing some type of funding for these activities (see section 6.3.2). However, the decision to involve a facilitator on these teams appeared to have less to do with ensuring the neutrality of the facilitator as it did with the need to expedite the process of writing a recovery strategy (i.e., having somebody dedicated to the task – see sections 6.4.2 and 6.2.3). The issue of the neutrality of the facilitator, particularly in situations where the individual is writing the recovery strategy, is discussed below.

6.4.4 Funding to Write Recovery Strategies

All of the teams (Old and New Teams) had managed to secure some form of funding to pay a consultant to write all or part of the recovery strategy (Table 6.4). On three of the nine teams the consultant was a team member whereas other teams (especially New Teams) hired consultants that were not otherwise considered to be members of the team and did not have expertise that was specific to the species (i.e., they were often biologists or ecologists but their area of expertise was not the species in question). In cases where New Teams had hired consultants, they also acted as facilitators in team meetings (as described above). This approach appears to offer the most promise in terms of getting a strategy written in a timely manner although the extent to which it represents an improvement to previous approaches could not be assessed given that New Teams had yet to actually complete a draft recovery strategy.

Table 6.5: Summary of Funding Support to Teams[86]

Funding for:	SPOW	WHWO	GSM	TBG	PWS	STS	GOERT	OSF	VIM
Coordinator	No	No	No	No	No	No	Yes	No	No
Outreach position	No	No	No	No	No	No	Yes	No	Yes
Logistics for meetings (room rental, lunches)	No	No	No	No	No	No	No	No	No
Someone to write the RS/RP	Yes	Yes	Yes*	Yes*	Yes*	Yes	Yes	Yes	Yes

* The individuals hired to write the recovery strategy also facilitated the teams' discussions.

[86] Table 6.5 does not consider funding for project implementation given that implementation was beyond the scope of this research.

While several of the New Teams as well as some of the Old Teams had hired facilitators to write recovery strategies and facilitate discussions (see Table 6.4), the facilitator was not always a "neutral" party (i.e., the facilitator had a stake in the decision). Some of the potential difficulties associated with hiring contractors that also have a stake in the species were illustrated by one of the Old Teams wherein a contractor who was also a key researcher on the species was hired to write the recovery strategy. According to some team members, the individual misrepresented some of the research on the species in the recovery strategy in that some of the statements that were made were not fully supported by the best available science. In particular, the statements in the recovery strategy suggested a link between certain land-use activities and the species' decline. While these statements represented the contractors views of the situation, other team members felt that there was insufficient evidence to make these claims. This caused some conflict among the team given that the characterization of the threats to the species would have directed the team towards a course of action with significant economic implications which may not have been justified and, most importantly, may not have contributed to the species' recovery.[87] While this example only represents one team's experience, the severity of the implications of the facilitator's lack of neutrality on the quality of the recovery strategy (and the recovery efforts for that species more broadly) underline the importance of seeking out neutral facilitators to guide discussions and prepare strategic plans (e.g., recovery strategies). The importance of a neutral facilitator is likely to increase in situations wherein the conflict is quite entrenched or where the issues are complex (Dorcey and Riek 1987).

6.4.5 Funding for Support Staff and other Contractors

The Garry Oak team, with over 85 members when both the team and implementation group members are considered, has a full-time (paid) coordinator[88] in place and was in the process of hiring a fundraiser at the time of the interviews. All of the Garry Oak team members interviewed were adamant that having a coordinator was essential to the team with one person commenting: "If a funding agency or government wanted to do something that was the most important thing for the recovery of an ecosystem, paying for a full-time coordinator for the

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[87] The "threat" that was described has since been determined to be a potential contributing factor to the species decline but is not felt to be the key threat to the species.

[88] For the first several years of the team's existence the coordinator also chaired the team. The chair was taken over by one of the federal representatives on the team in May of 2002 due in part to the fact that the coordinator was over-extended in having to take on the chairpersonship.

recovery team would be the best thing they could do."[89] While the team had managed to secure funding for the coordinator for several years, several team members commented that they had struggled every year to find sufficient funds for the position and the long-term security of the position (as well as the fundraising position) was in question. One of the key responsibilities of the fundraiser would in fact be to secure sufficient funds to sustain the two positions.

The Vancouver Island Marmot recovery team also had something similar to a coordinator in place in the form of the Marmot Recovery Foundation (MRF) (see Appendix VIII). The MRF was in fact established as a result of the team's inability to deal with the workload associated with project implementation, particularly in relation to seeking and administering funding for projects and reporting back on progress to funding agencies.

Other than these two teams, most teams had little or no access to funding to allocate to individuals who performed support functions, including providing funding to chairs in cases where they were not government employees and not otherwise compensated for their time. In all cases, teams felt some level of support would have been useful, particularly in relation to undertaking the administrative tasks related to contracts (i.e., preparing proposals for funding and preparing status reports and other documentation related to funding).[90]

6.4.6 Funding: General Conclusion

The crux of the problem with respect to the availability of funds for recovery teams is that there is no reliable source of funds available to all teams for activities related to process management (e.g., hiring a facilitator, hiring a contractor, paying team members' travel expenses). Most teams that had been successful in funding "support" activities had managed to find ways to re-direct funds meant for other purposes (e.g., funding for project implementation)[91]

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[89] It should be noted that s/he later qualified this statement by saying that the coordination role was particularly critical to a team a large and structurally complex as the Garry Oak team but may not be as critical for a smaller single-species team.

[90] In the absence of support staff to undertake these roles, several teams were relying on volunteers to perform these roles (see section 6.5.7).

[91] Species of federal priority are eligible for funding through the federal Habitat Stewardship Program (HSP), the Interdepartmental Recovery Fund (IRF), or the Endangered Species Recovery Fund (ESRF). All three funding sources have specific criteria that need to be met before funding will be allocated (i.e., only certain types of activities/projects are eligible for funding under the various programs). With the exception of the ESRF that has provided funding for the preparation of recovery strategies (i.e., money to hire a contractor), these funding sources

or access small amounts of money that team members had access to (e.g., budgets of individual team members). The recent exception to this observation relates to teams established for forest-dependent species which may have some funding through the provincial Forest Investment Account established in April 2002.

Recommendations:

- ***Teams should be aware that their choice of meeting location as well as other logistical decisions may impact the ability of key stakeholders to attend recovery team meetings.***
- ***Team chairs should be selected on the basis of the skills they posses and their ability to devote sufficient time to the process. Important skills for chairs including leadership, communication skills, and organizational abilities.***
- ***Chairs that are required to do much of the strategic planning (e.g., writing recovery strategies) and facilitation should be provided with training in these areas. Courses available in the U.S. may provide a good template to consider. Training in chairpersonship should also be available to all recovery team chairs.***
- ***Consideration should be given to hiring a coordinator for recovery teams, particularly in cases where teams are likely to involve several people representing a wide-array of interests or are structurally complex (e.g., teams taking ecosystem or landscape approaches to recovery planning).***
- ***A source of funding should be available to teams to undertake activities in support of the decision-making process (e.g., hire a facilitator or mediator, write the recovery strategy).***

6.5 Stakeholder Involvement

One of the most critical decisions in public participation processes is who to involve in the process. As discussed in Chapter 4, the range of interests involved influences the quality of the decision, the extent to which the decision is likely to be accepted by those affected, and is also thought to influence the eventual success of implementation. However, it is difficult to assess to what extent a given process has involved the "right" stakeholders given that there are few criteria upon which to base such an evaluation. Nonetheless, there are a number of considerations that have been outlined to guide decisions around who to involve that can form

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are not meant for activities related to the decision-making process (e.g., hiring a co-ordinator or facilitator for recovery teams).

the basis of such an evaluation (see section 4.5.1). In the case of recovery teams, the guidelines provided by RENEW via the Recovery Manual were also considered (i.e., the extent to which teams followed the guidelines). Finally, the views of team members themselves were considered in terms of the extent to which team members felt that the representation on their team was (or was not) appropriate.

6.5.1 RENEW's Directives Regarding Recovery Team Membership

As discussed in Chapter 3, the guidance provided by the Recovery Manual regarding recovery team membership is vague. The only definitive guidance provided is that teams will include representation from all jurisdictions responsible for species in Canada (including wildlife management boards authorized under a land claims agreement) (Environment Canada 2001). In describing the extent of involvement of non-jurisdictional representatives on teams, the Recovery Manual suggests that teams "invite species or issue experts from other agencies, universities, conservation groups, aboriginal groups, and stakeholder groups to sit on the recovery team" but the Manual also includes disclaimers such as "to the extent possible" and "as appropriate" (Environment Canada 2001: 66). Similarly, the Recovery Manual suggests the importance of achieving a "balance between science, management and stakeholder interests" (see Chapter 3, section 3.3). However "as appropriate," "to the extent that is possible," and "balance" are not further defined such that it is difficult to discern precisely who is meant to be involved (e.g., what criteria are used to gauge appropriateness and what is the balance that teams are meant to strive for?).

The Recovery Manual does specifically discuss the importance of aboriginal traditional knowledge and the need to involve First Nation people in some manner in the recovery planning process. While the guidelines for involving aboriginal people in the November 2001 version of the Recovery Manual were still under development, the Manual did discuss the importance of involving aboriginal people early in the recovery process and the need to follow existing processes where these have been established (e.g., processes for involving aboriginal people that have been established through land claim agreements). However, other than wildlife management boards (see above), the Manual fails to specify the extent of this involvement (e.g., to be involved in decision-making versus consultation) nor does it specify at what stage of the recovery planning process First Nations should be involved (i.e., recovery team versus recovery implementation group).

Overall, the directives provided in the Recovery Manual regarding team membership are not sufficient to provide meaningful guidance to teams leaving the decisions about this important aspect of the process to team chairs (or senior officials in government agencies – see section 6.5.6).

6.5.2 Team Membership on the Basis of the Role(s) of Recovery Teams

In the absence of specific guidance from RENEW regarding who should be on recovery teams, consideration can be given to their role: what is it that recovery teams are expected to do and who should therefore be involved? This approach is consistent with the types of criteria discussed in the decision-making literature in relation to deciding who to involve in participatory processes (see section 4.5.1).

According to RENEW, the team's central role is to prepare a recovery strategy and to coordinate the activities of the RIGs (see section 3.3). Recovery strategies are described as science-based, focusing on population status and trends, threats to the species' survival, habitat needs of the species, and gaps in knowledge (see section 3.5). Obvious recovery team members therefore include individuals with this type of expertise: scientists (either affiliated with academic institutions, government agencies or private institutions), First Nations individuals with relevant traditional knowledge, and others that may have knowledge of the species (e.g., naturalists). However, it appears that the scientifically-based guidance in recovery strategies (i.e., what the science suggests is the best course of action to recover the species) is meant to be tempered to some degree with broader socio-economic realities and consideration as to the likelihood of success of the proposed actions. In particular, recovery strategies are meant to include[92] the following:

- Socio-economic considerations[93]
- Technical feasibility of species' recovery (i.e., consideration of the likelihood of the threat to the species being successfully addressed)
- Anticipated conflicts or challenges

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[92] This information is based on the template for recovery strategies provided in the November 2001 version of the Recovery Manual.

[93] It is not clear what the expectations are of teams in relation to describing socio-economic considerations (see section 6.6.4).

This suggests that individuals with expertise extending beyond the biology and ecology of the species also have a role to play. In particular, local government officials, industry representatives, conservation organizations, and even individual landowners may all have valuable information to contribute on these latter issues. However, the Manual is again unclear as to the extent to which the recovery strategy (as compared to the recovery action plan) is meant to be broader than the science-based guidance, making it unclear to what extent the team should involve these broader interests.

Furthermore, the role of recovery teams extends beyond merely preparing recovery strategies. Interviews with recovery team members revealed that all of the teams I considered (i.e., Old and New Teams) were involved in the implementation of recovery actions very early in their history (i.e., before a recovery strategy had been prepared).[94] Team members all commented that recovery actions that had been undertaken were largely attributable to the connections that were established through the recovery team. In fact, implementation of recovery actions was described as being primarily a factor of: (a) having somebody on the team who was willing and/or interested in taking on the activity (or had a mandated responsibility to do so); and, (b) finding a funding agency/program willing to fund the activity (which itself appeared to be greatly facilitated by having a team member from the relevant agency assisting in writing funding proposals or with the ability to access funds from their internal budgets). Teams may therefore also need to involve the types of organizations and individuals who would best facilitate these types of collaborative efforts. Failure to do so could detract from the implementation of recovery actions and the eventual success of the species' recovery.

Overall, it is not clear who should be involved on teams (and to what extent teams were therefore involving the appropriate interests), due in part to the lack of clarity in the guidelines regarding recovery team membership but also as a result of the lack of clarity in relation to the team's purpose. The lack of guidance in the Recovery Manual regarding recovery team membership reduces the transparency of the process with respect to membership in that it does not make it clear to potential team members to what extent they could legitimately play a role. This could be particularly problematic given the issues that have surfaced in the U.S. stemming from the perceived over-representation of government representatives on recovery teams and the

[94] As discussed in section 3.2, the Recovery Manual also suggests that recovery teams may undertake recovery actions at any stage (i.e., they do not need to wait until a finalized recovery strategy has been produced).

resulting recommendations to establish a clear and transparent process regarding team membership appointments. This is further discussed in section 6.5.6.

