



TASMANIAN WILDERNESS

WORLD HERITAGE AREA

(TWWHA)

MANAGEMENT PLAN



Australian Government




Tasmanian
Government



United Nations
Educational, Scientific and
Cultural Organization



Tasmanian Wilderness
inscribed on the World
Heritage List in 1982



Tasmanian Wilderness World Heritage Area Management Plan 2016

This Management Plan for the Tasmanian Wilderness World Heritage Area has been prepared in accordance with the requirements of Part 3 of the *National Parks and Reserves Management Act 2002*.

Unless otherwise specified, this plan adopts the interpretation of terms given in the *National Parks and Reserves Management Act 2002*. The term 'Minister' when used in the plan means the Minister administering this Act.

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Minister's Foreword

The Tasmanian Wilderness World Heritage Area (TWWHA) covers almost a quarter of Tasmania, occupying more than 1.58 million hectares, and is one of the largest temperate natural areas in the southern hemisphere. The area was formally recognised as a mixed World Heritage property in 1982, through the World Heritage Convention, for its Outstanding Universal Value.

The TWWHA encompasses areas of truly exceptional natural beauty and contains biological and geological features of outstanding international significance. It is recognised for the diversity and uniqueness of its flora and fauna and provides habitat for globally significant species.

The TWWHA also contains examples of outstanding and exceptional cultural heritage, reflecting the long occupation of the area by Tasmanian Aboriginal people stretching back more than 40 000 years.

In addition, the TWWHA offers rare and highly valued recreational, educational and tourism experiences.

It is for all of these reasons that the area is valued immensely by Tasmanians as well as people from all around the world.

The Tasmanian Government recognises the importance of managing the TWWHA in a way that is genuinely respectful of its natural and cultural heritage values. It also recognises that the TWWHA is an area to be experienced, celebrated and shared with the world. The Tasmanian Government is supportive of sensitive and appropriate use of the TWWHA for recreational and tourism purposes and acknowledges the important role tourism plays in contributing to the economic wellbeing of the Tasmanian community.

A new feature of the Management Plan is an increased recognition of Aboriginal cultural heritage and a greater emphasis on involving Tasmanian Aboriginal people in the management of the TWWHA by investigating joint management

arrangements. In addition, the TWWHA has been an area where a variety of endeavours reflecting the course of post-European settlement have been undertaken and this continues through to today. It is an area with a rich historic heritage that has been the domain of people such as explorers, piners and trappers. It is recognised for its immense recreational value to bushwalkers and others who enjoy visiting the area, either as independent adventurers or as part of a guided experience.

This Management Plan replaces the previous 1999 Management Plan and provides management direction and guidance for the additional areas added in 2012 and 2013. It is contemporary in its approach, reflecting current understanding of key management issues while building on the successful past management of the TWWHA. It provides certainty for stakeholders and establishes an appropriate balance in the management of the values of the area while providing for a range of presentation opportunities.

The Tasmanian Government acknowledges and encourages the continued, widespread community interest in the way the TWWHA is managed. The level of community input into the development of this plan has ensured that it addresses management issues that are of broad concern to the community and provides for best practice management of this globally significant area.

I am confident that the plan will successfully guide management of this unique and outstanding area into the future and I encourage everyone to find some time to visit and experience first-hand the extraordinary natural and cultural landscape contained within the TWWHA.



The Honourable Matthew Groom MP
Minister for Environment, Parks and Heritage

Foreword from the Aboriginal Heritage Council

Tasmanian Aborigines are the Traditional Owners of *lutruwita* (Tasmania), and have been here since the beginning of time. We remember and honour our Elders past, present, and those to come.

We have been here since the creation of the first black person, *palawa*, since the creation of the landscape: rivers, mountains, sea and sky. Our cultural landscape is celebrated in song, story, dance and ceremony. It connects art and animals, stars and stories, people and places.

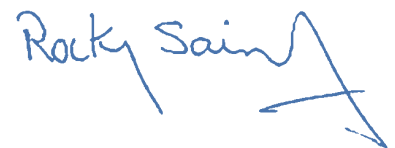
Our people have maintained Country in a sustainable way. Ingenuity and adaptability enabled our Ancestors to survive an ice age thousands of years ago. In generations since, their controlled burnings have regenerated plant life and renewed the land and our people. They marked and ochred rock and their bodies in intimate connections. The land and waters have nourished our people. Stars and creatures have strengthened identity. Respectful custodianship has enhanced relationships.

The legacy of our Ancestors can be seen in the cultural landscapes, including the area now known as the Tasmanian Wilderness World Heritage Area. Some cultural landscapes have remained almost as they were generations ago. Others have been severely affected by the invasion and subsequent colonisation. We see the impact that has destroyed, and continues to destroy, Aboriginal heritage. And we see survival and regeneration among our people who gain strength from the spirits of our Ancestors.

We are the custodians of our heritage. It is crucial that our cultural landscape is managed in a way that respects our ancestral past, deepens our current engagement and enables future generations to inherit our rich traditions and continuing practices.

The Tasmanian Wilderness World Heritage Area Management Plan acknowledges that tangible and intangible Aboriginal heritage is not only the Aboriginal landscapes, sites and artefacts left by generations past, but it will also continue to be created by our people in the present and future.

The Aboriginal Heritage Council welcomes the opportunity the Tasmanian Wilderness World Heritage Area Management Plan offers for our people to engage in the management, interpretation and enrichment of this significant cultural landscape.



Rocky Sainty
Chair
Aboriginal Heritage Council



Yah pulingina,



Top: Ochre and grindstone

Photo Fiona Hamilton

Bottom: Traditional Tasmanian Aboriginal shell necklace and basket

Photo Jillian Mundy

I am deeply honoured to invite you to read the Tasmanian Wilderness World Heritage Area Management Plan, which establishes our plan for how the area now known as the TWWHA will be managed cooperatively and with equity to protect its Outstanding Universal Value for at least the next seven years. Having been closely associated with the TWWHA for about three decades I hope you will join with me in celebrating this new and different approach for managing the significant and unique Tasmanian landscape that is recognised by UNESCO for its stunning natural beauty, rare flora and fauna and, of utmost importance, its ancient Aboriginal cultural heritage that, in lineal time, predates British colonisation by tens of thousands of years. The Aboriginal heritage values of the TWWHA, which are inseparable from the natural values within the landscape, remain powerful and core to who we are as Tasmanian Aboriginal people today.

My ancestors told of the time when Tasmania was created. Two Ancestral Beings walked across the Milky Way to this place now known as the TWWHA. As they travelled they transformed the land into hills, gullies and bays and used their stone tools to cut out the waterways and create the plants, animals and people. Since that time many thousands of generations of Aboriginal families have maintained and cared for our cultural and spiritual homelands. Our Old People knew every environmental niche and every landmark in Country. They knew the laws that governed life, which were passed on through spoken stories, in song and dance and by way of places made or marked in the landscape.

As the first Aboriginal representative on the Tasmanian World Heritage Advisory Committee many years ago, I have been privileged to be passionately associated with the TWWHA. Archaeological surveys and historical records provide us with evidence that the TWWHA was home to and utilised by Tasmanian Aboriginal people since the very beginning of human consciousness in art, birth, burial and ceremony. Living cultural landscapes in the form of hinterland button-grass plains and sweeping coastal scrubland provide us with evidence that

Aboriginal people shaped the landscape using ancient firing practices, passed on since the first ancestors walked across the Milky Way. Thus the TWWHA is of global significance for all humanity. It holds the secrets of dynamic, culturally diverse and spiritually rich peoples whose cultural and spiritual footprints can be found deep inside limestone caves or visible as ancient pathways, hunting corridors, stone quarries, ceremonial places and in the many coastal and inland campsites.

My people consider the TWWHA to be a precious cultural landscape that must be cared for and protected by sound ethical management; in which we, as part of that landscape, can make decisions about its management with equity, now and for our future generations. The challenge for us, as Aboriginal people, is to reconnect to Country in the TWWHA and to exercise, as individuals and as families, the opportunities this Management Plan presents to us. This Management Plan contains the keys for protecting our Country - good, strong governance made possible by improving our relationships with others tasked with managing the TWWHA and by respectfully working together and building a strong future for all generations. The TWWHA may be remote in geography, but it is close to our cultural hearts.

Before you read further about the future management of the Outstanding Universal Value of the TWWHA, and indeed, of all its values, I ask you to consider the nature of the relationships between people who deeply care about the TWWHA, and about how we can all be included in the management of this magnificent place.

I warmly introduce you to the next seven or more years of TWWHA management outlined in this plan, which allows all Tasmanians to share the deep history of the TWWHA and showcase our extraordinary place to the world with equity and integrity of which we can all feel justifiably proud.



Aunty Patsy Cameron
Tasmanian Aboriginal Elder



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EXECUTIVE

SUMMARY

The Tasmanian Wilderness World Heritage Area (TWWHA) is recognised through the World Heritage Convention (the Convention) as having both natural and cultural heritage of Outstanding Universal Value (OUV)¹. This recognition is based on the TWWHA meeting four natural criteria and three cultural criteria, conditions of integrity and authenticity and the application of a robust system of protection and management, as defined in the *Operational Guidelines for the implementation of the World Heritage Convention*. It is one of only two World Heritage properties that meet this many listing criteria. The TWWHA is one of the Southern Hemisphere's largest temperate wilderness areas. It covers almost a quarter of Tasmania and encompasses more than 1.58 million hectares.

The listed cultural values of the TWWHA belong to and are part of the cultural heritage of Tasmanian Aboriginal people. For Tasmanian Aboriginal people, the landscape, seascape and skyscape of the TWWHA have deep spiritual meaning and significance.

The TWWHA's natural values include estuaries, wild rivers, lakes, dramatic and varied scenery, karst landscapes, rainforests, tall eucalypt forests, moorlands, glacial and periglacial features, patterned mires and alpine vegetation. The TWWHA provides secure habitat for the conservation of biodiversity, including many threatened species, and its extent and integrity allow for ongoing ecological and biological processes. The landscape contains within it outstanding examples of major stages of the earth's geological history including significant ongoing geological processes. The natural values are enriched by the extraordinary cultural achievement of Aboriginal people's long occupation of Tasmania.

The TWWHA makes a significant and valuable contribution to the social and economic wellbeing of all Tasmanians. Its landscapes, interwoven with the island's history, are an important part of the Tasmanian identity. It has important recreational, educational, health and aesthetic value, provides vitally important ecosystem services, and helps to drive the Tasmanian economy through such activities as tourism and energy generation. There is considerable potential to sustainably increase the contribution of the TWWHA to the prosperity of all Tasmanians while improving conservation of its values.

MANAGEMENT

A number of different land tenures are located within the TWWHA. The majority of the area comprises reserves declared under the *State Nature Conservation Act 2002*. The Management Plan is formulated as a Tasmanian State instrument in accordance with the *State National Parks and Reserves Management Act 2002* (NPRMA). The Management Plan has been drafted to also meet the requirements of the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*, set out in the associated *Environment Protection and Biodiversity Conservation Regulations 2000*, with respect to management plans for World Heritage properties and the management obligations of the Australian Government arising from the World Heritage Convention. The TWWHA is a listed National Heritage Place, and the Management Plan also meets the relevant obligations that arise from this status. The Management Plan includes a Strategic Management Statement, a non-statutory component that sets out management arrangements for tenures in the TWWHA not subject to the statutory management plan. The Tasmanian Government has a policy position of not allowing commercial logging, including harvesting of special species timbers, and mining within the TWWHA. This commitment will be given effect through the Management Plan, the Strategic Management

¹ For a definition of OUV, see page 224.

Statement and other statutory measures.

The Management Plan identifies the natural and cultural values of the TWWHA, particularly values that underpin its World Heritage listing. It also identifies the key threats to those values and provides for their protection through management actions, monitoring and research priorities, and an adaptive management framework. Evaluation criteria associated with the management actions feed into a systematic framework to allow for the ongoing appraisal of the plan's effectiveness.

The Management Plan sets out what uses may occur within the TWWHA, where they may occur and under what circumstances, including the application of applicable assessment processes and criteria. Guidance is provided primarily through a zoning and

overlay system with an associated Table of Use, as well as through a number of specific prescriptions. The plan is expected to provide a strategic direction for the management of the TWWHA for at least the next seven years.

The guiding Vision for management of the TWWHA through this plan is:

To identify, protect, conserve, present, and, if appropriate, to rehabilitate, the World Heritage, National Heritage and other natural and cultural values of the TWWHA and to transmit that heritage to future generations in as good or better condition than at present.

CULTURAL VALUES

The Management Plan identifies Aboriginal cultural values of the TWWHA from a broad perspective and elevates the significance of these values, as Aboriginal cultural values are the only cultural values recognised in the World Heritage listing of the TWWHA. The plan is formulated under the NPRMA, which allows for, and requires, management of a range of cultural values. These include historic heritage values and cultural values associated with post-European activities in the TWWHA. These values are considered in the Management Plan separately and are managed in a manner consistent with that of World Heritage values.

By identifying the Aboriginal cultural values from a broad perspective, the Management Plan has been developed to move beyond a restrictive view that would limit this heritage to one derived largely from evidence of Pleistocene occupation or other sites of material culture, to one that views the TWWHA as a cultural landscape in its entirety. Across its extent, the TWWHA reflects a tangible expression of the presence of Tasmanian Aboriginal people. However, it is also imbued with the intangible; that which gives cultural meaning to the landscape, seascape and skyscape. The plan acknowledges the continuing existence of this living, contemporary culture; one

*A special place for Tasmanian Aboriginal people,
Southwest National Park
Photo Jillian Mundy*



that requires access to Country and a recognised and genuine management role for Aboriginal people.

From this perspective, a key threat to the effective management of cultural values in the TWWHA is the lack of understanding about both the nature of those values and their place in the landscape. In addition, Aboriginal cultural values have not been identified to the same extent as other values. In particular, they have not previously been the focus of management efforts and resourcing to the same extent as natural values. The resourcing of cultural heritage management has not reflected the importance of the cultural heritage criteria in the TWWHA listing. These values have been further threatened by the limited participation by Aboriginal people in this management, and by a lack of recognition and opportunity for cultural practice.

The Management Plan addresses these issues by providing for a range of measures that increase the

capacity of the Department of Primary Industries, Parks, Water and Environment, including through the establishment of a cultural management group for the TWWHA. The group will oversee implementation of Aboriginal cultural values management. In particular, it will establish links between the natural and cultural heritage aspects of Aboriginal interests, provide advice on matters pertaining to Aboriginal cultural values in the TWWHA, oversee project and policy development, and work closely with Aboriginal people and their organisations. Engagement with Aboriginal people will be a key task of the cultural management group, which will develop a stand-alone Community Engagement Agreement.

The cultural management group will also play a key role in providing cultural awareness training for TWWHA management staff; identifying values and associated management requirements in the 2013 minor boundary extension and across the

Pencil pines, Walls of Jerusalem National Park Photo DPI/PWE



TWWHA as a whole; revitalising approaches to the interpretation and presentation of cultural heritage; facilitating opportunities for access, use of resources and cultural practice; and developing a potential pathway for effective joint management. The cultural management group will also liaise with the Australian Government in the development of a dual name for the TWWHA and its recognition as a Cultural Landscape under the World Heritage Convention. Additionally, it will implement a timeframe and process for developing governance arrangements that provide a role for a non-government Aboriginal organisation in the joint management of the cultural values of the TWWHA.

NATURAL VALUES

The natural values of the TWWHA can be compared to the exceptional natural beauty of two other temperate wilderness areas in the Southern Hemisphere: south-west New Zealand (Fiordland) and western Patagonia in southern Chile and Argentina. All three areas display strong geological, floral and faunal links to the early supercontinent Gondwana. Together, they provide evidence of former continental configurations and environments. The TWWHA's complex and unusually complete geological history provides a valuable record of major evolutionary stages stretching back 1,300 million years, as well as the glacial legacies of three major periods stretching across 850 million years. Primitive and relict floral and faunal groups, with strong New Zealand and Patagonian affinities, provide evidence of the area's Gondwanan connections. Extensive outcrops of Jurassic dolerite provide evidence of the Gondwanan break-up that started about 180 million years ago.

The TWWHA's temperate rainforest, eucalypt forest, buttongrass moorland and alpine communities form a distinct mosaic of Antarctic and Australian elements. The moorlands and associated blanket bogs are key

parts of one of the Southern Hemisphere's most extensive organosol terrains. Isolation from the Australian mainland has led to very high levels of Tasmanian endemism. More than 65 per cent of species among some invertebrate groups, along with a high proportion of the flora and other fauna, are endemic to the TWWHA. Its temperate alpine ecosystems are among the most diverse in the world, with about 70 per cent of their flora endemic to Tasmania.

Several types of fauna in the TWWHA are closely related to species found in other land masses that were once part of the Gondwanan supercontinent. Additionally, the TWWHA is a refuge for a wide range of rare and threatened species, including carnivorous marsupials. They include the Tasmanian devil (*Sarcophilus harrisii*), which is the world's largest carnivorous marsupial, the spotted-tailed quoll (*Dasyurus maculatus*) and the eastern quoll (*D. viverrinus*). The area has diverse habitats, including seabird colonies on islands, high-energy coastlines, unique marine environments within Port Davey and Bathurst Harbour, extensive freshwater systems, Australia's most extensive glacially formed landscapes, deep karst systems and many different vegetation communities, including extensive stands of tall eucalypt forest.

The Management Plan identifies key knowledge gaps in the understanding of the TWWHA's natural values. In response, it provides for a systematic program of identification, inventory, assessment, mapping and documentation of these and other natural values. It identifies research and monitoring programs that provide an understanding of trends in the conservation status of priority natural values. It also identifies risks to those values, and provides management strategies and a rigorous assessment of management effectiveness.

The TWWHA's natural values are facing potentially rapid change. Climate change, fire and the incursions of invasive species are recognised as major threats to these values and the area's processes. The plan recognises

that strategies to mitigate the impact of climate change need to range from protecting refugia and increasing ecosystem resilience, to documenting systems and environments that are likely to be lost in the near future. There is a critical need for greater knowledge about optimal fire regimes for priority ecosystems and species, as well as the effectiveness of planned ecological burns to mitigate the effects of fire. These issues need to be addressed in the context of climate-induced change to soils, vegetation and conditions suitable for planned burning. The plan provides for a broad and strategic approach to biosecurity through management actions that prevent incursions into Tasmania, and the TWWHA itself, while establishing appropriate contingency plans, ongoing eradication, and the control of pests and diseases where feasible.

Some historical use has impacted parts of the TWWHA. For example, the 2013 boundary

*Russell Falls Track, Mount Field National Park
Photo Tourism Tasmania and Geoffrey Lea*



extension contains areas that are affected by their previous use for forest production activities, including roadworks, native forest harvesting and small-scale quarrying. The plan acknowledges that insufficient resources are available in the short to medium term to cover all of the areas that may require rehabilitation. As a response, it puts forward a strategic approach to identifying and implementing the area's rehabilitation needs.

PRESENTATION

Presentation is a key requirement of the World Heritage Convention. In addition, tourism and recreational uses that are consistent with the protection of natural and cultural values are management objectives for all classes of reserved land within the TWWHA. Management of presentation covers all aspects of the visitor experience, including information, interpretation, recreation opportunities, management presence and facilities. The visitor experience has many strands, ranging from types of engagement to the expectations and demands of visitor groups. The TWWHA is a vital cornerstone of Tasmanian and interstate tourism. Additionally, international tourists comprise a high proportion of visitors in some key locations. The recreational opportunities are also of great importance to many Tasmanians.

The plan prescribes criteria for the assessment of activities in the TWWHA to ensure the protection of World Heritage and other natural and cultural values of the TWWHA. The criteria ensure that indirect and cumulative impacts are considered in addition to social and economic impacts. Additional criteria are also prescribed for commercial tourism proposals in the TWWHA. These provide certainty for stakeholders and the tourism industry and provide for appropriate consideration of the sustainability of any proposal.

A strategic framework is needed to ensure a consistent and coherent approach to providing diverse presentation opportunities to the full

spectrum of users, and potential users, of the TWWHA. This framework, formulated as a Tourism Master Plan, will include the following key themes:

- a coherent marketing strategy that integrates the TWWHA's promotion and values with statewide and regional strategies;
- current and future visitor expectations, including demand analysis;
- Aboriginal cultural presentation;
- natural values presentation and conservation partnerships;
- historic heritage;
- prioritisation of investment in facilities and experiences;
- social inclusion;
- sustainable use;
- interpretation;

- commercial opportunities;
- opportunities for the support of management through tourism;
- strategic data collection and analysis;
- access;
- staff and operator training and accreditation;
- recreation opportunities and a recreation demand analysis; and
- strategic partnerships.

Access is a fundamental aspect of the visitor experience. However, it requires careful management practices that are consistent with the protection of the TWWHA's natural and cultural values:

Walking tracks: Considerable efforts have been made to develop and deliver the strategic management of walking tracks. These form the basis of track management over the life of the plan.

Cockle Creek, Southwest National Park/Recherche Bay Nature Recreation Area

Photo Tourism Tasmania & Dennis Harding



Boating: Motorised boating remains a recognised access option within suitable waterways.

Roads: Use of the road network is a key presentation issue associated with the 2013 minor boundary extension. It is not possible or desirable to retain the full extent of roads within the added areas, but the plan recognises the unique opportunity to fully consider the retention of those roads that would deliver a net benefit to the future presentation of the TWWHA.

Aircraft: The plan provides an appropriate and balanced approach to providing opportunities for aircraft access. Aircraft access is provided on a sliding scale across management zones, with landings in the Wilderness Zone limited to those required for management purposes. Aircraft access is prohibited or restricted in key recreational areas to avoid impacting the recreational experience sought by some visitors to those areas.

The Management Plan identifies where there is a need for more detailed management prescriptions and actions to ensure sustainable use for presentation. These areas, uses and activities include:

- Port Davey and Bathurst Harbour;
- Gordon and Franklin rivers;
- tracks and campsites;
- cave and karst features;
- climbing and canyoning; and
- snow skiing (Mount Field).

