PACIFIC

AUSTRALIA

Great Barrier Reef

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II.1 Introduction

Year of Inscription 1981

Organisation Responsible for the Report

- Great Barrier Reef Marine Park Authority (GBRMPA)
  P O Box 1379, Townsville 4810
  Queensland
  Australia

II.2 Statement of Significance

Inscription Criteria N i, ii, iii, iv

Statement of Significance

- Proposed as follows:
  "The biodiversity & the interconnectedness of species and habitats makes the GBR and the surrounding areas one of the richest and most complex natural systems on earth. While coral reef, mangrove & seagrass habitats occur elsewhere on the planet, no other WH Area contains such biodiversity. As the world's largest coral reef ecosystem, it is also a critical global resource."
  A summary of significant features highlights: (i) over 2000 km^2 of mangroves, including 54% of the world's mangrove diversity; (ii) over 2900 coral reefs built from over 360 species of hard coral; (iii) over 3000 km^2 of sea grasses; (iv) a breeding area for humpback & other whale species; (v) some 2000 fish & 6 turtle species; (vi) one of the world's largest dugong populations; and (vii) 2200 species of native plants (25% of Queensland's total).
  "The geographic extent of the GBR including the area north of the Marine Park boundary, extending beyond Cape York and into the Torres Strait, is culturally important to both Aboriginal & Torres Strait Islander people."
- An indicative table of WH attributes was attached.

Status of Site Boundaries

- "No revision of the GBR WH Area (GBRWHA) boundary has occurred since listing as a WH property. The extent of the GBR Marine Park, however, has increased and now comprises 99.25% of the GBRWHA [which] covers 348,000 km^2 (an area bigger than the UK, Holland & Switzerland combined)."
- The Marine Park now includes the subsoil beneath the seabed to a depth of 1,000m, and the airspace above the waters to a height of 915m.
- "In terms of 'buffering', the zoning spectrum provides increasing levels of protection for the more restrictive zones within the Marine Park", including regulations beyond the marine park boundaries.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- "Neither the GBRWHA nor the Marine Park are static and hence neither is the management for either area. Use patterns and technology are constantly changing and the marine environment itself is dynamic - subject to both human use and natural impacts."
- Over 70 coastal Aboriginal & Torres Strait Islander groups maintain strong cultural relationships to the GBR, and about "11 native-title claims are registered over parts of the WHA".

II.4 Management

Administrative and Management Arrangements

- The national "'GBR Marine Park Act' (1975) was enacted 'to provide for the protection, wise use, understanding & enjoyment of the Great Barrier Reef in perpetuity (…)' thus protecting the area's biodiversity whilst also "providing for reasonable use" through a spectrum of multiple-use zones.

- Since 1999, the GBRMP Act provides regulations on activities that occur outside the Marine Park such as "control point discharges from new aquacultures developments up to 5km inland".
- The national Environment Protection and Biodiversity Conservation Act 1999 protects the value of the WH property.
- The International Maritime Organisation has declared the GBR a 'Particularly Sensitive Area' ensuring "compulsory pilotage for large vessels". The national 'Environment Protection (Sea Dumping) Act' (1981) prohibits dumping from any vessel, aircraft or platform without approval.
- Other relevant state legislation includes: (i) 'Fisheries Act' (1994); (ii) 'Transport Infrastructure Act' (1994); (iii) 'Environmental Protection Act' (1994); (iv) 'Coastal Protection & Management Act' (1995); and (v) 'Integrated Planning Act' (1997).
- Day-to-day management of the WHA is delivered by the Queensland Parks & Wildlife Service (QPWS) in collaboration with agencies such as the Water Police, 'Coastwatch' & Customs National Marine Unit.
- In September 2001, the GBR Marine Park Authority (GBRMPA) released its 'Great Barrier Reef Catchment Water Quality Action Plan'.
- Although inscribed under natural criteria, "all the cultural attributes [such as historic shipwrecks] described in the nomination are today dealt with through legislative mechanisms".
- Between 1991-94, a 25-Year Strategic Plan was endorsed by 60 stakeholder groups. A comprehensive table of all associated 'Plans for the management of the GBRWHA' was attached.

"28 coastal areas initially precluded from the GBR Marine Park in the mid-1970s have recently been incorporated within the park boundaries."

Present State of Conservation

- In 1998, the 'State of the Great Barrier Reef WH Area' provided the first comprehensive synthesis of all available information on the property. The report is currently being updated.
- In the report, each environmental attribute was treated according to a 'State-Pressure-Response' model. "The overall picture was that while some elements of the GBR are subject to intensive pressures, the ecosystem as a whole is in good health."
- 28 coastal areas "initially precluded from the GBR Marine Park" in the mid-1970s have recently been incorporated within the park boundaries.

Staffing and Training Needs

- In June 2001, the total staff of the GBRMPA in Townsville numbered 157, along with some 94 staff within QPWS.
- The Cooperative Research Centre (known as the 'Reef CRC') was established in July 1993 as a joint venture between James Cook University, the marine tourism industry, scientific bodies & the MPA.
- In 2001, the MPA developed a "comprehensive list of its high priority research needs" used to strategically co-ordinate research on the GBR.
- A list of about 75 websites was attached for "hundreds of scientific & technical studies".

Financial Situation

- "It is difficult to estimate the total annual expenditure to range the GBRWHA across all relevant agencies & interest groups." Estimated spending is "in the order of AUD$ 78 million [US$ 46.8 million] per annum", spanning the government, universities & the private sector.
- According to the 1979 'Emerald Agreement', matching funds are provided by the Commonwealth & Queensland Governments for basic park management.
- In 2000-2001, the operating expense for the Marine Park was about AUD$ 30.6 million (US$ 18.4 million).
- * International Assistance from WHF: none.

Access to IT

- No information supplied.

Visitor Management

- Approx I.6 million tourists visit the Marine Park per annum. Around 90% of these are concentrated in 10% of the area (offshore Cairns & Whitsunday area).
- A 'Reef HQ Educational Program' plays a major role in raising reef awareness for visitors to the 'Reef HQ Aquarium' in Townsville, as well as throughout the country by school visits & video-link programs.
- A wide range of interpretive facilities include: (i) zoning plans & introductory guides for each section of the marine park; (ii) a 'Tourism Operators Handbook'; (iii) an 'Interpretive Manual for reef guides'; and (iv) numerous bulletins & leaflets.

II.5 Factors Affecting the Property

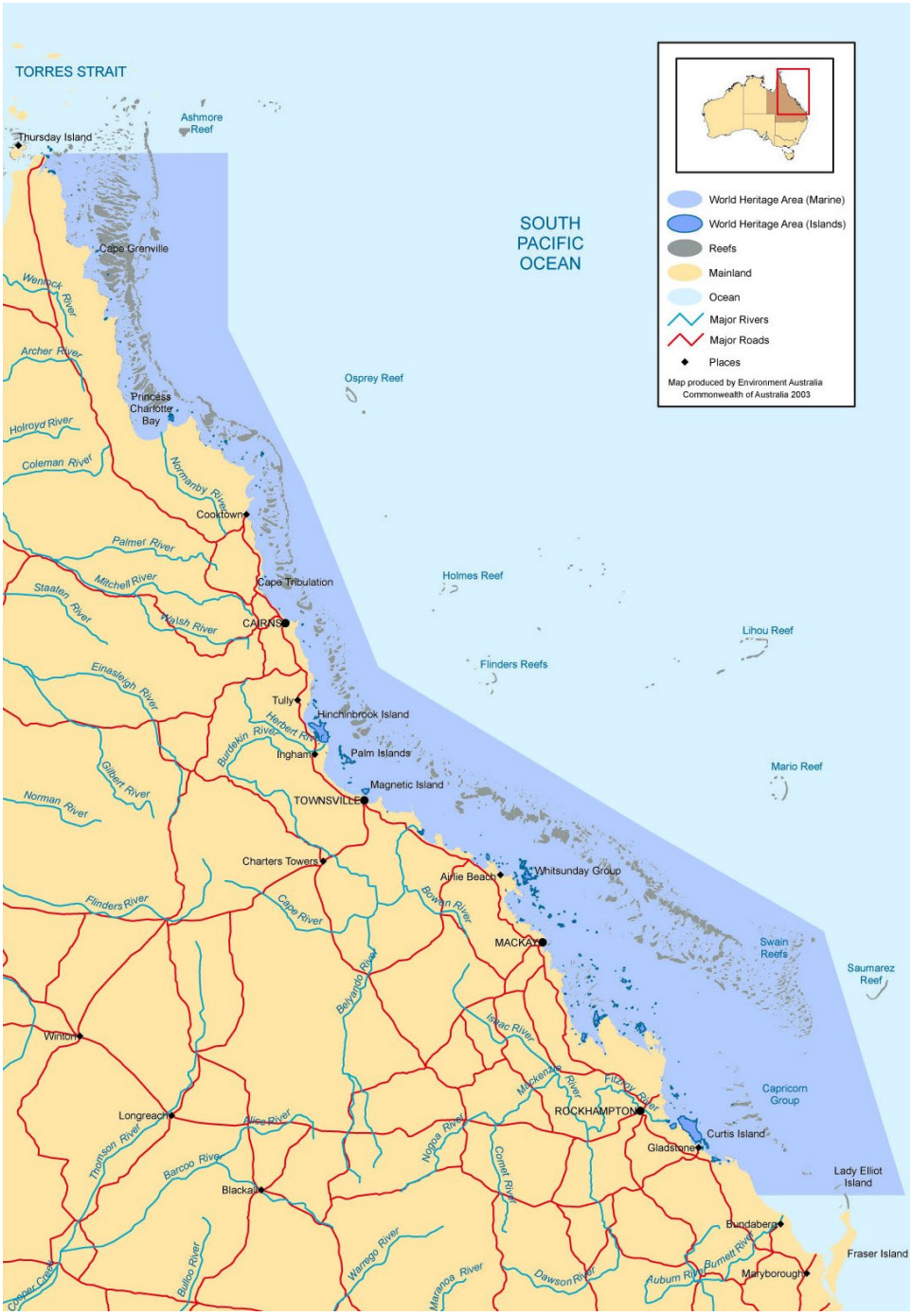
Threats and Risks

- Water quality issues & coastal development (terrestrial runoff: sediment & nutrients),
- Increasing fishing effort & impacts (bottom trawling for prawns, line, net & pot fisheries) ,
- Increasing tourism & recreational use (40% of visitors arrive with 10 major operators),
- Biodiversity loss (pollutant loads, decline in turtles & Dugong),

- Coral bleaching through global warming,
- Crown of Thorns starfish (COTS) outbreaks.

Counteractive Plans

- Water quality measures include: (i) 'end-of-river' pollution targets; (ii) codes of practice for agricultural industries; (iii) 'timelines' to upgrade sewerage discharge facilities.
- Fisheries measures include: (i) reduced numbers of trawler ships; (ii) 'by-catch' reduction devices; (iii) satellite tracking & enhanced vessel surveillance.
- Tourism measures include: (i) statutory 'plans of management' (PoMs); (ii) 'best environmental practices' register; (iii) reef-wide mooring policy.
- A 'Representative Areas Programme' (RAP) has been launched to increase the level & extent of 'no-take' areas (currently 4.5% of the area) as examples of 70 major different habitats known as "bioregions".



Map of the Great Barrier Reef showing WH Area (in darker blue)

II.6 Monitoring

Monitoring Arrangements

- "One of the highest levels of monitoring of any world heritage area takes place on the GBRWHA." This is undertaken primarily through the Reef CRC & the Australian Institute of Marine Science.

Monitoring Indicators

- Major thematic monitoring areas cover: (i) long-term coral reef health; (ii) 'QDPI Seagrass Watch'; (iii) coral bleaching; (iv) chlorophyll *a*; and (v) coordinated water quality.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- "Where matters are outside the GBRMPA's direct control", such as in fisheries management & water quality issues, the MPA takes an "active role in negotiating suitable outcomes".
- New management tools have had to be developed such as plans of management, no-anchoring zones,

vessel monitoring systems & Dugong protection areas.

- For "broader [global-scale] issues like coral bleaching or changes in sea level (…) little can be done by local management agencies".
- "Various proposals have been developed by coastal Aboriginal groups to incorporate their interests into Marine Park & WHA management, including several proposals for Indigenous co-operative management, [which] are currently being investigated."
- The MPA is "continually looking outwards", both within the WHA & internationally "to develop the best outcomes for marine area management."
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* State of Conservation Reports

1986 CC-CONF.003/INF.4 A proposal to revoke 390 ha of Lindeman Island for expansion of a holiday resort was tabled in the Queensland Legislative Assembly in February 1986. Public interest in this action was high and the proposal was withdrawn. Another potential threat from a proposed silica mine at Shelbourne Bay was the subject of an official IUCN enquiry.

1997 WHC-CONF.208/8BRev IUCN reported on concerns received over the Oyster Point development, potential damage to the WHA from acid sulphate soils, and an associated timetable of actions to protect the Reef. Australia responded that acid sulphate soils have been recognized along the whole east coast for many years, and very stringent controls exist at Oyster Point. Australia also pointed out that a regional plan controlled development & restricted certain types of fishing.

© Great Barrier Reef Marine Park Authority

Aerial view of the Great Barrier Reef

1998 WHC-CONF.201/3b Since 1997, WHC received a letter from 'The Wilderness Society' signed on behalf of 13 Australian conservation groups. The letter referred to threats (e.g. mining, fishing, logging & tourism projects) within/adjacent to 4 natural WH properties (including GBR) and to 2 mixed properties. The Chairperson transmitted the letter to the PD of Australia to UNESCO, IUCN & ICOMOS seeking their comments. IUCN acknowledged in its report to WHC that it received a large volume of reports & statements concerning many of the 13 WH sites of Australia and does not have the capacity at its HQ to evaluate them all. IUCN's Australian Committee offered to undertake annual assessments of selected properties in November 1997.
The Bureau recommended that IUCN: (a) establish a mechanism for assessing the stream of information on the state of conservation of Australian WH sites; and (b) provide an updated report on the GBR & one other natural site.

1998 WHC-CONF.202/4 The Extended Bureau was informed that the Australian authorities have set rigorous environmental conditions on activities in the Hinchinbrook region, and have implemented several measures to strengthen the conservation of the GBR. In accordance with the review, the Australian Government has reorganized the GBRMPA. The Extended Bureau was informed that IUCN had received reports on this site from its Australian National Committee, GBRMPA & Australian NGOs.

1999 WHC-CONF.204/5 IUCN transmitted to WHC a report entitled 'GBR WHA: Condition, Management and Threats' compiled by ACIUCN using a comprehensive monitoring process to draw together government & non-government members to focus on the scale & complexity of management of the WHA, as well as a range of threats including fishing, catchment issues, oil spills & oil shale mining. The report made 29 recommendations concerning the implementation of a representative system of protected areas, including IUCN categories I & II (no-take zones), and the management of the property by a single dedicated authority such as the GBRMPA with long-term funding & organisational stability.

1999 WHC-CONF.209/14 In October 1999, Australia transmitted to WHC & IUCN a set of 'Focused Recommendations' and a 'Framework for management' for the GBR. IUCN reviewed the recommendations grouped under 5 priority action areas: 1. The management of land & coastal catchments; 2. The management of fisheries; 3. The management of shipping & ship-sourced pollution; 4. Representative marine protected areas; and 5. Resources for research & management. IUCN reiterated its view that catchment issues pose the most serious threat to the WHA & recommended that the GBRMPA receive a core budget

sufficient to allow it to meet its WH obligations. IUCN considered the proposed 'Framework' to be comprehensive and agreed that many of the issues would require socio-economic changes at a scale which would take years to achieve. The Committee commended the State Party for the consultative approach adopted in developing a basis for monitoring of the GBRWHA, and recommended its adoption for the management of other WH natural properties in Australia.

2000 WHC-CONF.204/10 IUCN reviewed the progress report on the implementation of the 'Focused Recommendations' involving the establishment of a number of community-based Catchment Management Committees & associated projects. The Bureau invited the State Party to sustain the pace of progress.

2001 WHC-CONF.205/5 In November 2000, a Malaysian container vessel went aground on Sudbury Reef within the WH property, and was refloated after 13 days. The Malaysian company was fined AUS$400,000 under the Environmental Protection Act for the damage caused to an area of 1500m 2 . A larger area of 30,000m 2 was also affected by relatively low levels of contamination from the dispersal of flakes of paint. A clean-up effort which included MISC representatives and a team of divers using pumps, barges & underwater vacuums was completed in March 2001. Large pieces of coral were replaced in the trench area to facilitate natural recovery. IUCN further noted a report on Crown of Thorns starfish on the GBR and concerns that human-induced factors including nutrient & sediment-laden coastal run-offs may be shortening the interval between natural outbreaks.

The Bureau invited the State Party to continue follow-up actions to improve shipping safety & launch a long-term site monitoring programme.

2001 WHC-CONF.208/10 In September 2001 the Australian Government released a scientific report 'GBR Catchment water Quality Action Plan' (http://www.gbrmpa.gov.au/) which recommended end-of-river pollution targets for all 26 catchments adjacent to the GBR for 2011. The Plan proposed a mix of regulatory & non-regulatory measures including: proper EIAs; 'constraint mapping' for current & future agricultural development; enforcement of sewerage & wastewater standards; industry codes of practice; and catchment-specific education programmes.

The Committee invited the State Party to provide regular reports on the implementation of the plan.

AUSTRALIA

Kakadu National Park

II.1 Introduction

Year of Inscription 1981, 1987, 1992

Organisation Responsible for the Report

- Environment Australia
  Kakadu National Park Board of Management
  Jabiru, Northern Territory
  Australia

II.2 Statement of Significance

Inscription Criteria N ii, iii, iv C i, vi

Statement of Significance

- Proposed as follows:
  The "geomorphology and ecology of these coastal floodplains have undergone considerable change in a relatively short geological period", and are a useful record of sea-level change and the successional response of mangroves in Northern Australia.
  The scale and integrity of the landscape, little affected by European settlement, contains a variety of habitats including woodlands, monsoon rainforests, wetlands, floodplains, shrubland, heath, and a "largely intact faunal composition."
  "Kakadu is a landscape of cultural, religious & social significance to local Aboriginal people. Special places in the landscape include ceremonial places, sites of religious significance, archaeological and rock art sites."
  "The rock art of Kakadu continues to be an important storehouse and reference of traditions and knowledge for contemporary generations of Aboriginal traditional owners." An estimated 15,000 such 'living sites' exist across the escarpment & plateau country.
- An indicative table of WH attributes was attached.

Status of Site Boundaries

- "The northern boundary is coastline; the eastern boundary is Arnhem Land, which is Aboriginal land. To the south, the Mary River forms a readily identifiable natural boundary, and Nitmiluk (Katherine Gorge) NP is nearby."
- Three mining leases "pre-exist the establishment of the Park" outside the park boundaries. "These are Ranger, Jabiluka & Koongarra mineral leases, with the Ranger uranium mine being the only operational mine in the region."

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

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- Kakadu NP was nominated in 3 successive stages. The Stage III 'consolidated nomination' in 1992 reported that, "few species have been lost from the area since the arrival of non-Aboriginal people"; that the Park is "ecologically intact, with surrounding areas providing a very good buffer against external, potentially adverse, influences"; and that rock paintings are in a good state of conservation.
- Illegal collection of stone artefacts has been reported at some of the more accessible cultural sites.
- Key ecological integrity issues were examined by an IUCN technical evaluation in March 1992 including the: (i) cessation of small-scale mining & over-stocking; (ii) appropriate tourism measures; (iii) environmental impacts of the Mount Bundey military training area; and (iv) "future potential effects of uranium mining outside the Park."

II.4 Management

Administrative and Management Arrangements

- The "legislative foundation" for the joint management of the Park by the 'Kakadu Board of Management' (composed of a 10/14 Aboriginal majority) is found in the EPBC Act (1999) & 'NT Aboriginal Land Rights Act' (1976).
- Other state-level statutes include the: 'NT Aboriginal Sacred Sites Act' (1989); 'Heritage Conservation Act' (1991); 'Territory & Wildlife Conservation Act' (1995); and 'Planning Act' (1999).
- A local 'Environment Protection (Alligator Rivers Region) Act' (1978) provides specific protection to a catchment area vulnerable to the effects of mining.
- "Approximately 50% of the land in the Park is Aboriginal land, with title being held by Aboriginal land trusts". A lease to the Director of National Parks was executed in 1978, and revised in 1991.
- The first KNP Plan of Management was produced in 1981. Review is currently underway for a 5th plan to come into effect in 2004.
- "Although not inscribed on the WH List as a cultural landscape, the current Plan of Management identifies Kakadu National Park as a cultural landscape, shaped by many generations of Traditional Owners."

