Kayakers in Gwaii Haanas National Park Reserve/Haida heritage Site. H.Quan

Opportunities will be provided to visitors that enhance public understanding, appreciation, enjoyment and protection of the national heritage and which are appropriate to the purpose of each park and historic site. Essential and basic services are provided while maintaining ecological and commemorative integrity and recognizing the effects of incremental and cumulative impacts.

- Public opportunities are provided for in ways which contribute to heritage protection and national identity objectives, and which build public support for, and awareness of, Canadian heritage.
- Parks Canada recognizes the need for control and management of appropriate activities. Public demand alone is not sufficient justification for provision for facilities and services in support of appropriate activities.
- Services, facilities and access for the public must directly complement the opportunities provided, be considered essential, take account of limits to growth, and not compromise ecological and commemorative integrity nor the quality of experiences.

Human activities within a national park that threaten the integrity of park ecosystems will not be permitted.

> Parks Canada, Guiding Principles and Operational Policies (1994)



CHAPTER 11: ENJOYMENT AND APPROPRIATE USE

Use without abuse. How can it be attained?

James B. Harkin Commissioner, Dominion Parks Branch (c. 1920)

National parks were created for the "benefit, education and enjoyment" of the people of Canada. Parks have been, are, and will continue to be places for people to visit and re-create themselves. The modern challenge, brought on by growing numbers of increasingly mobile park users and by the expanding diversity of recreational activities, is to manage human use so that it does not affect the primary vocation of the parks, "to be kept unimpaired for the enjoyment of future generations." This is the challenge this chapter attempts to face.

Use and enjoyment have been among the historical goals for Canada's national parks, and will continue to be major elements of the Canadian character and heritage.

In order to protect ecological integrity, human use in national parks must be based on the principle of responsible experience: use without abuse. Human use must also pass the dual tests of allowability and appropriateness.

The Panel is concerned that these tests are currently not clearly defined and thus policies of use are inconsistent and uncertain. Parks Canada must develop a formal assessment program on both allowable and appropriate activities, and clearly define the term "basic and essential services" so that strong and consistent decisions can be made at the park level.



Use Within Limits

Human use is one value of Canada's national parks and has a strong historical connection. The National Parks Act of 1930 recognized this with the words "dedicated to the people of Canada for their benefit, education and enjoyment." Because of the modern threats to ecological integrity, the goal now

is for people to directly enjoy protected nature responsibly, or indirectly via media such as the Internet, film, television, or printed material.

While there is now greater understanding of the interactive effects between use and retaining ecosystems in an unimpaired condition, the subtle distinctions involving use and enjoyment are less clear, particularly in terms of their compatibility with ecological integrity. For example, ski develop-

ments in parks can affect wildlife movement; accommodations can cause water pollution through sewage.

Parks Canada needs a systematic screening mechanism to determine allowable activities within national parks. Beyond the need for a definitive list of allowable activities, we argue that the precautionary principle should be the guiding rule in determining whether a particular type or level of activity is appropriate in a specific national park.

Park visitors have a responsibility for the maintenance of ecological integrity. Not all uses, seasons of use, or levels of use are appropriate. The term "enjoyment" in the Act does not mean that people have the right to use parks in ways or levels of use that have negative impacts on ecological integrity and hence on the experience of future generations. National parks are of such

importance to Canada that visitors need to approach these sacred places with a sense of humility, respect, and re-connection.

Stress from Visitor Use

Ecological integrity is affected not just by the impacts of particular activities or particular levels of use, but also by the attitudes, values, beliefs, and behaviours of park visitors, regional communities, businesses, governments and park partners. As detailed in Chapter 10, interpretation and outreach play a critical role in educating target audiences about ecological integrity and shaping their attitudes, values, beliefs, and behaviours both within and outside of national parks.

