



Chapter 15

tourism and recreation values

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Introduction

Rationale

This chapter is a statement about the tourism and recreational values of Kosciuszko National Park. It describes 10 key attributes that underpin the tourism and recreation values and provides an assessment of those values. It is part of the Independent Scientific Committee's contribution to the Kosciuszko National Park Plan of Management process.

Tourism and recreation values were not specifically addressed in the 1982 Kosciuszko National Park Plan of Management. They are an important consideration for the Plan of Management review, reflecting global trends for a more sustainable, responsible and well managed tourism industry (WTO 1999, De Lacy et al 2002). In addition, the role of protected areas as important tourism and recreation destinations has become increasingly understood in the 20 years since the previous plan of management (Worboys 1997, Weaver 2001, Worboys et al 2001, Eagles et al 2002). Agencies need to administer tourism and recreation professionally and to actively manage for these values in addition to others. The tourism industry, governments, communities and destination managers have recognised the need for environmentally, economically and socially sustainable tourism and recreation (WTTC et al 1996, Weaver 2001, Worboys et al 2001, De Lacy et al 2002, Eagles et al 2002, Newsome et al 2002). Legislation governing the management of national parks in New South Wales (NSW) has recently been amended to reflect such changes (NPWS 2002).

“Protected landscapes can provide the matrix for a wide range of tourist experiences involving the utilisation of attraction and facilities in a particular landscape.”

There is a growing recognition of the need for professionalism in the management of tourism and recreation in protected areas (Weaver 2001, Worboys et al 2001, Eagles et al 2002, Newsome 2002). This has included the development of a range of methods to evaluate tourist motivations, expectations and satisfaction, market segments and carrying capacity. Various planning frameworks, such as limits of acceptable change, visitor activity management process, visitor experience resource protection, recreation opportunity spectrum, visitor impact management and tourism optimisation management model, provide a framework to assist with the management of sustainable tourism in protected areas (Ryan 1991; Weaver 2001; Worboys et al 2001; Eagles et al 2002; Newsome et al 2002; Weaver and Opperman 2000). The benefits to individuals which arise from tourism and recreation experiences in parks have also been examined in studies such the Canadian Parks/Recreation Association Benefits Catalogue (1997, Box 15.1). These studies reinforce the importance of the tourism and recreation values of the park and the need to protect them. We have drawn on this body of knowledge and experience in developing this chapter.

Box 15.1 Benefits of tourism and recreation

(Source: The Benefits Catalogue: Canadian Parks/Recreation Association, 1997)

The Canadian Parks/Recreation Association generated a comprehensive account of why recreation, sports, fitness, arts, culture, and parks are essential to personal, social, economic, and environmental well-being. They recognise eight key themes:

1. Recreation and active living are essential to personal health — a key determinant to health status.
2. Recreation is a key to balanced human development — helping Canadians reach for their potential.
3. Recreation and parks are essential to quality of life.
4. Recreation reduces self-destructive and anti-social behaviour.
5. Recreation and parks build strong families and healthy communities.
6. Recreation reduces health care, social service and police/justice costs.
7. Recreation and parks are significant economic generators in your community.
8. Parks, open spaces and natural areas are essential to ecological survival.

Structure of this chapter

Initially, we examine the basis for management by the NSW National Parks and Wildlife Service (NPWS). Then the background and context to tourism and recreation in Kosciuszko National Park is addressed. This includes a review of the importance of tourism and recreation in general and in protected areas in NSW, outlines the history of tourism in the park and describes the current tourism and recreation use, visitor awareness and visitor satisfaction.

The chapter then deals with the tourism and recreation values of Kosciuszko National Park. It defines what tourism and recreation values for the park are, and then documents a number of attributes that underpin them. Tourism and recreation values are defined by Clarke and Stankey (1979), who recognised recreation opportunity settings as a critical element in describing tourism and recreation values. They described recreation opportunity settings as the combination of physical (such as scenery), biological (such as native plants and animals), social (such as family, friends and/or other visitors), and managerial (such as the facilities and regulations imposed at a setting) conditions that give value to a place. They described the tourism and recreation value of an opportunity setting as

Table 15.1 Tourism and recreation opportunity setting management factors (after Clarke and Stankey 1979) and attributes of Kosciuszko National Park

Management factor (Clarke and Stankey 1979)	Notes (after Clarke and Stankey 1979)	Attributes underpinning the tourism and recreation value of Kosciuszko National Park
Access	Management defines the ease of access eg roads, tracks, cross-country travel; the means of conveyance such as cars, four-wheel-drives, horses or on foot; the sophistication of the access type, such as high-standard fire trails; and the maintenance regime.	Access to Kosciuszko National Park. Access within Kosciuszko National Park. Affordability.
Other non-recreational resource uses	Research identifies what recreationists prefer for access. This factor considers the extent to which non-recreational uses of a park are compatible with various opportunities for outdoor recreation. Operations of electricity authorities, Snow Hydro Limited operations, police, NPWS and others fit into this consideration for Kosciuszko National Park.	
On-site management	This includes site modifications such as facilities, exotic species of vegetation, vegetation management, landscaping, traffic barriers etc (the extent of the modification is important); the 'apparentness' of the modification; the complexity of the modification; and the nature of the facilities (if any).	For natural attractions, naturalness is considered a major tourism and recreation attraction for Kosciuszko National Park and is directly influenced by on-site management. For cultural attractions, cultural heritage infrastructure and sites are an important tourism and recreation attraction for Kosciuszko National Park. Services and facilities are the critical facilities and services to assist visitors.
Social interaction	The appropriate amount of social interaction is an important characteristic of different recreational activities. In more remote settings, low levels of interaction are appropriate and expected. In more modern settings, interaction can rise to very high levels. Natural terrain and management activities can greatly influence the level of contact of people. Social carrying capacity is an important management consideration.	Educational activities within the park may be formal and informal. Social interaction is an important part of the learning experience, as is the opportunity setting.
Acceptability of visitor impacts	The type of use for a setting is important. Human use of resources inevitably results in impacts. The level of impact that is consistent with the type of opportunity setting (and the status of the lands as a protected area) is important. Generally the tolerance of recreational users for impacts (ecological, sustainable, managerial) is greater among 'modern' recreation opportunity settings than among 'primitive' recreation opportunity settings.	The attribute 'Impacts of use' considers visitor use impacts, sustainable use and environmental performance management and monitoring.
Acceptable level of regimentation	The nature, extent, and level of control over recreational use are important factors characterising different opportunity settings. A continuum of controls can be described, from subtle to regulatory. 'Modern' settings are generally more highly organised and regulated than 'primitive' types.	Diversity of recreation opportunities is the range of tourism and recreation opportunities in the context of the park. Regional recreation opportunity settings are also important.

'the function of the perceived ability of that opportunity (setting) to provide certain activities and experiences.'

Adopting this definition, the chapter then identifies a number of attributes that help to make up a recreation opportunity setting and underpin the tourism and recreation value of a setting. The attributes have been identified for Kosciuszko National Park, and fit the six management factors of Clarke and Stankey (1979; see also Table 15.1 in this chapter). Management of the attributes is a contribution to the management of the tourism and recreation

value of the park.

The attributes selected have been brought forward following evaluation of tourist motivational behaviour theory as described by Beeton (1989) and Ryan (1991), as well as geographical, social, managerial and intrinsic factors associated with the recreation opportunity setting as outlined by Clark and Stankey (1979), Beeton (1989), Eagles et al (2002) and Weaver and Opperman (2000). The attributes are discussed in detail later in this chapter. Briefly, they are:

- the park as a natural attraction;
- the park as a cultural attraction;
- educational activities;
- diversity of tourism and recreation opportunities;
- access to the destination;
- access within the destination;
- services and facilities;
- impacts of use;
- affordability; and
- regional recreation opportunities.

Each attribute is assessed relative to the dependence of the attribute on the park, the condition of the attribute, the trend in its condition, pressures on the attribute, knowledge gaps and opportunities. It is a means of assessing the overall condition of tourism and recreation values for the park, and the trend in condition.

Based on this assessment, a number of findings have been prepared relative to the attributes. These are followed by management advice, including potential environmental management performance monitoring indicators. Lastly, it should be noted that this chapter does not consider the economic values of tourism and recreation, which are addressed in Chapter 17.

Terminology

The term 'tourism' is used in this report to refer to travel away from home for recreation or pleasure and associated activities (Worboys et al 2001). 'Visitor use' is any use of protected areas by visitors and tourists. The term 'recreation' is used to refer to any activity voluntarily undertaken principally for pleasure and satisfaction during leisure time. 'Recreation opportunity settings' are areas or sites where a combination of the six management factors provides a distinctive destination condition suitable for certain recreation opportunities and the possibility of certain experiences (Clarke and Stankey 1979). For simplicity, tourism and recreation have been treated together when discussing opportunity settings, but the authors recognise that there are differences at a level of detail.

Basis for management

The *National Parks and Wildlife Act 2001* (NSW) (NPW Act) and the Kosciuszko National Park Plan of Management (as amended, 1988) provide guidance for the management of tourism and recreation within the park.

Under section 2A(1)(c) of the amended Act (*National Parks and Wildlife Amendment Act 2001*) the NPWS has a responsibility to foster public appreciation and enjoyment of natural and cultural heritage and their conservation. Under section 30E(2)(e) of the Act, this must be done within a sustainable visitor use framework. The plan of management principles requires the economic and social context of the park to be considered within the plan (section 72AA(1)(u)), along with the provision of opportunities for public understanding, enjoyment and appreciation

of natural and cultural values, including opportunities for sustainable visitor use (section 72AA(1)(l)).

The management of tourism and recreation opportunities in Kosciuszko National Park are described in the 1982 plan of management. Recreation and tourism are specifically addressed in Section 6, 'Management of Outdoor Recreation Opportunities', and Section 7, 'Management of Skiing Facilities' (NPWS 1982). For some aspects of tourism and recreation management, the plan is inconsistent with the 2001 amendments to the NPW Act. This anomaly will be corrected in the 2003 plan.

Section 6 of the 1982 plan outlines the policies that guided its strategy for managing tourism and recreation practices (NPWS 2000). These include the following principles:

- In exercising 'the encouragement and regulation of appropriate use' of national parks, the NPWS has a primary responsibility to provide outdoor recreation opportunities requiring no facilities and services or only basic facilities and services;
- National parks provide only some of the outdoor recreation opportunities in any region, not all of them. When providing facilities and services in national parks, an effort will be made to provide opportunities different from, and generally less sophisticated than, those provided elsewhere in a region;
- Facilities and services provided will be consistent with the protection of features and processes of high aesthetic, scientific, conservation, educational, recreational and/or cultural value, and satisfy a demonstrated need;
- Only those facilities and services that assist in 'the appropriate use, understanding and enjoyment of each national park' will be provided. Facilities that create artificial features, attracting visitors in their own right, are not appropriate in a national park;
- The widest possible range of opportunities for the appropriate use of national parks by as many people as possible will be maintained, consistent with the protection of the natural and cultural features of such areas;
- National parks are public lands and decisions to enhance the opportunities for appropriate uses by any one group should not consistently be at the expense of opportunities for appropriate use by any other group. Nevertheless, the NPWS acknowledges that in many cases it has a responsibility to respond to expectations for recreation opportunities held by only a small number of people, and that many uses are more appropriately conducted outside national parks;
- The NPWS recognises that there is a wide range of socioeconomic capacities and physical abilities within the community. When allocating opportunities for appropriate use, the NPWS has a responsibility to minimise or avoid discrimination for or against sections of the community on the basis of socioeconomic status or physical handicap, within its constraints of finance and human resources; and
- In many cases, the small-scale facilities and services provided by the government, through the NPWS, for activities undertaken by a smaller number of people or physically handicapped groups will not be commercially viable. However, in other cases, the scale and nature of the facilities provided in national parks will provide economic opportunities for private enterprise. In such circumstances the development and operation of the proposed facility and/or provision of the proposed service may be offered under lease or licence to private enterprise.

Background and context

Tourism and recreation

Tourism is one of the most rapidly growing industries in the world, accounting for 12% of global gross national

product, or around US\$4.8 trillion (Newsome et al 2002). In Australia, the tourism sector directly contributes 4.7% of gross domestic product (A\$31.8 billion), with 551,000 people directly employed in the industry (6% of the labour force) and another 340,600 indirectly employed (ITR 2002). Tourism is predicted to increase, with a growth rate internationally of around 4% per annum. In Australia, international visitor arrivals have been predicted to grow by 7.3% annually over the next 10 years. Recent terrorist events may change patterns of tourism, resulting in fewer international visitor arrivals to Australia, but more domestic tourism (ITR 2002).

Tourism to natural areas, including national parks, is a fast growing segment of the tourism industry, accounting for 20% of all international travel expenditure (Newsome et al 2002). For overseas visitors to Australia, the natural landscape and heritage is seen as a major drawcard, although fewer people visit national parks as than visit capital cities or other key destinations such as the Gold Coast (see Chapter 17). Nature-based tourism is popular with domestic tourists, with over 22 million people visiting protected areas in NSW in 1994 (Worboys et al 2001).

Protected area tourism and recreation

Protected area tourism is a distinctive segment of the industry (Worboys et al 2001, Eagles 2002, Newsome et al 2002). It incorporates both traditional natural area tourism (tourism in a natural setting) and cultural tourism, where the cultural landscape or built environment occurs within a protected area. Natural area tourism incorporates adventure tourism, nature-based tourism, wildlife tourism and ecotourism (Newsome et al 2002).

Nature-based tourism occurs where viewing nature is the primary objective. It occurs in natural settings, with an emphasis on understanding and conserving the natural environment. Examples from Kosciuszko National Park include sightseeing, camping and bushwalking. Adventure tourism also focuses on activities in natural areas, however, the activities are the focus rather than the natural area. Examples from Kosciuszko National Park include downhill skiing, snowboarding and rafting. In wildlife tourism, the fauna and flora are a primary attraction. Wildlife tourism is becoming increasingly popular, with estimates that 75 million people in the United States watch wildlife each year (Newsome et al 2002). Kosciuszko National Park has distinct wildlife tourism opportunities, including birdwatching and interacting with kangaroos at many places in the park. Ecotourism should foster sustainable use through resource conservation, cultural revival and economic development and diversification (Worboys et al 2001, Newsome et al 2002). For a specific tourism activity to constitute ecotourism, it must be nature based, ecologically sustainable and environmentally educative, it must benefit the local community and it must generate tourism satisfaction (Newsome et al 2002). In Kosciuszko National Park, examples of ecotourism include the education centre at Sawpit Creek, cave tours at Yarrangobilly and some commercial tours that have a strong environmental and educative component.

Cultural tourism in protected areas such as Kosciuszko National Park includes activities such as (Worboys et al 2001):

- education on Aboriginal culture;
- visitation to standing structures (such as houses and outbuildings, sawmills, power stations, dams, etc)
- visits to surface features such as (mining sites, and grazing sites etc) and to cultural landscapes such as Kiandra and, 'Man from Snowy River Country', and
- participation in cultural activities such as (festivals etc, Worboys et al 2001).

Tourism and recreation in NSW national parks

Tourism to protected areas in NSW, including national parks, is managed by the NPWS. The total area managed is over 5.39 million hectares (as of June 2001). This consists of 161 national parks, 359 nature reserves, 13 historic sites, 11 Aboriginal areas, 22 state recreation areas, 10 regional parks and 4 karst conservation areas (NPWS 2001a).

Tourism and recreational use of these parks is very popular. Visits to NSW national parks rose by around 2.5% per annum in the years up to 1994, with over 22 million visits per annum to parks in 1994 (Worboys 1997). Under the *National Parks and Wildlife Amendment Act 2001*, visitor use must be consistent with the primary purpose of the protected areas, which is conservation of natural and cultural heritage.

To assist in the management of tourism in protected areas, NPWS have developed some planning papers. The most recent statements include:

- the Draft Nature Tourism and Recreation Strategy (Worboys 1997)
- the NSW NPWS Visitor Use Charter (NPWS 2001b)
- the Recreation Planning Framework for NSW National Parks (NPWS 2002).