Present State of Conservation

- "Australia has provided numerous reports to the WH Committee… including responding to calls for the Park to be included on the WH in Danger List."
- In April 1999, the Australian Government presented a detailed report 'Australia's Kakadu: Protecting World Heritage' which addressed point-by-point the threats & recommendations identified by the Chairperson of the WH Committee during a mission in June 1998.
- In April 2000, Australia provided an updated progress report on meeting commitments made in 'Australia's Kakadu'. In July 2000, IUCN & an 'Independent Science Panel' (ISP) visited Kakadu, and submitted a report to the WH Committee in Cairns, 2000.
- The 2000 WH Committee considered that the Jabiluka Mine proposal did not threaten the "biological and ecological systems" of Kakadu. However, "dialogue between the State Party and the Traditional Owners of the mine area continues". The Australian government is committed to inform WHC "openly and transparently" of progress.
- A set of internet links to all the relevant reports from the State Party between 1998-2000 were provided.

"Although not inscribed on the WH List as a cultural landscape, the current Plan of Management identifies Kakadu National Park as a cultural landscape, shaped by many generations of Traditional Owners."

Staffing and Training Needs

- In June 2002, 70 people were employed by "Parks Australia North for Kakadu", 41% of which comprised of Aboriginal staff members.
- Parks Australia is committed to an 'Indigenous Career Development & Recruitment Strategy' designed to "enable promotion" of Traditional Owners to higher management positions by continuous training.

Financial Situation

- In 2001-2002, the Commonwealth Government allocated approx. AUS$ 9.6 million (US$ 5.8 million) for operations & capital works in Kakadu NP.
- "Lease payments – including rental and a share of revenue generated from Park use fees and charges – are made to the Northern Land Council on behalf of the Land Trusts." No figures supplied.
- * International Assistance from WHF: none.

Access to IT

- No information supplied.

Visitor Management

- Based on official ticket sales between 1992 and 2001, visitors increased from 128,355 to 169,517 per year.
- Approx 51% of visitors are from overseas, & 50% are on organised tours for an average stay of 2.6 days.
- Visitor facilities include: (i) the Bowali Visitor Centre & Warradjan Aboriginal Cultural Centre; (ii) lookout platforms; (iii) interpretive displays; (iv) publications & videos; and (v) daily art site talks by rangers.
- Accommodation inside the park covers 25 designated camping sites, bush-style camping, a youth hostel & motel-style facilities.

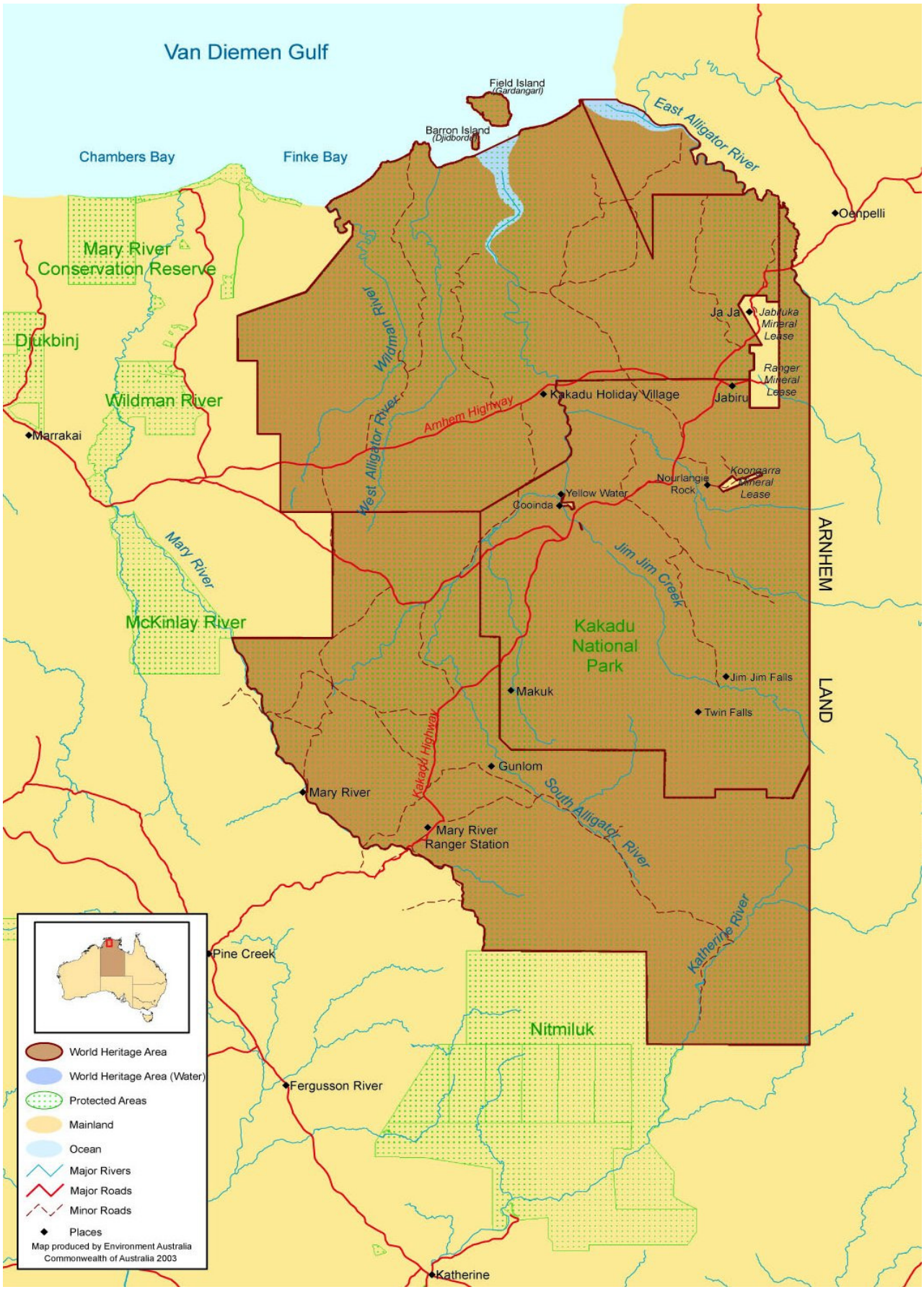
II.5 Factors Affecting the Property

Threats and Risks

- Introduced & feral animals, weeds (i.e. cane toad, Asian water buffalo, *Salvinia*, *Mimosa*),
- Saltwater intrusion (swamp to mangrove conversion),
- Uranium mill residue dumps,
- Disruption of Aboriginal fire-burning "mosaic",
- Excessive staff time dedicated to tourism,
- Damage to rock art & archaeological sites,
- Loss of oral cultural heritage.

Counteractive Plans

- A 'Feral Animals Strategy' includes a range of habitats & their sensitivities to disturbance.
- Weed infestations are treated "within a regional context" to avoid new sources of infestations.
- "Traditional owners are taking charge of and conducting traditional burning", making a "positive contribution" to fire & biodiversity management.
- In November 2000, "interim remediation" was carried out near Gunlom where Uranium mill residues were dumped during the 1950s & 1960s. This involved the "placement of armour rock", and the storage of radioactive material "in drums, within shipping containers and in a locked compound".
- In 1996, 'Environment Research Institute of the Supervising Scientist' (ERISS) published a vulnerability assessment of predicted climate change & sea-level rise in the Alligator Rivers Region.
- A zoning scheme with 'area plans' and restrictions on boating, biking, horse riding & rock climbing has been designed to control tourism.



Map of Kakadu National Park showing WH Area (in brown)

II.6 Monitoring

Monitoring Arrangements

- The 'Kakadu Region Social Impact Study' (KRSIS) addressed community development issues in 1997.
- Along with the mining company, "the ERISS carries out research & monitoring of uranium mining activities", with a focus on "off-site aquatic impacts" on Kakadu's streams & waterfalls.
- Site-level monitoring of water catchments has been "instigated on the recommendations of the ISP."
- Permanent *in situ* monitoring sites were established in 1996 to detect sea-level change with remote sensing techniques.

Monitoring Indicators

- A 3-page 'Monitoring Matrix' was presented.
- Salient indicators include: (i) cane toad & 11 other fauna surveys; (ii) long-term landscape change using aerial photography; (iii) art site & oral history records; (iv) an 'environmental radioactivity programme' for Aboriginal bush foods; (v) baseline data on aquatic systems "potentially at risk from mining operations".

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- "The Gunlom Aboriginal Land Trust lease in the south of Kakadu requires completion of a 'plan of environmental rehabilitation' for Guratba (Coronation Hill) and other old uranium mine sites".
- Parks Australia endeavours to fully implement "the achievement of this legal commitment" for the agreed rehabilitation of the Ranger Mine area by 31 December 2015.
- In late 2001, the Northern Land Council, traditional Aboriginal owners & Parks Australia "agreed to divide the rehabilitation project into Part A (sites with no or only minor radiological contamination) & Part B (those that have significant/complex radiological contamination)."
- In consultation with the Traditional Owners, the Kakadu Board of Management has discussed the possibility of Kakadu NP, the greater Kakadu Region, or the East Alligator River, being re-nominated as a WH Cultural Landscape.

Waterbirds at Kakadu National Park

*State of Conservation Reports

1986 CC-CONF.003/INF.4 IUCN was informed by the Australian authorities that the boundaries of the site had been considerably enlarged to include an important wetland area.

1991 SC-CONF.002/4 The Committee was pleased to be informed of the proposed Stage III extension of the WH Site. As the proposed additional area was higher than 10% of the original extent of the property, the Committee recommended that the extension be considered as a new nomination.

1994 WHC-CONF.001/3b An ICOMOS mission which visited Kakadu in April 1994, had discussions with Traditional Owner representatives on the managing council & visited a number of the rock-art sites. It observed the mosaic burning land-management practices employed by the park management and in use by Aboriginal groups for at least 25,000 years. The mission felt that the area represented an important cultural landscape.

1997 WHC-CONF.208/8BRev IUCN reported on a proposal to mine on a mining lease enclave outside the WH area. IUCN reported that 77 concerns had been identified over the proposal and the Senior Supervisory Scientist had suggested that a new EIA would be needed. ICOMOS considered that care needed to be taken to protect important sacred sites. It also expressed concern that the traditional owners had not participated in the environmental impact statement. The Australian Government advised that the '77 concerns' were in fact mandatory conditions set by the Government on the mining company, and that it had commissioned an independent social impact study. Australia added that there had been uranium mining in the area outside the WH site for 20 years with no significant environmental effects.

1998 WHC-CONF.202/4 IUCN informed the Ext. Bureau that its advice on the matter of the Jabluka mine was guided by the use of the precautionary principle. After hearing the views of Bureau members, the Chairperson summarised the debate as a consensus on the need to proceed according to the precautionary principle, even in the absence of complete data. The Chair emphasised that the multi-faceted environmental, cultural & legal issues relating to the conservation of the site highlighted the need for a fact-finding mission.

1998 WHC-CONF.203/8Rev & 203/INF.18 Following a joint IUCN & ICOMOS mission in November 1998, Professor Francioni presented 16 recommendations to the WH Committee concerning ascertained and potential dangers to Kakadu National Park posed by the Jabiluka mining proposal. He referred to the visual impacts and dangers to the living cultural heritage of Kakadu; the lack of recognition of the Kakadu cultural landscape; the need to reassess & expand the boundaries of the park; and referred to an overall breakdown in the trust and communication of the "joint management" regime.

The Chairperson noted that Australia had provided WHC with detailed reports on the assessment & approvals process of the Jabiluka mine site, and that WHC had also received many protest letters. The Chairperson further expressed the high-level mission's gratitude to the Australian authorities for their considerable assistance. IUCN presented a position statement approved by the Director-General of IUCN (referring to a resolution adopted by the World Conservation Congress in 1996) stating that the conditions existed for inscribing Kakadu on the List of WH in Danger. The statement also cautioned that a failure to recognise the dangers to the property would diminish the standards of, and risk prejudicing the prestige of the Convention. ICOMOS gave general support to the mission report.

The Observer of Australia responded that the recommendations were flawed and unacceptable to the Australian Government. The formulation of recommendations were then discussed in several closed sessions with Bureau members. The Committee later urged the Australian Government & Energy Resources Australia Inc. to undertake the voluntary suspension of construction of the mine, and recommended that the authorities provide a detailed report on: (a) the threats posed by the mine; (b) alternatives for milling ore at Jabiluka & Ranger; and (c) a detailed update on the implementation of a cultural heritage management plan.

1999 WHC-CONF.209/14 The 3rd extraordinary session of the Committee considered that it was the clear responsibility of the Australian Government to regulate the activities of a private company such as Energy Resources of Australia (ERA), and requested ICSU to continue the work of the Independent Scientific Panel in co-operation with the Supervising Scientist & IUCN. ERA informed the Committee that it was committed to a "transition from Ranger to Jabiluka such that two mines will not be in full production simultaneously." It was noted that the 4th World Archaeological Congress adopted a resolution in January 1999 calling for the inclusion of Kakadu on the List of WH in Danger. The Gundjehmi Aboriginal Corporation requested that ICOMOS & ICCROM representatives visit Kakadu to assist in the development of a "World's Best Practice" sacred site assessment process.

"In 2001, the World Heritage Committee was informed of the first sighting of cane toads (Bufo marinus) in Kakadu."

1999 WHC-CONF.204/5 The Bureau noted that WHC received a letter in October 1999 from Australia providing a report on progress made since July 1999. The report from the State Party indicated that drilling at Jabiluka had ceased, and that Energy Resources of Australia Ltd had resolved to work in consultation with Traditional Owners & ICOMOS in developing a Cultural Heritage Management Plan (CHMP).

2000 WHC-CONF.202/5 The Bureau was informed that WHC had received a report on Australia's progress in implementing commitments made to the Committee in 1999. In addition, WHC received correspondence concerning the water management system at Jabiluka, and a leak of tailings water contaminated with manganese at the Ranger uranium mine. In May 2000, WHC received a letter from the WH Branch of Environment Australia reporting that the pipe, from which the leak of tailings water, which took place between December 1999-April 2000, had been repaired, and water quality standards had not been exceeded.

2000 WHC-CONF.204/10 In co-operation with the Australian Supervising Scientist, the Independent Scientific Panel (ISP) of the International Council for Science (ICSU) and a representative of IUCN made a site visit in July 2000 to the Jabiluka & Ranger Mineral Leases. In September 2000, IUCN informed WHC that it considered that the tailings pipe leak to have had minor ecological impact, but noted the delays in reporting the leakage and the inconsistency in responses between the Northern Territory Authority and the more detailed response of the Australian Government & ERA. IUCN believed this vindicated the need for the Federal Government of Australia to resume direct control for the operations on a mine lease within the WH Area.

2000 WHC-CONF.204/21 The ISP concluded that the risks to the natural value of the Kakadu WH Site were small, but noted that the development of the Jabiluka Mill Alternative should not be allowed to threaten the natural WH value of Kakadu National Park.

2001 WHC-CONF. 205/5 In letters dated March-April 2001, the State Party confirmed that the Jabiluka mine site remains on a stand-by & environmental management phase with stakeholder discussions. IUCN noted that: (a) no mining was taking place at Jabiluka; (b) current activity was focused on responding to the concerns of Aboriginal people; (c) features common to both the Ranger Mill Alternative (RMA) & the Jabiluka Mill Alternative (JMA) had been constructed in line with the environmental impact assessment process; and (d) in its agreement with the 2001 WH Committee, the Australian Government undertook to establish an Independent Science Advisory

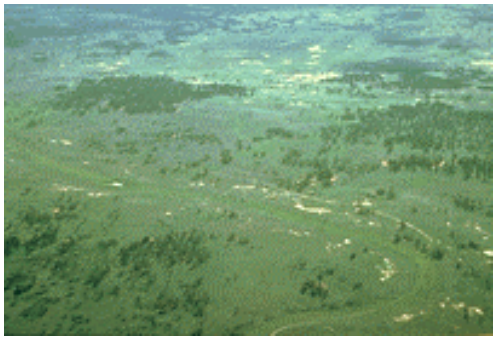
Committee (ISAC) “to report openly, independently and without restriction”. The State Party also reported the first sighting of cane toads (*Bufo marinus*) in Kakadu.

2001 WHC-CONF.208/10 The State Party provided new information on progress with the (i) cultural landscape & ecosystem analysis; (ii) recruitment of a water resource specialist; and (iii) details of the newly established ISAC. IUCN noted that the proposed ISAC included no NGO representation. A recent report from 3 Australian NGOs warned that no current mine plan is publicly available, and that the ‘interim water management pond’ at Jabiluka almost overflowed in mid-February 2001 forcing the company to resort to pumping water contaminated with uranium & other minerals into underground shafts. IUCN noted that the report raised concerns over the storage of an estimated 20,000 tonne stockpile of mineralised ore unearthed during the construction of Jabiluka. IUCN recommended that the above matters be referred to the first meeting of the ISAC.

2001 WHC-CONF.208/24 The State Party provided responses to the matters raised in 2001 WHC-CONF.208/10 and also noted that the 'Alligator Rivers Region Technical Committee' (ARRTC) will have the role of the Independent Scientific Advisory Committee for the Kakadu region.

AUSTRALIA

Willandra Lakes Region



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II.1 Introduction

Year of Inscription 1981

Organisation Responsible for the Report

- Environment Australia,
  New South Wales National Parks & Wildlife Service (NPWS)
  Willandra Lakes Region WHA, Lower Darling Area, New South Wales
  Australia

II.2 Statement of Significance

Inscription Criteria N i, C iii

Statement of Significance

- Proposed as follows:
  "An aesthetic sense, ritual and concern for deceased are surely the hallmarks of mankind. The Willandra discoveries have established the great antiquity and richness of Aboriginal culture and have caused a significant reassessment of Aboriginal prehistory and its place in the history of modern man."
  The outstanding universal value of the property derives from: skeletal remains amongst the earliest evidence of *Homo Sapiens* anywhere in the world; evidence of complex ritual & symbolic systems in the form of an ochred burial & a cremation now believed to be 40-42,000 years old uncovered near Lake Mungo; ancient grindstones to produce flour from wild grass seeds; and archaeological evidence of remarkable early human technological adaptation to the natural environment.
  In terms of natural heritage, the outstanding universal value includes: a regional Quaternary fossil landscape; a resource for research into palaeoclimatic, semi-arid environments & late Pleistocene paleo-magnetism; and one of the largest clay dunes in the world, the Chibnalwood lunette.
- An indicative table of WH attributes is attached.

"With regard to the integrity of the region, it is an irony of the Willandra Lakes that continued erosion of key geomorphological features results in the exposure of cultural sites that further reinforce the reason for the listing."