Most national parks report stress from visitor use. Based on the 1996 Stress Survey Questionnaire completed by all national parks, "Tourism and visitor facilities were ... reported to be causing significant impacts [in] 26 parks" (State of the Parks 1997 Report). All forms of recreation in a park affect ecological integrity, ranging from minor stresses such as vegetation trampling to major stresses such as the disruption of carnivore migration patterns.

There is a widespread misconception that the majority of visitor use occurs in such small areas that there is no significant stress placed on ecosystems. In some parks, only a small overall proportion of parks is devoted to visitor facilities (especially day-use facilities) but this type of use often occurs in key or critical habitat, involves unmanageable numbers of users, and provides a negative learning ground for how to experience protected nature in a national park. Day use may be the single biggest internal and unmanaged threat to ecological integrity in national parks.

Conflicting Messages on Visitor Use

It would be ideal if all Canadians were able to visit national parks and national historic sites.

Parks Canada, State of the Parks 1997 Report, p. 95

Increasing visitor traffic in national parks could compromise ecological integrity.

Auditor General (1996) p. 31-11

All recreational and harvesting activities are conditional on protecting the ecosystem.

Parks Canada, State of the Parks 1997 Report, p. 32





Hiking is an allowable activity in national parks but may not always be appropriate.
W. Lynch/Parks Canada

Reducing Impacts of Backcountry Use

The Skills Development Program at Ontario's Frontenac Provincial Park involves managing human behaviour through education in the field. The program is applicable to first-time park users and includes skiing, canoeing, and wilderness travel. Stress is not only the result of recreational activities. Ecological stress also arises from people staying overnight in a park (camping or hotel), driving through a park, or shopping in a park. In addition, backcountry use in national parks, while often involving relatively low numbers of people, is widely distributed. As a result, in many national parks there are few areas that have no human access or use. The cumulative impact of many people taking part in an apparently innocuous activity can result in major stresses on ecological integrity. For example, while one hiker passing through a grizzly bear feeding range may not affect bear behaviour, as few as 100 hikers in a month may cause a bear to abandon that range.

As outlined in Chapter 10, visitors need to understand why their use of parks results in stresses on ecological integrity, why some recreational uses must be re-examined or altered — and why some areas within some parks should have no human use.

A Lack of Basic Research

To welcome new uses or expanded levels of use without adequate background from scientific research (as discussed in Chapter 4) threatens the ecological integrity of both individual national parks and the national parks system as a whole. Parks Canada's actions on the subject of allowable and appropriate use are inconsistent with protecting ecological integrity, largely due to a lack of research on the impacts of visitor use.



To fulfil the obligations of the NPA [National Parks Act] and serve the people of Canada, park values must be maintained forever.

Clear service objectives must be used in determining benefit, education and enjoyment opportunities, since the provision of such opportunities must be measured against the obligations imposed by the Act to maintain the parks unimpaired. This means that not every kind of use requested by the public can be provided.

Only outdoor activities which promote the appreciation of a park's purpose and objectives, which respect the integrity of the ecosystem, and which call for a minimum of built facilities will be permitted.

As new or modified forms of outdoor recreation emerge, each will be assessed for its appropriateness nationally before consideration in the park management planning process. Individual park management plans will then specify the types and ranges of both new and existing appropriate outdoor recreation activities and their supporting facilities. PC [Parks Canada] will also periodically review its national directives to ensure that new forms of outdoor recreation are adequately considered.

> Parks Canada, Guiding Principles and Operational Policies (1994)

... recent studies of older national-park golf courses (e.g. Fundy, Banff, Cape Breton, Prince Albert, Riding Mountain) report high levels of mercury residues from pesticides.

> Parks Canada, State of the Parks 1997 Report, p. 45

There have been many calls to determine standards for levels of visitor use (often termed "carrying capacity"). However, research methods to determine standards for visitor use have not been developed or widely accepted by the research community. Even if research methods were available, Parks Canada currently lacks the capacity to implement research and to determine use standards.