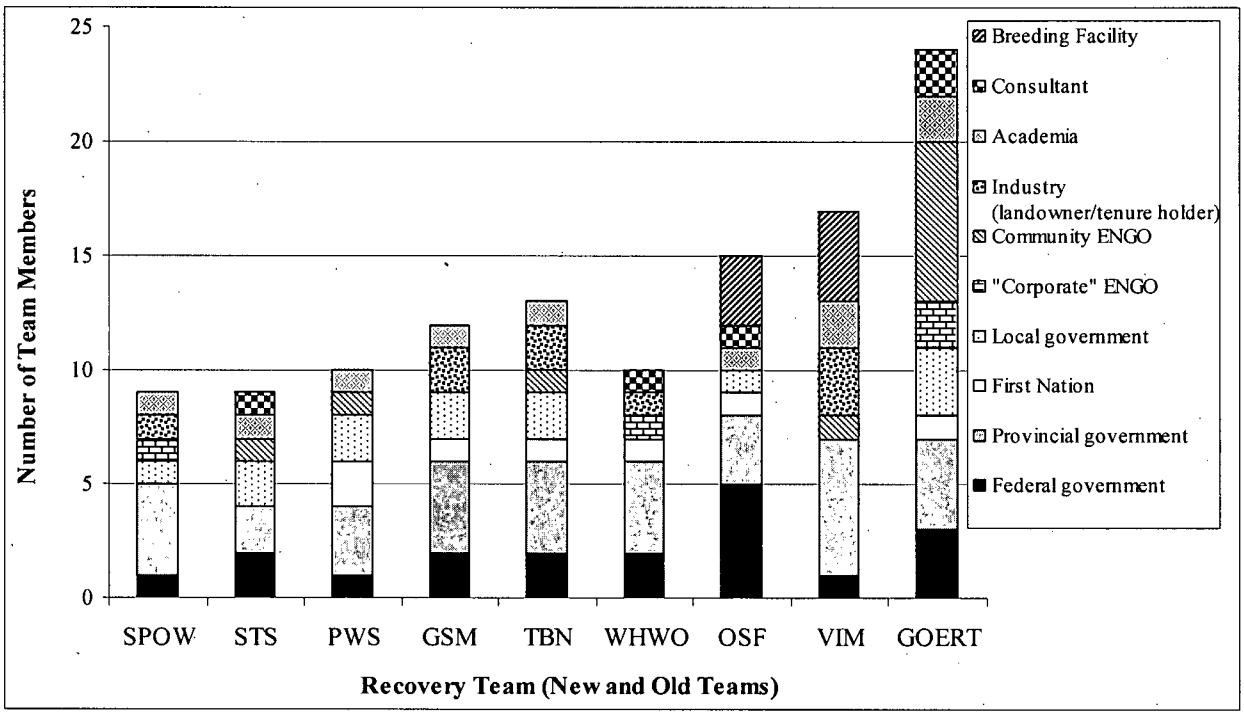
6.5.3 Representation on Recovery Teams: Interviewees' Observations and Reflections

Given the ambiguity in the directives provided by RENEW, team members were asked to describe the types of individuals or organizations that they felt should be members of recovery teams. Team members were also asked to comment on the extent to which they felt that the representation on their team was adequate and the implications of any gaps in representation that they had noted.

Generally speaking, chairs of both New and Old teams tended to express similar sentiments in relation to the ideal composition of recovery teams. Chairs consistently emphasized the fact that recovery strategies are meant to be "science-based" such that teams should be composed of individuals with appropriate expertise (provision of scientific advice and/or management and strategic planning experience as a key factor). However, other "non-science" organizations were also consistently identified. The following organizations and individuals were consistently identified by chairs (Old and New Teams) as well as other team members (Old Teams only) as key recovery team members:

- Individuals with jurisdictional responsibility for the species (e.g., representatives of relevant federal and provincial agencies);
- Species/ecosystem experts such as scientists with academic affiliations, researchers within government agencies, and independent scientists (e.g., consultants);
- Agencies with the authority/mandate to make decisions that could impact the species (including decisions impacting habitats thought to be important for the species) (e.g., regional and municipal governments);
- First Nation individuals and/or governments;
- Major landowners and/or tenure holders (e.g., forestry companies);
- Other organizations with an interest in the species (e.g., environmental non-government organizations); and,
- Individuals and organizations with an interest in undertaking recovery actions (e.g., naturalists, Land Trusts, breeding facilities).

Figure 6.1: Stakeholder Representation on New and Old teams (see Appendix IX for relevant data)



Generally speaking, many of the stakeholders described by chairs as important potential recovery team members were represented on the recovery teams considered in this analysis.[95] However, not every recovery team included a member of every stakeholder group identified above. Similarly, different teams had different breakdowns of stakeholder representation on a percentage basis (see Figure 6.1 for a breakdown of the membership of recovery teams). An important trend that emerged was the fact that all nine teams appeared to be making decisions around stakeholder involvement on the basis of the types of criteria discussed in the literature

[95] The information described in relation to team composition is based on recovery team membership lists and other information provided by recovery team chairs. It warrants noting that lists provided by chairs may include members who are not active participants at all recovery team meetings. Anecdotal information from recovery team members in fact suggests that some of the individuals considered as being team members have had very little if any interaction with the team. Nonetheless, the list of team members was considered as provided given that the list represents what the chair considers as constituting the team and would also be consistent with the team lists included in published recovery plans.

with respect to stakeholder involvement (see section 4.5.1).[96] With some exceptions (see section 6.5.4), teams were generally comprised of the individuals with the relevant information, representatives with the jurisdictional responsibility for the species and its habitat(s), and representatives with the ability to mitigate threats to the species. For example, teams wherein forestry was thought to be a factor in the species' decline involved representatives from the company holding tenure in the relevant areas. Similarly, teams where the efforts of local community members and environmental non-government organizations are likely to be critical to the success of recovery efforts (e.g., the Garry Oak team) had representation from these organizations.

6.5.4 Gaps in Representation Noted by Recovery Team Members

Despite feeling that the representation on their teams was generally adequate, interviewees did identify a number of consistent gaps across teams. The gaps in representation most frequently noted among chairs of Old and New Teams as well as team members of Old Teams are described below. Where relevant, the implications of these gaps in representation are noted both in terms of the views expressed by team members as well as my own analysis of the potential implications.

First Nation representatives

Chairs of New Teams and team members from all but one Old Team mentioned the lack of involvement of First Nation representatives as constituting a gap in the membership of their team. The extent to which this gap in membership existed in the teams I considered is not readily apparent from Figure 6.1 in that the figure reflects team membership as recorded in official team lists (see footnote #95). While teams often listed one or more First Nation representatives as being included on the team and distributed all relevant material to those individuals (e.g., recovery strategies, minutes of meetings), chairs and team members of the majority of teams (i.e., all but two teams) had never seen the First Nation representatives at meetings nor had they received any input from them on any of the material distributed. Of the

[96] This trend was something that I observed in analyzing the membership of the recovery teams and was also expressed by chairs in relation to deciding who should be involved on the team (i.e., chairs discussed the fact that they were considering the threats and other key issues related to the species' recovery in making decisions around membership).

nine teams I considered, only two teams had active First Nation representation. The lack of First Nation involvement on recovery teams is consistent with gaps in representation from First Nation organizations noted in a number of other environmental decision-making processes in British Columbia (cf: Duffy et al. 1998).

It warrants noting that all chairs stated that they had invited First Nation representatives to join the team but had not had success in retaining First Nation team members (other than the two teams described above). Chairs speculated that the lack of active involvement of First Nation organizations was due to their lack of capacity to participate in the process. This is consistent with comments made by a First Nation representative interviewed for this research (see section 6.3.1).

The lack of involvement of First Nation representatives may have significant implications for the quality of the recovery strategy, particularly in cases where there is relevant traditional ecological knowledge that should have been considered. Given the added authority over land-management decisions that First Nations in British Columbia are likely to achieve as treaties are negotiated, the lack of First Nation representation on recovery teams may also result in barriers to the implementation of recovery actions (British Columbia Treaty Negotiations Office 2003). Finally, recent court cases regarding land and resource use issues in British Columbia suggest that the failure to adequately involve First Nation representatives on recovery teams (and recovery implementation groups) may also have broader legal implications for government agencies if First Nation governments feel that their right to be consulted on recovery actions has not been respected (cf: *Council of the Haida Nation v. B.C. Minister of Forests* 2002).

Local government representatives

Interviewees from two of the three New Teams commented that their team would have benefited from a greater involvement from local government representatives. The importance of involving local government representatives was generally discussed in context of the importance of their support to the implementation of recovery actions given their authority over land-use decisions. As discussed in relation to First Nation representation, all team chairs had invited local government representatives to join the team but had varying degrees of success (see Table 6.6). In some cases, chairs speculated that the lack of involvement by local government representatives may have been a consequence of team meetings being held too far from communities such that the amount of travel (and associated costs) required may have been too high (see also section 6.4.1).

Table 6.6: Representation from Local Governments on Recovery Teams (percentage and number of representatives)

SPOW	GSM	OSF	STS	TBN	VIM	PWS	WHWO	GOERT
11% (1)	17% (2)	7% (1)	22% (2)	15% (2)	O%	20% (2)	O%	13% (3)

Academic/Scientific community

Several members of the Vancouver Island Marmot recovery team felt that they had insufficient representation from the scientific community early on in the process, particularly in terms of scientists affiliated with academic institutions (e.g., universities). This was felt to have had repercussions in terms of both the recovery strategy itself as well as the implementation of recovery actions (e.g., research projects). While this was partially addressed by forming the Science Advisory Group (SAG) (see Appendix VIII), team members felt that there was a need for more involvement from the academic community on the team itself. Furthermore, the future of SAG was unclear at the time of the interviews (according to one of the interviewees) such that the opportunity for on-going input from the scientific community through SAG was uncertain.

Evaluations of the U.S. *Endangered Species Act* suggest that the lack of involvement of representatives from the academic/scientific community on recovery teams could have detrimental impacts on the quality of the strategy. In particular, the lack of involvement from the scientific community was found to result in a failure to include the best available science in recovery strategies (Gerber and Schultz 2001). In their response to the major evaluation of the U.S. recovery planning process undertaken by the Society on Conservation Biology,[97] Crouse et al. (2002) specifically described the U.S. Fish and Wildlife Service's intent to improve collaborations between the agency and academic institutions.

Provincial Government

The lack of adequate representation from the provincial government was only discussed by interviewees from one team and related specifically to the lack of involvement of provincial government staff with the appropriate technical or scientific expertise (i.e., species/technical

[97] See footnote #49 in section 4.5.

experts).[98] The lack of adequate involvement from provincial government employees was seen as having resulted in weaknesses in the content of recovery strategies as well as action plans.

Comments made by one team member in relation to her/his perception of the reasons for the lack of involvement of provincial government representatives suggest the need for provincial agencies to re-evaluate their priorities around recovery efforts. While acknowledging that there were instances where the relevant staff were simply overcommitted (e.g., cases where there are only a few experts on a particular issue/taxa such that there are considerable demands on their time),[99] there were other instances wherein s/he perceived the lack of involvement of certain individuals/organizations as having been the result of a low priority being placed on recovery efforts within the organization. In particular, an area of critical importance for the recovery of one of the species was felt to be receiving very little attention because the provincial and federal employees working in the relevant fields had not received a mandate to participate.

6.5.5 Failure to Participate

In addition to considering the extent to which teams felt that they had gaps in terms of representation (i.e., the list of people considered as constituting the team), the extent to which people on the team in fact *contributed* to the process was also discussed by interviewees. Several interviewees discussed the fact that while teams were relatively large, not all team members contributed equally to the process. In fact, according to some interviewees, some team members barely contributed at all both in terms of frequently missing meetings as well as not providing any substantive feedback on the recovery strategy. On some of the teams, interviewees commented that only "a handful of people" had actually been involved in writing and directing the recovery strategy, of which the typical candidates included the members with the scientific expertise (e.g., members from the academic community or consultants) and the federal and provincial government representatives. This comment was consistent with my observations in that several of the interviewees who were not from government agencies or the academic community did not appear to be overly familiar with the recovery strategy. This was

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[98] Interviewees from other teams often commented that they had too many representatives from the provincial government (many of whom contributed very little). This is discussed in more detail in section 6.5.5.

[99] It was noted that this problem was exacerbated by the staff cuts to provincial ministries in 2001 (including most notably the laying off of the majority of the recently-hired species at risk biologists).

most evident when questions about the quality of the recovery strategy were asked (i.e., questions related to "outcome success" described in section 6.6).

Several reasons were cited in relation to the lack of active involvement by certain team members. To begin with, a number of team members[100] commented that they felt that the emphasis on involving diverse stakeholders was "politically motivated" rather than reflecting the type of representation (i.e., information) required to prepare recovery strategies. These interviewees suggested that some team members had been invited to participate in order for the team to be *perceived* as being inclusive and representative rather than because they had valuable information to contribute. However, because they did not have the requisite experience and expertise (according to certain interviewees), these team members generally did not participate in discussions and served only to complicate the team's logistical arrangements (e.g., more people invited to meetings resulting in more difficulty arranging meetings that suit all team members' schedules and needs). In some cases, team members felt that certain individuals appeared to be primarily interested in implementing recovery actions such that their involvement may have been more appropriate at the implementation level (i.e., involved on RIGs or involved on the team later in the process).

However, there were also individuals who were seen to have information and insight to contribute but had not devoted enough time to the process (according to team members and/or chairs). One of the chairs interviewed expressed some frustration around this issue, and commented that it may be valuable to provide more explicit information to potential recovery team members in relation to the type of commitment that membership on the team entails. S/he felt that this would ensure that individuals that consent to participate on the team are prepared to spend the amount of time and energy that is required.

6.5.6 Jurisdictional Control over Stakeholder Involvement

The focus of this section is to consider the extent to which decisions regarding recovery team membership (including the appointment of the chair of recovery teams) are controlled by the responsible jurisdiction, and to consider the views of team members on this issue. The choice to focus on this issue reflects the fact that authors of evaluative studies of the U.S. recovery planning process have suggested that too much control by government authorities over

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[100] The interviewees that made these comments had scientific training (more precise identification is not possible given the potential for the comments to be linked to particular individuals).

this key aspect of the process may be cause for concern. In particular, several authors have suggested that allowing governments to appoint recovery team members[101] allows for an inappropriate political influence in the process (Miller et al. 1994, Clark 1997, Snyder and Snyder 2000). Miller et al. (1994) claim that recovery teams are often "stacked" such that decisions are more likely to reflect agency and political concerns rather than task-oriented recovery goals. Clark (1997) also suggests that governments tend to create teams that are comprised predominantly of their own staff, ensuring in particular to put government staff in positions of power on the team (e.g., the chair). In order to reduce the problems associated with government control over the process, Snyder and Snyder (2000) recommend that decisions around team membership be made by an advisory group with representation from a number of professional organizations (including the government). Culbert and Blair (1989) similarly suggest that a standardized procedure be put in place around team membership, recommending that the appointment of experts who are not government employees be obligatory.