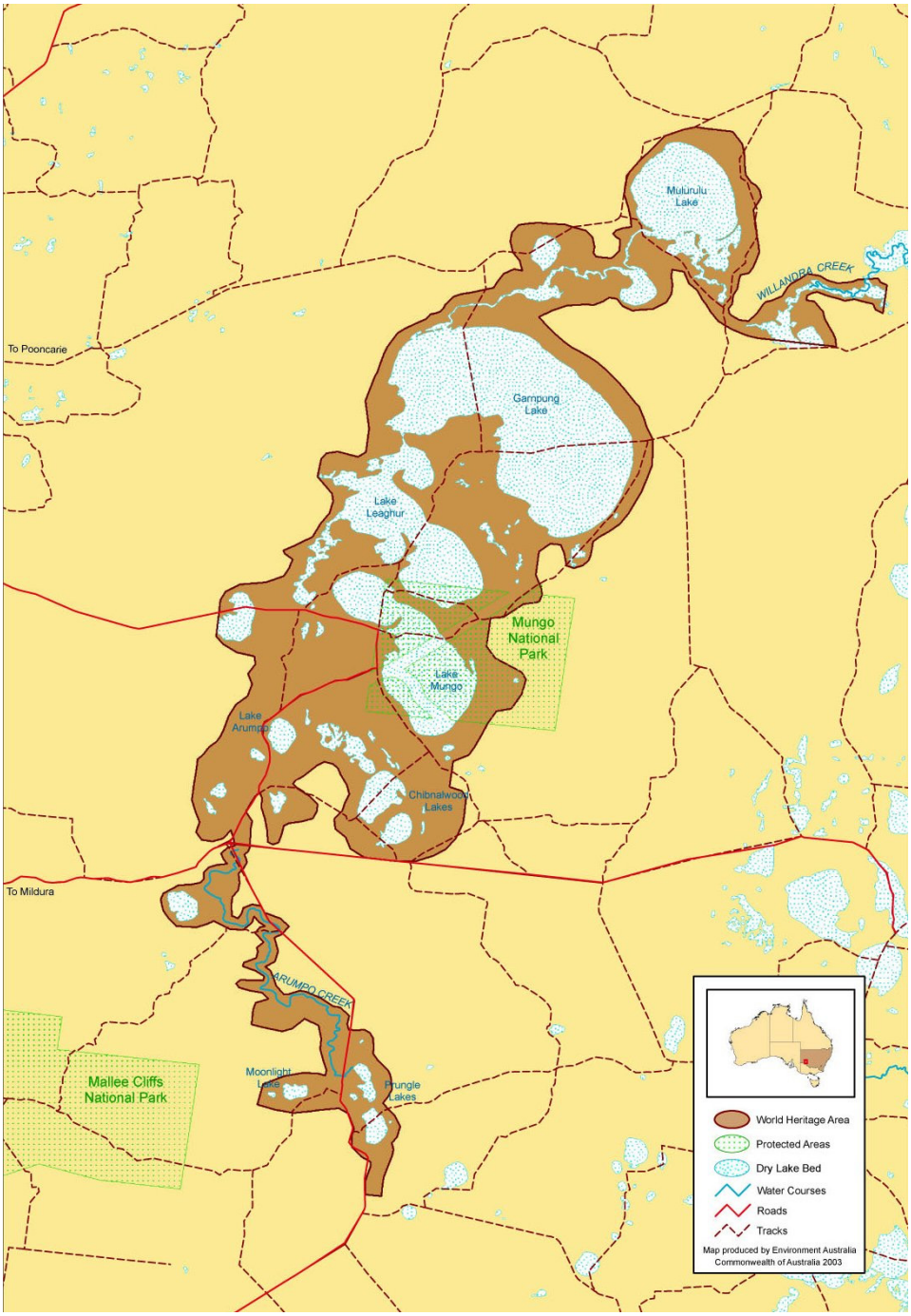
Status of Site Boundaries

- "At the time of listing, the boundary of the WLR was defined by cadastral boundaries which included pastoral leases and crown reserves." Although a "convenient reference", these borders did not accurately reflect the WH landscape.
- In 1995, the WH Committee endorsed Australia's revised boundary which removed certain pastoral leases and reduced the size of the property to under 240,000 ha. A few excluded areas were also included with the support of scientists, landholders & the 3 affiliated Aboriginal groups.
- As part of a "structural readjustment package" and to develop a management plan for WLR, several pastoral leases were purchased in October 2002 and added to the conservation estate (Mungo National Park), which now amounts to 25% of the WH area, an increase from 10% in 1981.
- There are no formal buffer zones. However, any proposed development in the vicinity of the WH boundary is formally assessed & scrutinised by the WLR WH management committees.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- "As overall, or general measures of condition, the authenticity and integrity of the WLR remain intact (…) The only change has been continued deflation and erosion of that which was already eroded at the time of listing."
- "With regard to the integrity of the region, it is an irony of the Willandra Lakes that continued erosion of key geomorphological features results in the exposure of cultural sites that further reinforce the reason for the listing."



Map of the Willandra Lakes region showing WH Area (in brown)

II.4 Management

Administrative and Management Arrangements

- Local authorities play a minor role in management committees and in-kind contributions to projects.
- State-level legislative controls include the: (i) Gazetted WLR 'Regional Environmental Plan' which identifies WLR WH management committees, including the tribal elders council, with decision-making responsibility; (ii) NSW National Parks & Wildlife Act (1974); (iii) NSW Dept. of Land & Water Conservation rangeland monitoring; (iv) NSW Environmental Planning and Assessment Act (1979).
- Referrals under the national EPBC Act 1999 have been few "by virtue of the WLR being in a remote area and not subject to high development pressure", and have related mainly to sand mining projects located outside the WH boundary.
- 3 management committees (with cross-representation of some members) are responsible for providing advice to Governments on management of the WLR: (i) three traditional tribal groups 'Elders Councils'; (ii) a 'Community Management Council' of local stakeholders; and (iii) a 'Technical & Scientific Advisory Committee'.
- A 'Steering Committee' of executive level Government officers coordinates inter-departmental policy on the WH area.

Present State of Conservation

- Mining for mineral sands has occurred in a number of locations, especially at Garnpang & Prungle Stations outside of the WH area boundaries. "Detailed environmental assessment of these locations are in progress."

Staffing and Training Needs

- "The WLR WHA has one dedicated staff member (the Executive Officer) located in the region." The officer is funded by the Commonwealth and supported by staff from NSW NPWS & Environment Australia.
- Training is provided by NSW NPWS on an "as needs basis".

Financial Situation

- Funds for WH management projects have been mainly grants from the Commonwealth 'Natural Heritage Trust' since 1996. No figures supplied.
- Funding is considered adequate. However, the delivery of annual "project-based" grants rather than recurrent funding allocations has made on-going site monitoring problematic.
- The State of NSW has "no specific budget for WH management". Such a budget "would be of great assistance in preparing joint Commonwealth/State funding submissions."
- * International Assistance from WHF: none.

Access to IT

- Computer resources running on IBM Windows NT & supported by an NPWS Intranet are adequate.

Visitor Management

- In 2001, NPWS estimates that about 40,000 people visited Mungo National Park with significant peaks during school holidays & winter months. A small tourist lodge has been established outside the western boundary.
- Limited interpretive facilities include: (i) a self-guided visitor centre at Mungo NP; (ii) new signage at WH boundaries (acknowledging traditional owners); and (iii) a guidebook, website & interactive CD-Rom.
- Improvements in interpretive materials will be completed by June 2003 with new brochures, maps, & audio-visual "touch-screen" computers.

II.5 Factors Affecting the Property

Threats and Risks

- Mining for mineral sands requiring large volumes of water,
- Combined grazing pressure of feral & native grazers,
- Deflation of ground surfaces in eroded areas,
- Erosive effects of foot traffic by visitors.

Counteractive Plans

- The rabbit population has declined following the introduction of the Rabbit Calici Virus (RCV).
- Midgley et al (1998) study on visitor impacts.
- The 'Walls of China' visitor car park has been relocated & additional boardwalks are planned.

II.6 Monitoring

Monitoring Arrangements

- The rangeland monitoring of the NSW Dept. of Land & Water Conservation "is not specifically targeted towards WH values, but rather to general landscape conservation" concerning overstocking/grazing.
- While the 1996 Plan of Management 'Sustaining the Willandra' accorded high priority to site rehabilitation, systematic recording of site condition data was only initiated in 2002 with the selection of 10 locations for detailed monitoring defined as the "repeated gathering of specified information".

Monitoring Indicators

- NPWS have collated data on visitor numbers since 1981 through road & pedestrian counters (an average of 3.3 people per vehicle is used), vehicle surveys, and analysis of visitor book signatures.
- In 1995, 23 points were identified to measure the rate of erosion near burial locations.
- Monitoring indicators established prior to 2002 include: (i) rangeland assessment plots (RAPs) at 11 locations; (ii) transects & photo points to monitor vegetation change; (iii) autumn studies of Kangaroo populations.
- The following draft list of key indicators has been identified for the Willandra Region: (i) integrity of geomorphological and fluvial features; (ii) retention of both known and as yet undiscovered evidence of giant extinct marsupial species, except for authorised removals; (iii) integrity and state of preservation of archaeological sites; (iv) retention of archaeological materials *in situ*, except where removal is authorized.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- "The ability to assess and control peripheral actions" which might have a detrimental effect on the property has been reinforced by the EPBC Act 1999.
- "The traditional owners of the region are only now beginning to achieve a meaningful role in the management of the WH area… This issue will be a priority area of the Plan of Management that is currently being prepared."
- As a result of monitoring indicators, "landholders are provided with annual reports and advice on management", including 'Individual Property Plans'. It is also proposed to submit Balmoral Station as a State Conservation Area.
- The need for a State Budget for WH management is "particularly the case for NSW" which has the responsibility for 4 separate WH properties.
- "An ongoing/recurrent budget for site monitoring and management is a major requirement."

* State of Conservation Reports

1994 WHC-CONF.001/3b As no one from IUCN, ICOMOS or UNESCO had ever paid a visit to this mixed site, IUCN requested the Australian authorities to arrange a field visit to examine reported problems with resident landowners, aboriginal concerns, and the lack of a management plan 13 years after it was requested by the Committee. The 2-day visit concluded that Willandra was the most neglected of all Australia's WH sites. A full briefing document was later provided to IUCN on the activities underway including the establishment of a Community Management Council; a Technical & Scientific Advisory Committee; the release of a 'Strategic Issues Document'; and a socio-economic impact study funded by the Commonwealth to assist the State of New South Wales.

1995 WHC-CONF.203/5 The Bureau took note of the first mission report to the site. In a letter dated September 1995, the national authorities advised WHC of a proposed amendment to the boundary of Willandra Lakes. In consultation with scientists, landholders & Aboriginal communities, the Technical & Scientific Advisory Committee prepared a report in May 1995 recommending a revision of the boundaries to adequately reflect the original cultural & natural values. The boundary review, which will reduce the total area by about 30% and add a number of small areas, is part of a package of planning measures to increase the credibility & sound future management of the site.

AUSTRALIA

Tasmanian Wilderness

II.1 Introduction

Year of Inscription 1982, 1989

Organisation Responsible for the Report

- Environment Australia
  Tasmanian Dept. of Tourism, Parks, Heritage & the Arts (Parks & Wildlife Service)
  GPO Box 44, Hobart, Tasmania 7001
  Australia

II.2 Statement of Significance

Inscription Criteria N i, ii, iii, iv C iii, iv, vi

Statement of Significance

- Proposed as follows:
  The WH area "comprises most of the last great temperate wilderness in Australia, and is one of only a few such regions in the world. It extends over l.38 million hectares, covering around 20% of the land area of the whole island of Tasmania."
  Rocks from virtually every geological period are represented, and the area has some of the deepest & longest caves in Australia.
  A variety of plant species descended from the super-continent of Gondwana are recognised by IUCN as an International Centre for Plant Diversity.
  The wilderness is also a stronghold for a high proportion of endemic species (i.e. orange-bellied parrot, burrowing crayfish) and ancient relict groups, such as the world's largest marsupial carnivores, the Tasmanian devil, spotted-tailed & eastern quoll.
  More than 40 sites, including Kutikina Cave & other rock art sites, have "exceptional cultural, emotional and spiritual value" to the Tasmanian Aboriginal community, and reveal remarkable human adaptation to the severity of the climate during the last Ice Age.
- An indicative table of WH attributes is attached.

Status of Site Boundaries

- As a result of several new species discovered, the authorities are undertaking a project to update the natural features of the WH area. "It is anticipated that this will result in a minor expansion of the area (approx. 20,000 additional hectares)".

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- "The condition of the natural and cultural heritage of the Tasmanian Wilderness WH area (TW WHA) has generally remained stable since listing of the area."
- At the time of the 1989 extension of the property, the IUCN technical evaluation "noted the very positive impact on the integrity of the property resulting from the cancellation of the Gordon-below-Franklin hydro-electric scheme".
- Scientific discoveries post-WH inscription include: (i) new marine communities such as a new species of skate & sea pen; (ii) the oldest documented vascular plant clone in the world (43,000 years old); and (iii) several new terrestrial species including the moss froglet, mountain skink, fern ally & a new lichen.

II.4 Management

Administrative and Management Arrangements

- The primary piece of legislation is the 'National Parks & Wildlife Act' (1970) which covers 90% of the land within the WH area. The act states that "no statutory powers can be exercised within a state reserve, unless authorised by a management plan."
- The first WH area management plan ran from 1992 to 1999, followed by the current 10-year plan. 'Site plans' also exist for 7 specific areas.
- The WH area is managed by joint Commonwealth & State arrangements: a Standing Committee of officials & a 15-member Consultative Committee of scientific, Aboriginal, industry & recreational interests provide advice to a 4-member Inter-Ministerial Council.
- 10 referrals have been made to the 'Australian Heritage Commission Act' (1975) since 1996, and 7 referrals to the EPBC Act (1999), concerning visitor facilities, wood processing & small-dam irrigation.
- The 'Aboriginal & Torres Strait Islander Heritage Protection Act' (1984) protects Aboriginal sites from desecration, whilst the Aboriginal Land Council administers the Kutikina Cave (15ha) and other "parcels of land" since December 1995.

- Other pieces of legislation such as the Crown Lands Act (1976), Electricity Supply Industry Act (1995), and Aboriginal Lands Act (1995), are applied to small parts of the WH area & adjacent lands.

Present State of Conservation

- Recent improvements include: (i) closure & rehabilitation of a major quarry at Marble Hill; (ii) an increase in the population of the endangered Pedder galaxies fish; (iii) greater abundance of the pencil pine moth & blind cave beetle; and (iv) an increase in the breeding range of the New Zealand fur seal.
- Detrimental changes include: (i) "viewfield impacts" of hydro-electric developments present at the time of inscription; (ii) destabilisation of the river bed from the Gordon power scheme; (iii) "pronounced sheet erosion" linked to previous grazing & firing land-uses; (iv) continued decline of the orange-bellied parrot; (v) introduced root rot disease (*phytophthora cinnamomi*); and (v) feral animals & weeds.

Staffing and Training Needs

- Between 1992-1999, staff increased from 86 to 112 permanent employees of the PWS. 58% are based in the field centres, and 41% in the Hobart Office.
- About 25 residents including rangers, volunteers & selected artists inhabit the WH property.
- In recent years, there has been an increase in the utilisation of volunteers from Tasmania & overseas as trainees, student placements & community workers.

Map of the Tasmanian Wilderness showing WH Area (in green for land and darker blue for water)

Financial Situation

- WH area funding "remained stable between 1993 and 2002 at approx. AUS$ 8.4 million (US$ 4.5 million) per year", comprising AUS$ 5 & AUS$ 3.4 million from the Federal & Tasmanian State Governments.
- * International Assistance from WHF: none.

Access to IT

- No information supplied.

View of the landscape of the Tasmanian wilderness

Visitor Management

- Visitors to Cradle Mountain numbered about 200,700 in 1999-2000 compared with 104,000 to Lake St. Clair (an increase of 35% since 1992).
- Major visitor centres & educational panels have been provided at or near all the major entrances at Cradle Mountain, Lake St. Clair, Strahan, Geeveston, Mt. Field & Hastings.
- All tourist developments must "be assessed through a rigorous process that includes environmental impact assessments and public consultation".
- If a tourist re-development project at Pumphouse Point proceeds, 100 overnight visitors & 20 additional hotel staff will be located inside the WH area.

II.5 Factors Affecting the Property

Threats and Risks

- Weeds (i.e. sea spurge, broom, blackberries),
- Feral & introduced animals (i.e. foxes, red deer, redfin perch, North Pacific seastars & bumblebees),
- Logging in surrounding areas,
- Impacts of the proposed 'Basslink' project,
- Smouldering peat fires & 'landscape-level' fires from "old-growth" buttongrass,
- Plant diseases spread by "infected mud",
- 4WD bikes & streambank erosion from vessel wakes,
- Noise from scenic flights, helicopters & powerboats,
- Loss of Aboriginal sites from wind & wave coastal erosion (linked to potential sea-level rise).

Counteractive Plans

- A state-wide programme has eradicated feral goats from the TWWHA. Other programmes have reduced the distribution of starlings & rabbits.
- A "range of measures" have been designed to mitigate the impacts of the regulation of river flows by hydro-power generation.
- "Fire issues are currently being dealt with via a major cross-discipline study on the impact of burning" on the WH property. The results will be used to "optimise burning for ecological diversity".
- Introduced "washdown stations for walkers", vehicles & helicopters to prevent the spread of root rot.

II.6 Monitoring

Monitoring Arrangements

- "The TW WHA has a monitoring system built into the management plan", requiring detailed baseline data reports every 5 years. The first such 'State of the Tasmanian Wilderness' is due "in the near future".
- A 'Commonwealth-State Regional Forest Agreement process' was completed by the Australian Heritage Commission and included 15 additional reserves covering 15,867 ha in the WH Area.
- A 3 volume 'Walking Track Management Strategy' (1994) deals with the sustainability of walking trails.

Monitoring Indicators

- Surveys by phone have shown that the percentage of Tasmanians who considered WH listing 'a good thing' increased from 63% in 1993 to 76% in 1999.
- The ANZECC 'Benchmarking & Best Practice Programme' (1996) has set up national data standards to count 'person visits' to protected areas.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- "Funding for management of the [wilderness] area increased dramatically following the recognition of the area as a WH site in 1982".
- "Nature-based tourism to Tasmania is increasingly being recognised as an integral component of the State's future economic well-being. Tasmania's

natural & cultural heritage is the most important attraction for visitors to the State."

- Tourism developments are expected to increase visitor levels, but there is also a need "for comprehensive management so as to address any potential impacts."

* State of Conservation Reports

1987 SC-CONF.005/INF.1 Following an IUCN report on logging outside the WHA, the Australian government initiated a committee to examine the extension of the site boundaries.

1994 WHC-CONF.001/3b WHC was advised of significant potential logging activities adjacent to the WHA.

1995 WHC-CONF.203/5 IUCN gave an update on the situation and recalled that: (a) forested land exists outside the site which may have WH value, and (b) adjacent road building & logging could negatively impact on the WH site. In a letter dated June 1995, the Australian Minister for the Environment affirmed the commitment of the Australian & Tasmanian Governments to undertake a comprehensive assessment of the Tasmanian forests. The Bureau insisted that the integrity of the site be respected, and thanked the Australian Minister for his encouraging response.

1996 WHC-CONF.202/2 The authorities informed WHC of an 'Interim Forest Assessment' undertaken in areas adjacent to the WH property. The outcome of the negotiations between the Commonwealth & Tasmanian Governments identified eight separate 'coupes': 5 to be protected from logging, and 3 to be made available for timber harvesting. Discussions involving both natural & cultural aspects were also undertaken. The Bureau commended the State Party for its efforts to carry out the preliminary assessment of additional WH features.

1997 WHC-CONF.208/8BRev IUCN reported on the Regional Forestry Agreement (RFA) signed by the Prime Minister of Australia & the Premier of Tasmania in November 1997. IUCN noted that the thematic methodology for identifying WH value by an independent expert panel had been exemplary in its approach. However, the allocation of public forest land for production and protection had been made at a political level which did not meet IUCN aspirations on boundary improvements. IUCN offered to perform an ongoing "audit function" for Australian WH sites. The Australian Government felt that the outcome of the RFA was a major gain for conservation in Tasmania.

1998 WHC-CONF.201/3b The Australian Minister for the Environment informed WHC that a number of areas classified as Dedicated Reserves adjacent to the existing WHA may be available for boundary modification under the terms of the RFA.

1998 WHC-CONF.202/4 The Australian authorities informed WHC that they would provide a timetable for the implementation of the 1997 RFA when the Tasmanian & Commonwealth Governments reached an agreement. The Bureau requested WHC to transmit a report from Australian NGOs to the State Party.

1999 WHC-CONF.209/14 Australia informed WHC of: (a) the recently completed Tasmanian Wilderness WH Area Management Plan developed by the Tasmanian Parks & Wildlife Service; and (b) the new 'Environment Protection & Biodiversity Conservation Act' 1999. The Australian Committee for IUCN (ACIUCN) proposed to undertake an assessment of the Tasmanian Wilderness and supported, in principle, the RFA process as a significant step towards a comprehensive, adequate & representative reserve system, and basis for the ecologically sustainable management of forests in Tasmania.

2000 WHC-CONF.202/5 IUCN informed WHC that, as with Shark Bay, ACIUCN has established a collaborative process to finalise a report on the state of conservation for the Tasmanian Wilderness. Issues to address included helicopter tourism & impacts associated with bushwalking. WHC was also informed by letter that the Australian government would work with ACIUCN to finalise the report.

2001 WHC-CONF.208/10 IUCN informed the Bureau of: (a) the proposed 'Basslink project' involving an electricity link to connect the Tasmanian Gordon River Hydro Electric Scheme (entirely within the TWWHA) with the Australian mainland grid: changes to the turbines & water release are forecast to modify ecological processes in the inter-tidal zone and cause degradation to the riparian vegetation; and (b) a proposed ecotourism resort at Planters Beach (covered by the 1999 WHA plan) where treated sewerage in the dune system may impact on a shell-collection site used by indigenous communities. The Bureau invited the State Party to submit detailed status reports, including outcomes of any EIAs, on both projects.