There is a widespread lack of even basic data on the human dimensions of visitor use, impacts of visitor use, visitor knowledge about ecological integrity, and similar use-related issues. For example, many parks simply do not know how many visitors use the park, for how long, or in what ways. In many cases, individual parks do not have either adequate numbers of staff or staff with appropriate training to gather such data. In other cases, the geographical configuration of a park makes it difficult to even count visitors. This lack of basic data is directly related to lack of funding.

Parks Canada has started to recognize that use must have limits, led by the Banff-Bow Valley Study released in 1996. This recognition must now be implemented throughout the entire national park system.

Allowable and Appropriate Use

Human use is part of national parks. There are, however, some uses that should be prohibited in all national parks and some activities and/or levels of activity that should not be permitted in particular parks, park areas or seasons. The need for revenue generation should not determine whether a given activity is allowable or appropriate. As discussed in Chapter 13, a solid financial audit might even reveal that the fees charged for certain activities do not meet the costs of providing that activity.

Allowable Activities

An allowable activity is defined as, "One which does not contravene the National Parks Act and Regulations for Parks Canada and which may also be appropriate to the conditions in a specific heritage area" (State of the Parks 1997 Report). Parks Canada has a long list of allowable activities, including backpacking, fishing, rafting, and heritage appreciation. Many of these allowable activities exist due to historical precedent. Some have been included as a result of particular park establishment agreements or idiosyncratic circumstances. Still others

seemed acceptable at the time they were deemed allowable, but the changing nature and magnitude of many such activities now raises questions regarding their impacts on ecological integrity.

Some activities are currently prohibited by regulations, specifically sport hunting, sky-diving, para-sailing, and offroad motorcycling. Such decisions appear to have been related to various factors, including ethical, human safety, and environmental reasons.



Cross-country skiing in Riding Mountain National Park — an allowable activity. P. McCloskey/Parks Canada

Protecting the Full Human Experience

The human experience in protected areas derives from all the senses, but protected area managers have paid little attention to sound and light pollution.

The Torrence Barrens Dark Sky Preserve in the Muskoka region of Ontario was set aside as a protected area of Crown land in 1997. Its purpose is to protect areas of wild land from light pollution, where pristine and unobstructed night skies are visible for star gazing and astronomy, and for experiencing nocturnal wildlife in remote areas. The preserve was spearheaded by the Muskoka Heritage Foundation, a community group dedicated to protecting the natural and cultural values of the Muskoka region. The Dark Sky Preserve has the full support and approvals from the Ontario Ministry of Natural Resources and local and district councils, and is the first reserve of this kind in North America. It also demonstrates the various roles that non-governmental organizations play in supporting protected areas.

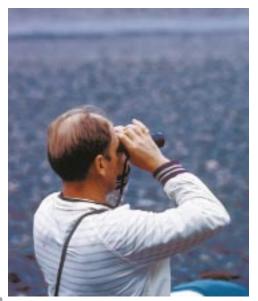
Still other activities have no clear status — including, baseball, bicycle races, competitive orienteering, cricket, curling, use of personal watercraft (jetskis), lacrosse, lawn bowling, rodeos, running races, and triathalons — all of which have occurred at one time or another in national parks.

The Panel recognizes that prohibition of activities with a long history in national parks, or removal of specific facilities related to those activities, is controversial.

To make specific decisions and to deal appropriately with conflicts between use and protection, Parks Canada needs a formal process to determine:

- the current allowability of existing uses and facilities;
- the allowability of expanding existing uses and facilities;
- the introduction of new uses and facilities.

Currently, there is no systematic framework in place to make decisions regarding allowability. The list of allowable and prohibited activities is the result of unrelated historical decisions that have not been subject to formal review.



