

Ecological Integrity and Parks Canada

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Abstract

The importance of environmental issues in the management of national parks has increased greatly over the past few decades. Until the 1970s, national parks were seen largely as areas for recreation and development. An era of increasing awareness of environmental issues followed. In the 1980s and 1990s, the concept of managing for ecological integrity was developed, as were a number of related definitions and tools (e.g., planning guide). In early 2001, the Report of the Panel on the Ecological Integrity of Canada's National Parks was released. It included 127 recommendations covering a large spectrum of thematic and administrative issues. The Panel also identified a set of preconditions that should be met before new funds are provided to Parks Canada for the implementation of recommendations. This paper reviews what Parks Canada has done in the last year to fulfil the preconditions identified by the Panel, and to respond to some of the recommendations. The adoption of ecological integrity as the fundamental principle for planning and managing national parks, in conjunction with limited availability of capital for development and redevelopment, sets Parks Canada on a new track. On the long term, this will have a significant influence on the management of individual parks, on the design of new parks, and on the overall system plan.

Background

The 1960's was a time when North America generally began to conceive of limits to former approaches to protected area management which emphasized recreation and development. At the same time considerable effort was made to protect what were usually referred to as the "natural resources" of the national parks, by undertaking comprehensive resource inventories, and preparing the first master plans which focussed on zoning within the boundaries. In the public hearings carried out to review these plans with the people of Canada, concerns were frequently

Note: This report on Ecological Integrity and Parks Canada was prepared by the editors from notes made by Gilles Seutin for his presentation, which focused on the Ecological Integrity (EI) Panel review and report to the Minister of Canadian Heritage. The Panel was established in 2000 to report on how best to ensure that EI is maintained or restored across the system of Canadian National Parks. The Panel report was presented to the Minister early in 2001 after a cross-country consultation and study. The Panel undertook its work at a time when Parks Canada's approach to National Parks was undergoing major changes.

Ecological Management Over Time

Early Period: Recreation and Development

1960's/70's: Awakening

- comprehensive resource inventories
- first master plans for parks (focussed on within parks)
- focus on 'without impairment' growing stronger

1980's/90's: Tools for EI

- environmental assessment becomes mandatory
- cumulative impact is understood
- legislative and policy frameworks are amended

2000: Stock taking, the EI Panel Report

expressed about the impact of development plans and proposals on the natural resources and ecosystems of the parks. One threshold was reached with the widespread opposition to the early 1970's Village Lake Louise proposed in Banff National Park. Another major change in the 1970's was the decision to try to accommodate aboriginal people's traditional uses of the parks and to develop closer partnerships with them, notably in the North. Other policies and procedures also changed. For example environmental assessment of development proposals became mandatory, although concern grew about the need to recognize and take into account the cumulative effects of development.

As a result of continuing pressure for development and a better understanding of its negative environmental effects, further changes were made in policies and legislation.

Evolution of Policy and Legislation

1979 - 'ecological integrity' introduced in policy

1988 - amendments to National Parks Act include ecological integrity

1990 - first State of Parks Report

1994 - Guiding Principles and Operational Policies emphasize ecological integrity

However, the debate about development continued and people questioned whether Parks Canada was paying enough attention to ecological integrity. Concern reached a high point in the Bow Valley and led to the establishment of the Banff and Bow Valley study in the early 1990's. The ensuing report led to many recommendations for changes in management in Banff and the Bow Valley but it also raised numerous general issues which led to the creation of the Ecological Integrity Panel.

Report of the EI Panel

The final report of the Panel is too complex to present in any detail here, however the fundamental finding was that:

“Our National Parks are under threat from stresses originating both inside and outside the parks. Unless action is taken now, deterioration across the whole system will continue.”

The EI Panel

Mandate: “To report to the Minister on how best to ensure that EI is maintained across the system of Canadian National Parks.”

- Parks protect ecological processes
- Parks protect biodiversity
- Parks are centres for research and education
- Parks are places to enjoy, appreciate and celebrate
- Parks have economic values

In this context the Panel report addressed numerous topics, primarily those listed in the following text box.