There is growing recognition of the potential to enrich the presentation of the cultural heritage of the TWWHA. In this respect, the Management Plan explicitly acknowledges Tasmanian Aboriginal people's custodianship over Aboriginal resources. This extends to the use of Aboriginal cultural heritage in the presentation of the TWWHA. Tangible and intangible elements of Aboriginal cultural values have been identified as key drivers of a revitalised approach

to presentation. Proper control of this use is a vital component of the TWWHA's contribution to the health and wellbeing of Tasmanian Aboriginal people.

A considerable wealth of historic heritage material and associated stories has been generated within the TWWHA since European settlement. This is derived from activities such as exploration, whaling, penal settlement, pining and timber getting, mining, grazing, snaring, early tourism, bushwalking and other recreational activities, hydro-electricity development and conservation protests. Historic heritage is an important and evolving feature of the TWWHA's interpretation and presentation. The Management Plan seeks to develop the presentation of historic heritage through partnerships with communities and the fostering of private investment.

The 2013 minor boundary extension included a

Overland Track, Cradle Mountain-Lake St Clair National Park

Photo Tourism Tasmania & Don Fuchs



number of areas where a range of recreational activities have been conducted (in some cases over several generations) and where the opportunity to continue these activities is of great importance to surrounding communities. It is acknowledged that this recreation has been, for the most part, consistent with the conservation of values that have led to the inclusion of the areas in the TWWHA. Continuation of these activities is an important aspect of presentation and is facilitated and supported within the plan. Furthermore, areas within the minor boundary extension include features that may provide unique opportunities for additional presentation options.

COMMUNITY ENGAGEMENT

The World Heritage Convention requires the adoption of a general policy that aims to give natural and cultural heritage a function in the life of local communities. In seeking to meet this requirement, the plan presents the TWWHA as an integral part of social and economic wellbeing in these communities by providing several strategies. The legitimate right of local communities to participate in the ongoing management of reserved land is recognised.

The development of a TWWHA communications strategy will include a review of delivery methods for management information that is relevant to local communities and the wider public. The strategy will also develop a stakeholder register that identifies the consultation interests of registered groups and develops consultation agreements. WILDCARE Inc will continue to be supported as the primary pathway for encouraging and support of volunteers. Broader supporting processes will be implemented to enable meaningful and active community, business and local government involvement in the management of the TWWHA.

The Management Plan will ensure that the social and economic implications for local communities are fully considered and, consistent with protection of the TWWHA's natural and cultural values, seek

to maximise social and economic benefit in these communities. In response to the increased amount of adjacent private land after the 2013 minor boundary extension, the plan provides for the development of processes and procedures that support cooperative planning and action with owners of property that adjoins the TWWHA.

GENERAL MANAGEMENT

A number of areas, such as fire planning and response and wilderness values, have broad implications for managing World Heritage values. The Management Plan incorporates existing strategic planning and policy direction that underpins the highly regarded fire management approach in Tasmania's parks and reserves while prescribing the development of an integrated fire plan for the TWWHA. The inclusion of the majority of the TWWHA into a Wilderness Zone with highly restricted use provisions ensures the protection of the integrity of the TWWHA and the highly valued wilderness recreational experience it provides.

The Management Plan also functions as the statutory plan under the State NPRMA for the various reserves in the TWWHA and includes provisions that set out how values, in particular historic heritage, that are not recognised as part of the Outstanding Universal Value of the TWWHA are to be managed.

USE AND DEVELOPMENT CONTROL

Use and potential development in the TWWHA are primarily regulated and controlled through a system of four Management Zones and nine Management Overlays. The Management Zones (Visitor Services, Recreation, Self-Reliant Recreation and Wilderness) reflect the spectrum of current and anticipated use and their associated levels of infrastructure. The Management Overlays (Motorised Vessel, Hunting, Hunting Access,

Biosecurity, Karst Management, Forestry Research, Water Supply, Special Management and Remote Area Management) are intended to be more flexible spatial management tools that allow for an appropriate response to possible changes in circumstances (for example, novel biosecurity threats), or for identifying more specialised management regimes and other permitted uses within particular areas or locations.

A Table of Use is associated with the Management Zone and Management Overlay system. The table helps to clarify the types of permitted activities, the circumstances under which they may occur, and the spatial area where they may generally occur, including the application of assessment processes and criteria. Specific prescriptions are provided for limited primary production.

MONITORING, EVALUATION AND REPORTING

The plan has been developed and structured to support adaptive management of the TWWHA through the Parks and Wildlife Service monitoring and evaluation framework. It articulates a Vision that is developed into Objectives for fundamental areas of management. Key Desired Outcomes (KDOs) are specific outcomes for priority issues within those key areas. KDOs have an associated set of Management Actions that are designed to achieve each KDO. Each Management Action has an Evaluation statement to determine or guide the subsequent evaluation of the Management Plan's effectiveness. The findings of that evaluation inform the review of future implementation actions and the outcomes they are expected to achieve.

Southern peaks of the Cradle Mountain-Lake St Clair National Park Photo Joe Shemesh



An aerial photograph of a coastal landscape. In the foreground, there's a sandy dune area with patches of green vegetation. A sandy path or dune ridge runs diagonally across the frame. To the left, a sandy beach meets the ocean with white waves. In the background, a range of mountains is visible under a cloudy sky. A teal banner is at the top, and a white box contains the title text.

I BASIS FOR MANAGEMENT

The Tasmanian Wilderness World Heritage Area (TWWHA) is one of the largest temperate wilderness areas in the world. The area's size exceeds 1.58 million hectares, which is almost a quarter of the area of Tasmania. It extends from the island's exposed southern and western coastlines to the tall eucalypt forests on the TWWHA's eastern margins and the high plateaus and escarpments overlooking the northern coastline.

The TWWHA contains tangible Tasmanian Aboriginal cultural heritage that reflects occupation of the land for at least 35,000 years; from when the area was in the grip of the last Ice Age, through to sites in use following European occupation of Tasmania. This heritage includes rich and diverse archaeological evidence. The Ice Age occupation sites are thought to be evidence of the world's most southerly human occupation during that time. For Tasmanian Aboriginal people, the landscape, seascape and skyline of the TWWHA have deep, intangible cultural significance. Every feature of the landscape is imbued with meaning. A continuing and deeply meaningful connection to Country is of immense importance to Tasmanian Aboriginal people. This connection allows them to find spiritual meaning within the area and to utilise and practise custodianship over its resources.

The TWWHA has unique estuaries, wild rivers, lakes, dramatic and varied scenery, karst landscapes, rainforests, tall eucalypt forests, moorlands, glacial and periglacial features, patterned mires and alpine vegetation. This combination of features exists within an unusually nutrient-poor, high-rainfall environment. The diverse set of landforms contains an extensive record from almost every geological period. There are outstanding examples of ongoing tectonic, fluvial, lacustrine, karst, periglacial, mire and coastal processes. The area, which is a refuge for many threatened species and vegetation communities, contains a high degree of endemism. Many plants and animals are descended from the biota of Gondwana, including some of the world's longest-lived and tallest plant species.

Through its World Heritage listing, the TWWHA is formally recognised as part of the natural and cultural heritage of the world because of its Outstanding Universal Value. It was first inscribed on the World Heritage List in 1982 and has been expanded on several occasions, including a major extension in 1989 and minor boundary modifications in 2010, 2012 and 2013. The TWWHA is also listed as a National Heritage Place (see Section 1.3 and Section 1.4, page 26). Its values and status make it a place of international and national significance, part of the natural and cultural heritage of Australia and the world. It has immeasurable intrinsic value in this context as an extensive reserve within which those values are protected.

The TWWHA makes a major contribution, in many different contexts, to the State's social and economic wellbeing. As such, it is an invaluable asset. It is a provider of ecosystem services and power generation, and a setting for many different recreational opportunities. Additionally, it offers intrinsic value as a contributor to positive perceptions in key economic sectors and as a cornerstone of vibrant tourism. There is considerable scope to increase these contributions while continuing to protect the TWWHA's natural and cultural values, particularly through the fostering of greater private investment as an accepted component of future management.

Map 1 Location of the TWWHA



1.1 TENURE

The TWWHA has a variety of land tenures but primarily consists of reserve classifications proclaimed under the *State Nature Conservation Act 2002* (NCA). The reserve classifications are national park, State reserve, historic site, nature recreation area, game reserve, conservation area and regional reserve. A number of these reserves were established some time ago, including Mount Field National Park. It was one of the two first national parks declared in Tasmania, in 1916, and was included in the TWWHA in the 2013 extension. Port Davey-Bathurst Harbour was gazetted as a marine nature reserve through the *Fisheries Amendment Rules 2005* issued under the *Living Marine Resources Management Act 1995*. The reserve extends to the high water mark of all rivers, bays and estuaries and is within the Southwest National Park. The boundaries of the marine nature reserve are shown in Schedule 2 Part 2 of the *Fisheries Rules 2009*. The TWWHA includes Pedra Branca and other islands off the south coast.

The most recent reserves were proclaimed in 2013, through the reservation processes that were provided by the *Tasmanian Forest Agreement Act 2013* (TFA Act). They cover, in total, more than 95,000 hectares. The TFA Act was repealed in 2014 through the enactment of the *Forestry (Rebuilding the Forest Industry) Act 2014*. These reserves, which remain in place, run along the eastern margin of the TWWHA, from Recherche Bay to the southern Central Plateau east of Lake St Clair. Following proclamation of the *Forest Management Act 2013*, areas previously designated as forest reserves throughout Tasmania were proclaimed as either conservation areas or regional reserves under the NCA. Within the TWWHA, these areas comprise approximately 14,000 hectares.

A number of the TWWHA's conservation areas include areas vested in Hydro Tasmania. These areas, while reserved under the NCA, are administered and managed by Hydro Tasmania in ways that are consistent with the NCA and NPRMA but allow activity associated with hydro-electricity generation. This activity pre-exists the declaration of the area

as World Heritage. Generation assets, within and next to the TWWHA, are a critical component of Tasmania's electricity-generation capacity, which not only meets the State's strategic needs but also provides income through the export of power to the national grid via the Basslink underwater cable. For all other areas reserved under the NCA, the Director of National Parks and Wildlife (Director) is the managing authority within the meaning of the NPRMA. The functions of the Director are set out in Section 7 of the NPRMA. Operational management of reserved land for which the Director is the managing authority is the responsibility of the Tasmanian Parks and Wildlife Service (PWS) of the Tasmanian Department of Primary Industries, Parks, Water and Environment (DPIPWE).

The TWWHA includes land classified as Future Potential Production Forest Land (FPPFL) within the meaning of the *Forestry (Rebuilding the Forest Industry) Act 2014*. There are approximately 25,400 hectares of FPPFL that is Crown Land along the lower margins of the Great Western Tiers, upper Mersey Valley and to the east of Cradle Mountain, with a small area in the vicinity of Lake Gordon. These areas of FPPFL are administered as unallocated Crown Land, for which the Minister responsible for the *Crown Lands Act 1976* is the managing entity. The remaining area of FPPFL, comprising approximately 9,700 hectares of freehold and vested land throughout the eastern Central Plateau, is managed by Hydro Tasmania.

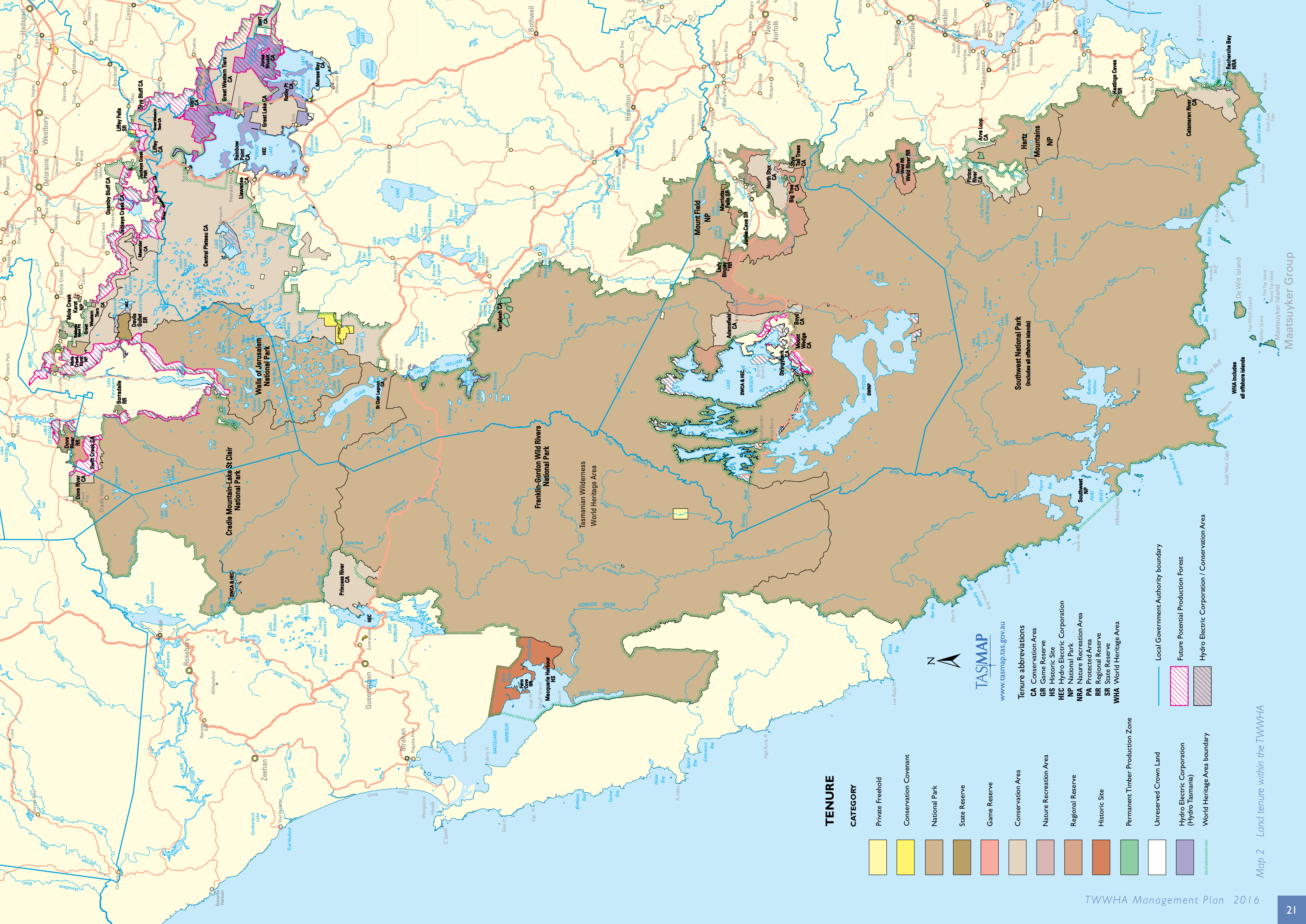
Three TWWHA land parcels are vested in the Aboriginal Land Council of Tasmania, in trust for Aboriginal people in perpetuity under the *Aboriginal Lands Act 1995*.

A number of freehold properties are within the TWWHA. Some are subject to conservation covenants through the NCA. Bush Heritage Australia and the Tasmanian Land Conservancy manage these properties for conservation purposes. Several other small freehold properties are within the Central Plateau area and at Kelly Basin.

Table 1.1 provides a complete list of reserves and other land tenures within the TWWHA.

Table 1.1 Land tenure within the TWWHA

Land Tenure	Area (hectares)
<i>Nature Conservation Act 2002 Reserves</i>	
National Park	
Southwest National Park	641,300.0
Franklin-Gordon Wild Rivers National Park	463,283.4
Cradle Mountain-Lake St Clair National Park	161,582.7
Walls of Jerusalem National Park	51,770.8
Mount Field National Park	22,514.0
Hartz Mountains National Park	12,124.7
Mole Creek Karst National Park	1,584.3
State Reserve	
Devils Gullet State Reserve	1,118.1
Marriotts Falls State Reserve	135.3
Hastings Caves State Reserve	112.8
Liffey Falls State Reserve	105.8
June Cave State Reserve	21.9
Historic Site	
Macquarie Harbour Historic Site	15,223.4
Game Reserve	
Farm Cove Game Reserve	1,692.7
Conservation Area	
Central Plateau Conservation Area	92,123.7
Great Western Tiers Conservation Area	14,501.5
Adamsfield Conservation Area	5,375.9
Picton River Conservation Area	4,613.7
North Styx Conservation Area	4,226.3
Great Lake Conservation Area	4,014.8
Catamaran River Conservation Area	3,917.4
Meander Conservation Area	1,664.0
Princess River Conservation Area	1,115.5
Liffey Conservation Area	1,056.1
Quamby Bluff Conservation Area	944.8
Arve Loop Conservation Area	944.3
Dove River Conservation Area	861.5
Drys Bluff Conservation Area	690.9
Swift Creek Conservation Area	461.7
Tarraleah Conservation Area	346.8
Styx Tall Trees Conservation Area	337.1
Jackeys Creek Conservation Area	212.8
Mersey River Conservation Area	134.2
Big Tree Conservation Area	111.6
Unnamed Conservation Area (Mayberry Purchase)	17.6
Jones Rivulet Conservation Area	64.3



TENURE

- CATEGORY**
- Private Freehold
 - Conservation Covenant
 - National Park
 - State Reserve
 - Game Reserve
 - Conservation Area
 - Nature Recreation Area
 - Regional Reserve
 - Historic Site
 - Permanent Timber Production Zone
 - Unreserved Crown Land
 - Hydro Electric Corporation (Hydro Tasmania)
 - World Heritage Area boundary
- Tenure abbreviations**
- CA Conservation Area
 - GR Game Reserve
 - HS Historic Site
 - HEC Hydro Electric Corporation
 - NP National Park
 - NRA Nature Recreation Area
 - PA Protected Area
 - RR Regional Reserve
 - SR State Reserve
 - WHA World Heritage Area
- Local Government Authority boundary**
- Future Potential Production Forest
 - Hydro Electric Corporation / Conservation Area

Map 2 Land tenure within the TWWHA

Land Tenure	Area (hectares)
<i>Nature Conservation Act 2002 Reserves</i>	
Conservation Area	
Stringybark Conservation Area	33.3
Southwest Conservation Area	215.8
Unnamed Conservation Area (Wet Caves Road Purchase)	94.8
Mount Wedge Conservation Area	9.9
Boyd Conservation Area	10.5
Conservation Area vested in Hydro Tasmania	3993.8
Regional Reserve	
Styx River Regional Reserve	11,240.1
Florentine River Regional Reserve	7,469.7
Weld River Regional Reserve	4,562.6
Clear Hill Regional Reserve	2,770.3
Dove River Regional Reserve	2,415.0
Humboldt Ridge Regional Reserve	610.6
Lady Binney Regional Reserve	379.3
Borradaile Regional Reserve	254.9
South Weld Regional Reserve	46.8
Nature Recreation Area	
Recherche Bay Nature Recreation Area	469.1
Other Tenures	
Aboriginal Land (Ballawinne Cave)	560.0
Aboriginal Land (Wargata Mina Cave)	154.4
Aboriginal Land (Kuti Kina Cave)	15.5
Future Potential Production Forest Land (unallocated Crown Land) ¹	25,428.4
Future Potential Production Forest Land (Hydro Tasmania) ¹	9,734.9
Permanent Timber Production Zone Land ²	942.3
Private Freehold with Conservation Covenant	1692.5
Private Freehold	543.1
Crown Land	117.2
Crown Land Public Reserve	3.8
Casement (land set aside for access purposes - such as road reserves)	78.2
Inland Water (Crown Land)	6.3
Total Area	1,584,159.5³

¹ See Section 10.2.5 (page 214) for management of this tenure including policy on future reservation.

² See Section 10.2.4 (page 213) for management of this tenure including policy on future reservation.

³ The areas provided in this table are determined from the State's digital cadastral database boundaries which are subject to ongoing adjustment to improve accuracy. The total area of the TWWHA differs from the official World Heritage area as gazetted by the Commonwealth of Australia in July 2013. The 2013 gazetted areas remain the official areas of the TWWHA until the Australian and Tasmanian Governments agree to a process to review the gazetted areas.

1.2 WORLD HERITAGE CONVENTION

Australia is a signatory to UNESCO's Convention Concerning the Protection of the World Cultural and Natural Heritage, known as the World Heritage Convention (the Convention). The Convention provides a permanent framework that complements and stimulates national programs aimed at conserving natural and cultural areas of Outstanding Universal Value.

The Convention establishes a list of sites of global significance. The World Heritage Committee is responsible for the implementation of the Convention and consists of representatives from 21 of the States Parties to the Convention. It determines whether a property is inscribed on the World Heritage List and has an oversight role in the state of conservation of inscribed properties. Three international non-governmental or intergovernmental organisations are named in the Convention to advise the Committee in its deliberations: The International Union for the Conservation of Nature (IUCN), The International Council on Monuments and Sites (ICOMOS) and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM). The World Heritage Committee has no power in relation to the ownership or management of listed properties. The sovereignty of a listed site remains with the country in which the site is located. Management is guided by the duties and obligations laid out in the Convention.

When a country becomes party to the Convention, it recognises a duty to ensure the identification, protection, conservation, presentation and transmission to future generations of the World Heritage on its property. In particular Article 4 and 5 of the Convention state:

Each State Party to this Convention recognizes that the duty of ensuring the identification, protection,

conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and cooperation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.

To ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage situated on its territory, each State Party to this Convention shall endeavor, in so far as possible, and as appropriate for each country:

- (a) to adopt a general policy which aims to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes;*
- (b) to set up within its territories, where such services do not exist, one or more services for the protection, conservation and presentation of the cultural and natural heritage with an appropriate staff and possessing the means to discharge their functions;*
- (c) to develop scientific and technical studies and research and to work out such operating methods as will make the State capable of counteracting the dangers that threaten its cultural or natural heritage;*
- (d) to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage; and*
- (e) to foster the establishment or development of national or regional centres for training in the protection, conservation and presentation of the cultural and natural heritage and to encourage scientific research in this field.*

The Australian and Tasmanian governments have

entered into a long-term partnership arrangement, under the 2009 Australian World Heritage Intergovernmental Agreement, to meet these obligations. In particular, funding for the management of the TWWHA has been on the basis of a joint arrangement between the two governments for almost all of its period of inscription.

