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**ORGANISATION DES NATIONS UNIES
POUR L'EDUCATION, LA SCIENCE ET LA CULTURE**

CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE

CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE MONDIAL, CULTUREL ET NATUREL

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

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Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

Point 7 de l'Ordre du jour provisoire: Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

**Tasmanian Wilderness (Australia) (181bis) /
Zone de nature sauvage de Tasmanie (Australie) (181bis)**

15-20 March 2008 / 15-20 mars 2008

This mission report should be read in conjunction with Document:
Ce rapport de mission doit être lu conjointement avec le document suivant:

- ☐ WHC-08/32.COM/7A
- ☐ WHC-08/32.COM/7A.Add
- ☐ WHC-08/32.COM/7B
- ☑ WHC-08/32.COM/7B.Add

TASMANIAN WILDERNESS
(Australia)
REPORT OF THE REACTIVE MONITORING MISSION
15 to 20 MARCH, 2008

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(Views expressed in this report do not necessarily reflect IUCN policy in relation to this property)

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Executive Summary

In 1982 and 1989, the Tasmanian Wilderness World Heritage Area (TWWHA) was inscribed on the World Heritage List as a mixed property under cultural criteria (iii), (iv) and (vi), and under all four natural criteria (vii), (viii), (ix) and (x). In 1989 there was an extension of the property, mainly to the north and east, based on the natural criteria.

Cultural values and risks

At present, the cultural outstanding universal value (OUV) of the property is attributed principally to Aboriginal archaeological and cultural sites in caves on the Franklin and Gordon Rivers. These are an outstanding example of a traditional way of life in extreme southern latitudes in the course of the last glaciation and recession of the Pleistocene era (since 34,000 years ago).

Little has been reported on the conservation status of these cultural sites and landscapes. Nevertheless, the mission is of the view that the existing sites within the TWWHA remain an exceptional testimony to a cultural tradition.

However, there is a lack of detailed conservation management planning, in part caused by appropriate state sensitivities to the Aboriginal communities' desire to self-manage and the latter's relative lack of land management and management planning capability. Outside the property there may be related cultural sites which could demonstrate OUV. A separate case would need to be made by the state party, at its own discretion, if these were to be proposed as an extension or serial addition to the existing property.

In general, the property needs to have better re-definition of themes in both Aboriginal and European land occupation and history, cultural landscape analysis and appropriate management, improved interpretation, improved partnerships and consultation and better training, documentation and data bases.

Natural values and risks

The 1989 IUCN assessments noted that: "The property is mostly undisturbed wilderness, encompassing most of the last temperate rain forest remaining in Australia, as well as extensive tracts of tall eucalypt forest".

It represents a notable association of ancient Gondwanan rain forest elements such as southern beech with the specifically Australian flora such as the eucalypts.

The area managed under the TWWHA management plan provides a good representation of tall eucalyptus forest and related ecological processes. The present pattern of old growth tall Eucalyptus forests and the rain forest have evolved in response to a random pattern of fire (both human and lightning-caused) over the Tasmanian landscape over time. Management by human agencies to maintain the evolutionary processes is a challenge.

Well organized Australian and Tasmanian non-governmental environmental organizations have repeatedly raised concerns about:

- under-representation in reserves and more general threats to old growth "tall wet Eucalyptus" forests,
- the build-up of road networks and logging in proximity to the property, and

- the risk posed by fire use in regeneration treatments of logged areas adjoining the property.

The focus of concern continues to be the appropriateness of the location of the eastern and northern boundary, determined at the time of the expansion of the property in 1989, and after an extensive consultation process. Part of the perception of the problem has been the boundaries, particularly to the north and the east. The adjoining area is a multiple-use landscape and as such its land management objectives are different from those of the TWWHA.

The Regional Forest Agreement (RFA) and the provision of reserves

Under the RFA (a Commonwealth-Tasmania state agreement, legally effective) there is a system of formal and informal reserves established under the "CAR principle" – reserves are to be Comprehensive, Adequate and Representative. The RFA instigated a detailed scientific review of forest classes and other ecological values and provided a common source of statistics for both the State Party and the environmental non-governmental organisations (ENGOs).

The total area under reserve status is almost 45% of Tasmania with the World Heritage Property amounting to 20% of the land area.

The ENGOs and the State Party differ on the extent of the tall old growth wet Eucalyptus forest in the The Tasmanian Wilderness Area on the basis of whether to include the E. nitida dominated forest. By including this vegetation type the State Party arrives at the statistic that the TWWHA contains 90,900ha or 38% of Tasmania's tall wet Eucalyptus old growth forests. By excluding the E. nitida vegetation type dominated by four Eucalyptus species the ENGOs state that the TWWHA contains 28% of Tasmania's tall old growth wet Eucalyptus forest.

The ENGOs indicate that the extent of the tall Eucalyptus vegetation types (both old growth and non-old growth) in the TWWHA represents 9% of the statewide extant in 1996. The mission was not provided the base data for these calculations.

Based on the RFA statistics, of the existing total old growth tall forest vegetation in Tasmania, 73% is in reservation. A system of formal and informal reserves, including national parks and the TWWHA, include about 79% of all remaining old growth forests and 46% of all native forest communities.

All natural production forests are regenerated by seeding on sites which requires preparation through burning slash. Plantations are not to replace forest coupes, but take place in private forests. By 2010, there is a commitment to reduce clear felling as a silvicultural technique in public old growth forests.

Logging roads and logging activities in close proximity to the Tasmanian Wilderness Area provide access to the property which if unregulated could lead to possible damage to cultural sites or sensitive vegetation, and threaten rare and endangered species.

A fundamental underpinning component of the RFA in Tasmania is the Forest Practices Code 2000. The construction of roads, regeneration fires and logging operations are all regulated under it.

The TWWHA Management Plan 1999 and its recent review are very thorough and represent a high standard of practice.

The stakeholders are fractious, suspicious of each other and seldom if ever meet to resolve differing points of views. Existing mechanisms of advisory bodies and consultative processes are viewed with suspicion and are shunned. The planning of the itinerary by the state party had to go through numerous iterations to assure that equal access was provided and a joint meeting of all stakeholders with the Mission was impossible to arrange.

Summary of main recommendations

The mission recommends that resources should be greatly enhanced for protecting archeological and aboriginal sites within and adjacent to the property, and that there is no need for extending the boundaries of the property for this purpose. The Aboriginal Relics Act also needs to be updated and passed into law.

Resources should be increased to enable the Tasmanian Aboriginal Land and Sea Council (TALSC) to improve its cultural sites and land management capability, and also resources for identifying, monitoring, interpreting, and managing aboriginal and historical sites, and cultural landscapes.

Considering the representation of old growth forest, including of the tall Eucalyptus forest within the area covered by the TWWHA and its management plan, as well as in the other reserves in Tasmania, and the fact that potential threats from production forestry activities are well managed, the mission does not recommend any change to the boundaries of the property to deal with such threats. However, it recommends that boundaries of the TWWHA be adjusted to include within it the 21 areas of national parks and state reserves, which are currently not a part of the inscribed property but are covered by its management plan.

Additionally, the mission recommends that after the expiry of the existing leases for mineral exploration and exploitation in the areas mentioned in the IUCN technical evaluation of 1989, they should not be renewed, and the areas concerned should be rehabilitated and incorporated into the TWWHA.

A vegetation management plan covering the TWWHA and the adjoining forest reserves should be prepared and implemented jointly by national parks and the forestry authorities, to address representativity of vegetation types and to reduce risks, particularly from fires and climate change.

The location and standards of logging roads in areas adjacent to the TWWHA should be influenced by the ecological integrity values of the property, and the roads no longer needed should be reclaimed.

Acknowledgements

The mission team would like to acknowledge: *NGO*s, the Huon Valley Environment Centre, The Wilderness Society, the Tasmanian Conservation Trust, the Tasmanian National Parks Association, Camp Florentine, the Australian Conservation Foundation

and Environment Tasmania; *Tasmanian forestry interests* especially Timber Communities Australia, Forests and Forestry Industry Council of Tasmania, Forest Industries Association of Tasmania and the Institute of Foresters Australia; the *Tasmanian Aboriginal Land and Sea Council* (TALSC) and their land management trainees; *Commonwealth and Tasmania officials* from Forestry Tasmania, the Tasmanian Parks and Wildlife Service (PWS), the Tasmania Department of Infrastructure, Energy and Resources, and the Commonwealth Department of Environment, Water, Heritage and the Arts (DEWHA) and their Minister the Hon. Peter Garrett. Special thanks are due to the State Party delegation from DEWHA for accompanying and facilitating the work of the mission. Thanks also to the advisory bodies in Australia, AIUCN and Australia ICOMOS, for their briefings and practical advice on the background to the issues. The welcome event on the evening of the first day with the TWWHA Consultative Committee proved informative and was a special way to be introduced to the challenges and opportunities faced by the property. A special thank you is extended to Dr Richard Cosgrove of la Trobe University for sharing his considerable archaeological knowledge of the TWWHA area.

1. BACKGROUND TO THE MISSION

The Tasmanian Wilderness is inscribed on the World Heritage List under cultural criteria (iii), (iv) and (vi), and under all four natural criteria (vii) (viii) (ix) (x).

Four National Parks (Southwest NP, Franklin - Gordon Wild Rivers NP, Cradle Mountain – Lake St. Clair NP, Walls of Jerusalem NP) and the Central Plateau Conservation Area and Protected Area constitute the World Heritage property and provide protection. Twenty one parcels of land mostly along the eastern boundary of the property, totaling over 20,000 hectares, are part of the national park management regime, but are not presently included in the property. As well, areas that contain mineral potential (Adamsfield conservation area) or being mined currently (Melaleuca exclusion) are not included in the property, though the Adamsfield conservation area is shown to be within the boundary of the TWWHA and is zoned for recreation.

The management of the natural attributes of the Tasmanian Wilderness World Heritage Area (TWWHA) is not an issue. Rather, Australian and Tasmanian non governmental environmental organizations (NGOs) have repeatedly raised concerns (see Annex A for some recent World Heritage Committee decisions), over the management objectives and logging practices of adjoining areas as being detrimental to the heritage values within and outside of the property. More specifically, concerns are focussed on the representation and the loss and threats to old growth Tall Wet Eucalyptus forests, the build-up of road networks in proximity to the property, and the risk posed by fire use in regeneration treatments of logged areas adjoining the property and fire management in general. Further, the environmental NGOs suggest that forestry practices have damaged or risked damage to Aboriginal archaeological and cultural sites. It has also been suggested by others that some other areas with high natural and cultural values such as Recherche Bay, the area north of the TWWHA (the Tarkine) and the Western Tiers should be added to the TWWHA.

In 2007 the WHC requested that the State Party invite a joint World Heritage Centre/IUCN/ICOMOS mission to assess the state of conservation of the property.

The State Party's most recent state of conservation report dated 1 February 2008 provides a detailed review of all the issues mentioned in the decisions of the World Heritage Committee. The mission met with forestry interests and other socio-economic interests, environmental and aboriginal groups. The mission received from each of the interest groups on site explanations and written relevant materials.

This mission report responds directly to the 2007 Committee decision and takes into consideration the views of received submissions.

2. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

The Parks and Wildlife Service (a division of the Tasmanian Department of Tourism, Art and the Environment) is responsible for the management of Tasmania's parks, reserves and World Heritage Areas, including the delivery of interpretation services and Crown land administration. In 2002 the *National Parks and Wildlife Act 1971* was revised and its functions split into two new Acts – the *Nature Conservation Act 2002* (under which areas

are reserved) and the *National Parks and Reserves Management Act 2002* (under which reserved areas are managed). The Park Management Plan governing the TWWHA is undergoing review with the intent of producing a revised plan in 2009.

Adjoining areas to the property are managed in accordance with the Regional Forestry Agreement (RFA) of 1997 (a statutory agreement between the Commonwealth and state governments) and the Forest Practices System (including the Forest Practices Code) with the oversight of the Forest Practices Authority (a statutory agency with powers to regulate forest establishment and logging).

The Tasmanian RFA has passed its tenth year of operation. It is supplemented by the Tasmanian Community Forest Agreement of 2005 (TCFA) which set aside further reserves and also provided Commonwealth financial assistance for 'structural adjustment' of the logging and timber industry, the latter including infrastructure and new methods of sustainable silviculture.

3. IDENTIFICATION AND ASSESSMENT OF ISSUES / THREATS

3.1 Cultural Issues/Threats:

At present, the cultural outstanding universal value (OUV) of the property is attributed principally to Aboriginal archaeological and cultural sites in caves on the Franklin and Gordon Rivers. The caves contain highly significant records of Aboriginal subsistence and parietal (wall) art (suites of hand stencils) which date back to as early as 34,000 years BP. Dr Richard Cosgrove has argued that the cave archaeological record indicates sophisticated use and management of landscape in the Pleistocene and later eras. Aboriginal ancestors were settled on the greater Australian sub-continent from before that time and came to the area of modern Tasmania utilising land bridges (resulting from the low sea levels of the Pleistocene era) in the modern Bass Strait area. Coastal Aboriginal sites date to within the last 4,000 years. There are also highly significant sites relating to 18th and 19th century European settlement including convict settlement sites in Macquarie Harbour, but these are not currently related to OUV.

Very little has been reported to the World Heritage Centre (WHC) on the conservation status of these sites and landscapes. The monitoring mission in respect to cultural matters considered sites and landscapes throughout and beyond the TWWHA.

Dr Richard Cosgrove, TALSC and NGOs drew our attention to the presence of palaeontological deposits (Nanwoon, Titans Shelter) containing extinct megafauna archaeological sites in caves and possible sites such as stone artefact scatters in Forestry Tasmania areas. The sites mentioned are immediately east of the TWWHA inscribed areas. They include Pleistocene-era hand stencils in Riveaux Cave (just north of Mt Riveaux) in a recently discovered karst area in the Huon River valley and Nunamira, a Pleistocene-era cave deposit not dissimilar to Kuti Kina, in the upper Florentine River valley. Parts of both the upper Florentine and the Huon are currently proposed for logging. The sites are broadly comparable to those which are well represented in the TWWHA.

The Tasmanian National Parks Association (TNPA), The Wilderness Society and other ENGOs have strongly recommended that the upper Florentine be included in the

Tasmanian Wilderness World Heritage Area. They have also argued that forestry practices in areas of 'tall eucalypt' forest have damaged or risked damage to Aboriginal archaeological and cultural sites. We discuss below the implications of logging for sites such as these.

It should also be noted that Cosgrove and others over the last two decades have also documented archaeological sites in the drier central districts of Tasmania, for example a site known as ORS 7, and others on the Western Tiers and in the Tarkine region. These sites are in a variety of land tenures.

The main issue here is broadly comparable to those which pertain to the natural heritage values. Is the presence of arguably OUV-quality sites outside the eastern boundary, possibly part of a continuous cultural landscape, grounds for extending the boundary to cover them?

The mission is of the view that the existing sites within the TWWHA are now better documented than at time of inscription and remain exceptional testimony to a cultural tradition. They continue to be of OUV. The existence of sites of arguably OUV quality outside the TWWHA does not diminish the OUV of sites in the inscribed TWWHA, but could rather enhance them by setting them into a wider context of Aboriginal land-use practices.

The mission is of the view that a separate case needs to be made by the State Party, at its own discretion, if sites outside the TWWHA are to be proposed as a serial addition or extension to the existing property. There are areas such as the upper Florentine that have both archaeological sites that relate in some way to the existing inscribed archaeological sites and high natural values such as the mixed rain forest and tall eucalypts. Meanwhile these sites should be managed for their cultural values.

If the State Party were to re-nominate the property as a cultural landscape (recalling that the TWWHA is a mixed site), then it would have to be considered whether the sites currently outside the TWWHA are truly part of the values of the overall cultural landscape that was being re-nominated for inscription on the WH list. The mission notes that the re-nomination of a natural property as a cultural landscape has been done on a number of occasions, notably Uluru-Katajuta and Tongariro.

Recommendation 1: Extending the boundaries of the TWWHA solely to improve the protection of archaeological and Aboriginal cultural sites of potential OUV outside the property is not warranted, as other means can be found to protect these sites.

The potential OUV-quality sites lying outside the TWWHA need to be managed under a range of land tenures and land management practices, including forestry. The key agency here is the Tasmanian Forestry Practices Authority, discussed further below, which publishes and maintains a Forestry Archaeology Manual. An example is the investigations following the discovery of karst in the upper Huon River valley. In the Forestry Practices Code (FPC) and the Manual, karst areas should receive intensive pre-development survey. In the Huon this led to the discovery and protection of the archaeological site of Riveaux Cave. The State Party has also discussed in detail the management of the Weld River valley in its report on the state of conservation of the

property of 28 January 2008. Further elaboration on the application of the FPC is provided below in this report.

The mission acknowledges that there is a problem with the prior recording and protection of open sites such as artefact scatters in rain forest cover. The floor of a rain forest obscures and prevents cost-effective survey prior to operations. (The TNPA in their submission described this as “poor pre-logging site visibility”.)

The importance of such scatters, compared with the well known cave deposits, would be less. Nevertheless they would provide an important additional source of evidence on ancient Aboriginal land use. If properly recorded, investigated and documented, discovery in the course of “first scrape” operations is an important way to maximise the research value of these scatters.

As with other aspects of cultural heritage management in the State the resourcing for pro-active, pre-development research is poor and should be improved. Further survey and conservation management that does not threaten the potential sites is warranted.

Archaeologist Don Ranson from the Aboriginal Heritage Office in his briefing to the mission noted that the TWWHA contains 50-100 Pleistocene sites and a few open sites, about 500 coastal Holocene shell middens (the mission saw examples at Stephens Bay and Louisa Bay) and 15 rock-marking sites (including six painted, of which four are Pleistocene in age). The mission saw an example of a rock shelter with an array of cupholes and two stone-axe grinding grooves in Payne Bay, Port Davey.

Because they are difficult of access the mission did not visit Kuti Kina, Wargata Mina or Balliwinne. Kuti Kina (once known as Fraser Cave) was one of the key sites in the original controversy about damming the Franklin River and fulfilled several of the cultural criteria for the inscription of the TWWHA . These three caves have been vested in TALSC under the Tasmania Aboriginal Land Act and are managed in a customary process as allowed for by the World Heritage *Operational Guidelines* (January 2008). However, the capacity of the TALSC is limited and this is addressed below in a further recommendation.

Following the lead of developments in the Nara Document, customary land management can provide an appropriate assurance of sustained conservation management but only where there is a “thorough shared understanding of the property by all stakeholders” (Operational Guidelines §. 111 (a)). Also the guidelines require “a cycle of planning, implementation, monitoring, evaluation and feedback” (§. 111 (b)) and “an accountable, transparent description of how the management system functions” (§. 111 (f)). These are important issues that are not being addressed in the TWWHA.

Don Ranson advised the mission that there is currently no active archaeological research or monitoring programme in the TWWHA, not even to the basic standards. However, Dr Cosgrove did advise us that the Pleistocene cave-floor deposits are in remarkably good condition. (The conditions are alkaline and bone is well preserved). They are well sealed either by flowstone or by ‘moonmilk’ (a soft microcrystalline calcite deposit) and probably have good conservation status. The wall stencils need review as to their conservation status and the need for active management. There appears to be some risk of damage from casual visits to caves even in remote areas.

At Stephens Bay and at Louisa Bay on the south coast mid-Holocene (later than 4,000 years BP) archaeological sites are undergoing coastal erosion at a rate that is expected to increase with increased water levels and heightened storm activity as an outcome of climate change. These sites originally sheltered by barrier dunes consist of tiers of buried sandy soil horizons with copious middens, hearths and flaked stone floors. With the loss of the barrier dunes the sites are now directly open to coastal erosion impacts from wind and wave action. At Louisa Bay, first the PWS and latterly TALSC have been attempting to stabilise and re-vegetate the surfaces of the eroding middens using biodegradable matting. Some success has been achieved with a modest degree of stabilisation and re-vegetation.

There are two issues here that need to be addressed in the conservation planning for such areas. The first is that these dune systems are subject to long-term geomorphological change and intervention needs to be planned wisely with due regard for the physical forces at work and the costs of ensuring successful conservation of the archaeological sites. The dune areas are not large in world perspective but the physical forces and processes need to be more closely considered than they appear to have been. The second is that the mitigation of the problem by excavating and analysing the middens appears not be considered. This is the appropriate response if stabilisation is costly or not cost-effective.

The lack of detailed conservation management planning is caused by a disjunction between, on the one hand, legitimate PWS sensitivities to the Aboriginal communities' desire to self-manage and, on the other hand, the same communities' relative lack of capability in that management task relative to that of the PWS and the world of research archaeology. The Aboriginal community contacts clearly knew that they needed a new generation of skilled, practical land management workers for these tasks.

The problem is exacerbated by the slowness in revising the Tasmanian Aboriginal Relics Act. The mission has been advised that a new Act is in preparation.

Recommendation 2: The State Party and the Tasmanian Forest Practices Authority should maintain and improve the resourcing for all survey, research, documentation and protection measures for archaeological and Aboriginal cultural sites both within the TWWHA and in the adjacent forestry areas.

Recommendation 3: The State Party and the Tasmanian State authorities should, as soon as possible, increase targeted accountable resourcing to TALSC to improve its cultural and land management capability.

Recommendation 4: The Tasmanian State authorities should renew efforts to pass into law a fully consulted and updated Aboriginal Relics Act.

The mission was advised by Australia ICOMOS and others that in 2002 the PWS had commissioned a report on cultural landscape analysis of the TWWHA. This report included both ancient Aboriginal cultural landscapes and 18th and 19th century historical landscapes. The mission understands that the report concluded that these landscapes appeared to have the potential to demonstrate OUV. The report is not in active circulation.

Both that report and the TNPA have recommended that areas in the Western Tiers (north-east of the inscribed area) and Recherche Bay (south-east) should be included within an expanded boundary for the TWWHA. The mission cannot provide a recommendation on whether the parts of the Western Tiers or Recherche Bay should be included in the TWWHA without further survey and documentation. As noted elsewhere a separate case for a possible serial listing of such landscapes, or an extension to the existing property, needs to be made by the State Party, should they decide to do so.

Mary Knaggs and Maddy Maitri in an historic heritage strategy report (2006) supplied to the mission detail a number of programmes that should be undertaken, including:

- Redefinition of themes in both Aboriginal and European land occupation and history
- New field surveys and re-assessment of known heritage sites
- Piloting cultural landscape management plans
- Interpretation
- Partnerships and consultation
- Training, documentation and data bases

The mission notes that community involvement in historic and cultural matters often defuses sharper conflicts about natural values and the use of conservation land.

