# SECTION C: A LEARNING ORGANIZATION CHAPTER 3: PLANNING FOR ECOLOGICAL INTEGRITY

Despite a great deal of planning activity, and the fact that policies to enact management for ecological integrity are clearly in place, Parks Canada is still grappling with how to translate policies into plans, how to translate plans into action, and how to evaluate the consequences of those actions to adapt to constantly-changing circumstances. Parks Canada must restructure planning in a way that puts ecological integrity at the core of the whole process. The Panel recommends adaptive management a formal process for continually improving management policies and practices by learning from their outcomes as a means for Parks Canada to best

integrate learning into its planning processes, to continually improve management for the protection of ecological integrity.

Parks Canada requires:

- fundamentally new planning documents at park- and national-level scales;
- revisions to consensus planning, zoning and environmental assessment procedures to support ecological integrity objectives;
- greater emphasis on monitoring, evaluation and reporting as integral components of planning cycles.

### Learning through Adaptive Management

Effective planning is needed to maintain ecological integrity in national parks. P. St.-Jacques/Parks Canada



The need for Parks Canada to employ adaptive management is a major theme throughout our report. In Chapter 2, we reported that Parks Canada must value and encourage learning and adaptation. This chapter addresses how best to adapt planning to the need to learn, and to incorporate multistakeholder values, by embracing adaptive management as a framework for the management of national parks from the planning required to manage individual parks in regional ecosystems to the management of parks as components of greater protected areas networks. Subsequent chapters elaborate on the need to address the chronic shortage of natural and social science and planning capacity (Chapter 4), the need to learn while actively managing (Chapter 5) and on inventory and monitoring as critical tools for learning (Chapter 6). In each of these chapters, we recommend adaptive management as a means of moving forward while improving the protection of ecological integrity.

## Adaptive Management: Policy as Hypothesis, Management by Experiment

Learning is not a haphazard by-product of mistakes in policy or management. In contrast to the usual system of rewards and advancement, which tends to discourage admission of error, by using adaptive management managers and decision-makers view unanticipated outcomes as opportunities to learn, and accept learning as an integral and valued part of the management process. Learning while doing accelerates progress toward improved policies and management.

Values & Assumptions Assumptions Assumptions Assumptions = Observations & Assumptions Assu

How Well Do Results Meet Expectations?

Figure 3-1. Policy as Hypothesis, Management by Experiment

Learning is facilitated by feedback obtained from monitoring and evaluation. Adjustments, in light of knowledge gained through experience, are critical components of the process. Without adequate investment in feedback, learning about the consequences of policies or management actions is slow, change is cumbersome and can come too late. The result is a situation where staff simply "muddle through."

Cyclic models for improvement through feedback are well established in other fields — business processes such as total quality management, and science procedures such as hypothesis testing (Figure 3-1).

Adaptive management requires that social and other values are explicitly incorporated. Thus, the process provides a means to overcome confrontational gridlock and facilitates regional cooperation as advocated in Chapters 7,8 and 9. It demands that individuals and organizations look beyond their narrow perspectives to broader, unifying goals.

Parks Canada has had a well-defined, broad policy objective that is perfect for orienting the organization and catalyzing implementation of adaptive management: the protection and restoration of ecological integrity.

The fastest progress toward policy goals is realized when management actions are planned and undertaken as controlled and replicated experiments that afford greater certainty about consequences of management actions. Programs such as fire restoration, infrastructure replacement, and control of hyperabundant species are ideal for active adaptive management. Where experimentation is impractical, such as road construction or other major developments that cannot be "undone" once completed, Parks Canada can still gain information and learn from doing by analyzing existing data, modelling, and selecting the best of several alternatives. This approach is called passive adaptive management. In both cases, monitoring, evaluation and reporting follow the decision, and learning occurs because outcomes are compared to initial expectations.

A generalized model of adaptive management as a cyclic process. Knowledge that derives from monitoring and evaluation of management actions is used to make adjustments to policies and ongoing management. Feedback accelerates progress toward policy goals, such as maintenance and restoration of ecological integrity.



#### A National Park Vision: Vuntut National Park

The vision for Vuntut National Parks acknowledges social, cultural and ecological values and serves as a good starting point for adaptive management.

In 15 to 20 years, Vuntut National Park will be:

- a protected area where the internationally significant Old Crow Flats area (a Ramsar site) is healthy, as demonstrated by tens of thousands of waterfowl, migratory moose populations and normally fluctuating muskrat populations.
  - a protected area where the health of wildlife populations, such as the Porcupine caribou herd, are the same or better than today, and natural wildlife movement patterns continue
    - a protected area with the same high level of ecological integrity that is has today, where natural processes govern change.
    - a protected area where traditional knowledge and scientific knowledge are given full and fair consideration for the protection, management and operation of the park. Research and monitoring are ongoing, and the results are used to alert park managers to environmental changes caused locally or globally, leading to appropriate actions.
    - a protected area that is managed co-operatively and effectively with the Vuntut Gwitchin, and whose management is regionally integrated with Old Crow Flats Special Management Area, Ivvavik National Park, the Arctic National

Wildlife Refuge, Vuntut Gwitchin Settlement Lands as well as the chain of protected areas across northern Yukon and northern Alaska.

