

State of the Tasmanian Wilderness World Heritage Area

An evaluation of management effectiveness



Summary Report Report No. 1 2004



PARKS and WILDLIFE
SERVICE TASMANIA
DEPARTMENT
of TOURISM,
PARKS, HERITAGE
and the ARTS

State of the Tasmanian Wilderness World Heritage Area

—an evaluation of management effectiveness

Report No. 1 2004

Summary Report

Overview	9
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Key findings of the evaluation	10
--------------------------------	----

General management and arrangements	10
-------------------------------------	----

Identification and understanding of the natural and cultural heritage	11
---	----

Protection of the natural and cultural heritage	12
---	----

Conservation and rehabilitation of the natural and cultural heritage	14
--	----

Presentation of the natural and cultural heritage	16
---	----

Stakeholders' assessments of management performance	17
---	----

Conclusions and proposed actions	18
----------------------------------	----

An indication of the overall effectiveness of management	19
--	----

Proposed actions for enhancing management performance	20
---	----

How can this report help improve ongoing management?	31
--	----

Parks and Wildlife Service

(Department of Tourism, Parks, Heritage and the Arts)

in association with

Resource Management and Conservation Division (Department of Primary Industries,
Water and Environment), Tasmanian Heritage Office, and Aboriginal Heritage Office
(Department of Tourism, Parks, Heritage and the Arts)

Department of Tourism, Parks, Heritage and the Arts

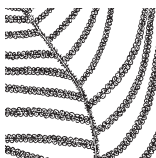
Hobart, Tasmania

**BOTANICAL
ILLUSTRATIONS:**

Leatherwood
Eucryphia lucida



**Alpine
coral-fern**
Gleichenia alpina



Fagus
*Nothofagus
gunnii*



Pencil pine
*Athrotaxis
cupressoides*



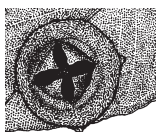
**Pineapple
grass**
Astelia alpina



Button grass
*Gymnoschoenus
sphaerocephalus*



Blue gum
*Eucalyptus
globulus*



King Billy pine
*Athrotaxis
selaginoides*



Orders and enquiries

Copies of the State of the Tasmanian Wilderness World Heritage Area Report and this Summary Report are available over-the-counter at *Service Tasmania* outlets in Tasmania or may be mail-ordered from the Parks and Wildlife Service at the address below. The report is available as a CD and can be downloaded free of charge from the Parks and Wildlife Service website at <www.parks.tas.gov.au>.

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Foreword

This first State of the Tasmanian Wilderness World Heritage Area Report is a landmark publication in the world of protected area management. It presents the findings of an evaluation of management effectiveness for the Tasmanian Wilderness World Heritage Area and documents the extent to which the management objectives were achieved under the first management plan.

While performance evaluation and reporting are widely recognised as fundamentals of best practice management systems, there are few, if any, examples of evidence-based reporting of the effectiveness of management for protected areas.

For most managing agencies, the development of a management plan is a significant achievement in itself. Few agencies audit the implementation of the management plan; and fewer still attempt to evaluate the effectiveness of management in achieving its objectives and desired outcomes. And yet evaluation is a critical step in recognising and correcting any departures from the desired outcomes of management.

This report marks the culmination of over 10 years of focus by the Parks and Wildlife Service to develop and establish a system of outcomes-based evaluation that is integrated into the management cycle for the Tasmanian Wilderness World Heritage Area.

With this report—and its underlying management evaluation system—Tasmania has achieved a world first in providing a structured and evidence-based account of how management of a World Heritage Area has performed against its management objectives and the obligations of the World Heritage Convention—to identify, protect, conserve, present, transmit to future generations and, if appropriate, rehabilitate the World Heritage values of the property.

This report is expected to contribute to management excellence for the Tasmanian Wilderness World Heritage Area by:

- guiding ongoing management directions and priorities for the Tasmanian Wilderness World Heritage Area to better achieve objectives and deliver desired outcomes;
- providing managers and other decision-makers with a sound information base to support adaptive management;
- providing transparency in management and providing all stakeholders with ready access to detailed accurate information about management matters;
- contributing to informed public involvement in management of the TWWHA.

Future editions of this report will regularly update the findings of evaluation.

With this report, I believe Tasmania has set a new benchmark for excellence in protected area management. I commend this report to everyone with an interest in the Tasmanian Wilderness World Heritage Area and to those worldwide who have responsibilities or interests in protected area management.

I believe all Tasmanians can feel justifiably proud of the growing number of world-leading initiatives that this smallest state of Australia is producing. The Tasmanian Government is committed to ensuring that Tasmania's national parks and World Heritage Areas are managed with excellence as world-class parks for Tasmanians and the world to visit and appreciate.



Director, National Parks and Wildlife, Rob Giason
Department of Tourism, Parks, Heritage and the Arts

What others have to say about this report

“ It has long been accepted that protected areas are essential in any National policy for biodiversity and landscape conservation. However until recently management of many such areas was oddly amateurish and did not do justice to the importance of the task of caring for heritage resources. Through its World Commission on Protected Areas (WCPA), IUCN advocates a much more rigorous approach in which managers are asked to be explicit about what they are aiming to do, and to measure their progress against these declared objectives. The approach is called assessing management effectiveness, and the response is called adaptive management.

The work on the assessment of management effectiveness pioneered in the Tasmanian Wilderness World Heritage Area represents a thorough professional review. Its significance lies not only in its relevance to the future management of the area itself, but also in its potential to offer lessons that other site managers could learn from. It is indeed an excellent piece of work that tries honestly to assess the quality of management and to identify what needs to be done to improve it. Congratulations to all concerned. ”

—Adrian Phillips,
Chair, World Commission on Protected Areas
(1994–2000)

“ The strong linkage between the evaluation process and the management plan for the area is a feature of this report and provides an excellent basis for assessing progress in management of this important World Heritage site. ”

—Dr Marc Hockings,
Vice-Chair (Management Effectiveness)
World Commission on Protected Areas

“ The development of the first management plan for the Tasmanian Wilderness World Heritage Area in 1992 and the completion of an evaluation of the effectiveness of that plan has immense value and significance for World Heritage management practice globally. The application of the World Heritage identity as an integrator of management practices across the multiple protected areas that make up the Tasmanian Wilderness World Heritage Area has significant lessons for countries that are grappling with how the World Heritage Convention can be used to conserve thematic or geographical protected area clusters. I am impressed with the work that has gone into this detailed and comprehensive report. Congratulations and well done! ”

—Dr. Natarajan Ishwaran,
Chief, Natural Heritage Section,
UNESCO World Heritage Centre

“ This rigorous, complete and totally honest evaluation of the implementation of the first Tasmanian Wilderness World Heritage Area Management Plan is to be highly commended. The scientific content is appropriate and accurate, and should inform future decision-making in relation to the many critical management issues covered by the second plan. ”

—Professor Jamie Kirkpatrick,
School of Geography,
University of Tasmania

“ Evaluation is not a widely practised art among conservation managers and the work done on evaluative methods and processes in Tasmania has broken new ground and set global benchmarks. This report is a very useful tool in Australia’s ongoing stewardship of this significant World Heritage site. ”

—Bryce McNair,
Chairperson,
World Heritage Area
Consultative Committee



Locality map, Tasmanian Wilderness World Heritage Area

The Tasmanian Wilderness World Heritage Area in southwest Tasmania protects one of the last great temperate wilderness regions in the world. It is one of the largest conservation reserves in Australia and comprises approximately 1.38 million hectares (about 3.41 million acres), which represents about 20% of the island state of Tasmania. The area is characterised by vast tracts of high quality wilderness, which harbours a wealth of globally significant natural and cultural heritage. The area includes the national parks of Cradle Mountain–Lake St Clair, Franklin–Gordon Wild Rivers, Southwest, Walls of Jerusalem, and Hartz Mountains, as well as the Central Plateau Conservation Area.



Overview

This is a summary of the first State of the Tasmanian Wilderness World Heritage Area Report.

Publication of this report marks a significant step in making management of the Tasmanian Wilderness World Heritage Area (TWWHA) more open, informed, and accountable.

The main purposes of the report are:

1. to provide a structured, evidence-based account of how management of the TWWHA is performing in achieving its management objectives and obligations under the World Heritage Convention—to identify, protect, conserve, present, transmit to future generations and, if appropriate, rehabilitate the World Heritage values of the property;
2. to provide informed feedback that guides management to better achieve objectives and deliver desired outcomes; and
3. to increase the transparency of management for the TWWHA.