Central to the Convention is the concept of Outstanding Universal Value (OUV). World Heritage properties are recognised as being exceptional or superlative on a global scale on the basis of the values within them, that is, those values are outstanding from a global perspective. To be considered of Outstanding Universal Value, a property needs to:

- meet one or more of ten criteria;
- meet the conditions of integrity;
- if a cultural property, meet the conditions of authenticity; and
- have an adequate system of protection and management to safeguard its future.

Authenticity relates to the true cultural expression of the values of a property, in material or conceptual form, that cannot be represented by a copy or re-creation. Integrity relates to the 'wholeness and intactness' of the property and how it conveys the values it holds. Integrity can relate to the size of the property (sufficient size to continue to represent the values) and to any threats affecting the property. All properties inscribed on the World Heritage List must have adequate protection and management mechanisms in place.

At the time of publication, the TWWHA was one of only two World Heritage properties to fulfil seven of ten criteria. Those criteria are:

- (iii) to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

- (iv) to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- (vi) to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;
- (vii) to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- (viii) to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- (ix) to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, freshwater, coastal and marine ecosystems and communities of plants and animals; and
- (x) to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

A 'Statement of Outstanding Universal Value' (SOUV) is the official statement about the value of the property that is prepared by the State Party and adopted by the World Heritage Committee. The statement encapsulates why the property is considered to be of Outstanding Universal Value: how it satisfies the criteria, the requirements of authenticity and integrity, and the protection and management requirements. These statements have been required since 2007 and a retrospective SOUV will be prepared for the TWWHA within the life of the plan following completion of the required cultural

values investigations. It is the key reference point for protection and management of a World Heritage property. It is also the reference point for monitoring and reporting. Its adoption will then allow for it to function as such in the management of the TWWHA. The guide to the values that form part of the OUV of the TWWHA, including authenticity and integrity, are the nomination and minor boundary modification documents submitted by the Australian Government to the World Heritage Committee.

It was against the backdrop of the pivotal conservation campaign to prevent the construction of a hydro-electricity scheme on the Franklin River that the area was first inscribed on the World Heritage List in 1982 as the Western Tasmania Wilderness National Parks World Heritage Area, encompassing an area of 769,355 ha. The inscription laid the basis for the Australian Government's ability to prevent the dam through its external powers, which was upheld by the High Court. Works undertaken to commence construction of the dam can still be seen in the lower Gordon and Franklin Rivers.

A significant extension was accepted in 1989 and the renamed Tasmanian Wilderness World Heritage Area was expanded to 1,383,865 ha, an increase of 78%. This nomination was an outcome of an intense political debate in both Tasmania and across Australia regarding the protection of tall eucalypt forests in Tasmania. In 2010 a minor boundary modification added an additional 23,873 ha. As the reservation of this area under Tasmanian legislation was anticipated prior to approval of the 1999 TWWHA Management Plan, the area added in 2010 was already subject to that plan. In 2012 the area between Melaleuca and Cox Bight was added through a minor boundary modification following the cessation of mining in that area, adding a further 3,810 ha. The current extent of the TWWHA was determined following a minor boundary modification in 2013, which added a further 172,050 ha. The modification included areas identified through the *Tasmanian Forests Agreement*

Act 2013 and areas of existing reserves such as Mt Field National Park. The 2012 and 2013 additions are shown in Map 3.

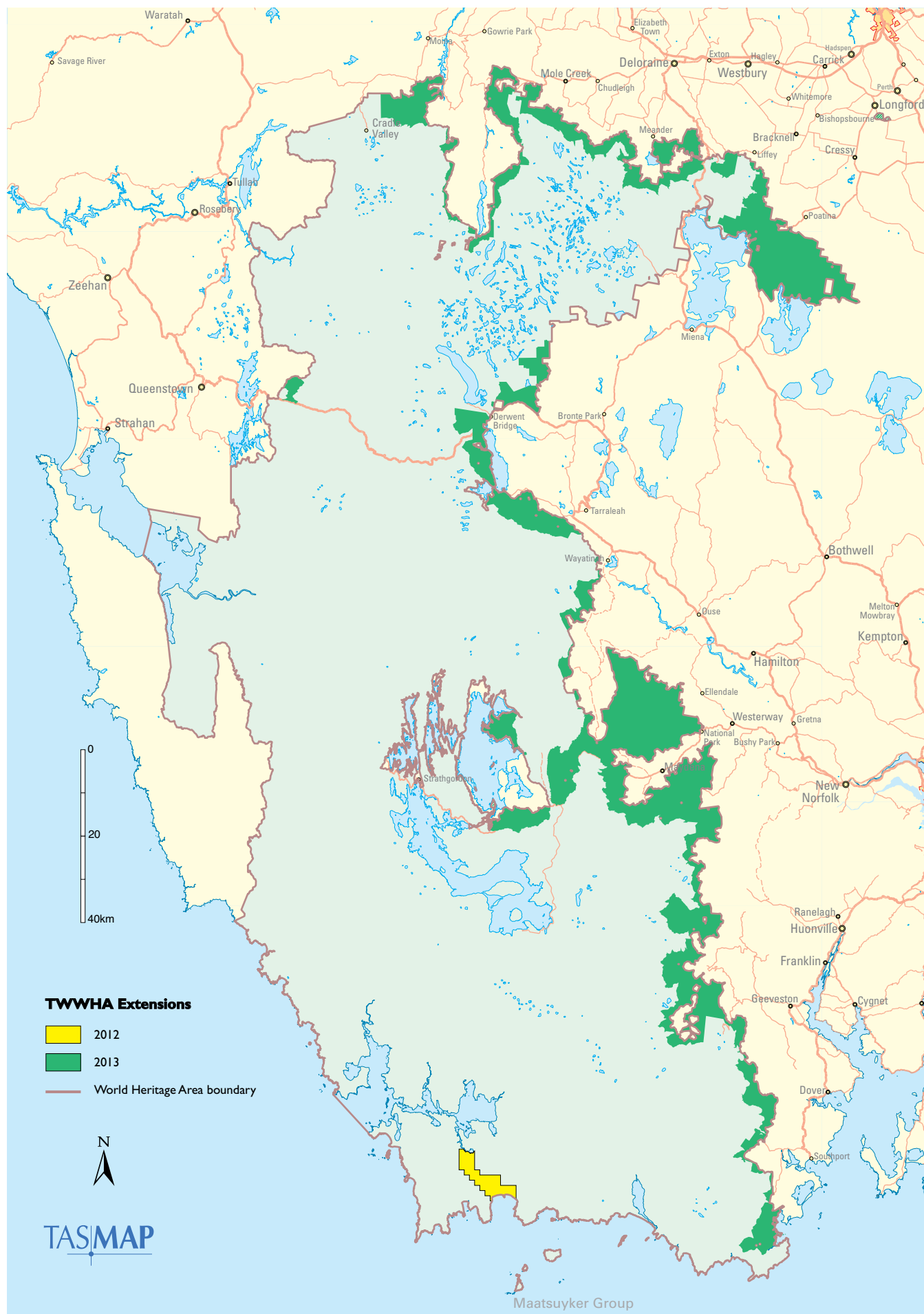
The TWWHA was inscribed in 1982 under cultural criteria (iii), (iv) and (vi). The 1989 extension nomination was for cultural criteria (iii), (v) and (vi), but these were not endorsed by the World Heritage Committee. Subsequent descriptions of the cultural values refer to criterion (v). The 2010 and 2012 minor boundary modifications did not refer to specific criteria. The 2013 minor boundary modification included specific details for the four natural criteria only. The 2013 minor boundary modification recognised that additional work was required to identify cultural values that would enhance the justification under the cultural criteria, which were identified as (iii), (v) and (vi). It is expected that the retrospective SOUV will identify the cultural criteria as being (iii), (iv) and (vi) consistent with the original inscription and as described in this Management Plan. It should be noted that some changes to the criteria descriptions have occurred since the original inscription; however, the overall meaning of the criteria remains the same.

1.3 NATIONAL HERITAGE LISTING

The TWWHA was included on the National Heritage List in 2007. The National Heritage List is a list of places of outstanding natural, Indigenous or historic heritage value to the nation. The TWWHA meets six of the nine criteria for listing:

- a. The place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history.
- b. The place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.

Map 3 TWWHA minor boundary extensions 2012 and 2013



- c. The place has outstanding heritage value to the nation because of the place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history.
- d. The place has outstanding heritage value to the nation because of the place's importance in demonstrating the principal characteristics of:
 - i. a class of Australia's natural or cultural places; or
 - ii. a class of Australia's natural or cultural environment.
- e. The place has outstanding heritage value to the nation because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.
- g. The place has outstanding heritage value to the nation because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

1.4 COMMONWEALTH ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) is the Australian Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places (including World Heritage properties) – defined in the EPBCA as matters of national environmental significance (MNES). The EPBCA includes provisions to enhance, conserve and present World Heritage values.

Any action that is likely to have a significant impact on any MNES must be referred under the EPBCA and may require approval. Actions that may impact on the TWWHA may need to be referred under the EPBCA for several reasons. World Heritage properties (and National Heritage places) are MNES, and any activity that may have a significant impact on the World Heritage values of the TWWHA needs to be considered under the EPBCA. Further, a number of other MNES, such as listed threatened species and migratory species, are found within the boundaries of the TWWHA, and potential impacts on these matters may also require referral.

Schedule 5 of the *Environmental Protection and Biodiversity Conservation Regulations 2000* sets out principles for the management of World Heritage properties and National Heritage places and sets out requirements for World Heritage management plans.

To have a significant impact on a World Heritage property, it is not necessary for an action to impact on the whole of the property, all of the attributes of the property, or a whole attribute of the property. It is sufficient if an action is likely to have a significant impact on an attribute of a World Heritage property that embodies, manifests, shows, or contributes to the Outstanding Universal Value and/or integrity of the property.

An action is likely to have a significant impact on the World Heritage values of a declared World Heritage property if there is a real chance or possibility that it will cause:

- one or more of the World Heritage values to be lost;
- one or more of the World Heritage values to be degraded or damaged; or
- one or more of the World Heritage values to be notably altered, modified, obscured or diminished.

Recovery plans for listed threatened species and ecological communities and threat abatement plans for key threatening processes may be made under the EPBCA by the Australian Government Minister for the Environment and are one of the key tools in their management. In making an approval under the EPBCA, the Australian Government Minister must not act inconsistently with a recovery plan or threat abatement plan. The Australian Government relies on the cooperation of the Tasmanian Government to implement plans jointly to the extent to which the plan applies in the State. Recovery plans are an important mechanism in the protection of species and communities listed under the EPBCA. Recovery plans set out the research and management actions necessary to stop the decline of, and support the recovery of, listed threatened species or threatened ecological communities. The aim of a recovery plan is to maximise the long-term survival in the wild of a threatened species or ecological community.

Schedule 5 of the EPBC Regulations sets out the general principles of management for World Heritage properties. Those principles are:

- The primary purpose of management of natural heritage and cultural heritage of a declared World Heritage property must be, in accordance with Australia's obligations under the World Heritage Convention, to identify, protect, conserve, present, transmit to future generations and, if appropriate, rehabilitate the World Heritage values of the property.
- The management should provide for public consultation on decisions and actions that may have a significant impact on the property.
- The management should make special provision, if appropriate, for the involvement in managing the property of people who:
 - (a) have a particular interest in the property; and
 - (b) may be affected by the management of the property.

- The management should provide for continuing community and technical input in managing the property.

The Regulations also require that at least one management plan be prepared for each property and provides a number of management planning principles that should be addressed in management plans for World Heritage properties. The Management Plan has been formulated to be consistent with the principles provided in the Regulations for the area subject to the plan.

Provisions on management plans and principles for National Heritage places are set out in Schedule 5A and 5B (places in states and self-governing territories) of the Regulations. The TWWHA was one of a suite of World Heritage properties that was added to the National Heritage List in 2007. No assessment of values was undertaken as the property met World Heritage criteria that corresponded to National Heritage criteria as listed in Section 1.3. As such, an assessment against the criteria for management plans and principles for National Heritage places is not required in the Management Plan. The TWWHA is still considered to be a National Heritage place under the EPBCA with respect to any potential impacts arising from an action.

The EPBCA contains provisions for bilateral agreements between the Australian Government and the states and territories that allow for accredited environmental assessment and approval systems, management arrangements or authorisation processes in those jurisdictions to act as delegated systems for functions and requirements of the EPBCA. For World Heritage properties, a bilateral agreement must be consistent with Australia's obligations under the World Heritage Convention and promote the management of the property in accordance with the Australian World Heritage management principles. A bilateral agreement may provide for the accreditation of a management plan for a declared World Heritage property provided it meets the requirements of Part 2B of the EPBC Regulations.

1.5 STATE LEGISLATION

In Tasmania, the two key pieces of legislation that provide for the proclamation and management of protected areas are the *Nature Conservation Act 2002* (NCA) and the *National Parks and Reserves Management Act 2002* (NPRMA). The NCA provides the mechanism for proclaiming reserved land under a variety of reserve classifications. The purposes of reservation for each class of reserved land are set out in Schedule 1 of the NCA. These apply to all corresponding reserved land classifications within the TWWHA as set out in Table 1.2 opposite.

The NPRMA provides for the management of reserved land and sets out management objectives for each class of reserved land. The management objectives are provided in Schedule 1 of the NPRMA (see Appendix A, page 220). The management objectives are not ranked and apply equally throughout a reserve subject to the provisions of any applicable management plan.

Under Section 27(1)(g) of the NPRMA, management plans must specify which management objectives are to apply for each class of reserved land subject to the plan.

All of the management objectives for each reserve class apply with the following exceptions and restrictions.

For conservation areas:

- the application of objective (e) does not include special species timber harvesting or other forms of commercial timber harvesting;
- application of objective (f) is restricted to the extraction of gravel for the management purpose of road and asset maintenance where it is required to meet other objectives of the reserve class, particularly in relation to protection from introduced species and diseases; and
- objective (g) is applied only where allowed for

in this Management Plan through the application of a Hunting Overlay (Section 3.1.2.2 page 66).

For regional reserves:

- application of objective (a) is restricted to the extraction of gravel for the management purpose of road and asset maintenance where it is required to meet other objectives of the reserve class, particularly in relation to protection from introduced species and diseases;
- the application of objective (b) does not include special species timber harvesting or other forms of commercial timber harvesting; and
- objective (l) is applied only where allowed for in this Management Plan through the application of a Hunting Overlay (Section 3.1.2.2 page 66).

For nature recreation areas:

- application of objective (j) is restricted to the extraction of gravel for the management purpose of road and asset maintenance where it is required to meet other objectives of the reserve class, particularly in relation to protection from introduced species and diseases.

For game reserves:

- objective (e) is applied only where allowed for in this Management Plan through the application of a Hunting Overlay (Section 3.1.2.2 page 66).

Section 27(1)(h) requires a management plan to provide the reasons why the objectives of a particular class of reserved land are specified. A complex interrelationship of factors is considered for the management of reserves in terms of realising any one particular objective of a specific reserve or, in the case of the TWWHA, an objective for a specific reserve within an area consisting of many reserves of different classes. The objectives specified in this Management

Plan for the various reserve classes in the TWWHA have been applied in the manner prescribed above to ensure their application directly achieve, or are compatible with, the identification, protection, conservation, presentation, transmission, and, if appropriate, rehabilitation of the World Heritage and other natural and cultural values of the property.

The *National Parks and Reserved Land Regulations 2009* provide the regulatory framework for the care, control and management of reserved land under the NPRMA. The regulations serve to implement, at

the appropriate level of detail, the management of reserved land, and are the key mechanism to provide for the authorisation and enforcement of many of the actions prescribed within the Management Plan.

The *State Coastal Policy 1996*, enacted through the *State Policies and Projects Act 1993*, applies to all of Tasmania, including all islands except for Macquarie Island. It therefore applies to those areas of the TWWHA that fall within the Policy's definition of the coastal zone, which is defined as land to a distance of one kilometre inland from the high-water mark.

Table 1.2 Purposes of reservation of reserve classes in the TWWHA

Reserve Class	Purpose of Reservation
National Park	The protection and maintenance of the natural and cultural values of the area of land while providing for ecologically sustainable recreation consistent with conserving those values.
State Reserve	The protection and maintenance of any one or more of the following: a. the natural and cultural values of the land; b. sites, objects or places of significance to Aboriginal people contained in that area of land; c. use of the area of land by Aboriginal people – while providing for ecologically sustainable recreation consistent with conserving any of the things referred to in paragraphs (a), (b) and (c), as applicable.
Game Reserve	The conservation of the natural values of the area of land that are unique, important or have representative value, the conservation of the natural biological diversity or geological diversity of that area of land, or both, and the ecologically sustainable hunting of game species in that area of land.
Conservation Area	The protection and maintenance of the natural and cultural values of the area of land and the sustainable use of the natural resources of that area of land including special species timber harvesting.
Nature Recreation Area	Public recreation and education consistent with conserving the natural and cultural values of the area of land.
Regional Reserve	Mineral exploration and the development of mineral deposits in the area of land, and the controlled use of other natural resources of that area of land, including special species timber harvesting, while protecting and maintaining the natural and cultural values of that area of land.
Historic Site	The conservation of the historic features of the area of land and the presentation of those features for public appreciation and education.

The management objectives for the relevant reserves under the NPRMA, and the policies, objectives and actions within this Management Plan, are considered to be consistent with the outcomes of the *State Coastal Policy 1996*.

Under the *State Policy on Water Quality Management 1997*, protected environmental values (PEVs) are set for all Tasmanian surface waters, including estuarine and coastal waters. PEVs are the current uses and values of the waterways. The Policy provides five categories of PEVs: Protection of Aquatic Ecosystems; Recreational Water Quality and Aesthetics; Raw Water for Drinking Water Supply; Agricultural Water Uses; and Industrial Water Supply. To date, PEVs have been set according to catchment or municipal boundaries and for large areas of the TWWHA. Management of water quality within the TWWHA must be in accordance with the determined PEVs. Where PEVs have not been determined, water-quality management will be for Protection of Aquatic Ecosystems and Recreational Water Quality and Aesthetics.

A number of other Acts apply throughout the TWWHA. For example, the *Threatened Species Protection Act 1995* and the *Weed Management Act 1999*. These Acts place additional obligations on management of the TWWHA. A list of additional Acts is provided in Section 3.3.5, page 85.

1.6 THE MANAGEMENT PLAN

The Management Plan has been formulated in accordance with the requirements of the NPRMA. It is a statutory plan that binds the managing authority for the land to principles and practices that are in accordance with the plan. As the plan applies to a World Heritage property, it has also been formulated in accordance with the EPBC Regulations.

The plan applies to any land within the TWWHA that is reserved under the NCA and for which the

Director is designated as the managing authority. It does not apply to freehold land subject to a conservation covenant under the NCA, freehold land or vested land held by Hydro Tasmania, including where it is classified as FPPFL, or any other freehold land. It also does not apply to Permanent Timber Production Zone Land or land vested in the Aboriginal Land Council of Tasmania.

Section 19(7) of the NPRMA requires that a management plan for conservation areas vested in public authorities can only be approved with the agreement of that authority. Hydro Tasmania has exercised its right to withhold that agreement and, therefore, the Management Plan does not apply to reserved land vested in Hydro Tasmania. This includes Lake Mackenzie and Lake Augusta. Hydro Tasmania manages those areas in accordance with the purposes of reservation set out in the NCA and the management objectives of the reserve class set out in the NPRMA.

Within the TWWHA, Crown Land designated as FPPFL is not subject to the Management Plan. As unallocated Crown Land, this land is managed under the *Crown Lands Act 1976* and in accordance with the *Forestry (Rebuilding the Forest Industry) Act 2014*, which provides management objectives for this class of land.

To describe the management arrangements for tenures in the TWWHA that are not subject to the statutory management plan a Strategic Management Statement is included in the plan (page 206). The purpose of the Strategic Management Statement is to provide an overview of how these areas are managed in order to ensure that the Management Plan includes management arrangements for the TWWHA to the fullest extent possible. In particular, it indicates how the OUV of those areas is protected. The OUV of the TWWHA is recognised, through its listing, as occurring throughout the extent of the property. The Strategic Management Statement is not part of the statutory component of the Management Plan. The Strategic Management Statement provides

management zones for unreserved public land. In the event that any part of that land is proclaimed as reserved land, it is to be subject to the statutory management plan and the zoning prescriptions and associated use provisions are to apply.

The Management Plan is expected to provide strategic direction for the management of the TWWHA for at least the next seven years. It identifies the cultural and natural values of the TWWHA, particularly the values that form the basis for its World Heritage listing. Key threats to those values are identified. Management actions, monitoring and research priorities, and an adaptive management framework are provided to ensure the protection of those values. The management actions represent a strategic approach that recognises the need to prioritise resources to ensure that key management objectives are achieved.

The Management Plan sets out what uses may occur within the TWWHA, where they may occur and under what circumstances. It provides guidance on the various uses of the TWWHA, primarily through a zoning and overlay system and an associated Table of Use, as well as a number of specific prescriptions. Each management action is designed to deliver measurable outcomes, allowing for the effectiveness of the Management Plan to be evaluated. In exercising his or her functions and powers, as set out in Section 30 of the NPRMA, the Director must manage reserved land for the purpose of giving effect to any applicable management plan.

The plan articulates an overall Vision that is developed as a series of Objectives relating to key areas of management. Key Desired Outcomes (KDOs) are specific outcomes for priority issues within those management areas. The KDOs have an associated set of Management Actions designed to achieve each corresponding KDO. Each Management Action provides an Evaluation statement to determine or guide subsequent evaluation of the Management

Plan's effectiveness as it relates to the implementation and outcomes of those actions in terms of achieving a KDO. Some management issues are dealt with through the provision of specific prescriptions rather than evaluated management actions. Actions in the plan will be implemented according to the availability of allocated funds.