- a protected area where the Vuntut Gwitchin continue a subsistence lifestyle and maintain a spiritual connection to the land. Vuntut Gwitchin Elders are on the land, educating youth so that respectful stewardship of the land will continue.
- a protected area where visitors are welcomed by Parks Canada and the Vuntut Gwitchin, and opportunities are provided to learn about the land, the people and Vuntut Gwitchin culture. The health of the land, wildlife and Gwitchin lifestyle have priority over visitor opportunities.



Vuntut National Park. Ian MacNeil/Parks Canada

### The Current Planning Framework

#### **General Observations**

The Panel made observations and heard evidence that apply generally to planning and reporting activities, regardless of level or who is involved with the planning processes. We address these first, and then focus on issues more specific to park-level planning. Finally, we use the adaptive management framework we recommend for revised planning processes at the park level, to sketch the components for an analogous planning system at the national scale.

Parks Canada currently divides planning activities into three tiers: strategic, implementation and work planning

(Figure 3-2). There are many types of plans in each tier, but only a few main plans provide for direct accountability. These plans are:

- at the strategic tier, the five-year Park Management Plan, which is the key accountability tool between the park, the government and the public;
- at the implementation tier, the three-year Business Plan, which combines planning for national historic sites with national parks at the level of Field Units and is the key accountability tool between Field Unit Superintendents and the Chief Executive Officer of Parks Canada;



Perhaps no phase of management planning has received as little attention as the evaluation of the results of the planning program efforts.

Parks Canada, Guide to Management Planning (1994) p. 12

Parks Canada ... has no formal process for monitoring the implementation of management plans or reviewing previous initiatives.

Auditor General (1996) pp. 31-39

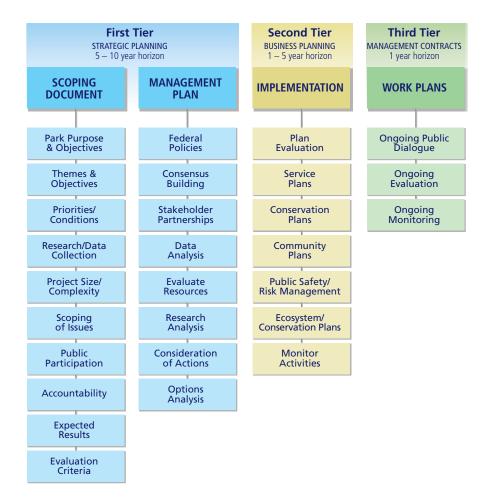


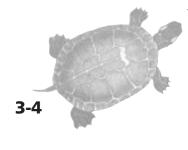
Figure 3-2 Current Planning Framework

A reproduction of a figure in "Guide to Management Planning" (Parks Canada 1994), illustrating the current three-tiered, park-level planning system. Each tier comprises many different types of plans that do not necessarily link to each other, nor to others in other tiers. Neither is there any indication how the results of evaluation and monitoring should feedback and result in adjustments to policy and management.

 at the work planning tier, individual plans that are usually prepared annually and elaborate methods to carry out projects listed in the strategic and/or implementation plans.

In contrast to the cyclic model of adaptive management, the Panel observed that planning in Parks Canada is linear, top-down, and has no obvious feedback loops to incorporate learning (Figure 3-2). Planning appears as a dizzying mix of strategic and tactical planning

activities, at a variety of spatial and temporal scales, without clear linkages between policy and strategic plans, nor between strategic and implementation plans. Evaluation and reporting (Figure 3-1) is the forgotten tier. Evaluation and reporting are restricted to the State of the Parks Report (Recommendation 6-9). The process is further confused by the retention of old names for new documents, old documents that linger despite being superseded by newer documents, and so forth.



### Accumulation of "Secondary" Planning Documents

A number of documents evolved over the past decade, ostensibly to bridge between policy and strategic-level plans: Ecosystem Conservation Plans, Ecological Integrity Statements (and documents describing the attendant processes to develop these products) and the State of the Parks Report. However, ecological integrity is still sidelined from the main accountability tools, which are the Park Management Plans, Business Plans and Corporate Plans.

In addition, it is difficult to find explicit links between policy and the main planning documents, or how the main plan-

> ning documents link to each other. It is also difficult to discover how the "first job" of maintaining and restoring ecological integrity carries through from law to policy, from policy to implementation, or anything in the way of explicit feedback to improve policy and management for ecologi-

cal integrity. Thus, at present, the Minister and the Chief Executive Officer are only indirectly accountable for delivering on the legal and policy commitments to ecological integrity.

### Too Much Planning, Too Little "Doing"

The Panel heard and observed that current planning is ponderous and timeconsuming, and that Parks Canada's effectiveness in implementing and monitoring its plans is inconsistent. The system is breaking under its own weight. The Panel further heard that senior management has become consumed by process issues, leaving little time to focus on the substantive issue of ecological integrity. The Panel also heard that some planning occurs in isolation, leaving the impression that much of it goes on for its own sake, rather than being focused on the central task of planning for the maintenance and restoration of ecological integrity.