Recommendation 5: The State Party and the Tasmanian State authorities should provide much better resources than those provided at present for establishing the extent, significance, monitoring, active management, interpretation of Aboriginal archaeological sites, historical archaeological sites and cultural landscapes demonstrating Aboriginal land-use, and for the involvement of communities in their management.

There are good grounds for the State Party in close consultation with the Aboriginal community (TALSC) and La Trobe University to re-formulate a full statement of OUV for the TWWHA and promote its use. This re-statement must be based on the values identified by the Advisory Bodies and the Committee at the time of inscription. A recommendation on this matter is elsewhere in this report.

3.2 Natural Issues/Threats:

The modern vegetation pattern of the TWWHA is complex, depending on soil and geological substrate, ancient and recent fire history, elevation and rainfall, aspect and mean temperature, and other complex ecological interactions. A remarkable feature is that in the low-lying high rainfall areas a forest of 'myrtle' (southern beech, genus *Nothofagus*) forms an understorey under a tall eucalypt overstorey. If there is no fire, the tall eucalypts become 'senescent' and in time very old southern beech will dominate. Frequent fires will cause both eucalypt and southern beech to be replaced by pyrophytic shrublands or button grass (a bunch-forming sedge) moorlands.

In any one view of the TWWHA at its eastern boundary, these patterns can be easily detected: from riparian forest strips, broad areas of emergent tall eucalypts with many dead spars (upper branches) in valley floors and lower slopes, a dark understorey of southern beech, and on upland plains and slopes, strips of shrubland giving way at altitude to bare rock screes or button grass moorlands.

Since the inscription and subsequent expansion of the property, the logging practices in the adjoining areas of the TWWHA have gone through extensive reviews, accreditations and are assessed as meeting international standards. The logging practices emulate, up to a point, these natural processes. Eucalypt extraction and regeneration involves small-area (up to 50 ha) controlled burns. Special Timber Management Units (STMUs) occupy a narrow variable zone along a number of locations of the TWWHA boundary; these units hold high-value timbers that are selectively logged by minimal-impact techniques. A rotation period of 200 years assures that old aged stands will occur only in reserves.

The boundaries of the TWWHA, particularly to the north and the east, have been a contentious issue ever since the inscription of the property in 1982 and its further extension in 1989, as has been the management of old growth forests which occur outside the property in these areas. Old growth is not a forest community, but an age-class and refers to forests that have reached their ecological maturity and are undisturbed.

The mission spent a full day in the company of environmental NGOs discussing the issues relevant to this debate and visiting specific areas. The NGOs, coordinated by The Wilderness Society, had also secured the consultancy services of Dr. Peter Hitchcock who carried out a study and provided the mission with a report on the World Heritage values of the forests adjacent to the property. Dr. Hitchcock accompanied the mission in its field visits with the ENGOs and provided insights based on his report suggesting a rationalization of boundaries to include larger better representation of old growth forests, addressing connectivity and possible climate change driven issues affecting vegetation over time.

The ENGOs had hired two helicopters to take the mission to areas in the Huon, Weld, Styx and the Florentine Valleys to show them forestry operations and road building activities in the tall eucalyptus rainforest ecosystem in these areas. A protest site, where activists had perched themselves on tree-tops linked to a trigger mechanism spanning across the access road, was also visited.

The ENGO groups' views are that these forests, which are characterised by old growth tall stands of *Eucalyptus regnans, E. delegatensis, E*. *obliqua* and *E. nitida*, are of World Heritage value (N.B. In contrast to the State Party, the ENGOs do not recognize E. nitida stands as tall Eucalyptus forests). The ENGOs have long held the view that the areas where they occur adjacent to the boundary in the east and the north should be added to the World Heritage Area, because these forest communities have outstanding universal value and are inadequately represented inside the property. The ENGO views are based on the perception that at the time of the expansion of the property the potential OUV of the Eucalyptus forest was undervalued and that the revised World Heritage criteria now provide for better guidance for what constitutes World Heritage values. Specific areas for inclusion are identified by ENGOs and these were provided to the mission.

Concern is expressed also by the ENGOs that regeneration fires in the logging coupes adjacent to the boundaries poses a fire hazard to the World Heritage property. Specific cases were cited where in 1989 such fires had escaped into the adjacent forest areas (in Clear Hill/Lake Gordon and Lune River), which are now part of the TWWHA. Similarly, they are also concerned that road construction and logging in such areas not only threatens the integrity of the property, but also forecloses the option of adding these

areas to the World Heritage property in future. The mission received a full briefing including statistics and maps from the NGOs on these matters.

The mission was also able to visit various areas with Forestry Tasmania, and the Tasmanian Parks and Wildlife Service (which is the agency responsible for management of the property), and to discuss these issues with them and the Forest Practices Authority (FPA). At the mission's request, Forestry Tasmania also produced a map and statistics of the various native forest communities in Tasmania, including old growth forests, occurring within and outside the boundaries of the WH site. The representation of the tall Eucalyptus forest types is discussed in a later section.

The mission noted that over 46.3% of Tasmanian native forest communities are protected by a system of formal and informal reserves, including national parks and the TWWHA. These reserves include about 79.3% of all remaining old growth forests of the state. The balance between forests assigned to reserves/conservation and for production was struck through the Regional Forest Agreement (RFA) process in 1997, supplemented through the 2005 Tasmanian Community Forestry Agreement (TCFA). These processes were widely consultative and provided for the full involvement of all stakeholders. It is worth noting that the outcome of the TCFA was the culmination of a series of preceding reviews and inquiries, namely, the 1988 Helsham Inquiry, the 1990 Tasmanian Forests and Forest Industry Strategy, and the 1996-97 RFA process. The latter includes an agreed process for further consideration of further assessment of WH values and any nominations in Tasmanian forest areas.

It is also worthy of note that about 10,000 people in Tasmania are reported to depend on the Forestry sector for their livelihood, which generates about 1.3 billion dollars annually for the economy. The Tasmanian RFA was the first of its kind in Australia and has been followed by similar RFA processes in the other states. The review of the Tasmanian RFA was recently completed and the mission was given a copy of the report with its recommendations, which did not contain any specific reference to the World Heritage property, except noting that a forthcoming mission of UNESCO, IUCN and ICOMOS would be looking into the issues.

As regards the construction of roads, regeneration fires and logging operations, these are all regulated under the Forest Practices Code (FPC) of 2000, which is currently undergoing a process of review. As noted previously, the FPA is an autonomous body which is charged with overseeing the implementation of the FPC, through the training and accreditation of Forest Practices Officers, who are employed by the user agencies such as Forestry Tasmania, the Forest and Timber industries, etc. The system works on the principle of self-regulation and is subject to a random 15% audit annually.

The mission also discussed issues relating to the construction of a paper mill at Bell Bay in north Tasmania, which has attracted concerns about potential increase in logging operations to supply raw material. It was clarified by the authorities concerned that the established level of annual harvesting of timber in Tasmania would not be raised, that no old growth forest will be logged for this purpose and that the mill would operate on the currently exported raw materials.

Through the course of the Mission, a number of matters were brought to its attention that went beyond its mandate but which are considered to be of relevance. These are discussed here prior to addressing the specific mandate findings and recommendations

1) Property Inscription

a) Tall Eucalyptus forests were identified as an aesthetic value (Natural - criterion. iii) in the IUCN evaluation of the property on its extension in 1989. The original inscription in 1982 did not note these vegetation types, specifically. The 1989 IUCN assessments specifically noted in the identification part of the summary report that *"The property is mostly undisturbed wilderness, encompassing most of the last temperate rain forest remaining in Australia, as well as extensive tracts of tall eucalypt forest*". Further in that report IUCN states that there is enough representation of the Tall Eucalyptus within the property *"(2) by adding on the eastern boundary an extensive area of undisturbed tall open forest dominated by eucalypts".*

b) Since the inscription and subsequent expansion of the property, new knowledge has come to light on the ecology and biodiversity values of, for example, the Tall Eucalyptus Forest of Tasmania, and cultural values arising from subsequent archaeological and Aboriginal evaluations. The original and the subsequent statement of OUV at the time of expansion do not measure up to the *Operational Guidelines* 2008 standards.

Recommendation 6: The State Party should revise the statement of OUV to include relevant recent natural and cultural knowledge available regarding the property and submit to the World Heritage Committee for approval.

2) Representation of Tall Eucalyptus Forest (TEF):

a) Ongoing logging of native vegetation and fires in and outside the TWWHA has decreased the total area of representation of the old age class in Tasmania. ENGOs provided the mission with a statement that the TWWHA now represents 8% of the previous state-wide tall old growth and non-old growth Eucalyptus forest extant in 1996. The mission had no basis for confirming this statistic. Nevertheless, according to RFA sourced statistics provided by the State Party (see Annex E), the vegetation types in all age classes dominated by the four Eucalyptus species that characterize tall Eucalyptus forests (*E. regnans, E. delegatensis, E. nitida, and E. obliqua*) total 237,000ha in Tasmania. Of this area, the old growth in reserve status (as of 30 June 2007) totals 172,000 ha or 73%. The TWWHA and areas managed under its management plan, contains 90,900ha or 38% of Tasmania's tall old growth forests dominated by the four named Eucalyptus species. Moreover, if *Callidendrous and Thamnic* rainforest and also the wet *E. viminalis* forest elements were to be added then the total extent of the tall wet eucalypt forest region in the State would be 395,500 ha with 302,900 ha or 76% under reservation. Of this, 120,800 ha are reserved within the TWWHA and areas managed under its management plan and 182,100 ha in the other reserves.

b) If the representation of the dry forest categories, which include these species (*E. delegatensis, E. nitida, and E. obliqua*), are also added to the total area of the above mentioned four species of tall eucalypts, the total statewide extent of both the tall Eucalyptus and dry Eucalyptus forest communities comprising these species would be 467,200 ha. Of this total, 355,700 ha or 76% is in reserve

status comprising 179,400 ha within the TWWHA and areas managed under its management plan, and 176,300 ha in the other reserves.

Recommendation 7: The area managed under the TWWHA management plan provides a good representation of well-managed tall Eucalyptus forest and there is similar forest outside the property which is also well-managed, but for both conservation and development objectives. The threats to these forests from production forestry activities are well managed and there no need for the boundary of the property to be changed to deal with such threats.

3) The boundary as a measure of the ecological integrity of the TWWHA

a) The ultimate boundary for a protected area is one best derived by considering ecosystems using a landscape level analysis. However, boundary choices for protected areas and indeed the decision to create a protected area is most often arrived at, as it was in the case of the Tasmanian Wilderness Area, by also considering socio-economic parameters. Ideally, all stakeholders participate and arrive at a decision collectively. In recognition of this process, the April 1989 Nomination document which extended the boundary states – *"Specific suggestions for adjustments of the eastern boundary reviewed during the IUCN field inspection have now been incorporated".*

b) Since then, better science on conservation planning and additional knowledge of the area's values is available. Considerations of climate change, invasive species, connectivity and the integrity of ecological processes add to protected area management challenges. ENGOs suggest that these issues in particular should cause a re-consideration of the World Heritage property boundaries.

c) Having a contour or a straight line for a protected area boundary adds to the management challenge of assuring the ecological integrity, connectivity and the integrity of ecosystem processes. The choice of this boundary in 1989 was based on a consultative process that also took in socio-economic considerations. Since then, under the Tasmanian Community Forest Agreement a series of Comprehensive, Adequate and Representative (CAR) reserves have been established adjoining the TWWHA. These areas, with the TWWHA, provide a basis for addressing these challenges. Accordingly, in future reviews of the TWWHA management plan and in the preparation of management plans for the system of forest reserves, consideration should be given on how to reduce risk and where possible safeguard and improve the ecological integrity of Tasmanian reserves through the contributions of the forest reserves in maintaining the World Heritage values they contain.