Even apparently innocuous activities such as bird watching or wildlife viewing may have impacts upon ecological integrity. A.F. Helmsley/Parks Canada

Recreational activities that are not inherently related to the nature of national parks should be declared as not allowable in national parks on both ethical and environmental grounds. Such activities should be explicitly prohibited by national policy. For instance, golf is an activity that is unwarranted in national parks on both ethical and ecological integrity grounds. Even if golf courses were to be "greened" (reduced pesticide and fertilizer use) they still consume considerable physical and financial resources and have no inherent relationship to the nature or values of national parks. Other activities — lawn bowling, for example — may be relatively environmentally benign, but have little or no relationship to the values of protected nature and should not be allowed.

The decision to declare an activity as not allowable could also be made on the basis of an ethical argument related to wilderness values and aesthetics, especially noise. For example, while evidence is being accumulated concerning negative impacts of personal water craft (jet skis) on water quality (VanMouwerik and Hagemann, 1999), jet-skis should be declared not allowable simply because the noise that they generate conflicts with wilderness values and aesthetics. The United States National Park Service is well advanced in this area, having developed a policy on soundscapes and lightscapes regulations concerning types and levels of sound and artificial light that are appropriate in national parks.



Banff-Bow Valley Task Force: Principles for Human Use Management

The Banff-Bow Valley Task Force developed a set of principles for human use management that may have general applicability to all national parks.

- 1. Maintaining ecological integrity in the entire park is paramount.
- 2. All management decisions about human use must be based on the principles of precaution. When there are no data to guide managers in making decision, the principles of precaution and the maintenance of ecological integrity take precedence over social, economic or political choices. Uncertainty about the impact of a decision necessitates a conservative approach.
- 3. It is important to maintain visitor satisfaction in all designated zones, while respecting the need to protect the park's natural and cultural resources.
 - 4. It is important to maintain sustainable tourism.
- 5. To the greatest extent possible, the effect of human use in the communities should remain within their boundaries. It should not affect the ecological integrity of the rest of the park.
- 6. Any system to manage human use in the park must consider equity of access by Canadians. Allocation of use must be fair and equitable and accommodate the largest number of people possible, without infringing on ecological integrity or visitor satisfaction. Residents or other special interest groups must not have preferential access.
- 7. Any group that proposes to increase use beyond current levels must demonstrate that it will not have a negative impact on ecological integrity or visitor enjoyment. The responsibility for demonstrating the acceptability of the proposed change rests with those proposing the change.
- 8. Public involvement is crucial in the allocation of human use and in the implementation and successful operation of human use management systems.
- 9. The opportunity to see, enjoy and learn about wildlife is achieved through education and interpretation on and by reducing the risk of human/wildlife conflicts.

adapted from the Banff-Bow Valley Study (1996)

Appropriate Uses

Appropriate uses are a sub-set of allowable uses. An appropriate use is one which:

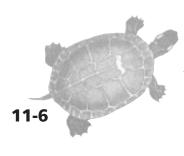
- is consistent with these [Parks Canada Policies] and the protection of ecological and/or commemorative integrity of protected heritage areas;
- is especially suited to the particular conditions of a specific protected heritage area, and- provides the means to appreciate, understand and enjoy protected heritage area themes, messages, and stories.

Parks Canada, Guiding Principles and Operational Policies (1994) p. 118

There are two measures of appropriateness: appropriate uses and appropriate levels of use. Some very good work has already been done in developing guidelines for Appropriate Activities Assessment (both Nilsen, 1994, and

the above Principles for Human Use Management developed by the Banff-Bow Valley Task Force). More nationallevel guidance is required.

Some activities or some levels of activity should be subject to a sanctioned process of demand management. Demand management is "a co-ordinated set of activities which involves influencing the type, level, timing, and character of demand, in such a way that it matches an organization's objectives" (Parks Canada, Draft findings and recommendations: Demand Management Workshop (1999). There are many mechanisms for demand management, including instituting quotas, reservations, waiting lists, higher prices in peak seasons, and interpretation and outreach programs. However, it may not be sufficient to simply curb current levels of visitor use, to say nothing of anticipated future increases in visitor use.