The number of experienced planners in Parks Canada has been reduced. As a result, planning cannot be carried out in a timely fashion; many plans are out of date. Further, increased regional integration, co-operation and consultation (as advocated in Chapters 7, 8 and 9) will mean that planners' workloads will increase as they are called on to interact with other jurisdictions. Numerous annual work plans, and required input to many other planning and reporting activities by resource management, interpretation and other staff, take too much time away from plan implementation.

"We have become known as 'Plans Canada'." Parks Canada resources management staff

"We have produced 15 plans in 18 months!"

Field Unit Superintendent

"If Parks Canada was directing target practice, the command would be: 'Ready, aim...aim...aim...'."

Parks Canada resources management staff



### **Changing the Current Planning Framework**

We had the opportunity to review Parks Canada's draft "Guide to Management Planning" (September 1999) and recommendations from the National Management Planning Conference (October 1999); we were encouraged to see that Parks Canada has started to address some of the concerns identified by the Panel, such as:

- that management plans need to be more strategic by spelling out and incorporating a clear vision for the greater protected areas networks and regional ecosystems of which national parks are a part (Chapters 8 and 9), the current state of ecological integrity (Chapters 4, 5 and 6), and the goals and means to maintain and restore ecological integrity by establishing measurable objectives for verifiable indicators (Chapters 6);
- the need to reduce planning products to the fewest documents and reports possible, each with one clear purpose and explicitly linked with each other (as recommended in this chapter);
- inclusion of suggested tools and techniques for consultation, and a call for more effective consultation with the public and other agencies (Chapters 2, 7, 8 and 9);

- better co-ordination and early involvement by the National Office and an enhanced role for regional co-ordination through Service Centres (Chapters 2 and 4);
- increased resources (Chapter 13) to nurture a competent planning core and/or to cover shortfalls for assignments, contracts and interchange agreements; and
- addressing ecological integrity issues at national historic sites, national historic canals and other sites.

However, we are concerned that Parks Canada has not yet addressed that:

- there is no explicit reference to adaptive management and mandatory monitoring and evaluation;
- there is little in the way of explicit ideas for consolidating and streamlining planning activity;
- there are still too many different, incongruent evaluation and reporting deadlines (annual and two-, three-, and five-year cycles) that are confusing, cause overlap among planning, management and reporting activities that ought to follow each other in an orderly cycle, and that represent investments of staff time better spent in implementation;
- staff time would be better spent in implementation than in producing a myriad of planning documents; and
- important planning tools such as zoning, wilderness designation and environmental assessment appear as afterthoughts in current plans.



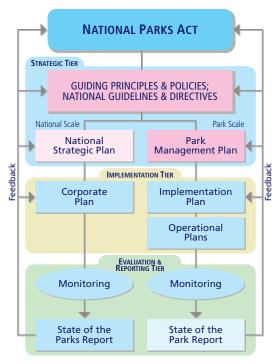
#### RECOMMENDATIONS

- 3-1. We recommend that Parks Canada adopt an adaptive management approach (as conceptualized in Figure 3-3) at both national- and park-level scales of planning and management, such that:
- the planning framework at each scale is consolidated around the main accountability tools at each tier (a strategic plan, an implementation plan and an evaluation report) and documents peripheral to this core are phased out;
- the planning system explicitly links the various components in the framework, both within and between national and park scales;
- the planning system makes increased and effective use of regional Service Centres to co-ordinate between national- and park-scale planning, management, and reporting so that ecological integrity objectives at both scales are mutually supportive. This will relieve Field Units of some of the present burden (Chapter 2) imposed by too much planning that leaves insufficient time for plan implementation, and will facilitate regional consultation and coordination (Chapters 7, 8, and 9);
- the planning framework provides for feedback, through monitoring and evaluation, about the adequacy of management practices for achieving ecological integrity objectives.

- 3-2. We recommend that Parks Canada simplify the parks planning process, similar to Figure 3-3, to:
- ensure that the legal requirement to maintain and enhance ecological integrity is carried down the entire process as the overriding priority;
- improve the efficiency of planning activities and thus free staff time for implementation;
- provide for fewer, but analogous, strategic and implementation planning and reporting cycles, with complementary, commensurate time lines, at each of national and park (regional ecosystem) scales.
- 3-3. We recommend that the Park Management Plan become a fundamentally new document, such that:
- it incorporates an Ecological Integrity Statement and the strategic aspects of Ecosystem Conservation Plans;
- all other planning is thus focused by the requirement to manage the ecosystem for ecological integrity first;
- the management planning process becomes, de facto, an ecosystem conservation planning process and its product, the Park Management Plan becomes, de facto, an ecosystem conservation plan;
- conservation scientists play a fundamental role on the management planning team (Recommendation 8-7).
- 3-4. We recommend that, with respect to strategic planning at the national level, Parks Canada establish a new strategic plan for managing the national system of parks for ecological integrity (Recommendation 8-2).