The Tasmanian Government's Expressions of Interest (EOI) process has been developed to encourage and facilitate private investment in sensitive and appropriate environmental tourism developments on reserved land. Carefully managed private investment in the presentation of the TWWHA, which ensures it is consistent with the protection of its values, can generate significant social and economic benefits, particularly for local communities and regions. The Management Plan supports this approach through the provision of private investment opportunities consistent with the plan's objectives and guiding Vision.

This plan replaces the *Tasmanian Wilderness World Heritage Area Management Plan 1999* and the 2002 alteration to that plan, in accordance with Section 19(2)(b) of the NPRMA. As a statutory plan, it prevails over any other non-statutory plan that applied to this area. Also in accordance with Section 19(2)(b), it will rescind, replace or alter, in whole or in part, any previous statutory plans, including the *Mount Field National Park, Marriotts Falls and Junee Cave State Reserve Management Plan 2002* and the *Mole Creek Karst National Park and Conservation Area Management Plan 2004*, to the extent that there is inconsistency. As required for World Heritage properties under the EPBC Regulations, this plan will be reviewed seven years from the effective date of its gazettal in the *Tasmanian Government Gazette*. Implementation of management actions, and their effectiveness in achieving the vision and management objectives of the plan, will be reviewed. The plan may also be reviewed or altered before this time in accordance with the NPRMA. The plan may refer to legislation, policies and plans in relation to

management provisions. It is recognised that these may change or be replaced from time to time over the life of the plan. Where that circumstance occurs, the management reference, prescription or action is taken to refer to the new legislation, policy or plan provided it continues to realise the intent of the original provision of the plan. The development of subsidiary plans, either statutory or non-statutory, over the life of this plan are made under this Management Plan and therefore must be consistent with its policy intent and prescriptions.

The following plans have been prepared for Visitor Services Zones (VSZ), Recreation Zones (RZ) and other areas in the TWWHA to guide management in higher-use areas:

- Pencil Pine – Cradle Valley VSZ
- Cynthia Bay – Lake St Clair VSZ
- Walls of Jerusalem RZ
- Lower Gordon River RZ
- Russell Falls VSZ
- Hartz Mountains VSZ
- Melaleuca Site and Rehabilitation
- Sarah Island VSZ
- Melaleuca – Port Davey Area

1.7 VISION AND OBJECTIVES

The guiding Vision for management of the TWWHA through this plan is:

To identify, protect, conserve, present, and, if appropriate, to rehabilitate, the World Heritage, National Heritage and other natural and cultural values of the TWWHA and to transmit that heritage to future generations in as good or better condition than at present.

The Vision, based on the obligations of management specified in Articles 4 and 5 of the World Heritage Convention, establishes a duty of long-term care and stewardship to ensure that the natural and cultural heritage of the TWWHA is not degraded by a cumulative impact over time.

The following Objectives provide further focus and emphasis for the management of the TWWHA. They are intended to complement the statutory management objectives of the area's various reserve classes and support achievement of the Vision. Additionally, they provide a framework for the development of management priorities and actions provided by the plan.

Cultural Values

To develop and implement a joint management arrangement that ensures the strategies and actions for identification, protection, conservation and presentation of the World Heritage and other values of the TWWHA are developed in partnership with Tasmanian Aboriginal people.

To understand the TWWHA as an Aboriginal cultural landscape, reflecting its long occupation, as a foundation for the management of its cultural values.

To identify, protect, conserve and restore cultural values in the TWWHA.

Natural Values

To identify, protect, conserve and restore natural biological and geological diversity and processes in the TWWHA.

To protect and conserve the natural landscapes of the TWWHA, particularly in areas of exceptional natural beauty, and aesthetic and cultural importance.

Presentation

To provide a diversity of visitor experiences in a manner that is consistent with the conservation of natural and cultural values.

Community Engagement

To promote and facilitate the role of the TWWHA as an integral and valued component of the social, environmental and economic wellbeing of the international, national and Tasmanian communities, and to involve these communities in its management.

Monitoring and Evaluation

To support the delivery of an informed, effective and transparent adaptive management regime for the TWWHA.

Key Guidance Documents

The following documents provide additional guidance and key principles that support the implementation of the Management Plan.

Australian Natural Heritage Charter

- Conservation principles, processes and practice

Australia ICOMOS Statement of Indigenous Cultural Practice

- Principles related to Indigenous cultural heritage

Australia's Biodiversity Conservation Strategy 2010-2030

- Guiding framework for biodiversity conservation

The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013

- Guidance for the conservation and management of places of cultural significance

AIATSIS Guidelines for Ethical Research in Australian Indigenous Studies 2012

- Principles of ethical research

Australia's Strategy for the National Reserve System 2009-2030

- Protected area management guidance in a national context

Natural Heritage Strategy for Tasmania 2013-2030

- Direction and guidance for the conservation of natural heritage in Tasmania

The Tasmanian Reserve Management Code of Practice

- Standards and practices for management of reserved land

Australian Heritage Strategy

- National vision for the management and protection of Australia's heritage

The background of the page is a full-page photograph of a natural landscape. In the foreground, a steep, rugged cliff face is visible, characterized by vertical rock formations and patches of dry, brownish vegetation. The cliff extends towards the right side of the frame. In the background, a flat-topped plateau or mesa is visible against a soft, hazy sky. The overall color palette is dominated by earthy browns, oranges, and blues, suggesting a sunset or sunrise setting.

2 STATEMENT

OF VALUES

The following chapter provides a summary of the cultural, natural and socio-economic values of the TWWHA. These value statements are intended to be comprehensive in a descriptive sense without necessarily being a definitive or exhaustive list of values. They provide a broad overview of World Heritage and other values of particular importance or relevance. For values that contribute to the Outstanding Universal Value (OUV) of the TWWHA, references of those values are included in the nomination and minor boundary modification documents, along with any future retrospective Statement of Outstanding Universal Value.

There is, for the natural and cultural values of the TWWHA, an inevitable and important hierarchy of significance that arises from its status as a World Heritage property. Natural and cultural values that contribute to the OUV of the TWWHA are of international significance, and the management of these values is strongly determined by the obligations that arise from the status of the TWWHA as a World Heritage property. The cultural values statement is confined to Tasmanian Aboriginal cultural values, as these are the only cultural values recognised as part of the OUV of the TWWHA. The reserves of the TWWHA are also managed in accordance with the requirements of the *National Parks and Reserves Management Act 2002*. The Act allows for recognition and management of a broader range of natural and cultural values, including historic heritage values. These values are managed in a manner consistent with the management of World Heritage values.

The statement of socio-economic values of the TWWHA is an important element in the description of values. It allows for inclusion of values that are not recognised as being part of the OUV of the TWWHA but are of significance at either the national, state or local level. These include historic heritage, social values and other cultural connections. The statement is also an important recognition that not all of the TWWHA consists of large expanses of natural or near natural landscapes, that it includes important infrastructure and other strategic assets. The statement considers the tangible social and economic benefits that the area provides, for example through hydro-electricity generation. The statement also allows for acknowledgement of some of the intangible benefits resulting from the protection of the TWWHA.

The TWWHA embraces a suite of individual sites with particular qualities. Many values are naturally disjunct and it is the aggregate of individual but complementary occurrences and relationships with other suites of values which generally constitutes the ultimate significance of the value rather than any individual site. Individual sites may not possess the most outstanding example of a particular value but, when viewed as a complex with many surrounding features of significance, the entire area serves to demonstrate an array of features of global significance. The significance of the area should therefore be considered as a whole – not merely as the sum of its specifically identified values. In this context the combination of the superlative natural and cultural values of the TWWHA is particularly significant.

2.1 CULTURAL VALUES

The occupation of the area during the late Pleistocene epoch and the development of a unique cultural tradition in response to the extreme climatic conditions of that time was the primary basis used to justify inscription on the World Heritage List under the cultural criteria. In many respects, the articulation of the cultural criteria has to some extent prevented a broader understanding of the area's cultural heritage as Tasmanian Aboriginal cultural heritage: an unbroken, living culture that is inseparable from the landscape, seascape and skyscape.

In this context, a common experience of Aboriginal people has been the limitation of their interests to tangible Aboriginal cultural sites – caves, artefact scatters, quarries and middens. This has confined

Warrener shell, an important food item for Tasmanian Aboriginal people, Southwest National Park
Photo Jillian Mundy



Aboriginal values to a past landscape; one that is often viewed as empty of people. To fully understand Aboriginal values, how Aboriginal people express those values needs to be appreciated, as Aboriginal cultural values can only be determined by Aboriginal people.

In 1996, the Aboriginal Management in the Tasmanian World Heritage Area project clearly identified plants, animals, marine resources, minerals (ochre and rock sources), tracks, forests, interpretation and presentation, and fire management as broader Aboriginal values of the TWWHA. This partial list emphasises Aboriginal people's connection with the area as a living, dynamic and shaped landscape.

Sacred stories about the TWWHA have survived in Tasmanian Aboriginal culture. On occasion, they have been presented to the public. The Needwonnee Walk creation story, set in the landscape of Louisa Bay and Cox Bight, on the south coast, is a recent example of an intangible Aboriginal value being made physical when revealed on the land for all to see.

Non-Aboriginal people recorded some of the stories, but they belong to Tasmanian Aboriginal people. The journal of George Augustus Robinson contains sacred and spiritual stories as related to him by Aboriginal guides. So do the writings of other European observers and their descendants. These writings demonstrate that Aboriginal people had knowledge about every feature of the TWWHA (mountains, hills, rivers, lakes, creeks, coastline, inlets, bays and islands, the sea and the stars), with their stories connecting those features together.

It is wrong to assume that contemporary Tasmanian Aboriginal people do not possess other sacred information, passed down through the generations and complementing stories that the Old People have preserved when talking to Europeans such as Robinson. Aboriginal people have the ability and the need to reconnect with their land and the spiritual

aspects of their culture, as expressed in a Tasmanian Aboriginal Land and Sea Council workshop:

... the community has an understanding of the Aboriginal landscape that reaches far beyond the experience of others. By getting to know our land once more, we are able to revision that land – that is, we are able to reconnect with the sacred.

These contemporary activities and rights are recognised in the Australia ICOMOS Burra Charter:

Places of significance to Indigenous people, and the reasons for their cultural significance, may change as Indigenous traditions adapt and evolve, and as Indigenous people are able to reconnect to places that have been denied to them in the past.

*Site visit to an important cultural landscape,
Southwest National Park
Photo Jillian Mundy*



Many secular stories originate from within the TWWHA and their existence is evident in historical research. They are considered to be secular only in a broad sense, as Aboriginal people may not necessarily consider them as such. One major political story tells how the discovery of Kuti Kina Cave was a pivotal reason for the blockade against the Gordon-below-Franklin Dam and one of the reasons for the demise of the proposal. Other stories relate to historical figures, such as William Lanney and his family, who are thought to have hidden for as long as they could in areas around Cradle Mountain; members of the North people led by Walyer who raided Van Diemen's Land Company properties in the Upper Mersey region; and the old woman Dray on her 200 km journey in search of her people along the south-west coastline. Aboriginal perspectives on many of their stories and oral histories are scattered and private; that is, they are largely inaccessible but deeply spiritual.

In this and many other ways, the TWWHA is an Aboriginal landscape that is united with an Aboriginal seascape and an Aboriginal starscape. Within this Aboriginal world are stories, plants, animal and mineral resources, and heritage sites that connect the people with their ancestors, the Old People, and the land. In this sense, the TWWHA is a constructed cultural place where the past rises up to the present day and the present day reaches out to the past. It is a place of nourishment for a community in need of healing and a people who can nourish the land.

The justification for World Heritage listing under the cultural criteria refers mainly to the Ice Age ancestors and the places they inhabited in the landscape. These assessments consider whether Aboriginal cultural heritage in the TWWHA is comparatively the best example of its kind in the world; that is, whether a place has Outstanding Universal Value. As such, the TWWHA contains one of the longest, richest and best preserved human occupation records from the Ice Age, an important component of its authenticity and integrity.

As of January 2014, approximately 962 of the Aboriginal sites on the Aboriginal Heritage Register (AHR) were in the TWWHA. Of these, 136 were within the 2013 boundary extension. The number of sites varies within the TWWHA as new sites are located or data is reassessed. There are confidentiality provisions that may apply to data on the AHR.

There is evidence of Aboriginal occupation in almost 90 occupied rock shelters, including stone artefacts on their floors. In 1989, presentation of the archaeological analysis of some Pleistocene sites (more than 11,700 years old) were documented in the nomination dossier for the extension of the TWWHA. Kuti Kina Cave is one of these sites. The importance of the cave to contemporary Aboriginal people was formally recognised in 1995, when it was returned to them through provisions of the *Aboriginal*

*Red ochre from near a coastal story place,
Southwest National Park
Photo Jillian Mundy*



Lands Act 1995, to be managed by the Aboriginal Land Council of Tasmania.

There are competing scientific interpretations about excavated sites and their meaning to the Old People. Aboriginal people actively participate in the expression of these different theories and stories.

More than 70 unoccupied rock shelters are also recorded on the AHR. These sites contain no obvious evidence of Aboriginal usage but look to be liveable places. They are recorded on the AHR because they may contain sub-surface evidence of Aboriginal occupation. For example, the Parmepar Meethaner site, in the Forth River valley, showed no visible evidence of Aboriginal occupation until it was excavated. It was found to contain a large amount of archaeological evidence and is the only known site where Aboriginal occupation was continuous from a very early date (about 34,000 years ago) to a very recent date (about 700 years ago). Other excavated caves in the south-west appear to have been unoccupied by the Old People by the end of the Pleistocene epoch. All are of great importance to contemporary Aboriginal people.

The TWWHA has more than 20 registered art sites (where ochre has been used or rock faces carved, pecked or abraded). The term 'art sites' is used in the plan. However, it is recognised that the terminology is the subject of ongoing discussion and debate and that other terms such as 'markings' may be preferred. The use of terms will be a matter of ongoing discussion among Aboriginal people and the use in the plan of 'art sites' should not be interpreted as advocating a position; rather it is used as a more commonly understood term. The sites include the caves of Wargata Mina and Ballawinne, which are recognised as sacred to the Aboriginal people and were also returned to them in 1995. These caves are part of the Outstanding Universal Value of the TWWHA because they represent ritual activity that is removed from day-to-day occupation, a situation that is rare.

Aboriginal cultural heritage places and interests were not formally assessed when the 2013 extension was nominated. However, there is an important and recently recorded site in the Huon River valley, in an area that was designated as State Forest. The site, known as Riveaux Art Cave, is in a complex and little explored limestone karst area that was discovered around 2002. Approximately 18 to 20 hand stencils have been applied in red ochre to the cave walls at the limit of natural light. Some are covered by a clear, thin limestone layer, as is found at Wargata Mina and Ballawinne. The layer serves to protect the stencils and suggests that they are very old. However, some other stencils at the site are exposed to the air and, therefore, may be more recent.

Kelp, an important cultural item, Southwest National Park
Photo Jillian Mundy



A Tasmanian Aboriginal Land and Sea Council response to visiting Riveaux Art Cave states:

'For many non-Aboriginal people, it is virtually impossible to describe the sense of belonging that comes over you once you establish your relationship with the land, because the relationship once in place can be as strong as you have with family, and your sense to protect it is exactly the same as you would have with family ... as a Tasmanian Aboriginal the sense of connection to this country is almost overpowering, and is one that cannot be ignored or set aside for other interests, because the connection the land has with you will not allow you to take this line of thought.'

Other Aboriginal art sites have been identified in the TWWHA in recent years, particularly along the south coast. They include abrasions, of which some look like footprints. As awareness of such places increases, it is highly likely that more will be identified. They demonstrate the complex relationship of the Old People to the land and are vitally important to contemporary Aboriginal people.

The AHR also lists about five sites where ochre has been extracted or prepared, as well as five sites that have stone arrangements. Burial sites are kept on a separate list due to their sensitivity but exist in the TWWHA.

A rare Pleistocene-era burial site, estimated to be between 16,000 and 18,000 years old, is situated in an area that was State Forest and is now in the 2013 extension. There are indications that other recorded caves in this area may have been used in a similar way.

Sandstone rock shelters in the Great Western Tiers Conservation Area are also located within the 2013 extension. Aboriginal people occupied these rock shelters more recently than the Ice Age caves that were mostly unoccupied from the end of the Pleistocene epoch and rarely reoccupied.

Four of the rock shelters have been excavated. The results of these excavations point to a late Holocene-era (less than 11,700 years ago) expansion by the Aboriginal people into new areas, with evidence indicating the earliest dates of occupation were around 3,000 years ago. It has been speculated that Billop Rock Shelter was abandoned as soon as European settlement began in the Midlands and that Palmer Rivulet forms one of the few natural passes on to the plateau. It is possible that an existing non-Aboriginal track follows the Palmer Rivulet Aboriginal track because some early cattlemen and snarers not only followed Aboriginal routes, but also copied Aboriginal burning practices.

The majority of AHR-listed sites in the TWWHA are stone artefact scatters or isolated stone artefacts from campsites or activity areas such as hunting sites. Most are from the Holocene. Good examples have

Aboriginal midden site, Southwest National Park
Photo Jillian Mundy



been found during surveys of the Central Plateau, which was covered by ice until 10,000 years ago. Sheet erosion has made Aboriginal sites on the Central Plateau more visible and more vulnerable. Triggers for this erosion include introduced rabbits and bushfires, along with other impacts from contemporary and historical usage and occupation of the area.

Small artefact scatters and isolated stone artefacts are located in areas near Little Lake and Gunns Lake that are part of the 2013 boundary extension in the Great Western Tiers Conservation Area. A larger artefact scatter, comprising more than 100 artefacts, is eroding on a dune at the southern end of Little Lake. The exact condition of this site, which apparently has not been surveyed since it was first recorded in 1982, is unknown.

It is possible that larger campsites around Little Lake and Gunns Lake were associated with Aboriginal people who had gathered in the area to tap sap from adjacent forests of cider gums (*Eucalyptus gunnii*). These annual gatherings are thought to have been important for trade, finding marriage partners, ceremonies and the sharing of news and stories.

More than 20 Aboriginal stone quarries in the TWWHA are on the AHR. Some were sources of tool-making stone over long periods due to the quality of the resource. A notable example is the vast quarry complex on Mt Rufus near Lake St Clair, which is another special place for contemporary Aboriginal people.

Large and small shell middens* are common along coastlines and on the islands of the TWWHA. Five of the middens are 'hut depressions', a particular type of midden formed around a hut which has long since

** Some Aboriginal people prefer the term 'living areas' or 'living sites' and this is respected; however, as these are not in common use, the term 'middens' is used throughout the Management Plan.*

decayed. It is believed that middens at Louisa Bay were occupied as semi-permanent villages. Such sites contain the remains of large quantities of shellfish and seal bone, land mammals such as wallaby and wombat, and birdlife such as muttonbird. These coastal and marine resources remain important to Aboriginal people.

Middens are visible and vulnerable Aboriginal sites because of coastal erosion and other impacts in the TWWHA. Many of them date to the time, about 8,000 years ago, when the sea was approaching its current levels and had finally cut off the land mass that is now Tasmania from what is now the Australian mainland. This led to cultural isolation of the Tasmanian Aboriginal people, a factor that is significant in the World Heritage listing. Middens along the south and west coasts are considerably more recent, dating back 3,000 years. The Holocene middens, artefact scatters and rock shelters are evidence of a shift in the way people used the land. It is likely that many of the sites were still in use when Europeans first arrived.

In general, the broad spread of sites across the TWWHA reflects where archaeologists, Aboriginal heritage officers and track rangers have walked and made discoveries when the ground surface is easily visible. However, Aboriginal people and others consider the entire TWWHA landscape to be an expression of Aboriginal culture.

Aboriginal people used fire to shape the landscape as they followed its rhythms in the TWWHA for thousands of years. These fires helped to form the current vegetation mosaics and their habitats. For example, the dominance of open moorland in western Tasmania is thought to be a direct result of Aboriginal activity during the late Ice Age.

2.2 NATURAL VALUES

The TWWHA is of immense importance as a natural ecosystem. Not only are the natural values of scientific, educational and recreational significance to the world, they have universal intrinsic value. They have deep cultural meaning to Tasmanian Aboriginal people. The area, therefore, is a place where all of these values must be recognised and respected.

The TWWHA fulfils all four criteria described for inclusion of properties on the World Heritage List as a natural property. It contains most of the temperate wilderness remaining in Australia and is one of the last remaining such areas in the world. It is this quality which underpins the success in meeting all four criteria for a natural property and is the basis for the maintenance of its integrity. This feature is characterised by large expanses of remote and difficult terrain distant from points of access that include a great variety of interconnected habitats and landscapes. These expanses show little of the disturbance from post-settlement activities that is evident elsewhere in Tasmania. Within the TWWHA are significant vegetation transitions across altitudinal and climatic gradients that provide outstanding connectivity. The combination of extensive landscapes and a high degree of naturalness contributes to the aesthetic qualities of the TWWHA.

The natural values of the TWWHA are similar to those in south New Zealand (Fiordland) and western Patagonia in southern Chile and Argentina. All three areas are located in the temperate zone of the Southern Hemisphere's Roaring Forties and contain mountainous regions of exceptional natural beauty. Although each area has its own unique features, they share an evolutionary history. Each displays strong geological, floral and faunal links to the early supercontinent Gondwana and, together, they provide evidence of past continental configurations and environments.

These relationships persist despite the final break-up of Gondwana about 40 million years ago. The break-up sparked the development of Tasmania's diverse landscapes and eventually led to the formation of the underlying structure of Bass Strait, which was subsequently flooded after the last glacial period. Tasmania has been separate from mainland Australia for about 8,000 years, although the process of sea level rise dates to approximately 14,000 years ago, with sea levels stabilising approximately 6,000 years ago. Isolation, together with the island's southern latitude, variable topography, soils, climate and long history of Aboriginal occupation, provides the foundation for distinct natural values.