Eliminating an activity entirely may be the only form of management that is suitable in some circumstances where ecological integrity is seriously threatened. An allowable activity may be deemed inappropriate for an entire park or an area within a park for various reasons — season, level of use, con-

Cars on the beach at Point Pelee National Park
— formerly an accepted activity, this practice
has been banned. Parks Canada

Reducing Impacts in Point Pelee National Park

Enormous visitor pressures in one of Canada's smallest national parks threatened to degrade the park environment beyond hope of recovery. Several excellent initiatives, which have been widely accepted by park visitors, have been taken, including:

- excluding cars south of the interpretive centre and introducing a shuttle between the centre and the south point;
- limiting visitor entry to a maximum number;
- closing pedestrian traffic across the dunes, and limiting visitor access to specific locations;
- providing a solar-powered toilet facility at the tip of the Point. This measure reduced the ecological impact of the facility and provides a concrete demonstration of commitment to ecological integrity that can be highlighted in interpretation programs.

propriate for an entire ducks in trail his propriate season, level of use, conflict with national park values. The Panel is firmly of the opinion that, even if hard scientific evidence on the negative impacts of an activity is not available, the precautionary principle should be the ducks in trail his propriate and national park with and national propriate the prime of hird.

rule in deciding whether an activity should be allowed in particular situations.

One example of an allowable activity that has been deemed inappropriate in most national parks is recreational snowmobiling. It currently occurs only in a small number of national parks because of park establishment agreements, but there is pressure on other parks to permit it. Such pressure is likely to increase, in part because of the growing movement to create a system of national snowmobiling trails. While noise alone may be a serious problem, there is also biophysical evidence against snowmobiling. Recent research conducted by the United States National Park Service has documented air and water quality concerns related to snow-

mobiles (Flores and Maniero, 1999; VanMouwerik and Hagemann, 1999). While rafting, canoeing, and kayaking are — and should be — allowable activities, they are deemed inappropriate where these activities threaten waterfowl, such as breeding Harlequin ducks in Jasper National Park. Similarly, trail hiking is frequently deemed inappropriate when it conflicts with animal migration, breeding, or feeding ranges or when it endangers human safety.

Allowable activities such as hiking and nature photography become inappropriate when particular levels of use threaten ecological integrity. A prime example is limiting the number of birdwatchers at certain times of the year, as has been done in Point Pelee National Park. Similarly, large numbers of campers place serious stresses on ecological integrity from pollution, sewage, garbage, and blocking animal corridors. Defining appropriate limits on camper numbers is one means of reducing impacts from this otherwise allowable activity. However, we argue that overflow campgrounds should be prohibited. Overflow campgrounds have very low levels of servicing and are inherently more stressful on ecological integrity than permanent campgrounds.

Currently, some parks are allowing certain uses (such as rabbit snaring or snowmobiling) simply because other parks must allow such uses as stipulated in their park establishment agreements, thereby setting apparent precedents. This is not an acceptable means of determining appropriateness (and as mentioned earlier, the listing of these activities as "allowable" must be reexamined). Pressures from local interests often sway decisions on appropriate activities, despite potential for damage to ecological integrity.





Backcountry campers need to understand the potential impacts of their activities.

J. Woods/Parks Canada

Some activities that were permitted in park establishment agreements also raise challenges about who should be allowed to participate in an activity. The definition of who can participate was not always clear in the agreements, thus raising issues of fairness and equitable access. For example, if snowmobiling is permitted, should it be restricted to local residents only or should it be open to non-local tourism operators? These issues represent a slippery slope, with the potential for making some activities broadly accessible in most or all national parks, even though those activities were deemed allowable based only on a specific park agreement for a specific reason.