Recommendation 8: Through the future TWWHA management plan reviews, institute a mechanism, involving all relevant stakeholders, to monitor, assess and manage for ecological integrity the TWWHA and adjoining reserves by considering activities related to forestry operations, road construction and regeneration fires in the areas adjacent to the World Heritage property.

4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

1) Appropriate management of areas of heritage value which are currently outside the property,

a) The forested areas adjoining the World Heritage Property are governed under a signed in 1997 Regional Forestry Agreement (RFA signed in 1997) between the Commonwealth and State Governments. However, a subsequent supplementary Tasmanian Community Forest Agreement (TCFA) was signed in 2005. The RFA is a framework that covers both public and private lands.

b) To be clear, the adjoining area is a working landscape or multiple-use area and as such differs from objectives of the TWWHA. However, under the RFA and TCFA, the following commitments were made which have a direct bearing on the management of areas adjoining the Tasmanian Wilderness Area.

i) A system of formal and informal reserves established (CAR - Comprehensive, Adequate and Representative). The total area under reserve status is almost 45% of Tasmania with the World Heritage property amounting to 20% of the land area. The relevant TWWHA forest ecosystems as defined under the Comprehensive Regional Assessment counted towards the level of reservation for meeting the JANIS[1] criteria of 15% for each forest ecosystem and 60% for old growth within each forest ecosystem.

ii) Reserves set up under the RFA are subject to mineral exploration unlike the lands in the TWWHA.

iii) Biodiversity-rich zones have been identified and are now managed for special species timber harvesting (STMUs). Clear felling is not allowed in these zones. Many of these special management zones are located directly adjoining the TWWHA borders.

iv) The use of the controversial pesticide 1080 on State Forests ceased at the end of 2005.

v) Since 2007, all natural forests are to be regenerated by seeding on site which requires preparation through burning slash. Plantations are not to replace natural forest coupes.

vi) By 2010, there is a commitment to reduce clear felling as a silvicultural technique in public old growth forests. Non-clear felling silviculture is to be used in a minimum of 80 per cent of the annual harvest areas of the couped old growth forest on State Forests. Research trials are funded under the agreement.

vii) An overall cap on clearing or conversion of native forest on both public and private was established with the objective to retain 95 per cent of the 1996 area of native forest, (future funding from the Commonwealth for implementing the RFA is dependent on meeting this commitment).

[1] The criteria as described in the JANIS Report for establishing the CAR Reserve System addressing Biodiversity, Old Growth forest and Wilderness, taking account of reserve design and management and social and economic considerations.

viii) The RFA is jointly funded and includes research and development activities to implement the above commitments.

ix) The State is to publicly report the area of public old growth forest harvested by silvicultural technique each year.

c) It is clear however, that not all the above commitments have as yet been realized. A review of the RFA in 2002 and 2008 has led to a number of observations and recommendations of relevance to the management of the area adjoining the TWWHA. The last five-year review of the RFA was completed by John Ramsey, a consultant, and tabled in February 2008. At the time of the Mission, respective Governments have acknowledged the receipt of the report but had as yet not responded to the recommendations. Relevant observations and recommendations to the area adjoining the property from Mr. Ramsey's review include:

   i) Management plans of Reserves and National Parks are not complete (Rec. 5). Resource allocations are needed to complete these plans and to implement the management plans (Rec. 6, 9). Forest Practices Authority should review mechanisms to ensure that forest harvesting operations do not impact on the integrity of the boundary of reserves (Rec. 11).

   ii) Reserve Management Code has been in place since 2003 but as yet there is still no publication of compliance auditing. As well, a promised environmental management system continues to be wanting.

   iii) Threatened species information is lagging (mainly for lack of resources) and thus not available to guide land use decisions (Rec. 12, 13, 14). Furthermore, subsequent changes in legislation and practices require amendments to the RFA (Rec. 18).

   iv) Implications of logging practices on water catchments.

d) A fundamental underpinning component of the RFA is the Forest Practices System. The compliance with the Forest Practices System is detailed in the Forest Practices Code. The Code is presently undergoing a required periodic review. In the course of the review of the RFA, Mr. Ramsey assessed the Forest Practices System to be comprehensive, with monitoring and appeal provisions and that it also provides for continuous improvement. The Mission had an opportunity to meet with Graham Wilkinson the head of the Forestry Practices Authority. Of note, a Yale University led comparative assessment of Tasmania's Forest Practices Policy (McDermott, et. al., 2007) concluded that it was among the most prescriptive in the world.

e) Compliance of the Forest Practices System is undertaken by Forest Practices Officers who are trained by the Authority but are drawn from within forest companies and authorities. In cases where the Officer reports on the non-adherence to the Forest Practices Code by his employer, employer employee relationships could be strained. A 15% audit of their assessments provides for a basis of review of due diligence.

Recommendation 9: Since the recommendations emanating from the recently completed 2008 RFA review if applied will further assure protection of the heritage

values outside of the property, the State Party should implement these accordingly and the response of the State Party to these recommendations should be transmitted to the World Heritage Centre and the Advisory Bodies.

f) There are currently 21 protected areas, mainly to the north and east, which are excluded from the boundaries of the World Heritage property but covered by its management plan (see Table 1). The management of these areas is the same as that of areas within the boundaries. The Committee had always hoped that these areas would be brought within the fold of the World Heritage property at some time in the future. In the draft 2007 Management Plan of the property, which has been prepared as a result of the ongoing review of the 1999 Management plan, the State Party indicates that these areas, which have been assessed as having WH values, will be considered for inclusion into the World Heritage property when the values are reviewed in 2009.

g) Expanding the size of the Tasmanian Wilderness Area accordingly, would provide for a more coherent management regime and would increase the representation of the tall Eucalyptus forest in the TWWHA. However, it also de facto extends the border up against more intensively managed land and increases the incidence of logging adjoining any such expanded border of the Tasmanian Wilderness Area. The issues arising from an increasingly finely divided line between reserve and intensive forest management, such as fire control, pest movement and public access, would need to be carefully managed.

Recommendation 10: The boundaries of the TWWHA should be extended to include the adjacent 21 areas of national parks and state reserves, which are currently not a part of the inscribed World Heritage property but are covered by its management plan.

h) Areas with high mineralization zones were left out of the TWWHA or not included in national parks. In the 1989 technical evaluation of the revision of the 1982 inscription of the property, IUCN had drawn attention to small-scale mining operations at several locations such as Oakleigh Creek, Adamsfield, Melaleuca, and Jane River. When approving the extension to the property, the World Heritage Committee noted with satisfaction the statement by the Australian observer that legislation had been passed to revoke all mining rights within the World Heritage site.

i) While some of these areas, such as the Adamsfield conservation area had already been incorporated into the World Heritage property (though not included in a National Park), the mission is of the opinion that all the remaining areas including those noted by IUCN in its evaluation should be incorporated into the World Heritage property as soon as the existing leases expire and that renewal or granting of any new leases should not be considered.

Recommendation 11: The existing leases for mineral exploration and exploitation within the property and immediately adjacent to it (such as in the Melaleuca Cox Bight area), should not be renewed after their expiry and the areas concerned should be rehabilitated and proposed for inclusion into the World Heritage property.

Furthermore, no new mining licenses should be granted within the property or in the areas which are being recommended for addition.

2) An assessment of the degree of risk from regeneration fires in areas adjacent to the World Heritage property as well as of the effectiveness of the fire management system in place,

a) Regeneration of Eucalyptus forests through regeneration burns and seeding is an acceptable silviculture treatment for regenerating Eucalyptus, a fire dependent species. It results in forest stands that are a better approximation of native forests than plantations. Fire management however has inherent risks in its application, but with its application experience and enhanced knowledge is realized. The past twenty years of regeneration fire treatments has yielded a high level of success - one reported escaped fire in the year 1989, among the over 500 successful treatments.

b) The fire season for regeneration burns are conducted from the end of March when westerly winds which by definition run away from the TWWHA predominate. Nevertheless, the current configuration of the Eastern Boundary is such that some areas scheduled for burning are not directly east of the property's eastern boundary and therefore may be more at risk.

c) The RFA calls for statewide policies across all tenures on fire management. The 2002 review of the RFA noted that these were in place. The 2008 review notes the policy framework needs to now also consider increased forest plantation coverage, drought and climate change scenarios. These are increased risks that must be factored in to all fire prescriptions, be it regeneration burn, fuel reduction burns or decisions to permit fires to burn without taking suppression actions.

d) Managing fire-dependent forest is a complex matter when the broad landscape becomes fragmented through variable land uses that are at times inimical to each other. Old growth tall Eucalyptus forests and the rain forest have evolved in response to a random pattern of fire (both human ad lightning caused) over the Tasmanian landscape over time. Management by human agencies to maintain the evolutionary processes is a challenge. Climate change leading to different patterns of precipitation and higher temperatures is an added concern. Drying and increased incidence of lightning fire is anticipated. There is concern that this may be a cause of stress on both the sensitive-to-fire species and the tall old growth Eucalyptus forest stands.

e) The tall Eucalyptus forests, now under the protection of the TWWHA and forest reserves provide an opportunity to apply a holistic management approach. To assure a full representation of the tall Eucalyptus forest (not just old age stands) into the future would be more likely to succeed if the approach was through a landscape-level/scale vegetation plan that addresses fire use. Having managers of national parks and the forestry reserve estate prepare and implement such a plan jointly would be preferable to the various parties planning separately.

f) The State Party has reported that an Integrated Fire-Risk Management Plan for Tasmania is in the process of being developed and that it is due to be completed by the end of 2009.

Recommendation 12: A vegetation management plan covering the TWWHA and the adjoining forest reserves should be prepared and implemented jointly by national parks and the forestry authorities. The plan should address representativity of vegetation types and include risk assessments, with particular reference to fire sensitive vegetation and take into consideration climate change projections.

3) Impacts of proposed forestry operations (including the construction of new roads) on the outstanding universal value of the property,

a) Logging roads in close proximity to the TWWHA provide access to the property which if unregulated can lead to possible damage to cultural sites or sensitive vegetation, and threaten rare and endangered species (through disturbance as well as arson). Roads also provide access for invasive species (including diseases). Forestry Tasmania are conscious of the above as well as the risk posed to expensive equipment on site and in response have instituted a gated system to control motorised access.

b) Recent forest coupes in very close proximity (if not right on the border) to the TWWHA create loss of aesthetic integrity, risk possible damage to cultural sites and take away from the wilderness experience of visitors to the property. The current use of computerised assessment of view sheds is a useful tool by which to reduce the visual impacts. Further, the commitment to reduce the amount of clear felling of native species by 2010 will also reduce these effects in time.

c) Environmental standards for road building are high. The TCFA provided for funds to permit building roads and infrastructure into areas that are scheduled for clear cut and selective logging and thus also provides access for a thriving honey industry. The Weld Valley, a particular area of interest, is scheduled to have a number of clear-felling coupes within the south-eastern side of valley and selective logging in the Special Timber Management zone adjoining the TWWHA. To reach the latter, a bridge will have to be built across the Weld River. A selective logging operator advised the mission that the equipment used for his operations has minimal requirements for access. Using his standards of access within the Special Management Zones would reduce visual and physical impacts. Where roads are not longer needed rehabilitation of these would enhance the aesthetics of the site.