Decisions around stakeholder involvement

There were three different approaches to the creation of recovery teams among the nine recovery teams considered in this analysis. The most obvious distinction between the approaches was the degree to which teams were created through an open process wherein all individuals with an interest were invited to participate, as compared to one wherein membership was essentially "by invitation only." Within the latter category (which captures almost all of the teams considered), two approaches can be further distinguished on the basis of the degree to which membership decisions were strictly regulated as compared to being subject to more informal rules or policies. All three approaches are described briefly below.

The least restrictive model of team membership was evident in the Garry Oak team wherein team membership was open to any and all interested individuals and organizations. This was due in large part to the fact that the team was initiated after an international symposium on Garry Oak in 1999 wherein participants resolved to pursue more coordinated efforts to protect the Garry Oak ecosystem. All symposium participants and other interested parties were invited to a follow-up meeting a few months later and the recovery team was eventually born out of that gathering. While membership on the team is no longer as open as it once was (i.e., the team now

[101] In the U.S., team members are appointed by the regional director of the U.S. Fish and Wildlife Service.

votes on potential additions to the team), it remains the most open and inclusive of the teams I considered.

In contrast, the approach used by the majority of the recovery teams I considered (8 of the 9 teams) was one wherein team membership decisions were largely made by the team chair with varying degrees of input from the larger team. The typical approach was one wherein chairs invited individuals and organizations thought to have valuable information or insight to provide to the recovery process to join the team. At the first team meeting, team members were invited to recommend additional team members. These recommendations were then discussed and often voted on by the team. In a limited number of cases, individuals approached the team chair expressing an interest in participating on the team with the ultimate decision resting with either the chair or the team (the latter being the most common).

Until recently, teams have approached membership decisions in the somewhat informal manner described above (i.e., allowing team members to discuss and sometimes vote on the addition of new members). However, decisions around membership on teams formed more recently (i.e., since September 2002) have been controlled to a greater extent by the responsible jurisdictions. In newly forming teams, team members must be formally invited by a senior official (e.g., a Branch Director or other senior official within the relevant government agency). Individuals interested in joining the team that have not been specifically invited by the senior official must make a formal request for membership to the responsible jurisdiction(s) by way of a letter outlining their expertise or interest in the species. This approach, described by a number of the chairs of the New Teams, is reflected in the "Terms of Reference for Recovery Teams" in the most recent iteration of the Recovery Manual (National Recovery Working Group 2003).

It appears that teams are moving from open and informal approaches to the establishment of recovery teams toward those that are controlled to a larger extent by the responsible jurisdiction(s). A trend toward greater centralization of decision-making also appears to be emerging by virtue of the fact that decision-making control in relation to team membership will be retained by senior officials within government departments as compared to falling within the discretionary powers of team chairs and/or team members.

Percent representation of government agencies on recovery teams

Other than the Garry Oak team,[102] federal and provincial government representatives constitute between 40 to 60% (average of 46.2%) of the team membership with the provincial government generally being the most extensively represented organization on a percentage basis (Table 6.7). Despite the rather significant representation[103] of government employees on recovery teams, team members' views on this were not consistent with those expressed by authors in the U.S. (as described above).

Several members of two of the Old Teams[104] felt that there were too many representatives from the provincial government on their team, particularly given that only one or two of them actually provided feedback and/or attended meetings consistently. Team members questioned the need for so many representatives from the government, particularly when many other groups (e.g., industry) were represented by only one individual. However these concerns tended to be expressed in relation to the difficulty of managing such large teams with no mention of the types of problems described in the U.S. (e.g., a perception that the governments' agendas were dominating the team's priorities).

Table 6.7: Federal and Provincial Government Involvement on Old and New Teams

	# Stake-holders on team	% Representation of Federal Government	% Representation of Provincial Government	Combined Federal and Provincial Representation
SPOW	6	11	45	56
STS	6	23	22	45
PWS	6	10	30	40
GSM	6	17	33	50
TBN	7	15	31	46
WHWO	6	20	40	60
OSF	7	32	20	52
VIM	6	6	34	40
GOERT	8	13	17	30
Avg.	**6.4**	**16**	**30.2**	**46.2**

[102] As noted earlier in this section as well as in section 6.5.3, the Garry Oak team was somewhat distinct in the way in which it was formed resulting in a relatively large percent representation from the non-government community.

[103] Note the different between the *representation* on the team as compared to *influence,* which are not necessarily synonymous.

[104] The third Old Team was the one described in section 6.5.4 wherein there was felt to be a lack of adequate involvement of the scientific experts from the relevant provincial agencies.

Role of the Chair

As was discussed in more detail in section 6.4.2, the chair tends take on a very significant role in recovery teams. This is particularly true of the Old Teams wherein the chair often undertook the roles of facilitation, coordination, and was frequently involved in writing all or part of the recovery strategy. As a result, team chairs tend to have considerable influence within the team and over the decision-making process as a whole. In recognition of this, team members from Old Teams were asked whether they felt that it was appropriate for chairs to be from a government agency.[105] As discussed above (i.e., Clark 1997), related concerns have been raised in the U.S.

Members of Old Teams interviewed were unanimous in stating that there would be no adverse impacts associated with the chair being a member of a provincial or federal agency (see Table 5.2 for the affiliations of the chairs of the three Old Teams considered in this analysis). One person in fact commented that it was more appropriate for the chairs to be from the responsible jurisdiction given that chairing the team should be a part of taking on that responsibility and accountability. Furthermore, one interviewee commented that having a chair from a non-government organization could constitute a conflict of interest if the chair also had other interests in the species or in the teams' efforts (e.g., if the chair was a consultant that could eventually be bidding on contracts to implement recovery actions) (see section 6.2.3 where this is discussed in more detail). The interviewee was in fact relaying the experience of her/his team wherein the consultant-chair was replaced by a government employee due in part to the potential for a conflict of interest situation to arise.

The only concerns relayed by interviewees regarding the affiliation of the chair was concern about the extent to which federal or provincial representatives would have sufficient time to do an adequate job of the chairpersonship. Interviewees also commented on the importance of ensuring that the individual chosen for the job would have the appropriate set of skills to fulfill the responsibilities of chair (see section 6.4.2 for a more complete discussion of the demands of the role of chair).

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[105] The terms of reference for recovery teams included in the June 3, 2003 version of the Recovery Manual stipulate that "A recovery team has, as a minimum, a chair provided by the lead jurisdiction" (National Recovery Working Group 2003: 16).

6.5.7 Other Observations Regarding Representation

Personal Suitability

In response to questions regarding who should be involved on the recovery team, a few team members and chairs discussed the importance of the individuals' personalities and/or skill sets and the compatibility between the individual's skills and the focal task of the group. For example, one interviewee commented that the RIGs on her/his team tended to be engaged in very detailed scientific discussions such that RIG members needed to have a good handle on the relevant science to contribute effectively in the discussions. Good recovery team members, on the other hand, were individuals with the ability to engage in broad thinking and strategic planning with lesser importance placed on their specific scientific expertise.

When asked to what they attributed the success of the team, interviewees all commented on the importance of the interpersonal dynamic among team members and/or the impact of certain individuals. While most team members commented on the importance of the coordinator/chair to the effectiveness of the team (see sections 6.4.2 and 6.5.6), the importance of other key team members was also discussed. Team members described the contribution made by certain individuals in providing a "positive energy" or "good feelings" to the group. Another interviewee described a fellow team member as acting as "the voice of reason" for the team, commenting that the individual often helped others express themselves in meetings, and generally felt that the individual assisted in facilitating discussions. One team member suggested that his/her involvement had less to do with his/her expertise but rather reflected the chair's view that s/he would be able to act as a mediator on the team.

These comments are consistent with the literature described in section 4.5.1 wherein the importance of team members' skills in group decision-making was underlined. Furthermore, it underlines the importance of providing appropriate training to individuals who may not have the experience working in group situations (see section 6.3.3).

Reliance on volunteer labour

In interviewing recovery team members and team chairs it became apparent that all of the Old Teams considered relied to some extent on "volunteer" effort.[106] The Garry Oak team, for

[106] The term volunteer is used here to reflect the fact that the individual is not being paid for the time they are devoting to the team (e.g., attending meetings, reviewing documents).

example, considered half of its team members as being volunteers.[107] Discussions with team members suggested that the extent to which teams relied on volunteer effort is not immediately obvious on the basis of the affiliation of the team members given that several "paid" team members spent much of their un-paid time (e.g., weekends and holidays) on the activities of the recovery team (e.g., reviewing the recovery strategy).

The fact that people are volunteering their time to participate on teams would seem to suggest that they have a high level of commitment to the species' recovery. When asked why they participated on the recovery team, most team members (Old Teams only) commented on their interest in the species and their desire to do something positive for it.[108] Interviewees expressed a sense of responsibility to be involved in recovery teams ("it is part of being socially responsible"); one person commented that s/he felt it was an honour to have been invited to participate on the team. In another case, an interviewee stated that his/her interest in participating on the team stemmed from her/his desire to ensure that the interests of her/his community were represented on the team and in the recovery strategy/recovery efforts. Further evidence of the commitment of certain team members to the team was the fact that recovery team members that were employees of the provincial government stayed on the team as volunteers after their positions within the government were eliminated.[109]

Given the importance of collaborative efforts and the reality of limited resources, the involvement and commitment of non-government organizations to species' recovery efforts is critical to species' recovery. However, the comments made by a number of interviewees suggest that care must be taken not to place unreasonable expectations or burdens on volunteer members. In particular, some team members commented that the governments' expectations of volunteers were too high and involved activities that should have been undertaken by team members who were being compensated for their involvement (e.g., government employees) (see footnote

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[107] Information on the volunteer/paid status of all team members was not available for other teams. However, comments made during interviews with team members revealed that at least some team members on both the Oregon Spotted Frog and Vancouver Island Marmot teams were volunteers.

[108] This question was asked of both "paid" and "un-paid" team members such that responses reflect both of these groups. In some cases individuals commented that they were involved on the team because it was part of their job but this was mentioned in addition to the motivations described above.

[109] According to a provincial government employee interviewed, several of the team members who had previously been employed by the provincial government refused to participate in the formal planning process (i.e., writing recovery action plans) because they felt strongly that those responsibilities should be carried out by paid employees.

#109). In particular, team members felt that volunteers should not be expected to devote their time to administrative tasks such as contract administration, taking minutes at meetings, and other relatively mundane tasks. Another interviewee commented that the drawback of having too many volunteers on the team (particularly in cases where the volunteers appear to be leading the teams' efforts) is the fact that there are few means by which to enforce timelines or require certain activities to be completed when the representatives are volunteering their time.

Despite the difficulties described above, the team members I interviewed appeared to be committed to an on-going involvement on their respective teams (i.e., the Old Teams considered in this analysis). When asked the hypothetical question of whether they would participate on the recovery team again (i.e., participate on the same team again), almost all interviewees said they would, almost invariably citing their interest in doing something for the species as their primary motivation. In fact, of all recovery team members and chairs interviewed, only one person said s/he would choose not to take part on the recovery team again.[110]

It warrants noting that several interviewees that had participated on other teams (not the Old and New Teams considered in this research) commented that their participation on those teams had been less positive and would cause them to be somewhat cautious about becoming a member of another recovery team in the future. One interviewee had stepped down from one of the other recovery teams of which s/he was a member as a result of his/her frustration with the process and his/her perception that the team members were not truly committed to recovering the species. In this particular case the individual felt that team members with jurisdictional responsibility for the species proceeded to undertake recovery actions and make decisions that were not consistent with the guidance provided by the team (i.e., the directives in the recovery strategy).

Actualizing Representation

Despite being able to articulate the types of organizations deserving of membership (see section 6.5.3), most chairs admitted to some confusion in relation to how to decide precisely who from the organizations to invite and/or how many people from each stakeholder "type" to

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[110] Nonetheless, the individual did express an interest in participating in the broader recovery effort by collecting relevant information for the team. The individual commented that his/her time could have been used more efficiently outside of the team and had expressed frustration during other parts of the interview in relation to her/his view that the team had not focused enough on project implementation, focusing too much on planning.

consider (i.e., how many local government or First Nation representatives). Chairs were particularly challenged in situations in which the species' range[111] was large such that several representatives from the individual stakeholder groups could potentially have an interest in being on the team (i.e., First Nations, municipalities, and landowners/tenure holders). The chair of one of the New Teams commented that chairs have begun to refer the invitation for membership to "umbrella" organizations (i.e., the BC Environmental Network or the Association of Timber Harvesters) rather than specific individuals. The organizations are then asked to recommend an individual for membership on the recovery team. In addition to removing some of the decision-making responsibility from the team chair, a key benefit of this approach is that these organizations often have governance policies that ensure that the individuals that participate report back to the larger organization (i.e., their broader constituency). This is an approach often recommended in the literature dealing with public participation in that it supports a broader constituency of involvement (cf: Thomas 1995). Unfortunately, the approach has a somewhat limited application given that appropriate umbrella organizations do not exist for all groups, while other groups may not feel that their mandate would authorize them to make these types of recommendations.

Recommendations:

- ***While it is not possible or appropriate to prescribe specifically what composition of teams is appropriate in a generic sense (e.g., one member of a First Nations organization, two scientists, etc.), teams need more guidance (i.e., clear criteria) to support their decision-making in relation to the appointment of recovery team members. In particular, teams would benefit from a more structured approach to deciding what types of interests should be involved on teams such as that outlined by Pearce et al. (2003). While it appears that teams have been applying their own criteria to team membership, articulation of these criteria in the Recovery Manual would support greater transparency around this crucial decision. Similarly, the purpose of recovery teams needs to be more clearly articulated in order to provide more guidance regarding the types of individuals that should be on the team.***

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[111] The term "range" is used here to represent the extent of habitat the species uses over the course of its life history. While the term "critical habitat" may have been substituted here (i.e. the habitat that is critical to the species' survival) this term was avoided in recognition of its connotation under the *Species at Risk Act*.