History of tourism and recreation in Kosciuszko National Park

Early tourism and recreation

Tourism and recreation have a long history in Kosciuszko National Park. The first ascent of the summit is thought to have been made on 12 March 1840 by Paul Edmund de Strezlecki (Gare 1992). He was more intent on exploration and discovery than tourism, as were a succession of scientists including the Reverend WB Clarke in 1851, Baron Mueller in 1855, Richard Helms in 1889 and Edgeworth David in 1907 (Gare 1992).

Documentation of early tourism is scant, however, the limestone caves at Yarrangobilly were first discovered by Mr Bowman of Talbingo in 1834 (KSPT 1960). The first documented use of the area for ski tourism was in 1861 at Kiandra, when local miners went 'ski-running' using modified palings known as butterpats (Hueneke 1987, Good 1992). The first ski club, the Kiandra Snow Shoe Club, was formed in 1878 and held annual ski competitions (Hueneke 1987,; Gare 1992). Other early tourism use included the establishment of cave reserves between 1872 and 1890 for 'Public Recreation and the Protection of Caves' for Yarrangobilly, and the use of sites such as Rules Point Guest House and Yarrangobilly Cave House for fishing and other recreational activities. The first cottages developed for tourism at the caves were constructed in 1888 (NPWS 1991). Exploration of the area overlapped with recreational activities, with the routes established by explorers, graziers and miners soon used by others for recreation. This included ascents of Mount Kosciuszko on horse, on bike and on skis during the 1880s to 1900s (Hueneke 1987).

Further development

The NSW government recognised the recreational value of the snow country when, in 1906, it established a reserve around Mount Kosciuszko (Snowy Mountains National Chase) 'for public recreation and preservation of game' (Good 1992). In addition, under the supervision of an engineer named Rennix, the government constructed a road to the summit of Mount Kosciuszko to provide vehicle access to continental Australia's highest mountain (KSPT 1960). This was completed in 1908. The government also built hotels, including Yarrangobilly Caves House (1901), the Hotel Kosciuszko (1908) and the Creel at Waste Point (1908), to provide accommodation and activities for tourists (KSPT 1960, Gare 1992, Good 1992). The Creel provided accommodation for fisherman and other tourists. The Caves House complex was completed in 1916 with the building of the two-storey wing, and in 1936 it became a hotel, with the transfer of the liquor licence from Rules Point. It was managed by the NSW Government Tourist Bureau from the late 1800s to 1963, when it was transferred to the Kosciusko State Park Trust. It operated until 1966 (NPWS 1991).

By the 1920s parties of bushwalkers, horse riders and skiers regularly used the area during summer and winter, with marketing of summer and winter recreational activities to wealthy residents of Sydney and Melbourne (Hueneke 1987).

As a result of increasing interest in mountain tourism, additional huts and hotels were built by the NSW state government and private clubs specifically for tourism in the high country. These included the chalet at Charlotte Pass, built in 1931, burnt down in 1938 and rebuilt in 1939 (Good 1992). A series of small lodges, mainly for back country skiing, were built by the government tourist bureau and ski associations with the approval of the newly formed Kosciusko State Park Trust in more remote locations on the Main Range. These included the construction of Lake Albina Lodge in 1951, Kunama Lodge in 1952, and Illawong Lodge in 1956, an extension of Pounds Creek hut built in 1926 (Hueneke 1982, 1987, Good 1992). Facilities provided for the Snowy Mountains Hydro Electric Scheme were also used for tourism and recreation, including workers' huts at Guthega, Schlink Hilton at Schlink Pass and huts within the Jagungal Wilderness Area (Hueneke 1982, 1987).

In 1944, the *Kosciusko State Park Act* was passed by the NSW government, protecting a total of 2000 square kilometres. The provision of formal downhill skiing facilities commenced in 1952, when the Act was amended to provide for ski lodge leases (Good 1992). Commercial developments based on alpine skiing commenced in Perisher Valley in 1959, at Thredbo in 1958, and at Guthega, Kiandra and then Mount Selwyn in the 1970s (Hueneke 1987,; Good 1992). There was rapid development of the ski resorts in the 1960s, 1970s and 1980s. This included completion of the chairlift from Thredbo Village to Top Station in 1962, the approval of the Thredbo Village Master Plan in 1964, Antons and Sponers T-bars in the late 1970s, the expansion of ski lifts in Perisher Valley in the early 1980s, the Perisher Valley Centre in the mid-1980s, Mount Blue Cow in 1986, the ski tube in 1987 and the sports academy in Thredbo in the late 1990s.

In 1960, there were more than 100,000 visitors to the park, for the first time (Good 1992). In the same year, there were some 16,000 visitors to the Yarrangobilly show caves (KSPT 1960). In 1967 the NPWS was established, recognising the importance of conservation of the natural and cultural values of national parks as well as nature tourism and recreation opportunities (Good 1992). The NPWS took over from the Kosciusko State Park Trust. The NPWS began to manage tourism and recreation in the park, including addressing issues associated with increased use. For example, due to traffic congestion, traffic jams and associated problems in 1973, the summit road from Charlotte Pass to Rawson Pass was closed to private vehicles in 1974. However, a shuttle bus continued to operate during peak periods from 1976 to 1982. The road was closed to all vehicles in 1982, and access from Thredbo Village to Top Station promoted. As a result, summer tourism focused on access to the summit from the Thredbo chairlift and the raised metal walkway from the top of the chairlift to Rawson Pass. The NPWS built this during summers between 1982 and 1987 (Worboys and Pickering 2002).

Ski resort development in the 1980s and 1990s involved diversification of use in winter and summer, and introduction of snow-making facilities (Grenier 1992; Buckley et al 2000; Pickering and Hill, in press). In the 1990s and more recently, development has focused on providing improved services and facilities for visitors to the resorts through accommodation and commercial space. There are now 12,000 beds in the ski resorts.

Current tourism and recreational use of Kosciuszko National Park

Kosciuszko National Park is one of the most visited national parks in NSW. It is within easy access of approximately 50% of the Australian population. On average, 861,000 domestic visitors travel to the Snowy Mountains region each year, with Kosciuszko National Park being the primary destination (Figure 15.1). Forty-five per cent of visitors to the region come during the July–September quarter, covering the main ski season. This is also the most popular time for people to stay in the region (Figure 15.2), with 56% of bed nights occurring during this quarter.

Figure 15.1 Number of domestic visitors (overnight visitors plus day trip visitors, in thousands) per quarter to the Snowy Mountains region, 1998–2001 (data from the Bureau of Tourism Research, National Visitor Survey 2002).

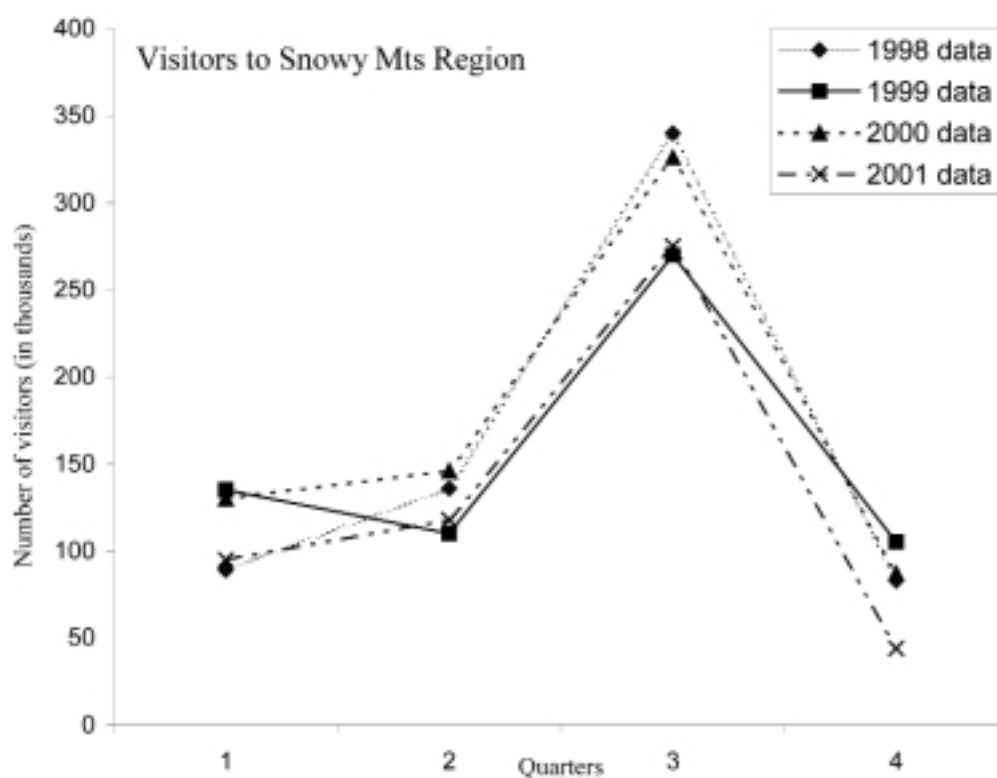
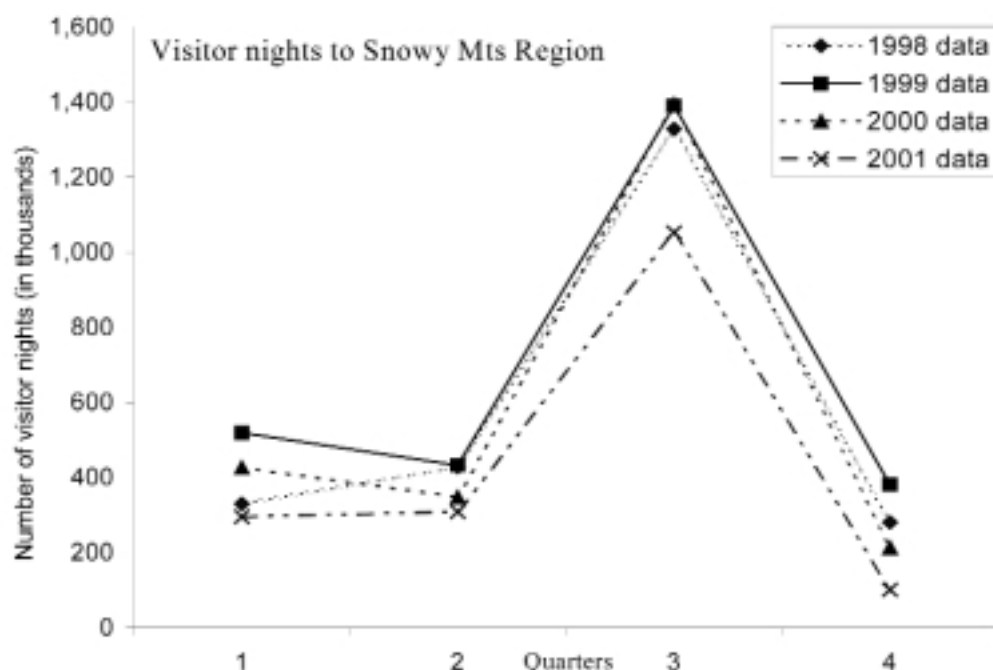


Figure 15.2 Number of domestic visitor nights in the Snowy Mountains region per quarter for 1998–2001 (data from the Bureau of Tourism Research, National Visitor Survey 2002).



Most winter tourists visit ski resorts. The majority participate in downhill skiing (23.6% of all people visiting the park) and snowboarding (8.4%), with lower numbers engaging in cross-country skiing (5.0%) and other activities (Good 1992,; Buckley et al 2000; see also Chapter 17). Some resort visitors do not engage in outdoor winter recreation activities but participate in the social life of the resorts. About 5% of visitors engage in activities away from resorts, mainly for snowboarding or ski-touring, either on day trips (often from resorts) or camping overnight in snow caves and/or tents. Relatively few engage in snow and ice climbing or snow shoeing (Virtanen 1993; see also Chapter 17).

Summer tourism to the Australian Alps has increased significantly over the past 25 years, with visitation to just the small alpine area of the Main Range trebling during that period. A survey in 1978 estimated that there were 20 ,000 summer visitor to the alpine area (Worboys 1978). By the early 1980s the number had increased to 36 ,000 people per summer (quoted in Virtanen 1993). The most recent estimate, for the snow-free period of 1999–2000, is 64 ,000 people (Johnston SW and Pickering 2001). However, in the last decade there has been no increase in the number of people using the Thredbo chairlift during the snow-free period (Denise Allardice, Kosciuszko-Thredbo Pty Ltd, pers comm, September 2002). During the main snow-free period, about 479 ,000 people visit the park each year (average of 1998–2001 data for first, second and fourth quarters for overnight and day visitors combined, BTR 2002). The most popular times are over the Christmas holidays (from mid-December to the beginning of February) and at Easter (Johnston SW and Pickering 2001,; TNSW 2002).

The three most popular activities in the park are bushwalking (57.2% of annual visitors), car touring and sightseeing (50.2%) and nature appreciation (46.1%,; see Chapter 17). Other popular non-snow-based activities are camping (15.6%), fishing (11.6%), four-wheel driving (8.8%), mountain bike riding (6.1%) and horse riding (5.3%,; see Chapter 17). The Yarrangobilly Caves in the northern part of the park are also very popular, with around 30 000–35 5,000 show cave visits a year; about twice that number of people visit the thermal pools, picnic or fish in the area (Andy Spate, Karst Consultant, pers comm, September 2002).

These results are similar to those obtained in a survey of 300 park visitors in NSW, the Australian Capital Territory (ACT) and Victoria (Worthington and Di Marzio Pty Ltd 1999). In this study bushwalking was the most popular activity among visitors to the Australian Alps national parks. Ninety-three per cent of visitors had gone bushwalking in a park, with 47% going to the region specifically to bushwalk (highest listed activity). Other popular activities and motivations were 'peace and quiet' (94%), picnicking/barbecues (88%), 'enjoying nature and natural environments' (87%), scenic driving (84%) and 'to see specific sites' (83%).

Most visitors to Kosciuszko National Park and the Snowy region are domestic tourists and less than 3% are international visitors (TNSW 2001, see also Chapter 17). Most domestic overnight visitors come from Sydney (49%), regional NSW (23%) or the ACT (11%), with low numbers from Victoria (7%) and Queensland (7%) (TNSW 2001). Nearly all visitors come for holidays or leisure (78%) rather than to visit friends or relatives or for business.

By far the largest market segment of domestic visitors are families with dependent children (46%). The other 54% of the market comprises young solos (4%), single adults (18%), young couples without children (19%) and older couples (17%) (TNSW 2001).

As mentioned above, few international visitors travel to the Snowy Mountains. In the year ending June 2000, there were 23,000 international visitors to the region out of 2.5 million international visitors to NSW (TNSW 2001). Most (73%) came from the United Kingdom (27%), Germany (19%), other countries in Europe (33%) and the United States (10%). Access to the park and lack of knowledge about the destination appear to be factors contributing to the low levels of international visitation (TNSW 2001, see also Chapter 17).

Visitor awareness and satisfaction with Kosciuszko National Park

Visitor awareness and satisfaction with Kosciuszko National Park is high. Worthington and Di Marzio Pty Ltd (1999) found that 98% of surveyed visitors to national parks were aware of Kosciuszko National Park. This recognition was higher than for any of the other 25 parks listed on their survey, including Kakadu, Uluru (Ayers Rock), the Blue Mountains or the other park in the Australian Alps (Worthington and Di Marzio Pty Ltd 1999). Kosciuszko National Park was also a very popular park, with 52% of the 300 respondents having visited. There were high levels of satisfaction with facilities in the Australian Alps national parks, including Kosciuszko National Park. Overall, the satisfaction levels with facilities and amenities was high (92%). There was high satisfaction (greater than 80%) with toilets (80% totally satisfied), short walking tracks (86%), picnic and barbecue areas (86%), car parking (89%), scenic driving (93%), visitor information centres (92%), information display boards (89%), roads within national parks (94%) and direction and information signs (81%). The main areas of dissatisfaction were the number of parks (with 33% wanting more), availability of water (9%), understaffing (7%) and poorly signposting of tracks (6%).

Tourism and recreation values of Kosciuszko National Park

The concept of tourism and recreation values

Kosciuszko National Park has long been an important destination for a large number of visitors. What are the values that underpin this visitation? The concept of values for essentially natural lands such as Kosciuszko National Park are briefly discussed here as part of establishing the concept of tourism and recreation values for the park.