The focus of this evaluation is on management effectiveness over the decade since the first statutory management plan for the TWWHA was approved in 1992. This evaluation establishes the methodology for evaluating management effectiveness for the TWWHA, allows the progress in management to date to be examined, and provides a sound reference set of data against which management effectiveness under the 1999 and subsequent management plans can be evaluated in future.

The main inputs to this evaluation were:

- scientific data and other measured evidence about performance indicators (especially in relation to the management objectives for protecting, conserving and rehabilitating the natural and cultural heritage);
- information and professional advice from experts (especially natural and cultural heritage specialists);
- the views of the general public and on-site visitors (especially in relation to the management objectives for presenting the natural and cultural heritage); and
- assessments and critical comment on management performance by internal and external stakeholders closely associated with management of the TWWHA.

This report presents evidence of management effectiveness against the objectives, and also includes key stakeholders' assessments of management performance. The report concludes with an overall indication of management effectiveness under the 1992 management plan and identifies opportunities for enhancing management performance. Actions are proposed to address the identified opportunities for improving management.

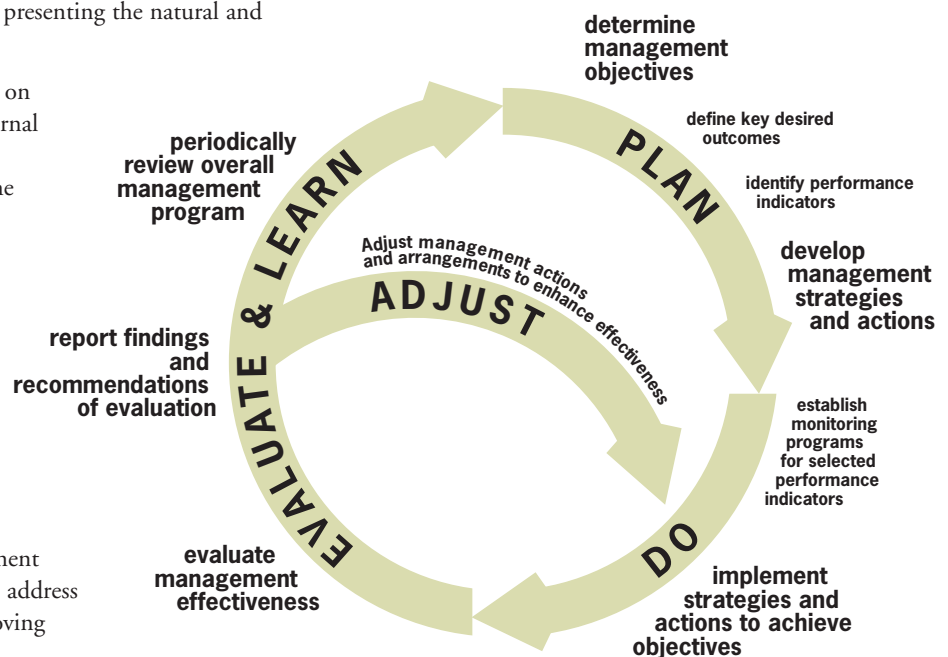
The preparation of regular State of the TWWHA

Reports is an integral component of the overall adaptive management system that has been developed for the TWWHA. This system, which operates through the management plan and linked State of the TWWHA Reports, facilitates the recognition of areas of management strength and weakness, and provides a sound basis for guiding continuous improvement in management.

The management cycle developed for the Tasmanian Wilderness World Heritage Area, with integrated evaluation and adaptive management

The integration of performance monitoring, evaluation and reporting into the cycle of management for the Tasmanian Wilderness World Heritage Area generates informed feedback that enables managers to learn from and improve on past management approaches and so progressively improve management effectiveness.

Source: Jones, G, in press, 'Is the management plan achieving its objectives?' In Worboys, G, Lockwood, M & De Lacy, T, *Protected Area Management. Principles and Practice*, second edition, Oxford University Press. Available on the Parks and Wildlife Service website at: <www.parks.tas.gov.au> under Publications.



Key findings of the evaluation

The key findings of this evaluation are presented below in an order reflecting the chapter structure of the Full Report.

GENERAL MANAGEMENT AND ARRANGEMENTS

Community acceptance of the 1992 management plan was moderate when the plan was released and grew over time as the plan was implemented. Day-to-day management of the TWWHA was generally well received and management interactions with visitors were very positive. Opportunities for community involvement in management of the TWWHA increased over the 1992–1999 management period through public consultation processes and the establishment of a variety of joint management projects (e.g. Aboriginal community involvement in Aboriginal heritage projects), management partnerships (e.g. for historic huts), and volunteer programs (e.g. WILDCARE).

The legislative powers of protection for the TWWHA and its values increased during the 1992–1999 period with the passage of the Commonwealth *Endangered Species Protection Act 1992* and the Tasmanian *Threatened Species Protection Act 1995* and *Historic Cultural Heritage Act 1995*.



Fire is arguably the greatest realistic threat that could cause rapid, large-scale, major ecological impacts to the TWWHA. Arson is a primary source of ignition for wildfires in southwest Tasmania.

Photo by Tim Rudman

Illegal activities continued to cause unacceptable losses and degradation of the natural heritage in parts of the TWWHA. In some cases, these activities posed a serious risk of major ecological impact in the TWWHA.

- The main ongoing illegal activity in the TWWHA that directly affects World Heritage values is poaching (theft) of Huon Pine, King Billy Pine and other valuable timbers.
- Arson is a primary source of ignition for wildfires in southwest Tasmania. Wildfires pose one of the most serious threats to the natural and cultural heritage of the TWWHA and have the potential to cause large-scale major ecological impacts.
- The deliberate introduction of non-native species into the TWWHA (or more broadly into Tasmania) poses a major threat to the natural heritage. For example the illegal introduction of trout into trout-free lakes and rivers for recreational fishing (which occurred in some waterways in the TWWHA) seriously degrades the high conservation values of these natural aquatic systems. Similarly, the potential establishment of foxes in Tasmania is a significant emerging threat for Tasmania and the TWWHA.

Over the management period, there were several visitor deaths in the TWWHA as a result of natural causes, climbing accidents and drowning.

None of these deaths could reasonably have been prevented by the managing agency.

Staff of the managing agency for the TWWHA developed considerable expertise in natural and cultural heritage management and operational management over the 1992–1999 period, and demonstrated professional leadership at the national and international level in a variety of fields.

IDENTIFICATION AND UNDERSTANDING OF THE NATURAL AND CULTURAL HERITAGE

There was a substantial increase in the level of knowledge and understanding of the natural and cultural values of the Tasmanian Wilderness World Heritage Area, and this provides a more informed basis for sound management.

- Significant discoveries were made of previously unknown natural communities and species, including unique marine bottom-dwelling communities in Bathurst Harbour–Bathurst Channel; a new vertebrate species (the moss froglet); several new species of plants, and many invertebrate species.
- Detailed vegetation maps were produced for almost half of the TWWHA, increasing the extent of vegetation mapping from approximately 16% of the area in 1992 to about 60% in 1999. Vegetation maps provide a fundamental management tool that assists managers in relation to a broad range of management issues including the protection of high conservation communities, fire management, and recreational management.
- Fire research significantly increased knowledge about fire behaviour in buttongrass moorlands. For example, it demonstrated that in order to achieve desired ecological outcomes, there was a need for longer inter-fire periods and more variation in season and pattern of burning than had previously been thought.

- The coastal sandy dune systems in southwest Tasmania, which are some of the least disturbed dune areas in south eastern Australia, were recognised as being of national significance.
- Genetic research indicated that King's holly (*Lomatia tasmanica*, F. Proteaceae) is of considerable scientific significance—it appears to have been in existence as a sterile triploid clone for at least 43,000 years, making it the oldest documented vascular plant clone in the world.

While the level of knowledge required for sound management of the TWWHA is generally considered adequate in most respects, there are several areas where specialists consider that a lack of knowledge is limiting or hampering management of the TWWHA. In particular, specialists in flora and fire management consider that additional information about fire regimes and their ecological impacts on communities is of the most critical importance to management of the TWWHA. Specialists in cultural heritage consider that the level of understanding of Aboriginal values attached to the TWWHA is poor.