- ***In selecting members for recovery teams, consideration should be give to both the individual's expertise and their personal suitability to the task (see also recommendation regarding training in section 6.3).***
- ***Attention should be paid to understanding the barriers to First Nation participation on recovery teams and instituting means by which to remove these barriers (see also sections 6.3.1 and 6.3.3).***
- ***Government agencies need to place appropriate priority on recovery efforts.***
- ***Team members whose involvement on recovery teams is part of their job (i.e., they are paid to participate) should be responsible for undertaking the bulk of the writing of recovery strategies and other administrative tasks. The involvement of volunteer members should be limited as much as possible to contributing their knowledge and expertise in order not to overburden them and risk their departure from the team (and RIGs).***
- ***While it does not appear to have been an issue in recovery teams established to date, government agencies should be careful to avoid some of the problems cited in the U.S. with respect to creating recovery teams that are dominated by representatives from government agencies, including stipulating that chairs must be from the responsible jurisdiction.***

6.6 Outcome Success

As described in section 1.2.1, three key indicators of outcome success were initially considered in this study:

- the extent to which team members were satisfied with the recovery strategy
- the extent to which the peer review process required revisions
- whether or not the recovery strategy was approved by the responsible jurisdictions and RENEW

These three indicators were meant to provide insight into the quality of the recovery strategy such that they assessed the views of the team itself, views of experts outside of the team (i.e., peer review), and the views of the responsible jurisdictions and RENEW (i.e., approval). The indicators were meant to be incremental in the sense that while achieving consensus among team members suggests some degree of quality, greater insight can be gleaned through feedback stemming from the peer review process (i.e., extensive comments suggest the team's strategy had significant flaws), and even more can be inferred by the approval (or not) of the responsible jurisdiction and RENEW.

While all three indicators would have ideally been considered for all of the Old Teams,[112] it became clear in the course of the interview process that this was not feasible. In fact, I was unable to consider anything beyond the first outcome indicator (satisfaction with the recovery strategy) in sufficient detail because the teams had either not progressed far enough along in the recovery planning process to make the indicator relevant (see Table 6.8), or because of team members' inability to recall sufficient detail about the process. Nonetheless, information on the other two indicators is considered in the limited cases where relevant information was available.

Table 6.8: Summary of Old Teams' Progress toward an Approved Recovery Strategy[113]

Team	Draft Recovery Strategy	(External) Peer Review	Approved Strategy[114]
Garry Oak Ecosystem	Yes	Yes	No
Oregon Spotted Frog	Yes	No	No
Vancouver Island Marmot	Yes	Yes	Yes

6.6.1 Team Achieved Consensus on the Recovery Strategy

Two separate questions were posed to team members to ascertain their views of their team's success in achieving consensus on the recovery strategy. Interviewees were directly asked for their views in relation to whether or not the team had achieved consensus on the recovery strategy. They were then asked whether they felt that the strategy met the needs of the species. This was felt to be one of the key criteria that individuals would have considered in agreeing to the strategy such that this question was meant to solicit more detailed feedback in relation to the individual's level of comfort with the strategy (i.e., the extent to which they were satisfied with the "consensus outcome").[115]

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[112] This discussion focuses on Old Teams given that most of the New Teams had not progressed far enough in the recovery planning process to provide information on any of the three indicators (see Table 6.7). Furthermore, this analysis required that the views of diverse team members be considered, an approach only undertaken for Old Teams.

[113] A more complete description of the approval process can be found in section 3.7.

[114] Connotes approval by both the responsible jurisdiction(s) and RENEW.

[115] This assumption was based of team members' descriptions of the goals of the recovery team as well as that outlined in the Recovery Manual.

All of the team members interviewed from the Old Teams indicated that the team had been successful in reaching consensus on a draft recovery strategy. While some team members described some difficulty making decisions about certain issues (e.g., recovery objectives), teams appeared to have encountered little conflict overall in writing and coming to consensus on the strategy. Interviewees also appeared to be relatively satisfied that the recovery strategy met the needs of the species/ecosystem, although a few comments on this topic warrant further consideration and are discussed in more detail below.

6.6.2 Peer Review Process

Of the three Old Teams considered, only the Garry Oak and Vancouver Island Marmot recovery teams had gone through the peer review process, and of these, only the Garry Oak team members were able to provide substantive feedback on the process. Members of the marmot team had very little recollection of the peer review process (including both the first and second time they went through it), recalling only that very few changes were made to the recovery strategy as a result of the peer review process.

In contrast, the Garry Oak team members interviewed had a more extensive recollection of the peer review process having gone through it more recently.[116] Interviewees characterized the comments they received from reviewers as including some valuable feedback that will be integrated into the revisions. However, interviewees also felt that some of the comments received were somewhat uninformed or irrelevant and did not feel that they needed to be incorporated or considered. The team in fact provided a summary of the peer review comments such that I was able to get a sense for the nature and scope of the comments. While it was difficult to discern how critical each comment was (i.e., the extent to which failure to incorporate the comment would influence jurisdictional approval), it appeared that peer reviewers felt that the recovery strategy lacked detail, providing a number of specific examples where additional information and detail should be incorporated. Reviewers also commented that the strategy failed to prioritize tasks/activities making it difficult to gauge the feasibility of implementing the strategy and ultimately recovering the species/ecosystem.

Comments from the peer review suggest that the Garry Oak team's initial assessment of "success" may have been somewhat exaggerated. Given the assumption that the quality of the

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[116] At the time of the interviews, the team coordinator was in the process of incorporating the peer review comments and producing a revised recovery strategy.

outcome is related to the quality of the process (see assumption described in 1.3.1), this suggests that the process the team engaged in to develop the recovery strategy may not have been adequate. However, this conclusion is somewhat premature given the difficulty in discerning the implications of the comments (i.e., implications of not incorporating all of the peer review comments). Furthermore, the lack of information on other teams precludes a similar analysis of their peer review process thereby significantly limiting the utility of this indicator to the overall assessment.

6.6.3 Approval by Jurisdiction and RENEW

Only the Vancouver Island Marmot recovery team had gone as far as securing jurisdictional approval for the recovery strategy. The team's recollection of this process was again somewhat limited although the chair's recollection was that the approval was relatively straightforward (i.e., described as a "rubber stamp") given the high level of involvement of the responsible jurisdiction on the recovery team. Team members did not recall having made many changes to the recovery strategy aside from some formatting changes. This may be inferred as supporting the team's assessment of the quality of the recovery strategy, suggesting a good process.

6.6.4 Outcome Success: Other Considerations

On the basis of the indicators of "outcome success" I chose (of which the most useful indicator was the team's success in reaching consensus on the strategy), it would appear that all of the Old Teams were successful in achieving what I defined as a "good" outcome.

Despite this assessment of the teams' "success," comments made during other stages of the interview warrant further consideration in that they suggest that there were more subtle weaknesses in the strategies the teams produced. To begin with, interviewees' comments suggest the need to question the legitimacy of the consensus that teams were able to reach. In particular, comments revealed that preparing recovery strategies may not represent as great a challenge to teams as I had assumed; reaching agreement on recovery strategies may not be particularly difficult. Perhaps more significantly, interviewees' comments suggest that their characterization of "consensus" among team members may not in fact represent success in achieving "true" consensus.

Strategies as Non-contentious

Comments made by a number of interviewees suggested that the teams were able to reach consensus relatively easily on recovery strategies because the strategies tend to be such broad and general documents that they are in fact difficult *not* to agree with. Almost all recovery team members commented that while they were satisfied with the quality of the recovery strategy, the strategy itself is not meant to provide very detailed guidance in relation to the recovery of the species; that level of detail would follow in the recovery action plan. On a similar vein, team members also commented that in some cases the state of knowledge for species is so poor that recovery strategies are limited to outlining the type of research that is needed to better guide recovery actions.[117] While team members felt that recovery strategies represent *necessary* steps towards the species' recovery,[118] they represent only the first steps in the process with much of the specific work in relation to prescribing recovery actions still ahead of teams. The recovery strategy therefore tends not to present much ground for conflict.

Recovery strategies were also characterized as being somewhat idealistic in that they describe what *needs* to be done as compared to what *can* be done. It is not until the recovery action planning stage that the difficult decisions need to be made in relation to incorporating the socio-economic considerations and other realities into the planning process. As stated by one recovery team member:

> If your task is just to recover the species [you have to think in terms of] 'what would you do' as compared to 'given the reality what do you do.' So you have to think in the ideal sense, what does the species need – that's the strategy. And after that you sort of have to include the other realities in there. And we all know we don't live in an ideal world so we modify what you would do with the realities. The Strategy still has to be from the species down. The realities modify the [recovery] actions not the strategy.

It also appeared that certain teams avoided the often contentious task of prioritizing actions in recovery strategies. According to one of the Garry Oak recovery team members interviewed: "we put everything in it, everybody's feeling about what was urgent, it's all in there, there's nothing to fight about." While it was emphasized that there was nothing frivolous in the strategy (i.e., nothing that was not deemed necessary for the recovery of the species), the

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[117] This comment was also made by the chair of one of the New Teams.

[118] The importance of the recovery strategy was also evident in the team that had begun to develop recovery action plans. In this case, the outline for the RAPs was taken directly from the recovery strategy. Furthermore, the RIGs' terms of reference specifically directed them to use the recovery strategy as a source of guidance in writing RAPs.

interviewee felt that not everything in it had the same level of urgency and stated that the actions identified in the recovery strategy still needed to be prioritized. As described in section 6.6.2, this observation (i.e., the team's failure to prioritize actions) was also reflected in the peer review comments.

This feedback suggests that the outcome I chose (i.e., the recovery strategy) was not entirely sufficient or was only the first step toward a much more difficult outcome (i.e., the recovery action plan). As a result, my assumption that having a good recovery strategy is more likely to result in the species' recovery may have placed the emphasis on a premature outcome (section 1.3.2). Furthermore, given the somewhat broad and general nature of recovery strategies and the fact that teams do not always appear to be engaging in the more difficult task of assigning priorities to actions, it is plausible that a weak or flawed process could still result in the development of a strategy that is agreeable to the team. However, the same process may not be sufficient as teams proceed to develop recovery action plans. Given that much of the difficult and contentious decision-making needs to take place before the recovery action plan can be prepared, this may prove to be a far greater challenge for the recovery team and/or recovery implementation groups. Some of the more challenging tasks are briefly considered below.

- Prioritization of Strategy and/or Action Plan

As described above, comments from interviewees suggested that at least some of the teams had not put much effort toward prioritizing the actions listed in the recovery strategy. Teams are expected to undertake further prioritization at the action plan level. In fact, the Recovery Manual provides a proposed ranking system that considers six criteria: assessing threats, predictability of effect, probability of effect, feasibility, cost-effectiveness, and time-dependency. A sliding scale of options and a point system is included with each of the six criteria in order to assist teams in ranking the extent to which the criteria are achieved. While this prioritization scheme is not obligatory, the fact that it is provided as something that teams/RIGs can consider suggests that the teams/RIGs need, at minimum, to undertake some form of prioritization exercise. When specifically asked about the ranking system provided in the Recovery Manual, none of the teams had considered the prioritization scheme in any detail, and several interviewees (including team chairs) were not aware of it at all.

- Critical Habitat

While critical habitat may be identified in the recovery strategy, teams can also defer its identification to the action plan (see Chapter 3).[119] In fact, none of the teams I considered had identified critical habitat because they felt that they did not have sufficient information to do so. In particular, teams identified two major barriers to the identification of critical habitat (all three Old Teams mentioned both of these barriers):

(1) the relevant policy was not yet developed, critical habitat was not well defined, and the policy implications remained unclear to the team (e.g., was the description of critical habitat meant to entail identifying specific properties or merely describing certain habitat types?)[120]

(2) the lack of information/knowledge to support its designation

Team members and others involved in the recovery planning process frequently commented that the identification of critical habitat would be a significant challenge for many teams and was likely to be met with difficulty.

- Socio-Economic Considerations

None of the teams had progressed very far in addressing the socio-economic considerations, due in large part to the fact that most team members appeared to be somewhat unclear as to what this was to entail.[121] Many discussed general challenges in relation to the conflicts between the species and human values (i.e., habitat alteration for agriculture and other land uses) suggesting the need for more consultation or involvement of landowners and local governments. However, none of the teams appear to have dealt with the socio-economic analysis in any kind of systematic or structured manner. As stated by one team chair: "That whole socio-economic end of things, I don't think anybody has a handle on how to deal with that."

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[119] According to the June 2003 Recovery Manual, the recovery team or RIG actually provides the minister with *advice* in relation to critical habitat (as compared to defining it themselves). The team/RIG could be requested to advise the minister regarding examples of activities that could result in its destruction; the portion of the species' critical habitat that have not been protected; and, proposed measures to protect the species' critical habitat.

[120] The "Critical Habitat Working Group" led by Environment Canada and the Department of Fisheries and Oceans is currently working toward the development of guidelines for the identification and protection of critical habitat as required under the *Species at Risk Act* (SARA)" (National Recovery Working Group 2003).

[121] See section 3.5.

Quality/Legitimacy of Consensus

Despite the fact that interviewees all felt that the team had been successful in reaching consensus on the recovery strategy, a number of comments about the process of achieving consensus warrant consideration. In particular, comments made by some interviewees suggest that striving for consensus may have adversely impacted the quality of the decision. Furthermore, the description of the process by which "consensus" was achieved suggests that the "consensus" that was achieved may not in fact be legitimate (i.e., represent a decision that is acceptable to all). This is discussed below in the context of the extent to which decisions involved all relevant interests and the extent to which teams engaged in "fair" negotiations. Changes under SARA and responses by interviewees also suggest that it may not be possible for future teams to reach consensus as easily as the Old Teams I considered.

- Consensus of Whom?