- 3-5. We recommend that Parks Canada establish formal, mandatory monitoring and evaluation processes (Recommendation 6-8) at the scale of individual parks prior to each new cycle of park management planning, by requiring a report from each park about the state of ecological integrity in the park and the surrounding greater ecosystem,
- track progress toward the maintenance or restoration of ecological integrity in parks and in the greater ecosystems that surround them;



- assess the effectiveness of specific management actions toward achieving the vision, objectives and goals in parks and in greater ecosystems;
- monitor the implementation of new strategic Park Management Plans for ensuring the maintenance of ecological integrity;
- indicate the proposed direction and management actions to respond to the present states of ecological integrity in parks and in greater ecosystems.

This report should undergo a thirdparty audit.

3-6. We recommend increased funding for renewing a planning core within Parks Canada (Recommendations 4-1 and 13-2) that is:

- competent in conservation science as well as planning for carrying out Parks Canada's mandate to maintain and enhance ecological integrity in greater park ecosystems;
- competent to meet the greater needs of enhanced consultation with the public and other agencies as demanded by ecosystem-based management.

Figure 3-3 A Proposed Planning Framework

A proposed organization to simplify Parks Canada's planning activities by consolidating and streamlining strategic plans, implementation plans and reports at both national- and park-level (regional ecosystem) scales. Dashed boxes indicate new components that need to be developed to make planning and reporting consistent with principles of adaptive management and analogous between scales. The name "Park Management Plan" is retained, as required by the Act, but it is a fundamentally new document incorporating an Ecological Integrity Statement and the strategic aspects of Ecosystem Conservation Plans; all other planning is thus focused by the requirement to manage the ecosystem for ecological integrity first. The management planning process becomes, de facto, an ecosystem conservation planning process and its product, the Park Management Plan becomes, de facto, an ecosystem conservation plan.

Business Plans are renamed "Implementation Plans" and contain the tactical aspects of Ecosystem Conservation Plans. Revised "business lines" and "service lines" link to the Park Management Plan, and reflect the requirement that management for ecological integrity is the first priority into which other activities fit. Finally, detailed work plans ("Operational Plans") become appendices to, and dovetail with, the "service lines" in the Implementation Plans. Pale-shaded boxes in the upper left and lower right denote new documents — the National Strategic Plan and the State of the Park Report — which do not currently exist.

### Planning at the Park Level

The Strategic Planning Tier
At the strategic planning tier, the Panel observed that:

- ecological integrity issues are not generally perceived as the core element that permeates the whole Park Management Plan, and corresponding management strategies are generally relegated to Ecological Integrity Statements and/or to Ecosystem Conservation Plans that are not considered part of the strategic tier of planning (these are produced at the second planning tier);
- recent management plans better reflect the requirement to maintain ecological integrity (such as for Banff National Park), yet still do not adequately reflect that maintaining and restoring ecological integrity is the first priority of national parks; ecological integrity is treated as a separate section in most plans, whereas it should be embedded in the document;
- objectives in Park Management Plans have, for the most part, been vague and fuzzy, rarely measurable and rarely linked to a follow-up monitoring program.

stressors affect park management. Strategic objectives and actions are also usually not well linked to stressors.

The Park Management Plans

generally do not provide a mean-

ingful discussion or overview of

the state of the park and how

Charron (1999)

### RECOMMENDATIONS

3-7. We recommend that Parks Canada phase out separate Ecological Integrity Statements and Ecosystem Conservation Plans when they become integral to new, revised Park Management Plans (Recommendation 3-3). By this action, maintenance of ecological integrity will become the fundamental goal of park management planning, and the strategic plan will be linked explicitly to policy.

The revised Park Management Plan should include:

- the long-term ecological vision of the park in its greater ecosystem, reflecting ecological time frames, and based on the state of the ecosystem deemed representative of the natural region in which the park situated;
- a conceptual model of the park's ecological system;

- an evaluation of the park's present ecological state;
- a specific set of goals and measurable objectives that provide a long-term direction toward maintenance or restoration of ecological integrity (the incorporated strategic aspects of the Ecosystem Conservation Plan);
- a comprehensive group of indicators and performance targets related to the goals and objectives and tied to a monitoring and evaluation program;
- strategic plans for resource protection, visitor use and management, active management, and interpretation and outreach given the performance targets for ecological indicators and how each of these activities contributes to conserving or restoring ecological integrity;
- a statement about how visitor use stresses the park's ecological integrity and how such stresses are being eliminated or mitigated (Recommendation 11-3 and 11-4).



3-8. We recommend that Parks Canada provide guidelines on how to develop adequate objectives and indicators for individual parks, which will permit an effective evaluation of progress toward the vision and goals of the Park Management Plan. Conservation scientists should be part of the team that prepares the Park Management Plan. Clearly-defined and measurable

objectives will assure the quality of the plan as an accountability tool and the implementation of an adaptive management approach. Formulation of objectives should take longterm outcomes into account to assess progress toward the park vision, and outline medium-term targets to implement specific actions.