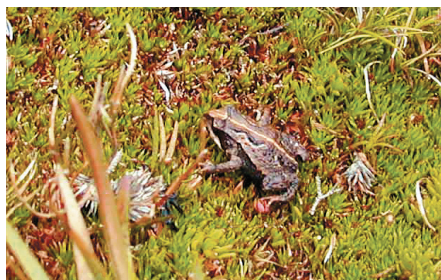


Left: Genetic research revealed that King's holly (*Lomatia tasmanica*) is of considerable significance to science—it appears to have been in existence as a sterile triploid clone for at least 43,000 years, making it the oldest documented vascular plant clone in the world. *Lomatia tasmanica* occurs only in the Tasmanian Wilderness World Heritage Area.

Photo by DPIWE

Below: The discovery of a new vertebrate species is an exceptionally rare event. This moss froglet, which was discovered in the Tasmanian Wilderness in 1993, was previously unknown to science.

Photo by Mike Driessen



Above: This unique community of bottom-dwelling sea-pens in Bathurst Harbour was one of the significant new discoveries made in the Tasmanian Wilderness during the term of the first management plan. This species of sea pen, which is a colonial invertebrate, normally lives at much greater depths off shore but can also live in the shallow dark tannin-stained waters of Bathurst Channel.

Photo © Parks and Wildlife Service

PROTECTION OF THE NATURAL AND CULTURAL HERITAGE

The main threats and pressures on the natural or cultural heritage of the TWWHA over the management period were:

- **illegal activities**, especially poaching of Huon pine and other valuable timbers; arson; and the deliberate introduction of non-native species into the area, especially trout;
- **wildfires**, especially the risk of 'landscape-scale fires' (i.e. fires that are not stopped by normal fire boundaries such as wet forest or major rivers) and peat fires;
- **plant diseases and dieback**, especially the root rot disease *Phytophthora cinnamomi*;
- **weeds**, especially marram grass, sea spurge, Spanish heath, gorse, ragwort, broom, blackberries, Canadian pond weed and holly;
- **introduced animals**, especially established introduced species such as trout, starlings, goats, rabbits, European wasps and bumblebees as well as the potential establishment of new introduced species;
- **tourism and visitor activities and use**, especially ecologically unsustainable levels or types of use;
- **development of new facilities and other infrastructure**, especially inappropriate or inappropriately sited facilities and infrastructure which can cause direct and/or indirect impacts to the natural or cultural heritage;
- **coastal erosion of Aboriginal heritage sites**, especially midden sites along the southwest coast;
- **lack of maintenance or active conservation of historic heritage**, especially huts or features that do not serve a current recreational or management amenity; and
- **regulation of river flows by hydroelectric power generating operations**, which can be associated with unnatural erosion of lake and river banks, and degradation of other values.

Sightseeing cruises on the lower Gordon River are a popular way for visitors to enjoy the beauty of the Tasmanian Wilderness. However, the wakes from cruise vessels were shown to be responsible for causing serious ongoing riverbank erosion. Active management of speed and access conditions for commercial cruise boats resulted in either the cessation of riverbank erosion in some areas of the river, or dramatic reductions in the rates of erosion in other areas.

Photo © Tourism Tasmania



New or emerging threats to the natural or cultural heritage of the TWWHA include:

- **the potential establishment of new introduced species** in the TWWHA and/or Tasmania, especially foxes;
- **the recent widespread outbreak of Devil Facial Tumour Disease in Tasmanian devils**;
- **lack of knowledge about fire regimes and possibly the inappropriateness of current regimes** to establish and maintain the optimal mix of ecological communities for the long-term conservation of biodiversity in the TWWHA and to properly manage the risk of unmanageable wildfires;
- **increasing levels of tourism and numbers of visitors to the TWWHA**, which requires careful management to ensure that human use of the TWWHA is ecologically sustainable and does not degrade the area's special values;
- **increasing mechanised access to remote areas of the TWWHA** e.g. all terrain vehicles (ATV's) and quad bikes south of Macquarie Harbour and along coastal regions, and increasing use of boats and aircraft flights to access remote areas;
- **cruise ships, boating and diving activities** in the Port Davey–Bathurst Harbour region;
- **changes to flow regimes in the Gordon River** under proposed Basslink hydroelectric power generation operations; and
- **drought and/or global warming** e.g. there has been an observed widespread lack of regeneration of pencil pines (*Athrotaxis cupressoides*) within the coniferous woodlands of the Central Plateau in recent years, and throughout Tasmania there has been a decline in the health of eucalypt woodlands.

The Tasmanian public perceives the main threats to the TWWHA to be too many visitors, commercial development, and environmental degradation.



A large feral goat—a sight no longer likely to be encountered in the Tasmanian Wilderness World Heritage Area thanks to the success of the feral goat eradication program which removed all feral goats from the TWWHA. A statewide feral goat eradication program is continuing.

Photo by Hans and Annie Wapstra

Several activities or pressures that were causing significant impacts or posed active threats to the natural or cultural heritage of the TWWHA were either halted or significantly reduced over the 1992–1999 period. For example:

- A major quarry for limestone at Lune River that had been demonstrated to be causing damage to a nearby limestone karst¹ system of international significance was closed and a major rehabilitation program was implemented to stabilise and restore the environment.
- Active management of speed and access conditions for commercial cruise boats on the lower Gordon River resulted in either the cessation of serious riverbank erosion in some areas or dramatic reductions in the rates of erosion in other areas.
- Sheep and cattle grazing on the Central Plateau (which had been linked to widespread and serious erosion and damage to alpine vegetation) ceased in accordance with the 1992 management plan.
- A statewide feral goat eradication program achieved the elimination of all goats from the TWWHA.
- A commercial horse-riding operation adjacent to the TWWHA at Cradle Mountain, which was causing environmental impacts, was relocated to a less vulnerable area.
- The use of campfires in sensitive alpine areas (which was considered a risk for starting peat fires and other wildfires) virtually ceased as a result of the declaration of Fuel Stove Only Areas.
- Coastal erosion processes, which were threatening numerous Aboriginal heritage sites along the southwest coast of Tasmania, were successfully mitigated at several large midden sites through an active program of midden stabilisation.

An emerging threat for management of the Tasmanian Wilderness is the recent widespread outbreak of facial tumours in Tasmanian devils in the eastern half of the state.

Photo by Christo Baars



There were no major wildfires in the TWWHA over the 1992–1999 period.

There was evidence of incremental spread of the root rot disease *Phytophthora cinnamomi* along some walking tracks, most notably along the Southwest Cape circuit and within the Cox Bight area. However, there was no evidence of infection by the disease along walking tracks within most of the catchment areas previously identified as being disease-free and being actively managed as *Phytophthora*-free catchment areas. A new high altitude dieback caused some localised losses in the Pencil Pine communities at Pine Lake on the Central Plateau; however, the situation now appears to have stabilised.

Some weeds continued to expand their populations in the TWWHA. Weeds that are spreading include Spanish heath, gorse, ragwort, broom, blackberries, Canadian pondweed and holly. Two recent new weed invasions in the area, marram grass and sea spurge, pose a serious threat to natural coastal ecosystems. However, weed infestations within the TWWHA are still largely limited to roadsides and localised areas adjacent to huts within the Central Plateau Conservation Area.



Several large Aboriginal midden sites along the Southwest coast that were at risk of being lost as a result of natural coastal erosion processes were successfully protected and stabilised.

Photo by Parks and Wildlife Service

1 The term 'karst' is used to describe a region that has underground drainage with many cavities and passages caused by the dissolution of the rock.

There was no known establishment of new introduced animal species in the TWWHA. Feral goats were eradicated; rabbits are thought to have been eradicated from the Strathgordon area; and starlings have virtually been eradicated from the breeding habitat of the endangered orange-bellied parrot at Melaleuca. However, several introduced animal species are known to have expanded their distributions in the TWWHA over the management period including trout, lyrebirds, kookaburras and bumblebees. (Note that whilst lyrebirds and kookaburras are native Australian species they do not occur naturally in Tasmania.)



The evocative remains of an oven from a bygone era at Sarah Island, Macquarie Harbour. The condition of convict heritage on Sarah Island improved as a result of active conservation works at a number of historic sites.

Photo by Glenys Jones

The purposeful translocation of a small number of Pedder galaxias fish to a lake that resembled the species' natural habitat in the original (pre-dam) Lake Pedder, and the subsequent successful establishment of a natural breeding population, has probably saved this endangered species from extinction.