The TWWHA's complex and unusually complete geological history stretches back 1,300 million years, but also includes 3,000-million-year-old fragments of re-deposited rock, and is a valuable record of evolution.

Precambrian geology, Federation Peak, Southwest National Park Photo DPIWE



Features include two-kilometre deep sequences of limestone that have extensive karst and glacio-karst landforms. Caves in karst areas contain fossil and sub-fossil deposits of extinct species such as marsupial mega fauna and the thylacine (*Thylacinus cynocephalus*). There are also spectacular light displays by the Tasmanian glow-worm (*Arachnocampa tasmaniensis*).

The TWWHA contains glacial legacies from three major periods that stretch, in total, over 850 million years. The New Zealand and Patagonian similarities of primitive and relict floral and faunal groups, along with extensive outcrops of Jurassic dolerite, provide evidence of Gondwanan connections and the break-up that began about 180 million years ago. In many respects, the area's geology has a closer affinity with parts of Antarctica than mainland Australia.

Fossil evidence indicates that temperate rainforest was widespread in Australia, Antarctica, South America and New Zealand about 40 million years ago. The southern beech genus (*Nothofagus*) that is found in New Zealand and South America can also be found in the TWWHA as the Tasmanian myrtle (*Nothofagus cunninghamii*). The similarity of forests across Gondwana is confirmed by fossil evidence, including fossilised foliage that was recently discovered near Cradle Mountain. The fossil is from a giant conifer, *Fitzroya tasmanensis*, a genus that now grows only in Chile.

Temperate rainforest, eucalypt forest, buttongrass moorland and alpine communities form a distinct mosaic of Antarctic and Australian elements in the TWWHA. Tall eucalypt forests are of international significance as they provide the world's best examples of distinctive evolutionary features that enable the dominant sclerophyll trees to survive in areas where the climatic climax vegetation is rainforest which includes exceptional growth rates, flammability, and phenomenal height. The moorlands and their associated blanket bogs are key parts of one of the most extensive organosol terrains in the Southern

Hemisphere. Succession processes from moorland to rainforest depending on fire regimes are evident, and there is a large body of evidence that suggests buttongrass moorlands have become extensive in western Tasmania in response to manipulation of fire regimes by Aboriginal people. Changes in vegetation in response to changes in fire regime have been demonstrated since European arrival.

Isolation from the Australian mainland has led to very high levels of Tasmanian endemism. More than 65 per cent of species among some invertebrate groups, along with a high proportion of the flora and other fauna, are endemic to the TWWHA. Its temperate alpine ecosystems are among the most diverse in the world, with about 70 per cent of their flora endemic to Tasmania. Tasmania, including parts of the TWWHA, has a very high palaeo-endemic richness in a global context. Montane and subalpine rainforest habitats,

which are well represented in the TWWHA, are associated with the highest richness and abundance of palaeo-endemics in Tasmania. Recent research suggests that palaeo-endemism correlates strongly with constantly moist climates lacking extreme temperatures and with open vegetation types where fire is rare or absent. Palaeo-endemics occupy a climate space that is globally rare and their pattern of occurrence suggests persistence since the Cretaceous era of open vegetation in these environments.

Most of Tasmania's endemic conifers (including *Lagarostrobos franklinii*, *Athrotaxis selaginoides*, *A. cupressoides* and *Microstrobos niphophilus*) and a third of its threatened species occur in the TWWHA, including *Lomatia tasmanica*, also known as King's lomatia or King's holly. Recent research has revealed that King's holly is one of the world's oldest known plant clones. Stands of genetically identical individuals are estimated to be at least 43,000 years old.

The TWWHA contains aesthetic examples of plant responses and interactions with their environment. One of the most striking examples is the development of pool complexes in response to the damming of water flow by plant communities – most commonly by restionaceous sedgeland or cushion communities. Superlative examples of cushion-dammed pools are developed at Newdegate Pass, Mount Field. The effect of extreme wind on vegetation is demonstrated best by the striping in plant communities, most evident in alpine feldmark communities and the sphagnum peatlands of the Central Plateau. Interactions between plant community development and animal grazing is most apparent in the globally unusual development of marsupial lawns, a form of lentic wetland, which are best developed on the south-west coast of the TWWHA and in alpine areas of the Central Plateau. Several endemic plant species are largely restricted to this rare habitat.

Twenty vegetation communities in the TWWHA are

King Billy pine, Southwest National Park
Photo DPIPWE



listed as threatened under Schedule 3A of the NCA. They include coniferous communities, alkaline pan communities, wetlands, rookery halophytic herbland and cushion moorlands. The area also contains two nationally listed threatened communities: alpine sphagnum bogs and their associated fens, and giant kelp forests.

Several types of fauna in the TWWHA are closely related to species found in other land masses that were once part of Gondwana. The mountain shrimp (*Anaspides tasmaniae*), which is very similar to 230-million-year-old Triassic fossils, has close relatives in New Zealand and South America. The Tasmanian cave spider (*Hickmania troglodytes*), which is one of the world's most primitive spiders, is the only member of its family outside Chile. Very closely related, recently described species in the dance fly genus *Hydropeza* occur in the TWWHA, New Zealand and Chile. There

Spotted tailed quoll

Photo DPI/PWE



are several other unique species of invertebrates with Gondwanan links, including caddisflies, dragonflies, stoneflies and isopods.

The TWWHA is a refuge for a wide range of rare and threatened species, including carnivorous marsupials. They include the Tasmanian devil (*Sarcophilus harrisii*), which is the world's largest carnivorous marsupial, the spotted-tailed quoll (*Dasyurus maculatus*) and the eastern quoll (*D. viverrinus*). Two of only five surviving species of monotreme, the most primitive mammal group in the world, are found in the TWWHA: the platypus (*Ornithorhynchus anatinus*) and the short-beaked echidna (*Tachyglossus aculeatus*). There are also more than 30 rare and threatened fauna species, including the Pedder galaxias (*Galaxias pedderensis*) and the Pedra Branca skink (*Niveoscincus palfreymani*). The breeding population of the endangered orange-bellied parrot (*Neophema chrysogaster*), numbering less than 70 individuals, breeds only in a single, remote site in the area.

There are significant breeding populations of seabirds on remote islands off the south-west coast. They include two of only three breeding colonies of the threatened and endemic shy albatross (*Thalassarche cauta*). There are approximately five million other seabirds, dominated in number by short-tailed shearwaters (*Ardenna tenuirostris*) and fairy prions (*Pachyptila turtur*). The islands are also important breeding sites for little penguins (*Eudyptula minor*) and two threatened species of seal: the long-nosed fur seal (*Arctocephalus forsteri*) and the southern elephant seal (*Mirounga leonina*).

The waters of Port Davey and Bathurst Harbour are home to one of the world's most southerly and isolated temperate seagrass beds, and to giant kelp (*Macrocystis pyrifera*) forests. In this part of the TWWHA, flora and fauna that typically occur at a depth of around 200 metres are found at depths of less than 20 metres due to the lack of light penetration through the tannin-stained surface water.

These waters and their strong currents provide perfect conditions for more than 500 species of filter-feeding invertebrates, many of which are endemic to the area. They include soft coral species and large numbers of sea pens. Their presence, on this scale, is unique in the near-shore environment of Australia. The endangered Maugean skate (*Zearaja maugeana*), found only in Bathurst Harbour and Macquarie Harbour, is the world's only brackish-water skate. Its closest relatives are found in New Zealand and Patagonia.

Approximately 25 per cent of Tasmania's lakes, tarns, lagoons and wetlands are in the TWWHA. Many of them occur above an altitude of 1,000 metres on the Central Plateau. This area is a stronghold for two species of endemic freshwater fish: western paragalaxias (*Paragalaxias julianus*) and Clarence galaxias (*Galaxias johnstoni*). Tasmania's highland lakes

Hickman's pygmy mountain shrimp
Photo DPIPWE



Tasmanian tree frog

Photo DPIPWE



and tarns, lagoons and wetlands have a high degree of invertebrate endemism.

The TWWHA has the longest undisturbed stretches of temperate, high-energy rocky and sandy coastline in south-eastern Australia. There is a significant diversity of beach barrier (dune) systems, including bay head and river mouth, cliff-top, parallel and transgressive dunes. An excellent example of a recurved baymouth spit is located at Prion Beach on the south coast, and Louisa Bay has a well-developed tombolo formation. The oldest interglacial Pleistocene dunes and sand sheets date back 125,000 years. More recent dunes were formed after deglaciation and the relative stabilisation of sea levels about 6,000 years ago.

As one of the largest conservation reserves in Australia, the TWWHA is of great national significance. It is

known for large intrusions of Jurassic dolerite that are not found elsewhere in the nation; its glacially formed landscapes are the nation's most extensive; and karst features, such as caves, are among the longest, deepest and best decorated. The area contains a significant amount of Australia's cool temperate rainforest and snow country, and provides secure and largely undisturbed habitat for many animals that are extinct, rare or threatened on the mainland. They include the pademelon (*Thylogale billardieri*), broad-toothed mouse (*Mastacomys fuscus*), swamp antechinus (*Antechinus minimus*) and ground parrot (*Pezoporus wallicus*). Many of Australia's wild and natural rivers are located in the TWWHA, including the catchments of the Davey and Old Rivers. The catchment of Port Davey and New River is entirely within the TWWHA and is 2,840 km² in area. The TWWHA also contains Australia's deepest lake, Lake St Clair, which was formed by various glaciations over the past two million years.

The TWWHA is also significant in a Tasmanian context. Among its features are most of the State's pristine alpine and sub-alpine environments, landscapes that were once glaciated, karstic rock and extensive coastal landforms. The area contains about 20 per cent of the State's rainforest and about 240 of the 320 Tasmanian endemic higher plant species, of which about half have most of their distribution within the TWWHA. There are significant secure habitats for many species of animal, including 25 of the State's 27 endemic mammals, birds, lizards and frogs, and four endemic fish species. The Styx River Valley includes exceptional stands of *Eucalyptus regnans*, the world's tallest flowering plant. This area has the highest concentration (more than 30) of registered 'Giant Trees' (at least 85 metres tall or 280 cubic metres in volume) in Tasmania, with many trees over 90 metres tall and some close to 100 metres. Some of those trees feature larger girths and buttresses on

Alpine herbfield, Southwest National Park
Photo DPIWE



the lower trunks than California's giant redwoods. There are several other eucalypt species that achieve these heights in the TWWHA such as *E. obliqua*, *E. delegatensis* and the endemic *E. nitida*. The diversity of eucalypts in these forests and the presence of well-developed or mature rainforest understoreys distinguish the wet forests of the TWWHA from those of mainland Australia. In areas such as the Weld Valley there is a complete transect from exceptional tall eucalypt forest on the valley floor through to the alpine vegetation of the Snowy Range.

2.3 SOCIAL AND ECONOMIC VALUES

The TWWHA contains significant socio-economic values, including post-European historic values and social connections. The area's socio-economic value to the Tasmanian Aboriginal people is presented as a

personal perspective in the following section.

In addition to the recognised natural and cultural values, social and spiritual attachments are engendered by important recreational, health, educational and aesthetic values. The TWWHA provides highly valued ecosystem services and is a significant contributor to the Tasmanian economy, particularly through tourism and energy generation. People have lived, gathered and moved through the TWWHA for at least 35,000 years. As an integral component of the ecosystem, people continue to seek material and cultural benefit from the area while endeavouring to ensure that future generations can enjoy the same opportunity.

Nature-based recreation is an activity of socio-economic importance. The TWWHA provides a wide variety of recreational experiences: from

Du Cane Range, Cradle Mountain-Lake St Clair National Park
Photo DPIPWE



wheelchair-friendly access at Russell Falls, to remote camping and walking activities; and from the climbing of cliffs that are among the tallest in Australia, to the navigation of coasts and wild rivers in sea kayaks and rafts. Hunting also occurs in some parts during restricted periods, providing the opportunity for local people to follow some of the more socially important and environmentally benign ways of their parents and grandparents. The internationally renowned recreational trout fishery also makes an important economic contribution. More than 26,000 licences were issued statewide to its participants in 2014-15.

The Tasmanian Parks and Wildlife Community Monitor Survey 2014 revealed that 46 per cent of Tasmanians had visited Tasmania's national parks and reserves in the previous 12 months. More than 68 per cent rated the value of parks and reserves to their community

Cradle Valley, Cradle Mountain-Lake St Clair National Park

Photo Tourism Tasmania & Garry Moore



as 'high' or 'very high' with there being particularly strong awareness about Cradle Mountain, Lake St Clair and Mount Field in the TWWHA. Of the 1.17 million interstate and international visitors to Tasmania in 2015-16, over a third visited national parks and many undertook bushwalks. Popular sites (2015 data) included Cradle Mountain (203,000 interstate and international visitors), Lake St Clair (91,000) and Mount Field (162,000).

The TWWHA provides a respite from the pressures of modern life. Physical activity in natural settings is therapeutic, creating a potential for healing and enhanced psychological wellbeing. It fosters a sense of wellness, reduces stress, depression, anxiety and anger, and improves fitness. Evidence suggests that a range of specific health benefits is derived from interactions and therapeutic engagements with nature. The TWWHA provides many opportunities to connect with the types of habitat that have supported humans throughout history.

The deep spiritual and cultural connections to the TWWHA and its surrounds for Tasmanian Aboriginal people have been discussed in the cultural values statement. The ability to continue to connect with and experience Country is of great importance for cultural and spiritual wellbeing but also material, socio-economic wellbeing, with the two being intertwined. The full socio-economic potential of the TWWHA for Tasmanian Aboriginal people has yet to be realised; opportunities in management, tourism and research are all key areas where material benefit may be gained in the context of contemporary connection to Country. The importance of the TWWHA in the wellbeing of Tasmanian Aboriginal people is acknowledged in the Management Plan and supported through management actions that allow for continuity of the timeless connections of Tasmanian Aboriginal people with the TWWHA and through measures that will provide opportunity for socio-economic benefit as a result.

People have harvested pines, fished, prospected and mined in the TWWHA for the past 200 years. These activities are part of Tasmania's social, cultural and economic fabric, through family associations with former lifestyles and activities, and through contemporary usage of natural resources. Throughout the TWWHA there remains important tangible evidence of past lifestyles and endeavours. Parts of the TWWHA provide opportunities to conserve social values that help to form the identity, connections and meaning of well-established cultures and lifestyles.

For many people, identity and sense of belonging are derived from connections with places of personal importance. Personal, family, and community histories are entwined with the TWWHA. Areas such as the West Coast, the upper Mersey region and the Central

*Mount Kate House,
Cradle Mountain-Lake St Clair National Park
Photo DPIPWE*



Apiary site, Clear Hill Regional Reserve

Photo DPIPWE



Plateau are places where generations of local people have camped, hunted, fished, bushwalked and ridden horses. This plan provides a management regime that both respects local family and community senses of place that pre-date the listing of the TWWHA, and protects natural and cultural values. A sense of connection with areas of the TWWHA is not limited to nearby communities. There are many places in the TWWHA that are particularly significant to people who have enjoyed visiting them over their lives but who do not live nearby. These places often have important family and personal connections with many people who have contributed significantly to their protection and their development as places for the enjoyment of visitors. A good example is the community run ski field at Mt Mawson in the Mount Field National Park with its rich social history.

In and near the TWWHA are hydro-electricity schemes, dams and impoundments, canals, roads and associated infrastructure that continue to be valuable generators of electricity. The remains of the construction of those schemes, such as survey huts, still exist too. The development of these schemes was a central feature of the economic and social history of Tasmania, including, ultimately, the rise of the modern environmental movement. These features therefore can have both important personal and broader social value but may also be viewed very differently as a result of the intertwined history associated with them.

Natural resources are extracted from parts of the TWWHA. Since 2008, more than 1,500 cubic metres of Huon pine has been salvaged from Macquarie Harbour, which contributed about 25 per cent of the Huon pine sawlog that was supplied by Forestry Tasmania to sawmills on the West and North-West

Coasts. During the past seven years, more than 23 tonnes of rock lobster, with a market value of about \$1.2 million, has been caught at Port Davey. About 25 tonnes of abalone is caught at Port Davey each year. Its estimated commercial value during the past 14 years is nearly \$14 million. Substantial quantities of leatherwood honey are also sustainably harvested from the TWWHA. The internationally renowned product is a mainstay of the State's apiculture industry. About 1,000 tonnes of honey is produced in Tasmania each year, with leatherwood honey accounting for about 70 per cent of this amount. Access to leatherwood honey is vital to the sustainability of the industry, which is also (through its pollination services) an essential component of Tasmanian agricultural production.

The TWWHA provides important opportunities for education and research; it is a natural laboratory for

Tyenna Peak, Mount Field National Park, with the town of Maydena in the valley below
Photo Tourism Tasmania & Richard Bennett



learning about nature, culture and ourselves. Scientists and students regularly visit the area to focus on natural and cultural environments and values, and to observe interactions between nature and humans. Research and other types of work have drawn local, national and international attention to human-induced vegetation changes, the need for species conservation, human waste impacts, marine and estuarine values, fire-soil interactions, insect ecology, Quaternary glaciations and the Tasmanian Aboriginal people's use and occupation of, and connection to, the TWWHA.

Aesthetic qualities are key parts of the TWWHA's social value – the beauty and grandeur of its landmarks; the wildness of its places and landscapes; and the impressive beauty and power of its plants and animals. Many people gain satisfaction simply from knowing that such beauty exists. As such, the TWWHA is an internationally significant source of inspiration, focus and activity for artists, photographers, filmmakers and writers. Through their work and direct experiences, places such as Cradle Mountain, the Western Arthurs, Federation Peak, Port Davey and the Walls of Jerusalem are seen and appreciated by millions of people. This helps to promote Tasmania's international profile and its reputation as a premier nature-based tourism destination. Films, books and photographs have had such a powerful impact that many people who have not visited the area are among the strongest advocates for its conservation. Recent additions to the TWWHA, such as the lower slopes of Adamsons Peak, the Upper Florentine and Styx valleys, Mount Field National Park and the Great Western Tiers, have outstanding aesthetic significance, both within the TWWHA boundaries and as wild backgrounds to the renowned pastoral scenery of settled Tasmania.

All of these qualities generate a sense of reverence that enables people to transcend the more common experiences of everyday life. Tasmanians regard the TWWHA as a spiritual place. Many people attach immense value to its opportunities for solitude and

spiritual connection. Some fall in love with the area through cultural transmission between generations or through their own experiences, and some form close attachments to particular places: Cradle Valley and Mount Field for bushwalkers; the Franklin River for rafters; the Central Plateau for trout fishermen, horse riders, shooters and those with an interest in the preservation of historic heritage and knowledge. For those who were personally involved or supported the pivotal conservation campaigns that led to the listing and expansion of the TWWHA, there remains a deep sense of investment and connection with the area as a whole and with particular areas that were the focus for those campaigns.

The ecosystems provide vital services that support the quality of life for all species, including humans. Carbon is stored in forests, soils and wetland peats;

*Gordon River rainforest, Franklin-Gordon
Wild Rivers National Park
Photo DPIWE*



forests release oxygen; water is captured, stored, purified and released to be used for hydro-electricity, drinking water, commercial fishing, fish farms and irrigation. The value of some ecosystem services (such as clean air and water or healthcare savings) cannot be easily quantified, while the potential of other services (such as the medicinal properties of many western Tasmanian endemic organisms) is unknown. Large-scale estimates and studies of ecosystem services in other parts of the world indicate that the socio-economic value of the TWWHA's current and potential ecosystem services is likely to be significant.

An understanding can be gained of the worth of hydro-electricity generation derived from water in the TWWHA, which comprises most of Hydro Tasmania's catchment area. Hydro Tasmania employs over 1,000 people, possesses assets worth \$5.2 billion, has 2,653 megawatts of installed capacity and produced

Cradle Mountain-Lake St Clair National Park
Photo Tasmanian Walking Company



8,180 gigawatt hours of output in 2014-15. In 2014-15, the Hydro generated over \$1.5 billion in revenue, made \$183 million in profit and returned a dividend of \$118.6 million to the Tasmanian Government.

The TWWHA is a cornerstone of the State's highly successful tourism industry. Visitors to Tasmania spend, in total, more than \$1.5 billion per annum. Many visits translate into overnight stays that are critical to the economic prosperity of towns such as Strahan, which recorded 109,552 visitor nights in 2015-16. Management activities generate a wide range of economic outcomes through employment and the purchase of goods and services.

In a report to the Australian Government Department of the Environment, Water, Heritage and the Arts in 2008, Gillespie Economics estimated that the TWWHA contributes \$721.8 million in annual direct and indirect State output or business turnover; \$313.5 million in annual direct and indirect State value added; \$208.2 million in direct and indirect State household income; and 5,372 direct and indirect Tasmanian jobs. There is considerable scope for growth in the value of the TWWHA as a tourism asset. Increasing opportunities for investment in sustainable development will revitalise the area and realise more of its tourism potential.

There is considerable demand for commercial adventure tourism, immersive experiences and a variety of accommodation; from the rustic lodgings of Mount Field's Government Huts, to the luxury standard at Pumphouse Point at Lake St Clair. Activities include wildlife viewing, walking, camping, rafting, climbing, canyoning and yachting. However, many visitors establish more passive connections to the TWWHA. They are happy to tour along roads, seeing mountains and rainforest as they drive, stop for short walks to waterfalls and lookouts, look for native animals around visitor centres, and breathe in the clean and fragrant air. As key parts of the TWWHA's

social value, all of these experiences and activities underpin a significant slice of Tasmania's economy.

The TWWHA reinforces a particular perception of Tasmania's natural environment in the promotion of tourism, agriculture and other economic sectors. Wild nature, contemporary culture, fine food and wine are key attractors. Marketers realise that Tasmania's extensive natural landscapes help to generate expenditure outside, as well as inside, those areas. Brand Tasmania conveys and promotes this perception through high-quality images and the use of descriptions such as 'iconic attraction'. This type of marketing brings people to Tasmania to experience all of its attractions.