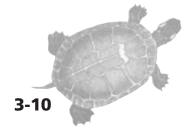
### Specific Tools: Consensus Planning, Zoning and Environmental Assessment

Consensus planning, zoning and environmental assessment should provide powerful opportunities and tools for planning for ecological integrity. Parks Canada has had some successes with consensus planning in the establishment of some northern parks, but needs to exercise caution, as consensus planning can lead to compromise with respect to ecological integrity. Neither zoning nor environmental assessment are currently applied in ways that advance ecological integrity; both appear "tacked on" to management planning, even in Parks Canada's proposed new guidelines for management planning, rather than being integral to planning for ecological integrity. We deal with issues surrounding consensus planning and zoning here; environmental assessment is treated more fully in Chapter 12.

### Troubles with Consensus Planning

To engage in ecosystem-based management to maintain or restore ecological integrity, Parks Canada is evolving from traditional consultation processes, such as written submissions and public hearings at the time of developing management plans, to more co-operative or consensus processes, such as round tables or other multi-stakeholder processes. Such civic-based approaches acknowledge the range of values held by different parties and endorse the idea that Parks Canada must work cooperatively with neighbors to ensure ecological integrity. Nevertheless, the Panel heard that, in some cases:

- ecological integrity is not understood by participants and facilitators:
- round tables are not given clear definition of the priority of ecological integrity;
- round tables are conducted without knowledge of conservation science at the table;
- representatives of certain perspectives (non-local, conservation values) are excluded as they did not represent local interests;



- round tables with local stakeholders can result in obtaining regional buy-in, but they run the risk of negotiating away the mandate of maintaining ecological integrity because of disparities (sometimes only perceived) between local, regional and national interests. In some cases, such processes may lead to decisions that are contrary to Parks Canada's
- Guiding Principles and Policies and sometimes even contrary to the intent of the National Parks Act;
- Parks Canada has yet to develop an efficient, general framework and guidelines for round table structures;
- Parks Canada has not solicited Aboriginal peoples' knowledge in this respect.

### RECOMMENDATION

3-9. We recommend that Parks Canada develop national guidelines and associated training for planners and senior managers to successfully protect and integrate the primary objective of Parks Canada's mandate into public involvement processes, that meet the following criteria:

- ensure partnerships with First Nations and incorporate Aboriginal approaches to forming partnerships;
- prior to the decision by any potential partners to participate in a specific process, they receive adequate information about the concept of ecological integrity and its implications for planning and management from Parks Canada;
- all participants agree to abide by the legislative and policy requirements respecting ecological integrity;

- all facilitators and mediators have a clear understanding of the mandate of Parks Canada with respect to ecological integrity;
- conservation scientists and other appropriate specialists from within and outside Parks Canada are active participants in the process;
- formal criteria and tests be developed to ensure that any decisions made through public involvement will uphold the maintenance and restoration of ecological integrity;
- formal evaluations of these new and innovative ways to involve the public be conducted by Parks Canada staff and third parties outside of specific processes.



### The Need to Review Park Zoning

Park zoning is a critical conservation tool, providing analysis for decisionmaking about environmentally sensitive areas and land use planning for determining appropriate activities. Zoning

This potentially useful tool for park management {zoning} has been mishandled in the national parks. Despite the claims by Parks Canada that zoning is based on ecological factors, in practice zoning reflects current use and development. Instead of identifying inappropriate or non-conforming facilities/uses which have emerged through history, zoning is reconfigured to accommodate these. Without arguing necessarily for removal of such facilities/uses, we believe that zoning, to be meaningful, must truly represent ecological values as they occur in the landscape so that capabilities to withstand activity may be assigned.

submission to the Panel

can be a key tool for development of a Park Management Plan and should be designed to allocate lands within a park on the basis of significance for ecological integrity, within which the potential for human use can then be assessed.

• the current zoning system predates Parks Canada's development of an ecosystem-based management approach and is more reflective of historic land use than

the

Panel

ecological sensitivity;

 zoning categories as they exist are weakly defined in terms of protection of ecological values;

However.

found that:

- generally, ecological information is used only for determining the location of Zone I (Special Preservation) areas;
- the scale of zoning is usually at a coarse level and misses small, but significant, ecological elements;
- the zoning system does not take account of aquatic ecosystems;
- the use of natural features as zoning boundaries is the exception rather than the rule.

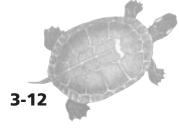
Guidelines for the development of a new zoning system could include:

- use of state-of-the-art spatial analysis (geographic information systems), using both fine and coarse filters, and reserve design algorithms that take account of:
  - the rarity and/or uniqueness of specific habitat types;
  - the range or habitat requirements of species of concern;
  - sensitivity of abiotic ecosystem components to erosion, pollution, compaction, and other processes; and
  - sensitivity of biotic components to impacts such as habitat loss.
- application of a precautionary approach to assigning significance and sensitivity, so as to avoid development of cumulative effects that convert common and abundant ecological elements into rare and sensitive ones;
- application of the zoning designation regardless of existing or proposed facilities, developments or uses, based rather on the importance of the land to zoning for ecological integrity;
- application of zoning such that boundaries are delineated by natural features, so far as is possible, so that zones are easily communicable to the public;
- recognition of the varying significance and sensitivity as well as complexity associated with freshwater and near-shore marine environments;
- spatial and temporal means of identifying significance and sensitivity.