Photo by Ron Mawbey



There is evidence that some levels and types of visitor use have begun to cause unsustainable environmental impacts in some parts of the TWWHA. For example, although 'hardened' walking tracks in high-use visitor areas of the TWWHA are generally being sustainably managed, many walking tracks throughout the TWWHA are not currently being sustainably managed. In these areas, walker impacts are causing ongoing erosion and deterioration of tracks and backcountry campsites and the formation of unplanned new tracks. In some areas, walker impacts are damaging sensitive alpine plant communities. If not effectively addressed by management, unsustainable levels and types of visitor use have the potential to cause progressive and serious degradation of the TWWHA. However, a sound scientific base of knowledge has been established which can guide management towards sustainable environmental management of the entire TWWHA walking track network (e.g. the sustainable carrying capacity of walkers in different vegetation types has been experimentally determined). Other tourism and visitor activities that require continued careful management include commercial cruise boat operations on the lower Gordon River and horseriding on the Central Plateau.

CONSERVATION AND REHABILITATION OF THE NATURAL AND CULTURAL HERITAGE

The overall condition of the natural and cultural heritage of the Tasmanian Wilderness World Heritage Area generally remained stable over the 1992–1999 period.

- The natural diversity and processes of the TWWHA are largely in very good condition apart from a limited number of sites of specific disturbances (such as dams and roads) and the occurrence of plant diseases, weeds and introduced animals in some areas.
- The extent and severity of sheet erosion on the Central Plateau, which has been linked to past fire and grazing practices, remains a significant impact on the natural heritage of the TWWHA.
- The vast majority of the TWWHA is of extremely high wilderness quality.
- Aboriginal sites within the TWWHA are generally in a stable condition, with the notable exception of midden sites along the southwest coast which are being lost as a result of natural coastal erosion.
- The water quality of surface water within the TWWHA is generally high. However, water quality in Macquarie Harbour (the southern third of which is part of the TWWHA) continues to be affected by heavy metals and acidic drainage from the polluted King and Queen Rivers which flow into the harbour—a legacy of past mining activities at Mount Lyell.

Improvements in the condition of natural and cultural values over the 1992–1999 period included:

- The water quality and ecology of the Exit Cave area (which is recognised internationally for the scientific significance of its limestone karst system) markedly improved following closure and rehabilitation of the nearby limestone quarry at Lune River.
- The population size of the endangered Pedder galaxias fish (*Galaxias pedderensis*) significantly increased following the purposeful introduction of a small group of individuals to a lake that resembled the species' natural habitat in the original (pre-dam) Lake Pedder. A small natural breeding population has now established.
- The breeding range and production of the New Zealand fur seal (listed as Rare under the *Threatened Species Protection Act 1995*) increased in southwest Tasmania. Breeding sites for the seals have expanded from Maatsuyker Island to other islands within the group.
- The pencil pine moth (formerly listed as Vulnerable under the *Threatened Species Protection Act 1995*) was delisted as a result of the findings of surveys that revealed that its distribution and abundance were greater than previously known. The distribution of the vulnerable blind cave beetle was also found to be greater than previously known.
- Active rehabilitation of a range of degraded sites within the TWWHA achieved considerable local improvements in landscape quality and the aesthetic quality of viewfields.
- The condition of convict heritage on Sarah Island improved as a result of active conservation works at a number of historic sites on the island. There was also significant progress in conserving and maintaining a range of historic huts and places throughout the TWWHA.

Below: This limestone quarry at Lune River was closed in 1992 because of its environmental impacts on the nearby Exit Cave area—a limestone karst system of recognised international significance.

Photo by Parks and Wildlife Service



Declines in the condition of natural and cultural values detected over the 1992–1999 period included:

- The endangered orange-bellied parrot (which breeds in Tasmania and overwinters interstate) continued to decline in overall numbers and distribution range within Tasmania. However, the breeding population at Melaleuca remained stable at about 90–120 individuals. The total population of orange-bellied parrots is estimated to remain less than 200 mature individuals.
- The high conservation value of several natural aquatic ecosystems was degraded by the illegal introduction and establishment of trout in these formerly trout-free waterways.
- There was some further dieback in susceptible plant communities as the result of plant diseases, especially the root rot *Phytophthora cinnamomi*.
- A number of Aboriginal heritage sites along the southwest coast and other sites (e.g. Hazards Beach, Cockle Creek) were lost as a result of natural coastal erosion processes.
- The riverbanks in the middle sections of the Gordon River continued to erode as a result of the regulation of river flows by hydroelectric power station operations. The rare and scientifically significant meromictic² lakes adjacent to the Gordon River have also been degraded as a result of changed flow regimes. However, much of this degradation had already occurred prior to the 1992–1999 period.

2 Meromixis arises where incomplete mixing occurs in a water body and some part of the water mass remains isolated throughout the year, giving rise to salinity-induced stratification and abrupt physico-chemical changes across a shallow chemocline. The meromictic lakes on the Gordon River are known to have been associated with a unique micro-biota.



Above: The Lune River quarry area in 2001, following a major rehabilitation program. The rehabilitation works successfully stabilised the quarry benches and resulted in marked improvements in the water quality and ecology of the nearby Exit Cave area.

Photo by Ian Houshold

PRESENTATION OF THE NATURAL AND CULTURAL HERITAGE

Market research polls of randomly selected Tasmanian residents revealed that there was a significant increase in Tasmanian public awareness and support for the TWWHA over the management period. For example, the percentage of Tasmanians who considered World Heritage listing to be 'a good thing' increased from 63% in 1993 to 76% in 1999. The percentage who considered World Heritage listing to be 'a bad thing' remained stable at about 4%.

A range of new visitor facilities, supporting infrastructure, and better education and information products and services were provided to assist visitors and the general public to appreciate and enjoy the TWWHA.

- A variety of high quality tourist stops and short walking tracks was provided along the Lyell Highway, and a new circuit walking track was constructed around Dove Lake at Cradle Mountain.
- The Cynthia Bay Visitor Services Zone at Lake St Clair was redesigned and major new visitor facilities and infrastructure were constructed. These included an interpretive Visitor Centre, a larger carpark in a less obtrusive area, a major new sewage treatment plant to service the site, and new accommodation cabins.
- Numerous degraded and actively eroding walking tracks throughout the TWWHA were stabilised, upgraded or reconstructed, including the Overland Track, South Coast Track, Mt Anne Track, and tracks in the Southern Ranges, and Eastern and Western Arthurs.
- A website for the Parks and Wildlife Service was developed which provides a wealth of information about the TWWHA and its natural and cultural heritage. (Go to <www.parks.tas.gov.au> and follow the links to Visitors' Guides and the Tasmanian Wilderness World Heritage Area.)
- A wide range of information and interpretation signs, brochures and other publications was produced, and staff continued to provide information and education services to visitors and the general public, e.g. through the Summer Interpretive Ranger Program, Track Ranger Program, Visitor Centres and schools.

The Tasmanian Wilderness World Heritage Area was a significant attraction for local, interstate and international visitors. The number of visitors to the TWWHA increased strongly over the 1992–1999 period (by about 30–35%). Surveys revealed that visitors were overwhelmingly positive about their visit to the TWWHA. Personal benefits that visitors identified from their visit largely centred on the opportunity to be active in a natural, beautiful and peaceful setting away from their normal lifestyles. The overall message from visitors was that the Tasmanian Wilderness World Heritage Area is valued primarily for its natural qualities, and people want it to remain that way.

The majority of visitors who had previously visited the TWWHA considered that the place either hadn't changed or had changed for the better.

A variety of high quality short walks was provided along the Lyell Highway and other sites to encourage visitors to stop and enjoy an easy stroll in the Tasmanian Wilderness. Interpretive signs were provided along the tracks to assist visitors to understand more about the area and its values.

Photo by © Geoffrey Lea –
Tasmanian Great Short Walks



Sensitive environmental design was one of the factors that contributed to the Lake St Clair Visitor Centre being awarded the Royal Australian Institute of Architects State Award for a new public building.

Photo by Glenys Jones

STAKEHOLDERS' ASSESSMENTS OF MANAGEMENT PERFORMANCE

Targeted questionnaires were put to key internal and external stakeholders for the TWWHA to gather assessments and critical comment on management performance for the area. The stakeholders involved comprised the World Heritage Area Consultative Committee (an external advisory committee of scientific and community representatives); Department of the Environment and Heritage (the federal agency with responsibilities for World Heritage management); staff of the then managing agency (including specialists with professional expertise in natural and cultural heritage); the Tasmanian Aboriginal Land Council (the representative organisation of the Aboriginal community); and the Tasmanian public (through telephone polls of randomly selected Tasmanian residents).