There is enormous potential for the TWWHA to generate further scientific, social and economic benefits. As such, it is critical that the integrity of its natural features, along with their cultural associations and histories, are respected and transmitted to future generations.

Franklin-Gordon Wild Rivers National Park
Photo Tourism Tasmania & George Apostolidis



A Tasmanian Aboriginal Perspective

Aboriginal Tasmania's socio-economic position remains inequitable. Analysis of 2011 Census data shows Aboriginal people, compared to non-Aboriginal Tasmanians, are a third less likely to own our homes (52%:71%) and three times as likely to live in public housing (15%:5%). We are also twice as likely to be unemployed (12%:6%) and far less likely to hold a bachelor degree (4%:11%) or a post-school qualification (29%:41%). Our median personal weekly income is also well below that of non-Aboriginal Tasmania. These disparities are exacerbated by our demographic structure. Our median age is 22 years compared to 37 years for non-Aboriginal Tasmania. We are, by standard measures, a young and inter-generationally disadvantaged population.

The Aboriginal/Tasmanian Wilderness World Heritage Area relationship can mitigate this socio-economic

Young Tasmanian Aboriginal women reconnecting with Country, Southwest National Park

Photo Jillian Mundy



disadvantage. Research in Australia and elsewhere confirms a link between Country and wellbeing. For Aboriginal people, wellbeing goes beyond physical and material health, embracing interwoven social, cultural, spiritual, emotional, educational and economic dimensions. Wellbeing's heart is connection to Country and cultural continuity. Connection to Country is linked to higher levels of physical and emotional wellbeing.

Realising the Aboriginal wellbeing aspects of the TWWHA is about bridging the acknowledged divide between Aboriginal and non-Aboriginal perspectives on how human/Country relationships are, and should be. For Aboriginal people, the term 'wilderness' is not easily understood. Our Country may not have been plundered or degraded, but it is not inanimate or untouched for productive cultural and material usage. Rather, Country previously designated as wilderness is understood within the relationship of all things, forces, rituals and entities, which comprise it, including Aboriginal people.

More critically, our relationship to Country is social, cultural and economic, and reciprocal. Country is intensively and adaptively managed to support Aboriginal culture, lives and lifestyles that, in return, sustain and nurture Country. Country provides for us and we provide for it. Our relationship to the TWWHA must be supported to be a source of autonomy, social integration, social and cultural cohesion and healing – all influencing our wellbeing. Keeping Country safe, and keeping our relationship to Country appropriate, means engaging actively with the TWWHA lived environment, materially, culturally, spiritually and educationally. Physical connection is the medium whereby Aboriginal autonomy, and its social, cultural and economic benefits, is achieved within a framework of relatedness to Country and kin.

Connection is not simply the regular presence of Aboriginal people on the TWWHA. It requires a tangible recognition of the Aboriginal/TWWHA relationship as one of continuity, a continuum of



past, present and future. Connection and closeness to Country cannot be separated from who we are, as an Aboriginal people. The various dimensions of Aboriginal wellbeing are derived from living on Country, living culture and authentic relationship and management of values. This relationship is not possible from a mediated distance and it is here that the concepts of 'Country' and 'wilderness' conflict. Country, by definition, must be, and manifestly be perceived to be, culturally experienced and integrated, not locked away and managed by exclusion. The continuity of bond with Country is about leaving our own messages for future generations, coupled with a material realisation of the wellbeing benefits this relationship to Country can bring.

This 2016 TWWHA Management Plan is an opportunity to strengthen the relationship between

Healthy Country, healthy people, Tasmanian Aboriginal people on Country, Southwest National Park

Photo Jillian Mundy



the TWWHA and Tasmanian Aboriginal people for mutual benefit. Its effective implementation is founded on overcoming the gulf of understanding inherent in past and present management practices that have fostered Aboriginal exclusion. The foundation elements of a valid partnership are the protection and recognition of the TWWHA as an Aboriginal cultural landscape and the development and implementation of authentic joint management arrangements.

The entire TWWHA is a unique area of Aboriginal cultural heritage of universal value. Recognising and protecting the TWWHA as an Aboriginal cultural landscape requires recognition of Aboriginal custodianship equal to that afforded the non-Indigenous protection role. The Management Plan seeks to make this tangible through dual naming to reflect Aboriginal understandings of Country that are not compatible with the concept of 'wilderness', to reflect the many thousand-year-old Aboriginal heritage. Through the plan the TWWHA will be rebranded to reflect Tasmanian Aboriginal people's custodianship and the Aboriginal cultural context of all the area's values: cultural and natural. These measures and the development of a stringent and resourced program of 'reconnection and strengthening' of Aboriginal relationships to Country, including providing for Aboriginal people to develop extended-stay cultural spaces within the TWWHA, are expected to make significant contributions to Aboriginal wellbeing.

Fully realising the wellbeing significance of the TWWHA for Aboriginal Tasmania requires active participation in the natural and cultural resource management of the TWWHA. A meaningful partnership is one that balances the legitimate needs of cultural and site protection with the equally valid social, cultural, spiritual, health and economic benefits that accrue from Aboriginal connection and closeness to Country.

This personal contribution to the Management Plan from Professor Maggie Walter is gratefully acknowledged. Professor Walter is Pro Vice-Chancellor, Aboriginal Research and Leadership and Professor of Sociology, University of Tasmania.



3 USE AND DEVELOPMENT CONTROLS

3.1 THE MANAGEMENT ZONING AND OVERLAY SYSTEM

The application of a zoning system is a fundamental tool for regulating use of the TWWHA. The primary element of the system is the application of Management Zones and an associated Table of Use. The zones are a reflection of existing and anticipated use of the TWWHA, and of the need to control, manage and facilitate usage to ensure that the area's values are protected and management objectives are achieved.

The secondary element is the use of Management Overlays to further refine management within particular areas. Overlays are used both to directly manage and protect values and to regulate use, with regulation of use also often being for the protection of values. The overlay system is a more flexible management tool that allows for an appropriate response to possible changes in circumstances, such as novel biosecurity threats. The spatial extent of Management Overlays, as described in the Management Plan, may be altered without amendment of the Management Plan. Unless part of an emergency response, alteration of Management Overlays will be subject to a Reserve Activity Assessment (RAA) and an opportunity for public comment provided. Where a Management Overlay is altered, established or removed, the spatial extent and rationale for that change will be published as a Public Notice and on the PWS website.

Every effort has been made to ensure the zoning system is comprehensive, and all existing and approved uses and developments within reserves have been identified and correctly zoned to allow for them to continue and to be maintained (unless an alternative management approach has been defined). However, it is recognised that oversights may occur; the Management Plan does not necessarily preclude the continuation of these uses. Any existing and sanctioned use or development that is not identified in the plan may continue and may be maintained, subject to other requirements of the plan. However, this does not apply when work performed on existing infrastructure is outside of normal maintenance and inconsistent with the zoning intent.

3.1.1 Management Zones

Four Management Zones are used: Visitor Services, Recreation, Self-Reliant Recreation and Wilderness. The Management Zones are responses to two broad management objectives: protection and conservation of values, and presentation to visitors. They also reflect the spectrum of use and associated levels of management. Indicative descriptions of each zone are provided below.

Management Zones are provided in the plan to guide the managing authority in the exercise of powers under the NPRMA pursuant to Section 27(1) (a) and (b). Other than where explicitly provided for under this plan, the boundaries are not subject to modification. Zone boundaries not specifically prescribed are spatially defined within the limitations of the relevant zoning maps.

The Management Plan acknowledges that the entire TWWHA is of cultural significance to Tasmanian Aboriginal people. The Management Zones are not intended to preclude Tasmanian Aboriginal people's access to Country or conduct of cultural practices (Section 4.5, page 102).

In determining the Management Zones, the following factors have been taken into account:

- World Heritage and other values, and threats to those values;
- remoteness;
- management activities;
- tourism and recreation;
- existing and anticipated patterns of use and management response;
- access; and
- pre-existing or authorised uses.

In many instances, zones are centred on walking tracks and roads. For walking tracks, the prescribed width of the zones is 200 metres on either side of the track centre line. The intention is to provide a

*Cradle Valley Boardwalk, Visitor Services Zone,
Cradle Mountain-Lake St Clair National Park
Photo DPIWE*



zone of sufficient width to allow minor rerouting, to capture existing associated infrastructure, such as huts and toilets, and to allow sufficient scope for future infrastructure requirements. Associated assets that are found to be beyond this width may be considered to be within the adjacent zone. On the South Coast Track, the total practical width of the zone on either side of the track centreline may be less than the prescribed width due to topographical constraints. Where this occurs, prescribed uses for the zone may be considered within an area up to 400 metres from the centreline of the track on the side of the track that does not have the constraint.

For roads, the Recreation Zone is 50 metres wide on either side of the road centreline. This allows the responsible authority to conduct routine maintenance activities, such as vegetation clearance, repair of drains, erosion control, maintenance of cut and fill structures, and the use of hardstands. It is also intended for the capture of associated infrastructure and public facilities, such as picnic shelters, toilets, lookouts and car parks. Assets that are found to be beyond this width may be considered to be within the Recreation Zone associated with the adjoining road. Notwithstanding existing legal rights of access, the application of the Recreation Zone to roads within the TWWHA does not imply a right of access at all times. It is anticipated that, after the road network is reviewed, some roads will be permanently closed, potentially rehabilitated and then rezoned, as required, in future plans.

3.1.1.1 Visitor Services Zone

The Visitor Services Zone is generally an area that provides, or is anticipated to provide, the highest level of developed visitor facilities, and where the majority of visitors experience the TWWHA. This type of zone is generally a high-use area with mechanised access. It promotes visitation and provides services and facilities according to levels of usage and environmental constraints. Natural and cultural heritage values draw visitors to the zone and are the basis of enjoyment and experience.

Development typically includes signs, toilets, shelters, car parks, interpretation infrastructure, picnic facilities including sheltered barbecue facilities, vehicle-based camping areas including such facilities as shower blocks, walking tracks developed to a high standard, and infrastructure and equipment caches that are created under concession agreements. Development may extend to tourist accommodation, staff housing, restaurant facilities, public-landing facilities, and the development of infrastructure services by the managing authority or others, such as, sewerage, water supply and power. Within the Cradle Mountain Visitor Services Zone there may be a need over the life of the plan to develop public transport modes that can effectively move large numbers of people. This can include but is not limited to low level cable cars and aerial ropeways, and funicular and cable rail systems. Infrastructure for towed snow skiing may be

*Ronny Creek, Visitor Services Zone,
Cradle Mountain-Lake St Clair National Park
Photo DPI/PWE*



provided in the Lake Dobson Visitor Service Zone.

This type of zone is the main location for provision of education and interpretation facilities and activities. It is generally expected to have an on-site or regular management presence. In some instances, it may complement visitor facilities outside the TWWHA. A number of Visitor Services Zones have existing Visitor Services Zone plans.

The Visitor Services Zone aims to:

- enable all visitors to experience and enjoy the values of the TWWHA, by providing and allowing for a range of quality services and facilities;
- provide a principal focus for necessary visitor and management services, facilities and infrastructure;
- provide high levels of access and cater for high visitor numbers;
- maintain, as far as possible, the natural setting and cultural integrity; and
- minimise the environmental and social impacts of facilities and visitor use.

Visitor Services Zones have been designated at the following locations:

- Cradle Valley
- Lake St Clair
- Bernacchi Lodge
- Abbotts Lookout
- Lake Dobson
- Russell Falls
- Hartz Mountains National Park
- Recherche Bay
- Maatsuyker Island
- Melaleuca
- Styx Valley

3.1.1.2 Recreation Zone

The Recreation Zone is generally an area where visitors conduct popular recreational activities that require a natural setting, including activities delivered by commercial enterprises. This type of zone is often a corridor for recreational travel and transit, either by vehicle or foot, through adjacent Self-Reliant Recreation or Wilderness zones. In some places, such as the central part of the Walls of Jerusalem, this type of zone comprises a large non-linear area, in order to provide a more practical response to usage patterns and anticipated management.

The zone typically has good access options for visitors, and is suitable for moderate levels of day and overnight use. Camping, walking and other low-impact, nature-based recreation opportunities may be provided, but at a more basic level than in a Visitor

*Bert Nichols Hut, Recreation Zone,
Cradle Mountain-Lake St Clair National Park
Photo DPIPWE*



Services Zone. Opportunities for recreational four-wheel-drive use, horse riding and mountain biking are also available. Development and infrastructure typically extend to the construction and upgrade of walking tracks, standing camps and huts, toilets, signs, basic camping areas and equipment caches that are created under concession agreements. Vehicle roads and tracks and associated infrastructure (for example, small car-parking areas) are features of this zone. Management inputs and presence may be at moderate levels during times of high usage and low at other times. Illustrative examples of this zone are the Overland Track, where hardened tracks, toilets, public and commercial huts are provided, and the vehicle-based facilities at the Franklin River on the Lyell Highway, where car parking, toilets and picnic facilities are provided. A number of Recreation Zones have Recreation Zone plans in place.

The Recreation Zone aims to:

- provide a range of recreational experiences for suitably equipped and prepared people in moderately challenging and largely natural settings;
- enable relatively high levels of active day and overnight recreation, without significant impact on natural or cultural values;
- provide a location for site-appropriate management infrastructure, such as bushwalker huts, sensitive and high-quality commercial infrastructure, and infrastructure that is managed by others and used by the general public; and
- allow for a variety of access opportunities including the use and maintenance of roads, vehicular tracks and associated infrastructure.

3.1.1.3 Self-Reliant Recreation Zone

The Self-Reliant Recreation Zone is generally an area where visitors can conduct recreational activities that require a challenging and relatively unmodified

setting, including activities delivered by commercial enterprises. Opportunities for some activities, such as horseriding, are more limited in scope. Visitors exhibit a higher level of experience and commitment in this type of zone. Some of the TWWHA's most challenging walking and fishing country, including the expansive western lakes area on the Central Plateau and challenging traverses in the Eastern and Western Arthur Ranges of the Southwest National Park, are within Self-Reliant Recreation Zones. Such zones may contain environmentally sensitive areas that show signs of impact. Infrastructure, such as tent platforms, toilets and hardened tracks, may be installed to mitigate environmental damage or to provide for recreational use appropriate for the zone. However, minimal management input and presence is intended.

*Eastern Arthur Range, Self-Reliant Recreation Zone,
Southwest National Park
Photo DPIPWE*



The Self-Reliant Recreation Zone aims to:

- conserve natural and cultural values in an area subject to low-level, but potentially significant, recreation use;
- maintain, as far as possible, characteristics of remoteness and isolation; and
- retain a largely unmodified natural setting for a challenging experience that meets the needs of a relatively low number of self-reliant recreation users.

3.1.1.4 Wilderness Zone

The Wilderness Zone is generally an area where there are large expanses of remote and undisturbed landscape with high wilderness values. It may also include areas with lower wilderness values, including areas adjacent to land tenures outside the TWWHA where land use may impact on wilderness values. The zoning of these areas in the Wilderness Zone is to allow for a buffer for areas containing more significant wilderness values or where there is no rationale for allocating another zone. In some instances the zoning has been applied to places that are adversely affected by past practices. In such cases, many affected areas would be expected to gradually return to a higher degree of naturalness. It should be noted that the extent of wilderness character in the TWWHA is not entirely defined by the Wilderness Zone. Nevertheless, the Wilderness Zone is designed as far as possible to include all areas of high wilderness value together with the regions whose largely undeveloped condition maintains the remoteness of these areas.

Wilderness Zone management inputs are primarily for the protection of values, fire management, monitoring and essential safety purposes. The zone is to be managed in a manner that allows for natural processes to predominate. The zone provides important opportunities for recreation in a remote, wilderness setting. To ensure these opportunities continue, new facilities and tracks are not usually provided and

mechanised access is limited to essential management purposes. Subject to approval, infrastructure for the purposes of scientific research, monitoring and observation, and restoration and rehabilitation may be located in the zone. Where this infrastructure is required on a long-term basis it should be included in the Remote Management Overlay.

The area encompassed within the Wilderness Zone, as is the TWWHA as a whole, is part of a Tasmanian Aboriginal cultural landscape. Continuing cultural practice in this area is a fundamental part of its management. In many areas of the Wilderness Zone there are also tangible historic heritage values such as huts. These may be maintained or conserved where appropriate.

The Wilderness Zone aims to:

- provide for large areas of remote country as a means of managing, protecting and conserving

Wilderness Zone, Southwest National Park
Photo DPIPWE



World Heritage and other natural and cultural values; and

- retain a challenging unmodified natural setting that suitably experienced, equipped and motivated people can visit for recreation in a remote, wilderness environment.

3.1.2 Management Overlays

Management Overlays are used to identify more specialised management regimes for specific areas and locations. They are applied over the top of Management Zones, which continue to provide the relevant general policies and controls. Management Overlay prescriptions prevail over Management Zone prescriptions where there is any inconsistency. The following Management Overlays are used:

- Motorised Vessel
- Hunting
- Hunting Access
- Biosecurity
- Karst Management
- Forest Research
- Water Supply
- Special Management
- Remote Area Management

3.1.2.1 Motorised Vessel

This overlay is a designated area where motorised boats may be used for recreational or commercial purposes. The objective is to allow for mechanised boating access that is consistent with the protection of World Heritage and other natural and cultural values, as well as recreational values. Vessels in distress or unable to safely make passage within the Motorised Vessel Overlay may enter waters beyond the extent of the overlay to the extent required to ensure their safety.

Motorised boats are any vessels with engines, including sailboats; they do not include floatplanes and

other aerial craft that land on water. Motorised boats may use Macquarie Harbour; the lower Gordon River as far as Angel Cliffs, Port Davey-Bathurst Harbour; Double Lagoon and Lake Pedder; Lake St Clair; Lake Ada, Pillans Lake, Lake Fergus (electric engines only) and the Julian Lakes. The following prescriptions apply in the Motorised Vessel Overlay:

- Entry and exit must be via designated points, where these are provided. It is illegal to construct launching sites without an authority from the Director.
- Specific restrictions such as speed limits or other restrictions to minimise environmental or social impacts, or to ensure public safety, may be imposed for any waterway and must be adhered to.

The following specific limits have been imposed on motorised boats within the Port Davey-Bathurst

Harbour area to reduce the likelihood of bank erosion or disturbance within important bird habitats:

- Davey River: Motorised boating is not permitted upstream of 145° 56.411'E. Maximum speed is 5 knots upstream of 43° 11.300'S; maximum boat length of 6m.
- Old River: Motorised boating is not permitted upstream of 146° 16.474'E. Maximum speed is 5 knots upstream of 43° 19.413'S; maximum boat length of 6m.
- Spring River: Motorised boating is not permitted east of 146° 03.718'E (the mouth of the Spring River in Manwoneer Inlet).
- North River: Motorised boating is not permitted north of the line joining 43° 19.184'S 146° 09.147'E and 43° 19.618'S 146° 10.597'E (the two headlands forming the entrance to North Inlet).

King William Range, Wilderness Zone, Franklin-Gordon Wild Rivers National Park

Photo Tourism Tasmania & Geoff Murray



- James Kelly Basin: Motorised boating is not permitted west of a line joining 43° 15.852'S 145° 53.282'E and 43° 15.948'S 145° 54.282'E.
- Hannant Inlet: Motorised boating is not permitted south of 43° 22.788'S.
- Moulters Inlet: Motorised boating is not permitted south of 43° 22.854'S.
- In Melaleuca Inlet a 5 knot maximum speed limit applies south of 43° 24.496'S. Access to Melaleuca Lagoon is restricted to leaseholders and for management purposes.

Additional management prescriptions are provided for Port Davey-Bathurst Harbour (Section 6.4.1 page 136) and the Gordon River (Section 6.4.2 page 138).

3.1.2.2 Hunting

This overlay prescribes areas where designated game species may be hunted recreationally. The objective is to allow the enjoyment of hunting to continue in areas of pre-existing use, and under conditions that minimise environmental and social impacts on World Heritage and other natural and cultural values of the TWWHA.

The overlay on Farm Cove Game Reserve on Macquarie Harbour allows for hunting of permitted duck species only. The overlay areas on the Central Plateau allow for hunting of wallaby, rabbit and fallow deer. The hunting of deer may only occur within the overlay east of the Highland Lakes Road. Dogs may be used for hunting purposes in accordance with the prescriptions detailed below. Companion dogs are addressed in the Table of Use, Section 3.2 page 77).

The following prescriptions apply in the Hunting Overlay:

- All hunting must be undertaken in accordance with relevant provisions of the *Wildlife (General) Regulations 2010* or any other regulations in place.
- Use of firearms is not permitted during the period commencing one hour after sunset on

any day and ending one hour before sunrise on the next day.

- Incidental taking of feral species including, but not limited to, cats, goats and foxes is permitted. Any fox carcass must be retained, preserved and provided to the Department of Primary Industries, Parks, Water and Environment.
- Within the Hunting Overlay in Farm Cove Game Reserve, the following prescriptions apply:
 - A maximum of one dog per hunter is allowed for the purpose of retrieving ducks.
 - Existing hides may be maintained using materials salvaged from inside the Farm Cove Game Reserve. No new hides are to be constructed.
 - Dogs and firearms may be transported in vessels through the Macquarie Harbour Historic Site for the purposes of hunting in the Farm Cove Game Reserve. Dogs are permitted to the high water mark within Farm Cove Game Reserve and may, if tied up, be kept at Kelly Basin and Braddon River campsites. Firearms may be brought ashore at Braddon River and Kelly Basin camps only for the purposes of duck hunting in Farm Cove Game Reserve.
 - Only shotguns may be used in the Farm Cove Game Reserve.
- Within the Hunting Overlay areas on the Central Plateau, the following prescriptions apply:
 - A maximum of two dogs per wallaby hunter are allowed for the purpose of tracking and flushing out game only, with a maximum of six dogs per party.
 - Only shotguns may be used in the area west of the Highland Lakes Road.

