Te Wahipounamu - South West New Zealand

SITE INFORMATION

Country:
New Zealand
Inscribed in: 1986
Criteria:
(vii) (viii) (ix) (x)

Site description:

The landscape in this park, situated in south-west New Zealand, has been shaped by successive glaciations into fjords, rocky coasts, towering cliffs, lakes and waterfalls. Two-thirds of the park is covered with southern beech and podocarps, some of which are over 800 years old. The kea, the only alpine parrot in the world, lives in the park, as does the rare and endangered takahe, a large flightless bird.

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SUMMARY

2014 Conservation Outlook

Good with some concerns

The conservation outlook of the property can be assessed as of moderate concern. The full range of World Heritage natural values enjoys effective protection and professional management attention under a strict legal regime and a comprehensive system of management strategies and plans that is widely consulted with the public and all key stakeholders and is legally binding on all authorities including the Government. The institutional basis of management is strong and highly professional. However, the threats to the property’s natural values and attributes, especially from the impacts of invasive species, have not been fully addressed due to insufficient resourcing of the Department of Conservation, especially in the urgent need to control invasive pests throughout the remote mountainous majority of the site. Unless this is done, the long-term prognosis for the more vulnerable components of the indigenous biota is unfavourable.

Current state and trend of VALUES

Low Concern
Trend: Stable

The property protects outstanding natural values and attributes under all four natural World Heritage criteria. Scenery and aesthetic values within the huge expanse of wilderness that characterizes the property are largely intact apart from some localized impacts of tourist facilities and infrastructure. Geological and landform values are inherently robust and resistant to human disturbance, though the effects of atmospheric warming are readily apparent in the marked reduction of ice fields and glaciers. Indigenous plant life and birds are locally severely impacted by invasive introduced species of browsing and predatory animals, and there are some problem weed plants, and current controls are only adequate in parts of the property to limit their spread and influence. Some biota, including ancient, endemic and unique species, have gone extinct while others
are endangered as a result of both direct and indirect human impacts and their survival requires constant vigilance and carefully considered, science based management intervention.

**Overall THREATS**

**Low Threat**

Threats to the natural values of the property range from high to very low. The greatest threat, presenting a major management challenge, is from the severe impacts of invasive browsing and predatory animals on indigenous vegetation and wildlife, particularly birds. Current programmes for monitoring and control, aimed at avoiding new incursions and eradicating or controlling invasive species, are effective across key habitats, but are only being applied in localized parts of the property. Throughout the rest of the property, it is not possible under current budgetary restrictions and little is being done to restrict the severity and extent of ecological impacts from invasive pests. Low levels of threat are associated with the growing demand for tourism facilities development, including new road and rail corridors, and the potential effects of climate change on vegetation distribution, habitat fragmentation, alien species invasion, and an already marked reduction in the volume of permanent ice. Hazards from high-magnitude natural events threaten property and public safety, in particular, but are reduced by management intervention.

**Overall PROTECTION and MANAGEMENT**

**Effective**

Overall, protection and management of the property can be assessed as effective. About two thirds of the property is strictly protected (as national park or reserve) in perpetuity under national legal statutes; however, the remaining third has a much lower level of protection as ‘stewardship land’. Protection policies, regulations and management intervention are guided by a comprehensive system of management strategies and plans developed through wide public consultation and binding on all authorities including the Crown. The property is administered by the country’s principal conservation agency but currently is not sufficiently staffed and financed to cope with current demands. Principal threats to natural values are well recognized and are subject to management intervention where and when staffing and budgets allow.
FULL ASSESSMENT

Description of values

Values

World Heritage values

▶ A vast primeval wilderness of mountains and fiords of outstanding scenic beauty.
   Criterion:(vii)

The property contains many of the natural features that contribute to New Zealand’s international reputation for superlative landscapes: its highest mountains, longest glaciers, tallest forests, wildest rivers and gorges, most rugged coastlines, and deepest fiords and lakes. The temperate rainforests of the property are unmatched in their composition, extent and intactness by any such forests elsewhere in the world. Only traces of human influence are evident, mainly in peripheral areas (NZ Government,1990; 2003).