### RECOMMENDATION

3-10. We recommend that Parks Canada revise the present zoning system and methods for zoning in order to help designate, through planning, areas

within parks based principally on their significance for maintaining or restoring ecological integrity and on their ecological sensitivity.



### **Designating Wilderness Areas**

The Panel's observations about zoning in general notwithstanding, Parks Canada currently has at its disposal an excellent way to maintain ecological integrity within national parks: formal designation of sensitive or undeveloped areas as "wilderness."

The meaning of the term "wilderness" has evolved from ancient cultural and religious ideas about primeval nature. For people of many cultures today, it refers to "a natural or wild place without human development." In the United States, wilderness is associated with specific legal land designations; in Canada, vast areas endure as wilderness with no legal protection. Wilderness has been recognized worldwide as an essential and dwindling reservoir of biodiversity and evolving ecosystems. By definition, wilderness has a high degree of ecological integrity.

Under Parks Canada's existing zoning system, there is a provision for the legal protection of wilderness as a means to prevent inappropriate development or activities. Section 14 of The National Parks Act provides for the Minister "to prevent activity that is likely to impair wilderness character" (that is, ecological integrity) through the creation of wilderness areas by regulation. Under the existing Act, Cabinet must approve wilderness areas through an Order-in-Council. Changes to the boundary of a designated wilderness area have to be preceded by public consultation and also approved through an Orderin-Council.

### An Alternate Approach to Park Zoning: Gwaii Haanas

The draft Gwaii Haanas Management Plan takes an alternative approach to zoning, using geographic information systems to identify gaps in the coverage of ecologicallyand culturally-important park attributes by appropriate zones. A more flexible zoning system is proposed that includes spatial and temporal variation in sensitivity to impacts that may at times require temporary closures, such as islands with seabird colonies, or seal and sea lion haulouts, when these areas are being used for nesting or rearing offspring. Restricted access or controls on methods of viewing and access will also become part of a mandatory orientation session for visitors as well as operating guidelines for tour operators.

Parks Canada employee, submission to the Panel

### RECOMMENDATIONS

3-11. We recommend that within six months, there be an Order-in-Council to convert existing wilderness zones (Zone 2 areas) in national parks into legally designated wilderness as provided by the National Parks Act.

3-12. We recommend that the Minister seek, through Bill C-70 or its successors, to amend Section 14 of the National

Parks Act to empower the Minister to make the necessary wilderness regulations rather than requiring an Order-in-Council through Cabinet Committee. We further recommend that an Order-in-Council be required to remove any wilderness designated through these regulations. Suggested wording for Bill C-70 is in Appendix C.



### Implementation and Work Planning Tiers

The main planning tool at the implementation tier is the Business Plan. The Panel observed that there are numerous other planning processes and products considered part of implementation planning, some of which have both strategic and implementation components, but none of which have the status of Business Plans as an accountability tool.

Several of these documents — especially Ecosystem Conservation Plans and Ecological Integrity Statements attempt to bring ecological integrity into mainstream planning. In our view, that Parks Canada felt it necessary to devise these planning documents as a means to come to terms with planning for ecological integrity, rather than simply incorporating ecological integrity into all planning tools as the core theme, is indicative of the inertia to acceptance of ecological integrity as the core of planning activity. Other implementation-tier plans are not obviously constructed around ecological integrity.

**Ecosystem Conservation Plans attempt** to establish measurable goals, management strategies and actions to ensure the protection of ecosystems in and around national parks. As such, they are hybrid documents; there is need to separate the strategic from the tactical components. The advent of Ecological Integrity Statements has superseded the strategic aspects of Ecosystem Conservation Plans, and the tactical aspects appear redundant with third-tier work plans. Further, implementation of the Natural Resources (Ecosystem) Management Process, out of which Ecosystem Conservation Plans evolved, proved difficult.

The workload and resources required to produce all the products have been generally underestimated, explaining in part the Auditor General's recommendation that Parks Canada still needs to improve the quantity and quality of its baseline biophysical data in order to respond to ecosystem-based management needs. Nevertheless, the Natural Resource Management Process is dated and Parks Canada is actively working to implement new ecosystem management principles.

The Panel observed that Business Plans do not translate well into implementation plans for maintenance and restoration of ecological integrity, because targets and performance indicators for ecological integrity are often expressed in broad terms only, if at all. Further, business planning for many parks is done at the level of Field Units and rolled up with planning for other heritage sites, and the "business lines" and "service lines" do not reflect the mandate for ecological integrity, making it difficult to allocate and account for expenditures related to ecological integrity. We discuss this more fully in Chapter 13. Linkages with strategic directions of Park Management Plans are not always evident and often so broad that they are meaningless. Finally, review criteria for Business Plans issued by the Executive Board do not include a clear focus on ecological integrity.