Appropriate activities in national parks, and required facilities, should meet all of the following criteria related to ecological integrity:

- appropriate in terms of "basic and essential" services. A clear definition of this term is needed, such that individual parks can make decisions regarding what activities are "basic and essential." Criteria to define "basic and essential services" should reflect national park objectives in maintaining ecological integrity, and be consistent with and dependent on appropriate enjoyment and appreciation of park values;
- appropriate in terms of local environmental, social, and economic conditions. For example, bird-watching may not be appropriate if it occurs during nesting season;
- appropriate in terms of numbers of visitors and timing. For example, many parks are stretched beyond their management capacity during peak summer weekends; in such cases, reservation systems are warranted;
- appropriate in terms of demand for long-term use. For example, research is needed to determine the demand for new activities that require major investments of both personnel and money.

The Panel also notes that the combination of activities and uses creates "cumulative effects" that, in combination, can be more harmful to ecological integrity than the individual activities or uses by themselves.



Historical Precedents and Non-conforming Uses: A Clarification



Removing major developments in national parks, such as ski resorts, may be more environmentally harmful than allowing such developments to remain. Blackbird Design

Some current activities, facilities and related infrastructure will be determined to be inappropriate under our proposed assessment framework. The question remains as to how to manage these "non-conforming uses." For example, what would happen if, through a formal review, downhill skiing was determined to be not allowable and/or appropriate? Would the existing ski facilities in national parks be required to be shut down?

The Panel is of the opinion that such action would be unjustifiable, on historical and economic grounds. Existing ski resorts are found in national parks because they were acceptable at the time they were introduced. If they were removed, ski resorts might be re-built in areas outside and perhaps adjacent to national parks, thus creating more stress on the ecological integrity of greater park ecosystems or of other protected areas.

In our opinion, facilities and activities that do not meet the criteria for appropriateness should be discontinued wherever feasible. However, largescale facilities that are deemed not allowable and/or appropriate should be managed as "non-conforming uses." In other words, such facilities would be allowed to continue to exist and treated fairly. Parks Canada should allow no expansion (other than existing contractual obligations), curtail any aspects of facility operation that clearly and directly affect ecological integrity, and work together with the facility owner/operator to mitigate and minimize stress on ecological integrity.

Parks Canada should review every existing facility and use in every national park to determine allowability and appropriateness, and not allow the continued existence of non-conforming uses or facilities to be a precedent for permitting similar facilities to be built in other national parks.

If non-conforming facilities become economically non-viable, no longer popular, or are determined to have undue impacts on ecological integrity, Parks Canada should take steps to permanently remove them from the parks.



Aboriginal Uses

The issue of harvesting and other activities carried out by Aboriginal peoples in national parks, and the issue of uses allowed under park establishment agreements, are separate from determining what constitutes appropriate use for most park visitors. This is because the right to such use arises from constitutional decisions or legal precedents. These issues present a significant dilemma, that of allowing a specific group of people to partake in activities prohibited to the public at large.

Traditional use of water, land, plants and animals is based on a cultural commitment to conservation, a shared responsibility that is understood and honoured among Aboriginal peoples. Continuing to help Canadians understand and trust this Aboriginal sense of connection to and responsibility for the land could eventually lead to broad acceptance of Aboriginal harvesting and other uses within national parks. Both Parks Canada and Aboriginal peoples can make significant contributions to developing this trust, in part through interpretation and outreach programs.

Parks Canada must develop nationallevel guidance on the question of allowable uses by Aboriginal peoples, with or without park establishment agreements, including benchmark areas within national parks where no harvest of any kind occurs.

Ecotourism: Allowable, But How Appropriate?

"Ecotourism" is a common buzz-word in the fields of tourism and recreation. The Panel heard on many occasions that ecotourism is the desirable form of tourism and that ecotourism is necessary to save protected areas from the evil impacts of mass tourism.

The term "ecotourism" has been used for over two decades. It is one of a long list of terms that have been put into juxtaposition with mass tourism. Other terms include green tourism, soft tourism, alternative tourism, community-based tourism, New tourism, nature tourism, adventure tourism, and so on. The common argument is that mass tourism is bad and these forms of tourism are good — or at least better.