AUSTRALIA

The Lord Howe Island Group

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II.1 Introduction

Year of Inscription 1982

Organisation Responsible for the Report

- Environment Australia
  New South Wales (NSW) Government through the Lord Howe Island Board
  Australia

II.2 Statement of Significance

Inscription Criteria N iii, iv

Statement of Significance

- Proposed as follows:
  The islands are the eroded remnant of a large shield volcano which erupted from the sea floor intermittently for about 500,000 years in the late Miocene (6.5-7 million years ago).
  They are a major breeding hotspot for extensive colonies of nesting seabirds, including the only known breeding locality for the Providence Petrel, and the largest breeding concentration in the world of the Red-tailed Tropic bird.
  There is a transition between algal and coral reefs at their ecological limits (235 species of marine algae), endemism is high, and a unique assemblage of temperate and tropical forms cohabit.
  There are also 500 marine fish species and numerous species of indigenous pteriodphytes, angiosperms, and spiders.

Status of Site Boundaries

- The borders and buffer zone of the property are considered adequate.
- The Island Board and the local Community have sought to extend the marine park from 12 to 30 nautical miles.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- No changes are foreseen.

II.4 Management

Administrative and Management Arrangements

- The WH property is managed directly by the Lord Howe Island Board (consists of 3 elected local residents) responsible for the care, control and management of the Island.
- Relevant laws include the: National Parks & Wildlife Act (1974, amendment 1981); NSW Environment Planning & Assessment Act (1979); Noxious Weeds Act (1993); Lord Howe Island Regulation (1994); Threatened Species Conservation Act (1995); NSW Marine Parks Act (1997); and the Environment Protection & Biodiversity Conservation Act (1999).
- The Lord Howe Island WH Property Strategic Plan for Management 2000–2005 was released in February 2000.

Present State of Conservation

- The island is considered secure from outside environmental influences.

Staffing and Training Needs

- 53 staff including temporary positions.
- Training needs have not been identified.

Financial Situation

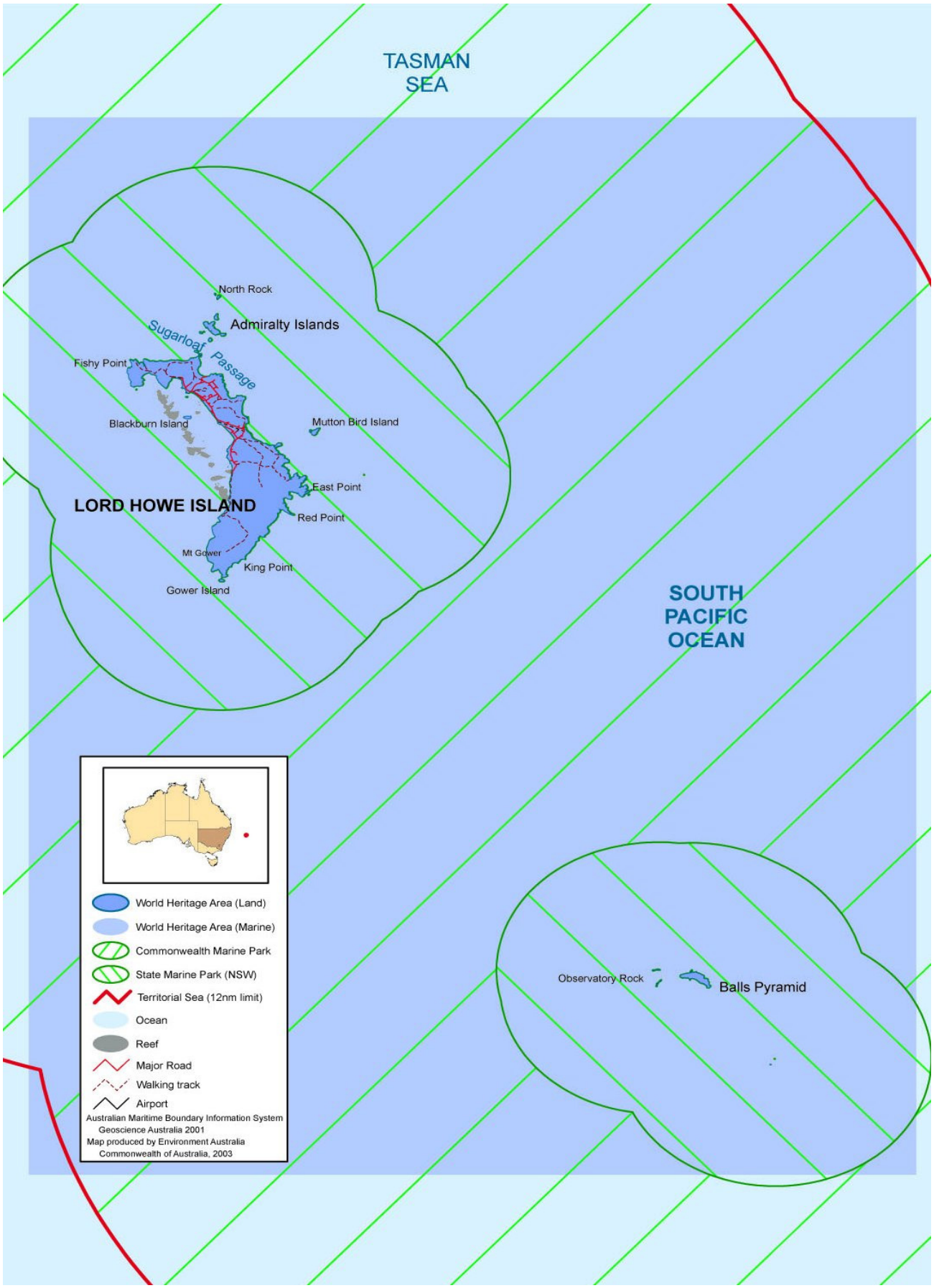
- The Island's Board expenditure on environmental management was US$615,000 in 2001-2002.
- The NSW Marine Park Authority's expenditure was US$335,400 in 2001-2002.
- It is considered that a proportion of State funding and almost all Commonwealth funding is project-specific and generally short term.
- * International Assistance from WHF: none.

Access to IT

- No information supplied.

Visitor Management

- There is a limit of 400 visitors at any one time according to the Regional Environment Plan (REP).



Map of the Lord Howe Island showing WH Area (in darker blue)

II.5 Factors Affecting the Property

Threats and Risks

- Many threatened species of animals,
- Invasive plants & animals,
- Global warming,
- Visitor & Tourism pressures,
- Fishing.

Counteractive Plans

- A 'Threatened Species Recovery Plan' (with a special "recovery team") and a 'Strategic Plan for Weed Management' were prepared by the Board in 2002.
- The new Regional Environment Plan (REP) will address development and visitor pressure by mid-2003.

II.6 Monitoring

Monitoring Arrangements

- The NSW 'Threatened Species Conservation Act' (1995) currently outlines monitoring criteria for measuring impacts.

Monitoring Indicators

- Indicator categories include: (i) ongoing; (ii) biannual; (iii) annual; and (iv) 5-yearly research projects.
- Inventories have also been developed.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- Significant progress has been made since the inscription of the Property.
- Several operational projects on the island relate to monitoring of key species which are fundamental to the maintenance of WH value.
- There is a need to establish reliable, on-going streams of funds in order to sustain these projects through to their logical conclusion.

* No State of Conservation Reports

AUSTRALIA

Uluru Kata Tjuta

II.1 Introduction

Year of Inscription 1987, 1994

Organisation Responsible for the Report

- Parks Australia
  Heritage Management Branch of the Dept. of Environment & Heritage
  Australia

II.2 Statement of Significance

Inscription Criteria N ii, iii C v, vi

Statement of Significance

- Proposed as follows:
  "The huge rock formations of Uluru and Kata Tjuta are remarkable geological and landform features set in a contrasting, relatively flat, sand-plain environment. They are a part of an important cultural landscape and have special significance to Anangu. The features of both Uluru and Kata Tjuta are physical evidence of the actions, artefacts and bodies of the ancestral heroes (the *tjukuritija*) who travelled the earth in creation times."
- The landscape of the park also represents the outcome of thousands of years of management under traditional practices governed by the *Tjukurpa* (law, knowledge, religion & philosophy) of the Pitjantjatjara & Yankunytjatjara Aboriginal people.
- Patch burning (which leaves burnt & unburnt areas in a mosaic-like pattern) during the cool season has been adopted as a major ecological management tool in the park.
- A number of rare animals are found in the park including the: (i) Hairy-footed Dunnart; (ii) Sandhill Dunnart; (iii) Mulgara; and (iv) rare Great Desert Skink lizard which can grow up to 2 metres.
- An indicative table of WH attributes is attached.

Status of Site Boundaries

- At the time of the IUCN evaluation in 1987, it became obvious "that the rectangular boundaries of the Park were artificial and other natural features lay outside the area."
- The UKT is a Biosphere Reserve under the UNESCO MAB programme (along with 11 other reserves in Australia). However, formal zoning of the buffer & transition zones "has not yet been instituted".
- Uluru NP management plan (1991) recognises 3 management zones: (i) 'intensive' (the climb, sunset & sunrise viewing areas); (ii) 'intermediate' (Olga Gorge); and (iii) 'minimum' (walking trails).

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- During renomination in 1994, the boundaries were modified and an inappropriate air strip was removed. Since 1994, "significant road relocations, including the Kata Tjuta ring road, have been made to prevent access to sacred sites."

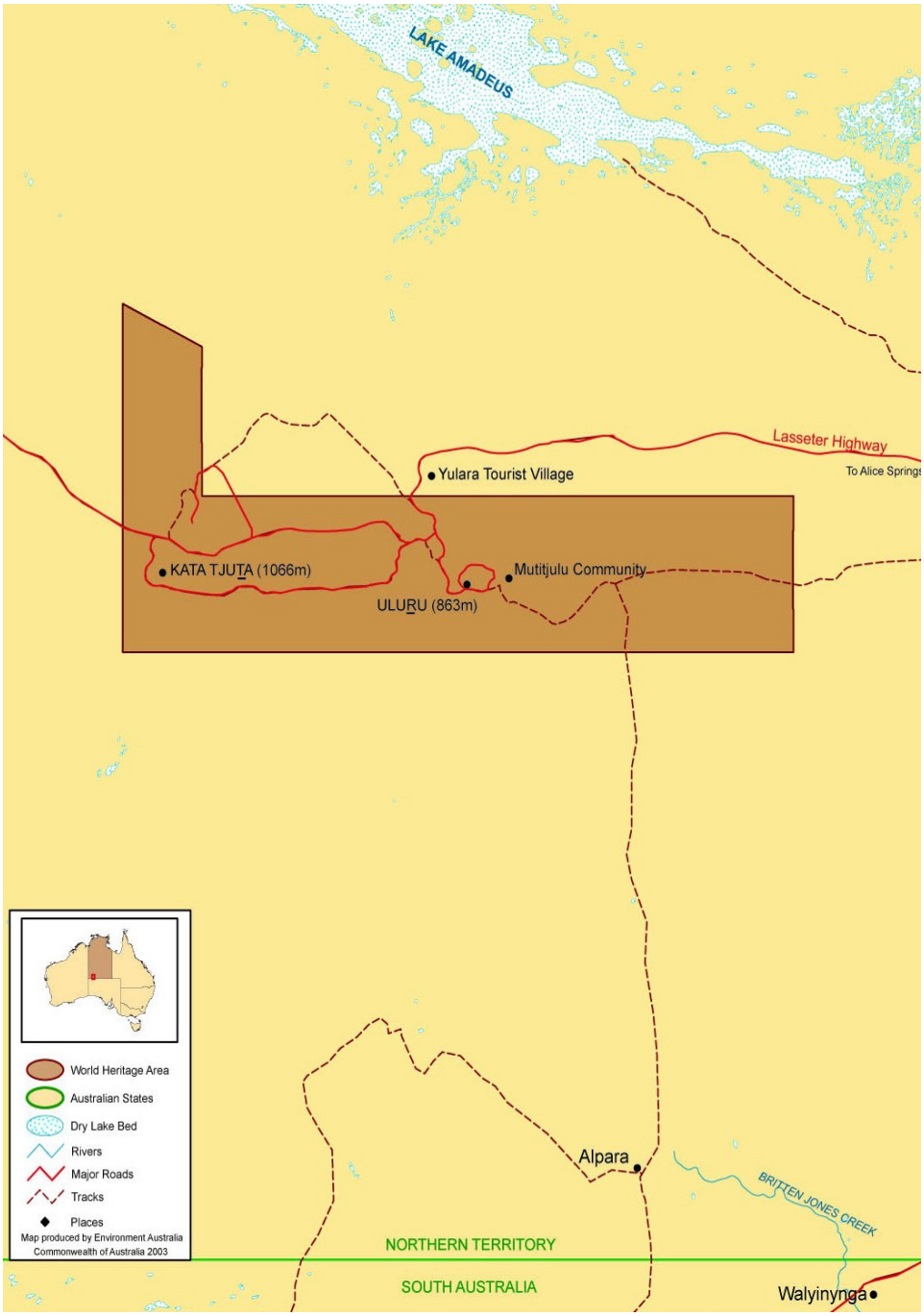
View of Uluru

View of Kata Tjuta

II.4 Management

Administrative and Management Arrangements

- "The inalienable freehold title of Uluru-Kata Tjuta NP was handed back to the Anangu (the UKT Aboriginal Land Trust) in 1985 following a successful land rights claim under the Aboriginal Land Rights (Northern Territory) Act 1976".
- The Aboriginal Land Trust subsequently "leased the area back to the Director of National Parks to be jointly managed… under a board of Management with a majority of Anangu owners".
- The EPBC Act 1999 "ensures the maintenance of an Aboriginal majority on the Uluru-Kata Tjuta Board of Management.



Map of Uluru- Kata Tjuta showing WH Area (in brown)

- National legislation includes: (i) Australian Heritage Commission Act (1974); (ii) Aboriginal & Torres Strait Islander Heritage Protection Act (1984); and (iii) Native Title Act (1993).
- State legislation includes: (i) NT 'Aboriginal Land Rights Act' (1976); (ii) NT 'Aboriginal Sacred Sites Act' (1989); (iii) Heritage Conservation Act (1991); and (iv) Territory Parks & Wildlife Conservation Act (1995).
- The current 2000 management plan is the 4th plan for the park, and is the main policy document in effect for 7 years. The plan, which was released as a draft for comments, lists a range of actions that the Anangu deem necessary.

Present State of Conservation

- In April 1995, the Board of Management and the then Australian Nature Conservation Agency were awarded the UNESCO 'Picasso Gold Medal for WH Management' involving indigenous peoples.
- IUCN noted in 1994 that fragile rock paintings & archaeological deposits had been well protected by raised walkways.
- Developments are confined to the area bounded by the sealed 'ring road' in Uluru, and on the western side of the domes in Kata Tjuta.

Staffing and Training Needs

- A 'Community Traditional Consultancy' scheme engages Aboriginal people on a casual & temporary "day labour" basis. In June 2002, 40% of the workforce employed were Anangu.
- No overall staff figures supplied.
- Parks Australia offers opportunities to all employees to pursue formal studies and promote inter-generational transfer of ecological knowledge in Aboriginal languages & land management.
- A cultural heritage workshop for park staff, Anangu & other stakeholders was held in September 2000.

Financial Situation

- In 2001-2002, approx. AUS$ 8.08 million (US$ 4.8 million) was allocated for operations & capital works in the park.
- In 1999-2000, the park received AUS$ 3.1million (US$ 1.85million) to enhance visitor facilities, shelters (*wiltjas*), & toilet facilities.

- Lease payments go to the Central Land Council, and "the remaining revenue received from Park use fees… subsidises the Commonwealth Government's contribution to the park".
- * International Assistance from WHF: none.

Access to IT

- GIS is used to map the distribution of rabbit warrens, develop a 'holistic flora map', and integrate scientific analysis with traditional knowledge.

Visitor Management

- Between 1983 and 2001, visitors increased from about 105,970 to 396,456.
- Researchers must obtain a permit from the Director of National Parks in consultation with the Anangu. Parks Australia also produces a 'Tour Operator Workbook'.
- An award-winning Cultural Centre resembling 2 ancestral snakes was opened in 1995 providing visitors with an introduction to *Tjukurpa*, Anangu lifestyle, wildlife & joint management.
- "The protection of sacred sites enhances the visitor experience, as they begin to understand the country and Anangu culture, and the implied responsibilities of visiting".
- Although "inconsistent with their spiritual veneration of the site (…) Anangu choose to leave the decision of whether or not 'to climb' [the rock] to the tourists".

Signpost of the Uluru National Park Cultural Centre

"The protection of sacred sites enhances the visitor experience, as they begin to understand the country and Anangu culture, and the implied responsibilities of visiting."

II.5 Factors Affecting the Property

Threats and Risks

- Threat of wildfires,
- Disruption of the dune plains & southern aquifer recharge through poorly planned infrastructure,
- Crowding at peak visitation times,
- Six introduced mammals (house mice, camels, foxes, cats, dogs & rabbits),
- Some 34 exotic plant weeds including Buffel grass,
- Erosion of the soils,
- Off-road driving,
- Damage to rock art from water & vegetation.

Counteractive Plans

- Anangu fire management techniques have "greatly reduced the threat of wildfires".
- A review of hydrodynamics, current & projected use of groundwater aquifers is being completed.
- The 'Feral Animals Strategy' is implemented in line with relevant national threat abatement plans.

II.6 Monitoring

Monitoring Arrangements

- Key indicators are being developed as part of an over-arching park performance management framework to assist 'State of the Environment' reporting. A 'Monitoring Matrix' is presented.
- Traditional Aboriginal tracking techniques supplement vertebrate & invertebrate monitoring in 8 permanent sites representing a range of habitats in the park.
- A comprehensive visitor monitoring strategy with baseline data is being developed.

Monitoring Indicators

- Various monitoring indicators exist for: (i) weed infestations; (ii) burning practices; (iii) water consumption; (iv) introduced animals; (v) fire risks; (vi) fine-scale soil mapping & erosion hazard maps; and (vii) a 'rock art database'.

II.7 Conclusions and Recommended Actions

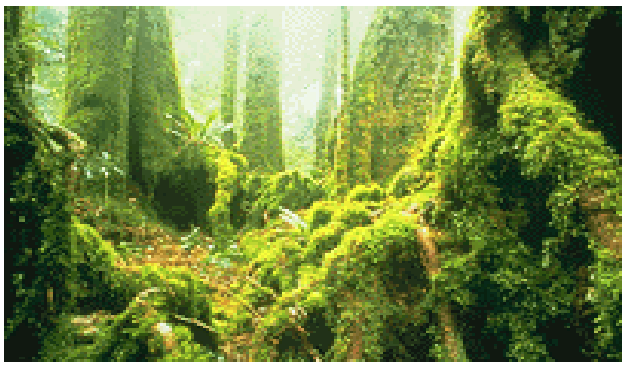
Conclusions and Proposed Actions

- "Improved monitoring of cultural values represents a future need in the management of the park".
- Implementation of the 'Parks Visitor Infrastructure Masterplan' will "stage" new developments.
- New infrastructure based on the presentation of WH features (especially cultural values), "rather than ease of access" or scenery will be developed.
- Five years before the lease expiry in 2084, the Aboriginal Land Trust will renegotiate the renewal or extension of the existing management arrangements.

* No State of Conservation Reports

AUSTRALIA

Central Eastern Rainforest Reserves of Australia (CERRA)



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II.1 Introduction

Year of Inscription 1986, 1994

Organisation Responsible for the Report

- Environment Australia
  New South Wales National Parks & Wildlife Service
  Queensland Parks & Wildlife Service
  Australia

II.2 Statement of Significance

Inscription Criteria N i, ii, iv

Statement of Significance

- Proposed as follows:
  The area includes one of the most extensive areas of subtropical rainforest in the world, large areas of warm temperate rainforest, and nearly all of the Antarctic beech cool temperate rainforest.
  It contains the most ancient type of vegetation in Australia, and provides an interesting living link with the evolutionary record of the continent.
  There is a concentration of primitive plant families which are directly related to the birth and spread of flowering plants over 100 million years ago.
  The changing forest mosaic represents an ongoing process that has been occurring for millions of years, and provides a habitat for more than 200 rare or threatened plant and animal species.