▶ Many classic examples of the tectonic and glacial features and processes that have shaped the earth.
   Criterion:(viii)

The property is considered as the best modern representation of the primitive taxa of Gondwanaland. The breakup of this southern supercontinent and New Zealand’s long isolation since is considered to be among the most important events in the earth’s evolutionary history. It enabled the survival of ancient Gondwanan biota to a greater degree here than elsewhere, living representatives of which include flightless kiwis, carnivorous land snails, and 14 species of podocarp and genera of beech. The Great Alpine Fault that bisects the region marks the collision between the Indo-Australian and Pacific tectonic plates resulting in the massive up
thrust of the Southern Alps that rise to nearly 4,000m within 30km of the ocean. The property presents remarkable evidence of the impact of Pleistocene glaciations. Spectacular landforms include: 15 fiords carved from plutonic igneous rock; a series of large lake-filled troughs; classic erosion features such as U-shaped and hanging valleys, cirques, and ice-shorn spurs; chronological sequences of moraines and outwash gravels from valley and piedmont glaciers extending to the sea; and the Franz Josef and Fox glaciers which descend into temperate rainforest. Complementing the glacial landforms is a sequence of 13 marine terraces progressively uplifted more than 1000m over the past 1 million years (NZ Government, 1990; 2003).

► The largest and least modified expanse of New Zealand’s natural ecosystems.
Criterion: (ix)

Temperate rainforest, alpine and freshwater ecosystems are all well represented over an extensive array of landforms and across wide climatic and altitudinal gradients. Notable examples of on-going biological processes occur in the large expanses of temperate rainforest, plant succession following glacial retreat, soil/plant chronosequences on beach ridges, plant succession on alluvial terraces, vegetation gradients around the margins of glacial lakes and ecotypic differentiation of plants on ultramafic soils. The extensive and little-modified freshwater habitats, the impressive diversity of alpine ecosystems, extensive alpine plant endemism, and on-going evolution associated with long-standing geographical isolation of animal populations, such as the kiwi taxa, are further examples of on-going biological development (NZ Government, 1990; 2003).

► Unique biota in a relatively pristine state.
Criterion: (x)

The habitats of Te Wahipounamu contain an extensive range of New Zealand’s unusual endemic fauna, which reflects a long evolutionary isolation and the absence of mammalian predators. The property contains the entire wild population of the rare and endangered takahē Notornis mantelli; the entire population of the South Island subspecies of brown kiwi Apteryx australis; New Zealand’s rarest Kiwi, the rowi Apteryx rowi; the only significant remaining populations of the seriously declining
mohua/yellowhead Mohoua ochrocephala; the only large populations remaining of käkä and käkärika/yellow-crowned parakeet; and the only remaining population of pateke/Fiordland brown teal in the South Island. The world's rarest and heaviest parrot, käkäpö Strigops habroptilus, survived in Fiordland until the early 1980s. It is now thought to be extinct on the mainland and its survival depends on careful management of a limited number of offshore island populations, including two within Fiordland National Park. Within nearly 2 million hectares of primary rainforest are the best examples in the Southern Hemisphere of one of the most ancient groups of gymnosperms, the Podocarpaceae, ranging from densely packed 50m-high rimu to the world's smallest conifer, the prostrate pygmy pine (NZ Government, 1990; 2003).

Assessment information

Threats

Current Threats

Low Threat

Threats range from very low to high. The greatest threat is from the severe impacts of invasive browsing and predatory animals on indigenous vegetation and wildlife, particularly birds. Rigorous monitoring and control measures are in place in some critical areas of the property (Okarito Forest, Dart Forest, Waitutu Forest, etc), aimed at avoiding new incursions and eradicating or controlling invasive species. However, large remote mountainous areas are inaccessible to ground control, and a much greater use of aerial application of specific poisons targeting these pests is needed. Low levels of threat are associated with the already evident effects of climate change on vegetation patterns, habitat fragmentation and alien species invasion. Hazards from high-magnitude natural events threaten public safety in particular, but are reduced by management intervention.
Tourism/ visitors/ recreation

Low Threat
Inside site
Outside site


Invasive Non-Native/ Alien Species

High Threat
Inside site

Introduced alien browsing animals such as possums and deer, and predators such as rodents and mustelids, have caused major vegetation loss and resulted in localized extinctions, range reductions, and significant decline in the abundance of some indigenous biota. Control policies seek to prevent further incursions, and eradicate or control the range and impact of existing invasive species. On-going management intervention is currently insufficient to limit the extent of the threat for most of the property. Unless urgent measures are taken across the majority of the property which is currently not being actively managed for pest control, the long-term outlook for indigenous biodiversity is pessimistic (IUCN, 1990; NZ Government, 1990, 2003; UNEP/WCMC, 2011, PCE, 2011).

Temperature changes

Low Threat
Inside site

There is clear evidence of global warming from the marked reduction in permanent ice fields and glaciers. Under current temperature projections, it is predicted that up to 50% of the indigenous alpine species may become endangered or extinct by 2100 as a result of shrubland and forest encroachment, habitat fragmentation, alien species invasion and direct climate and weather events (IUCN, 1990; NZ Government, 1990, 2003; UNEP/WCMC, 2011).
Avalanches/ Landslides, Earthquakes/ Tsunamis

Very Low Threat
Inside site

The property is subject to low-frequency high-magnitude events such as earthquakes, snow avalanches, landslides and flooding. These have caused deaths and damage or loss of property. Safety planning and management intervention have focused on major tourist access routes and facilities, reducing the hazard considerably but vigilance and on-going controls are required (NZ Government, 1990, 2003; UNEP/WCMC, 2011).