In modern industrialised Australia, human and natural environments are starkly contrasted. Essentially, natural lands like Kosciuszko National Park may have spiritual values. For indigenous Australians, natural landscapes and natural sites are of immense cultural significance. Likewise, for non-indigenous Australians, there are strong

connections to the bush. Historical events and life experiences since 1788 have made many sites and landscapes particularly significant for individuals and families. Connections to nature may also be spiritual, and recent wilderness legislation has recognised this by reserving areas of natural lands for opportunities for solitude and spiritual activities (Worboys et al 2001).

Kosciuszko National Park also has intrinsic values. The 1993 Convention on Biological Diversity, ratified by Australia, affirmed the concept of the intrinsic value of biodiversity. The 1982 World Charter for Nature, adopted by over 100 countries, stated:

Every form of life is unique, warranting respect regardless of its worth to man, and, to accord other organisms such recognition, man must be guided by a moral code of action.

Many people hold ethical, religious and cultural beliefs, and feel strongly about their relationship with other life forms (Worboys et al 2001).

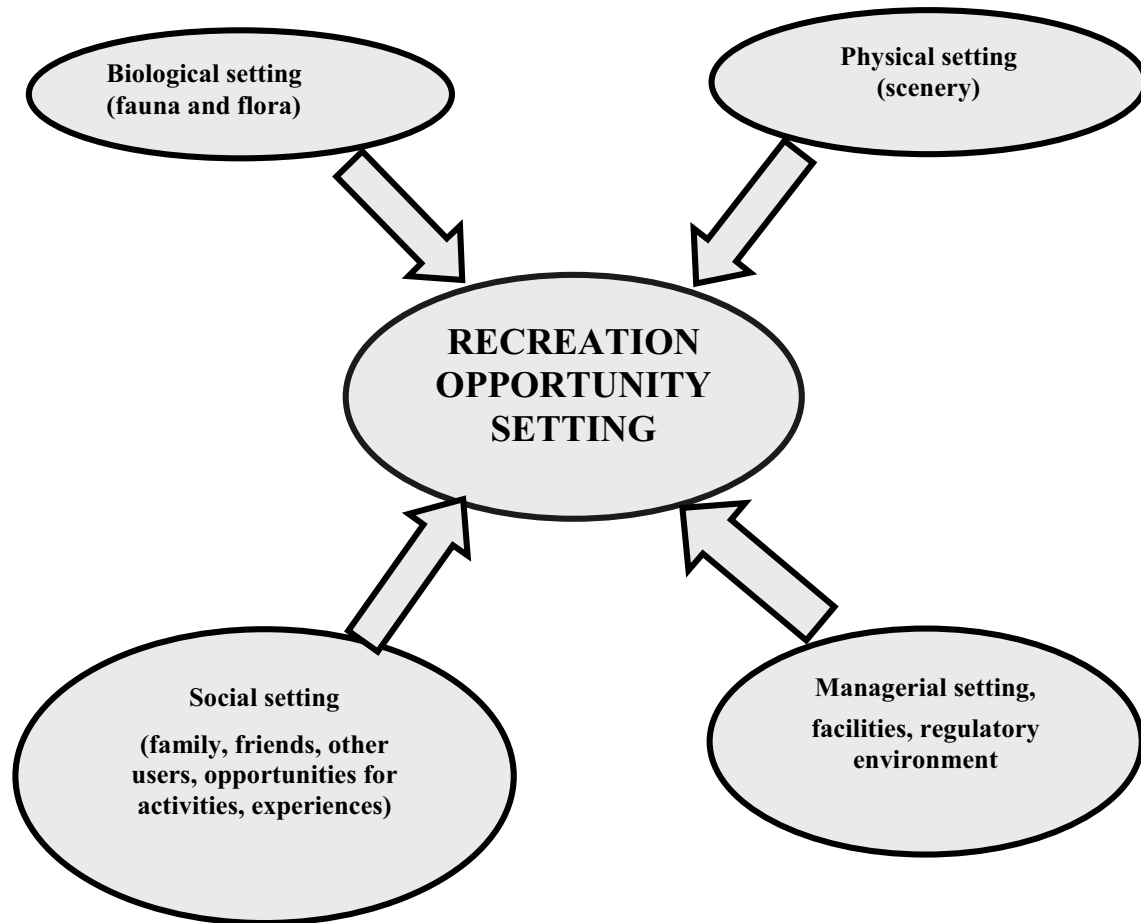
Human-centred values of Kosciuszko National Park may be recognised as 'use' and 'non-use'. Non-use values include *option values* (natural systems have not been exploited and may be valuable in the future), *existence values* (enjoyment people get from knowing an area has been conserved, whether or not they use it) and *bequest values* (derived from the belief that natural resources should be retained for future generations to appreciate and enjoy). Use values are where humans benefit directly from using natural living resources. Biodiversity is important, for example, for medicine and agriculture and for ecosystem services. Natural areas are also becoming increasingly important for tourism and recreation (Worboys et al 2001). Chapter 16 has further details of use and non-use values of the park. The tourism and recreation values of Kosciuszko National Park described in this report are focused on 'use values', that is, how the park is valued by users as a tourism and recreation opportunity.

Describing tourism and recreation values for the park

The tourism and recreation use values of Kosciuszko can be described in terms of opportunity settings found within the park. According to Clarke and Stankey (1979), recreation opportunity settings can be defined as the combination of physical (such as scenery), biological (such as native plants and animals), social (such as family, friends and/or other visitors) and managerial (such as the facilities and regulations imposed at a setting) conditions that give value to a place (Figure 15.3; see also Table 15.1). They are what we usually visualise when we think about a destination before a visit. Clark and Stankey (1979) further explain the concept:

Recreation opportunity settings imply a choice for recreationists; people must be aware of the opportunities, and the opportunities must be comprised of conditions desired by recreationists. The recreational value of an opportunity is a function of the perceived ability of that opportunity to provide certain activities and experiences. Our definition focuses on the social, physical and managerial attributes of settings, not on the psychological values that may be derived.

Figure 15.3 Elements contributing to a recreation opportunity setting



It should be noted that they described visitor experience as opportunities for experiences, rather than becoming embroiled in complexities surrounding the visitor experience (psychological state) of individuals. However, this relationship is important; the opportunities lead to experiences, so it is important to briefly introduce this area of theory.

Tourism and recreation opportunities are means by which a visitor acquires experiences and fulfils aspirations; it has been argued that these experiences fulfil psychological needs and motivations (Ryan 1991). Described in a general way for tourism, some of these needs and aspirations include the escape motivation, relaxation and play, strengthening family bonds, prestige, social interaction, sexual opportunity, educational opportunity, self-fulfilment, wish fulfilment and shopping (Ryan 1991). Beeton (1994) extends this discussion to protected areas. Some relevant extracts of his work are:

Motivation to travel, or to participate in recreation activities, results from the set of needs and attitudes which predispose individuals to act in specific goal oriented ways. Motivation is therefore an inner state which directs behaviour to achieve specific goals.

Natural areas such as national parks play an important role in both tourist and excursionist satisfaction by providing areas which can potentially offer experiences of challenge, escape, relaxation, self-discovery and spiritual awareness.

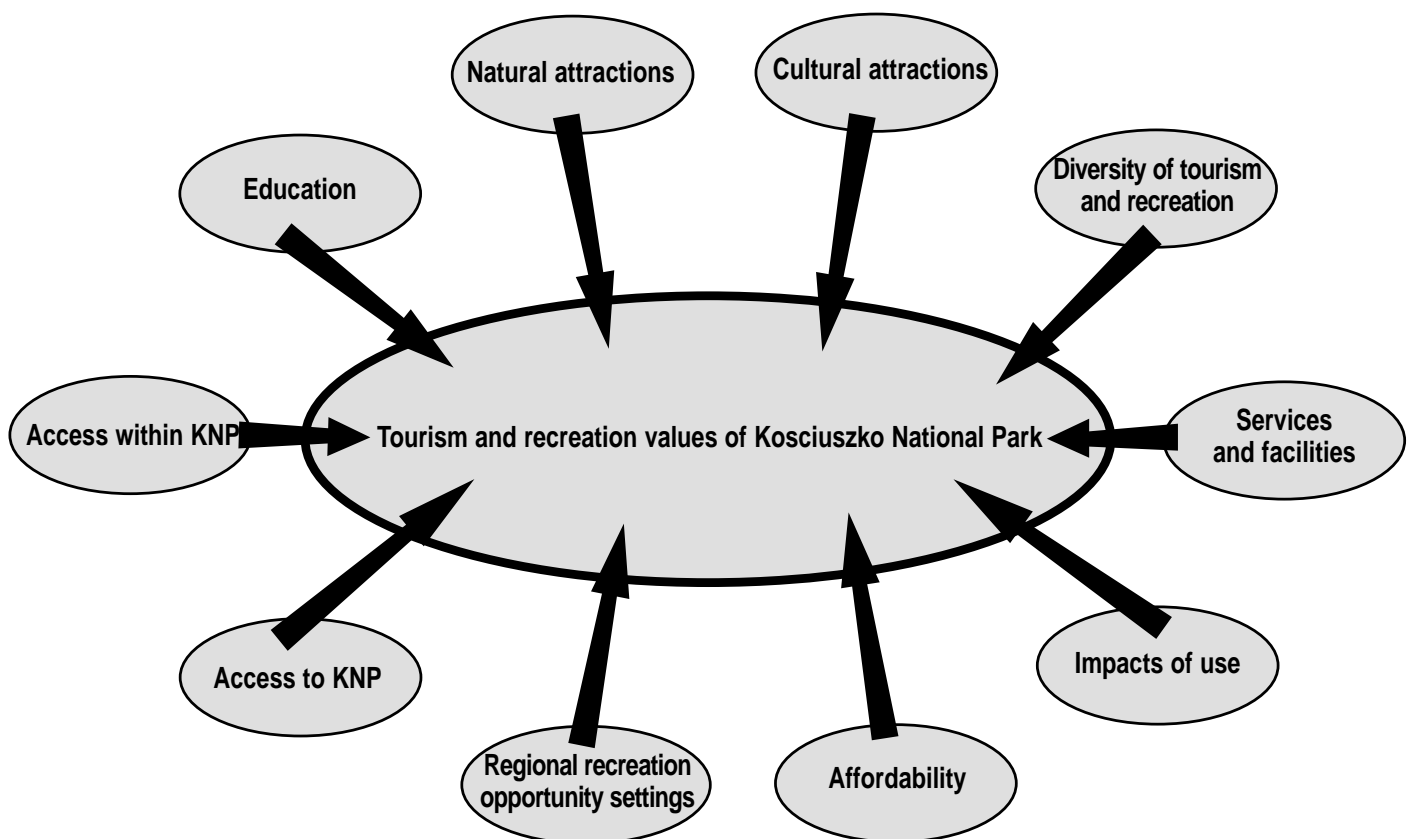
Protected landscapes can provide the matrix for a wide range of tourist experiences involving the utilisation of attraction and facilities in a particular landscape.

All the elements involved in a traveller's visit and the psychological benefits obtained from these activities constitute the recreation/tourist experience the destination, or on-site experience incorporates all aspects relevant to the destination and the recreationists state of mind. The area, including area design, setting, activities engaged in, proximity to and number of other recreationists and their behaviour, the facilities available, and inter-area travel nodes, will all contribute to the on-site experience.

The tourism and recreation value of Kosciuszko National Park is influenced by a number of geographical, social, managerial and intrinsic factors, including geographical proximity to markets, accessibility to markets, cultural links, availability of services, affordability, peace and stability, positive market image, pro-tourism policies and availability of attractions (Weaver and Opperman 2000). Attractions are seen as the most important component of the tourism sector; they may incorporate specific features such as ski villages, historic sites or non-specific features such as scenery or climate.

This report identifies 10 attributes of tourism and recreation opportunity settings that underpin the tourism and recreation value of Kosciuszko National Park. They are shown in Figure 15.4. Management of the attributes is a contribution to the management of the tourism and recreation value of the park.

Figure 15.4 Importance of some attributes that underpin the tourism and recreation values of Kosciuszko National Park



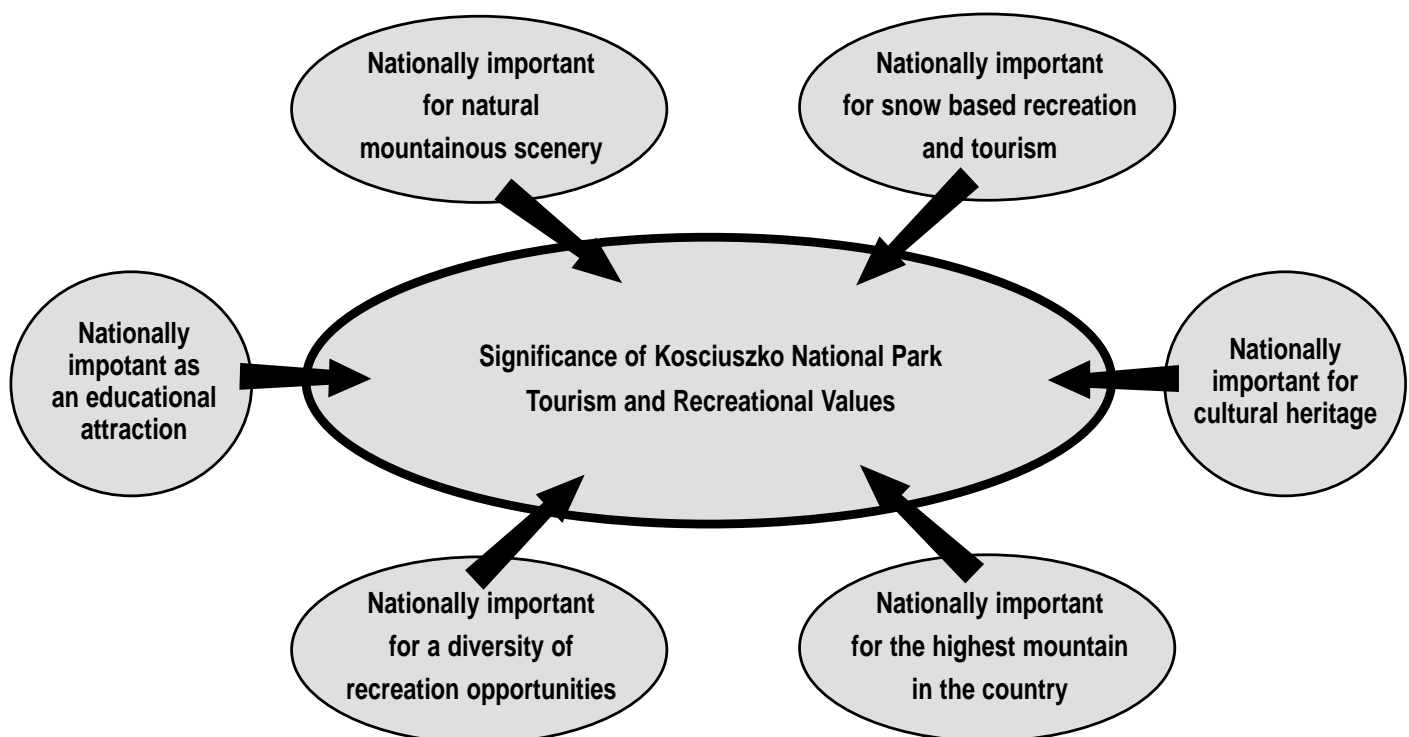
The attributes have been identified specifically for Kosciuszko National Park, and fit the six management factors of Clarke and Stankey (1979) (see Table 15.1). The attributes have been selected following evaluation of tourist motivational behaviour theory as described by Beeton (1989) and Ryan (1991), as well as geographical, social, managerial and intrinsic factors associated with the recreation opportunity setting, as outlined by Clark and Stankey (1979), Beeton (1989), Eagles et al (2002) and Weaver and Opperman (2000). The attributes determined have been tested with park staff and members of the Kosciuszko National Park Plan of Management Community Forum.

The next section assesses these attributes using the following criteria: the significance of the attribute, dependence of the attribute on the park, condition of the attribute, trend in condition, pressures on the attribute, knowledge gaps, and opportunities to improve the attribute. The order in which each attribute is presented does not reflect its relative importance.