3.1.2.3 Hunting Access

The Hunting Access Overlay creates an access corridor to areas that are subject to a Hunting

Overlay, or to areas outside the TWWHA that are used for hunting, through which firearms may be carried, but within which hunting is disallowed. The Hunting Access Overlay may only be used for this purpose where the associated Hunting Overlay or adjacent area is available for hunting. The application of general policies in the area is as specified by the underlying Management Zone.

3.1.2.4 Biosecurity

A high level of integrity substantially adds to the Outstanding Universal Value of the TWWHA. However, a number of introduced pests, weeds and pathogens are direct and serious threats to its natural and cultural values. *Phytophthora* root rot is degrading buttongrass moorland vegetation and chytrid fungus is a threat to frog species. Ongoing management is required for sea spurge weed (*Euphorbia paralias*) on remote beaches and for blackberry (*Rubus fruticosus*) on wild rivers. There are 15 Declared Weeds in the TWWHA, and nine introduced fauna species are widespread. It will not be feasible to eradicate many of the more serious pests, weeds and pathogens if they establish a foothold. New and emerging biosecurity threats may arise from the presence of interstate and overseas visitors. Fishing and walking gear, canoes, boats, float tubes and other items can harbour pests, weeds and pathogens, including a new *Phytophthora* species (*Phytophthora ramorum*) and the didymo freshwater algae (*Didymosphenia geminata*) that is choking New Zealand waterways. Neither species has yet been recorded in Australia.

The Biosecurity Overlay allows for management of any such threats through the application of biosecurity measures that are additional to those that may be applied across the whole TWWHA. The declaration of a Biosecurity Overlay may be required in response to specific biosecurity threats, or as an ongoing measure to protect areas that have values that are especially vulnerable, particularly in remote areas. The application of any such prescriptions will depend on

the nature of the threat. However, regulation of access is likely to be a key mitigation measure. No areas are currently designated as a Biosecurity Overlay. Where a Biosecurity Overlay is to restrict any person from entering or remaining in or on any part of reserved land, the Director must be satisfied that the public access restriction is necessary for the proper care, control or management of that area.

3.1.2.5 Karst Management

While access to caves and karst features is managed in accordance with the PWS Cave Access Policy, additional management measures may be required to protect karst values on a scale that is beyond the policy. Karst areas formed in limestone and dolomite are recognised as contributing to the Outstanding Universal Value of the TWWHA. Karst areas have distinctive attributes, such as the presence of underground cavities, conduit-flow groundwater systems and typically skeletal soils, in addition to the presence of caves with important natural and cultural values. These are sensitive environments which cannot be managed effectively without reference to their karst characteristics. The Karst Management Overlay identifies areas where management needs to take ongoing account of karst values. As with the Biosecurity Overlay, the application of management measures will depend on the circumstances.

A Karst Management Overlay is applied to the Mole Creek Karst National Park and associated reserves where it lies within the TWWHA. The relevant block management and Management Zone provisions of the Mole Creek Karst National Park Management Plan 2004 apply within this extent of the Karst Management Overlay. Where blocks have been added after the Mole Creek Karst National Park Management Plan, the relevant provisions of the 'Natural Zone' of that plan apply. Access within the overlay is in accordance with the PWS Cave Access Policy. The initial application of this overlay in the Mole Creek Karst National Park and associated reserves

has been on an administrative basis, although this measure is for the protection of values. It is expected that future application of the overlay would be on a more bio-physical basis.

3.1.2.6 Forest Research

Part of the Warra Long Term Research Site was brought into the TWWHA by the 2013 boundary extension. The site hosts a number of important long-term research projects about forest-management issues, including carbon storage, disturbance, forest ecology and climate change. The site includes an 80-metre-tall carbon flux tower that continuously measures the exchanges of carbon, water and energy between a 55-metre-tall mixed-age *Eucalyptus obliqua* forest and the atmosphere. The forests that surround the tower are perpetuated by wildfires every 100 to 150 years; they represent one of the most productive and carbon-dense native forest ecosystems on Earth. Understanding the carbon and water cycles of these forests is a matter of great scientific and social interest, particularly in regard to the comparative outcomes of their competing uses: harvesting for wood production and reservation. Data from the flux site not only contributes to questions of local importance, but also supports national and international science, particularly research about the impact and vulnerabilities of climate change, climate modelling and carbon dynamics.

The Forest Research Overlay encompasses the extent of the Warra site within the TWWHA. It acknowledges pre-existing use of the site and the importance of its research activities. Within the Forest Research Overlay, existing long-term studies are permitted to continue, including the potential for harvesting of forest that surrounds the flux tower where required for research purposes only.

3.1.2.7 Water Supply

The Lake Fenton-Lady Barron Creek catchment

within Mount Field National Park provides drinking water for downstream users, including those in Hobart. TasWater manages supply of the water. Recreational and other activities can pose risks to the quality of drinking water. The objective of the overlay is to manage the collection and supply of water, and to protect drinking water quality while also protecting and conserving natural and cultural values. Within the Water Supply Overlay, the following applies:

- Management within the Water Supply Overlay will be governed by the prescriptions of the Lake Fenton-Lady Barron Creek Drinking Water Catchment Management Plan (2000).
- The advice of TasWater will be sought regarding any activity or development with the potential to impact upon water quality in the zone.
- Camping is prohibited.
- Swimming is prohibited.
- Fishing is prohibited at Lake Fenton and on Lady Barron Creek upstream of the TasWater weir.
- Vehicles collecting toilet wastes from within or beyond the zone must have empty toilet waste containers when they initially enter the zone.

3.1.2.8 Special Management

In limited circumstances, access restrictions may be required where the protection of natural and cultural values is incompatible with general public access. There may be impact from direct physical use or, indirectly, from events such as the spread of pests, weeds and pathogens. In some cases, restrictions may also be required to protect long-term research and monitoring sites from disturbance. The Special Management Overlay is designated as a restricted area to which the public does not have a general right of access in accordance with Section 37 of the *National Parks and Reserves Management Act 2002*. Entry to a Special Management Overlay requires written authority from the Director, in accordance with Regulation 28 of the *National Parks and Reserves*

Land Regulations 2009, and is subject to conditions that the Director may deem necessary, or requires an authorised person to be present. The Special Management Overlay currently applies to the following locations:

- Boomerang Scientific Reference Site;
- the following islands: Pedra Branca, Mewstone and Eddystone Rock; and
- the following caves where guided tours are conducted, or where access has been restricted for some time, through physical barriers or by an authority (the Cave Access Policy will provide a context for zoning within the caves and reviewing conditions for access):
 - Newdegate Cave
 - King George Cave
 - Wolf Hole
 - Mystery Creek Cave (upper passage)
 - Kubla Khan Cave
 - Genghis Khan Cave
 - Diamond Cave
 - Tailender Cave
 - Baldocks Cave
 - Croesus Cave
 - King Solomons Cave
 - Haile Selassie Cave
 - Marakooa 1 Cave
 - Marakooa 2 Cave
 - Herberts Pot
 - Welcome Stranger Cave

The Boomerang Scientific Reference Site is a sensitive scientific reference or benchmark site. It protects a representative example of feldmark that is undisturbed by walking tracks or other impacts. Disturbance at this site is irreversible and would adversely affect scientific monitoring that is of high importance to TWWHA management.

Special Management Overlays for caves apply to

entrance points and the underground extent of the caves. They do not apply to ground surfaces above the caves.

The Special Management Overlay is intended to be used where ongoing restriction is likely to be required. The prescriptions for the use of the overlay are not intended to apply to the use of the *National Parks and Reserved Land Regulations 2009* to restrict access in response to events such as landslips, wildfire, floods or other public safety concerns or areas subject to works or other management activities requiring restriction of access.

3.1.2.9 Remote Area Management

The Remote Area Management Overlay identifies areas where providing and maintaining vital infrastructure in otherwise remote settings are required. The infrastructure includes communication towers, navigation lights, hydrological gauging stations, weather stations, associated helicopter pads, and facilities on Maatsuyker Island and at Melaleuca. Such areas generally have a limited extent and are identified graphically by a symbol, rather than a delineated area (except for Maatsuyker Island and Melaleuca). The intent of this overlay is to allow for routine maintenance, use and access, vegetation clearance limited to that required for safe use and fire protection, replacement of existing infrastructure with similar structures, and minor modifications to existing infrastructure to occur through an authority or lease.

3.2 DISTRIBUTION OF ZONES AND THE TABLE OF USE

The Table of Use (page 77) provides guidance on use of the TWWHA that is based on the Management Zones and Overlays. The allowance by the Management Plan of a particular activity or use provides an opportunity for it to occur. However, it does not necessarily follow that the activity or use

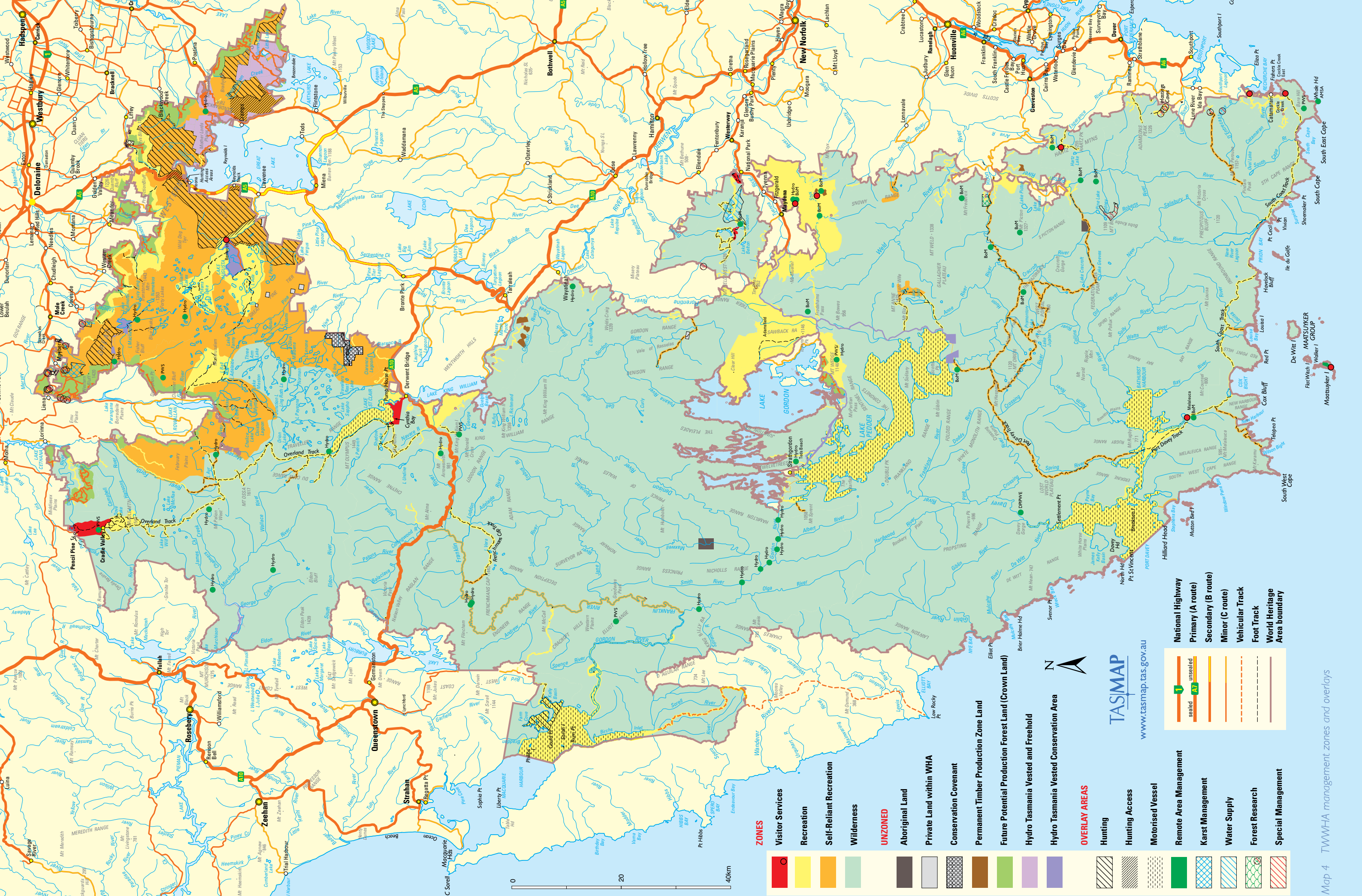
is permitted as a right. Activities such as bushwalking and camping are described as 'permitted' throughout all the zones to indicate that these activities are considered a normal enjoyment for people within the TWWHA, although they may at times be locally regulated where required for management purposes, for example safety or the protection of natural or cultural values. Other activities (for example four-wheel driving and horseriding) are allowed for but may require an authority from the Director in accordance with the *National Parks and Reserved Land Regulations 2009* in some areas. Some activities, such as those requiring the construction of infrastructure, while allowed for in the Table of Use, will be required to undergo applicable assessment and approval processes, to determine if an individual proposal should be granted the authority to proceed.

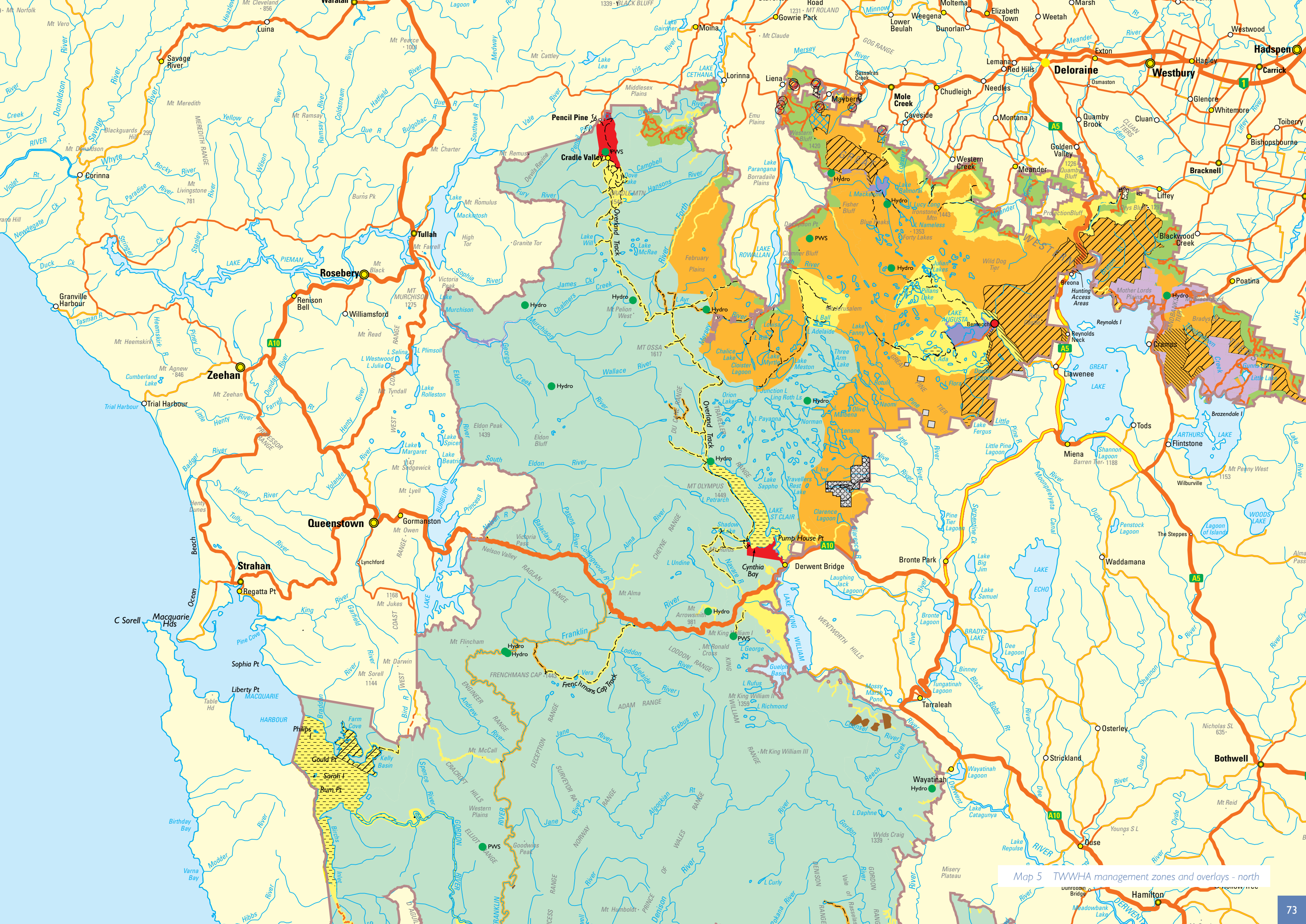
Commercial activities within reserved land, such as guided fishing trips or the use of standing camps, require the granting of a lease or licence from the Minister, in addition to any relevant assessment and approval process. The granting of leases and licences is provided for through the NPRMA. In exercising the provisions within this Act, the Minister must have regard to the Management Plan, and the objectives of the Tasmanian resource management and planning system. To meet this requirement, the Minister would therefore consider only sensitive and appropriate developments within the TWWHA.

An overview of the TWWHA Management Zones is shown in Map 4 (page 71). Map 5 (page 73) and Map 6 (page 75) break this overview into northern and southern sections. Maps 9 to 23 (pages 191–205) show zones in particular areas of interest at a finer scale.

Hydro Tasmania monitoring station (lower right of image), in a Remote Area Management Overlay, Franklin-Gordon Wild Rivers National Park
Photo DPIWE







Map 5 TWWHA management zones and overlays - north



Map 6 TWWHA management zones and overlays - south

TABLE OF USE

The Table provides guidance on recreational and use activities. The Table needs to be read in conjunction with the notes and other provisions in the plan as some activities are specifically constrained by an overlay, or by conditions specified elsewhere in the plan. Notes relating to this table are on page 80.

An activity or use may be regulated, restricted or prohibited through the provisions of the *National Parks and Reserved Land Regulations 2009* if required for environmental, safety or social purposes, consistent with this Management Plan.

Key:

- Y Provides for the activity or use to occur within the zone. Whilst the opportunity for the activity or use is allowed for, it is not necessarily permitted as a right. A proposed activity or use may:
- be subject to applicable assessment and approval processes;
 - require the issue of an authority in accordance with the *National Parks and Reserved Land Regulations 2009* or a licence/lease (for commercial operations) in accordance with the *National Parks and Reserves Management Act 2002*; and/or
 - be restricted to roads, tracks or a designated area.
- N Not permitted

Activity	Visitor Services Zone	Recreation Zone	Self-Reliant Recreation Zone	Wilderness
Aircraft – Subject to the restrictions prescribed in Section 6.3.3				
• Commercial Landings ¹	Y	Y	Y	N
• Private Landings	Y Melaleuca only under exceptional circumstances	N	maximum 5 sites only N	N
Aircraft – Ballooning ¹ operations and landings on reserved land – commercial only	Y	Y	N	N
Aircraft – Hang-gliding / paragliding ^{2,3}	N	Y	Y	Y
Aircraft – Remotely Piloted Aircraft operation and use of drones on reserved land				
• Associated with commercial filming ^{1,2}	Y	Y	Y	Y
• Management purposes ²	Y	Y	Y	Y
• Recreational/private	N	N	N	N
Apiary sites (beekeeping) ¹	N	Y	N except existing licences	N except existing licences
Bushwalking	Y	Y ⁴	Y	Y
Camp fires	N ⁵	N ⁵	N ⁵	N
Camping	Y designated camping areas only	Y	Y	Y
Caving In accordance with the requirements of the PWS 'Cave Access Policy'	Y	Y	Y	Y
Commercial filming ¹	Y	Y	Y	Y

Activity	Visitor Services Zone	Recreation Zone	Self-Reliant Recreation Zone	Wilderness
Commercial forestry excluding Huon pine salvage from the shoreline of Macquarie Harbour	N	N	N	N
Commercial tourism operation ¹ not including built infrastructure	Y	Y	Y	Y
Construction of single use mountain bike tracks	Y	Y ⁹	Y ⁹	N
Cycling / mountain bike riding	Y ⁶	Y ^{6,9}	Y ⁹	N
Dog walking not including the use of dogs for hunting	N except in the designated dog-exercising areas of the Recherche Bay Nature Recreation Area	Y ^{7,8} daylight hours only except designated areas at Recherche Bay Nature Recreation Area	N ⁸	N
Existing public or historic huts and associated infrastructure	Y may be maintained or replaced including through a partnership agreement	Y may be maintained or replaced including through a partnership agreement	Y may be maintained or replaced including through a partnership agreement where justified by recreational, social or heritage values	Y may be maintained or replaced including through a partnership agreement where justified by recreational, social or heritage values
Firewood collection – commercial and domestic	N	N	N	N
Fishing – inland and coastal waters Bait is not to be sourced from within the TWWHA.	Y ^{11, 16}	Y ^{11, 16}	Y ^{11, 16}	Y ^{11, 16}
Four-wheel-driving ² In designated vehicle areas or by authority as detailed in section 8.5	Y	Y ⁷	N	N
Geocaching	Y ²	Y ²	N	N
Grazing	N	N	N	N
Horseriding all overnight use requires an authority	N	Y ^{7, 10}	Y ¹⁰	N
Hunting – recreational	N	Y ¹² within the Hunting Overlay (section 3.1.2.2)	Y ¹² within the Hunting Overlay (section 3.1.2.2)	N
Marine farming	N	N	N	N
Mineral exploration and extraction not for management purposes	N	N	N	N