A key principle of consensus-based decision-making is that the decision is only meaningful if it was arrived at with the active involvement of all relevant interests. As discussed in section 6.5, while there are not conclusive means by which to assess to what extent processes are sufficiently inclusive, there do appear to be some indications that the views of some of the relevant interests may not have been incorporated in the decision in the context of the recovery teams considered. Several teams had gaps in representation (section 6.5.4) and also described situations in which team members did not actively participate in the process (section 6.5.5). This suggests that the views of several relevant groups were not incorporated into the discussions and are unlikely to be reflected in the ultimate decision. The resulting decision (i.e., the recovery strategy) may therefore not in fact represent a consensus of all relevant interests.

- Coercion not Consensus

Consensus is meant to be achieved through a fair and equitable negotiation process (Cormick et al. 1996). However, interviewees' responses suggested that the negotiation processes were not always fair and equitable and in fact appeared to involve coercion and other tactics not consistent with consensus decision-making.

In one team, interviewees relayed instances wherein they were only able to obtain "grudging consensus" characterized by one interviewee as a situation in which "everyone gangs up on one person to convince them they are wrong…and that's actually quite effective." Team members apparently spent several hours trying to convince one team member of the value of a

certain course of action before "consensus" was finally achieved. Although it is possible that the team member came to agree with the views of the broader team, it is also possible (and arguably likely) that the individual was essentially coerced into agreeing.

- Consensus as Conflict Avoidance

Comments made by interviewees from two teams suggested that while their teams reached "consensus," there were occasions when contentious issues were not fully resolved. One team member commented that there were occasions where the team would "deliberately forget things that [were] not getting resolved" suggesting that the ultimate quality of the recovery strategy may have been compromised. This is consistent with the concerns expressed by several authors who suggest that pursuing consensus can lead to decisions that are of poorer quality because team members intentionally avoid dealing with issues around which there is significant conflict or disharmony (cf: Coglianese 1999; Gregory et al. 2001; Poncelet 2001).

- Consensus as Work Avoidance

Similarly, other comments suggested that team members may have occasionally refrained from raising their concerns about elements of the recovery strategy because doing so would require them to pursue the matter and/or make the requisite changes themselves. Because team members did not have sufficient time/energy to devote to making the required changes, they simply refrained from raising their concerns. As described by one interviewee: "If you really want to disagree with something strongly, the basic solution is for you to step in and re-write that chunk. So frequently that keeps people from getting too concerned." This suggests that the strategy may not have reflected the best available information and/or did not adequately reflect the views of the recovery team.

- "High-jacking" the Discussion

Members of another recovery team commented that the pursuit of a consensus outcome provided one of its members with the opportunity to "highjack the agenda." In this particular instance, team members felt that the person refused to negotiate in a manner that was seen as reasonable, thereby impeding the team's ability to come to consensus. It should be noted that the team members that commented on this situation did support the pursuit of a consensus outcome in that they felt that it ensures that everybody has an opportunity to be heard and have their interests addressed. However, the situation involving the disruptive individual was seen as

constituting an abuse of power on her/his part that was the direct result of the team's commitment to the achievement of a consensus-outcome.[122] This experience is consistent with a situation described by a number of authors wherein the emphasis on consensus gives each individual a significant amount of influence and even a veto power of the team's decision making process (cf: Poncelet 2001) (see section 4.4.3).

- Consensus as Time consuming

A number of interviewees commented on the fact that reaching consensus took a considerable amount of time and energy, particularly in situations wherein there is a fair amount of conflict and/or where there are numerous issues that need to be addressed (e.g., ecosystem-level planning). Members of one recovery team expressed concerns about the implications of the shorter timeframes being introduced through the *Species at Risk Act* (see Chapter 3) on the ability of teams to reach consensus. As stated by the chair of one of the teams: "we had a great process...we had the time to do it...we could work at a pace that matched us." Interviewees expressed concern that the timelines imposed by SARA would not have allowed them sufficient time to work their way to consensus. Chairs of New Teams echoed this sentiment suggesting that the achievement of a consensus outcome may not be possible for their teams given the short timeframes within which some were operating (i.e., four months). The views expressed by the chairs/team members are consistent with the concerns raised in relation to the appropriateness of the timeframe for the preparation of recovery strategies in section 6.2.4.

6.6.5 Other Successes of the Process

While the indicators of outcome success chosen for this study focused specifically on recovery strategies themselves, a number of other "successes" mentioned by team members warrant mentioning. Most of these successes were described in response to questions focusing specifically on what team members perceived as being the success(es) of the recovery planning process.

- *Collaboration:* Almost all interviewees mentioned the benefit of having all of the interests together and focusing their efforts on the species. Several team members commented in particular that the connections made between organizations via the recovery planning process

[122] It is worthy of note that the situation involving this individual was only resolved by the team member stepping down from the team.

led to projects being undertaken that would never have occurred in the absence of these relationships. One interviewee commented that the recovery efforts would have gone nowhere in absence of what s/he referred to as the "federal initiative." Although the emphasis in the responses tended to be on the implementation of recovery activities, some interviewees commented on the importance of the diverse membership of the recovery team in developing a recovery strategy of high quality.

- *Profile*: Members of one team suggested that one of the successes of the recovery planning process and the recovery team in particular was the ability to attract media attention and community interest in the team's activities. One interviewee commented that "For something like the [species name] to have the kind of energy and effort that has gone toward it is really encouraging." The emphasis in these comments was the fact that the species was of relatively low profile and the ability to garner that level of interest in it was encouraging.
- *Funding:* Recovery strategies were seen as a means by which to provide strategic direction to the recovery process but also demonstrated to potential funding agencies that the team had a clear vision for what needed to be accomplished. One team felt that the ability to demonstrate this vision had been helpful to them in attracting funding.
- *Implementation:* Although explicitly not addressed in interviews (or considered as part of the objectives of my research – see assumption 3, section 1.3.2), interviewees invariably commented on successes in implementing recovery actions (as well as challenges to implementation, of which the most frequently mentioned were capacity challenges in terms of both availability of funding and availability of people to do the work).

CHAPTER 7: SUMMARY AND CONCLUSIONS

Recovery strategies represent the "crucial link" between the listing of a species by COSEWIC and its eventual recovery. Strategies are therefore meant to represent the integration of the best-available information on the species (and its threats) in order to ensure that they represent the best possible guidance to government agencies (as well as non-government agencies) in relation to the species' recovery. In accordance with the importance of these documents, care must be taken to ensure that the processes by which they are prepared are effective and do in fact result in the preparation of "good" recovery strategies. The short timeframes within which they need to be prepared further underlines the importance of striving for as efficient a process as possible.

This research considered a number of different elements of the decision-making process that a sub-set of Canadian recovery teams followed in order to determine whether there appear to be areas where these processes could be improved. Improving the decision-making processes that teams followed was seen as facilitating the development of better recovery strategies and, ultimately, promoting a better chance of success in recovering the species. The results of this research are summarized briefly below according to the same categories described in both Chapter 4, section 4.5 and the broad headings used in Chapter 6. The recommendations generated by this research are also summarized here according to whether they relate to changes to the Recovery Manual, advice to recovery team chairs, or broader policy changes that would need to be implemented by RENEW (and/or the responsible jurisdictions).

7.1 Summary of Findings

7.1.1 Recovery Manual

Comments on the Recovery Manual were generally positive. The guidance provided in the Recovery Manual was felt to be good overall although a number of gaps were noted, both in terms of aspects of the Recovery Manual that were unfinished (e.g., description of critical habitat and socio-economic considerations) and areas where more detail could be provided (e.g., the template for recovery strategies). The most common complaint among interviewees was the fact that the Recovery Manual was very long and was subject to frequent change as a result of its ongoing draft status. As a result, most team members did not feel it worth their time to read it. It was also noted that the Recovery Manual is not currently available on-line such that access to

this key source of information on the recovery planning process is somewhat restricted. However, chairs of Old Teams commented that the existence of the Manual represents a contribution to the recovery planning process.

7.1.2 Process Design

Three aspects of process design were considered: clarity of process (to team members), the extent to which teams' procedural frameworks were comprehensive and effective, and the appropriateness of the timeframes prescribed in SARA for the preparation (and approval) of recovery strategies. Team members (and chairs) expressed few concerns about the design of the process overall. However, there appeared to be some confusion over certain aspects of the process including the approval process and the extent to which teams would be required to make substantive changes as a result. Some indications of a lack of consistency among team members' views of the team's overarching goals were also evident.

Teams considered in this analysis generally had very informal procedural frameworks although a trend towards increasing formality (i.e., written terms of reference and conflict of interest policies) was noted among New Teams. None of the teams (Old and New Teams) had developed conflict resolution strategies or "behavioural rules." Some of the difficulties noted in teams with respect to interpersonal conflicts suggest that the establishment of behavioural rules and conflict resolution mechanisms may have proven beneficial.

The appropriateness of the timelines imposed by SARA in relation to the preparation of recovery strategies was also considered. Among the teams I considered that had draft recovery strategies, most would not have met the timelines imposed by SARA, particularly if the time taken to secure approval of the strategies was considered. While the approach used in this study limited the extent to which the observations from my teams could be extrapolated more broadly, the findings suggest that teams may experience difficulties meetings the SARA timelines and warrant some consideration by government agencies.

7.1.3 Resources in Support of Participants

Interviewees did not feel that there were inequalities among team members in relation to the team members' respective abilities and opportunities to influence the decision (i.e., the recovery strategies). In particular, they did not feel that access to information and knowledge, funding (i.e., compensation for time and travel expenses), and training greatly affected their ability to participate in the process. However, some challenges were noted among teams. To

begin with, challenges associated with a lack of expertise in strategic planning were noted, due in large part to the fact that teams had to rely on team members with little skill and expertise in these areas. Similarly, the lack of training in negotiation, consensus-building, and other aspects of decision-making may have contributed to some of the challenges noted by interviewees in relation to personality conflicts among team members. Training is likely to become increasingly important as teams engage in discussions around some of the more controversial issues where the level of uncertainty and conflicting values among team members increases.

It was also noted that members of recovery teams volunteering their time to participate received very little if any compensation for their participation. While team members interviewed did not feel that this posed a significant limitation to their involvement on teams, most commented that they would have appreciated being compensated for their travel expenses. While offering per diems for involvement in public participation processes is sometimes recommended in the literature, this did not appear to be feasible for recovery teams given their limited access to financial resources in support of "process" (as compared to implementation).

7.1.4 Process Management

One of the largest weaknesses of the management of the recovery planning process was the teams' lack of access to funding in support of activities related to the decision-making process. Teams would have benefited from funding to hire an independent (i.e., neutral) consultant/contractor to facilitate discussions and write the recovery strategy, and to hire a coordinator and other support staff (e.g., fundraiser) for their team. It was also noted that the chair of recovery teams takes on a multitude of roles and plays an integral part in the teams' success. The provision of training in chairpersonship as well as strategic planning and facilitation would be beneficial, especially for those chairs with no prior experience in these areas. The teams' experiences also underlined the implications of the choice of venue for recovery team meetings on the ability of various stakeholders to participate.

7.1.5 Stakeholder Involvement

The major weakness identified in relation to stakeholder involvement was the lack of clear and transparent criteria by which decisions regarding recovery team membership should be made (e.g., what criteria to apply in making decisions around who to involve). Furthermore, the purpose of the recovery teams lacks clarity (particularly when considered in concert with what teams are *actually* doing) as does the intended scope of the recovery strategy (science only as

compared to being tempered by socio-economic realities) making it difficult to assess who should be involved on teams. In particular, it was unclear to what extent teams are meant to be comprised only of experts and representatives of jurisdictions as compared to involving a broader array of stakeholder interests.

Overall, teams felt that the representation on their teams was appropriate (i.e., representation from all relevant interests) although a number of gaps in representation were noted by team members. The most common gaps mentioned were First Nation representation, the lack of adequate involvement of local government representatives, and some weaknesses in terms of the teams' access to technical experts (including those affiliated with universities and government agencies). Gaps in representation noted by team members appeared to be a consequence of individuals and organizations turning down invitations to participate rather than a failure of teams to extent invitations to the individuals/organizations. Gaps in involvement (as compared to representation) were also noted wherein individuals who were members of the team were not actively involved in the recovery planning process. Implications of gaps in representation mentioned by interviewees included perceived weaknesses in recovery strategies and longer timeframes for writing recovery strategies.

A trend towards greater control by responsible jurisdictions in terms of retaining authority for critical decisions affecting teams (i.e., appointing team members and taking on the role of chair) was also evident. While interviewees did not express any concern over this level of control by the responsible jurisdictions, the recovery planning literature from the U.S. suggests that this may arise as an issue in the future.

It was also noted that recovery teams all rely to some extent on volunteer members with a keen interest in contributing to the recovery planning process. Despite their high level of motivation, some indication of frustration was noted in relation to the over-reliance on volunteers for activities that should (according to team members) have been undertaken by government officials or other team members whose time was compensated (e.g., writing recovery strategies, contract administration).

7.1.6 Outcome Success

According to the three indicators of outcome success chosen in this study (of which the first indicator was the most useful), all of the Old Teams considered were successful in achieving a good outcome. Given the assumption between the quality of the process and the success of the outcome described in section 1.3.1 (one of the driving assumptions in this research), this result

suggests that the process may have been adequate. However, further exploration of the success of the process revealed weaknesses in terms of the legitimacy of the consensus that teams achieved. Concerns about the teams' ability to maintain their level of success were also raised in relation to the increased level of difficulty they will face in preparing recovery action plans (i.e., dealing with the identification of critical habitat and socio-economic considerations). The ability of the current process to facilitate the types of discussions and incorporate the diversity of interests and knowledge that need to be considered in preparing recovery action plans was put into question.

7.2 Summary of Recommendations

The results of this research suggest a number of areas where the decision-making process engaged in by recovery teams could be improved upon. The recommendations described in the various sections of Chapter 6 are summarized here according to whether they relate to improvements to the Recovery Manual, advice to recovery teams chairs, or broader policy changes that should be considered by RENEW and/or the responsible jurisdictions. Among the recommendations listed below, arguably the most important is the need for RENEW to clarify the purpose of recovery teams, the scope of the recovery strategy (i.e., science-based versus addressing socio-economic implications of recovery), and the extent to which recovery teams are meant to involve a wide array of stakeholders as compared to being largely (or exclusively) comprised of scientific experts and jurisdictional representatives.