Work planning occurs over shorter time scales, often responding to immediate concerns or needs, and out of synchrony with longer-term planning cycles driven by larger agendas. Thus, it is not always evident whether and how on-theground activity relates directly to long-term ecological integrity objectives.



### RECOMMENDATIONS

3-13. We recommend that Parks Canada fold the strategic components of Ecosystem Conservation Plans, with Ecological Integrity Statements, from this tier into revised Park Management Plans (Recommendation 3-3) at the strategic tier and discontinue the use of Ecosystem Conservation Plans and Ecological Integrity Statements as separate documents.

By this action, ecosystem management for ecological integrity would no longer be side-lined from the main planning process. The Panel cautions that the recommendations to phase out Ecosystem Conservation Plans and Ecological Integrity Statements must not be taken out of context. It is not our intent that ecosystem conservation planning be dropped. It is our intent that ecosystem conservation planning and ecological integrity achieve the status of a legislated role by embedding them in the Park Management Plan (Recommendation 3-3). Recommendation 3-13 cannot be implemented without also implementing Recommendation 3-3 to substantially revise the composition of management planning teams; these actions go hand-in-hand and reflect a major shift in planning processes consistent with legal requirements and policy commitments to manage principally for ecological integrity.

3-14. In an effort to move away from the language of business, we recommend that Parks Canada stop using the term "Business Plan" and refer instead to "Implementation Plans" (Chapter 2).

3-15. We recommend that Parks Canada revise the present format of Implementation (Business) Plans to also become comprehensive accountability tools for maintenance and restoration of ecological integrity. The tactical components of Ecosystem Conservation Plans should be outlined in the Implementation Plan and elaborated in individual Operational Plans for specific projects as means to achieve and maintain ecological integrity. Operational Plans should be considered appendices to the Implementation Plan, thus making explicit the links from the Guiding Policies and Principles and strategic Park Management Plans to action-oriented work plans through Implementation Plans (Figure 3-3). The Implementation Plan should describe:

- clear linkages to the strategic Park Management Plan in sufficient detail to be meaningful;
- progress to the goals described in the Park Management Plan;
- how the park will monitor implementation of aspects of the Implementation Plan related to ecological integrity;
- business and service lines that can be used to more readily distinguish the financial and human resources specifically allocated to ecological integrity with clear information on funding for salaries, goods and services, and others such as emergency funds (Chapter 13).

3-16. We recommend that Parks Canada review the length of the cycle for implementation planning with a view to making it commensurate with the length of the cycle for strategic planning, such that each new implementation planning cycle immediately follows and is guided by new Park Management Plans. This will facilitate better linkages between strategic and implementation planning.



3-17. We recommend that Parks Canada designate stand-alone work plans as "Operational Plans" under the umbrellas of the strategic and implementation plans to facilitate better linkage between strategic directions and on-

the-ground activities to achieve ecological integrity objectives. This can be done by adding Operational Plans as appendices to the Implementation Plan, thus forcing the Implementation Plan to refer explicitly to them as well as to strategic Park Management Plans.

### **Evaluation and Reporting:** The Forgotten Tier

The Panel observed that, except for recent developments in Banff National Park, evaluation and feedback on



progress toward ecological integrity objectives are virtually non-existent at the park level. We earlier recommended (Recommendation 3-5) a formal evaluation product in the form of a five-year State of the Park Report produced by each park. Further, while individual parks contribute to the national State of the Parks Report, the length of evaluation and reporting cycles is different from the length of management and business planning cycles, leading to confusion and waste of staff time. Finally, local stakeholders have voiced desires to review progress more frequently than the legal five-year interval associated with Park Management Plans. Parks Canada must develop a means to report more frequently to stakeholders and others about progress to implementing measures to protect and restore ecological integrity, without directing staff time and resources away from implementation.

Monitoring should be a valuable part of the planning process. J. Pleau/Parks Canada

### RECOMMENDATION

3-18. We recommend that Parks Canada annually report about progress to maintaining and restoring ecological integrity in individual parks to provide a short-term feedback loop at the park level (Figure 3-4). A formal, mandatory Annual Plan Implementation Report should be available to the public using appropriate public involvement mechanisms. (This report could be simply a

compendium of the annual reports on individual Operational Plans.) The Annual Plan Implementation Report should be short and designed to facilitate easy "roll up" into a mandatory five-year report on the state of ecological integrity in the park (Recommendation 3-5) prior to the beginning of the next park management planning cycle.



### Planning at the National Level

### Strategic Planning

Planning at the scale of the entire system of national parks could benefit from reorganization to an adaptive management framework that parallels that outlined above for park-level planning. Currently, such parallels are patchy, at best (Figure 3-3).