"Major tenure changes in the surrounding landscape have enhanced the protection of the site."

Status of Site Boundaries

- The borders and buffer zone of the property are considered adequate.
- The area was inscribed on the WH List in 1994 with an extension to the original area listed in 1986.
- CERRA comprises nearly 50 reserves. The boundaries of some of the reserves have been extended.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- WH value is considered to have been maintained.
- Major tenure changes in the surrounding landscape have enhanced the protection of the site.

II.4 Management

Administrative and Management Arrangements

- At the state level, the national parks are administered by the Queensland and NSW National Parks & Wildlife Service (part of the Environment Protection Agency).
- The respective NPWS authorities administer the National Parks & Wildlife Act (1974, amended in 2001), and the Wilderness Act (1987).
- Other relevant laws include the Environment Protection and Biodiversity Conservation Act (1999); Nature Conservation Act (1992); Rural Lands Protection Act (1985); and Forestry Act (1959).
- 0.4 % of the CERRA land is administered by trustees under the Provisions of Land Act (1994).
- A strategic overview for the management of CERRA was prepared in November 2000.

Present State of Conservation

- The main conservation issues include: (i) uncontrolled or inappropriate use of fire; (ii) inappropriate recreation & tourism activities; (iii) invasion by pest species; and (iv) loss of biodiversity.

Staffing and Training Needs

- Staff are employed under the NSW Public Sector Employment & Management Act (2002), and the Queensland Public Service Act (1996).
- Staff and training needs have not been identified.

Map of the Central Eastern Rainforests Reserves of Australia showing WH Area (in green)

Financial Situation

- Funds are provided by both State and Commonwealth agencies.
- Funding is considered inadequate to address certain issues like weed and pest control, rehabilitation of degraded areas, and systematic monitoring.
- * International Assistance from WHF: none.

Access to IT

- IT arrangements are considered adequate.

Visitor Management

- Queensland and NSW receive approx. I.4 million and 0.6 million visitors per year respectively.
- Inappropriate recreation activities persist, and there is a need to further develop tourism infrastructure.
- The NSW authorities are introducing a 'Visitor Data System' (VDS).

II.5 Factors Affecting the Property

Threats and Risks

- Incompatible land use on adjoining properties,
- Global/human-induced climate change,
- Properties adjoining CERRA are under pressure for residential and tourist development,
- Diversity in local government zoning policies creates a potential for inconsistent planning,
- Urbanization and increasing population.

Counteractive Plans

- Issues are being addressed through funding and management priorities.

II.6 Monitoring

Monitoring Arrangements

- The site Technical & Scientific Advisory Committee has identified a research and monitoring strategy.
- Monitoring objectives in the CERRA Strategic Overview include: (i) to review and update WH value in each reserve as necessary; (ii) baseline studies; (iii) regular reporting; and (iv) to undertake and support research into patterns of visitor use and its impacts.

Monitoring Indicators

- Each year approx. 200-300 scientific and technical studies are undertaken with a number of new discoveries taking place.
- Each of the relevant park agencies report on various indices such as vegetation mapping; visitation indicators; bush campsites; species-specific and flora/fauna communities projects.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- The WH value of the property is well maintained.
- Changes in tenure, particularly of adjacent properties, have enhanced the protection of WH areas.
- There is need for appropriate management tools and enforcement capability to manage key threatening processes.
- Ongoing, co-ordinated monitoring and research efforts are of high importance.
- To implement the Strategic Overview involving both the Community and Technical & Scientific Advisory Committees.
- To continue consultation and involvement of indigenous people to enhance & protect cultural value.

* State of Conservation Reports

2000 Bureau WHC-CONF.202/5 IUCN informed WHC that the company Naturelink had plans for a 22km cableway capable of carrying 900 people per hour from Mudgeeraba to the famous 'Purlingbrook Falls' through 3km of primary wet sclerophyll forest. Conservationists expressed concerns that the decision was driven by commercial considerations and that the cableway would be clearly visible & acoustically obvious from several "wilderness" lookouts as it cuts across the WH area. IUCN believed that the cableway represented an important threat to the integrity of the WH property. The Bureau invited the State Party to consider the issues raised by IUCN and provide an up-to-date report on the proposed project.

2000 Committee WHC-CONF.204/10 A draft Environmental Impact Statement for the proposed Naturelink Cableway project was released in June 2000 for public comments, and an assessment report on the EIS was to be submitted to the Queensland Co-ordinator General to take a final decision. IUCN drew attention to a similar proposal at Morne Trois Piton National Park where Dominica decided to relocate a cable car outside the WH property. The Committee invited the State Party to submit to WHC an up-date on the findings of the EIS and any decisions made regarding the project proposal.

AUSTRALIA

Wet Tropics of Queensland

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II.1 Introduction

Year of Inscription 1991

Organisation Responsible for the Report

- Environment Australia
  Wet Tropics Management Authority
  Australia

II.2 Statement of Significance

Inscription Criteria N i, ii, iii, iv

Statement of Significance

- Appendix 1 of the report updates information on the wording and emphasis of the natural criteria submitted at the time of nomination. The following is an abridged summary:
  "As a relict of the Gondwana era 100 million years ago, the site represents a unique record of the mixing of flora and fauna following the collision of the Australian and Asian continental plates about 15 million years ago.
  Biotic elements relate to 8 major stages in the earth's ecological and evolutionary history over the past 415 million years.
  The site contains one of the most complete and diverse living records of the major stages in the evolution of land plants.
  The site has outstanding features of natural beauty with extensive sweeping forest vistas, wild rivers, waterfalls, rugged gorges, and coastal scenery.
  The site contains one of the most important living records of the history of marsupials and songbirds, hundreds of locally endemic species, and provides habitat for 351 and 82 species of rare and threatened plants and animal."
- Aboriginal occupation is thought to date back to at least 40,000 years ago.

"Rainforest aboriginal people have indicated that they wish to have the property recognized as a living cultural landscape."

Status of Site Boundaries

- The borders and buffer zone of the property are considered adequate.
- No formal revision of the boundary has occurred.

II.3 Statement of Authenticity/Integrity

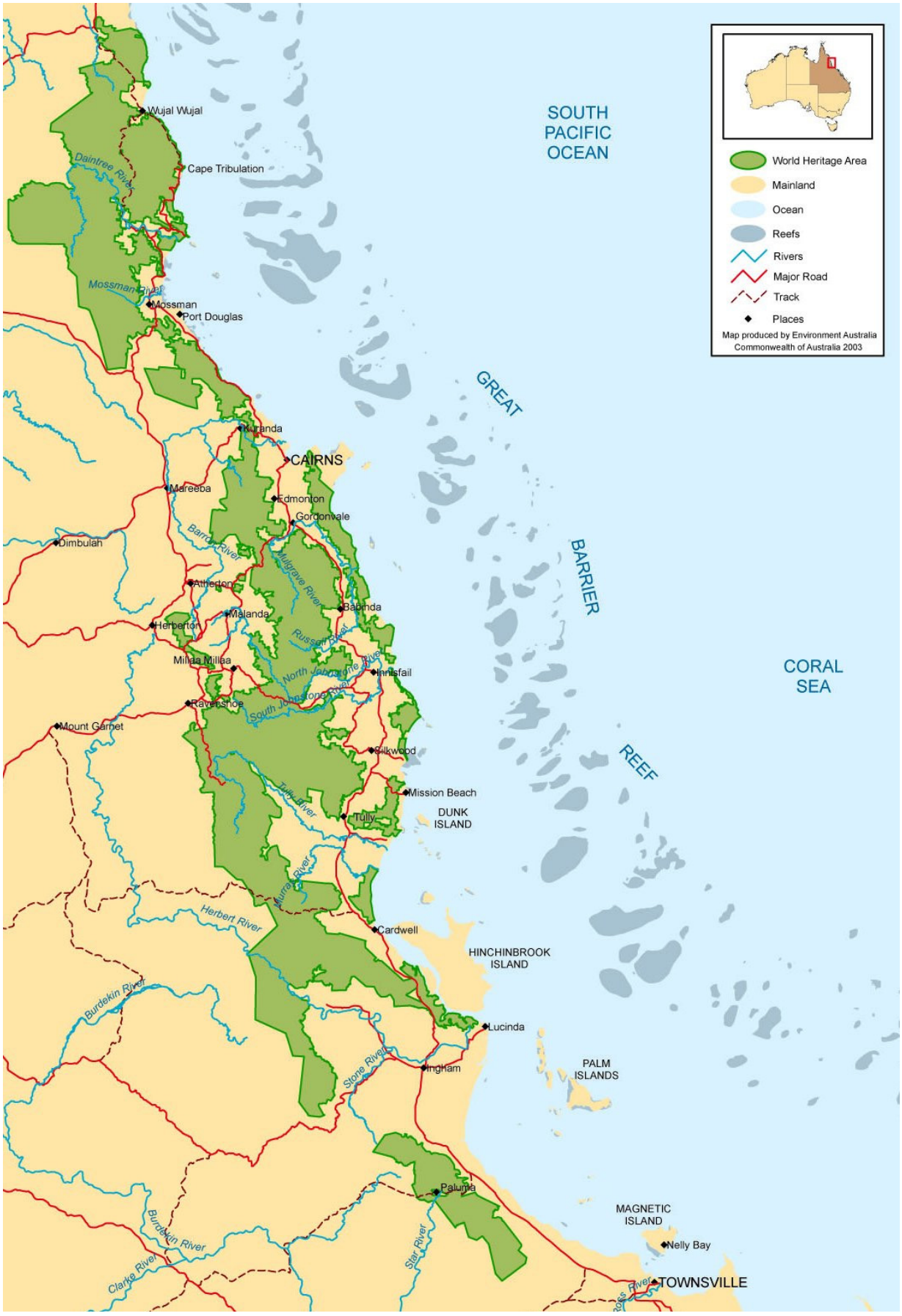
Status of Authenticity/Integrity

- Human impact is considered low compared to other tropical forest regions.
- The majority of the region's lowland and basalt tableland forest cover has been cleared for agricultural purposes, and large parts of the property have been affected by selective logging.
- Other impacts include incursions by exotic plants, animals and diseases.

II.4 Management

Administrative and Management Arrangements

- The Commonwealth Wet Tropics of Queensland WH Area Conservation Act (1994) gives effect to the 1990 State-Commonwealth WH Area Management Scheme.
- Other important legislation includes the: the Wet Tropics WH Protection & Management Act (1993); Wet Tropics Management Plan (1998); Vegetation Management Act (1999); EPBC (1999, as above); and Vegetation Management Regulation (2000).
- The Queensland Parks & Wildlife Service operates under the Nature Conservation Act (1992).
- The property boundaries fall within 14 responsible local government jurisdictions.
- The non-statutory 'FNQ 2010' is a co-operative regional planning process involving Commonwealth, State and Local governments.
- The Wet Tropics Authority has released a 'Nature-Based Tourism Strategy' (2000), 'Natural Resource Management Plan' (2002). A 'Wet Tropics Conservation Strategy' will be completed in 2003.
- 80% of the property is potentially claimable under the Native Title Act (1993). 16 native title claims have been logged with the National Native Title Tribunal concerning land in the WH Area.



Map of the Wet Tropic Forests of Queensland shoeing WH Area (in green)

Present State of Conservation

- The WH value is considered to have been maintained.

Staffing and Training Needs

- The Wet Tropics Authority has 30 permanent staff.
- In-house training is provided in workforce diversity, cross-cultural awareness, and GIS technical skills.

Financial Situation

- Commonwealth and Queensland government funding amounted to US$7.43 million for 2000-01.
- Expenditure for staff training was US$50,000 in 2000-02.
- Financial resources are considered as limited.
- * International Assistance from WHF: none.

Access to IT

- IT facilities are considered adequate.

Visitor Management

- The annual number of visitors to the region increased from 840,000 in 1985 to around 2 million in 1995. The figure is predicted to double by 2016.
- The Authority has established a 'Tourism Industry Liaison Group' with representatives drawn from regional tourism associations.

II.5 Factors Affecting the Property

Threats and Risks

- Extreme sensitivity to climate change (cyclones, floods & droughts),
- Pressure on endemic & spatially restricted species,
- Regional population growth,
- Agricultural expansion & land clearance,
- Altered drainage patterns,
- Environmental pests,
- Habitat fragmentation from construction/roads,
- Dams & weirs as aquatic/terrestrial habitat modifiers,
- Fire hazards,
- Virulent outbreaks of forest dieback.

Counteractive Plans

- Environmental restoration activities include: strategic tree planting, re-establishing wildlife corridors, the rehabilitation of degraded road verges, and the decommissioning of obsolete infrastructure.
- The Rainforest CRC has several projects examining a range of freshwater management issues, integrated research on dieback outbreaks, and has developed a 'Wet Tropics Vertebrate Pest Risk Assessment Scheme'.
- The Wet Tropics Authority actively participates in the FNQ 2010 regional water infrastructure planning processes to ensure WH interests, and is developing a weed 'Risk Assessment System'.
- The Queensland Parks & Wildlife Service drafted a state-wide fire policy in mid-2000.
- The Wet Tropics Authority has commissioned a water infrastructure environmental code of practice, and facilitated the 'Queensland Electricity Supply Industry Environmental Code of Practice'.

II.6 Monitoring

Monitoring Arrangements

- The 'State of the Wet Tropics' report is now a statutory requirement under the WH Wet Tropics Management Act (1993).
- The ACIUCN Reactive Monitoring Reports identified the following priorities: (i) support site management; (ii) monitor the management of native and introduced species; and (iii) ensure complementary management of land use and human impacts.
- At the site level, the Authority is currently testing a visitor monitoring system in collaboration with the Rainforest CRC.
- Other monitoring arrangements include community, landholder and neighbour surveys.

Monitoring Indicators

- Major indicator studies cover: (i) vegetation mapping programmes; (ii) environmental impact studies; and (iii) mapping of patches of rainforest dieback.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- Knowledge of the site's significance has increased markedly since WH listing, and a statutory management plan for the property is now in place.
- Native title and indigenous land use negotiations will continue to emerge as a major area of management focus with 80% of the property potentially claimable under the Native Title Act (1993).
- Rainforest Aboriginal people have indicated they wish to have the property recognized as a living cultural landscape.
- The completed 'Wet Tropics Management Plan' identifies priority management strategies. However, specific environment management plans need to be developed as an additional condition of some permits to allow more explicit compliance monitoring.
- The Authority's long-term regional vegetation and geology mapping project is due for completion in 2004.
- The establishment of an 'Australian Tropical Forest Institute' (ATFI) is also accorded high priority.

* State of Conservation Reports

1991 WHC-CONF.202/4 The Bureau noted that although a management agency had been set up, no additional funds for field activities had been provided. The Bureau was also concerned about the pace of tourism development & the potential impact of a proposed hydropower development project.

1992 WHC-CONF.203/3 The Bureau was informed that a site visit had been undertaken by IUCN who would submit an up-dated state of conservation report.

1998 WHC-CONF.201/3b A letter from The Wilderness Society signed on behalf of 13 Australian conservation groups, addressed to the Chairperson, was received by WHC concerning threats within & adjacent to WTQ.

1998 WHC-CONF.202/4 The Ext. Bureau learned that the Commonwealth Minister for the Environment had determined that clearing of vegetation that may have occurred within this property did not place the WH value of the site at risk.

1998 WHC-CONF.203/8rev The Committee was informed that the arrangements for the management of this site met with the full confidence of the Government of Australia. The Management Plan, effective as of 1 September 1998, had been prepared with the full involvement of all stakeholders, including Aboriginal groups, and provided the WTMA with a full suite of powers to act in the interests of the WH property.

1999 WHC- CONF.204/5 IUCN informed WHC that central to the conservation of the site would be the effectiveness of the implementation of the management plan to mitigate impacts of invasive species, water extraction, tourism development & Aboriginal involvement.

1999 WHC-CONF.209/14 The Committee urged the State Party & IUCN to finalise the consultation process for an up-to-date state of conservation report for WTQ.

2000 WHC-CONF.204/10 In September 2000, ACIUCN completed its report 'Condition, Management and Threats' on the Wet Tropics of Queensland WHA in close co-operation with the State Party. As in the case of the Great Barrier Reef & Shark Bay, ACIUCN undertook a cluster analysis of 19 recommendations in consultation with the members of a working group which identified 4 "Focused Recommendations": 1. Support for management of the WTQ WHA; 2. Management of native & introduced species; 3. Management of land use and human impacts within & beyond the boundaries of the WHA; 4. Strategic issues for future management. ACIUCN recommended adequate resources to fully implement the WT Management Plan & Strategic Plan 1998-2003, and reiterated a call to reject proposals to construct the Tully Millstream Dam or to extend the electricity grid north of the Daintree river (subject to review when the 'Daintree Futures Study' is finalised). ACIUCN also recommended: (a) increased indigenous involvement in management; (b) re-nomination of the area for its cultural values; and (c) at least 1 member of the Board of the WTMA to be a person recognised as an expert by the conservation movement.

2001 WHC-CONF.205/5 In a letter dated April 2001, the State Party transmitted to WHC its response to the priority action areas described in ACIUCN report, which were transmitted to IUCN for review.

AUSTRALIA

Shark Bay, Western Australia

II.1 Introduction

Year of Inscription 1991

Organisation Responsible for the Report

- Environment Australia
  Department of Conservation & Land Management (Western Australia)
  Australia

II.2 Statement of Significance

Inscription Criteria N i, ii, iii, iv

Statement of Significance

- Proposed as follows: "The Shark Bay region represents a meeting point of three major climatic regions (subtropical, grasslands and desert) and forms a transition zone between two major botanical provinces.
  It is home to a population of 5 species of endangered mammals; 2 marine mammals considered vulnerable; over 230 species of birds (35% of Australia's recorded total); nearly 100 species of amphibians and reptiles; and vast sea-grass beds which are the largest and most species rich in the world.
  Stromatolites are also found on the site which are the oldest life forms on earth dating from some 3,500 million years ago".

Status of Site Boundaries

- The borders and buffer zone of the property are considered adequate.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- No changes are foreseen.

II.4 Management

Administrative and Management Arrangements

- A Ministerial Council is composed of ministers of the Australian Commonwealth (Environment Australia) and the Western Australian Dept. of Conservation & Land Management (DCLM).

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Beach scene at the Shark Bay

- The 'Scientific Advisory Committee' provides advice to the Ministerial Council on scientific research.
- The 'Community Consultative Committee' provides advice to the Ministerial Council on protection.
- There are several other Western Australian and local Government agencies involved in management.
- The main legislation includes: the Environment Protection & Biodiversity Conservation Act (1999) and the Conservation & Land Management Act (1984).
- A comprehensive planning framework has been developed for Shark Bay, including a partnership between government and the local community.
- Several short and long term management plans are also underway.