7.2.1 Changes to the Recovery Manual

Specific improvements to the content of the Recovery Manual

- Teams should be provided with added guidance in making decisions regarding recovery team and recovery implementation group membership. Similarly, more definition around the recovery teams' purpose is important to ensuring potential recovery team members have an accurate understanding of the teams' mandate and role(s).
- The templates for recovery strategies and action plans should provide more detailed descriptions of key terms (e.g., goals and objectives) in order to provide teams with sufficient guidance to allow them to include information of the appropriate scope and level of detail.

- Templates for recovery action plans are needed in order to provide guidance to teams writing action plans but also to clarify the level of detail that is expected in the recovery strategy (i.e., how much detail to provide in the recovery strategy as compared to the action plan).
- Templates for multi-species, ecosystem, and landscape level plans need to be reviewed to ensure that they provide adequate guidance to teams that are writing these types of plans.
- The definition and policy implications of critical habitat need to be better articulated in the Recovery Manual. A better description of the expectations of teams in terms of socio-economic analysis is also required.

(The following two recommendations might be best addressed by adding the relevant information in an appendix to the Recovery Manual and/or making it available on-line)

- Detailed terms of reference such as those being developed by New Teams should be made available to newly forming teams for their consideration.
- Reference documents providing guidance on strategic planning ("how to" guides) should be made available to chairs (or, at minimum, references to such documents should be provided) (see also recommendation regarding training).

A number of changes to encourage team members and others to read the Recovery Manual should be considered

- An Executive Summary of the Recovery Manual should be prepared and distributed to all recovery team members (as well as to other interested parties).
- Recognizing that the document is likely to continue to evolve, changes to the previous version should be clearly marked (i.e., in a cover letter or via an addendum).
- The Recovery Manual (as well as the Executive Summary) should be available on-line to make it more widely accessible.

7.2.2 Advice to Team Chairs

Removing barriers to involvement

- Attention should be paid to understanding the barriers to participation of key stakeholder groups on recovery teams (e.g., First Nations) and instituting means by which to remove these barriers. This may include such measures as ensuring that teams be provided with appropriate cross-cultural training and holding meetings at venues that are most convenient for key participants.

- Government agencies need to ensure that appropriate priority is placed on recovery efforts in order to ensure that their staff participates on recovery teams.
- Teams should, at minimum, offer to compensate participants for their travel expenses in order to remove this disincentive to participation.

Team chairs should ensure that team members clearly understand the team's key goals and objectives and their role in decision-making

- All teams – but particularly multi-species, ecosystem, or landscape-level teams – should ensure to clearly articulate the team's mandate at the beginning of the process in order to minimize future confusion and conflict among team members.
- Attention should be paid to providing team members with realistic expectations in terms of the level of revisions that are likely to result from the approval (endorsement) process.
- Terms of Reference developed for recovery teams should be clear about the roles and responsibilities of recovery team members (including the expectation of team members in terms of their time commitment).

Conflict avoidance

- Clear behavioural rules and conflict resolution mechanisms should be developed by teams that are likely to deal with conflict or that are structurally complex (i.e., involve a diverse array of interests or are dealing with a large number of species). These should be developed in a collaborative manner that involves all recovery team members.

7.2.3 Broader Recommendations/Policy Changes

Funding in support of process should be available to recovery teams

- A source of funding should be available to teams to undertake activities in support of the decision-making process (e.g., hire a facilitator or mediator, write the recovery strategy, hiring a coordinator for teams). Funding for these types of activities will be increasingly important for teams that are likely to encounter significant conflict or teams that are structurally complex (e.g., multi-species teams or teams involving a broad array of interests).
- Teams should have access to funding to compensate participants for their travel expenses (see also removing barriers to participation).

Training should be made available to team chairs and team members

Training should be *available* for the following activities:

- Strategic planning (team chairs)
- Chairing (team chairs)
- Negotiation/consensus-building
- Cross-cultural training (all team members)

Changes to the process may need to be considered in order to ensure that the timelines outlined in SARA can be met

- RENEW should review the timelines outlined in SARA in accordance with the experience of recovery teams to date. Changes may need to be made to the approval process in order to make it more efficient. Alternatively, consideration may need to be given to providing teams with greater assistance in order to increase the speed with which recovery strategies are prepared (i.e., hiring consultants to write the recovery strategies on behalf of teams; see also section 6.4.4).

As responsible jurisdictions select team chairs and team members, they should consider individuals' personal suitability to the task

- Team chairs play a critical role in ensuring the team's efficiency and effectiveness. Chairs should therefore be selected on the basis of the skills they posses and their ability to devote sufficient time to the process. Important skills for chairs including leadership, communication skills (including facilitation), and organizational abilities (see also recommendation on training).
- In selecting members for recovery teams, consideration should be give to both the individuals' expertise and their personal suitability to the task (e.g., ability to engage in strategic thinking) (see also recommendation regarding the provision of training).
- The involvement of volunteer members should be limited as much as possible to contributing their knowledge and expertise in order not to overburden them and risk their departure from the team. Team members whose involvement on recovery teams is part of their job (i.e., they are paid to participate) should be responsible for undertaking the bulk of the writing of recovery strategies and other administrative tasks.

7.3 Concluding Remarks

On the basis of this study, it appears that the decision-making processes used by the nine recovery teams I considered had some weaknesses, many of which are summarized in section 7.2 above. Among the most important of these relates to the lack of clarity within the Recovery Manual regarding the purpose of the team. In particular, it is not clear to what extent the recovery strategies that teams are meant to produce are intended to be purely scientific assessments of the species' needs with respect to recovery as compared to needing to address the socio-economic implications of recovery actions (i.e., the barriers to recovery). The extent to which the recovery strategy is predominantly science-based as compared to also addressing socio-economic realities has important implications for the diversity of stakeholders that should be included on the team (i.e., comprised of a narrow as compared to a broad range of interests).

The results of this study also suggest that it is important to consider the characteristics of the species and its threats in designing the decision-making process for recovery teams. In particular, the extent to which conflict is likely to be prevalent in the team's deliberations must be considered. The greater the likelihood of conflict, the more attention and resources should be devoted to the design of the process. Similarly, the complexity of the issues that need to be addressed by teams affects the extent to which the recommendations from the public participation literature should be applied to recovery teams (e.g., having a trained and neutral process facilitator and having access to training for team members in negotiation and consensus-building).

Overall, the results of this research suggest that RENEW and the responsible jurisdictions should consider a number of changes to the Recovery Manual and the broader policy context in order to ensure that recovery strategies incorporate the best available information and consequently represent the best guidance for the species' recovery. Failure to do so could result in wasted effort on the part of recovery team members and a lack of progress in relation to the recovery of species.

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APPENDIX I: COSEWIC'S Quantitative Criteria

	Endangered	Threatened
A. Declining Total Population		
Reduction in population size based on any of the following 4 options and specifying a-e as appropriate:		
(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.	≥ 70 %	≥ 50 %
(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.	≥ 50 %	≥ 30 %
(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 km^2	< 20,000 km^2
Or		
2. Area of occupancy	< 500 km^2	< 2,000 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)

	Endangered	Threatened
(2) continuing decline, observed, projected, or inferred, in numbers of mature individual 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 km² or number of locations ≤ 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

(National Recovery Working Group 2003: 64)

APPENDIX II: History of Major Developments in the Creation of Federal Species at Risk Legislation in Canada

Year	Major Development
1993	The House of Commons Standing Committee on the Environment recommended that Environment Canada initiate a comprehensive intergovernmental approach to protect species at risk and their habitats. As a result, a multi-stakeholder focus groups co-ordinated by Environment Canada (Canadian Wildlife Service) officials was created and resulted in the production of a report recommending that the federal government create endangered species legislation.
April 1994	A Task Force on Endangered Species Conservation was established with representatives from major resource industries, private landowners, academia, and environmental groups. This group produced a report in May 1996 that contained extensive policy recommendations to the federal government.
May 1995	Regional consultation workshops were held across Canada.
Fall 1995	The Federal Environment Minister (Sergio Marchi) released a proposal for a species at risk bill.
October 1996	Federal and provincial ministers with responsibilities for wildlife signed the Accord for the Protection of Species at Risk which committed each jurisdiction to pass legislation and develop programs to protect species at risk.
October 31, 1996	Bill C-65, the Canadian Endangered Species Protection Act (CESPA), was introduced in House of Commons. The Bill was not passed.
March 3, 1997	A stronger version of Bill C-65 was brought back to the Parliament. This version died on the order paper when Parliament was dissolved prior to a June election.
April 2000	Bill C-33, the Species at Risk Act (SARA), was introduced in the House of Commons by federal environment minister David Anderson. While the Bill made it all the way to committee hearings, the October 2001 election resulted in the dissolution of Parliament such that the Bill died on the order paper.
February 2001	Bill C-5, the Species at Risk Act, was introduced into the House of Commons in February of 2001 and was passed in June of 2002.
December 2002	The *Species at Risk Act* received Royal Assent.
June 5, 2003	Provisions of SARA except those dealing with prohibitions and enforcement came into effect.
June 1, 2004	*The remaining provisions (see above) will come into effect.*

(Amos et al. 2001; Environment Canada 2003b)

APPENDIX III: SARA Schedule 1 Species Occurring in B.C.

EXTIRPATED

Birds:
- Greater Sage-grouse *(phaios subspecies)*

Reptiles:
- Pigmy Short-horned Lizard

Lepidopterans:
- Island Marble

ENDANGERED

Mammals:
- American Badger *(jeffersonii subspecies)*
- Killer Whale *(northeast Pacific southern resident population)*
- Vancouver Island Marmot

Birds:
- Burrowing Owl
- Eskimo Curlew
- Northern Spotted Owl
- Sage Thrasher
- Western Yellow-breasted Chat *(BC population)*
- White-headed Woodpecker

Amphibians:
- Northern Leopard Frog *(Southern Mountain population)*
- Oregon Spotted Frog
- Rocky Mountain Tailed Frog
- Tiger Salamander *(Southern Mountain popUlation)*

Reptiles:
- Leatherback seaturtle
- Nightsnake
- Sharp-tailed Snake

Fish:
- Benthic Paxton Lake Stickleback
- Benthic Vananda Creek Stickleback
- Coho Salmon *(Interior Fraser population)*
- Limnetic Paxton Lake Stickleback
- Limnetic Vananda Creek Stickleback

(Endangered fish cont.)
- Morrison Creek Lamprey
- Nooksack Dace
- Sockeye Salmon *(Cultus population)*
- Sockeye Salmon *(Sakinaw population)*

Molluscs:
- Hotwater Physa

Lepidopterans:
- Island Blue
- Taylor's Checkerspot

Plants:
- Bearded Owl-clover
- Bear's-foot Sanicle
- Deltoid Balsamroot
- Golden Paintbrush
- Prairie Lupine
- Scarlet Ammannia
- Southern Maidenhair Fern
- Tall Bugbane
- Tall Woolly-heads
- Toothcup
- Water-plantain Buttercup

Mosses:
- Poor Pocket Moss
- Rigid Apple Moss

Lichens:
- Seaside Centipede Lichen

THREATENED

Mammals:
- Ermine *(haidarum subspecies)*
- Killer *Whale (Northeast Pacific northern resident population)*
- Killer Whale *(northeast Pacific transient population)*
- Pacific Water Shrew
- Pallid Bat
- Sea Otter
- Wood Bison
- Woodland Caribou *(Boreal population)*

(Threatened mammals cont.)

- Woodland Caribou *(Southern Mountain population)*

Birds:

- Peregrine Falcon *(anatum subspecies)*
- Marbled Murrelet
- Northern Goshawk (*laingi subspecies*)

Amphibians:

- Pacific Giant Salamander
- Great Basin Spadefoot Toad

Fish:

- Cowichan Lake Lamprey
- Cultus Pygmy Sculpin
- Shorthead Sculpin

Molluscs:

- Northern Abalone

Lepidopterans:

- Behr's Hairstreak *(Columbia)*
- Dun Skipper *(Western population)*

Plants:

- Lyall's Mariposa Lily
- Mexican Mosquito-fern
- Phantom Orchid
- Purple Sanicle
- White-top Aster
- Scouler's Corydalis
- Yellow Montane Violet

Mosses:

- Haller's Apple Moss

SPECIAL CONCERN:

Mammals:

- Killer Whale *(Northeast Pacific offshore population)*
- Mountain Beaver

Birds:

- Barn Owl *(Western population)*
- Flammulated Owl
- Lewis's Woodpecker
- Peregrine Falcon (*pealei subspecies)*
- Yellow Rail

Amphibians:

- Coast Tailed Frog
- Coeur d'Alene Salamander

Fish:

- Columbia Mottled Sculpin

Molluscs:

- Olympia Oyster

Lepidopterans:

- Monarch

Plants:

- Coastal Wood Fern
- Vancouver Island Beggarticks

(Species at Risk Public Registry 2003)

APPENDIX IV: Recovery Teams in B.C.