Recommendation 13: Logging road location and standards in areas adjoining the TWWHA should take into consideration ecological integrity, possible cultural sites and aesthetic values of the property. Furthermore, on successfully regenerating coupes and areas selectively logged, access roads could be considered surplus and reclaimed if not needed for access to the TWWHA.

4) <u>Climate Change</u>:

a) In relation to climate change, although the State Party report acknowledges that the property is at risk from climate change, it notes that the size of the area and the diversity of its ecosystems contribute to its adaptive capacity. However, the mission feels that an active programme needs to be instituted for monitoring the impacts of climate change, including for carrying out a vulnerability assessment for both natural and cultural (archaeological) resources and to prepare an adaptation strategy on that basis. This could be integrated within the recommended strategy and action plan for reducing risks to the World Heritage property. Incorporating the implications of deforestation in light of the discussions on the successor to the Kyoto Protocol emission commitments may be a further consideration in this assessment.

Recommendation 14: An active programme for monitoring the impacts of climate change on the property should be put in place, including conducting a vulnerability assessment and developing adaptation strategies on that basis. The climate change monitoring programme should be integrated and form a part of the proposed risk-reduction strategy and action plan.

5. CONCLUSIONS AND RECOMMENDATIONS

Overall the Mission Team concludes that the State of Conservation of the property is satisfactory. The mission was impressed by the strong commitment of all stakeholders, including ENGO and other civil society groups including representatives of the Aboriginal community, Commonwealth and State Government agencies, industry representatives, etc to ensuring that the outstanding universal value and integrity of the property are maintained. It is notable that the mission had to unfortunately meet with each of these stakeholders separately given the fractious and even hostile relationships observed.

There are some issues that need to be addressed, particularly in relation to the cultural values of the property and in relation to forestry related activities in adjacent areas. One of the purposes of the mission was to determine whether there were areas outside the existing boundaries that ought to be protected for natural and cultural values related to those for which the WHS was inscribed. An effective and elaborate regulatory system governs the management of the property, and considerable technical skills and scientific knowledge are also harnessed for this purpose.

Accordingly on the basis of its evaluation of all the issues, the mission makes the following recommendations:

Recommendations on cultural values:

1. Extending the boundaries of the TWWHA solely to improve the protection of archaeological and Aboriginal cultural sites is not warranted as there are other management mechanisms that could protect their potential OUV.
2. The State Party and the Tasmanian Forest Practices Authority should maintain and improve the resourcing for all protection measures for archaeological and Aboriginal cultural sites both within the TWWHA and in the adjacent forestry areas.

3. The State Party and the Tasmanian state authorities should as soon as possible increase targeted accountable resourcing to TALSC to improve its cultural and land management capability.

4. The Tasmanian state authorities should renew efforts to pass into law a fully consulted and updated Aboriginal Relics Act.

5. The State Party and the Tasmanian state authorities should provide much better resources than those provided at present for establishing the extent of significance of, monitoring, active management of, interpretation of, and community involvement with Aboriginal archaeological sites, historical archaeological sites and cultural landscapes.

Recommendations on natural values:

6. The State Party should revise the statement of OUV to include relevant recent natural and cultural knowledge available regarding the property and submit to the World Heritage Committee for approval.

7. The area managed under the TWWHA management plan provides a good representation of well-managed tall eucalyptus forest and there is similar forest outside the property which is also well-managed, but for both conservation and development objectives. The threats to these forests from production forestry activities are well managed and there no need for the boundary of the property to be changed to deal with such threats.

8. Through the future TWWHA management plan reviews, institute a mechanism, involving all relevant stakeholders, to monitor, assess and manage for ecological integrity the TWWHA and adjoining reserves by considering activities related to forestry operations, road construction and regeneration fires in the areas adjacent to the World Heritage property.

9. Since the recommendations emanating from the recently completed 2008 review, if applied, will further assure protection of the heritage values outside of the property, the State Party should implement these accordingly and the response of the State Party to these recommendations should be transmitted to the World Heritage Centre and the Advisory Bodies.

10. The boundaries of the TWWHA should be extended to include the adjacent 21 areas of national parks and state reserves, which are currently not a part of the inscribed World Heritage property but are covered by its management plan.

11. The existing leases for mineral exploration and exploitation within the property and immediately adjacent to it (such as in the Melaleuca Cox Bight area), should not be renewed after their expiry and the areas concerned should be rehabilitated and proposed for inclusion into the World Heritage property. Furthermore, no new mining licenses should be granted within the property or in the areas which are being recommended for addition.

12. A vegetation management plan covering the TWWHA and the adjoining forest reserves should be prepared and implemented jointly by national parks and the forestry authorities. The plan should address representativity of vegetation types and include risk assessments, with particular reference to fire sensitive vegetation and take into consideration climate change projections.

13. Logging road location and standards in areas adjoining the TWWHA should take into consideration ecological integrity, possible cultural sites and aesthetic values of the property. Furthermore, on successfully regenerating coupes and areas selectively logged, access roads could be considered surplus and reclaimed if not needed for production of honey or access to the TWWHA.

14. An active programme for monitoring the impacts of climate change on the property should be put in place, including conducting a vulnerability assessment and developing adaptation strategies on that basis. The climate change monitoring programme should be integrated and form a part of the proposed risk-reduction strategy and action plan.

6. ANNEXES

Table 1 - List of 21 areas to be added to the property

A Previous decisions of the World Heritage Committee

B Itinerary and programme

C List of people met

D Map of the property

E Forest reservation status

F Selected photographs

Table 1 – List of areas to be added to the property

Name of Area	Added through RFA process*	Area** (Hectares)	Comments
Cradle Mountain – Lake St Clair National Park			
Dove River	Yes	320	
Mersey Valley - block 1	No	96	May be considered together, eg Table 2 p15 of the Management Plan, or separately eg p17 of the Plan
Mersey Valley - block 2	No	12	
Franklin-Gordon Wild Rivers National Park			
Beech Creek	No	82	May be considered together, eg Table 2 p15 of the Management Plan, or separately eg p17 of the Plan
Navarre Plains	No	759	
Counsel River	Yes	141	
Beech Creek – Counsel River	Yes	3,927	
Tiger Range	Yes	1,140	
Nelson Falls	Yes	325	
Southwest National Park			
Hartz 'hole'	No	1211	May be considered together, eg Table 2 p15 of the Management Plan, or separately eg p17 of the Plan
Southeast of Cockle Creek	No	2087	
Little Florentine River	Yes	821	
Styx River	Yes	1,008	
Blakes Opening	Yes	3,715	
Cook Rivulet	Yes	335	
Farmhouse Creek	Yes	334	
East Picton	Yes	405	
Hastings Caves	Yes	1,254	
D'Entrecasteaux River	Yes	1,446	
Catamaran River	Yes	394	
State Reserves Additions			
Devils Gullet	Yes	302	
Total Area		**20,114**	

*Areas that became reserves as a result of the *Regional Forest Agreement (Land Classification) Act 1998*.
**Rounded to the nearest hectare.

ANNEX A – RELEVANT PREVIOUS DECISIONS

Decision 30 COM 7B.32 - 2006

The World Heritage Committee,

1. Having examined Document *WHC-06/30.COM/7B*,

2. Commends the State Party for the implementation of a Supplementary Tasmanian Regional Forest Agreement, and recent efforts to increase the protection of old growth forests adjacent to the World Heritage property, thus increasing the buffer zone in certain areas;

3. Notes the concerns expressed by NGOs in relation to the impacts of logging adjacent to the World Heritage property and the potential for this activity to compromise options for future extensions to the World Heritage property;

4. Requests the State Party to submit a revised map of the World Heritage property, showing the areas of extended buffer zone and identifying other use zones directly adjacent to the boundary;

5. Notes that the World Heritage Centre has written to the State Party seeking comments on outstanding NGO concerns and that the State Party has indicated its willingness to provide a full response;

6. Requests the State Party to submit to the World Heritage Centre by **1 February 2007** a report on progress on the issues identified.

Decision: 31 COM 7B.43 - 2007

The World Heritage Committee,

1. Having examined Document WHC-07/31.COM/7B,

2. Recalling Decision 30 COM 7B.32, adopted at its 30th session (Vilnius, 2006),

3. Notes with concern the issues raised by NGOs in relation to the impacts of logging adjacent to the World Heritage property and the commencement of the North Weld Road which compromises options for future extensions to the World Heritage property;

4. Urges the State Party to consider the extension of the World Heritage property to include critical old-growth forests to the east and north of the property, or at least to manage these forests in a manner which is consistent with a potential World Heritage value;

5. Expresses its concern about the risk from fire related to forest regeneration and natural events, and its possible adverse impact on the World Heritage property, and

requests the State Party to prepare a Risk Management Plan and to consider distancing the logging operations from the boundary of the property;

6. Taking into account the clarification provided orally by the State Party at the 31st session, also requests the State Party to invite a joint World Heritage Centre/IUCN/ICOMOS mission to assess the state of conservation of the property, focusing on:

   a) appropriate management of areas of heritage value which are currently outside the property,

   b) an assessment of the degree of risk related to regeneration fires in areas adjacent to the World Heritage property as well as of the effectiveness of the fire management system in place,

   c) impacts of proposed forestry operations (including the construction of new roads) on the outstanding universal value of the property,

7. Requests the State Party to provide the World Heritage Centre with an updated report by 1 February 2008 on the state of conservation of the property and the above mentioned issues for examination by the Committee at its 32nd session in 2008.

ANNEX B – ITINERARY AND PROGRAMME

MAR	TIME	PRE MISSION	
SAT 15	1855/1945	Brian Prince and Nicola Bryden to Sydney.	**Accommodation - Sydney**
SUN 16	0635	IUCN rep Nik Lopoukhine arrives Sydney	*Nicola*
	0820	ICOMOS rep Kevin Jones, arrives Sydney	*Brian*
		Pre-briefing & breakfast	*Kevin, Brian, Nicola*
	Afternoon	Nik Lopoukhine – own arrangements - meeting with Penny Figgis	
	Afternoon	Meeting with Dr Richard Cosgrove	*Kevin, Brian, Nicola, Richard*
	1735	Veronica Blazely (AG) arrives in Sydney	
	1930	Dinner	*Nik, Kevin, Veronica, Brian, Richard*
	2100	WHC rep Kishore Rao - arrives Sydney	*Nicola*
	2110	Bob Rutherford (Tasmanian rep on State Party delegation) arrives and makes way to hotel.	**Accommodation - Sydney**
MON 17		**SYDNEY MEETINGS – TRAVEL TO HOBART**	
	0700-0800	Breakfast meeting of 3 mission members	*Mission alone*
	0710	Greg Terrill arrives Sydney from Canberra	
	0800-0830	Briefing from Dr Richard Cosgrove	*Mission, State Party Delegation, Richard*
	0830-0930	Briefing with State Party delegation	*Mission, State Party Delegation*
	0930-0945	Check out	
	0945	Walk to Commonwealth Parliamentary Office (CPO) Charterbridge House, 56-70 Phillip Street, Sydney	*Mission, Greg*
	1000-1030	Meet with Minister Garrett via video link (at CPO) *Jenny Hunt from Minister Garrett's Electorate Office to host.*	*Mission, Greg, Nicola.*
	1030 for 1045-1245	Joint meeting with ACIUCN, Australia ICOMOS Morning Tea on arrival. Lunch at 1230	*Mission, ACIUCN, Aust ICOMOS, Greg, Brian*
	1245-1300	Depart to airport	*Mission, State Party Delegation*
	1420	Fly to Hobart	QF1019 *Mission, State Party Delegation*
	1610	Arrive Hobart - VEHICLE transfer to hotel	*Tas VEHICLE & driver for mission. State Party delegation in own vehicle(s)*
	1700	Check in at Hotel	
	1800	Introductions and briefing on arrangements for Tasmanian part of mission visit.	*Mission State Party Delegation & key Tas Govt officials* Venue: Art Installation Suite Henry Jones Art Hotel