The majority of key stakeholders considered that the overall state of the TWWHA is satisfactory or better. Most considered that the overall state of the TWWHA had either got somewhat better or had remained about the same over the 1992–1999 period. However, cultural heritage specialists of the managing agency and the Tasmanian Aboriginal Land Council considered that the overall state of protection and conservation of Aboriginal heritage in the TWWHA was less than satisfactory.

There was generally a very high level of satisfaction amongst key stakeholders with the performance of the Parks and Wildlife Service and other managers of the TWWHA. For example, 94% of the Tasmanian public who had recently visited the TWWHA considered that the performance of the managing agency was satisfactory or better, with 66% considering it to be good or very good, and only 5% considering it to be poor.

Key factors that stakeholders identified as having contributed positively to management performance for the TWWHA over the 1992–1999 period included (in descending order of frequency of mention by stakeholders):

- the level of Federal–State funding for management;
- public support and cooperation in management;
- good staff;
- an effective World Heritage Area Consultative Committee;
- a good management plan and key management strategies;
- good science; and
- no major wildfires over the period.

Surveys revealed that the majority of visitors to the Tasmanian Wilderness were overwhelmingly positive about their visit.

Photo by Glenys Jones



The natural diversity and processes of the Tasmanian Wilderness are largely in very good condition. New River Lagoon, Prion Beach on the south coast.

Photo © Parks and Wildlife Service



Key factors that stakeholders identified as having limited or threatened management performance for the TWWHA over the 1992–1999 period included (in descending order of frequency of mention by stakeholders):

- inadequate resources and uncertainty of future funding;
- inadequate community engagement and support;
- political decisions were not always consistent with World Heritage management objectives;
- slow response/low priority to management of impacts and threats to values;
- inadequacy of fire management; and
- delays with site plans.

Stakeholders considered that the working relations between the managing agency and the community had grown stronger over the 1992–1999 period, and that the level of community support for the TWWHA was now generally satisfactory or better.



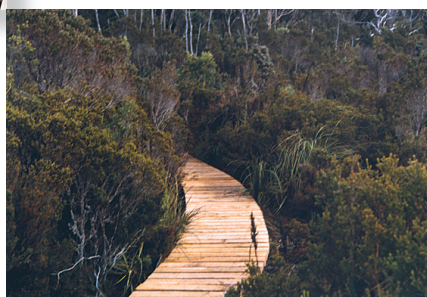
High quality and aesthetic track work at a variety of locations throughout the Tasmanian Wilderness improved the recreational amenity of the area for visitors and assisted in protecting the environment from walker impacts. A remote area camping platform at Hanging Lake, Southwest National Park (above), and new trackwork at Lake Osborne, Hartz Mountains National Park (right).

Photos by Parks and Wildlife Service



Above: There are over 1,000km of walking tracks in the Tasmanian Wilderness World Heritage Area. Track workers stabilised, upgraded and reconstructed many actively eroding and degraded walking tracks throughout the area. A Walking Track Management Strategy and linked monitoring system were developed to manage the physical and environmental sustainability of the entire walking track network within the Tasmanian Wilderness.

Photo by Parks and Wildlife Service



Conclusions and proposed actions

The findings of this evaluation demonstrate that management under the 1992 management plan delivered major achievements and that sound progress was made against all the management objectives.

An indication of the overall effectiveness of management against each management objective of the 1992 management plan is presented below. This assessment is based on all the findings of evaluation, including stakeholders' views on management performance. Note that this assessment does not reflect the level of management effort or activity directed towards the objective, but focuses on the outcomes achieved.

An indication of the overall effectiveness of management under the 1992 management plan

Objectives of the 1992 TWWHA management plan		Assessment of management effectiveness
Overall objective for management: To protect, conserve, present and, where necessary, rehabilitate the natural and cultural heritage.		★ ★ ★
Objectives of protection, conservation and rehabilitation:		★ ★ ★
1. Protect the natural diversity of the WHA and maintain and restore its natural ecological processes and systems.		
2. Maintain and enhance wilderness quality.	Maintenance Enhancement	★ ★ ★ ★ ★ ★ *
3. Maintain viable populations of all native species.		★ ★ ★ ★
4. Maintain and enhance scenic and environmental quality.		★ ★ ★
5. Protect and conserve cultural heritage.	Aboriginal heritage Historical heritage	★ ★ ★ ★ ★
6. Develop, through research, a better understanding of natural and cultural values, processes and impacts.		★ ★ ★ ★
Objectives of presentation:		★ ★ ★
7. Promote community awareness, acceptance, understanding and appreciation of the concept of World Heritage and the values of the Tasmanian WHA.		
8. Assist visitor appreciation and enjoyment by developing and promoting an appropriate range of opportunities and facilities for public recreation and tourism both in and adjacent to the WHA.		★ ★ ★ ★
9. Enrich the experience of visitors through education and interpretation.		★ ★ ★ ★
10. Develop public understanding of the principles and values of conservation.		★ ★ ★
11. Improve the basis for management through a better understanding of visitor use, expectations, satisfaction and community attitudes.		★ ★ ★
Additional objectives related to other Departmental and Statutory responsibilities and the potential conflict between the primary objectives:		
12. Minimise the adverse impacts on values and recreation of management programs, permitted uses, activities, facilities and developments.		★ ★ ★
13. Minimise, or contain within acceptable levels, hazards to human life and property.		★ ★ ★
14. Ensure that policies, actions and practices achieve management objectives and are cost-effective.		★ ★ ★ ★

N/A Not assessed; no clear basis or evidence available on which to assess management effectiveness.

- ★ Objective clearly not met; no progress towards desired outcomes achieved and/or undesirable outcomes delivered; current situation generally worse than at the beginning of the management period.
- ★ ★ Objective slightly progressed; some progress towards one or more desired outcomes or negative trends significantly reduced; situation generally about the same or slightly better than at the beginning of the management period.
- ★ ★ ★ Objective moderately progressed; at least 1 desired outcome delivered or on track to delivery, or evidence of clear progress towards several desired outcomes; situation generally better than at the beginning of the management period.
- ★ ★ ★ ★ Objective well progressed; several desired outcomes delivered or on track to delivery; situation significantly better than at the beginning of the management period.
- ★ ★ ★ ★ ★ Objective achieved or on track to delivery; most if not all desired outcomes delivered or on track to delivery; situation either as desired or approaching the desired situation.

* The anticipated major enhancement of wilderness quality that was to have been achieved through the closure and rehabilitation of the Mt McCall 4WD Track as prescribed by the 1992 management plan did not proceed. This change in management action was formally approved through amendment of the 1992 management plan in 1997.

Proposed actions for enhancing management performance

This evaluation revealed a variety of opportunities for enhancing management performance for the TWWHA. The Parks and Wildlife Service has developed the following proposed actions to address these opportunities. The background and rationale for each proposed action is presented below to assist readers' understanding.

Note that implementation of the proposed actions will be subject to endorsement through normal management processes and the procurement of necessary funds. The overall level of Commonwealth and State funding for management of the TWWHA will significantly influence the extent to which these actions can be implemented.

General management and arrangements

Proposed Action 1
That the federal and state governments commit to providing adequate, secure and ongoing funding for sound management of the Tasmanian Wilderness World Heritage Area. This includes adequate provision for the full implementation of the prescribed actions of the statutory TWWHA Management Plan over its term.

Proposed Action 2
That the Parks and Wildlife Service and others with responsibilities or interests in the TWWHA explore opportunities for establishing complementary sources of funding to enhance management of the TWWHA e.g. through partnership arrangements, private sector support and endowments, and cost recovery arrangements from operations that derive a commercial or utility benefit from the TWWHA.

Adequate, secure funding for management

OPPORTUNITY FOR IMPROVEMENT: Key stakeholders identified inadequate resources for management and the uncertainty surrounding future funding as key factors that had limited or threatened overall management performance for the TWWHA over the 1992–1999 period. For example, there were insufficient funds to allow for full implementation of the statutory 1992 management plan during its term, and the uncertainty surrounding future funding levels raised concerns regarding the continuity of many management programs for the TWWHA. In addition, the short-term nature of some project-based funds resulted in the discontinuous provision of funds for some important long-term programs e.g. the eradication program for feral goats. Recent changes in federal funding arrangements for the TWWHA in 2002/2003 have further increased uncertainties regarding ongoing funding levels for management of the TWWHA.

The IUCN Vth World Parks Congress³ identified a range of actions that governments and others could consider taking to achieve secure and sufficient resources to meet the recurrent operating costs of a globally representative system of protected areas.