Significance of Kosciuszko National Park tourism and recreation values

Kosciuszko National Park is considered to have nationally significant values for tourism and recreation. The importance of the ten attributes is discussed further in the following sections. This importance of some of these attributes to visitors is illustrated in Figure 15.5.

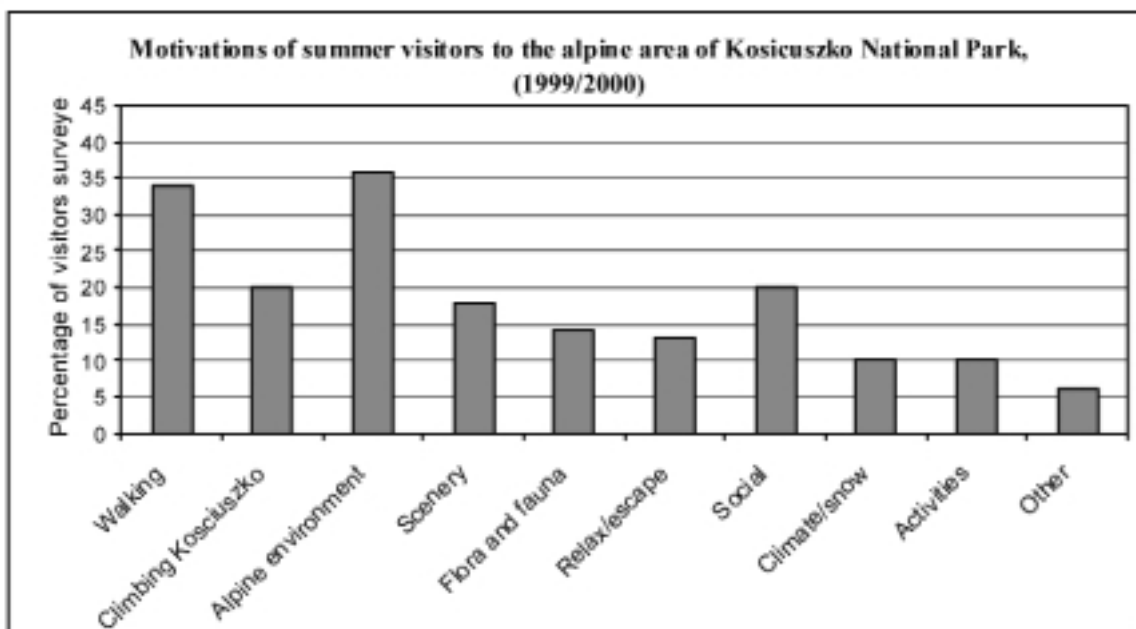
Figure 15.5 Importance of some attributes that underpin the tourism and recreation values of Kosciuszko National Park



Attribute 1: natural attraction

The extraordinary aesthetic scenic and natural qualities of Kosciuszko National Park are one of the primary factors contributing to the high tourism and recreation values of the park. The natural attraction of a protected area such as Kosciuszko National Park can provide opportunities that cater to visitors' needs for play, self-fulfilment, educational opportunity, relaxation and the escape motivation (Beeton 1989). In a survey of park visitors in NSW, Victoria and the ACT, and rural residents, 96% of park visitors and 85% of rural residents believed that conservation of natural heritage was the most important reason for the existence of these national parks (Worthington and Di Marzio Pty Ltd 1999). Natural attraction was also a major motivation for 68% summer visitors surveyed while visiting the alpine area of Kosciuszko National Park (Figure 15.6).

Figure 15.6 Motivations of summer visitors to the Kosciuszko alpine area (McMaster 2000).



The natural condition of the park contributes to visitor satisfaction by providing opportunities for challenge, escape, relaxation, self-discovery and spiritual awareness. The park features a diversity of natural settings, including the highest mountains on the Australian continent and the highest peak, natural mountainous scenery of high aesthetic quality and appeal, snow-covered landscapes, clear air, mountain streams, glacial lakes, waterfalls, limestone caves, thermal springs, alpine wildflowers, subalpine snow gum woodlands, montane forests, native pine communities, endemic plants and animals and open space. The park is a World Biosphere Reserve, in part due to the international recognition of the natural values of the park.

Importance of the park as a natural attraction

Kosciuszko National Park as a natural attraction is nationally important. The natural scenic qualities of Kosciuszko National Park, its mountainous landscapes, its size and its diversity of natural settings and the presence of snow are paramount in what is valued as a tourism and recreation attraction by visitors.

Dependence on the park

The opportunity to experience natural attractions such as the summit of Mount Kosciuszko and the Main Range, wilderness areas such as Jagungal, Pilot, Byadbo, Bogong Peaks and Bimberi is available only in Kosciuszko National Park. For other tourism and recreation opportunities, such as to experience the natural attraction of the snow country and frost hollow grassy valleys, there is partial dependence on the park, as there are similar opportunities in Victoria and Tasmania.

Condition and trend in condition

The extraordinary aesthetic, scenic and natural heritage of Kosciuszko National Park is one of the primary tourism and recreation attributes of the park. Table 15.2 describes the condition and trend in condition of these attributes.

Table 15.2 Condition and trends in condition for natural attraction aspects of Kosciuszko National Park

Natural attraction	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread
Natural scenery ^a	Undisturbed; no human structures		■		□			□		□	
Native wildlife ^b	Presence of native fauna; absence of introduced fauna			■					■	□	
Native plants ^c	Presence of native flora; absence of non-native plants and pathogens			■						■	
Limestone caves ^d				■					■		
Soils	Non-eroding; non-compacted/ disturbed		■		□			■		□	
Water quality ^e	Unpolluted streams			■	□				■	□	
Status of air quality ^f	Unpolluted air; greenhouse gas emissions minimised		■		□				■	□	
Non-natural noise ^g	No artificial noise		■		□				■	□	
Non-natural light ^h	No electric lights; natural darkness; opportunity to see stars without light pollution		■						■		

■ Overall status for Kosciuszko National Park; □ Relates to parts of Kosciuszko National Park

^a The park is scenically very diverse. There are many large natural areas where the natural scenery is in very good condition. Some other areas are impacted by power lines, urban areas and car parks within the ski resorts and many features of the Snowy scheme. Some areas are degraded including the nation's highest peak, Mount Kosciuszko, where further rehabilitation works are required. Natural scenery is very important for tourism and recreation.

^b Impacted by tourism and recreation. Habitats of endangered species have been modified in the ski resorts. There are road kills, and many species are influenced by visitors throughout the park. Bats may be disturbed in caves, breeding populations of snakes and other species may be disturbed by walkers. Special management is needed for the ski resorts including aquatic organisms.

^c Slashing of native vegetation in the ski resorts and trampling of alpine area plants are two impacts that need managing.

^d Access to the caves in the park is by permit system or by ranger guided tour. This system appears to be working satisfactorily.

^e There are water quality issues for streams downstream from urbanised facilities in the park. There are other streams which may include water borne parasites. Water quality management needs action to help maintain minimum standards of water quality, especially for remote areas.

^f Generally this is very good for the park, however, air quality for the ski resort areas diminishes at peak times.

^g This is usually very good, but it is an issue which may affect visitors within the ski-resort areas, near the major dams and transmission lines of the Snowy Scheme and along the highway routes. The NPWS helicopter may be an issue in remote areas.

^h This feature is usually very good, with the exception of the ski resort areas.

Pressures

A range of pressures may influence the natural attraction of Kosciuszko National Park, including threatening processes, incidents and planning and management decisions. Such pressures for protected areas are described in more detail in Worboys et al (2001). The evaluation of the natural values presented in other chapters of this report, including flora, fauna, geomorphology, water quality, wilderness and natural aesthetics, highlights the range of pressures operating on the natural attraction of the park.

Tourism, recreation and park facilities and services can directly impact on the natural attraction of Kosciuszko National Park unless they are managed carefully and strategically. Any impact on the park's natural values is an impact on its tourism and recreation values. There are specific pressures on natural scenery, wildlife, native plants, soil, water quality and air quality. Pressures include non-natural noise, non-natural light and climate change.

Natural scenery

There are areas in the park where structures detract from the natural scenery (see Chapter 11). These include the unrehabilitated summit road; the disturbed Rawson Pass car park area; old Snowy Scheme work sites; unfinished Jounama rehabilitation; erosion at Cooleman, Nungar, Tantangara Dam, Kiandra and Ravine; transmission lines through the park (including unlawful clearing works); some unaesthetic urbanised landscapes at the ski resorts; alpine area multiple tracking caused by visitors; eroding access tracks, including those in the northern section of the park; and the presence of introduced plants (Grenier 1992, Mosley 1992, Buckley et al 2000, NPWS 2000, Johnston, FM and Pickering 2001, Worboys and Pickering 2002, Pickering et al, in press). Further rehabilitation work is required in many areas of the park, including the summit area.

Wildlife

Feral horses, foxes, cats and wild pigs impact on streams, natural grasslands and native fauna (Chapter 10). Such introduced species are considered to diminish the natural values and the tourism and recreation experiences (Mosley 1992). The loss of the corroboree frog in some areas and pressures on the habitat of the mountain pygmy-possum are evident. The loss of wildlife on roads is also of concern.

Native plants

The spread of weeds is strongly associated with tourism infrastructure and detracts from the natural attraction of the region (Johnston FM and Pickering 2001, Worboys and Pickering 2002). The alpine area is one area of concern: trampling of native vegetation is creating disturbed areas — for example, with multiple tracking — which provide opportunities for the spread of weeds (Worboys and Pickering 2002, Pickering et al, in press). Similar impacts in other high-use areas in the park are of concern.

Soil

A range of areas within the park are subject to high-frequency visitor use, including by horse riders and walkers. Such use has caused soil compaction and erosion, in some cases to the level of bedrock (Virtanen 1993, Arkle 2000). There is the potential for serious erosion at these sites (Virtanen 1993, Arkle 2000; see also Chapter 6).

Water quality

Large numbers of visitors to the park place pressure on catchments, which brings potential issues for water quality (see Chapter 8). Water in most streams in the park is likely to be contaminated by pathogens such as *Giardia* (Cullen et al 1992,; Good 1995, AALC 2000, Buckley et al 2000). The release of treated sewage waters to subalpine streams at the very headwaters of Australia's principal river system catchments, including the Snowy River at Spencers Creek, the Snowy River at Perisher Creek, the Thredbo River at Thredbo, and possibly Rules Creek at Yarrangobilly Caves, places additional pressure on rivers, creeks and streams (Cullen et al 1992, Good 1995; see also Chapter 8). All sewage treatment operations in the park are licensed by the NSW Environment Protection Authority to meet stringent water quality requirements. Nevertheless, there is and will continue to be pressure on the health of streams and rivers in the park.

Air quality

Pressures occur during periods of controlled burning (and wildfires), from smoke pollution from lodge fires and heating combined with atmospheric inversions, and locally from motor vehicle exhausts at resort car parks (Buckley et al 2000).

Non-natural noise

Pressures occur, especially in the urbanised ski resorts, which can have a high latent noise level (Buckley et al 2000) from sources such as lodges, restaurants and entertainment centres. Growth in the use of over-snow transport, which may occur as a result of additional facilities and services in the resort areas, will add to the non-natural noise in these areas. Also, non-natural noise associated with the increasing use of snow grooming and snow making machinery in the ski resorts at night is an issue. The use of mechanised transport for management access to remote areas (skidoo, four-wheel drive, helicopter, low-flying aircraft) can be an issue. The Sydney–Melbourne and Canberra–Melbourne flight paths lie over the northern sections of the park, creating an additional noise (and visual) impact for wilderness areas.

Non-natural light

Pressures mainly occur in the urbanised areas of the park, with some light spill into adjacent areas.

Climate change

Snow cover in the Australian Alps is predicted to decline within the next 70 years with global warming (Whetton et al 1996,; Whetton 1998). As a result there are likely to be wide-ranging changes to the ecology of the system, including changes in the distribution and abundance of species and fire regime (Green 1998).

Knowledge gaps

Additional information is required on water quality management and noise quality management. There is a need for detailed measurements of the impacts of feral animals and weeds on natural attractions.

Opportunities

There are a number of opportunities for improved management, including the establishment of baseline levels of environmental management performance in natural settings for operations within the park and establishment of a monitoring system that maintains a minimum level of environmental performance for operations.

Attribute 2: cultural attraction

The park has a rich and diverse cultural setting (Good 1992). It is especially important to local communities for its Aboriginal and historical heritage. There is evidence of Aboriginal use and there is continued Aboriginal use. There is evidence of early mining, forestry, tourism and grazing — for example, historic chalets, mountain huts, old mining debris and sawpits (see Chapters 13 and 14). Scientific discovery of the natural heritage of the park is also important, and has contributed to our understanding of geology, ecology and evolution (Good 1992). The Snowy Mountains Hydro Electric Scheme, with its dams, villages and power stations, is a significant cultural feature, recognised internationally as an engineering marvel (Good 1992).

The cultural heritage of Kosciuszko National Park enhances visitors' cultural links, an important component of visitor satisfaction (Beeton 1989, Weaver and Opperman 2000). Experiencing the cultural heritage of Kosciuszko National Park may also assist visitors in fulfilling needs for social interaction, education, self-fulfilment, relaxation, play and the strengthening of family bonds (Ryan 1991).

Importance of the park as a cultural attraction

Kosciuszko National Park has a rich and varied cultural heritage (Good 1992) and is considered to be nationally important. It is highly valued by Aboriginal people, artists, scientists, tourists and locals. Historical artefacts within the park include paintings, poems, legends and bush folklore, all of which help to underpin its nationally important cultural values (see Chapters 13 and 14).

Dependence on the park

The intrinsic and historic and cultural heritage values of Kosciuszko National Park are completely reliant on the park setting for their context and importance.

Condition and trend in condition

The cultural heritage sites of Kosciuszko National Park are generally in a satisfactory condition. There have been some instances of damage to sites, including Aboriginal sites, during fire operations. Interpretation and preservation are poor at some specific sites, including Kiandra, where they are considered poor and declining (see Chapter 13). Table 15.3 describes the condition and trend in condition for cultural attractions.

Pressures

The pressures facing cultural attractions include issues associated with access, use, maintenance, and interpretation. For example, there is continued need for maintenance of some cultural heritage structures and sites (for example, some Aboriginal sites, mining and grazing sites including Kiandra, and many of the huts). There are direct pressures for recognition of the cultural links to the park from specific groups, access to sites for those groups, and then pressures from use of sites. While there has been a decline within the general community of knowledge of cultural events associated with the mountains, including early tourism, mining and the Snowy

Mountains Hydro Electric Scheme, there can also be pressures associated with conflicting messages invoked by different aspects of the park's cultural heritage (eg scientific conservation and 'Man from Snowy River', Aboriginal heritage and some early grazing practices).

Table 15.3 Condition and trend in condition for cultural attraction aspects of Kosciuszko National Park

Cultural attraction	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Conserved status of Aboriginal cultural heritage sites ^a	Sites adequately protected; absence of vandalism			□	■				■		
Conserved status of historic cultural heritage sites ^b	Sites adequately protected; absence of vandalism			□	■				■	□	

■ Overall status for Kosciuszko National Park; □ Relates to parts of Kosciuszko National Park

^a Many Aboriginal heritage sites are in the same locations as visitor use sites and need careful management. Some sites need repair. Others are in a satisfactory condition.

^b Many historic sites within the park need constant work. The Kosciuszko huts are maintained through voluntary work with the Kosciuszko Huts Association. Caves House has been renovated and repainted. Locations such as Kiandra need work to conserve heritage features.

Knowledge gaps

More knowledge is needed about many aspects of the cultural history of the park, including detailed local history, along with an understanding of the importance of the park for the Aboriginal community and other members of the local community.

Opportunities

Opportunities for management improvements include further recognition and appreciation of Aboriginal cultural heritage, including full collaboration with the Aboriginal community. There is also a need to work with the local community more broadly to understand the diversity of cultural values and strategies to ensure that they are acknowledged in the management of the park. There could be an expansion of cultural tourism to the region, particularly for schoolchildren (see educational activities) and the over-50 market. This could be undertaken as part of a package of regional tourism opportunities in collaboration with local tourism organisations, educational institutions and organisations such as the Snowy Hydro Limited. There are also opportunities for more interpretation of the cultural values in the park and at visitor information outlets and for cultural heritage audio tours. Working with volunteers could be further developed to help protect tourism and recreation values while enhancing a sense of involvement and ownership of the interpretation of the cultural values of the park.