	1900	Traditional welcome (*TALSC– Aunty Pat Green, Uncle Jim Everett, Hank Horton)* Dinner with TWWHACC, Elders & usual agency managers / observers	Venue: Jones & Co Room, Henry Jones Art Hotel Attendees: *Mission, State Party delegation, TWWHACC members plus Elders & agency managers / observers.*

MAR	TIME		
TUE			
18		**NGO CONSULTATIONS - HOBART**	
	0745-0800	Walk to Old Woolstore	
	0800-0930 *Note extended time*	NGO consultations – Industry interests Including tea & coffee on arrival	OLD WOOLSTORE *Mission only, industry interests*
	0930	Field trip. Conservation NGOs Includes briefing, field trip and dinner	*Mission only, Conservation NGOs*
	On return	Conservation NGOs – briefings	OLD WOOLSTORE
		Meeting with Tasmanian Representatives of Australia ICOMOS	OLD WOOLSTORE
	2000	Dinner with conservation NGOs	*Mission only, hosted by NGOs*. **Accommodation Hobart**

MAR	TIME		
WED		**FIELD TRIPS & BRIEFINGS – TALSC focus**	
19	0700	Breakfast at hotel – including informal briefing	*Mission, Don Ranson & Peter Mooney, Greg Terrill & Brian Prince*
	0745 0800	Walk to Woolstore	*Mission, Brian Prince & Peter Mooney*
	0800-0845	TALSC – cultural values presentation	*Mission, TALSC* Old Woolstore
	0845	Transfer to Cenotaph	0930 MINI-BUS for TALSC community to Picton
	0900 dep	**HELICOPTER 1** • Nik Lopoukhine • Kishore Rao • Greg Terrill • Peter Mooney/John Hickey	**HELICOPTER 2** • Kevin Jones • Colin Hughes • Brian Prince • John Hickey/Peter Mooney
	Approx 0945	AG VEHICLE to Geeveston	MINI-BUS for TALSC community to Picton
	1015-1100	**HELICOPTERS Louisa Bay** – morning tea. Enroute fly over TWWHA – explanation of fire management, landscape management during flyover.	
	1230	**HELICOPTERS** & AG VEHICLE **arrive Duggans Quarry aka Riveaux Quarry** **Drive lunch participants to Picton BBQ area for Meet on Country**	
	1300	Lunch with TALSC and community	
	1430	Visit to Riveaux Cave - Small group only – as determined by TALSC	
	1730	**HELICOPTERS return to Hobart**	AG VEHICLE returns to Hobart TALSC MINI-BUS returns to Hobart

		HELICOPTER 1 • Nik Lopoukhine • Greg Terrill • Kishore Rao • John Hickey / Peter Mooney	**HELICOPTER 2** • Kevin Jones • Colin Hughes • Brian Prince • Peter Mooney / John Hickey
	Approx 1815	HELICOPTERS arrive at cenotaph, VEHICLE transfers from cenotaph to hotel	
	1830-1930	Forest Practices Authority briefing to delegates	Old Woolstore *Mission, Graham Wilkinson, possibly Denise Gaughwin & State Party Delegation*
	1930	Dinner and separate meeting	*Mission*
		Dinner and debrief	*State Party Delegation, plus Tas Govt officials from day's field trip*
			Accommodation Hobart

THU 20		**FIELD TRIPS & briefings –LAND MANAGERS**	
	0730-0945	Briefing	Executive Building 15 Murray St *Mission, State Party Delegation, Tas Govt & FT officials*
	0945	**MINIBUS Depart (Helicopter flights cancelled due to poor weather conditions)** Mission, State Party delegation, Hans Drielsma, John Hickey, Steve Whitely, Andrew Blakesley, Hank Horton.	
	1000	AG VEHICLE to meeting point at Airwalk	
	1200-1230	Lunch at Airwalk with meet social and economic interests	*Mission, State Party Delegation, Tas Govt & FT officials, Social and Economic Interest groups*
	1230-1400	Briefing with social and economic interests	*Mission, Social and Economic Interest groups*
		AG VEHICLE return to Hobart	
	1400	MINIBUS to Weld Valley then return to Hobart	*Mission, State Party Delegation, Tas Govt & FT officials*
	1730-1830	Break for mission	
	1830-1930	Formal end of mission debriefing	*Mission, State Party Delegation and all involved Tas Govt officials* Venue: Henry Jones Art Hotel, Art Installation Suite
	1930/2000	Private dinner for mission members with John Ramsay	
	1930/2000	Private dinner AG and Tas Govt officials	
		Accommodation Hobart	

FRI 21		**DEPARTURE DAY**	
	0700	Nik Lopoukhine – depart Hobart	
	0850	Nik Lopoukhine – arrive Sydney	
	1030	Kevin Jones, Kishore Rao, AG staff depart Hobart	
	1220	Kevin Jones, Kishore Rao, AG staff arrive Sydney	
	1230	Nik Lopoukhine departs Sydney International	
	1400	AG staff depart Sydney	
	1455	AG staff arrive Canberra	
		Kishore Rao remains in Sydney (private travel)	**Accommodation (private)**
		Kevin Jones remains in Syd / Canberra (private)	**Accommodation (private)**

ANNEX C - Representatives met by the mission:

(1) Environmental NGOs

ORGANISATION/GROUP	NAME
Sydney 17 March 2008	
ACIUCN	Peter Ogilvie, Chair
	Pam Eiser, Executive Officer
	Penny Figgis, Vice Chair IUCN WCPA Australia and New Zealand
Hobart 18 March 2008	
The Wilderness Society:	Alec Marr
	Geoff Law
	Vica Bayley
	Peter Hitchcock (consultant)
Huon Valley Environment Centre:	Adam Burling
	Jenny Webber
	Will Mooney
	Warwick Jordan
Still Wild Still Threatened:	Ula Majewski
	Stuart Primrose
Tasmanian Conservation Trust:	Christian Bell
Tasmanian National Parks Assn:	Tom Baxter
Australian Conservation Foundation:	Lindsay Hesketh
Environment Tasmania:	Simon Branigan
Tarkine National Coalition:	Phillip Pullinger
Lake Pedder Restoration Committee:	Helen Gee

(2) Cultural NGOs

ICOMOS	Name
Sydney	Peter Phillips, President, Australia ICOMOS
	Susan McIntyre-Tamwoy
	Mary Knaggs
Hobart	Anne McConnell
	Angela McGowan
	Jane Harrington

(3) Industry NGOs

Organisation/Body	Name
Tuesday 18 March	
Huon Valley Council	Robert Armstrong, Mayor
Forest & Forest Industry Council	Rob Woolley, Chair
Forest & Forest Industry Council	Sean Riley, General Manager
Institute of Foresters Australia	Dr Peter Volker, National President
Forest Industries Association Tasmania	Katy Hobbs, Forester
Forest Industries Association Tasmania	Dr Bruce Greaves, Forester
Tasmanian Bee Keepers Association	Peter Ewington, Bee Keeper
Timber Communities Australia	Barry Chipman, Tasmanian State Manager

Thursday 20 March	
TCA Huon Resource Development Group	Alan Duggan, President
TCA Huon Resource Development Group	Basil Hickey, (retired forester), Vice President
Forest Industries Association Tasmania	Terry Edwards, CEO
Tourism Industry Council Tasmania	Daniel Hanna, CEO
Gondwana Forest Products	Shaun Dohnt, Forest Practices Officer
McCulloch Forestry Systems	Kevin McCulloch, Timber Harvesting Contractor
Forest & Forest Industry Council	Steve Bavage, Communications Manager
Timber Communities Australia	Barry Chipman, Tasmanian State Manager
	George Harris, Wood craftsman

(4) World Heritage Area Consultative Committee representatives 17 March 2008

Area represented	Name
(Chair)	Professor Malcolm Wells
Ecologist	Professor Jamie Kirkpatrick
Forest Management	Mr Kim Creak
Independent Angler	Mr Ashley Artis
Tourism	Ms Julie Marshall
Independent Conservationist	Ms Helen Pryor
Bushwalking	Mr John Cannon
Aboriginal community	Mr Hank Horton
Trade Unionist	Mr Michael Swanton
Conservation Advocate	Mr Michael Lynch
Adventure Tourism	Ms Larni Gibson
Cultural Heritage	Mr Chris Tassell

(5) Members of the Tasmanian Aboriginal Land and Sea Council and Aboriginal community members

17 March 2008	
Tasmanian Aboriginal Elder	Aunt Pat Green
TALSC Committee member, Acting Chair	Uncle Jim Everett
TALSC, Manager	Hank Horton
19 March 2008	
Tasmanian Aboriginal Elder	Aunt Pat Green
TALSC, Manager	Hank Horton
TALSC, Senior Heritage Officer	Colin Hughes
TALSC, Support Officer	Kayleen Westcombe
TALSC, Reception	Karlie Goodwin
TALSC, Project Coordinator	Rebecca Gibney-Mansell
TALSC, Project Manager	Andry Sculthorpe
TALSC, Land Manager	Luke Mabb
TALSC, Administrator	Rajeev Nighawam
TALSC, Administration Support	Lois Reed
Aboriginal Land Management Trainees:	Dennis Westcombe/Everett
	Kia Simom-Brown
	Ben Everett
	Shane Hughes
	Dayne Langdon
	Jamie Langdon
	Jay Dee Green
	Wayne Maynard
	Chris Wright
	Ashley Hogan
Community Members:	Nan Mabb, Elder

	Glenn Shaw
	Jimmy Hogan & Daughter
	Jamie Lord
	Bob Hughes
	Jarrod Hughes
	Aunt Nan Burgess
	Brad Horton

(6) Tasmanian Government Representatives

Department of Infrastructure, Energy and Resources	Bob Rutherford – Deputy Secretary
Department of Infrastructure, Energy and Resources	Andrew Blakesley Director, Forestry Policy
Department of Environment, Parks, Heritage and the Arts	Peter Mooney – General Manager, Parks & Wildlife Services
Department of Environment, Parks, Heritage and the Arts	Don Ranson - Manager Aboriginal Heritage Research & Development, Aboriginal Heritage Office
Forestry Tasmania	Hans Drielsma – Executive General Manager
Forestry Tasmania	John Hickey Manager – Planning
Forestry Tasmania	Steve Whitely – Assistant General Manager Operations & Special Timbers
Forestry Tasmania	Mike Farrow – District Forest Manager, Murchison District
Department of Primary Industries and Water	Phil Bell – Threatened Species Section
Forest Practices Authority	Graham Wilkinson – Chief Forest Practices Officer
Forest Practices Authority	Ms Denise Gaughwin, Senior Archaeologist