3 Refer to the Durban Action Plan and Recommendations of the IUCN Vth World Parks Congress, Durban, South Africa 8–17 September 2003, available on the IUCN website at: <<http://www.iucn.org/wpc2003/>>

Community commitment to sound management of the TWWHA

OPPORTUNITY FOR IMPROVEMENT: Key stakeholders considered that community engagement had not always been adequate and that the existence of disaffected communities limited or threatened overall management performance. The World Heritage Area Consultative Committee suggested 'there is still a lot of work to do to make the World Heritage Area concept welcomed rather than merely accepted'.

The IUCN Vth World Parks Congress recommended 'that governments, inter-governmental organisations, NGOs, local communities and civil society raise awareness of the value of protected areas and the benefits they provide to society, and enhance general commitment to support protected areas.'

Proposed Action 3
That the Parks and Wildlife Service in collaboration with the World Heritage Area Consultative Committee and others as appropriate develop initiatives to raise community awareness of the values and benefits of the TWWHA and enhance general commitment to sound management of the area in accordance with its World Heritage obligations.

Tasmanian legislation to reflect World Heritage obligations

OPPORTUNITY FOR IMPROVEMENT: Key stakeholders considered that political decisions were not always consistent with World Heritage Area management objectives and that this was a key factor limiting or threatening management performance for the TWWHA.

Tasmanian State legislation covering National Parks and Reserves was originally developed prior to the listing of any World Heritage Areas in Tasmania. To date, this legislation has not been amended to reflect the international obligations of management of these areas under the World Heritage Convention. The Tasmanian government has foreshadowed a review of the *National Parks and Reserves Management Act 2002* and *Nature Conservation Act 2002*.

Proposed Action 4
That Tasmanian legislation for National Parks and Reserves be amended to reflect the international obligations for management of World Heritage Areas under the World Heritage Convention i.e. to identify, protect, conserve, present, transmit to future generations and, if appropriate, rehabilitate the World Heritage values of the property.

Management of controversial issues

OPPORTUNITY FOR IMPROVEMENT: In relation to the management of significant or controversial issues, the World Heritage Area Consultative Committee stated: 'The primary concern of managers and other decision-makers should be to protect the values of the World Heritage Area'.

Proposed Action 5
That the management plan for the TWWHA endorse as a principle of management that the highest priority and commitment of management is to ensure that the natural and cultural heritage of the TWWHA is protected from degradation.

Proposed Action 6
That managers, planners and other decision-makers and advisory bodies for the TWWHA⁴ make use of State of the TWWHA Reports to inform and guide management directions, priorities and actions to improve the delivery of desired outcomes, e.g. through budget allocation processes and provisions in the next TWWHA management plan.

Adaptive management

OPPORTUNITY FOR IMPROVEMENT: State of the TWWHA Reports provide managers and other decision-makers for the TWWHA with informed feedback about management effectiveness. This information provides a valuable resource that can be used to guide and improve ongoing management to achieve better delivery of the objectives and desired outcomes.

COMMENT: The Parks and Wildlife Service will take account of the findings of this report in budget allocation processes and in undertaking the mid-term review of the 1999 TWWHA Management Plan, which is scheduled to commence in 2004.

Proposed Action 7
That the Parks and Wildlife Service establish identified high priority areas or projects of management action for the TWWHA each year, and allocate appropriate levels of effort and resources to ensure substantial progress is achieved in each (e.g. to progress Key Focus Areas identified in the management plan).

Establishment of high priority projects

OPPORTUNITY FOR IMPROVEMENT: The World Heritage Area Consultative Committee provided the following suggestion for improving the performance of the Parks and Wildlife Service: 'Each year, the Parks and Wildlife Service needs to make one or two areas or projects the priority and "really get somewhere with them".'

COMMENT: The Parks and Wildlife Service is already adopting this approach.

Proposed Action 8
That the Parks and Wildlife Service establish an appropriate information management system to monitor public health and safety incidents in the TWWHA (and other reserves as appropriate) to enable routine reporting on performance for public safety and to enhance the agency's ability to identify and respond to emerging public health and safety issues.

Systematic monitoring of public safety incidents in the TWWHA

OPPORTUNITY FOR IMPROVEMENT: Lack of systematic and consistent reporting of public health and safety incidents in the TWWHA prevented detailed analysis of management performance for public safety. Systematic monitoring of deaths, serious injuries and lost persons in the TWWHA would enhance the Parks and Wildlife Service's ability to identify and respond to emerging health and safety issues.

⁴ These include the managing agency, State and Federal Ministers with responsibility for the Tasmanian Wilderness World Heritage Area, the World Heritage Area Ministerial Council, Standing Committee, Consultative Committee, and Department of the Environment and Heritage.

Identification and understanding of the natural and cultural heritage

Allocation of resources for the identification and understanding of values

OPPORTUNITY FOR IMPROVEMENT: In considering the balance of management effort applied across management responsibilities, the World Heritage Area Consultative Committee suggested that there should be significantly more effort and resources allocated to research related to the identification of World Heritage values.

Proposed Action 9
That budget processes for the TWWHA allocate a significant level of effort and resources to research related to the identification and understanding of World Heritage and other natural and cultural values of the TWWHA e.g. no less than 3% of total TWWHA project resources.

Coordinated research strategy

OPPORTUNITY FOR IMPROVEMENT: The World Heritage Area Consultative Committee provided the following suggestions for improving management for the identification of natural and cultural values:

- Research needs to be encouraged, planned and prioritised.
- There is a clear need for an overall strategy/ coordination/ direction for research. (Currently all research undertaken in the World Heritage Area is either related to management, proposed development or is of an ad hoc academic interest.)

Natural and cultural heritage specialists of the managing agency identified a number of areas where lack of knowledge was hampering sound management of the TWWHA (refer to Section 3.5 'Adequacy of knowledge for sound management').

Proposed Action 10
That the Parks and Wildlife Service, in conjunction with others as appropriate, develop a coordinated strategy to guide priorities for research in the TWWHA, taking account of identified gaps in knowledge required for sound management.

Protection, conservation and rehabilitation of the natural and cultural heritage

11
Proposed Action
That the Parks and Wildlife Service in conjunction with the Resource Management and Conservation division of DPIWE, the Inland Fisheries Service and others as appropriate coordinate the development and/or expansion of strategic programs (including preventive programs) to address illegal activities that pose a significant threat to the natural or cultural heritage of the TWWHA. These include poaching of Huon pine and other valuable timbers; arson; and the deliberate introduction of non-native species into the area (e.g. trout into trout-free lakes and rivers).

Strategic programs to address illegal activities

OPPORTUNITY FOR IMPROVEMENT: Illegal activities in the TWWHA are causing ongoing losses of Tasmania's natural heritage and in some cases are posing a significant threat to natural ecosystems e.g. through arson (refer to Section 2.5.2 'Law enforcement and compliance issues').

COMMENT: Responsibility for the prevention, investigation and response to illegal activities in the TWWHA involves a wide range of officers from various agencies including Rangers and Fire Management Officers from the Parks and Wildlife Service; Wildlife Officers from the Resource Management and Conservation division of DPIWE; officers of the Inland Fisheries Service and Quarantine Services (DPIWE); the Fox Task Force (DPIWE); and Police Tasmania.

12
Proposed Action
That the management plan, budget allocations, and day-to-day management of the TWWHA give high priority to addressing identified impacts and threats to the natural and cultural values of the TWWHA.

High priority for addressing impacts and threats

OPPORTUNITY FOR IMPROVEMENT: Key stakeholders identified the slow response and/or low priority given to managing impacts and threats to sensitive areas and values as a key factor limiting management performance for the protection and conservation of values. Staff of the managing agency with responsibility for implementing prescribed actions of the management plan identified a significant limitation to the implementation of actions was a lack of funding or insufficient time—both of which generally stemmed from the action being considered a low priority either by those allocating funds to the project (within the managing agency or externally) or by those allocating staff time and effort to implement the action.

13
Proposed Action
That the Parks and Wildlife Service in conjunction with natural and cultural heritage specialists, the World Heritage Area Consultative Committee and others as appropriate annually review procedures and progress for the identification, assessment and amelioration of threats to the natural and cultural values of the TWWHA.

Procedures for identifying, assessing and ameliorating threats to values

OPPORTUNITY FOR IMPROVEMENT: Staff of the managing agency identified a variety of opportunities for improving agency procedures related to the identification and assessment of threats to natural and cultural values (see Section 7.6 'Protection and conservation of values').