For example, at the level of strategic planning nationally, there is at present no counterpart to strategic Park Management Plans at the park level (Recommendation 3-4). The current National Park System Plan focuses on completion of the park system, but does not provide guidance to system-wide decision-making with respect to ecological integrity at the national scale in the

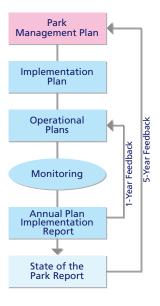


Figure 3-4 Evaluation and Reporting in Planning

A "close-up" of the right side of Figure 3-3, illustrating park-level management planning, to show the relationship between annual evaluation and reporting on progress to the objectives of Implementation Plans and longer (five-year) evaluation and reporting on progress to objectives of Park Management Plans.

same way that Park Management Plans are beginning to evolve as strategic plans for delivering ecological integrity at the scale of individual parks.

Chapters 8 and 9 deal with the need for Parks Canada to think more strategically about its partnership role in greater protected areas networks, and issues surrounding new park establishment. System completion alone is unlikely to suffice for the maintenance of ecological integrity. It is not safe to assume that planning strategically for ecological integrity at the level of individual parks will necessarily result in ecological integrity in the system as a whole. Parks Canada will require a strategic plan for managing for ecological integrity, akin to individual Park Management Plans, which describes targets for verifiable indicators of ecological integrity at the national level, too.

### **Implementation Planning**

At the level of implementation planning, the national Corporate Plan is analogous to Implementation (Business) Plans in the parks or Field Units in that it is the key accountability tool between the Chief Executive Officer of Parks Canada and the Minister, in the way that Implementation (Business) Plans provide accountability between Field Unit Superintendents and the Chief Executive Officer. However, the Panel was concerned by the description of the Corporate Plan provided in the Planning, Reporting and Accountability Structure recently tabled with the Treasury Board — that the Corporate Plan is likely to suffer the same shortcomings as a tool for implementing





The Torngat Mountains in Labrador may become a national park.

Plans face at the level of individual parks. Ecological integrity is still not the guiding principle, nor the first priority for management under which

all other activity takes place. Rather, it remains one of many things Parks Canada must do, and the "business lines" and "service lines" do not lend themselves to easy accounting of expenditures for ecological integrity.

strategies at the scale of the national

parks system that the present Business

### **Evaluation and Reporting**

At the reporting tier, although few parks report individually on progress to achieving ecological integrity objectives (Figure 3-3, Recommendation 3-4), reporting at the national level has a high profile in the form of the biannual State of the Parks Report. Even so, the Panel heard that the State of the Parks Report is not reviewed through any Parliamentary process.

Without a guiding national strategy to achieve ecological integrity for the system as a whole (Recommendation 3-4), the State of the Parks Report is relegated the role of reporting on the collective state of the "rolled up" parts. Again, because the integrity of the whole cannot be assumed to be merely the summed integrity of the parts, the current State of the Parks Report does not address whether the parks system, as one component of greater protected areas networks, is adequately managed for ecological integrity.

#### RECOMMENDATIONS

3-19. We recommend that the basic elements of a new National Strategic Plan should be similar to those proposed for revised Park Management Plans (see above), but scaled to the national level, and particularly include:

- the strategy that Parks Canada will follow to best position and manage its protected areas in relation to those of its neighbours in a greater, national protected areas network (Chapters 8 and 9);
- the targets for verifiable indicators that the greater protected areas networks, of which national parks are a component, adequately protect Canada's ecological integrity and biodiversity;
- the extent to which national-level indicators of ecological integrity meet targets;



3-20. With respect to implementation planning at the national level, we recommend that Parks Canada revise the Corporate Plan along lines conceptually similar to those suggested for Implementation (Business) Plans (Recommendation 3-15), especially so that business lines and service lines better reflect the principal objective of national parks with respect to ecological integrity and to better track the allocation or resources to the maintenance and restoration of ecological integrity. Develop Corporate Plans to achieve national-level targets for indicators of ecological integrity.

3-21. With respect to evaluation and reporting at the national scale, we recommend that Parks Canada continue to produce the State of the Parks Report, but:

- plan ahead to eventual revision and adaptation of the State of the Parks Report to address progress to the goals and objectives of a new strategic plan for managing the system of national parks for ecological integrity at the nationallevel (Recommendations 3-5 and 3-19);
- better align strategic planning with evaluation and reporting to ensure up-to-date information is available at the beginning of each new planning cycle. Consider changes to the National Parks Act that would eventually bring the required report production cycle (currently every two years) in line with the new cycle of strategic planning at the national level, which will necessarily be longer (minimally five years). In the threeyear gap created by extending the reporting cycle for the State of the Parks Report from two to five years,

the new, mandatory Annual Plan Implementation Reports at the park level (Recommendation 3-18) and annual reports on Corporate Plan implementation (as required now by the Parks Canada Agency Act) would fill the need for more frequent public reporting locally and nationally;

 ensure that the State of the Parks Report is reviewed by the Standing Committee on Canadian Heritage.

3-22. To those ends, we recommend that Parks Canada create an enhanced role for regional Service Centres to ensure that national-, regional- and park-level planning, implementation, evaluation and reporting is co-ordinated and mutually supportive (Chapters 2 and 4).