Attribute 3: educational activities

Kosciuszko National Park provides rich opportunities for informal experiential learning and for education through formal classes, study groups and major conferences. Aspects of the park and its heritage are part of the national educational curriculum. Natural, cultural and managerial education themes are important, as are the pursuit of the arts through painting, poetry and literature. The work of the NPWS Educational Centre at Sawpit Creek, and the occasional hosting of important conferences and seminars in the mountains by the ski resorts and NPWS provide quality experiences. The Department of Sport and Recreation and Department of Education have important programs related to the park. In addition, guided walks at Thredbo, the NPWS discovery ranger program and cave tours at Yarrangobilly all add to the educational activities in the park.

Education is a major motivator for visitors, whether it concerns the natural or cultural heritage of the park or recreational activities themselves. The high-quality experience that can be achieved enhances visitor satisfaction. The benefits of enhanced educational activities in the region are recognised by local tourism organisations (TSM 2001). Yet the full potential of Kosciuszko National Park as an educational destination has not been realised.

Importance of the park for educational activities

Kosciuszko National Park is considered to have national importance as an educational opportunity.

Dependence

The park plays an important (if not essential) role in setting the scene for educational opportunities. Many aspects of the educational experience are park dependent.

Condition and trend in condition

Table 15.4 describes the condition and trend in condition of educational activities.

Pressures

Pressures on educational activities include poor knowledge of the intrinsic values of the park, including cultural heritage values; too few opportunities for education for the growing numbers of visitors; lack of diversity in the educational experience; and the fact that there is no system for establishing a minimum standard for educators in the park.

Knowledge gaps

More knowledge is needed on educational use of the park. There should also be further market research into opportunities for educational use and the types of education experiences that currently attract visitors.

Opportunities

Management opportunities include facilitating the potential for educational use of the park (on Aboriginal, Snowy scheme, scientific exploration of the park and other themes) of the park. This could involve the provision of a range of educational activities, including activities prior to arrival at the destination (eg visitor centres and websites). There should also be research on visitor needs for educational activities. Expansion of educational activities could also involve further collaboration with commercial operators to assist with the educational experience.

Table 15.4 Condition and trend in condition for educational activity aspects of Kosciuszko National Park

Criteria for assessment of condition	Condition				Trend in condition					
	Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Educational activity Educational opportunities available ^a ◊ to school groups ◊ to adult education groups ◊ for university training ◊ to aboriginal groups			□	■			■			
Depth of education opportunities potentially available and utilised, ^b ◊ learning from the elders, ◊ learning from the locals ◊ learning from the tourism industry ◊ learning from alpine sports medicine ◊ learning from the arts ◊ learning from managers ◊ learning from international conservation experience			□	■				■		

■ Overall status for Kosciuszko National Park; □ Relates to parts of Kosciuszko National Park

^a Whilst there is a range of educational programmes linked to the park, there could be far more. The park has unique infrastructure, which could be used far more in facilitating education programmes. The resorts could play a new role in the future.

^b The range of potential educational opportunities available are considered to be poorly adopted.

Attribute 4: diversity of tourism and recreation opportunities

The park includes tourism and recreation opportunity settings from wilderness to the urban environment of ski resorts. The park has a managerial environment supportive of a range of tourism and recreation experiences, and managerial settings either without tourism support infrastructure or with a range of infrastructure. Kosciuszko National Park caters for a wide diversity of recreation activities based on these settings. It is an important destination for snow-based recreation activities. It is also very important for wilderness or remote area recreation opportunities. The quiet and peaceful atmosphere and scenic qualities of many parts of Kosciuszko are regarded by many visitors as the most important characteristic of the park (Mackay and Virtanen 2001). Some recreation activities are specific to the park. These include the Kosciuszko to Kiandra ski trail; ice climbing at Blue Lake; the 500-metre vertical skiing opportunity at Thredbo ski resort; the national horse trail section through the park; the Hume and Hovell track through the park; the Alpine walking track section through the park; and preparation at altitude for elite sports.

Importance of the park for diversity of tourism and recreation opportunities

The park is considered to be nationally important for the diversity of its recreational opportunity settings. Snow and mountains are rare phenomena in a continent dominated by arid and flat lands. Access to snow and the possibility of participating in snow-based activities in a natural setting are highly valued by Australians and are a significant tourism and recreation attribute of Kosciuszko National Park. The park is especially valuable for its large areas of natural lands, which offer opportunities for solitude and self-reliant recreation. It is the exceptional variation of recreation opportunity settings within one park which establishes its national significance.

Dependence on the park

Many of the opportunity settings of Kosciuszko are unique in an Australian context and thus totally dependent on the park. Kosciuszko National Park is one of the very few remaining areas in NSW where there are opportunities for self-reliant activities in remote lands. In NSW, snow-based recreation is totally dependent on the park.

Condition and trend in condition

Table 15.5 describes the condition and trend in condition of diversity of tourism and recreation opportunities.

Table 15.5 Condition and trend in condition for diversity of tourism and recreation opportunities in Kosciuszko National Park

	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Diversity of recreation settings	Wide range of appropriate recreation facilities and services including a strong NPWS policy for minimising the provision of infrastructure for wilderness areas ^a			■				■			
	Recreation opportunity settings are actively managed to maintain a diversity of settings ^b				■				■		

■ Overall status for Kosciuszko National Park □ Relates to parts of Kosciuszko National Park

^a There is a diversity of recreation opportunity settings for the park. Recent (2002) expansion of wilderness areas has consolidated this diversity with the additional protection of the most vulnerable recreation opportunity setting type, the facility free, disturbance free areas.

^b There is no active management planning guidance and policy controls by the NPWS to control the nature of facilities provided at particular settings. There is a strong probability of incremental hardening of sites over time in the absence of such guidance.

Pressures

There are a number of pressures, including unsustainable and inappropriate use, that apply in managing a diversity of opportunities. For example, the environmental impacts of a diversity of activities at a given site can be an issue. Developing pressures include impacts associated with increasing visitor numbers and new activities. Climate change is likely to produce new pressures associated with changes in snow cover and increased summer tourism. Impacts of tourism activities and infrastructure combined with changes in tourism activities could have negative synergistic effects, such as the spread of weeds (Scherrer and Pickering 2001). There is also potential for conflict between visitor groups and within groups (Table 15.6).

Table 15.6 Personal experience conflicts that affect tourism and recreation values in Kosciuszko National Park (after Eagles et al 2002)

Conflict	Nature of the conflict
Visitor–manager	Managers may be required to regulate visitors closely to protect environmental values. A visitor's experience may be impacted by the regulatory environment.
Visitor–visitor (single activity)	Conflicts may occur within one recreational activity. They may occur when there are: <ul style="list-style-type: none"> • inappropriate visitor behaviours • different skills and experience levels of visitors • different expectations of social behaviour.
Visitor–visitor (different activities)	Conflicts may occur between different visitor activity groups. This may occur between: <ul style="list-style-type: none"> • motorised and non-motorised recreation • active recreationists (eg cyclists) and passive recreationists (eg nature study) • active recreationists (eg downhill skiers) and active recreationists (eg snowboarders) • active non-assisted recreationists (eg bushwalkers) and active assisted recreationists (eg horse riding).
Visitor–management operations	Conflicts may occur when a recreational experience is impacted by management operations. This may occur when: <ul style="list-style-type: none"> • low flying aircraft are required for management duties over remote areas • motor vehicles (over snow, over water, over land) are required to be used in remote areas • controlled burning introduces smoke and poor visibility • incidents involve multi-agencies and media operations.

Knowledge gaps

Knowledge gaps include an absence of a recreation opportunity setting management model for tourism and recreation within the park and an absence of information about activities and use, including trends.

Opportunities for tourism and recreation opportunities

Opportunities for management include establishment of NPWS competency and capacity to manage for recreation opportunities and supply and demand, and the detailed mapping of recreation opportunity settings. It is important to ensure that activities foster appreciation and enjoyment of natural and cultural heritage and their conservation, and that there is more user-group liaison.

There is also an opportunity to develop a tourism and recreation strategy that involves local tourism authorities and commercial operators in and adjacent to the park. There is recognition among tourism operators of the need to diversify recreation opportunities both in the park and outside the park (SGS 2001). This is, in part, driven by the recognition of the volatility of winter tourism, which is strongly affected by the quality of the snow season (SGS 2001). Tourism opportunities outside the park that have been identified as opportunities include coach tours, scenic drives, hiking, water sports (Lake Jindabyne, Lake Eucumbene), horse riding, four-wheel driving, golf, fishing and mountain biking (SGS 2001). This would complement the strategy of providing recreation opportunities within the park that are based on natural and cultural values rather than artificial features.

Attribute 5: access to Kosciuszko National Park

Access to recreation opportunity settings within Kosciuszko National Park are fostered through an all-weather, bitumen-sealed highway system within NSW. The park is readily accessible by road from the major urban centres of Sydney (six hours drive), Melbourne (eight hours) and Canberra (three hours). Approximately 50% of the Australian population lives in these three centres.

Air services take tourists to Canberra (from where it is a three-hour drive to Kosciuszko National Park) or to Cooma airport (a one-hour drive to the park). Planes can land at Tumut airport and Khancoban airstrip, just outside the park. Although these air services are close to the park, they are further from the ski fields than is the case at the Victorian ski fields at Mount Hotham, which are serviced by the adjacent Dinner Plain airfield. The Jindabyne airstrip is not suitable for visitor access to the mountains.

Importance of access to the park

Access to Kosciuszko National Park (as a destination) is a very important attribute, as is access to recreation opportunity settings within the park. The vast majority of visitors to the Snowy region come by private car (85% of domestic overnight visitors), with others arriving by bus or coach (9%) and only around 4% by plane (TNSW 2002). The main access routes to the park are by the main roads through the region (eg Monaro Highway, Snowy Mountains Highway and Kosciuszko Alpine Way), although access on gravel roads and walking tracks and by other means (eg horse, bike, ski tube etc) is also available.

Dependence on the park

Access to the park and the availability of public transport, including air access, are not dependent on the park.

Condition and trend in condition

Improved highways between Sydney and Kosciuszko National Park, and recent improvements to the Kosciuszko Alpine Way, have contributed to reduced travel times and safer travel. Access by air is somewhat diminished due to the infrequency and uncertainty of the regional air service to Cooma, and the distance from Cooma airport to Kosciuszko National Park. The competitive advantage achieved at Mount Hotham ski resort in Victoria as a result of the Dinner Plain airfield adjacent to the snowfields has placed some competitive pressures on NSW ski resort operators. The absence of regular bus services to many areas in the region and in the park, particularly in summer, detracts from low cost access to the park and the region.

Table 15.7 describes the condition and trend in condition of access to Kosciuszko National Park.

Table 15.7 Condition and trend in condition for access to Kosciuszko National Park

	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Access to Kosciuszko National Park	Access to Kosciuszko National Park is maintained through road-based services and air services. ^a		■		□		■			□	
	Access to region, ski fields and other areas in Park by low cost and/or public transport				■					■	

■ Condition status for access to Kosciuszko National Park; □ Condition status for some aspects of access to Kosciuszko National Park

^a The highway system servicing the park has been improving with time. Travel times to the snow fields are consistently being reduced through better road systems. Air services to Cooma have been less than satisfactory in recent times.

^b Public transport systems to the snowfields and the park are generally less than satisfactory.

Pressures

Pressures in relation to access to the park include high maintenance costs for road systems to the park; extreme weather conditions, with ice on roads and poor visibility, affecting road safety and consuming large resources to maintain access; pressures for easy and faster access to ski resorts; and traffic congestion in peak use periods in the southern parts of the park.

Knowledge gaps

Knowledge gaps include the carrying capacity of key access roads to the ski resorts; the life-expectancy of access arrangements in their current form; and alternative access opportunities for the park.

Opportunities

Opportunities include dealing with limitations associated with air access and other forms of public transport, in cooperation with industry and local government; and the need to improve transport from gateway towns to the ski resort areas of the park.

Attribute 6: access within Kosciuszko National Park

Within the park, there is a major high-quality north–south highway system, the Snowy Mountains Highway. The all-weather, gravel-surfaced Barry Way connects Jindabyne to Victoria in another north–south route. East–west, the Alpine Way provides near all-season vehicular access for visitors. The Kosciuszko Road provides all-season vehicular access to Perisher Valley and seasonal access to Charlotte Pass, and the Khancoban to Cabramurra road provides bitumen non-snow season vehicular access across the Great Dividing Range.

The Long Plain Road also provides north-side summer access for the park. In addition, a large number of public-access bitumen and gravel roads provide vehicular access (often seasonal) to multiple locations within the park, such as the Tantangara road, the Island Bend road, the Little River track; the Murray Gates track, the Grassy Flats track, the Geehi Dam road, the Elliot Way, the Lobbs Hole to Ravine road, the Goobaragandra road, the Broken Cart track and the Blue Waterholes track. A large part of this vehicle access system is a legacy of the Snowy Mountains Hydro Electric Scheme.

The public road system provides ready access to a wide range of recreation opportunity settings within Kosciuszko National Park. The perimeters of all wilderness areas are readily accessed. This public vehicle accessibility is also used by cyclists, bushwalkers, horse riders and commercial tour groups. The extensive road network provides access for alpine skiing opportunities; bushwalking track heads; camping sites; picnic sites; white-water rafting and horse riding drop-off and pick-up points; cross-country skiing commencement points; adventure activity sites; and cultural heritage sites.

Importance of access within the park

Access to tourism and recreation opportunities within Kosciuszko National Park is a very important attribute. The NPWS determines the types and ease of access within the park (for example, roads, tracks and cross-country travel), the means of conveyance (for example, cars, four-wheel drives, horses and by foot), the sophistication of the access type (for example, high-standard fire trails) and the maintenance regime for access tracks. Access decisions determine the diversity of recreation opportunity settings maintained for visitors. A policy change to permit vehicular access to a remote area, for example, reduces the diversity of recreation opportunity settings unless there are mitigating circumstances.

Dependence on the park

The access system within the park is dependent on the park.

Condition and trend in condition

Recent improvements to the Alpine Way and the generally consistent maintenance to the gravel public access roads within the park have contributed to quality and reliable access for tourism and recreation. The absence of regular bus services within the park, particularly in summer, detracts from low cost access to the park and region. The Snowy Mountains Hydro Electric Scheme has provided visitors to Kosciuszko National Park with an outstanding public road access system. More recent access facilities such as the ski tube have considerably assisted skier access to snow.

Table 15.8 describes the condition and trend in condition for access within the park.

Table 15.8 Condition and trend in condition for access to tourism and recreation destinations within Kosciuszko National Park

	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Access within the park	Access to the skifields within the park is maintained through vehicle access from dormitory towns, snow clearing services and ski tube access ^a		■						■		
	Access to natural attractions and diverse recreation opportunity settings within the park is maintained through a network of public access roads. Provides opportunities for activities ^b such as bushwalking, canoeing, cross-country skiing, ski-touring, horse-riding, cycling, swimming, picnicking, photography, painting and camping	■			□		■				

■ Condition status for access within Kosciuszko National Park □ Condition status for some aspects of access within Kosciuszko National Park

^a Access to the ski fields is generally acceptable to better than satisfactory. Poor weather conditions and icy roads easily disrupt traffic flows. Ski tube provides an alternative service.

^b Access to recreation opportunity settings is excellent for the park. Recent policy decisions have reduced the number of areas that are readily available for horse riding and this has been recognised. The same decisions have provided protection for further areas, providing opportunities for self-reliant recreation and solitude.

Pressures

Pressures on access within the park include high maintenance costs for the park road and track system; extreme weather conditions and ice on roads, with poor visibility, reducing the quality of a visitor's experience and affecting safety on roads, a periodic demand for upgrading some gravel roads within the park; public risk associated with verge parking and pedestrian access in certain areas of the park, such as the road below the turning circle at the Charlotte Pass road head; car parking problems in the ski resort areas during peak periods, with spill-over onto adjacent roads; and pressure for access to the same areas of the park for different activities such as bushwalking, horse riding, four-wheel drive use and trail bike use.