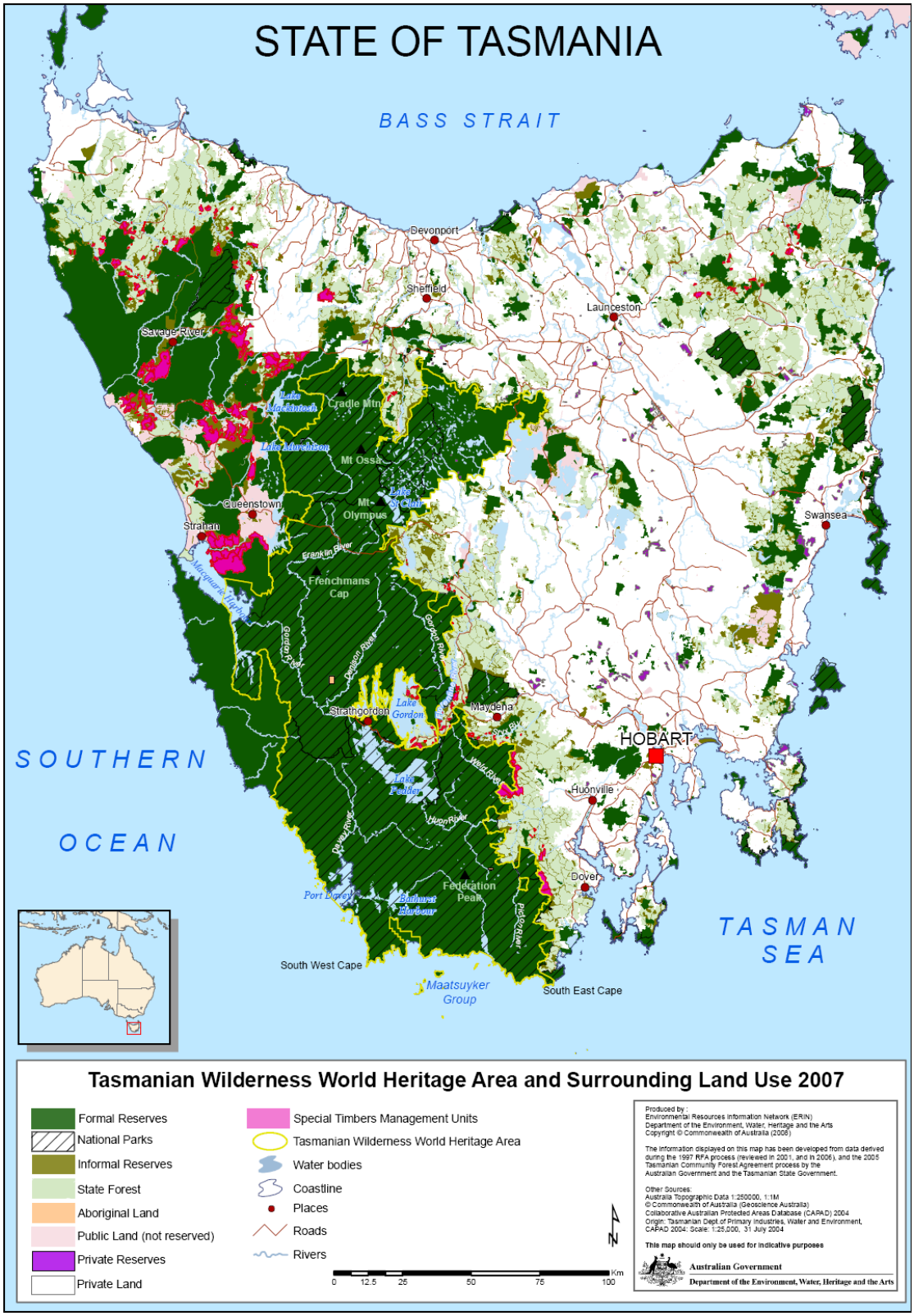
(7) Australian Government Representatives

Minister for the Environment, Heritage and the Arts	The Hon Peter Garrett AM MP
Office of the Minister for the Environment, Heritage and the Arts	Peter Wright - advisor
Department of the Environment, Water, Heritage and the Arts	Greg Terrill – Assistant Secretary Heritage Strategy Branch
Department of the Environment, Water, Heritage and the Arts	Veronica Blazely – Director, Natural Heritage Management Section
Department of the Environment, Water, Heritage and the Arts	Nicola Bryden – Assistant Director, Natural Heritage Management Section TWWHA Desk Officer
Department of the Environment, Water, Heritage and the Arts	Brian Prince – Director Indigenous Heritage Section

(8) Independent experts

Archaeologist	Richard Cosgrove
Author of second 5-year review of the Tasmanian Regional Forest Agreement	John Ramsay

ANNEX D – MAP OF THE PROPERTY



ANNEX E – FOREST RESERVATION STATUS

RFA Old Growth Forest Community Reservation Status [3]

Old Growth forest community	Total Statewide extent in 2007 (ha)	Statewide reservation % of 2007 extent [5]	TWWHA Management Plan Area				Reserved [5] outside Total TWWHA Plan Area [4]	
			Area in TWWHA	Extra area under TWWHA Plan	Total TWWHA Plan Area [4]	% Total TWWHA Plan Area [4] of Statewide	Area(ha)	(%)
Communities represented in areas under TWWHA Management Plan								
Callidendrous and thamnic rainforest on fe	158,400	82.5%	28,000	1,900	29,900	18.9%	100,800	63.6%
Dry E. *delegatensis* forest	77,300	69.2%	22,300	700	23,000	29.8%	30,400	39.3%
Dry *E. nitida* forest	107,200	93.1%	62,400	70	62,400	58.3%	37,300	34.8%
Dry *E. obliqua* forest	45,700	67.1%	2,800	300	3,100	6.9%	27,500	60.3%
E. amygdalina forest on dolerite	30,100	63.0%	300	0	300	1.1%	18,600	62.0%
E. coccifera dry forest	32,500	88.2%	17,800	90	17,900	55.1%	10,800	33.1%
E. pauciflora on Jurassic dolerite	1,900	61.0%	200	0	200	9.5%	1,000	51.5%
E. pauciflora on sediments	4,200	75.4%	2,200	20	2,200	52.5%	1,000	22.8%
E. regnans forest	11,800	64.0%	2,400	300	2,700	22.9%	4,900	41.1%
E. rodwayi forest	700	20.4%	10	0	10	1.3%	100	19.1%
E. subcrenulata forest	7,400	90.3%	5,900	10	5,900	79.9%	800	10.4%
E. viminalis and/or *E. globulus* coastal sl	900	19.6%	100	0	100	11.5%	70	8.1%
Huon Pine forest	7,600	96.5%	6,000	0	6,000	79.1%	1,300	17.5%
King Billy Pine forest	17,300	97.5%	10,000	50	10,100	58.3%	6,800	39.2%
King Billy Pine with deciduous beech	400	97.0%	200	0	200	47.3%	200	49.6%
Leptospermum spp./Melaleuca squarrosa	9,800	91.8%	7,300	0	7,300	74.3%	1,700	17.5%
Notelaea ligustrina and/or *Pomaderris ap*	300	83.2%	100	0	100	45.1%	100	38.1%
Pencil Pine forest	300	99.9%	300	0	300	99.6%	1	0.3%
Pencil Pine with deciduous beech	200	100.0%	200	0	200	100.0%	0	0.0%
Tall *E. delegatensis* forest	97,200	65.6%	37,800	2,400	40,200	41.3%	23,600	24.3%
Tall *E. nitida* forest	49,500	97.3%	34,400	100	34,500	69.6%	13,700	27.7%
Tall *E. obliqua* forest	78,500	66.8%	11,400	2,000	13,500	17.2%	38,900	49.6%
Thamnic rainforest on less fertile sites	334,900	91.3%	153,900	2,700	156,500	46.7%	149,400	44.6%
Communities not represented in areas under TWWHA Management Plan								
Allocasuarina verticillata forest	1,000	56.1%	0	0	0	0.0%	500	56.1%
Banksia serrata woodland	200	73.8%	0	0	0	0.0%	100	73.8%
Callitris rhomboidea forest	600	59.2%	0	0	0	0.0%	400	59.2%
Coastal *E. amygdalina* dry sclerophyll for	39,400	66.7%	0	0	0	0.0%	26,300	66.7%
E. amygdalina forest on sandstone	6,600	65.1%	0	0	0	0.0%	4,300	65.1%
E. brookeriana wet forest	600	38.1%	0	0	0	0.0%	200	38.1%
E. pulchella/E. globulus/E. viminalis gra	62,800	52.7%	0	0	0	0.0%	33,100	52.7%
E. risdonii forest	10	8.0%	0	0	0	0.0%	1	8.0%
E. sieberi forest on granite	900	84.0%	0	0	0	0.0%	800	84.0%
E. sieberi on other substrates	1,600	50.1%	0	0	0	0.0%	800	50.1%
E. tenuiramis on dolerite	5,400	89.5%	0	0	0	0.0%	4,900	89.5%
E. tenuiramis on granite	2,900	94.0%	0	0	0	0.0%	2,700	94.0%
E. viminalis/ E. ovata/E. amygdalina/ E. o	2,400	71.1%	0	0	0	0.0%	1,700	71.1%
Grassy *E. globulus* forest	4,900	83.5%	0	0	0	0.0%	4,100	83.5%
Grassy *E. viminalis* forest	8,400	11.7%	0	0	0	0.0%	1,000	11.7%
Inland *E. amygdalina* forest	2,800	30.4%	0	0	0	0.0%	900	30.4%
Inland *E. tenuiramis* forest	8,000	35.5%	0	0	0	0.0%	2,800	35.5%
Melaleuca ericifolia forest	300	65.1%	0	0	0	0.0%	200	65.1%
Shrubby *E. ovata* forest	500	36.6%	0	0	0	0.0%	200	36.6%
Wet *E. viminalis* forest on basalt	100	73.0%	0	0	0	0.0%	100	73.0%
Grand Total [6]	**1,223,400**	**79.3%**	**406,000**	**10,700**	**416,700**	**34.1%**	**554,000**	**45.3%**

1. Areas rounded to nearest 10 or 100 hectares.

2. Totals not sum of rounded columns but rounded actual totals; percentages calculated on actual figures, not rounded figures.