Present State of Conservation

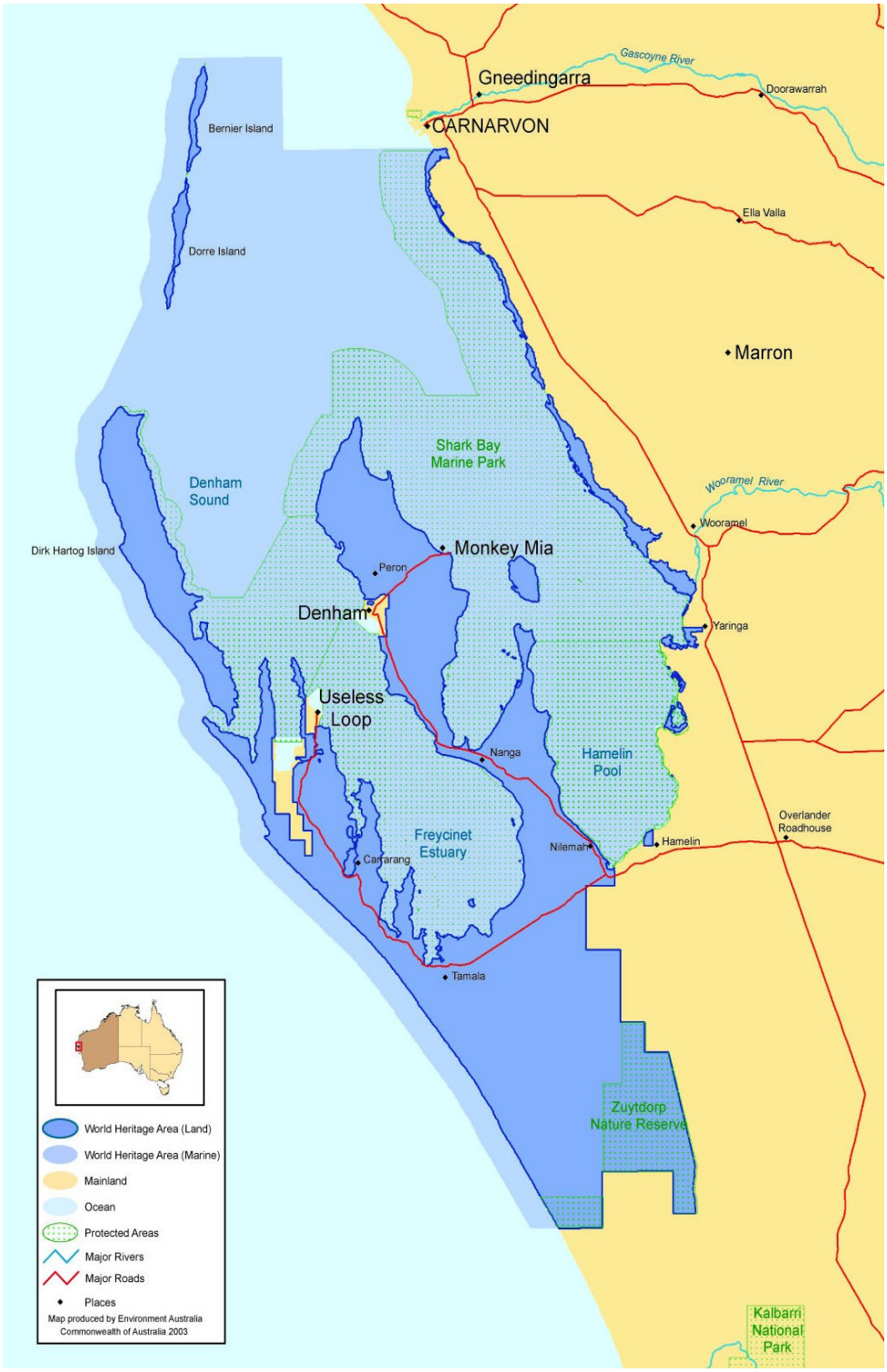
- The conservation status is considered adequate.

Staffing and Training Needs

- Staffing is considered sufficient with a district manager, 24 full-time and 6 temporary staff.
- Training needs have not been identified.

Financial Situation

- The estimated budget for Monkey Mia was approx. US$637,700 for 2002.
- The Dept. of Fisheries further contributes approximately US$500,000 annually for fisheries management
- Commonwealth funding for projects within the WH area was US$200,796 in 2001-2002



Map of Shark Bay showing WH Area (in darker blue)

- * International Assistance from WHF: none.

Access to IT

- Computer facilities include local & wide area networks with internet access.
- State-of-the-art GPS satellite radio tracking is used.

Visitor Management

- The 'Cape Peron recreation management project' provides wildlife and coastal scenery viewing opportunities for visitors.
- Local government authorities and land managers manage recreation areas outside conservation reserves.
- Visitor surveys have been carried out in different sites. 'VISTAT' is the official visitor information and statistics data collection system.
- The 'Tamala-Carrarang Recreation & Tourism Plan' (1998) has identified certain access management requirements.

II.5 Factors Affecting the Property

Threats and Risks

- Risk of oil spillage from salt ships and introduction of exotic biota from ballast water discharge.
- Activities on pastoral leases such as overstocking and clearing of native vegetation.
- Invasive species (feral animals, weeds, exotic marine organisms).
- Shell extraction & processing (aesthetic impact).
- Fire hazards to human & natural resources.
- Recreational impacts of remote camping and fishing.

Counteractive Plans

- Shell extraction is undertaken according to the conditions of an environmental management plan.
- All salt operations are managed in accordance with the 'Shark Bay Solar Salt Industry Agreement' (1983).

- 'Project Eden' was commenced in 1994 to control feral animals in various parts of the property.
- The 'Terrestrial Reserves Management Plan' includes a weed control program. A Commonwealth project is underway to investigate the risks associated with introduced marine pests.
- The Bush Fire Act (1954) has the responsibility to protect natural resources from wildfire.

II.6 Monitoring

Monitoring Arrangements

- There are several ongoing marine, terrestrial, climate and Landsat Satellite monitoring programmes and scientific studies.
- Numerous other research projects have yet to be undertaken including the "geological oceanography of inlets", and the genetic variation in the shell beach cockle.
- Identified gaps in monitoring are management-oriented research; impact of human activities and threatening processes; and the monitoring of mammals on Bernier & Dorre Islands.
- The ACIUCN reactive monitoring reports have also identified priority action areas for visitor management; the control of invasive species; and the strategic framework for the site.

Monitoring Indicators

- Current indicators include the: (i) annual monitoring programme of Loggerhead Turtle (started in 1994); (ii) baseline marine water quality; (iii) 5-yearly Dugong monitoring; (iv) floristic survey of Peron Peninsula; (v) visitor surveys; (vi) fire buffer zone monitoring; (vii) 'Project Eden's' collection of long-term climatic data; and (viii) monitoring of terrestrial ecology by Landsat Satellite.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- The property has been maintained in terms of conservation and management arrangements to address potential threatening processes.
- The 'Shark Bay Ministerial Council' will provide direction in the identification of priority actions for different agencies.
- As the lead agency, the Dept. of Conservation & Land Management will liase with other agencies with regard to programme implementation.
- The proposed future actions for 2003-2008 are the: (i) completion of a management plan for South Peron; (ii) transfer of the tenure of Dirk Hartog Island to the national park; (iii) completion of a management plan for Edel Land; (iv) extension of the Shark Bay Marine Park; (v) finalization of the strategy plan; (vi) completion of a communication plan; (vii) completion of a WH Interpretive Centre; (viii) continued involvement of indigenous groups; and (ix) continued feral predator control.

*State of Conservation Reports

1994 Bureau WHC-CONF.001/3b In response to concerns expressed in its original technical evaluation, IUCN reported that complementary legislation to provide for joint management structures (including a Ministerial Council, Community Consultative & Scientific Advisory Committees) had not yet been established. In the interim, the 1988 Shark Bay Region Plan remained the guiding management document. Substantial progress in conservation status had nonetheless occurred, including an expansion of education & information services, removal of feral animals, construction of barrier fences and boardwalks, provision of improved visitor services, and the reintroduction of burrowing *bettong*. A series of management plans for the marine reserves & Monkey Mia were also underway, along with a Fisheries plan and a Terrestrial Reserves plan. Available staff to manage such a large area were however still considered as insufficient.

1998 Bureau WHC-CONF.201/3b The Australian Minister for the Environment informed WHC that he would provide further information concerning a letter from The Wilderness Society referring to threats to Shark Bay.

1998 Ext Bureau WHC-CONF.202/4 The Bureau was informed that a petroleum exploration permit had been granted by the State Government of West Australia (WA) for an area located within the WH site. The Observer of Australia assured the Bureau that no development that threatens the WH value of the site would be allowed to take place. IUCN voiced its concern, however, concerning the issue of the granting of prospecting licences by State Governments of WA and Queensland, for locations within WH areas, and called for closer liaison between Commonwealth and State Governments on this matter. The Australian authorities informed the Centre that a mining lease of the Shark Bay Salt Joint Venture (SBSJV) had attracted public comment but was outside the WH area. The WA Dept of Environment conducted two environmental compliance audits and concluded that SBSJV had satisfactorily implemented environmental conditions during the construction phase. Furthermore, in accordance with a post-construction environmental requirement, marine mega-fauna which were trapped behind the levee, were transferred to open marine waters with the help of the Dept of Conservation & Land Management.

1998 Committee WHC WHC-CONF.203/8rev The Bureau was informed that IUCN had received a report on the state of conservation of the site from its Australian National Committee, and that it was in the process of reviewing that report. The Bureau requested the Centre to transmit the report from IUCN Australia to the State Party for review, and recommended that IUCN provide an up-to-date state of conservation report on the site.

1999 Bureau WHC-CONF.204/5 The Bureau took note of information provided by the Centre, the Australian Government, and IUCN on the consultative process involving the ACIUCN, the State Government of WA and other stakeholders. IUCN noted that the issues addressed would include potential threats of mining (for shells, salt extraction, gypsum leases & mineral sands), tourism development, and the need to finalize an overall management plan. The Bureau urged the State Party and IUCN to finalise the consultation process as soon as possible, and provide a detailed state of conservation report for Shark Bay.

1999 Committee WHC-CONF.209/14 The Australian Government informed the Centre in September 1999 that the consultative process involving ACIUCN, the State Government of WA, and other stakeholders, to prepare a state of conservation report for Shark Bay was being finalised.

2000 Bureau WHC-CONF.202/5 ACIUCN submitted its report on the 'Shark Bay WH Area: Condition, Management and Threats' including 15 recommendations adopted in March 2000. The consultation process involved a questionnaire circulated to various organisations involved in the SBWH Area (including Commonwealth, State & Local Government authorities; conservation groups; members of the Shark Bay Community Consultative & Scientific Advisory Committees; scientists; locals; and industry groups) as well as a series of working group discussions. IUCN further undertook a participatory cluster analysis to identify the following 5 focused recommendations:
(1) Overall Management Framework. ACIUCN recommended that the SBWH Property Strategic Plan be completed, and that outstanding reserve proposals identified be implemented as a matter of priority.
(2) Minerals and Petroleum. It was not possible to achieve unanimous agreement in the ACIUCN report concerning shell mining and salt extraction. Nevertheless, ACIUCN affirmed its policy position that mining and mineral exploration should not take place in IUCN Protected Area Categories I & II (or in Categories III & IV according to another WCPA position paper); that the Coquina Shell remained an important feature of the WH area; and that proposals to expand salt extraction in the WH area were of concern. ACIUCN suggested that the Commonwealth and State Government report on actions taken to ensure that such activities would not cause damage to the WH property.
(3) Biological Resource Harvest. Management plans need to ensure that all grazing, aquaculture and fisheries leases are ecologically sustainable and not likely, individually or cumulatively, to cause adverse impacts to the WH property.
(4) Invasive Species. Strategic plans need to address the eradication, or adequate control, of feral and exotic species (including in the ballast discharge from ships) to prevent future entry of invasive species.
(5) Visitor Management. ACIUCN recommended that an overall visitor management strategy be developed to ensure that tourism and recreational fishing are consistent with the maintenance of WH value.

2000 Committee WHC-CONF.204/10 The Australian Government's response to ACIUCN's report on Shark Bay indicated that the State Party supported the Focused Recommendations 1, 2 & 3. In the case of Recommendations 4 & 5, the Australian Government expressed its support in principle. For each of the IUCN Recommendations, the Australian Government proposed several actions, a responsible authority for implementing actions, the level of priority assigned to the activity, as well as achievements and commitments. The Bureau commended the State Party and IUCN to have successfully repeated the process applied to the Great Barrier Reef for the SBWH area, and urged them to develop a 'Framework for Management' that could be used as a basis for annual monitoring of progress based on the 5 Focused Recommendations.

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Stromalites, the oldest life forms on earth

AUSTRALIA

Fraser Island

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II.1 Introduction

Year of Inscription 1992

Organisation Responsible for the Report

- Environment Australia
  Queensland Environment Protection Agency (EPA)
  Australia

II.2 Statement of Significance

Inscription Criteria N ii, iii

Statement of Significance

- Proposed as follows:
  The site contains complex Aeolian dune formations evolving from a unique interaction of coastal successional vegetation, hydrological and geomorphological systems not known to occur elsewhere.
  Other unique features include an outstanding vegetational chrono-sequence; an ancient group of ferns that first appeared in the Silurian Period 400 million years ago; and most of the world's known habitat for acid frogs.
  The property encompasses 250km of clear sandy beaches, striking sand cliffs, spectacular blowouts, fresh water lakes in a rich variety of settings (from rainforest to colourful heaths), and the largest unconfined sand island aquifer known in the world.

"Fraser Island has broadband satellite connectivity to the EPA network which provides access to e-mail, internet and a subset of corporate applications."

Status of Site Boundaries

- The borders and buffer zone of the property are considered adequate.
- Changes to the tenure of some areas have been made.
- The Great Sandy Strait acts as a buffer zone between the WH area and the mainland.
- A proposal to establish the 'Great Sandy Marine Park' is currently being developed to establish the marine protected area over tidal waters and lands.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- "Soil profiles and ongoing pedological evolution remain undisturbed on all but mined areas. All impact of logging on process such as nutrient cycling, forest structure and population genetics will shortly cease, and the refugial role of both closed forests and heathland is assured. Weeds, plant diseases and feral animals are present but in low numbers subject to active management and are controllable".
- Localised degradation can occur from excessive numbers of visitors, inappropriate fire management, and invasive exotic species and pathogens.

II.4 Management

Administrative and Management Arrangements

- Day-to-day management is carried out by the Queensland National Parks & Wildlife Service.
- Local government planning and development assessment is undertaken in accordance with the Environmental Protection Act (1994) and the Integrated Planning Act (1997).
- Relevant laws include the: Forestry Act (1959); Recreation Areas Management Act & By Law (1988, 1991); World Heritage Properties Conservation Act (1983); Nature Conservation Act (1992); and the Environment Protection & Biodiversity Conservation Act (1999).
- A joint Ministerial Council between the Commonwealth and Queensland Government has been established. However, no joint management arrangements (traditional protective measures) have yet been established.
- The 'Great Sandy Region Management Plan' for natural and cultural resource management was drawn up in 1994.

Present State of Conservation

- The original WH value is considered to be intact.

Staffing and Training Needs

- 63 staff and 12 volunteers in 2002.
- Staff have received training in the use of firearms, fire management, workplace health & safety, first aid, compliance and legislation.

Financial Situation

- The majority of funding comes from receipts under the 1988 Recreation Areas Management Act which increased from US$I.47 million in 1992-93 to US$4.1 million in 2001-2003.
- Supplementary revenue received by the Board (service permits, penalties, brochures sales) is paid into the Queens Recreation Areas Management Board Fund.
- There are general funding limitations.
- * International Assistance from WHF: none.

Access to IT

- Fraser Island has broadband satellite connectivity to the EPA network which provides Internet and email access and a subset of corporate applications.

Visitor Management

- There were some 200,000 visitors at the time of listing in 1992, which rose to almost 340,000 in 2001-2002.
- Visitors are able to access information on Fraser Island through a variety of media: brochures, videos, maps, websites, and an information kit.
- Visitor management covers: (i) pre-visit information; (ii) off-site orientation; (iii) on-site orientation; (iv) site interpretation; and (v) post-visit reinforcement.
- There is a general paucity of social science research addressing visitor and social impact management.
- The greatest potential threats to WH values include recreational activities and a lack of knowledge about the ecological impacts of visitors.

Map of the Fraser Island showing WH Area (in green)

* State of Conservation Reports

2000 Bureau CONF.202/5 IUCN informed the WH Centre that it had received a number of reports concerning the state of conservation of this property, including: (i) impacts associated with increasing tourism, particularly on fresh water environments; (ii) the unique dune lake system; (iii) adequacy of the fire management programme; and (iv) reduction in state government funding associated with other revenue generation mechanisms. IUCN further noted that the Fraser Island Scientific Advisory Committee had reviewed the WH value of the site and a report was due in 2000. The Bureau invited the State Party to consider extending the application of ACIUCN's consultation process to include Fraser Island, and requested the State Party to submit the report of the Fraser Island Scientific Advisory Committee to the WH Centre.

2001 Committee CONF.208/10 In April 2001, a 9-year old boy was killed by dingoes on Fraser Island prompting a re-evaluation of the risk posed to humans by dingoes, and a re-assessment of the draft FI Dingo Management Strategy (March 2001). Immediately following the incident, the Queensland Parks and Wildlife Service (QPWS) undertook a cull of 31 habituated dingoes. A Risk Assessment Report was also commissioned by the Queensland Environmental Protection Agency (EPA) which provided site-specific recommendations including the fencing of campgrounds & recreational areas; active deterrence of animals in the vicinity of popular visitor areas; restriction on food taking to certain locations; and time restrictions for visitors. Additional island-wide management approaches included: (i) limiting visitor numbers; (ii) increasing fines & penalties for feeding dingoes; (iii) enhancing public education & awareness; (iv) additional ranger presence; and (v) increasing dingo monitoring & research. The need for consultation on appropriate limits with the Island's residents, tour operators, the FI Community Advisory Committee, native title claimants, and the Island's WH Area Management Committee was also emphasised.

IUCN received further expert advice that the impact of the cull was unlikely to have any adverse impacts on the long-term viability of the dingo population. According to the IUCN Canid Action Plan, the FI dingo population is of great relevance to the status of Fraser Island as a WH site, and represents the best opportunity to maintain a self-sustaining population of wild genetically pure dingoes. Fraser Island does not, however, have an exclusive Plan of Management, as it is catered for by the 1994 Great Sandy Region Management Plan (GSRMP), which also includes adjacent marine areas and lands outside the protected area. A review considering a management plan specific for the FIWH property, as well as a commitment to new legislative requirements is scheduled for completion in March 2003. In July 2001, the Queensland Government announced the allocation of an extra AU$1.75million towards the management of Fraser Island.

The Bureau commended the State Party/QPWS on the Risk Assessment and the draft Dingo Management Strategy, and invited the State Party to provide further information on the visitor management strategy as it is developed.

II.5 Factors Affecting the Property

Threats and Risks

- Growth in population in the Great Sandy Region,
- Expansion of residential areas and infrastructure development,
- Tourism & support industries,
- Fire hazards,
- Lack of knowledge from systematic monitoring,
- Invasive plants & pathogens,
- Global warming as a potential threat.

Counteractive Plans

- Overall development within the WH area is controlled via local government planning schemes and state government legislation.
- In addition, a Dingo Management Strategy, a draft camping plan, and a draft fire strategy, have also been prepared.

II.6 Monitoring

Monitoring Arrangements

- A substantial monitoring programme is conducted by QPWS on Fraser Island.
- Some of the major ongoing monitoring projects in collaboration with different partners cover the effects of fire on flora & fauna; presence of key species; beach bird populations; frog monitoring and the impact of traffic on wildlife.

Monitoring Indicators

- Monitoring indicators include: (i) presence of plants; (ii) species composition; (iii) small mammal population indices from Elliot box & pitfall trapping; (iv) visibility; (v) counts of birds; (vi) Dingo sighting locations; (vii) species presence & abundance indices; (viii) records of road kills.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- The authorities have maintained the WH value.
- Recreation, visitation, and inappropriate fire regimes have however been identified as being the two main threats to the WH value.
- Discussions are underway with relevant stakeholder groups to consider a possible future extension to the boundary of the property.

AUSTRALIA

Australian Fossil Mammals Sites Riversleigh and Naracoorte

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II.1 Introduction

Year of Inscription 1994

Organisation Responsible for the Report

- Environment Australia
- Queensland Parks & Wildlife Service
  Townsville, Queensland 4810
- Wildlife South Australia
  Naracoorte, South Australia 5271
  Australia

II.2 Statement of Significance

Inscription Criteria N i, ii,

Statement of Significance

- Proposed as follows:
  Riversleigh is one of the world's richest Oligo-Miocene mammal records, 15-25 million years old.
  Placental mammals at Riversleigh are represented by more than 35 bat species. The fossil bat record is also the richest in the world.
  The fossils in the Naracoorte Caves illustrate faunal change, highlighting the impacts of both climatic change & humankind on Australia's mammals from at least 350,000 years before the present.
  There are almost 99 vertebrate species, ranging in size from very small frogs to buffalo-sized marsupials.
  Riversleigh & Naracoorte provide evidence separately of key stages in the evolution of the fauna of the world's most isolated continent.

Status of Site Boundaries

- In 2000, an extension to the Riversleigh WH area boundary (Queensland) was proposed, but the Lawn Hill Riversleigh Pastoral Holding Company did not consent to the sale of their property.
- The Naracoorte Caves National Park boundary (South Australia) was extended to include a small cave known as 'Wombat Cave'. The WH value of this needs to be assessed for the possible extension of the boundary.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value has been maintained.