Knowledge gaps

Knowledge gaps include visitor use profiles for the different forms of access provided for the park; cost-benefit analyses of investments in the provision and maintenance of access for tourism and recreation; and the environmental effects of the provision of access.

Opportunities

Opportunities include improvements in transport efficiencies from gateway towns to resort areas of Kosciuszko National Park, including innovations such as increasing the capacity and extent of the ski tube by connecting it to the dormitory town of Jindabyne; and definition of limits of use for access to the summit of Mount Kosciuszko. In addition, there is an opportunity for the provision of vehicle-based touring circuits within the region, including within the park. The over-50s self-drive market is a demand that could be met by the provision of self-drives within the region, and several such circuits have been identified by Tourism Snowy Mountains (TSM 2001). The provision of roadside interpretation and car based picnic facilities enhances such car touring experiences.

Attribute 7: services and facilities

The availability of services and facilities is considered to be an important aspect of the attraction for tourists (Weaver and Opperman 2000). In Kosciuszko National Park, a range of facilities and services may attract visitors, including no services or facilities; picnicking and camping in mountainous settings; restaurants in a snow environment; alpine ski lifts; managed ski slopes; high-quality walking tracks suitable for people with limited mobility; visitor centres; ranger walks; and signage. Services and facilities need to be consistent with the status of Kosciuszko National Park as a protected area.

Importance of the park for services and facilities

The park is seen to have state level of importance for the provision of services and facilities. Within the park, the high-quality facilities for visitors range from basic picnic and camping sites in scenic locations to more sophisticated alpine skiing resorts.

Dependence on the park

The facilities and services are dependent on the park.

Condition and trend in condition

There is a high diversity of recreation facilities and services within the park. The 1988 Kosciuszko National Park Plan of Management provides the current detailed inventory of those facilities. Table 15.9 describes the condition and trend in condition of recreation services and facilities.

Pressures

Pressures include overuse and unsustainable use of facilities; the high cost of maintenance; poor-quality maintenance and services; inconsistent design and poor design of facilities; and pressure for additional types of facilities and services.

Knowledge gaps

Knowledge gaps include visitor feedback on existing services and facilities and unmet needs; supply and demand management; trends in visitors' expectations of services and facilities; and visitor movements in the region and the park.

Table 15.9 Condition and trend in condition for service and facilities in Kosciuszko National Park

	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Services and facilities	The nature and sophistication of visitor services and facilities are appropriate to the recreation opportunity setting ^a			■	□				■		
	There is no unplanned or inconsistent incremental hardening of visitor destination settings ^b				■					■	
	There is a diversity of visitor services and facilities for the park ^c		■						■		
	Visitor services and facilities provided are designed to reflect the limits of sustainable visitor use for recreation opportunity settings ^d				■				■		
	The nature of the visitor services and facilities provided are safe, and are designed to deal with natural and human caused incidents including fire, geological phenomena, and weather extremes including blizzards and wind storms ^e			■				■			

■ Overall status for Kosciuszko National Park □ Relates to parts of Kosciuszko National Park

^a The literature describing recreation opportunity settings describes certain services and facilities that are appropriate to different recreation opportunity setting classes (Clarke and Stankey 1979, NPWS 2002). The NPWS currently lacks a formal system for dealing with this.

^b Incremental hardening of visitor sites is a potential management problem. Good planning can overcome this issue (Worboys et al 2001).

^c The diversity of settings in Kosciuszko National Park ranges from ski resort areas with urban style facilities to wilderness areas with no facilities.

^d Limits of visitor use reflect that there are only so many people a site or area can accommodate at any given time. There are only so many people that can fit into a theatre. There are only so many people that can fit onto a boat. The same applies for destinations within the park. A planning framework is available to provide a rationale and process for such decision making (Worboys et al 2001).

^e This simply reflects an appraisal of whether managerial processes and systems are in place to ensure that public safety is managed as part of the provision of services and facilities.

Opportunities

Opportunities include introducing a framework for sustainable management and visitor use limits; designing facilities and services to meet visitor expectations and so that they are environmentally sustainable; asset management systems; supply and demand management; visitor satisfaction surveys; partnerships with local governments and the tourism industry to provide a range of recreation and tourism services that are not park dependent; and better opportunities for access to facilities for people with limited mobility.

Attribute 8: impacts of use

Human use of resources inevitably results in impacts, and tourism and recreation is no exception (Worboys et al 2001, Eagles et al 2002, Newsome et al 2002). Impacts of use in the context of tourism and recreation values must be considered relative to the desired opportunity and subsequent impacts on visitor experiences (Clarke and Stankey 1979). Garbage-strewn picnic areas, vandalised facilities and polluted streams are just some impacts arising from visitor use that which can impact a recreation opportunity setting. Generally the tolerance of a recreational user for impacts (ecological, social or managerial) is greater among more modified recreation opportunity settings such as the ski resort management units than in more remote areas such as the designated wilderness areas of the park (after Clarke and Stankey 1979). There are no excuses, however, for visitor use impacts that detract from the natural attributes of Kosciuszko National Park. Natural attributes are the most important attribute underpinning the tourism and recreation values of the park. The World Conservation Union (IUCN) World Commission on Protected Areas (Eagles et al 2002) described the types of risks to protected areas from tourism activities, infrastructure, services and facilities (Table 15.10). This assessment is based on their global experience and input from protected area management experts from around the world. If not managed adequately, visitor use impacts can be a threatening process to the natural values of Kosciuszko National Park.

Impacts do occur, but impacts caused by use of Kosciuszko National Park must be acceptable relative to its status. Contemporary management authorities can use a number of techniques to minimise impacts, including making management judgments and defining limits of visitor use for destinations by policy (as distinct from the less practical limits of acceptable change theory), managing supply and demand, managing resource capabilities (such as site hardening) and managing the impact of use by modifying the type and nature of use (Worboys et al 2001:288–295, Eagles et al 2002:88–98). All require active tourism management by the NPWS. Banff National Park in Canada has introduced visitor use limits, with its planning of destinations. Montague Island Nature Reserve off the south coast of NSW and Macquarie Island have also introduced visitor use limits to guide their operations (Worboys et al 2001).

Modifying the type and nature of use is an important opportunity for Kosciuszko National Park. A new trend in industry accountability for environmental management performance has slowly emerged from the tourism industry in the last decade. This reflects a sharing of the accountability for environmental management performance by industry. It would be a new paradigm for Kosciuszko National Park. Some background about this opportunity is provided here.

Table 15.10 Environmental risks to protected areas from tourism (after Eagles et al 2002)

Element	Examples of risk from tourist activities
Ecosystems	<p>The construction of accommodation, visitor centres, infrastructure, and other services has a direct impact on the environment, by vegetation removal, animal disturbance, elimination of habitats, impacts on drainage etc.</p> <p>Wildlife habitat may be significantly changed (travel routes, feeding areas, breeding areas, etc) by all kinds of tourist development and use.</p>
Soils	<p>Soil compaction can occur in certain well-used areas.</p> <p>Soil removal and soil erosion also occurs, and may continue after the disturbance is gone.</p>
Vegetation	<p>Concentrated use around facilities has a negative effect on vegetation.</p> <p>Transportation may have direct negative impacts on the environment (eg vegetation removal, weed transmission, animal disturbance).</p> <p>Fire frequency may change due to tourists and park tourism management.</p>
Water	<p>Increased demands for fresh water.</p> <p>Disposal of sewage or litter in rivers, lakes.</p>
Air	<p>Motorised transportation may cause pollution from emissions.</p> <p>Energy consumption and green house gas emissions</p>
Wildlife	<p>Fishing may change population dynamics.</p> <p>Fishers may demand the introduction of foreign species, and increased populations of target animals.</p> <p>Impacts occur on insects and small invertebrates, from effects of transportation, introduced species etc.</p> <p>Disturbance by visitors can occur for all species, including those that are not attracting visitors.</p> <p>Disturbance can be of several kinds: noise, visual or harassing behaviour.</p> <p>The impact can last beyond the time of the initial contact (eg until heart-rate returns to normal, or until birds alight, or mammals resume breeding or eating).</p> <p>Habituation to humans can caused changed wildlife behaviour, such as approaching people for food.</p>

Following the Rio De Janeiro Earth Summit in 1992, the World Tourism and Travel Council, World Tourism Organisation and Earth Council published 'Agenda 21 for the travel and tourism industry, towards environmentally sustainable development' in 1994. This document helped to underpin a global environmental certification scheme for travel and tourism called Green Globe 21. It recognised 10 key performance areas for environmental and social management performance by the tourism industry. It was a basis for a minimum level of environmental and social management performance by the travel and tourism industry. Green Globe 21 developed a certification standard based on the document to help account for responsible environmental performance.

Other industry sustainable performance codes and environmental certification schemes have subsequently emerged, including the Nature and Ecotourism Accreditation Program (NEAP) of the Ecotourism Association of Australia (EAA). Most recently, in 2002, the International Ecotourism Standard was developed as an alliance between the EAA, Green Globe 21, and the Cooperative Research Centre for Sustainable Tourism. In 2001, the World Tourism Organisation released a global code of ethics for travel and tourism. The Asia Pacific Economic Cooperation (APEC) and Pacific Asia Travel Association released a code for sustainable tourism in 2001, and encouraged industry to adopt and promulgate its principles (Box 15.2).

BOX 15.2 Pacific Asia Travel Association — Asia Pacific Economic Cooperation Code for Sustainable Tourism 2001

The Code for Sustainable Tourism has been adopted by both PATA and APEC as a reflection of their strong commitment to tourism growth across the Asia and Pacific region that is viable and sustainable over a long-term future.

The Pacific Asia Travel Association (PATA) was established in 1951 as the body for national tourist offices, airlines, hotels, tour operators, travel agencies and other firms active in tourism to promote travel to and within the Pacific Asia region. Its charter sets out its fundamental commitment to what is now called sustainable development:

...to encourage and assist in the development of travel industries throughout Pacific-Asia in a manner which recognises the urgent importance to practice an environmental ethic that supports responsible conservation and restoration of Pacific Asia's unique combination of natural, social and cultural resources.

PATA has maintained that commitment for over 50 years through numerous publications, conferences and workshops, and through its consistent promotion of heritage conservation, cultural tourism and eco-tourism. PATA first adopted a code for environmentally sensitive tourism at its 40th annual conference in 1991.

Asia Pacific Economic Co-operation (APEC) was formed as a high level forum for the leaders of Asia Pacific economies in 1989. It has a particular commitment to opening the region to the freer flow of trade in goods and services, which includes tourism, and to co-operation across its economies on a wide front.

APEC established a Tourism Working Group in 1991 and convened the first meeting of Asia Pacific Ministers of Tourism in Seoul in 2000. At that meeting APEC adopted its Tourism Charter, which sets out the goal to 'sustainably manage tourism outcomes and impacts.' This expresses APEC's clear commitment to ecologically and culturally sustainable tourism development.

Reflecting these commitments, APEC and PATA, at a meeting of the APEC Tourism Working Group and at the Fiftieth PATA Conference respectively, both in Malaysia in April 2001, adopted the Code for Sustainable Tourism to guide their own activities and for promotion to their members and affiliates.

The code is designed for adoption and implementation by a wide range of tourism-related organisations and companies. By adhering to it they will be showing their commitment to the vision of tourism growth that is fully responsible in its approach to natural environments, to social needs and to cultural sensitivities. By following the Code, organisations will also be positioning themselves to deal with environmental regulation, environmental accounting, environmental standards such as ISO, and accreditation schemes requiring reporting on environmental and social impacts.

Code for sustainable tourism

The PATA/APEC code urges PATA Association and Chapter members and their industry partners and APEC Member Economies to:

CONSERVE THE NATURAL ENVIRONMENT AND ITS ECOSYSTEMS

CONTRIBUTE to the conservation of any habitat of flora and fauna affected by tourism

ENCOURAGE relevant authorities to identify areas worthy of conservation and to determine the level of development, if any, which would be compatible in or adjacent to those areas

INCLUDE enhancement and corrective actions at tourism sites to conserve wildlife and natural ecosystems

RESPECT AND SUPPORT LOCAL TRADITIONS, CULTURES AND COMMUNITIES

ENSURE that community attitudes, cultural values and concerns, including local customs and beliefs, are taken into account in the planning of all tourism related projects

PROVIDE the opportunity for the wider community to take part in discussions and consultations on tourism planning issues where these affect the tourism industry and the community

ENCOURAGE an understanding by all those involved in tourism of each community's customs, cultural values, beliefs and traditions and how they relate to the environment

CONTRIBUTE to the identity and pride of local communities through providing quality tourism products and services sensitive to those communities

MAINTAIN ENVIRONMENTAL MANAGEMENT SYSTEMS

ENSURE that environmental assessment is an integral step in planning for a tourism project

ENCOURAGE regular environmental audits of practices throughout the tourism industry and to promote desirable changes to those practices

ESTABLISH detailed environmental policies and/or guidelines for the various sectors of the tourism industry

INCORPORATE environmentally sensitive design and construction solutions in any building or landscaping for tourism purposes

CONSERVE AND REDUCE ENERGY, WASTE AND POLLUTANTS

FOSTER environmentally responsible practices for:

reducing pollutants and greenhouse gases

conserving water and protecting water quality

managing efficiently waste and energy

controlling noise levels

promoting the use of recyclable and biodegradable materials

ENCOURAGE NATURAL AND SOCIAL ENVIRONMENTAL COMMITMENT

ENCOURAGE those involved in tourism to comply with local, regional and national planning policies and to participate in the planning process

FOSTER, in both management and staff of all tourism projects and activities, an awareness of environmental and cultural values

ENCOURAGE all those who provide services to tourism enterprises to participate through environmentally and socially responsible actions

SUPPORT environmental and cultural awareness through tourism marketing

EDUCATE AND INFORM OTHERS ABOUT LOCAL ENVIRONMENTS AND CULTURES

SUPPORT the inclusion of environmental and cultural values in tourism education, training and planning

ENHANCE the appreciation and understanding by tourists of natural environments and cultural sensitivities through the provision of accurate information and appropriate interpretation

ENCOURAGE and support research on the environmental and cultural impacts of tourism

COOPERATE WITH OTHERS TO SUSTAIN THE ENVIRONMENT

COOPERATE with other individuals and organisations to advance environmental improvements and sustainable development practices

COMPLY with all international conventions and national, state and local laws which safeguard natural environments and cultural sensitivities.

The international APEC–PATA and World Tourism Organisation codes also strongly encourage individual industry members and companies to be accountable for environmental management performance. The voluntary certification schemes are a practical means of demonstrating such performance. Sustainable tourism is now strongly advocated by the travel and tourism industry globally. The term is based on the environmentally sustainable development (ESD) outcome arising from the Rio De Janeiro Earth Summit and its famous Agenda 21 ESD document. It has been recently defined by the Queensland Government (1997) as follows:

Sustainable Tourism is the development of an internationally competitive ecologically sustainable and socially responsible tourism industry based on the integration of economic, social and environmental objectives.

This approach is consistent with recommendations made to the World Summit on Sustainable Development in Johannesburg in September 2002 by the United Nations Environment Programme Global Environment Outlook Report (GEO 3). This report made a number of recommendations to the summit (UNEP 2002), including the following:

- Reinforce the linkages between global and local levels and ensure that implementation and capacity (for environmental improvement) are passed on to local authorities wherever possible;
- Support private sector initiatives on environmental performance standards and reporting, such as voluntary disclosure on progress in stemming pollution, protecting environmental assets and promoting sustainable development;
- Take active measures to stimulate sustainable consumption and production practices;
- Provide incentives for eco-efficient (cleaner) production and innovation; and
- Encourage further adoption of voluntary initiatives such as commitments by companies to achieve additional environmental targets; codes of conduct for sectoral industry associations regarding environmental responsibility; environmental performance targets agreed between government; and, a company or sector legally binding covenants.