1. Garry Oak Ecosystem Recovery Team

   The GOERT includes the following COSEWIC-listed species

   - Bearded Owl-clover
   - Bear's-foot Sanicle
   - Deltoid Balsamroot
   - Dun Skipper
   - Golden Paintbrush
   - Island Blue
   - Island Marble
   - Prairie Lupine
   - Purple Sanicle
   - Rigid Apple Moss
   - Sharp-tailed snake*
   - Tall Woolly-heads
   - Taylor's Checkerspot
   - Water-plantain Buttercup
   - White-top Aster
   - Yellow Montane Violet

2. The South Okanagan-Similkameen Conservation Program (SOSCP)

   The SOSCP includes the following COSEWIC-listed species

   - Behr's Columbia Hairstreak
   - Burrowing Owl
   - Great Basin Spadefoot
   - Lyall's Mariposa Lily
   - Night Snake
   - Pallid Bat
   - Peregrine Falcon (Anatum)
   - Pygmy Short-horned Lizard
   - Sage Thrasher*
   - Scarlet Ammannia
   - Tiger salamander
   - Toothcup
   - Western Yellow-breasted Chat*
   - White-headed Woodpecker*

3. American Badger
4. Southern Maidenhair Fern
5. Vancouver Island Marmot
6. Freshwater Fishes (all extirpated, threatened, and endangered freshwater fish in B.C.)
7. Haller's Apple Moss
8. Hotwater Physa
9. Killer Whale
10. Pacific Leatherback Turtle
11. Pacific Water Shrew
12. Marbled Murrelet
13. Nooksack Dace
14. Northern Abalone
15. Northern Leopard Frog (Southern mountain population)
16. Northern Spotted Owl
17. Oregon Spotted Frog
18. Pacific Giant Salamander
19. Poor Pocket Moss
20. Rocky Mountain Tailed Frog
21. Right Whale
22. Sea Otter
23. Seaside Centipede
24. Tall Bugbane
25. Queen Charlotte Island Ermine
26. Wood Bison
27. Woodland Caribou (Southern Mountain population)
28. Woodland Caribou (Boreal population)

Denotes a species that also has a separate recovery team (i.e., in addition to being considered as part of a larger ecosystem or landscape approach).

This list represents a merger between a list provided by Environment Canada at a public information session on SARA on June 23, 2003 (Environment Canada 2003) and a list provided by Kari Nelson of the Ministry of Water, Land and Air Protection on June 24, 2003. The two lists were not identical due in large part to differences in what is perceived as constituting a recovery team (i.e., whether or not lists included teams that are also included under broader recovery strategies such as the Garry Oak Ecosystem Recovery Strategy).

APPENDIX V: Interview Questions: Chairs of New Teams

Purpose of the interview:

My project focuses on people's experiences and impression of the recovery planning process – by which I mean the process that recovery teams underwent in preparing a recovery strategy/recovery action plan for the species/ecosystem of interest.

During the interview, I'll be asking you questions to get at your views of the process. I will ask you both specific questions regarding certain elements of the process as well as a few more open-ended questions to try to get as complete a picture as possible of your experience. The timeline I'm looking at is from when the recovery team was initiated and/or when your participation on the team began to the present time.

Before I begin though, I want to make sure you are comfortable with my use of a tape recorder. I will not be sharing the taped conversation with anybody else and am planning on using it only to help re-fresh my memory regarding what we talked about *(see also consent form with more on the participant's rights).*

Start Time:

Location/setting: _____

Background

1. Name and affiliation of interviewee

2. What species (or group of species) was the team established for?

3. When was the team established?

4. How many meetings has the team had to date/how long has the team been operational?

5. At what stage in the recovery planning process is the team?

General Questions

6. Tell me a bit about your experience in developing recovery teams and working towards the development of recovery strategies (how were objectives identified, how was the strategy prepared or how is it being prepared…)

Manual Effectiveness Questions:

7. Are you familiar with the Recovery Operations Manual?

8. Are you making use of the Manual (or is the team currently using the manual)?

9. IF YES, are you finding the Manual useful?

   What do you find particularly useful about it?
   What about the Manual are you finding less useful?

Did you/are you making use of the templates for the Recovery Strategies/Recovery Action Plans?
Have you looked at/made use of the prioritization criteria?

10. What would you have liked to have seen in the Recovery Manual that is not in there and/or is not detailed enough? (Or what aspects of the Manual do you feel should have been more detailed?)

Team Membership

11. How (by whom) is the team being formed?

12. In what way is team membership being decided upon (i.e., how decisions are being made regarding who is "invited" to participate.

    13. Could you foresee turning people away? What policy/principle would you use to explain this decision?

14. How is the team structured (Recovery Team and Recovery Action Groups)?

    15. How do you perceive the difference, if any, between the types of people that should participate at the RT level as compared to the RAG level?

Process

16. Will there be a coordinator for the team? Why or why not? Will the coordinator be paid?

17. Who will chair the team (if different from co-ordination function)?

18. Has your team (or will they be) discussed procedural rules – conflict resolution, decision-making rules (i.e., consensus)? Please explain/elaborate.

19. Is the team developing a Terms of Reference? If yes, what will it/does it include (i.e., what types of issues/process does it cover)?

Funding/Support

20. Did/will the team receive any type of training (including discussion of "what is RENEW etc") prior to embarking on the recovery planning process? If not, should they have?

21. Will (does) the recovery team receive any funding to conduct meetings (i.e., room rental, hiring a facilitator; paying for a coordinator, etc.)? Please do not include any stipends (per diems, travel expenses) provided to participants in your response to this question.

    If the team receives funding for meetings...
    22. What are the (potential) sources of that funding? (If possible, please also provide estimates in relation to the amount or percentage of total provided by different agencies – major funding sources only)

23. Do/will any of the individual members of the recovery team receive any compensation for their participation on the team (i.e. per diems, travel expenses; please do not include the salaries of those people who are participating on the team as part of their job – e.g., government employees)?

If yes...

24. What principles/policy are used to make decisions regarding provision of funding?

25. What are the major funding sources (both process but also implementation if available)

That concludes the questions I have for you – do you have anything to add?
Do you have any comments or questions for me?

END TIME:

APPENDIX VI: Interview Questions: Chairs of Old Teams

Purpose of the interview:

My project focuses on people's experiences and impression of the recovery planning process – by which I mean the process that recovery teams underwent in preparing a recovery strategy/recovery action plan for the species/ecosystem of interest.

During the interview, I'll be asking you questions to get at your views of the process. I will ask you both specific questions regarding certain elements of the process as well as a few more open-ended questions to try to get as complete a picture as possible of your experience. The timeline I'm looking at is from when the recovery team was initiated and/or when your participation on the team began to the present time.

Before I begin though, I want to make sure you are comfortable with my use of a tape recorder. I will not be sharing the taped conversation with anybody else and am planning on using it only to help re-fresh my memory regarding what we talked about *(see also consent form with more on the participant's rights).*

START TIME:

Location/setting: _____

Background

1. Name and affiliation of interviewee

2. How long have you participated on the Team?

3. How long has the recovery team been operational (number of years/months)?

4. How many meetings has the recovery team had – average number of meetings per year or total over its "history"? What is the average duration of a meeting? (For example, team meets for a full day once every two months.)

5. What has been your involvement (RT and RAG)?

6. What motivated you to become involved in the team?

7. Were you involved in any recovery teams before/since this one?

8. What is your experience, if any, with multi-stakeholder decision-making processes? Have you been involved in similar processes? How was this process similar and/or different from other processes you have been involved with[1]?

RECOVERY MANUAL

9. Are you familiar with the Recovery Operations Manual (show copy of November 2001 version)? Did your team make use of the Manual (or is the team currently using the manual)?

10. Are you making use of the Manual (or is the team currently using the manual)?

11. IF YES, are you finding the Manual useful?

    What do you find particularly useful about it?

    What about the Manual are you finding less useful?

    Did you/are you making use of the templates for the Recovery Strategies/Recovery Action Plans?

    Have you looked at/made use of the prioritization criteria? If yes, how useful did you find these to be?

12. What would you have liked to have seen in the Recovery Manual that is not in there and/or is not detailed enough? (Or what aspects of the Recovery Manual do you feel should have been more detailed?)

TEAM COMPOSITION

13. How (by whom) was the team formed?

14. Do you know how the team membership was determined (i.e., how decisions were made regarding who would be "invited" to participate)? If yes, please explain. (*If not ask to be referred to someone who could answer this question).*

15. How many people are on the recovery team at present? How has the membership changed over time?

16. Would you see the membership of the Team changing over time – and if so, how?

17. How would you characterize the affiliation of the members of the recovery team?

18. Please comment on the representation of interests that were on the Recovery Team.
    - Do you feel that there was an appropriate balance of interests at the table?
    - Were any interests not represented that you feel should have been? Were any interests represented at the table that you feel should not have been? [123]

Please explain

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[123] (MacQueen 1996)

19. Do you feel that you (all members of the team) had access to sufficient resources – time, money, information – to participate effectively in the process?

FINANCIAL AND ADMINISTRATIVE SUPPORT FOR THE TEAM

20. Is there a coordinator in place for the recovery team (if a list of duties is available for the coordinator please provide if possible)? Does the coordinator also represent one of the interest groups (or are her/his efforts dedicated solely to the coordination function)? Is the coordinator paid for her/his time?

21. Does the recovery team receive any funding to conduct meetings (i.e., room rental, hiring a facilitator; paying for a coordinator, etc.)? Please do not include any stipends (per diems, travel expenses) provided to participants in your response to this question.

    If the team receives funding for meetings
    What are the sources of that funding? (If possible, please also provide estimates in relation to the amount or percentage of total provided by different agencies – major funding sources only)

22. Do any of the individual members of the recovery team receive any compensation for their participation on the team (e.g., per diems, travel expenses; please do not include the salaries of those people who are participating on the team as part of their job – e.g., government employees)?

    If interviewee answered YES to the question above:
    What principles/policy are used to make decisions regarding provision of funding?

    What is the source of the funding (type of agency that provides the funding)?

23. Did you/your team receive any training in negotiation or other aspects of the decision-making process prior to beginning the discussions related to the preparation of the recovery strategy? If so, was it helpful? If not, do you feel this would have been beneficial.[1]

Process Design Questions

24. Do you recall how the decision-making process was established? For example:

    (a) Did you discuss ground-rules or other protocols prior to embarking on the process? If so, what were they? Was this helpful? Are there any improvements you would suggest? [124]

    (b) Did you discuss how you would come to an agreement regarding the recovery strategy? If so, what "decision rule" did you decide on (please be as specific as possible)?

    IF CONSENSUS, THEN

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[124] (MacQueen 1996)

(c) Did the Recovery Team have a clear definition of consensus in your view? If so, what was it? If not, what did you understand consensus to mean? [125]

25. Did you discuss how you would resolve conflict or disagreement in the group? Were there even any conflicts/disagreements (specific example if possible)? What were they about and how were they resolved?

26. Do you recall any instances where discussions became bogged down -- where some things/issues pre-occupied discussions at the expense of others?

Writing of Strategy

27. To the best of your recollection, please walk me through the way in which the Recovery Strategy was prepared (how were the key objectives outlined, who wrote the bulk of it, how was feedback solicited, did you use other strategies as models)?

28. How and to what extent are the socio-economic considerations addressed?

29. How and to what extent was critical habitat defined?

PROGRESS TO DATE

30. At what stage would you characterize the recovery team as being at with respect to preparing a recovery strategy:

    (a) IF draft strategy has been prepared:

    To the best of your recollection, please walk me through the process by which your team came to an agreement on the Strategy.

    Does the strategy represent a consensus of the Team? Were there parts that were not agreed to (which parts)?

    IF NOT consensus
    What type of "agreement" does the Strategy represent (majority)?

    (b) IF strategy has gone through peer review
    How is the team addressing the comments received?

    (c) *IF strategy has gone through public comment*
    How was this done? How were comments incorporated.

    (d) IF strategy has been "approved"
    What was involved (or what do you expect is involved).

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[125] (MacQueen 1996)

31. Do you recall having discussed the approval process (as a team)? To what extent was the Recovery Team satisfied with the approval process; did they have any concerns about any aspects of it? In hindsight, do you have any concerns with it?

32. How satisfied were you with the outcome of the Recovery Planning process?

    (a) Are you satisfied that the recovery strategy/RAPs adequately meets the needs of the species/ecosystem? Please elaborate on why or why not (what is missing).

    (b) To what extent do you feel that the Recovery Strategy (or Recovery Action Plan) that the team (RAG) produced is "implementable" and/or likely to lead to the species recovery? If not, why not.

33. Do you feel the process was a success or a failure? Please explain.

    a) What would you describe as the success(es) of the Recovery Planning process? What brought about these successes?

    b) What would you describe as the failure(s) of the Recovery Planning process? What brought about these failures?

RECOMMENDATIONS FOR IMPROVEMENTS

34. What kinds of things really stand out for you about the process? What was really positive? Why? What was really negative? Why? [126]

35. With the benefit of your experience, what types of changes would you have made to the process? Please indicate how you feel that these changes would have improved your experience/would improve the experience of future teams.

36. Based on your experience with the recovery team, would you participate in recovery planning processes in the future? Why or why not?

IMPLEMENTATION

37. How were decisions made regarding the prioritization of projects (in terms of implementation)?

38. Who has implemented the projects (i.e., community groups, government employees, academic organizations)? What have been the main sources of funding for project implementation?

That concludes the questions I have for you – do you have anything to add?
Do you have any comments or questions for me?

END TIME:

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[126] (MacQueen 1996)

APPENDIX VII: Interview Questions: Team Members (Old Teams)

Start-time: _____

Location/setting: _____

Purpose of the interview:

My project focuses on people's experiences and impression of the recovery planning process – by which I mean the process that recovery teams underwent in preparing a recovery strategy/recovery action plan for the species/ecosystem of interest.

During the interview, I'll be asking you questions to get at your views of the process. I will ask you both specific questions regarding certain elements of the process as well as a few more open-ended questions to try to get as complete a picture as possible of your experience. The timeline I'm looking at is from when the recovery team was initiated and/or when your participation on the team began to the present time.

Before I begin though, I want to make sure you are comfortable with my use of a tape recorder. I will not be sharing the taped conversation with anybody else and am planning on using it only to help re-fresh my memory regarding what we talked about *(see also consent form with more on the participant's rights).*

QUESTIONS REGARDING INDIVIDUAL'S ROLE/PARTICIPATION

1. How would you define your role in the recovery team (e.g., representative of an organization, representing a certain 'perspective' or 'interest')? Please be as specific as possible (what type of organization, what interest…).

2. When did you become involved with the recovery team (relative to when it began – from the beginning, mid-way through; or provide the year that you started participating)?

3. What motivated you to become involved in the team?

4. (*If not addressed in response to question above*) How did you come to be a member of the recovery team (e.g., volunteered; requested to participate by government official; suggested to participate by another team members; etc.)