II.4 Management

Administrative and Management Arrangements

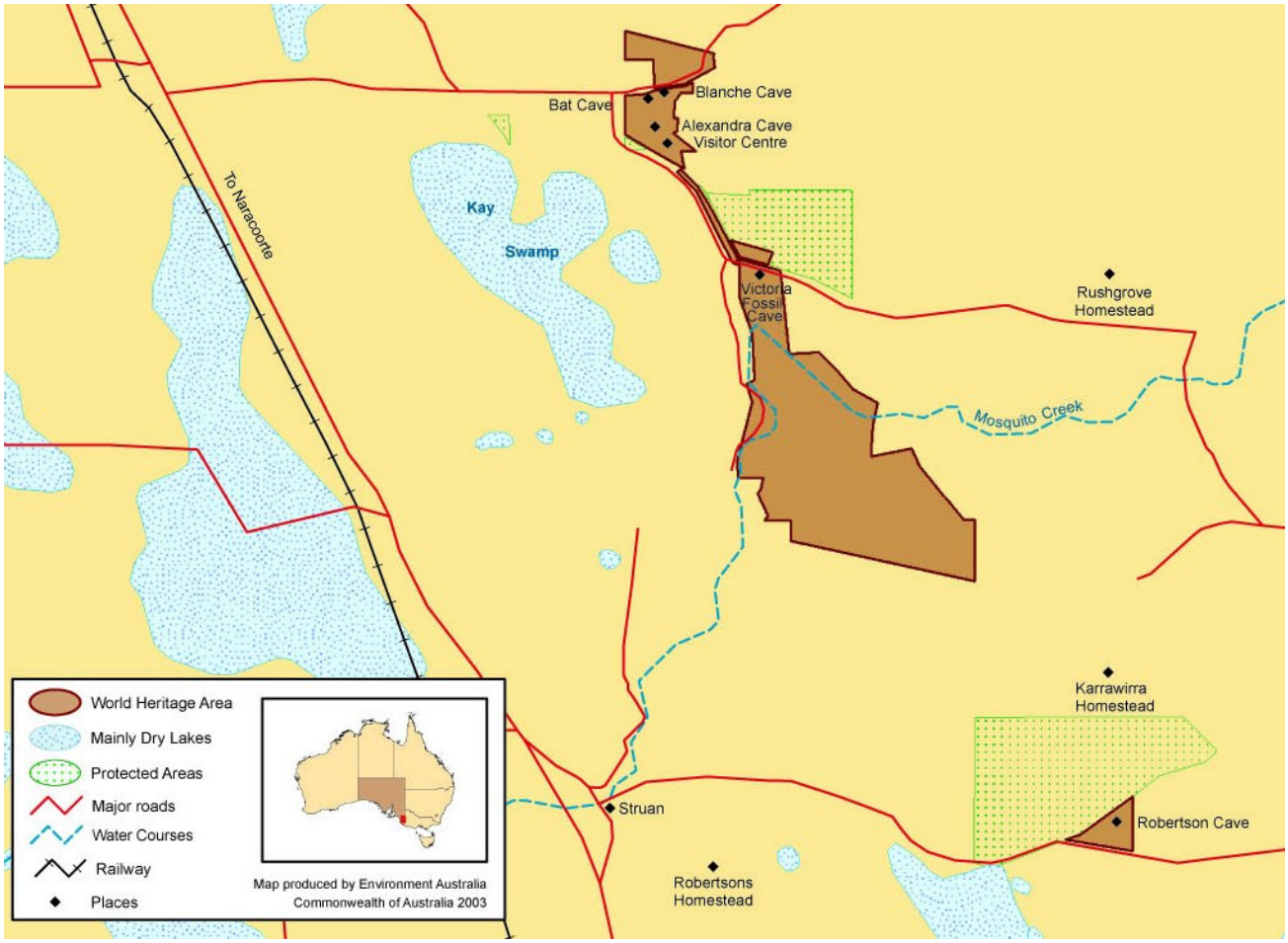
- The property is protected by the Environment Protection & Biodiversity Conservation Act (1999).
- Other legislation includes: (i) 'Australian Heritage Commission Act' (1975); (ii) 'Native Title Act' (1993); (iii) 'Aboriginal Land Act' (1991); (iv) 'Cultural Record Act' (1987); (v) 'The Nature Conservation Act' (1992); and (vi) 'National Parks & Wildlife Act' (1972).
- The Riversleigh WH area is managed by QPWS. A Management Strategy was developed in 2002.
- The Naracoorte Caves are administered by the Dept. for Environment & Heritage (SA).
- The management Plan for the Naracoorte Caves National Park was formally adopted in February 2001.
- Claims have been made for determination of Native Title over lands.

Present State of Conservation

- The conservation status is considered adequate.
- Media reports (2001 & 2002) claimed that Queensland and the Australian Governments allowed vandalism and illegal removal of fossil material to occur at Riversleigh due to "neglect" & a lack of site security. Funding and management strategies have been provided to address this issue.
- Although mining exploration permits are issued, no exploration is allowed in the WH area.

Staffing and Training Needs

- Riversleigh unit consists of 7 operational staff of which one full time equivalent allocated for WH Area work.
- A full time Ranger-in-Charge for Riversleigh has been recruited for day-to-day management.



Map of Naracoorte caves National Park showing WH Area (in brown) and Protected Area (in green)

- QPWS has nominated two seasonal Cultural Rangers and a Project Officer to the Riversleigh management unit. In addition to this, a Senior Ranger, District Manager and other regional support staff devote a percentage of their time
- Training is required for all staff involved in the direct management of Riversleigh.
- Training of staff involved in cave & fossil presentations is undertaken internally.
- There is a need of a staff member with a Palaeontological background for the training of staff & development of programmes.
- There are 3.5 full time staff, 10 casual & 5 full time equivalent positions at Naracoorte Caves.
- A Palaeontologist is paid for by the Australian Government.

Financial Situation

- The Australian Government has over time provided funding assistance to the States of Queensland & South Australia for a range of measures including staffing, maintenance, protection and presentation of Riversleigh & Naracoote.
- * International Assistance from WHF: none.

Access to IT

- IT arrangements are considered adequate.

Visitor Management

- Approx. 10,000 people visit 'D-site' at Riversleigh each year, with numbers projected to increase with an improved profile, access & walking tracks.
- Accommodation is provided at camping grounds situated 45 km from Riversleigh.
- Naracoorte has over the years had an increased annual visitation from around 40,000 to 80,000.

II.5 Factors Affecting the Property

Threats and Risks

- Increased visitor pressure & small scale disturbance,
- Exotic plant invasions,
- Feral pigs,
- Domestic & wild cattle,
- Fire hazards,
- Fluctuations in temperature & humidity caused by visitors to the Victoria Fossil Cave,
- Extraction of fossiliferous material for research may exert pressure on the site.

Counteractive Plans

- QPWS Resource Rangers are reviewing the weed status & developing a fire control system.
- Rangers control pig activity.
- Commonwealth & Queensland governments are establishing a management strategy for Riversleigh.
- Commonwealth & State funds have been directed towards activities to mitigate risks to the property.

II.6 Monitoring

Monitoring Arrangements

- From April to October, management includes daily randomly timed patrols to all accessible areas.
- Exploration sites have been mapped & surveyed for volumes of material removed.
- Photographic monitoring procedures & survey of the specific sites.
- A 10 km long fence-line project is underway to secure certain areas at Riversleigh.
- Bat populations & associated guanophyllic faunas are being monitored in a collaborative project.

Monitoring Indicators

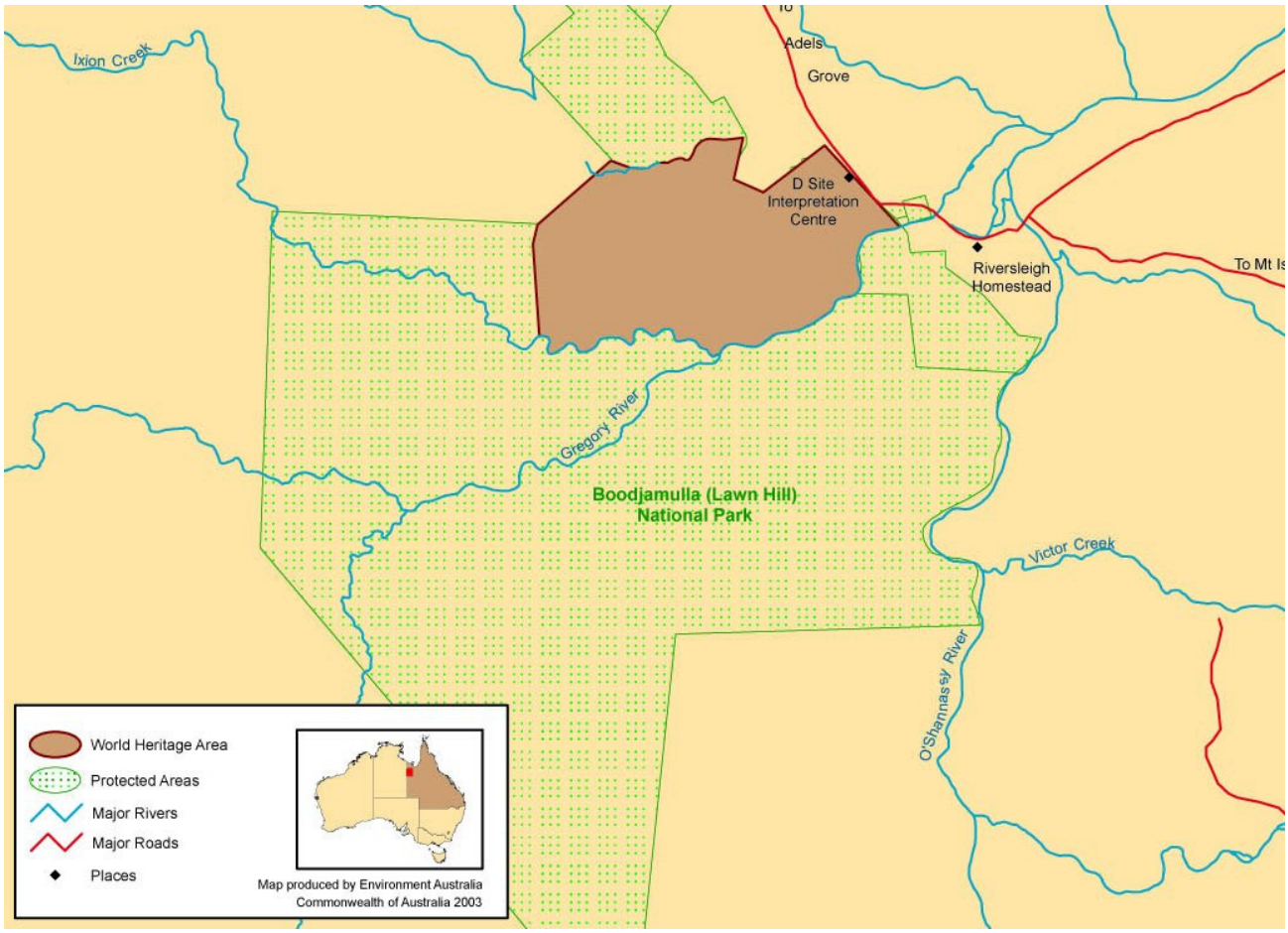
- The monitoring indicators identified are mapping, surveys and research studies.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- The main management challenges, for Riversleigh, are to implement improved strategies for protection of a remote World Heritage site by patrols, clear public information and securing public areas.
- The current management challenges, for Naracoorte, are to mitigate the increasing effects of visitation and party size tours through specific caves and redevelop presentation facilities.
- It is recommended that on-going monitoring system for fossil displacement and removal and regular communication are required to assist managers and researchers for a better presentation and transmission of the fossil resource.

** No State of Conservation Reports*



Map of Riversleigh showing WH Area (in brown) and Protected Areas (in green)

NEW ZEALAND

Te Wahipounamu – South West New Zealand

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II.1 Introduction

Year of Inscription 1990

Organisation Responsible for the Report

- Department of Conservation (DoC)
  P O Box 10420
  Wellington
  New Zealand

II.2 Statement of Significance

Inscription Criteria N i, ii, iii, iv

Statement of Significance

- Proposed as follows:
  "The area has outstanding universal significance for its Gondwana taxa, and it contains great diversity of landforms, flora and fauna."
- A major biogeographic feature of New Zealand's vegetation occurs within the region. The wetter, milder west is characterised by luxuriant rain forest and wetlands; the drier, more continental east has more open forest (generally mountain beech), shrublands and short tussock grasslands.
- The total wild population of 220 endangered takahe (a large flightless bird "rediscovered" in 1948), and the entire population of two of New Zealand's six varieties of kiwi, are found in the site.

Status of Site Boundaries

- The 2.6 million ha area of Te Wāhipounamu includes the national parks of Aoraki/Mount Cook, Westland /Tai Poutini, Mount Aspiring and Fiordland.
- Since 1990, various adjacent Crown-owned lands have been reclassified to form additions to Te Wāhipounamu's buffer zones. Further additions to buffer zones will occur as circumstances dictate.
- The Crown has successfully negotiated the purchase of the forest cutting rights on all but two of the blocks within the Waitutu forest.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained and, in several key instances, enhanced.
- The additions of South Okarito and Waikukupa forests to Westland NP in 1982, and Red Hills to Mount Aspiring NP in 1990, signalled a significant shift from extractive industries to sustainable use in the area.
- The Olivine Wilderness Area (83,000 ha) was gazetted in 1997, providing statutory protection to the wilderness value of this remote area of mountains, glaciers and wild rivers in Mount Aspiring NP. At the northern boundary of the site, a new wilderness area (Adams) was opened for public comment and recently approved by the Minister of Conservation.

II.4 Management

Administrative and Management Arrangements

- Te Wāhipounamu is protected under the Conservation Act (1987), the National Parks Act (1980), and the Reserves Act (1977), and is managed by the New Zealand Dept. of Conservation.
- In 1996, legislation was enacted to formally establish Te Rūnanga o Ngāi Tahu as the Maori tribal authority. The negotiated Deed of Settlement led to the Ngāi Tahu Claims Settlement Act 1998 which recognises 5 defined *Tōpuni* (chiefly) places and protects a number of plant and animal *taonga* (treasure) species.
- The formal changes of name of two national parks (Westland to Westland-Tai Poutini; and Mt Cook to Aoraki-Mt Cook) also reflect the official recognition of Ngāi Tahu associations with Te Wāhipounamu.
- Te Wāhipounamu is managed by the DoC according to Conservation Management Strategies approved by the New Zealand Conservation Authority.
- 'Operative management plans' exist for the 4 national parks in the site, and the Regional General Manager (Southern Region) delegates accountabilities for WH Area matters to a 'co-ordinating panel' of conservancy representatives.

- Draft management plans are currently being reviewed with full public consultation. The plans provide a set of guiding principles that reflect the World Heritage status of the site.

Present State of Conservation

- Proposed plans for tourist aircraft activity over Fiordland NP are subject to appeals in the Environment Court.
- A legal challenge to the addition of land to Westland National Park did not proceed.
- "A very substantial recovery of vegetation" followed the recreational hunting of red deer in the 1970s.

Staffing and Training Needs

- Te Wāhipounamu is managed by DoC staff located in 4 conservancies and their component area offices and field centres. Staff are trained in all aspects of Park management

Financial Situation

- The site is managed and administered by DoC though central government funding. No figures supplied.
- * International Assistance from WHF: none.

Access to IT

- DoC operates a reliable national network with internet capacity.

Visitor Management

- "In the New Zealand context, the principle issue is about the maintenance of natural character. Visitor pressures are therefore not so much about volume as quality of experience."
- A range of private sector tourist activities operate under concession agreements. The DoC also opened the Haast Visitor Centre in 1991 with interpretive information on World Heritage value.
- At major visitor attractions such as Franz Josef and Fox Glaciers, Aoraki/Mount Cook and Milford Sound, "issues are frequently associated with aircraft access, over-flying and perceptions of crowding. The effects tend to be on the visitors rather than the site."

"A range of private sector tourist activities operate under concession agreements. The Doc also opened the Haast visitor Centre in 1991 with interpretive information on World Heritage value."

II.5 Factors Affecting the Property

Threats and Risks

- Predation of juvenile kiwis, mohua, and indigenous blue ducks by stoats & rats.

View of Franz Joseph Glacier

- Disruption of forest ecosystem fruiting, seed dispersal and pollination by the omnivorous Australian brushtail possum.
- Feral introduced Himalayan *thar* and deer species.
- Several species of hawkweed which displace up to 80% of native inter-tussock vegetation.

Counteractive Plans

- Poisoning of possums with biodegradable 1080 (*sodium monofluoroacetate*) in cereal bait or gel form by GPS-controlled "aerial sowing".
- Himalayan Thar Control Policy.
- South Island Wilding Tree Control Strategy.
- Visitor strategy and concession agreements. Booking systems have been introduced for the most popular walking tracks.

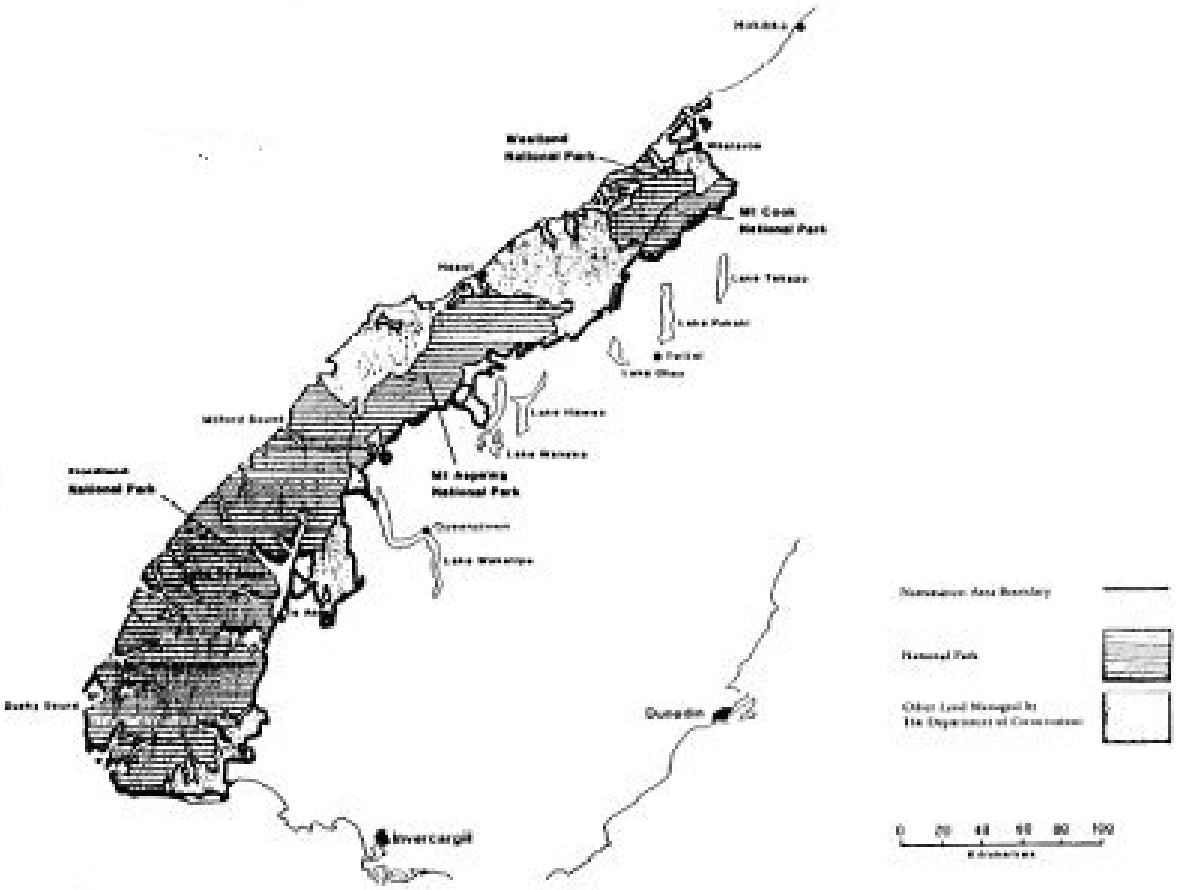
II.6 Monitoring

Monitoring Arrangements

- A number of different monitoring strategies cover the following areas: (i) biodiversity; (ii) visitor numbers; (iii) studies of aircraft overflight; (iv) modifications in the thickness of the Dart Glacier; (v) national network of permanent ecological plots; (vi) an ecosystem research programme in the Waitutu Forest (indigenous forest-pest interactions).