Sustainable tourism is appropriate for Kosciuszko National Park as a tool to help maintain tourism and recreation values. Such an approach brings with it a sharing of the accountability for environmental management performance. It is unnecessary and unwise for the NPWS to have the sole accountability for determining environmental management performance. Certification schemes introduce individual accountability for environmental management performance reporting. The schemes also recognise environmental performance areas (WTTC et al 1996,; APEC–PATA 2001,; De Lacy et al 2002) that respond to global environmental issues as well as park-specific issues. It is a more appropriate and holistic approach to environmental management for the park, a very relevant point given that environmental issues such as global warming are directly influencing the future of snow tourism in the park.

New environmental benchmarking tools developed by the Cooperative Research Centre for Sustainable Tourism have established environmental performance indicators (Earthcheck indicators) and a system of quantified environmental performance for these global and local environmental issues for the travel and tourism industry (De Lacy et al 2002). Such cutting edge quantified environmental management performance for the park would be underpinned by quantified minimum environmental performance standards. Individual companies and authorities

would be measured against these minimum benchmarking standards annually. The benchmarking system is already in place in Australia and New Zealand, and leading travel and tourism companies are participating. Falls Creek ski resort in Victoria is pioneering the approach for ski resorts in Australia.

Importance of impacts of use of the park

This is a very important attribute in influencing the tourism and recreation value of Kosciuszko National Park. Impacts of use need to be managed to retain the tourism and recreation value of the park. Tourism and recreation needs to be sustainable and based on environmental performance that meets agreed performance targets. Quantified environmental management performance improvement outcomes (and targets) are possible under a benchmarking system.

Condition and trend in condition

The condition and trend in condition of impacts of use for Kosciuszko National Park can be expressed relative to the global environmental criteria identified by Agenda 21 for the travel and tourism industry (WTTC et al 1996) and subsequent work by the Cooperative Research Centre for Sustainable Tourism (De Lacy et al 2002).

Table 15.11 indicates how well the particular environmental management performance criteria are managed to minimise either primary or secondary impacts of visitor use on the park. The table shows that impacts of use can be managed better for the park.

Pressures

Pressures that influence impacts of use include an absence of active management of tourism and recreation and limits of visitor use; an absence of monitoring of visitor use; an absence of monitoring of the environmental performance management of tourism and recreation; an absence of an active and applied tourism and recreation research program and the adaptive use of its findings; poor management of services and facilities; and overcrowding, including supply and demand.

Knowledge gaps

There is a need for quantified environmental performance baseline levels for key criteria specific to Kosciuszko National Park and for supplementary indicators for monitoring.

Opportunities

There is an opportunity to introduce a new system for managing tourism and recreation at Kosciuszko National Park, which would be based on environmental management performance and include quantified environmental management performance monitoring; global and local environmental management performance criteria; individual company environmental performance; minimum (annual) environmental performance standards for companies and communities; strategic environmental performance criteria and incremental improvements; adaptive research; continuous improvement in environmental performance; limits of use for destinations; and active, continuous, professional management of travel and tourism.

Table 15.11 Condition and trend in condition for impacts of use of Kosciuszko National Park

	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Impact of use ^a	Energy consumption ^b				■					■	
	Green house gas reduction ^c				■					■	
	Solid waste reduction ^d				■				■		
	Liquid waste reduction ^e				■				■		
	Potable water use reduction; disposal standards met ^f				■					■	
	Social criteria ^g			■					■		
	Noise reduction ^h				■				■		
	Biodiversity conservation ⁱ				■				■		
	Kosciuszko specific criteria ^j				■				■		

■ Condition status (how well the environmental performance criteria are managed for the park) for 'impacts of use' criteria

^a Earthcheck environmental performance management criteria from De Lacy et al (2002)

^b Energy consumption is relatively high for snow based tourism which is underpinned by snow making. Transport to and from the ski fields consumes energy, as does the special heating required for accommodation and energy consumed in sewage treatment. Electricity energy consumption, where it is based on coal-fired power stations is a contributor to green house gases and global warming. Reduction targets for the park in tonnes of carbon per annum may be possible. There are currently no known tourism strategic energy conservation schemes in place for the park. Energy reduction means cost savings for companies and authorities.

^c Greenhouse gas reductions can be achieved by lowering energy consumption in all aspects of travel and tourism operations. Examples include: less potable water used means less use of pumps and less energy used; less sewage water created means less treatment needed and less energy consumed; and, less garbage generated and sent to landfill means less transportation and less energy used. There is no known programme in place for the strategic reduction of greenhouse gases for the park.

^d Solid waste reduction means less waste going to landfill, through systems that minimise waste generation, recycling, reuse. This means less pollution of the planet at the landfill, less greenhouse gases generated through energy consumed in managing the waste. Less waste means cost savings for the managing authority. There is no known programme in place for the strategic reduction of solid waste generated for the park.

^e Liquid waste reduction means less waste waters to be treated. Reduction in inputs through reduced water use is one tool that is available. Licensed disposal standards being met reflects on the quality of treatment achieved. All ski resorts discharge into sub-alpine streams within the park. Some discharges have not met licensing performance standards. There have

been some pollution incidents associated with ski resort management. There is no known programme in place for the strategic improvement of liquid waste generated within the park.

^f Reduction in potable water use will benefit the natural flow regimes of the mountain streams that provide water supplies to service visitor use facilities. There is no known programme in place for the strategic reduction in potable water use within the park.

^g Social criteria currently focuses on local employment created through travel and tourism. This criterion is considered satisfactory, and there are active programmes of employment generation locally through tourism.

^h Noise reduction. There is no known program in place for the strategic reduction of non-natural noise within the park.

ⁱ Biodiversity conservation. There are a number of biodiversity conservation programmes and specific species conservation initiatives within the park. There is no known programme in place within the park for the strategic improvement of biodiversity conservation developed as a joint initiative with the travel and tourism industry.

^j Supplementary indicators. There are no known supplementary (Kosciuszko National Park specific) indicators in place within the park for the strategic improvement of impacts of use' developed with the travel and tourism industry.

Attribute 9: affordability of tourism and recreation in Kosciuszko National Park

Competitive, low-cost accommodation, services, transport, lift and ski facilities and entry fees relative to other tourism destinations are considered to be an important consideration for visitors (TSM 2001).

Competition for visitors between the Snowy Mountains region, the northern parts of Kosciuszko National Park and other tourism regions, as well as competition for visitors within the region, provides a low-cost basis for visitors to come to the area. There is also a range of low-cost tourism opportunities within the park, particularly for summer activities. Pricing competitiveness of the ski lift companies is influenced by the limited supply of ski facilities and relative high demand for these facilities. Some resorts, such as Selwyn snowfields, have positioned themselves as providers of low-cost family holidays, providing additional opportunities for an affordable snow holiday.

This results in high-cost, high-status luxury tourism opportunities centred around the resorts and other areas in winter, combined with affordable basic holiday options in and around the park, particularly in the summer, including camping trips and back-country walking and camping. The diversity of holiday costs, including the option of affordable holidays, is seen as a major asset for the region.

Kosciuszko National Park has a \$15 per day entry fee and an \$80 annual pass. These fees help the NPWS to maintain the extensive access system, utilities, customer service and facilities. Despite this input, and fees for utilities and services, tourism and recreation management within the park is subsidised by the NPWS.

Importance of affordability in the park

The affordability and diversity of costs of recreational and tourism opportunities within the park are important at the regional level.

Dependence on the park

The affordability of Kosciuszko National Park as a destination for visitors is influenced by a range of costs, including those directly associated with and dependent on the park. These include the cost of park entry. Most park facilities are free, except for entrance to Yarrangobilly Caves and the use of accommodation at Currango Homestead.

Table 15.12 Condition and trend in condition for affordability tourism and recreational activities in Kosciuszko National Park

	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Affordability	Competition for the provision of services and facilities for visitors is effective.			■	□				■		
	Demand and supply is carefully managed, consistent with the sustainable limits of visitor use established for recreation settings for Kosciuszko National Park.				■				■		

■ Overall status for tourism and recreation for Kosciuszko National Park □ Relates to components of tourism and recreation for Kosciuszko National Park

Costs associated with the use of commercial facilities in the park are independent of the park, but are influenced by park use fees, rents and charges for the provision of municipal services administered by NPWS.

Condition and trend in condition for affordability

Table 15.12 describes the condition and trend in condition of affordability.

Pressures

Pressures include the high cost of maintaining tourism and recreation facilities and services within the park; limits on the budget for NPWS, restricting the capacity to provide the most appropriate facilities (social and environmental); pressures on NPWS to limit the cost of entry fees and to provide more efficient ways of collecting fees at peak times; and increasing costs of winter skiing, including lift tickets and accommodation (TSM 2001).

Knowledge gaps

Knowledge gaps include detailed information on the actual cost of providing services and facilities for tourism and recreation opportunities provided by the NPWS.

Opportunities

Opportunities include recognition of the actual costs borne in the provision of tourism and recreational opportunities by NPWS, the local community and the tourism industry; the continued provision of low-cost tourism and recreation opportunities in summer, including family camping and back-country walking and camping options as part of the recreational opportunity spectrum (where environmentally appropriate); the provision of additional facilities that enhance visitors' experience of the park and their understanding of how the entrance fee is spent; and options for the collection of entry fees to the park to reduce congestion during peak periods at entry gates.

Attribute 10: regional recreation opportunities

Surrounding regional towns, such as Adaminaby, Batlow, Bombala, Jindabyne, Khancoban, Talbingo, and Tumut, provide recreation services and recreation opportunities (TSM 2001). These, together with the diversity of tourism and recreation opportunities within the park, increase the attraction of the region for tourists (TSM 2001). Lands outside the park with a different status from the park provide complementary recreational opportunity settings.

Public lands managed by forestry provide recreation opportunities. Some freehold lands with natural settings provide opportunities for horse riding and other activities. If we review this even further afield, the pattern of land use reflects essentially cleared lands, with other protected areas providing protection to the remaining natural lands around the park, and some state forests. In south-eastern Australia, there are few options for natural land tourism and recreation outside the public land system. This reinforces the need to carefully manage the tourism and recreation values of the park.

The road approaches to the park are also important as a tourism and recreation setting. The eastern approaches to the park are under pressure from small subdivisions, potentially leading to an urbanised strip near the approaches to the park. Cooperative planning with local governments can help to prevent this. Urbanised lands on the boundary of the park are not a satisfactory model.

Importance of recreation opportunities in the park's region

The region surrounding the park, when combined with the park, is very important and of national significance.

Dependence on the park

The region complements the park. There is interdependency.

Condition and trend in condition

Major improvements for a cooperative and integrated approach to tourism management for regions surrounding the park (the Greater Snowy Mountains Region) and the park itself are considered essential for the improvement of tourism and recreation values of the area (SGS 2001). Also, continued active involvement in the Australian Alps Liaison Committee will facilitate cooperative management of the Australian Alps national parks and provision of a diversity of recreation activities across these parks.

Table 15.13 describes the condition and trend in condition for regional recreational opportunities.

Pressures

Pressures include demands for more facilities in national parks (often reflecting a lack of understanding of the tourism and recreation values of the parks); increased tourism use, placing increased pressures on existing recreational opportunities; changes in land use in areas adjacent to the park (eg rural residential developments in the Thredbo Valley); and demand for more commercial opportunities in the park.

Knowledge gaps

Knowledge gaps include information about the diversity of recreation opportunities and visitor activities across the region and how the park contributes to these.

Table 15.13 Condition and trend in condition for recreation opportunities in the Kosciuszko National Park region

	Criteria for assessment of condition	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Regional tourism and recreation opportunities	Snowy Mountains regional tourism resources are managed in an integrated way ^a			■					■		
	More sophisticated tourism and recreation facilities and services such as golf courses, swimming pools, theme parks, vehicle based adventure sports, horse riding and other intensive impact sports are developed outside the park ^b			■					■		
	Opportunities to facilitate new markets such as the education based market are developed cooperatively ^c										

■ Overall status for the region; □ Relates to parts of the region

^a This evaluation relates to the greater area surrounding the park. It reflects that there is a greater opportunity for an integrated approach to managing the tourism and recreation values of the area.

^b This evaluation reflects that there is a greater opportunity for more sophisticated, urban style facilities for the greater region outside of the park.

^c This evaluation reflects that initiatives to develop the education market are only satisfactory.

Opportunities

Coordination and integration between the NPWS, local government and private tourism organisations should be further enhanced to develop a clear regional tourism strategy, fostering a diversity of tourism opportunities in the region within and external to the park. This would facilitate the marketing of the region as a distinctive destination. The NPWS can play a leadership role.

Summary of findings

Kosciuszko National Park has nationally significant tourism and recreation values. These national values are underpinned by 10 key attributes. In this chapter, we have evaluated these attributes relative to their condition and trend in condition and the pressures to which they are exposed. Here, we present some findings.

Natural attraction

- The natural quality of Kosciuszko National Park is the most important attribute underpinning the tourism and recreation value of the park: and

- The importance of this attribute will increase with time as the area of natural lands and the availability of recreation opportunities in natural lands outside protected areas decrease.

Cultural attraction

- The cultural heritage of Kosciuszko National Park is a very important attribute underpinning the tourism and recreation value of the park.

Education

- Educational opportunities within Kosciuszko National Park are an important attribute underpinning the tourism and recreation value; and
- There is potential for education to be more important as a market niche for tourism and recreation services in the future.

Diversity of tourism and recreation opportunities

- The diversity of recreation opportunity settings is a very important attribute underpinning the tourism and recreation value of Kosciuszko National Park.
- Recreation opportunity settings appropriate to the tourism and recreation value of Kosciuszko National Park include:
 - large, remote and unmodified settings;
 - remote areas with minor facilities;
 - natural areas providing motorised access and basic visitor facilities;
 - areas of relative naturalness with recreation facilities evident and all-weather motor access; and
 - major visitor facility areas such as ski facilities, picnic areas, camping grounds, information centres and car parks.
- Maintenance of the diversity of recreation opportunity settings requires active management, including:
 - planning and identification of recreation opportunity settings for the park;
 - maintaining an absence of facilities and non-natural disturbance in the lands most vulnerable to change, the large natural areas; and
 - diligence, quality planning and quality managerial systems to ensure that the visitor services and facilities provided for a recreation opportunity setting (if any) are appropriate.
- The diversity of tourism and recreation activities which that the recreation opportunity settings host is a very important attribute underpinning the tourism and recreation value of Kosciuszko National Park;
- Recreation activities in the context of the national park require constant management to maintain the tourism and recreation value of Kosciuszko National Park, including:
 - the management of activity impacts, including habitat disturbance, soil disturbance, water quality, noise quality, air quality and impacts on opportunities for quiet solitude;
 - the management of activities suitable for a national park recreation opportunity setting; and
 - the diversity of the potential tourism and recreation experiences.

- Tourism and recreation experiences require constant management to maintain the tourism and recreation value of Kosciuszko National Park, including:
 - planning for tourism recreation, including establishing visitor use limits for destinations and active supply and demand management within such limits;
 - active management to minimise and prevent inter-activity social conflict; and
 - active management to prevent overcrowding.

Access to Kosciuszko National Park

- Access to Kosciuszko National Park is a very important attribute underpinning the tourism and recreation value of the park.

Access within Kosciuszko National Park

- Access within Kosciuszko National Park is a very important attribute underpinning the tourism and recreation value of the park; and
- There is a comprehensive and adequate vehicle-based access system for recreation opportunity settings for the park.

Services and facilities

- The diversity of tourism and recreation services and facilities suitable for a national park is a very important attribute underpinning the tourism and recreation value of the park;
- Urbanised facilities are in conflict with the most important tourism and recreation value of Kosciuszko National Park, its natural qualities;
- Urban facilities that service alpine skiing, such as access, car parks, food and shelter, ski lifts and utility and safety support services, are necessary to underpin alpine skiing recreation opportunities within designated areas of the park. For alpine skiing areas, it is critical that the natural qualities of the park are protected;
- Urban-style tourism and recreation facilities such as accommodation, golf courses, tennis courts, swimming pools and theme parks within the park are unnecessary to underpin alpine skiing recreation opportunities within the park. They are inconsistent with the principal tourism and recreation attribute of the park; and
- Services and facilities within Kosciuszko National Park need to be actively managed and require attention to:
 - the suitability of services and facilities for recreation opportunity settings; and
 - competent facility maintenance and service delivery.