We have heard ecotourism being defined as any form of recreation that is based on presumed low-impact use of the environment. This view potentially encompasses a range of park users who appear to be engaged in benign activities but whose impact on ecological integrity may be large, such as:

- park visitors who arrive in their motor homes to go bird-watching;
- visitors who stay in a luxury park lodge and go for a hike or take a rafting trip;
- visitors who take chartered planes into remote northern parks, bringing in all their own equipment, to hike or camp.



Cycling in Yoho National Park could be called an "ecotourism" activity. W. Lynch/Parks Canada

In theory, bird-watching, hiking, rafting, and taking pictures are benign and are therefore appropriate. However, in practice, timing and levels of use are often ignored. In addition, broader impacts are not taken into account, such as impacts caused by travel to and from the park, the purchase of high-tech equipment and services, the on-site servicing requirements (water, sewer, waste management, energy), and the potential lack of positive local economic impact.

An ecotourist might be more environmentally responsible or aware than an ordinary tourist, but to be truly less harmful than mass tourism, the Panel argues that true ecotourism would:

- be defined clearly as a particular bundle of allowable and appropriate recreation activities and related facilities and services;
- cause minimal negative effects in terms of environmental, social, and economic impacts;

- include types and levels of activities that are appropriate to the local setting and to regional/national interests;
- use facilities designed and constructed to be locally appropriate, with an emphasis on local materials and skills;
- cause or use developments appropriate to the needs of the local community;
- provide local people with maximum opportunities for employment at all levels, from ownership to management to operation;
- incorporate an educational component.

These conditions are extremely demanding. Despite the fact that many activities in national parks are called ecotourism, it is the Panel's view that few current or proposed activities in Canada's national parks meet these stringent criteria. In place of the fuzzy term ecotourism that is currently used widely but defined rarely, national parks should focus on the concept of recreational activities that meet a set of characteristics and standards of allowability and appropriateness that are primarily based on ecological integrity.



RECOMMENDATIONS

11-1. We recommend that Parks Canada develop a formal assessment program for assessing activities in national parks with ecological integrity as the determining factor.

This assessment should:

- assess each activity nationally for allowability, with the assessment to be approved by the Director General of Ecological Integrity;
- assess each allowable activity at each national park for appropriateness, with the assessment to be approved by the Field Unit Superintendent with guidance from the Director General of Ecological Integrity;
- not allow or consider any new activities as allowable or appropriate without undergoing an assessment at the national level:
- using the Banff-Bow Valley Round Table process as an example, develop a set of conditions and standards to determine whether a particular activity and a particular level of use are appropriate in specific situations in terms of ecological integrity;
- use the precautionary principle as the primary guide in determining the appropriateness of types of activities and levels of use in national parks;
- use the following criteria as measures of the appropriateness of each allowable activity:
 - appropriate in terms of "basic and essential" services:
 - appropriate in terms of local environmental, social, and economic conditions;

- appropriate in terms of numbers of visitors and timing;
- appropriate in terms of demand for long-term use.

The framework proposed by Nilsen (1994) is a useful starting point for developing these policies and programs.

11-2. We recommend that Parks Canada phase out inappropriate recreational uses of national parks, over time and as opportunities arise, including those that are deemed "non-conforming uses." (See also recommendations in Chapter 12.)

Note: this recommendation is related to recreational activities and does not include traditional activities that are part of a park establishment agreement.

11-3. We recommend that Parks Canada adopt demand management as an explicit policy, provide increased support for social and natural science research related to demand management, and address demand management in each park's Park Management Plan and interpretation programs, so that visitors and other audiences can understand why they should support demand management.

11-4. We recommend that Parks Canada develop a national directive to define "basic and essential services." Suggested wording appears in Appendix C.