Monitoring Indicators

- Indicators for biodiversity include: (i) monitoring of 'seed rain' to follow the beech mast cycle; (ii) pest indices for stoats, rats and mice; (iii) bird counts; (iv) permanent plots in tussock grassland; (v) permanent plots in forests (to assess the impact of deer); (vi) monitoring of foliage condition on indicator tree species.



Map of Te Wahipounamu showing nominated area boundary (thick black line) and national park (stripped area)

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- The Dept. of Conservation is currently in the "early development phase of design, testing and costing [of] an inventory and monitoring system that will meet its reporting requirements" at national and international levels.
- The project is expected to result in the identification of a 'national multi-scaled biodiversity assessment-sampling programme' that will: (i) "detect changes in biodiversity that exceed the range of natural variation, across a range of spatial and temporal scales; (ii) provide an early warning of potential irreversible changes; (iii) provide reports on changes in pressure and the status of biodiversity condition."
- No stated need for support from the WHF.

** State of Conservation Reports*

1989 Committee CONF.004/5 The Committee was informed by IUCN that concern had been expressed regarding interest by Comalco New Zealand Ltd in purchasing a stake in the hydro-electric scheme in the national park to draw power for an aluminium smelter located outside the Park. IUCN noted that when Fiordland was inscribed as a WH site, the existence of the power scheme was accepted because of its design and modest scale in relation to the I.2 million ha site, and because of the strict rules governing operating levels of Lakes Te Anau and Manapouri monitored by an independent Guardians group. When electricity generation in NZ passed from the government to a State corporation, Comalco expressed interest in gaining an ownership interest in the Manapouri generation and transmission assets. IUCN's enquiries have shown however that the NZ Government accepts a commitment by Comalco that, in the event of it gaining an interest in these assets, it would recognise the need to continue the operational rules.

The Committee commended the State Party on its initiative to give a statutory role to the Guardians group, and in its efforts to ensure that any changes in ownership

of electricity generation would not threaten the integrity of the WH property.

1993 Bureau CONF.001/3 At its previous session in 1992, the Committee was informed that the Government of New Zealand had approved an application from a private company for a license to export water from inside the WH site. The exportation of freshwater required the construction of a dam, a buried pipeline, and four large reservoirs at Jackson's Bay.

The Committee noted that the visual and ecological impacts of the proposed development project were not clear, and that the legal and economic considerations were being actively debated. The Centre contacted the authorities and requested them to keep the Committee informed of the environmental impacts of the water export project.

In April 1993, the authorities informed the Centre that the Minister of Conservation had indicated to Okuru Enterprises Ltd. that he would not approve a pipeline inside the Mt. Aspiring NP located within the WH property. Okuru Enterprises Ltd. subsequently modified their application to obtain water from a creek outside the NP, which was advertised for public comment, and would be re-submitted to the Minister of Conservation. The authorities assured the Centre that the environmental impact of the modified proposal would be carefully considered, and that the value of the WH area would be an important consideration in reviewing any water export project.

1994 Bureau CONF.001/3b Three issues were discussed by the Bureau.
(1) In June 1994, the NZ Minister of Justice stated that "small parcels of conservation of land may be returned to Ngai Tahu and other iwi (Maori tribes) to protect *wahi tapu* or sacred sites". Although the Maori Ngai Tahu iwi had supported the NZ WH nomination, they had also pursued land claims in the Waitangi Tribunal set up to consider Maori land grievances under the Treaty of Waitangi (1840) set up between Maori leaders and the British. IUCN noted that the Ngai Tahu claims might include some land in the WH area, and considered it helpful to invite the NZ Government to report on any implication of the Treaty claims on the WH property.
(2) IUCN noted that continued cattle grazing was prejudicial to the natural value of parts of Mount Aspiring NP, including the Siberia area, the Wilkin Valley, Cattle Flat and Dredge Flat within the WH property. It recognised, however, that NZ National Parks Policy aimed to phase out cattle grazing in national parks where it was considered to be prevent forest regeneration, and invited the Dept. of Conservation to report on proposals to end grazing at the site. (3) IUCN further noted that when Fiordland National Park was listed as WH in 1986, it had proposed to include the Waitutu forest along the park's southern boundary. When Fiordland National Park was later incorporated into the larger Te Wahipounamu site in 1990, part of the Waitutu forest under government ownership was listed, whilst the coastal section of forest under Maori ownership was not. IUCN reported concern among conservation interests in New Zealand that the owners of the coastal forest had entered into a logging contract which would threaten the integrity of the adjoining Waitutu forest land within the WH property.

1999 Committee CONF.209/14 IUCN reported that it was awaiting a response from the NZ Dept. of Conservation (DOC) regarding concerns expressed by the Forest & Bird Society (FBS) of NZ on the management of the introduced *thar*, a mountain goat. The FBS claimed that a high level of *thar* were maintained for recreational hunting leading to concerns regarding the impact on the indigenous flora and the integrity of the alpine ecosystem.

The Bureau requested the NZ Dept of Conservation to provide a detailed report on the management of the *thar* in Te Wahipounamu

2000 Bureau CONF.202/5 The Centre reported that it had not yet received a report by the State Party on the management of the introduced *thar* as requested before 15 April 2000.

2000 Committee CONF.204/10 As requested by the Bureau, the DoC supplied a report on the management of the *thar* which outlined that the 'Himalayan *Thar* Management Policy' was applied throughout the country for the "sustained control" of the animal and the "maintenance of an ecologically acceptable vegetation and estate condition". At the time, the Control Plan had reduced the total number of *thar* from more than 13,000 to less than 7,000 in just five years. The DOC noted its commitment to a scientifically robust monitoring programme to measure the impacts of *thar* on vegetation and expected to report on these results by 2002/3. Following the report from the State Party, IUCN consulted with the FBS which was pleased that the State Party had acted on the concerns raised. However, the possibility of the WH area being re-populated by *thar* from outside the area continued to be a cause for concern.

The New Zealand Conservation Authority (NZCA), which has a statutory role under the National Parks Act expressed some dissent on the overall *Thar* Management Policy claiming that: (i) a concerted effort over a few years was required as opposed to selective culling and monitoring; (ii) a review of the policy should be carried out in 2000; and (iii) any decision would be a political one as consensus would never be reached among the deeply divided interests.

The Bureau requested the State Party to give due consideration to changes called for by the NZCA when it reviewed the *thar* control policy's impacts in 2002/2003.

NEW ZEALAND

Tongariro National Park

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II.1 Introduction

Year of Inscription 1990, 1993

Organisation Responsible for the Report

- Department of Conservation (DoC)
  P O Box 10420
  Wellington
  New Zealand

II.2 Statement of Significance

Inscription Criteria N ii, iii C vi

Statement of Significance

- Proposed as follows:
  "The Park contains active and extinct volcanoes, a diverse range of ecosystems and highly scenic landscapes. The area was the genesis of New Zealand's national park system, inspired by the unique gift in 1887 by Te Heuheu Tukino and his people, of the sacred mountain tops to the people of New Zealand."

Status of Site Boundaries

- The boundaries of the TNP remain unaltered since 1990.
- A proposal to include the Rangataua Conservation Area (6,100 ha) is awaiting the resolution of a Treaty of Waitangi Claim.
- To the east of the TNP is the Kaimanawa Conservation Park (77,348 ha), and the Erua Conservation Area to the north-west. Both protected areas provide a buffer to ensure the conservation of the property.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained and, in several key instances, enhanced.

II.4 Management

Administrative and Management Arrangements

- The TNP is managed by the DoC according to Conservation Management Strategies approved by the New Zealand Conservation Authority.
- The TNP Management Plan is currently being reviewed with full public consultation. The draft plan provides a set of guiding principles that reflect dual World Heritage status.
- There are now four Maori members of the TNP Conservation Board. "Staff awareness of Maori issues and cultural values has increased markedly since cultural inscription in 1993."

Present State of Conservation

- The revised 10-year management plan for TNP has clearly restricted ski-field development to identified amenity areas, and banned the recreational use of helicopters or over-snow vehicles in the park.
- Following volcanic eruptions in 1996 and 1997, ash debris build up at the Crater Lake outlet has meant that the Lake will refill in the period 2002-04 to a higher level than before.

Staffing and Training Needs

- 35 full time equivalent staff work in Tongariro National Park with a further 60 seasonal workers employed in the summer. Staff are trained in all aspects of Park management.

Financial Situation

- The expenditure budget in 2002-2003 was US$3.5 million and the revenue budget was US$2.2 million.
- * International Assistance from WHF: none.

Access to IT

- DoC operates a reliable national network of 36 PCs with internet capacity in the TNP.
- A GIS capability is currently being developed.

Visitor Management

- Public awareness of the property has been enhanced by a redevelopment of the Whakapapa Visitor Centre and new displays at the Ohakune Visitor Centre.
- A new park handbook has been produced and other publications updated. New signage has been installed throughout the WH Area.

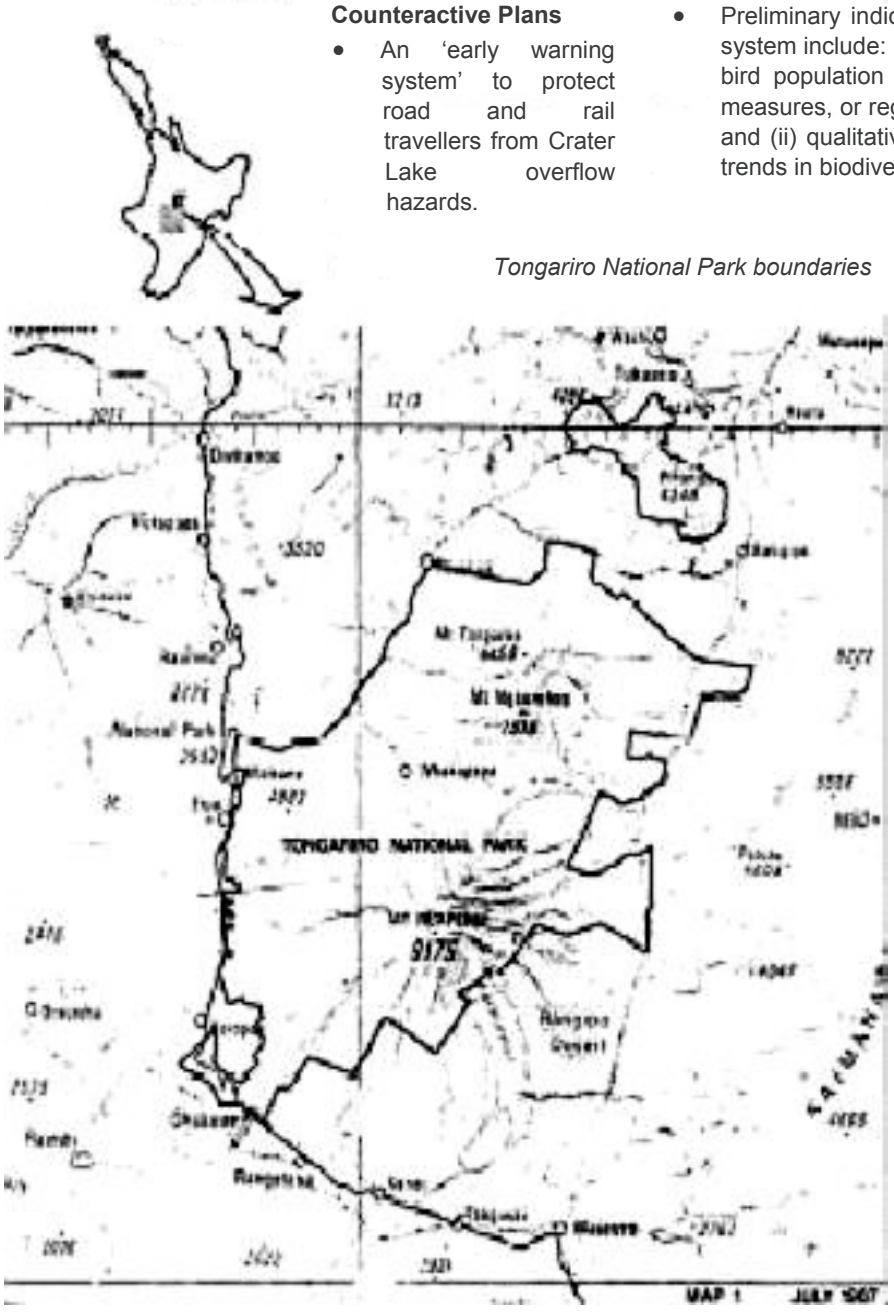
II.5 Factors Affecting the Property

Threats and Risks

- Overflow of the Waikato River onto State Highway 1 resulting from ash debris in the Crater Lake,
- Untreated sewerage in Whakapapa & Iwikau villages,
- Animal & weed pest control (heather, rats, stoats).

Counteractive Plans

- An 'early warning system' to protect road and rail travellers from Crater Lake overflow hazards.



Tongariro National Park boundaries

- Limits on visitor numbers & surfacing tracks.

II.6 Monitoring

Monitoring Arrangements

- Biodiversity monitoring usually occurs in conjunction with specific management programmes.
- Volcanic hazard monitoring is carried out on an ongoing basis. High use visitor sites and concession activities are measured for environmental impact.
- "Monitoring of cultural values has not been attempted specifically for the WH Area but Te Puni Kokiri (the Ministry of Maori Development) has responsibility for monitoring the performance of all government departments in their relationship and responsibilities to Maori."

Monitoring Indicators

- Preliminary indicators for a standardised monitoring system include: (i) 'result' or 'outcome' indicators (i.e. bird population counts to estimate possum control measures, or regular measuring of permanent plots); and (ii) qualitative 'condition' monitoring to measure trends in biodiversity health.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- "The gift of Tongariro as a 'sacred place of the Crown' was unique… [and] established a threefold bond amongst the land, Maori and pakeha (predominantly British settlers). The spirit of this gift continued in the creation of further national parks around the country."
- Maori are consulted on all management actions in the TNP including visitor centre displays, biodiversity programmes, and concession applications.
- Cultural perspectives were a key issue in the 'Crater Lake' issue. In April 2002 the WH Committee welcomed decisions by the Minister not to intervene directly in the Crater Lake and install the early warning system and embankment in its place.

* State of Conservation Reports

1995 Committee CONF.203/5 The Committee was informed that in May 1995 the Centre had received information from the local Maori community about the random dropping of 1080 poison on Mount Tongariro to combat possum which threatened indigenous flora. The Centre contacted the New Zealand authorities and received an answer from the Dept. of Conservation (DoC) indicating that the increasing possum population was a matter of grave concern. From a Maori perspective, however, the notion of controlling the possum population was an alien one to their culture. The DoC held consultations with the community which agreed to a time-limited operation which would not contaminate waterways.

1998 Ext Bureau CONF.202/4 The Bureau was informed by the New Zealand authorities that an eruption of Mt. Ruapehu in 1953 caused one of the country's major civilian disasters and that there was an inevitability of a lahar from the crater following the 1996 & 1997 eruptions. The Minister for Conservation therefore called for a comprehensive environmental and cultural assessment of the risks. The following mitigation options were considered: (a) installing an alarm and warning system; (b) building structures off the mountain to contain the lahar expected when the ash-dam fails; and (c) bulldozing or hand digging a shallow trench a trench through the ash-dam itself. It was pointed out that the Park management was in regular consultation with the Ngati Rangi and the Ngati Tuwharetoa Tribes who consider that the excavation at the Crater Lake "challenges the indigenous integrity and strength of the cultural WH status" of the Park. The DoC reiterated its commitment to a consultation process that would support an exemplary code of cultural sensitivity and field conservation practice.

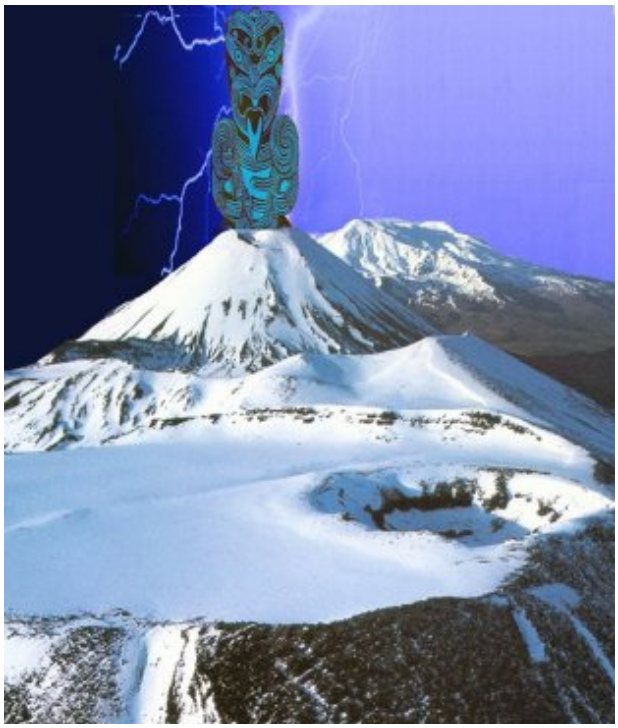
The Bureau requested the New Zealand authorities to keep the Centre informed about the outcome of decisions concerning the management of the ash build-up at the crater outlet of Mount Ruapehu.

1998 Committee CONF.203/8 rev The Director of the Centre, who attended the World Heritage celebrations in Tongariro National Park in November 1998 confirmed the extremely sensitive approach adopted by the management regarding the sacred volcanic peaks.

"Maori are consulted on all management actions in TNP including visitor centre displays, biodiversity programmes, and concession applications."

The Committee commended the New Zealand authorities for the ethically and culturally sensitive manner in which they were addressing the issue. The Committee requested the Centre and IUCN to submit a status update on the management of ash build up at the Crater Lake outlet on Mt. Ruapehu to its session in 1999.

1999 Bureau CONF.204/5 The Bureau was informed that US$4,000 of promotional assistance was supplied for a small travelling photographic exhibition in 1998. In March 1999, the DoC provided the Centre with an update on the management of the ash build-up at the Crater Lake. A draft Assessment of the Environmental Effects report was released for public comment with Maori and other agencies in October 1998, and later sent to the Minister of Conservation. The DoC informed the Centre that it was investigating a suitable alarm system to warn the public about large lahars from the Crater Lake. Continuous monitoring had shown that as of March 1999 the Crater Lake was 22% full and 54 meters below the old overflow level. According to current projections, the Crater Lake would not fill until the year 2003.



Tongariro Mountain, superimposed with the representation of Ngatoroirangi, the tohunga and navigator of the Arawa canoe, in Maori mythology

2001 Committee CONF.208/10 The Committee was informed that US$20,000 in training assistance was provided for a WH Site Manager's Workshop in October 2000. The final report on the ash build-up at the Crater Lake observed that following wide-ranging consultation on the Assessment of Environmental Effects (AEE), the Conservation Minister had approved the installation of an early warning system and the construction of a bund to prevent the lahar overflowing into the Tongariro River Catchment from the Whangaehu Valley. The Minister was preparing a final decision on engineering works at the Crater Lake. The report expressed concern that the proposed

earthworks were an over-reaction to the threat which would harm both the cultural and natural value associated with the Crater rim, and that the proposed engineering might establish a dangerous precedent requiring continual follow-up works within Tongariro and other national parks where volcanic eruptions are an ongoing natural feature. The report commented that it would be more consistent with National Park legislation and principles to allow natural processes to function, and to implement measures that would protect both public safety and infrastructure.

The Bureau requested the State Party to outline alternative options to the proposed engineering works so as to maintain the outstanding natural and cultural value of the site.

2002 Bureau CONF.201/11rev Following the request of the Committee in 2001, the State Party provided a report on the minimisation of risks associated with the impending Crater Lake lahar. The Minister announced that the installation of the warning system, and the construction of a bank alongside the Whangaehu River were sufficient to address risks to public safety. In addition, the DoC was working closely with the Police and the Ministry of Civil Defence & Emergency Management to develop an emergency response plan, and helping organisations with assets to review their individual civil defence plans. The Minister decided against undertaking major engineering works which had been opposed by environmental and recreational groups, the Tongariro/Taupo Conservation Board, the NZ Conservation Authority, and by local Maori tribes. The decision was based on (i) assessment of potential risks to staff working on the engineering works versus the risk to the public & infrastructure without engineering; and (ii) public concerns about the impact on national park values that would occur by bulldozing into the summit of the mountain. In making the announcement, the Minister stated that an engineering intervention would be inconsistent with the provisions of the National Parks Act, the Tongariro NP Management Plan, and the WH Convention. Both ICOMOS and IUCN expressed their support for this decision.

The Bureau commended the State Party on its decision and expressed its hope that all parties would accept the decision.