Potential Threats

High Threat

Low levels of threat are associated with growing demand for tourism facilities development, including new road and rail corridors.

Tourism/ Recreation Areas

High Threat
Inside site
Outside site

There are two proposals for developing tourism transport facilities in the property - an 11 km single-lane road tunnel providing access to Milford Sound, and a 29 km monorail as part of a new multi-vehicle tourist route. Both proposals have engendered considerable public opposition as they do not conform to the respective national park management plans. Following environmental impact assessment and public consultation, the tunnel project has been rejected, while a decision is pending on the monorail. There is also the long-standing threat of a 60 km tourist road linking the Cascade valley with the Hollyford valley and Milford Road in Fiordland National Park, although this has not yet reached the stage of environmental impact planning.
Protection and management

Assessing Protection and Management

▶ Relationships with local people
Highly Effective

All key stakeholders, including the indigenous Ngai Tahu Maori people, support the property and its World Heritage status. Management strategies and plans are widely consulted with the public (NZ Government, 1990, 2003).

▶ Legal framework and enforcement
Some Concern

The property is protected in perpetuity under three major national legal statutes (Conservation Act 1987, National Parks Act 1980 and Reserves Act 1977), and the authorities have full enforcement rights over the land, essentially all of which is Crown-owned public land (NZ Government, 1990, 2003). However, one third of the property is stewardship land and the NZ Government has failed to assess the value of these areas and to upgrade their legal status where warranted (PCE, 2013).

▶ Integration into regional and national planning systems
Highly Effective

Plans for property management are fully integrated with local and regional plans for protection, use and sustainable conservation of natural resources (NZ Government, 1990, 2003).

▶ Management system
Highly Effective

Management effectiveness
Highly Effective

The property is protected by national law and managed by the principal central government conservation agency under statutory management strategies and plans (NZ Government, 1990, 2003).

Implementation of Committee decisions and recommendations
Highly Effective

The Committee expressed its satisfaction about management of aircraft use. The Committee welcomed the initiatives to bring the waters of the fiords under the control of the property and requested to be kept informed of any reconsideration of the withdrawn proposal to export fresh water. In 2005, eight marine reserves were created in the fiords and in 2008 the waters and seabed of the fiords were added to New Zealand’s tentative list of prospective WH properties (as an addition to Te Wahipounamu). The Committee endorsed the efforts to rehabilitate takaehe habitat and restore population numbers, and encouraged the State Party to implement the redevelopment plan for the Milford Area (10 COM.VIII). The Committee was informed of governmental approval for an application from a private company to export water from the World Heritage site, which would require the construction of a dam, a buried pipeline and four large reservoirs. The Committee noted that the visual and ecological impacts of the proposed development were not clearly known and that the legal and economic considerations which guided the decision to approve the project are being actively debated (16 COM.VIII). The State Party submitted a report outlining mitigation of threats from cattle grazing and the impact of potential logging operations in Maori-owned coastal forests immediately adjacent to the Park. The measures were acceptable (18 COM. IX). The Committee noted information provided by the State Party concerning accidental leakage of some 13,000 liters of diesel fuel into the headwaters of Milford Sound. The marine reserve appears not to have been adversely affected and there are no long-term threats. A clean-up operation has been completed with the support of the community (28 COM.15B.17). The State Party responded to a WH Centre request to report on proposals to construct a road tunnel and
monorail in the property (36 COM.).

▶ **Boundaries**

**Some Concern**

Boundaries of the property are well-defined and are consistent with boundaries of four national parks (covering 67% of the property) and some 40 other different protected areas within the property. The lack of inclusion within the property of the seabed and waters of the fiords is a significant deficiency. This is being addressed by placing this extension on NZ’s tentative list and thus can be addressed by a future nomination.


▶ **Sustainable finance**

**Effective**

The property has a budget from Crown grant and revenue from commercial concessions (NZ Government, 1990, 2003). The currently available budget is insufficient to control the full range of introduced pests eliminating the richness of biodiversity in the property.

▶ **Staff training and development**

**Effective**

There are well-qualified staff at all levels of administration and management and training opportunities are available (NZ Government, 1990, 2003). However, the major restructuring of the management agency, the Department of Conservation, in 2013 reduced the number (and knowledge) of staff managing the property (Confidential comment, 2013).