COMMENT: The Parks and Wildlife Service is currently reviewing its internal impact assessment procedures for proposed activities and is developing an improved Reserve Activity Assessment System.

High priority for rehabilitating degraded sites and values

OPPORTUNITY FOR IMPROVEMENT: Rehabilitation programs have made significant progress in stabilising and repairing a variety of degraded sites in the TWWHA; however, a number of degraded sites and values remain—in particular, the extent and severity of sheet erosion on the Central Plateau remains a significant impact on the geoheritage values of the TWWHA (see Section 5.2.1 ‘Condition of geodiversity’).

COMMENT: Natural Heritage Trust (NHT) funds have already enabled pilot work for rehabilitation to be undertaken at key sensitive sites.

Proposed Action **14**
That the management plan for the TWWHA give high priority to rehabilitating degraded sites and values in the TWWHA, including the extensive sheet erosion on the Central Plateau.

Improve management of Aboriginal heritage

OPPORTUNITY FOR IMPROVEMENT: Cultural heritage staff within the managing agency and the Tasmanian Aboriginal Land Council considered that the current state of protection and conservation of Aboriginal heritage within the TWWHA was less than satisfactory.

Proposed Action **15**
That the mid-term review of the 1999 TWWHA management plan give special attention to the management of Aboriginal heritage in the TWWHA, with a view to improving the protection and conservation of Aboriginal heritage.

Design of major conservation programs to include evaluation

OPPORTUNITY FOR IMPROVEMENT: The design of several key conservation management programs did not readily allow the effectiveness of those programs to be determined. In addition, a lack of consistency in the way management programs were reported hampered the collation of findings for this evaluation.

COMMENT: Future TWWHA management plans will identify major conservation management programs that will be formally evaluated for management effectiveness.

Proposed Action **16**
That project managers for major conservation management programs for the TWWHA incorporate evaluation into the design of those programs to enable their effectiveness to be determined and reported in future State of the TWWHA Reports, e.g. in a format consistent with Section 4.10.2 ‘Case study—Riverbank erosion on the lower Gordon River’.

Presentation of the natural and cultural heritage

Provide visitors with more information about Aboriginal heritage

OPPORTUNITY FOR IMPROVEMENT: Surveys of visitors to the TWWHA revealed that there was a significant unmet visitor desire for more information about Aboriginal culture and the relationship of Aborigines with particular areas.

In addition, the IUCN Vth World Parks Congress recommended that ‘governments, inter-governmental organisations, NGOs, local communities and civil societies integrate indigenous knowledge and education systems in interpretation of and education about natural, cultural and spiritual values of protected areas.’

COMMENT: New Aboriginal interpretation has recently been developed at Lake St Clair and is planned for Sarah Island and Melaleuca.

Proposed Action **17**
That in collaboration with the Aboriginal community, management of the TWWHA give high priority to providing information and interpretation about Aboriginal heritage at visitor sites associated with the TWWHA.

Proposed Action 18

That the Parks and Wildlife Service and others as appropriate consistently evaluate the popularity and effectiveness of major information, interpretive and educational initiatives, products and services, and take account of the findings to guide ongoing presentation of information about the TWWHA. Until further evidence becomes available, television programs and newspapers should be the preferred media for presenting information to the general public about the TWWHA, while the use of multimedia and Internet-based services should continue to be developed and monitored.

Popularity and effectiveness of information and educational products and services

OPPORTUNITY FOR IMPROVEMENT: Relatively little measured information was available from which to determine the popularity or effectiveness of information, educational and interpretive products or services for the TWWHA. Market research⁵ revealed that the vast majority of Tasmanians gained their information about the World Heritage Area from television programs (72%), followed by newspapers (58%), magazines (25%) and radio (19%). Only 3% named the Parks and Wildlife Service as a key source of information about the TWWHA. However, use of the Parks and Wildlife Service's Internet web site has risen rapidly and staff consider that multimedia (including the Internet) are likely to become increasingly important means of communicating information about the TWWHA. The systematic evaluation of major interpretive and educational products would assist in focusing management effort on the most effective means of presenting the TWWHA.

COMMENT: The Parks and Wildlife Service is placing additional emphasis on evaluating interpretive products and services e.g. a review of the Strahan Visitor Centre has recently been undertaken and a funding application has been made to review the Cradle Mountain and Lake St Clair Visitor Centres.

Proposed Action 19

That the Parks and Wildlife Service foster and develop stronger links between information services and products about the TWWHA and the educational curricula for schools, universities and teacher training courses (especially Internet-based services and other multimedia products) to raise youth awareness and knowledge of the TWWHA.

Stronger links between the TWWHA and educational curricula

OPPORTUNITY FOR IMPROVEMENT: Market research revealed that young Tasmanians have a relatively low level of awareness and knowledge about the TWWHA compared with older Tasmanians. For example, only 53% of Tasmanians 16–25 years of age had heard of the Tasmanian Wilderness World Heritage Area compared with 87% of those over 40 years of age. Staff of the managing agency consider that the low level of youth awareness of the TWWHA could be effectively addressed by establishing stronger links between the TWWHA and the educational curricula for schools, universities and teacher training courses.

COMMENT: PWS is planning to develop a new web-based 'Wild Learning' initiative with the aim of bringing the World Heritage Area to students via the Internet and other multimedia approaches.

5 EMRS (Enterprise Marketing and Research Services), 2000, 'Parks & Wildlife World Heritage Awareness Survey', January 2000. Prepared for the Parks and Wildlife Service, Hobart Tasmania.

Management standards for visitor facilities and experience

OPPORTUNITY FOR IMPROVEMENT: Parks and Wildlife Service staff consider that the establishment of management standards and/or clear statements of desired outcomes in relation to visitor experience in the TWWHA would assist in clarifying and defining what the TWWHA is being managed to provide, and so assist the delivery of high quality visitor experience. In addition, Tourism Tasmania suggests that accreditation should be pursued as part of the licensing system for commercial operators to ensure that high standards of operation are delivered.

COMMENT: PWS has made a start to addressing these issues. A Reserve Standards Framework is currently under development to define standards for visitor facilities, and an Asset Management System is being developed.

Proposed Action 20
That the Parks and Wildlife Service establish standards for visitor facilities, services and for the quality of visitor experience (especially recreation quality) to be provided in different sites and/or zones in the TWWHA, and implement associated programs of management, accreditation and monitoring (including corrective actions as needed) to ensure that these standards are met.

Strategic program of visitor surveys

OPPORTUNITY FOR IMPROVEMENT: Surveys of visitors to the TWWHA to date have generally been designed to meet specific immediate needs. The lack of consistency between visitor surveys in purpose and design significantly limited the potential value of such surveys for tracking changes in visitor use and satisfaction over time. A more strategic approach to visitor surveys would allow trends to be detected and would enable emerging issues to be identified more quickly, so providing for a faster and more appropriate management response.

COMMENT: The Parks and Wildlife Service has recently approved such a program of visitor surveys.

Proposed Action 21
That the Parks and Wildlife Service establish an ongoing strategic program of visitor surveys with clearly defined purposes and consistent design to monitor visitors' use and satisfaction with their experience of the TWWHA.

Maintain natural peace and quiet

OPPORTUNITY FOR IMPROVEMENT: The importance to the Tasmanian public of maintaining the natural tranquillity of the TWWHA was recently demonstrated through the public response to a proposal to provide additional helicopter landing sites in the TWWHA. There was an unprecedented level and uniformity of public opposition to the proposal⁶. A major concern of most respondents was that aircraft noise would disturb the 'peace and quiet' of the area and intrude on their wilderness experience. This strong public response signals the need for proactive management of noise to protect the quality of visitors' wilderness recreational experience in the TWWHA.

In addition, the federal Department of the Environment and Heritage suggested: 'The monitoring approach that the managing agency has developed is highly commendable and should be extended to include other issues of public concern such as impacts on other users—particularly remote area users—of overflights and commercial guided tours'.

COMMENT: Noise disturbance from overflights has become a significant management issue in National Parks in several countries e.g. in the Grand Canyon, USA, and at Mt Cook, New Zealand. Air space use over the TWWHA, as in other areas of Australia, is controlled by the Civil Aviation Safety Authority (CASA), not the managing agency for the TWWHA. Consequently, management of aircraft flights over the TWWHA requires close cooperation between the Parks and Wildlife Service and airspace regulators and operators.