5. Were you involved in any recovery teams before the one you are presently involved with (since?)?

6. What is your experience, if any, with multi-stakeholder decision-making processes? Have you been involved in similar processes? How was this process similar and/or different from other processes you have been involved with?[1]

MANUAL FAMILIARITY AND EFFECTIVENESS

7. Are you familiar with the Recovery Operations Manual (show copy of the November 2001 version)?

8. Are you making use of the Manual (or is the team currently using the manual)?

9. IF YES, are you finding the Manual useful?

   - What do you find particularly useful about it?
   - What about the Manual are you finding less useful?
   - Did you/are you making use of the templates for the Recovery Strategies/Recovery Action Plans?
   - Have you looked at/made use of the prioritization criteria?

10. What would you have liked to have seen in Recovery Manual that is not in there and/or is not detailed enough? (Or what aspects of the Recovery Manual do you feel should have been more detailed?)

REPRESENTATION OF INTERESTS

11. Please comment on the representation of interests on the Recovery Team.
    - Do you feel that there was an appropriate balance of interests at the table?
    - Were any interests not represented that you feel should have been?
    - Were any interests represented at the table that you feel should not have been?[127]

    Please explain.

12. Do you feel that you (all members of the team) had access to sufficient resources – time, money, information – to participate effectively in the process?

13. In your opinion, were all voices/inputs treated equally; should they have been (why, why not)?

14. To what extent to you think that you were able to play a strong role in influencing the Recovery Strategy? (work on this wording)

"SUPPORT" QUESTIONS

15. What was the affiliation of the chair of your team? Did you have any concerns about the chair's affiliation?

16. Was there a dedicated coordinator for your recovery team (OR, I understand that there was a recovery team coordinator in place…)?

    What roles did the coordinator take on?

    In what way do you think the coordinator contributed or detracted from the team's efforts?

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[127] (MacQueen 1996)

17. Did you receive any training in negotiation or other aspects of the decision-making process prior to beginning the discussions related to the preparation of the recovery strategy? If so, was it helpful? If not, do you feel this would have been beneficial.[128]

PROCESS DESIGN QUESTIONS

18. Do you recall how the decision-making process was established? For example:

    (a) Did you discuss ground-rules or other protocols prior to embarking on the process?
    If so, what were they? Was this helpful?
    If not, do you think you should have?
    Are there any improvements you would suggest?[129]

(b) Did you discuss how you would come to an agreement regarding the recovery strategy? If so, what "decision rule" did you decide on (please be as specific as possible)?

IF CONSENSUS, THEN

(c) Did the Recovery Team have a clear definition of consensus in your view? If so, what was it? If not, what did you understand consensus to mean?[130]

19. Did you discuss how you would resolve conflict or disagreement in the group? Were there even any conflicts/disagreements (specific example if possible)? What were they about and how were they resolved?

20. Do you recall any instances where discussions became bogged down -- where some things/issues pre-occupied discussions at the expense of others?

OUTCOME QUESTIONS

21. Did the recovery team reach agreement in terms of developing a recovery strategy (that represented consensus)? If the team was only able to agree to parts of the strategy please discuss which parts were agreed to and why certain parts may have been more difficult to come to agreement on.

22. How satisfied were you with the outcome of the Recovery Planning process?

    (c) Are you satisfied that the recovery strategy adequately meets the needs of the species/ecosystem? Please elaborate on why or why not (what is missing).

    (d) To what extent do you feel that the Recovery Strategy (or Recovery Action Plan) that the team (RAG) produced is "implementable" and/or likely to lead to the species recovery? If not, why not.

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[128] (MacQueen 1996)

[129] Ibid.

[130] Ibid.

23. Do you feel the process was a success or a failure? Please explain.

(a) What, if anything, would you describe as the success(es) of the Recovery Planning process? What brought about these successes?

(b) What, if anything, would you describe as the failure(s) of the Recovery Planning process? What brought about these failures?

APPROVAL PROCESS

(*Modify set of questions to ask depending on how "far along" the Team has progressed in relation to approval*)

24. As I understand it, the recovery strategy that the RT produced was then subject to further approvals – peer review and then approval by the jurisdictions…

- Do you recall having discussed the approval process (as a team)?
- To what extent were you/was the Recovery Team satisfied with the approval process; did they have any concerns about any aspects of it?
- In hindsight, do you have any concerns with it?

RECOMMENDATIONS FOR IMPROVEMENTS

25. What kinds of things really stand out for you about the process? What was really positive? Why? What was really negative? Why?[131]

26. With the benefit of your experience, what types of changes would you have made to the process? Please indicate how you feel that these changes would have improved your experience/would improve the experience of future teams.

27. Based on your experience with the recovery team, would you participate in recovery planning processes in the future? Why or why not?

That concludes the questions I have for you – do you have anything to add?
Do you have any comments or questions for me?

End time: _____

[131] (MacQueen 1996)

APPENDIX VIII: Summary Information on Old Teams

Table A.1: Summary Information for Old Teams

	Vancouver Island Marmot	Oregon Spotted Frog	Garry Oak Ecosystem
Year of formation	1988	November 1999	June 1999
Type of team	Single species team	Single species team	Ecosystem-level team
Species' COSEWIC status	Endangered	Endangered	21 COSEWIC-listed species[132]
Team meeting frequency	2-3 times per year	2-3 times per year	Once per month (RIGs meet separately)
# of recovery team members	17	15	24
Affiliation of recovery team chair/co-chairs	Provincial government	Consultant and a member with an academic affiliation	Federal government[133]
# of RIGs	No RIGs but they do have similar structures (see Figure A.2)	No RIGs but they do have "working groups"	8 RIGs and three Steering Committees (see Figure A.1)
# of members on RIGs	About 18 people on the two "RIGs"	All working group members are on the Recovery Team	73 people participate on the various RIGs.[134]
Status when interview(s) .conducted	Updated Recovery Plan approved by RENEW and published	Draft Recovery Strategy completed but has not gone through peer review	Draft Recovery Strategy completed and has gone through peer review.[135] The team also has draft RAPs for four of the eight RIGs.

[132] The 21 COSEWIC-listed species are broken down as follows: 1 extirpated, 12 endangered, 4 threatened, and 4 species of special concern (Fuchs and Garry Oak Ecosystem Recovery Team 2001). Note that these numbers are current as of 2001 such that they do not reflect recent COSEWIC status assessments (i.e., May 2003).

[133] Until May 2002 the team was chaired by the GOERT program coordinator (who currently acts as vice-chair for the team).

[134] About 60 people participate only at the RIG level (i.e., they are not also on the team). It should also be noted that several team members also participate on the various RIGs (and in some cases participate on more than one RIG).

[135] The team is currently incorporating comments from the peer review process and expect to have a revised draft by the summer of 2003.

Figure A.1: Organizational Structure of the Garry Oak Ecosystem Recovery Team and Recovery Implementation Groups

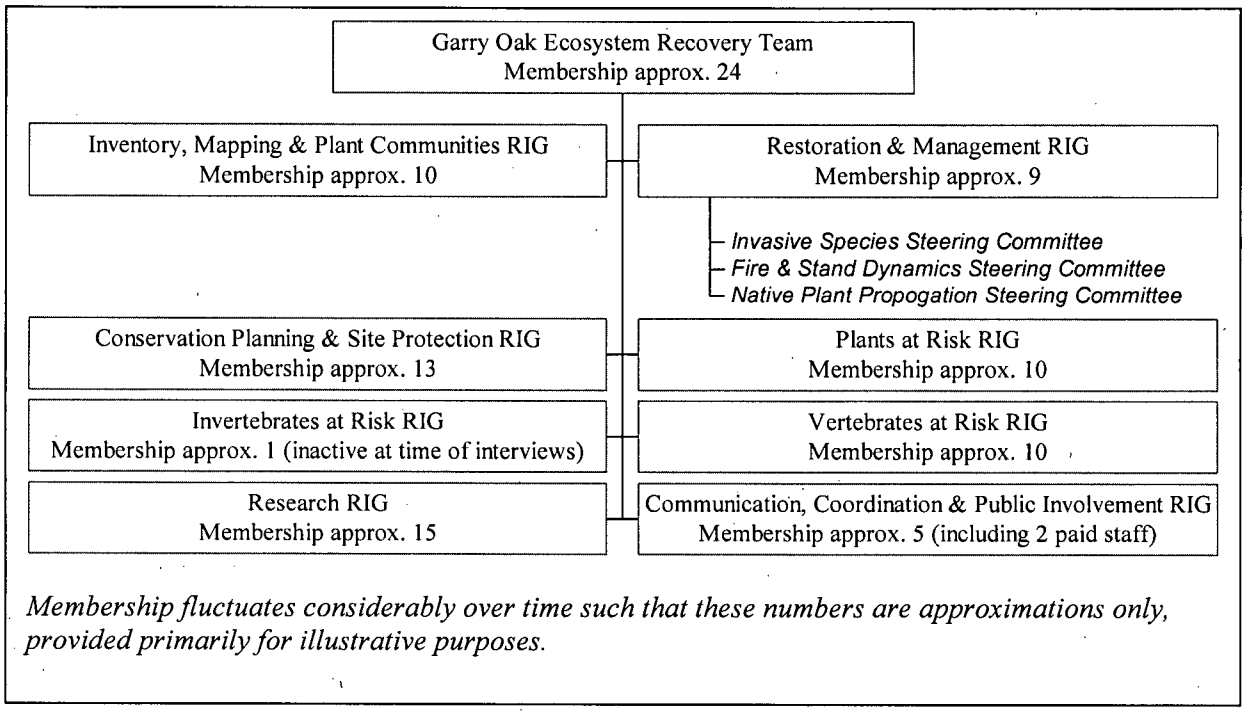
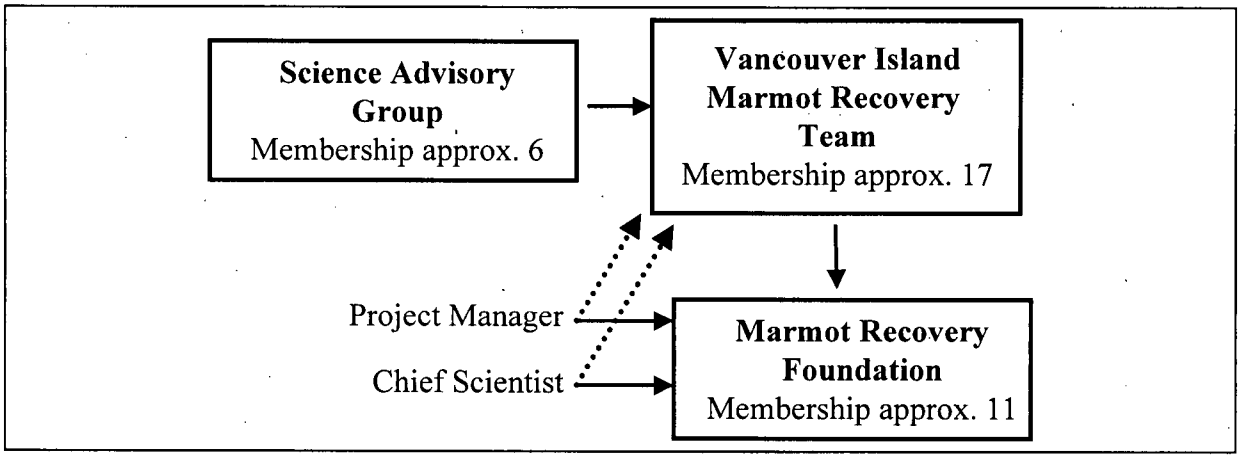


Figure A.2: Organizational Structure of theVancouver Island Marmot Recovery Team and Associated Implementation Bodies



- The Marmot Recovery Foundation (MRF) is a not-for-profit organization with charitable status whose main function is to coordinate and administer recovery actions for the team, including raising the necessary funds and carrying out associated business, administrative

and public awareness activities (Vancouver Island Marmot Recovery Team 2002).[136] In addition to an Executive Director, the MRF has two full-time (paid) staff (i.e., a Program Coordinator and a Chief Scientist). The Foundation is directed by a board comprised of four members from private industry, and one member from the provincial and federal governments respectively.

- The Science Advisory Group (SAG) was established in 2000 and is a technical team of biologists whose role is to provide scientific direction to the Recovery Team.[137] The SAG is chaired by Environment Canada and its members are chosen by Environment Canada in consultation with the Vancouver Island Marmot recovery team. The primary purpose of the SAG is to allocate funding[138] to conduct research of interest to the Team (Vancouver Island Marmot Recovery Team 2002).

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[136] Initial funding for the MRF was provided by Weyerhauser and the provincial government, each of whom contributed 1 million dollars over five year (starting in 1998) for the Foundation's operational costs. The intent is for public to provide over 1/3 of the Foundation's funding support in the future (i.e., fundraising campaigns).

[137] The Science Advisory Group (SAG) was established in response to a unanimous recommendation of the participants of the International Workshop for the Conservation of the Vancouver Island Marmot in 1999.

[138] Funding for the research is provided by the federal government (Environment Canada) and private industry (Timberwest), each of whom contributed a half million dollars over a three-year period (2000-2003). It is unclear whether funding for research activities will be available after the three-year period expires (i.e., after 2003).

APPENDIX IX: Data for Figure 6.1

Table A.2: Stakeholder Representation on New and Old Teams

Affiliation	*SPOW*	*STS*	*PWS*	*GSM*	*TBN*	*WHWO*	*OSF*	*VIM*	*GOERT*
Federal government	1	2	1	2	2	2	5	1	3
Provincial government	4	2	3	4	4	4	3	6	4
First Nation	0	0	2	1	1	1	1	0	1
Local government	1	2	2	2	2	0	1	0	3
"Corporate" ENGO (see footnote #57)	1	0	0	0	0	1	0	0	2
Community ENGO	0	1	1	0	1	0	0	1	7
Industry (landowner/tenure holder)	1	0	0	2	2	1	0	3	0
Academia	1	1	1	1	1	0	1	2	2
Consultant	0	1	0	0	0	1	1	0	2
Breeding Facility	0	0	0	0	0	0	3	4	0