Impacts of use

- Tourism and recreational use of Kosciuszko National Park need to be actively managed so that it is not a threat to the tourism and recreation value of the park; and
- There should be cutting edge management of the park for sustainable use, including:
 - individualised accountability for environmental performance for companies, communities and authorities operating within the park;
 - strategic and quantified environmental performance improvements established against global environmental issues as well as specific Kosciuszko National Park environmental issues; and
 - recognition of visitor use limits and frequency of use limits by informed policy for sites or areas within the park.

Affordability

- The affordability of tourism and recreation services provided in support of activities within the national park is an important attribute underpinning the tourism and recreation value of Kosciuszko National Park.

Regional recreation opportunity settings

- The diversity of tourism and recreation services and facilities within the Greater Snowy Mountains Region is a very important attribute underpinning the tourism and recreation value of Kosciuszko National Park.

A joint workshop between representatives of the Independent Scientific Committee and the Kosciuszko National Park Plan of Management Community Forum, held on 5 September 2002, generated Table 15.14 to summarise the condition and trend in condition of the ten tourism and recreation attributes considered in this chapter. The condition and trend in condition are considered indicative, not definitive.

Opportunities

The following advice, based on the key findings of this report, is provided to the NPWS for managing the tourism and recreation values of Kosciuszko National Park. It provides suggestions for managing Kosciuszko National Park for tourism and recreation values.

Management of the tourism and recreation values of Kosciuszko National Park needs to be planned. Outcomes for such a strategic plan should include:

- the NPWS achieving a capacity and competency to proactively manage for tourism and recreation values and sustainable use;
- the conservation and protection of the most important tourism and recreation attribute, the natural intrinsic qualities of the park;
- the professional management of other attributes which underpin the tourism and recreation values;
- identification of the nature and spatial arrangement of recreation opportunity settings for the park;
- the definition of a sustainable tourism and recreation operational framework for the park in the context of global and local criteria;
- active management for sustainable tourism and recreation, including supply and demand management and the addressing of unacceptable impacts of use;
- active management of the ramifications of global warming and reducing snow cover with time, especially lease management;
- the establishment of policy 'limits of use' figures for destinations to achieve sustainable use, including the summit of Mount Kosciuszko;
- the introduction of a quantified environmental performance management system which underpins sustainable tourism and recreation management, especially for leases and licenses;
- the introduction of quantified environmental improvement targets for tourism and recreation for the park with a performance monitoring system; and
- working with the community and the tourism and recreation industry at a park and regional scale to manage for tourism and recreation values.

Table 15.14 Evaluation of the condition and trend in condition of ten tourism and recreation attributes of Kosciuszko National Park.

Attribute	Category	Condition					Trend in condition				
		Excellent	Very good	Satisfactory	Poor	Very poor	Improving generally	Improving slightly	No net change	Declining in some areas	Widespread decline
Natural	Mount Kosciuszko				■			■		□	
	Snow		■						■		
	Valleys				□					■	
Cultural	Kiandra					■			■		
	Snowy		■						■		
	Aboriginal					■			■		
	Huts		■						■		
	Mining/grazing			■					■		
Education					■				■		
Diversity			■					■			
Activities			■					■			
Facilities	Ski resorts		■					■			
	Other				■					■	
Access	Mass transport				■				■		
	Road			■					■		
Scarcity			■							■	
Costs				■					■		
Regional opportunities				■					■		

■ Strong correlation with the level of condition or trend in condition status; □ Some correlation with the level of condition or trend of condition.

Note: Concepts such as 'condition' and 'trend in condition' can mean many things and apply to the attributes in many ways. For the purposes of this planning exercise and the workshop which derived this table, these terms have been generally used to refer to the principal components of the attribute determined as being significant (eg. for natural values, the summit of Mount Kosciuszko) and an interpretation of the condition status of those attributes. The trend in condition simply refers to whether the attribute condition is static, improving or declining in its condition.

Such a strategic plan should be developed in consultation with the local community, particularly in regard to the development of policy decisions for visitor use limits for destinations and environmental performance management baseline standards for the park.

Strategic policy for urban facilities

The policy enunciated in the 1982 Kosciuszko National Park Plan of Management that 'no further accommodation within Kosciuszko National Park be provided once the planning limits are reached' should be supported. It is unnecessary to provide further urban facilities that do not provide immediate service for skiers. It is detrimental to the tourism and recreation value of the park.

If recent legal requirements prevail for Perisher Valley, so that its urban expansion is an exception, it is recommended that there be a requirement for any new urban facilities to have no detrimental impact on the natural attraction attributes of the park, in perpetuity, as demonstrated by annual environmental management performance monitoring systems and minimum environmental standards of management.

Global warming and a reduction in snow cover will increase the importance of the summer viability of the ski resorts as destinations. There will be an advocacy for urban-style attractions. The tourism and recreation industry and the NPWS need to work together to achieve economic viability for destinations within the park based on the sustainable use of natural attractions within the park

Sustainable use: strategic environmental management performance

Tourism and recreation management performance and monitoring indicators should target global and local environmental improvement performance outcomes. Companies, communities and authorities which individually implement environmentally sustainable management practices are advised to target the most important global and local environmental issues.

Environmental management performance areas recognised internationally include energy use reduction; green house gases reduction; the achievement of solid waste reduction; liquid waste reduction and disposal standards; potable water use reduction; hazardous waste management; local employment; noise reduction; biodiversity conservation; and supplementary indicators (these may be chosen to suit Kosciuszko).

Environmental management performance baseline standards should be developed for the park against these criteria. Monitoring of the acceptability of environmental performance for individual organisations would then be against these standards.

Strategic information and research

Improvements in information availability are required to adequately manage for tourism and recreation values. There is a need for information for the establishment and management of baseline environmental management performance; data for supply and demand management, including visitor use numbers, visitor use by market segments (survey information), demand forecasts for market segments, and supply limits for recreation opportunities (tourism resource management information); visitor experience information; visitor impact information; economics of visitor use information; and visitor facilities and services information.

Strategic research and adaptive management

An active research program focusing on the key tourism and recreation issues facing Kosciuszko National Park is critical. Management mechanisms for determining research priorities and mechanisms for implementing the results of research in an adaptive manner are considered important.

Leadership in regional sustainable tourism management

There is a need for a leadership role in working at a landscape scale with tourism and recreation management. This would be in close cooperation with Planning NSW for the ski resorts, local authorities for regional tourism management, the Australian Alps Liaison Committee for whole of alps approaches, and with the NSW tourism industry. This will help achieve sustainable tourism and recreation outcomes for Kosciuszko National Park.

Summary

The tourism and recreational value of Kosciuszko National Park has been assessed as significant at a national level. The tourism and recreational value of an opportunity setting has been defined as a function of the perceived ability of that opportunity to provide certain activities and experiences. This chapter identifies 10 attributes that underpin tourism and recreational values for Kosciuszko National Park. They have been evaluated and are found to be in a varied condition and subject to various pressures. To manage for the tourism and recreation values of the park, active, competent management of tourism and recreation is advised at a park and regional level, supported by an approach to management that focuses on strategic planning and an environmental performance outcome. This chapter suggests the introduction of new approaches to tourism and recreation management, including sustainable use management, limits of use management, environmental performance management and individual company, community and authority accountability for environmental performance outcomes. As a basis for protecting the tourism and recreation values of the park, the chapter advises environmental performance accountability and monitoring against global, Agenda 21 and triple bottom line based criteria as well as park-specific criteria.

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References

- AALC (Australian Alps Liaison Committee) (2000). *Australian Alps Best Practice Human Waste Management Workshop Papers and Presentations*. Australian Alps Liaison Committee, Canberra.
- APEC–PATA (Asia Pacific Economic Co-operation – Pacific Asia Travel Association) 2001. *Code for Sustainable Tourism 2001*. APEC–PATA, Seoul.
- Arkle P (2000). Tourism in the summit area of Mount Kosciuszko: an assessment of tourist interaction and impact. Honours thesis, Department of Geography, Australian National University, Canberra.
- Beeton RJS (1989). Tourism and protected areas. In: Bakson P, Nyman S and Sheppard D (eds), *National Parks and Tourism*, New South Wales National Parks and Wildlife Service, Sydney, 33–49.
- Buckley RC, Pickering CM and Warnken J (2000). Environmental management for alpine tourism and resorts in Australia. In: Goode PM, Price MF and Zimmermann FM (eds), *Tourism and Development in Mountain Regions*, CABI Publishing, New York, 27–46.
- BTR (Bureau of Tourism Research) (2002). *National Visitor Survey, Year Ending December 2001*. Bureau of Tourism Research, Canberra.
- Canadian Parks/Recreation Association (1997). *Benefits Catalogue*. Canadian Parks/Recreation Association, Ontario, Canada.
- Clarke RN. and Stankey GH (1979). *The Recreation Opportunity Spectrum: A Framework for Planning, Management and Research*. United States Department of Agriculture, Forest Service, General Technical Report PNW–98.
- Cullen P, Norris R and Thurtell L (1992). Management of water quality in the Australian Alps. In: Good R (ed), *The Australian Alps*. Revue de Géographie Alpine, Grenoble, 425–450.
- De Lacy T, Battig M, Moore S and Noakes S (2002). *Public–Private Partnerships for Sustainable Tourism*. Asia Pacific Economic Cooperation, APEC Tourism Working Group. CRC for Sustainable Tourism, Griffith University, Gold Coast.
- Eagles PFJ, McCool SF and Haynes C (2002). *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*. Best Practice Protected Area Guidelines Services No. 8. World Commission on Protected Areas, IUCN (The World Conservation Union), Cambridge.
- Gare N (1992). Recreation and the Australian Alps; the Kosciuszko story. In: Scougall B (ed), *Cultural Heritage of the Australian Alps*. Proceedings of the symposium at Jindabyne, New South Wales, 16–18 October 1991. Australian Alps Liaison Committee, Canberra, 317–326.
- Good RB (1992). *Kosciusko Heritage*. New South Wales National Parks Service, Sydney.
- Good RB (1995). Ecologically sustainable development in the Australian Alps. *Mountain Research and Development* 15:251–258.
- Green K (1998). *Snow — A Natural History: An Uncertain Future*. Australian Alps Liaison Committee, Canberra.
- Grenier P (1992). Skiing in the Australian Alps: development and conflict. In: Good R (ed), *The Australian Alps*, Revue de Géographie Alpine, Grenoble, 227–278.
- Hueneke K (1982). *Huts of the High Country*. Tabletop Press, Canberra.
- Hueneke K (1987). *Kiandra to Kosciusko*. Tabletop Press, Canberra.
- ITR (Department of Industry, Tourism and Resources) (2002). *The 10 Year Plan for Tourism: A Discussion Paper*. Department of Industry, Tourism and Resources, Commonwealth Government, Canberra.
- Johnston FM and Pickering CM (2001). Alien plants in the Australian Alps. *Mountain Research and Development* 21(3):284–291.

- Johnston SW and Pickering CM (2001). Visitor monitoring and social expectations for track planning: a case study of the Kosciuszko alpine area. Proceedings of the Mountain Walking Track Management Conference, March 2001. Australian Alps Liaison Committee, Canberra, 167–172.
- KSPT (Kosciusko State Park Trust) (1960). *Kosciusko State Park NSW*. Kosciusko State Park Trust, Cooma.
- Mackay J and Virtanen S (2001). *Australian Alps Recreation Strategy*. Australian Alps Liaison Committee, Canberra.
- McMaster K (2000). Interpretation for summer recreation in the Kosciuszko Alpine Area. Honours thesis, Department of Geography, School of Environmental Management, Australian National University, Canberra.
- Mosley JG (1992). The Australian Alps: a potential world heritage. In: Good R and Grenier P (eds) *The Australian Alps*. Revue de Géographie Alpine, Institut de Géographie Alpine, Grenoble, 531–546.
- Newsome D, Moore SA and Dowling RK (2002). *Natural Area Tourism: Ecology, Impacts and Management*. Channel View Publications, Sydney.
- NPWS (National Parks and Wildlife Service) (1982). *Kosciuszko National Park, Plan of Management*. NSW National Parks and Wildlife Service, Sydney.
- NPWS (National Parks and Wildlife Service) (1991) *The North End, Kosciuszko National Park Visitor Information*. NSW National Parks and Wildlife Service, Sydney.
- NPWS (National Parks and Wildlife Service) (2000). *Kosciuszko National Park, Plan of Management. Consolidated Version*. NSW National Parks and Wildlife Service, Sydney.
- NPWS (National Parks and Wildlife Service) (2001a). *New South Wales National Parks and Wildlife Service 2001 Annual Report*. New South Wales National Parks and Wildlife Service, Sydney.
- NPWS (National Parks and Wildlife Service) (2001b). NSW NPWS Visitor Use Charter. Draft unpublished report. NSW National Parks and Wildlife Service, Sydney.
- NPWS (National Parks and Wildlife Service) (2002) *Recreation Planning Framework for NSW National Parks*. NSW National Parks and Wildlife Service, Sydney.
- Pickering CM. and Hill W (in press). Ecological change as a result of tourism: snow manipulation in the Australian Alps. In: Buckley R, Weaver D and Pickering CM (eds), *Nature Tourism and the Environment*. CABI, London.
- Pickering CM, Johnston S, Green K and Enders G (in press). People on the roof: impacts of tourism on the alpine area of Mount Kosciuszko. In: Buckley R, Weaver D and Pickering CM (eds), *Nature Tourism and the Environment*. CABI, London.
- Queensland Government (1997). *Queensland Ecotourism Plan*. Department of Tourism, Small Business and Industry, Queensland.
- Ryan C (1991). *Recreational Tourism: A Social Science Perspective*. Routledge, London.
- Scherrer P and Pickering CM (2001). Effects of grazing, tourism and climate change on the alpine vegetation of Kosciuszko National Park. *Victorian Naturalist* 118:93–99.
- SGS Economics and Planning (2001). Situation analysis for the alpine region settlement strategy: working paper #2. Unpublished paper, SGS Economics and Planning, November 2001, Jindabyne.
- TNSW (Tourism New South Wales) (2002). *Snowy Mountains Region Tourism Profile, Year End June 2001*. Tourism New South Wales, Sydney.
- TSM (Tourism Snowy Mountains) (2001). *Snowy Mountains Regional Tourism Plan 2001–2004*. Stafford Group, Woollahra.
- UNEP (United Nations Environment Programme) (2002). *Global Environment Outlook 3*. UNEP, Earthscan Publications, London.

- Virtanen S (1993). *Toward Conservation and Recreation Management of Kosciuszko Alpine Area*. New South Wales National Parks and Wildlife Service, Jindabyne.
- Weaver D (2001). *Ecotourism*. John Wiley and Sons, Sydney.
- Weaver D and Opperman M (2000). *Tourism Management*. John Wiley and Sons, Sydney.
- Hetton P (1998). Climate change impacts on the spatial extent of snow-cover in the Australian Alps. In: Green K (ed), *Snow — A Natural History: An Uncertain Future*. Australian Alps Liaison Committee, Canberra, 195–206.
- Whetton PH, Haylock MR, Galloway RW (1996). Climate change and snow cover duration in the Australian Alps. *Climate Change* 32:447–479.
- Worboys GL (1978). *The Mount Kosciuszko Outstanding Natural Area Plan of Management*. New South Wales National Parks and Wildlife Service, Jindabyne.
- Worboys GL (1997). *Draft Nature Tourism and Recreation Strategy*. NSW National Parks and Wildlife Service, Sydney.
- Worboys GL and Pickering CM (2002). *Managing the Kosciuszko Alpine Area: Conservation milestones and future challenges*. Mountain Tourism Research Report No. 2, Cooperative Research Centre for Sustainable Tourism, Griffith University.
- Worboys GL, Lockwood M and De Lacy T (2001). *Protected Area Management: Principles and Practice*. Oxford University Press, London.
- Worthington and Di Marzio Pty Ltd (1999) *The Australian Alps Benchmark Awareness and Satisfaction Research*. Australian Alps Liaison Committee, Canberra.
- WTO (World Tourism Organisation) (1999) World Tourism Organisation Global Code of Ethics.
<www.world-tourism.org/projects/ethics/ethics.html>
- WTTC (World Tourism and Travel Council), WTO (World Tourism Organisation) and Earth Council (1996). *Agenda 21 for the Travel and Tourism Industry Towards Environmentally Sustainable Development*. WTTC, London.