Proposed Action 22
That the Parks and Wildlife Service, in consultation with airspace regulators and operators, proactively manage noise to maintain the natural peace and quiet of the TWWHA, and so protect the quality of visitors' wilderness recreational experience e.g. by developing tranquillity standards for identified sites and/or zones within the TWWHA.

⁶ Of 651 public submissions received through the public consultation process, only 12 supported the proposal to allow helicopter landing sites, and 3 of these were from the proponents. (Parks and Wildlife Service, 2000, *Summary of public comment on the proposal for additional landing sites in the Tasmanian Wilderness World Heritage Area*, Hobart, Tasmania).

Supporting tools for management

Proposed Action **23**
That the Parks and Wildlife Service in conjunction with other agencies and bodies with data relevant to management of the TWWHA further develop and improve their computer-based information management systems to enable systematic and efficient collation, sharing, and retrieval of information required for sound management and regular reporting on management performance for the TWWHA.

Computer-based information management systems

OPPORTUNITY FOR IMPROVEMENT: Staff of the managing agency identified a variety of arenas in which the current data storage and management systems being used were limiting operational management and performance reporting for the TWWHA (refer to Section 8.3 'Limitations of this evaluation').

COMMENT: PWS is planning the development of an improved data management system that will address the identified needs, commencing with asset management and financial management.

Proposed Action **24**
That the Parks and Wildlife Service develop future TWWHA management plans to comply with the management principles for World Heritage Area management plans set out in the Regulations of the *Environment Protection and Biodiversity Conservation Act 1999*.

Management plans to comply with EPBC principles

OPPORTUNITY FOR IMPROVEMENT: Regulations of the *Environment Protection and Biodiversity Conservation Act 1999* include management principles that establish a standard for management plans for World Heritage Areas. The Department of the Environment and Heritage has indicated that neither the 1992 nor the 1999 TWWHA management plans (which were developed prior to this Act) fully comply with the principles set out in the Regulations.

COMMENT: PWS will either make the necessary changes at the 2004 mid-term review of the 1999 TWWHA management plan or—if the changes required are extensive—at the 2009 full review of the management plan.

Proposed Action **25**
That TWWHA management plans prescribe long-term monitoring programs for selected World Heritage and other significant natural and cultural values (including degraded values), and threats or pressures on values that will be formally monitored and reported on in future State of the TWWHA Reports.

Management plans to specify threats and values to be monitored

OPPORTUNITY FOR IMPROVEMENT: The greatest limitation to this evaluation was simply the lack of time-series measured data on relevant performance indicators. This is not surprising given the relatively recent adoption of an evaluative approach to management. In addition, the monitoring programs that were undertaken during the 1992–1999 period were primarily established through the initiative of individual staff or project teams within the managing agency as there was no overall coordinated strategy for identifying and targeting priority values and threats to be monitored.

The Department of the Environment and Heritage provided the following suggestion for improving management performance for the TWWHA: 'There is a need to expand and extend monitoring programs to include more monitoring of World Heritage values (in addition to current impacts monitoring work) as a consequence of the focus afforded by the *Environment Protection and Biodiversity Conservation Act 1999* on the protection of World Heritage values.'

COMMENT: The Parks and Wildlife Service will implement this approach during the 2004 mid-term review of the TWWHA Management Plan.

Timing of State of the TWWHA Reports

OPPORTUNITY FOR IMPROVEMENT: This State of the TWWHA Report was not available on a timeframe that allowed its findings to feed into and inform the preparation of the current (1999) management plan. Staffing levels for the evaluation (generally less than one full time position) were a limiting factor.

Proposed Action **26**
That the Parks and Wildlife Service prepare 'State of the TWWHA Reports' at regular points in the management cycle to ensure that the findings of evaluation are available to feed into and inform preparation of the next management plan.

Standard and practice of management for the TWWHA

Practical guidelines for heritage management

OPPORTUNITY FOR IMPROVEMENT: Staff of the managing agency considered that the standard and practice of management for the TWWHA could be improved through providing managers with ready access to practical guidelines on best practice principles and practices for the management of Tasmania's natural and cultural heritage.

COMMENT: PWS has recently produced a 'Tasmanian Reserve Management Code of Practice 2003' which provides general guidelines for the operational management of Tasmania's natural and cultural heritage.

Proposed Action **27**
That the Parks and Wildlife Service develop, apply, and as appropriate update a code of best practice principles and practices to guide the practical management of Tasmania's natural and cultural heritage in the TWWHA (and other Tasmanian national parks and reserves).

External reviews of projects

OPPORTUNITY FOR IMPROVEMENT: Staff of the managing agency who were involved in the external review of the WHA Vegetation Mapping Project considered that the review had positively influenced the course of the project. They suggested that similar external reviews could assist in ensuring that high standards of practice were achieved for other significant projects, research programs and publications etc.

Proposed Action **28**
That external reviews be conducted from time to time for significant projects and/or other selected programs of management for the TWWHA to ensure that high standards of practice and performance are achieved and maintained. The selection of projects for external review should take account of suggestions put forward by advisory bodies for the TWWHA.



Proposed Action 29
That personnel management within the Parks and Wildlife Service and associated agencies implement measures to support and retain experienced and knowledgeable staff, and further enhance management capacity for the TWWHA e.g. by encouraging staff career development; relating staff salary, benefits and progression to performance; and by undertaking appropriate recruitment, training and succession planning.

Personnel management

OPPORTUNITY FOR IMPROVEMENT: In relation to the standard and practice of heritage management, the Department of the Environment and Heritage suggested that the performance of management for the TWWHA could be improved through ‘personnel management within the managing agency focusing on conducting the necessary measures to retain experienced personnel and further enhancing management capabilities by training and appropriate incentives’.

In addition, the IUCN Vth World Parks Congress recommended that ‘protected area authorities recruit, develop and support staff in ways that will encourage and maintain high levels of commitment and performance’, for example by ‘ensuring continuous and systematic institutional capacity development linking training to performance’ and by ‘encouraging career development and retention of staff by relating salary, benefits and progression to performance’.

Proposed Action 30
That the Parks and Wildlife Service establish links with the *Tasmania Together* Progress Board and others as appropriate to consider establishing coalitions of interest that will further the delivery of the management objectives for the TWWHA (and other reserves) that align with *Tasmania Together* goals.

Tasmania Together Coalitions of Interest

OPPORTUNITY FOR IMPROVEMENT: Several goals of *Tasmanian Together* (a government initiated community-developed long-term strategic plan for achieving the social, economic and environmental aspirations of Tasmanian society) align closely with the responsibilities of management for the TWWHA and other Tasmanian reserves. The *Tasmania Together* Progress Report 2003⁷ indicates that the Progress Board will be seeking to develop coalitions of interest within and between various sectors of the community with respect to *Tasmania Together* goals.

A tranquil scene at Lake St Clair

Photo by Glenys Jones



⁷ Tasmania Together Progress Board, 2003, *Tasmania Together Progress Report 2003. A report to Parliament on what the people of Tasmania have achieved in the pursuit of the Tasmania Together vision*. Available at <<http://www.tasmaniattogether.tas.gov.au/>>.

How can this report help improve ongoing management?

This report provides those with management responsibilities for the TWWHA with a sound and informed basis for making decisions. As such it is a vital tool for supporting and guiding adaptive management of the TWWHA consistent with international best practice systems⁸.

Managers and others with responsibilities for the TWWHA can use this report to help improve ongoing management by:

- actively considering and responding to the findings and proposed actions of this report;
- establishing clear linkages between the findings of this report and budget allocation processes and decisions in relation to management direction and priorities, and the allocation of financial and staff resources for management of the TWWHA;
- providing ongoing support for management programs that have been demonstrated to be effective in achieving management objectives, and considering the relative merits of increasing or redirecting management effort to, or from, areas of weak performance and/or low relevance to management objectives;
- targeting critical gaps in information required for sound management and addressing identified limitations of this evaluation; and
- taking account of the findings and proposed actions of this report during the mid-term review of the 1999 management plan for the TWWHA (scheduled to commence in 2004) and incorporating appropriate prescriptions for management action into the next management plan.

In addition, this report can help improve ongoing management by providing all stakeholders with detailed accurate information about management of the TWWHA. This in turn contributes to broader community understanding and involvement in management, and paves the way for more effective, community-supported management of the TWWHA.

⁸ For example, ISO 14004 (Standards New Zealand & Standards Association of Australia, 1996, *Environmental management systems: general guidelines on principles, systems and supporting techniques*, Australian/New Zealand Standard, AS/NZS ISO 14004:1996, Joint Technical Committee QR/11, Environmental Management).