▶ **Sustainable use**

**Effective**

Fishing, including white baiting, animal grazing under short-term pastoral leases, small-scale placer gold mining in rivers and on beaches, sphagnum moss collection and traditional use of plants by Maori (NZ Government, 1990, 2003).
Education and interpretation programs
Highly Effective


Tourism and interpretation
Highly Effective

Interpretation is supported by nine visitor centres in national parks and a major World Heritage visitor centre at Haast (NZ Government, 1990, 2003).

Monitoring
Highly Effective

Monitoring programmes exist for biodiversity, endangered birds, pest animal numbers, tree canopy cover, vegetation condition, glacier ice volume, visitor numbers and aircraft over flights (NZ Government, 1990, 2003).

Research
Highly Effective

There is an extensive programme of on-going research, including good collaborative arrangements with national science agencies (NZ Government, 1990, 2003).

Overall assessment of protection and management
Effective

Overall, protection and management of the property can be assessed as effective. About two thirds of the property is strictly protected (as national park or reserve) in perpetuity under national legal statutes; however, the remaining third has a much lower level of protection as ‘stewardship land’. Protection policies, regulations and management intervention are guided by a comprehensive system of management strategies and plans developed through wide public consultation and binding on all authorities including the Crown. The property is administered by the country’s principal conservation agency but currently is not sufficiently staffed and financed to cope with
current demands. Principal threats to natural values are well recognized and are subject to management intervention where and when staffing and budgets allow.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site**

*Highly Effective*

The property is well-buffered from external influences, especially because of its remoteness and rugged alpine topography. The management agency has an excellent collaborative relationship with land and resource managers outside the property, which avoids conflict and enables any threats to be jointly addressed and eliminated.

**State and trend of values**

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**Assessing the current state and trend of values**

**World Heritage values**

▶ **A vast primeval wilderness of mountains and fiords of outstanding scenic beauty.**

*Good*

*Trend: Stable*

Scenic and aesthetic values and attributes are intact, apart from some localized intrusion for tourist facilities and services (NZ Government, 1990, 2003).

▶ **Many classic examples of the tectonic and glacial features and processes that have shaped the earth.**

*Good*

*Trend: Stable*

Geological and geomorphological features and processes are robust and resilient to change under human influences. There is some evidence of the effects of changing climate on icefields and glaciers (NZ Government, 1990,
The largest and least modified expanse of New Zealand’s natural ecosystems.
High Concern
Trend: Stable

The natural biodiversity and wildlife habitats are severely locally impacted by alien species of browsing and predatory animals and by some weed plants. Active monitoring and management intervention can contain these threats within reasonable limits, but only in key parts of the property (NZ Government, 1990, 2003; PCE, 2011).

Unique biota in a relatively pristine state.
High Concern
Trend: Stable

Ancient, unique, threatened and endangered biota are of international significance for science and conservation. The survival of some species within the property presents a major management challenge requiring constant vigilance, innovative management intervention, and improved budgets (NZ Government, 1990, 2003 PCE, 2011)

Summary of the Values

Assessment of the current state and trend of World Heritage values
Low Concern
Trend: Stable

The property protects outstanding natural values and attributes under all four natural World Heritage criteria. Scenery and aesthetic values within the huge expanse of wilderness that characterizes the property are largely intact apart from some localized impacts of tourist facilities and infrastructure. Geological and landform values are inherently robust and resistant to human disturbance, though the effects of atmospheric warming are readily apparent in the marked reduction of ice fields and glaciers. Indigenous plant life and birds are locally severely impacted by invasive introduced species of browsing and predatory animals, and there are some problem weed plants,
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Additional information

Key conservation issues

- Local

Benefits

Understanding Benefits

- Outdoor recreation and tourism

  The property is a major, internationally renowned destination for tourists seeking an outdoor recreation experience in a wilderness setting. It includes three of the country’s Great Walks. The property is the major landscape for non-commercial wilderness recreation by New Zealanders. There are many private tourist concessions providing employment and income for the benefit of local people and the community.

- Is the protected area valued for its nature conservation?

  The property protects 2.6 million hectares (10% of the country) of mountain wilderness terrain with huge expanses of alpine herbfields and grasslands, subalpine shrublands, rain forests and wildlife habitat, numerous lakes and the headwater catchments of countless rivers and streams.
➤ Wilderness and iconic features

The property is significant in the culture and traditions of the local Maori people, especially as a source of pounamu (nephrite jade), and of plant and animal products taken sustainably for traditional uses.

Summary of benefits

The property is a major landscape for a wide range of wilderness outdoor recreation, with many globally-renowned tourism opportunities. It protects a huge expanse of natural wilderness terrain and provides a wide range of environmental services such as headwater catchment conservation, and it protects areas of significance to the culture and traditional practices of local indigenous peoples.

Projects

Compilation of active conservation projects

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