3. ALL - Extent, Reservation Status and Old Growth Vegetation communities - current as at ***30 June, 2007.*** *Source: Forestry Tasmania da*

4. Total TWWHA Plan Area = TWWHA+Extra Area under TWWHA Management Plan

5. Reserved land includes Formal & Informal Reserves on public land together with Private CAR Reserves as mapped at FT.

6. Percentage Grand Totals are % of total Old Growth Forest in Tasmania, not % of total land area.

RFA Native Forest Community Reservation Status [3]

Native Forest community	Total Statewide extent in 2007 (ha)	Statewide reservation % of 2007 extent [5]	TWWHA Management Plan Area: Area in TWWHA	TWWHA Management Plan Area: Extra area under TWWHA Plan	TWWHA Management Plan Area: Total TWWHA Plan Area [4]	TWWHA Management Plan Area: % Total TWWHA Plan Area (4) of Statewide	Reserved [5] outside: Area(ha)	Reserved [5] outside: (%)
Communities represented in areas under TWWHA Management Plan								
Acacia melanoxylon forest on flats	9,000	29.7%	300	0	300	3.0%	2,400	26.7%
Callidendrous and thamnic rainforest on fe	187,000	75.6%	28,500	1,900	30,400	16.3%	110,900	59.3%
Coastal *E. amygdalina* dry sclerophyll for	185,000	38.1%	200	0	200	0.1%	70,300	38.0%
Dry *E. delegatensis* forest	287,000	34.8%	31,300	800	32,100	11.2%	67,700	23.6%
Dry *E. nitida* forest	160,000	89.2%	91,500	300	91,800	57.5%	50,700	31.8%
Dry *E. obliqua* forest	160,000	35.8%	4,100	1,100	5,200	3.3%	52,000	32.6%
E. amygdalina forest on dolerite	177,000	19.4%	400	0	400	0.2%	33,800	19.1%
E. coccifera dry forest	55,000	78.2%	25,900	200	26,100	47.9%	16,500	30.3%
E. pauciflora on Jurassic dolerite	19,000	15.9%	300	0	300	1.5%	2,700	14.4%
E. pauciflora on sediments	16,000	33.3%	2,800	20	2,900	17.7%	2,500	15.6%
E. regnans forest	68,000	27.7%	3,200	300	3,600	5.3%	15,200	22.5%
E. rodwayi forest	9,000	5.6%	10	0	10	0.1%	500	5.5%
E. subcrenulata forest	10,000	86.3%	7,600	10	7,600	74.5%	1,200	11.8%
E. viminalis and/or *E. globulus* coastal sl	1,000	37.2%	100	0	100	8.2%	400	29.0%
E. viminalis/ E. ovata/E. amygdalina/ E. o	38,000	33.2%	40	0	40	0.1%	12,500	33.1%
Huon Pine forest	9,000	85.3%	6,200	0	6,200	68.6%	1,500	16.7%
King Billy Pine forest	20,000	90.2%	10,300	50	10,300	51.2%	7,900	39.0%
King Billy Pine with deciduous beech	800	93.8%	200	0	200	23.4%	600	70.5%
Leptospermum spp./Melaleuca squarrosa	19,000	58.7%	7,400	0	7,400	39.2%	3,700	19.5%
Notelaea ligustrina and/or *Pomaderris ap*	300	78.1%	100	0	100	42.7%	100	35.5%
Pencil Pine forest	300	99.9%	300	0	300	99.6%	1	0.3%
Pencil Pine with deciduous beech	200	100.0%	200	0	200	100.0%	0	0.0%
Silver wattle (Acacia dealbata) forest	50,000	29.3%	1,400	40	1,400	2.8%	13,400	26.6%
Tall *E. delegatensis* forest	272,000	35.8%	42,700	2,600	45,300	16.7%	52,000	19.1%
Tall *E. nitida* forest	74,000	92.5%	49,700	300	50,000	67.3%	18,700	25.2%
Tall *E. obliqua* forest	394,000	31.8%	17,800	4,900	22,700	5.8%	102,500	26.0%
Thamnic rainforest on less fertile sites	376,000	85.8%	156,200	2,700	158,900	42.3%	163,700	43.5%
Communities not represented in areas under TWWHA Management Plan								
Acacia melanoxylon forest on rises	13,000	36.6%	0	0	0	0.0%	4,700	36.6%
Allocasuarina verticillata forest	1,000	45.8%	0	0	0	0.0%	700	45.8%
Banksia serrata woodland	200	73.8%	0	0	0	0.0%	100	73.8%
Callitris rhomboidea forest	800	63.4%	0	0	0	0.0%	500	63.4%
E. amygdalina forest on sandstone	30,000	28.0%	0	0	0	0.0%	8,400	28.0%
E. brookeriana wet forest	4,000	32.5%	0	0	0	0.0%	1,400	32.5%
E. morrisbyi forest	23	75.4%	0	0	0	0.0%	20	75.4%
E. pulchella/E. globulus/E. viminalis gra	150,000	30.8%	0	0	0	0.0%	46,100	30.8%
E. risdonii forest	400	46.9%	0	0	0	0.0%	200	46.9%
E. sieberi forest on granite	18,000	31.2%	0	0	0	0.0%	5,500	31.2%
E. sieberi on other substrates	46,000	26.8%	0	0	0	0.0%	12,200	26.8%
E. tenuiramis on dolerite	8,000	75.5%	0	0	0	0.0%	6,300	75.5%
E. tenuiramis on granite	3,000	93.4%	0	0	0	0.0%	2,800	93.4%
Furneaux *E. nitida* forest	30,000	63.2%	0	0	0	0.0%	18,800	63.2%
Furneaux *E. viminalis* forest	100	87.2%	0	0	0	0.0%	100	87.2%
Grassy *E. globulus* forest	14,000	46.7%	0	0	0	0.0%	6,600	46.7%
Grassy *E. viminalis* forest	113,000	4.2%	0	0	0	0.0%	4,800	4.2%
Inland *E. amygdalina* forest	25,000	24.5%	0	0	0	0.0%	6,100	24.5%
Inland *E. tenuiramis* forest	55,000	19.7%	0	0	0	0.0%	10,800	19.7%
King Island *E. globulus/E. brookeriana/E.*	2,000	25.0%	0	0	0	0.0%	600	25.0%
Melaleuca ericifolia forest	600	66.8%	0	0	0	0.0%	400	66.8%
Shrubby E. ovata forest	7,000	8.1%	0	0	0	0.0%	600	8.1%
Wet *E. viminalis* forest on basalt	4,000	16.5%	0	0	0	0.0%	600	16.5%
Grand Total [6]	**3,120,000**	**46.3%**	**488,800**	**15,200**	**503,900**	**16.2%**	**941,800**	**30.2%**

1. Areas rounded to nearest 10 or 100 hectares.

2. Totals not sum of rounded columns but rounded actual totals; percentages calculated on actual figures, not rounded figures.

3. ALL - Extent, Reservation Status and Vegetation communities (which includes Old Growth communities) - current as at ***30 June, 2007.***

4. Total TWWHA Plan Area = TWWHA+Extra Area under TWWHA Management Plan

5. Reserved land includes Formal & Informal Reserves on public land together with Private CAR Reserves as mapped at FT.

6. Percentage Grand Totals are % of total Native Forest in Tasmania, not % of total land area.

RFA Old Growth Forest Community Reservation Status [3]								
			TWWHA Management Plan Area				Reserved [5] outside	
Old Growth forest community	Total Statewide extent in 1996 (ha)	Statewide reservation % of 1996 extent [5]	Area in TWWHA	Extra area under TWWHA Plan	Total TWWHA Plan Area [4]	% Total TWWHA Plan Area [4] of Statewide extent	Area(ha)	(%)
Communities represented in areas under TWWHA Management Plan								
Callidendrous and thamnic rainforest on fe	159,640	82	28,000	1,900	29,900	19	100,800	63
Dry E. *delegatensis* forest	79,820	67	22,300	700	23,000	29	30,400	38
Dry *E. nitida* forest	107,360	93	62,400	70	62,400	58	37,300	35
Dry *E. obliqua* forest	46,960	65	2,800	300	3,100	7	27,500	59
E. amygdalina forest on dolerite	30,490	62	300	0	300	1	18,600	61
E. coccifera dry forest	32,630	88	17,800	90	17,900	55	10,800	33
E. pauciflora on Jurassic dolerite	1,870	61	200	0	200	9	1,000	51
E. pauciflora on sediments	4,300	74	2,200	20	2,200	52	1,000	22
E. regnans forest	13,290	57	2,400	300	2,700	20	4,900	37
E. rodwayi forest	730	20	10	0	10	1	100	19
E. subcrenulata forest	7,420	90	5,900	10	5,900	79	800	10
E. viminalis and/or *E. globulus* coastal sl	870	20	100	0	100	11	70	8
Huon Pine forest	7,570	97	6,000	0	6,000	80	1,300	18
King Billy Pine forest	17,300	97	10,000	50	10,100	58	6,800	39
King Billy Pine with deciduous beech	370	97	200	0	200	47	200	49
Leptospermum spp./Melaleuca squarrosa	9,950	91	7,300	0	7,300	73	1,700	17
Notelaea ligustrina and/or *Pomaderris ap*	270	83	100	0	100	44	100	38
Pencil Pine forest	340	100	300	0	300	99	1	1
Pencil Pine with deciduous beech	170	100	200	0	200	100	0	0
Tall *E. delegatensis* forest	104,420	61	37,800	2,400	40,200	38	23,600	23
Tall *E. nitida* forest	49,600	97	34,400	100	34,500	70	13,700	28
Tall *E. obliqua* forest	83,490	63	11,400	2,000	13,500	16	38,900	47
Thamnic rainforest on less fertile sites	335,790	91	153,900	2,700	156,500	47	149,400	44
Communities not represented in areas under TWWHA Management Plan								
Allocasuarina verticillata forest	970	56	0	0	0	0.0	500	56
Banksia serrata woodland	160	73	0	0	0	0.0	100	73
Callitris rhomboidea forest	600	59	0	0	0	0.0	400	59
Coastal *E. amygdalina* dry sclerophyll fo	40,080	66	0	0	0	0.0	26,300	66
E. amygdalina forest on sandstone	6,600	65	0	0	0	0.0	4,300	65
E. brookeriana wet forest	690	33	0	0	0	0.0	200	33
E. pulchella/E. globulus/E. viminalis gra	63,840	52	0	0	0	0.0	33,100	52
E. risdonii forest	10	8	0	0	0	0.0	1	8
E. sieberi forest on granite	960	83	0	0	0	0.0	800	83
E. sieberi on other substrates	1,660	50	0	0	0	0.0	800	50
E. tenuiramis on dolerite	5,490	88	0	0	0	0.0	4,900	88
E. tenuiramis on granite	2,900	94	0	0	0	0.0	2,700	94
E. viminalis/ E. ovata/E. amygdalina/ E. o	2,500	68	0	0	0	0.0	1,700	68
Grassy *E. globulus* forest	4,910	83	0	0	0	0.0	4,100	83
Grassy *E. viminalis* forest	8,500	12	0	0	0	0.0	1,000	12
Inland *E. amygdalina* forest	2,860	30	0	0	0	0.0	900	30
Inland *E. tenuiramis* forest	7,970	35	0	0	0	0.0	2,800	35
Melaleuca ericifolia forest	310	64	0	0	0	0.0	200	64
Shrubby *E. ovata* forest	470	37	0	0	0	0.0	200	37
Wet *E. viminalis* forest on basalt	140	73	0	0	0	0.0	100	74
Grand Total [6]	**1,246,270**	**78**	**406,000**	**10,700**	**416,700**	**33**	**554,000**	**44**

1. Areas rounded to nearest 10 or 100 hectares.

2. Totals not sum of rounded columns but rounded actual totals; percentages calculated on actual figures, not rounded figures.

3. Extent as at 30 June 1996, Reservation Status as at ***30 June 2007.*** *Source: Forestry Tasmania data.*

4. Total TWWHA Plan Area = TWWHA+Extra Area under TWWHA Management Plan

5. Reserved land includes Formal & Informal Reserves on public land together with Private CAR Reserves as mapped at FT.

6. Percentage Grand Totals are % of total Old Growth Forest in Tasmania, not % of total land area.

ANNEX F – SELECTED PHOTOGRAPHS

View of tall eucalyptus forest

Variable retention logging system

Logging coupe adjacent to the property

Area recovering from past fire incident

NGO protest site against logging

Volunteers perched on trees

Melaleuca Cox Bight mining area

Cultural site