Topics Addressed in the EI Report

- A Sacred Trust
- Toward a Culture of Conservation
- Planning for Ecological Integrity
- Building Capacity for Learning and Education
- The Need for Active Management and Restoration
- Tools for Understanding and Assessing EI
- Working with Aboriginal People
- National Parks in the Canadian Protected Area Network
- From Islands to Networks
- Interpretation and Outreach
- Enjoyment and Appropriate Use
- Shrinking the Ecological Footprint
- The Need for Committed Investment

Ministerial Action Plan

Parks Canada responded to the Panel report by promptly issuing an Action Plan dealing with its 127 recommendations. This Action Plan focussed on:

- Making EI central in legislation and policy
- Building partnerships for EI
- Planning for EI, and

- Renewal of Parks Canada as an agency with the capacity to support the EI mandate

Making EI Central in Policy and Legislation

The 1988 legislation on national parks was reviewed in depth and a new Canada National Parks Act was brought into force in February 2001. EI is now built into the Act where it is defined as,

“a condition that is determined to be characteristic of its natural region and likely to persist, including biotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes”

EI is also given primacy of place in this Act, over recreation and related pressures. The new Act states that,

“Maintenance or restoration of ecological integrity, through the protection of park resources and natural processes, shall be the first priority of the Minister when considering all aspects of the management of parks”

Building Partnerships for Ecological Integrity

Prominent activities in this regard in the past year were:

- Participating actively in local and regional processes
- Collaborating with Tourism Industry (e.g. accord with Tourism Industry Association of Canada (TIAC), January 2000 states, “Parks Canada and TIAC will work cooperatively ... to maintain and enhance the ecological integrity of National Parks...”)
- Strengthening collaboration with Aboriginal peoples (e.g. development of a Parks Canada/Assembly of First Nations Working Group)

Planning for Ecological Integrity

In this regard the new Canada National Parks Act requires that management plans include:

- A long-term ecological vision
- Ecological integrity objectives and indicators
- Provisions for protection and visitor use
- Performance evaluation

Improved planning for ecological integrity has also involved,

- Revision of the Guide to Management Planning
- Requirements for annual reports on implementation of park management plans

- Requirements for a 5-year State of the Park Report for each park
- Stricter criteria for decision-making regarding capital redevelopment
- Revision of ecological assessment guidelines

Renewal of Parks Canada's Capacity to support the EI Mandate

One of the major actions in this regard has been the appointment of an Executive Director of Ecological Integrity who also became a member of the Executive Board of Parks Canada. Knowledge of ecological principles is primacy in recruiting and hiring senior managers. An EI orientation and training program has also been launched and a Science Strategy is under development.

The Science Strategy

The Science Strategy is built on the conclusion that decisions for national parks require knowledge, and science as a primary way to gain such knowledge. The Science Strategy focuses on three basic questions:

- What science is needed for park management in an EI context?
- How will Parks Canada acquire that science knowledge?
- How will Parks Canada use the resulting knowledge?

The science strategy evolved from a number of contextual considerations and requirements:

- Early issue identification
- Inclusiveness
- Sound science and science advice
- Uncertainty and risk assessment
- Transparency and openness
- Review

Seven principles are laid out to address these contextual challenges. These are:

- Produce credible, peer-reviewed science in support of decision-making
- Practice adaptive management (including monitoring)
- Apply the precautionary principle and provide science-based risk assessment
- Integrate and apply all types of scientific information at appropriate scale (including the greater ecosystem)
- Foster partnership - conduct science as a collegial activity
- Favour non-destructive science
- Parks Canada science will be open, transparent and inclusive

The main goals of the Science Strategy follow from these seven principles and include:

- Improve knowledge of the state of EI
- Build capacity for knowledge and continuous learning
- Strengthen information management
- Improve awareness of science
- Network internal practitioners

The major challenges that the new Science Strategy will be used to address include:

- Restoring species composition: Species at Risk program, ...
- Restoring habitat: Contaminated sites program, ...
- Restoring processes: Fire program, ...
- Green operations: Human Use Management (HUM), Visitor Transportation Systems (VTS), Environmental Management Systems (EMS), International Organization for Standardization (ISO 14001), ...
- Green Infrastructure: Environmental Assessment guidelines...
- Designing Future Parks: Ecological Integrity and Park Establishment Working Group,

Conclusion

The concept of ecological integrity has been a valuable guide to many of Parks Canada's recent initiatives. For instance, it has been instrumental in the development of the new Parks Canada Guide to Management Planning (Parks Canada, 2000) and in the revision of the Canada National Parks Act. It will be an important component of an upcoming conference on "Human Use Management in Mountain Areas" in Banff (June 10-14, 2001), and was a driving force for the recently signed agreement between Parks Canada and the Tourism Industry Association of Canada, with the intention of fostering sustainable tourism. Further details about Parks Canada's future directions can be found in "First Priority: Progress Report on Implementation of the Recommendations of the Panel on the Ecological Integrity of Canada's National Parks" (Parks Canada, 2001)

References

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