Activity	Visitor Services Zone	Recreation Zone	Self-Reliant Recreation Zone	Wilderness
Motorised boating ¹⁶ Specific requirements apply to: • Port Davey-Bathurst Harbour (refer section 6.4.1) and • Gordon River (refer section 6.4.2)	Y within the Motorised Vessel Overlay (section 3.1.2.1)	Y within the Motorised Vessel Overlay (section 3.1.2.1)	N except with the use of electric engines within the Motorised Vessel Overlay on Lake Fergus	N
Organised event or group activity ² (non-commercial including training exercises)	Y	Y	Y	Y
Prospecting ¹³	N	Y ² in conservation areas and regional reserves only	N	N
Rafting / kayaking and canoeing non-motorised vessels	Y	Y	Y ¹⁴	Y
Rock climbing, canyoning and abseiling ¹⁵	Y	Y	Y	Y
Sea kayaking	Y	Y	Y	Y
Signage	Y	Y	Y for management purposes only	Y for management purposes only
Snow skiing and snow recreation Towed skiing Lake Dobson VSZ only	Y	Y	Y	Y
Over snow vehicles ¹⁷	Y	Y	N	N
Trail-bike riding and all-terrain vehicles access. ² Registered vehicles only. In designated vehicle areas or by authority as detailed in section 8.5.	N	Y ⁷	N	N
Vehicle Access on roads open for public use	Y	Y	N	N
Visitor accommodation (new) New private (non-commercial) infrastructure is prohibited	Y	Y including huts and standing camps	Y standing camps only	N
Visitor Facilities – day use ¹⁸	Y	Y	N	N
Walking Tracks For track classifications see Section 6.3.1, page 130	Y new tracks permitted, tracks to W1 or W2 standard	Y new tracks permitted, tracks generally to T1 standard	Y new tracks or reroutes for environmental/management purposes, tracks generally managed up to T3 standard	Y new tracks or reroutes for environmental/management purposes, tracks generally managed up to T3 standard
Water sports (passive activities only e.g. scuba diving, surfing)	Y	Y ¹⁶ restrictions apply in Bathurst Channel	Y	Y ¹⁶ restrictions apply in Bathurst Channel

NOTES:

1. Where approved by way of a licence / lease agreement in accordance with the NPRMA.
2. Where approved by a written authority (permit) or a designated area for that activity / use in accordance with the *National Parks and Reserved Land Regulations 2009*.
3. A 'group authority' may be issued to the Tasmanian Hang Gliding and Paragliding Association specifying approved take-off and landing areas within the TWWHA and conditions of approval.
4. On the Overland Track a booking and fee system applies.
5. The TWWHA is a designated Fuel Stove Only Area except where a fireplace area has been designated in accordance with the requirements of the Management Plan (Section 8.1) and the *National Parks and Reserved Land Regulations 2009*.
6. On formed roads and PWS managed vehicular tracks or designated bicycle-riding areas.
7. On formed roads and managed vehicular tracks or designated areas in regional reserves and conservation areas within the 2013 extension areas. Subject to the outcome of the strategic review of the road network.
8. Companion dogs permitted by authority within the Central Plateau Conservation Area and at the Braddon River, Kelly Basin and Mosely (Birch's Narrows) campsites.
9. Within conservation areas, and in regional reserves in the area of the 2013 extension where determined and designated in accordance with the *National Parks and Reserved Land Regulations 2009*.
10. Within current designated horseriding areas by the existing permit registration system or by authority.
11. In accordance with the *Living Marine Resources Management Act 1995*, *Inland Fisheries Act 1995* and associated regulations
12. Hunting within the Farm Cove Game Reserve during the open season (duck) by general authority (public notice). Hunting within the specified areas of the Central Plateau by written authority issued to a hunter.
13. Prospecting means to explore for minerals to a depth of less than 2 metres below the surface of the earth or any excavation by means of a handheld instrument. Where approved, a permit will also be required under the *Mineral Resources Development Act 1995*.
14. Commercial rafting of the Franklin River is subject to the provisions detailed in Section 6.4.5.
15. Refer to Section 6.4.6 of the plan for the specific climbing and canyoning prescriptions.
16. Refer to Section 6.4.1. The *Port Davey Marine Reserve – Guidelines for Visitors* provides further information on fishing, boating and scuba diving in this area.
17. Over snow vehicles may be used in association with a licensed operation on a public road or approved vehicular track, or for search and rescue purposes.
18. Day use access, amenities and information in accordance with the Reserve Standards Framework including car parks, picnic shelters and tables, toilets, walker registration booths, and interpretation.

3.3 ASSESSMENT AND APPROVAL PROCESSES

At the State level, the Management Plan functions as a statutory plan for the various reserves within the TWWHA. In this regard, the management by PWS of areas that are subject to this plan is required to be in accordance with its broad intent and its specific prescriptions. Where the plan allows for a use to potentially occur (for example, new visitor infrastructure), that activity may be subject to a number of assessment and approval processes. The purpose of the Management Plan is to provide guidance on potential use of the TWWHA. The relevant assessment and approval processes determine if a specific proposal is compatible with the Vision and management Objectives set out in the Management Plan, in addition to any other

*Frenchmans Cap Track reroute works,
Franklin-Gordon Wild Rivers National Park
Photo DPI/PWE*



lawful requirements. This section of the plan outlines assessment and approval processes that may apply to a range of possible activities within the TWWHA.

3.3.1 Reserve Activity Assessment

The Reserve Activity Assessment (RAA) is the PWS assessment process for activities on reserved land that could have a potential impact on reserve values. The RAA process has been in place for a number of years and has effectively replaced the New Proposals and Impact Assessment process prescribed in the 1999 TWWHA Management Plan. An RAA helps the PWS to assess and document:

- an activity's compliance with relevant statutes, policies and plans;
- an activity's environmental, social and economic benefits and impacts;
- the actions to be taken to maximise benefits and minimise impacts;
- whether a proposal is approved, approved with conditions or not approved; and
- whether the activity, when completed, achieved its stated objectives.

The RAA process meets the requirements of the Tasmanian Reserve Management Code of Practice which sets out appropriate management practices and standards. An RAA is required for new or recurrent works, and for activities that, over a period of time, have the potential to cause adverse environmental, social or economic impacts. Routine and general maintenance or replacement activities, such as those performed on a day-to-day basis, or activities where the potential to cause environmental, social or economic damage is low, do not usually require an RAA. For activities in the TWWHA considered through the RAA process, the potential impact on values that contribute to the Outstanding Universal Value of the TWWHA will be a key consideration.

There are four levels of RAA corresponding to the nature of the proposal or activity to be assessed. A Level 1 RAA is used to assess if legislative and policy requirements are met for low-impact activities where potential impacts are well understood. It is usually a desktop assessment and public input is not normally sought. A Level 2 RAA requires specialist advice and is used to assess activities that have a moderate potential for environmental, social or economic impacts. A Level 3 RAA will require additional assessments and studies to understand the potential impacts of an activity. Stakeholder consultation for Level 2 and Level 3 RAAs will be undertaken where this may be beneficial. A Level 4 RAA, which is the highest level, requires the formulation of a Development Proposal and Environmental Management Plan (DPEMP) as the basis for the RAA assessment. A DPEMP involves onsite natural and cultural surveys and impact assessments. DPEMPs for Level 4 RAAs are released for public comment. Level 4 RAAs are usually required for proposals that are large in scale and have high public interest and/or substantial potential for impact on cultural and natural values. The RAA process flowchart is shown in Figure 3.1 on the following page. Activities that are subject to the Management Plan will be assessed, as required, through the RAA process.

The RAA is an adaptive process that is intended to change over time in response to review and changing circumstances. Therefore while the process itself is the prescribed assessment process for activities and proposals in the TWWHA, the details of the current RAA process are provided for information only and are not prescribed in this Management Plan. In recognition of the particular circumstances and management obligations in the TWWHA, an additional set of assessment criteria are prescribed below and apply to any assessment in the TWWHA undertaken through the RAA process or any future equivalent.

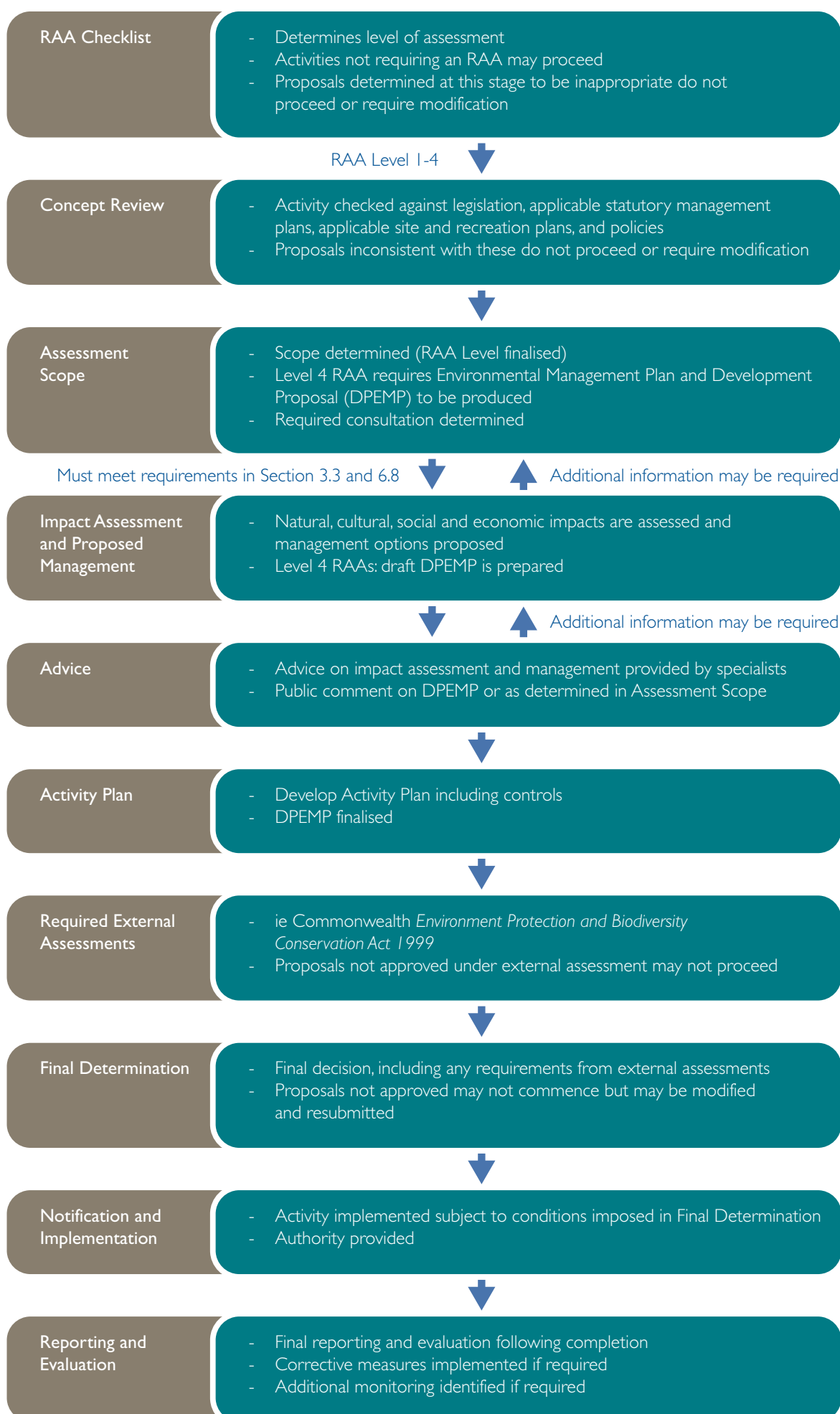
For activities and proposals in the TWWHA that require assessment through the RAA process, the following additional criteria are to be satisfied:

- The assessment process must identify the World Heritage values likely to be affected by the proposal.
- The assessment process must identify how those values might be affected.
- The assessment process must consider direct, indirect and cumulative impacts on World Heritage values.
- The assessment process must identify how any impacts on World Heritage values will be managed or mitigated.
- The assessment process must consider the social and environmental benefits and impacts of the proposal.
- The assessment process must consider appropriate monitoring and compliance measures.
- The assessment process must consider provision of public consultation based on the scale and nature of the proposal.

3.3.2 Local Government Planning Approval

In Tasmania, the *Land Use Planning and Approvals Act 1993* (LUPAA) regulates land use and development through the planning scheme administered by a local council. Proposals within the TWWHA may require a statutory assessment process that is provided by LUPAA. Depending on the type of use or development being proposed, the provisions of the planning scheme may require public consultation set out under LUPAA.

Figure 3.1 Reserve Activity Assessment Process



3.3.3 *Environment Protection and Biodiversity Conservation Act 1999*

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) provides a legal framework to protect and manage matters of national environmental significance (MNES), such as listed threatened flora, fauna and ecological communities, National Heritage places and World Heritage properties.

Any action that is likely to have a significant impact on any MNES must be referred under the EPBCA and may require approval. Actions that may impact on the TWWHA may need to be referred under the EPBCA for several reasons. As World Heritage properties (and National Heritage places) are MNES, any activity that may have a significant impact on the World Heritage values of the TWWHA needs to be considered under the EPBCA. Further, a number of other MNES, such as listed threatened species and migratory species, are found within the boundaries of the property, and potential impacts on these matters may also require referral. This applies to actions that are proposed either within, adjacent to or outside the World Heritage property boundary, including indirect and cumulative impacts.

Where a proposed action is determined to be a controlled action (i.e. likely to have a significant impact), assessment and approval under the EPBCA are required. All assessment processes under the EPBCA include a public comment period. Exemptions under the EPBCA may be applicable based on prior authorisation and existing use, as determined by the Australian Government Minister for the Environment.

3.3.4 *Licences, Leases and Expressions of Interest Processes*

Commercial activities on reserved land require either a business licence and/or a licence or lease to

occupy depending on the circumstances. Licences and leases may be granted by the Minister administering the NPRMA through the relevant provisions of the Act. Individual proposals requiring a licence or lease may be forwarded for consideration at any time. Assessment processes set out in this plan are used to determine the appropriateness of licence or lease proposals.

There may be circumstances where there are multiple proposals for a particular site or area, or where a proposal is put forward for an area where there is limited capacity for additional development should the proposal proceed. Under these circumstances an 'expressions of interest' process may be an appropriate mechanism to determine the most appropriate outcome and to manage cumulative impacts to the values and visitor experience of that area. This mechanism has become standard practice for PWS.

Assessment of a proposal may require further development of policy or planning tools either for the activity or the area in order to properly guide the assessment of the proposal. An application for a licence or lease under the NPRMA does not place any specific procedural obligations on the Minister, and the Minister may take any reasonable action to meet the requirements of the NPRMA.

To stimulate private investment in tourism on reserved land, a broader Expressions of Interest (EOI) policy has been developed. The EOI process is an administrative process, within the existing legislative framework, for assessment and approval of development proposals, in particular proposals that require significant built infrastructure, or exclusivity. The EOI process establishes an assessment panel. The assessment panel assesses proposals against the intent and guidelines of the particular EOI and makes recommendations to the Minister identifying those proposals that should be considered for licence and lease negotiations. As with any proposal requiring

a licence or lease, a number of other State or Commonwealth approvals may need to be obtained.

3.3.5 Other Approval Processes

Other regulatory processes may apply, through the following State legislation, to an activity within the TWWHA. This includes, but is not necessarily limited to:

- *Aboriginal Relics Act 1975*
- *Building Act 2000*
- *Environmental Management and Pollution Control Act 1994*
- *Forest Practices Act 1985*
- *Historic Cultural Heritage Act 1995*
- *Nature Conservation Act 2002*
- *Mineral Resources Development Act 1995*

*High voltage transmission line,
Styx River Regional Reserve
Photo DPI/PWE*



- *Threatened Species Protection Act 1995*
- *Inland Fisheries Act 1995*
- *Living Marine Resources Management Act 1995*
- *Weed Management Act 1999*
- *Water Management Act 1999*

3.4 STATUTORY POWERS

National Parks, State Reserves, Historic Sites and Game Reserves in the TWWHA

Under Section 35(1) of the *National Parks and Reserves Management Act 2002* (NPRMA), 'statutory powers', as defined in Section 3 of the Act, may not be exercised in relation to any land in a national park, State reserve, nature reserve, historic site or game reserve unless authorised by a management plan.

The NPRMA defines 'statutory power' to mean:

- (a) a power under an enactment, other than this Act, for one or more of the following purposes:
 - (i) the reservation or dedication of Crown land for any purpose;
 - (ii) the alienation of, or the grant of private rights in or over, any such land;
 - (iii) the carrying out of any works or other operations on any such land; and
- (b) a power that, under an enactment other than this Act, may be exercised by a public authority in relation to land vested in it.

A provision in a management plan that authorises the exercise of any such statutory power (in effect, for the purpose of making provision for the use or development of land within a national park, State reserve, nature reserve, historic site and a game reserve otherwise than under the powers conferred by the NPRMA) will not take effect unless its inclusion in the management plan has the approval of both Houses of Parliament.

Subject to the approval of Parliament, the statutory powers listed below are authorised to be exercised in a national park, State reserve, historic site and game reserve in the TWWHA. The authorisation of the exercise of those powers is subject to the restrictions specified in this plan in accordance with Section 27(2) of the NPRMA.

It should be noted that while the Management Plan authorises the exercise of the following statutory powers, it does not relieve those exercising statutory powers from their obligations under other Tasmanian and Commonwealth legislation.

Electricity Supply Industry Act 1995

An electricity entity is authorised to exercise statutory powers under Section 52 of the *Electricity Supply Industry Act 1995* (ESIA) subject to the following restrictions:

- 1) In so far as it relates to electricity infrastructure, the exercise of statutory powers applies only to existing electricity infrastructure, owned and/or managed by the electricity entity, in its current location within the TWWHA and to any infrastructure which is reasonably required for the modification, addition to or replacement of existing infrastructure in close proximity to that location.
- 2) An electricity entity must give written notice to the Director at least 14 days prior to the carrying out of any works to which Section 52(5) of the ESIA applies where it is practicable to do so.
- 3) The responsible authority's agreement to proposed works is not presumed for the purpose of Section 52 except in relation to work classified as being of minor environmental impact in Regulation 7(a), 7(b), 7(d) (but only for the removal, repair or maintenance of underground cables) and 7(e) of the *Electricity Supply Industry Regulations 2008*.

Roads and Jetties Act 1935

The Minister administering the *Roads and Jetties Act 1935* or a road authority is authorised to carry out statutory powers under that Act in relation to State highways and subsidiary roads within the TWWHA subject to the following restrictions:

- 1) The exercise of statutory powers applies only to existing State highways and subsidiary roads, in their current location within the TWWHA.
- 2) In exercising statutory powers under the *Roads and Jetties Act 1935*, the Minister or road authority shall endeavour to minimise disturbance to the natural and cultural environment.
- 3) The exercise of powers under Section 35(3) of the *Roads and Jetties Act 1935* is restricted to the extraction of material from borrow pits or small quarries along the Lyell Highway and Gordon River Road. Such extraction is conditional upon the undertaking by the Minister or road authority of an environmental assessment, to be completed to the satisfaction of the Director. The assessment must identify any rehabilitation works required.
- 4) No gravel or other resources extracted from within the TWWHA may be used outside the TWWHA.
- 5) Plant and machinery utilised in undertaking works must be subject to any hygiene controls which apply from time to time under departmental guidelines to minimise the risk of spreading weeds, pathogens and diseases.

Survey Co-ordination Act 1944

The Surveyor General is authorised to exercise his or her statutory powers under the *Survey Co-ordination Act 1944* in relation to survey marks located within the TWWHA subject to the following restrictions:

- 1) The exercise of statutory powers under the *Survey Co-ordination Act 1944* is restricted to existing permanent survey marks in their current location within the TWWHA and to any infrastructure which is reasonably required to replace existing infrastructure in that location.
- 2) Access to existing and replacement permanent survey marks will be done in a manner that minimises environmental damage (such as vegetation clearance), and biosecurity measures which apply from time to time under

*Lake Fenton water supply dam,
Mount Field National Park
Photo DPIPWE*



departmental guidelines must be implemented to avoid the spread of weeds, pathogens and diseases.

Inland Fisheries Act 1995

The Director of Inland Fisheries is authorised to exercise statutory powers under the *Inland Fisheries Act 1995*, with the exception of statutory powers in Part 8 Division 4, subject to the following restriction:

- 1) Salmon are not to be released into any water body within the TWWHA that is not currently inhabited by them.

Living Marine Resources Management Act 1995

The Minister administering the *Living Marine Resources Management Act 1995* is authorised to exercise all of the statutory powers under that Act in relation to the granting of fishing licences to take fish.

Marine and Safety Authority Act 1997

The Marine and Safety Authority of Tasmania (MAST) is authorised to exercise all of its statutory powers under the *Marine and Safety Authority Act 1997* subject to the following restriction:

- 1) The exercise of statutory powers under the *Marine and Safety Authority Act 1997* is restricted to existing marine facilities, owned and/or managed by MAST, in their current location within the TWWHA and to any infrastructure which is reasonably required to replace existing marine facilities in that location.

Water and Sewage Industry Act 2008

Regulated entities are authorised to exercise statutory powers under Section 56E of the *Water and Sewage Industry Act 2008* subject to the following restriction:

- 1) The exercise of statutory powers is restricted to existing water and sewerage infrastructure, owned and/or managed by the regulated entity,

in its current location within the TWWHA and to any infrastructure which is reasonably required to replace such existing infrastructure in close proximity to that location.

Local Government (Highways) Act 1982

Corporations are authorised to exercise statutory powers under *Local Government (Highways) Act 1982* in relation to local highways within the TWWHA subject to the following restrictions:

- 1) The exercise of statutory powers applies only to existing local highways vested in corporations, in their current location within the TWWHA.
- 2) In exercising statutory powers under the *Local Government (Highways) Act 1982*, the corporation shall do what is reasonably practicable to minimise disturbance to the natural and cultural environment.
- 3) The exercise of powers under Section 26 of the *Local Government (Highways) Act 1982* is restricted to the extraction of material from borrow pits or small quarries. Such extraction is conditional upon the undertaking by the corporation of an environmental assessment, to be completed to the satisfaction of the Director. The assessment must identify any rehabilitation works required.
- 4) No gravel or other resources extracted from within the TWWHA may be used outside the TWWHA.
- 5) Plant and machinery utilised in undertaking works must be subject to appropriate hygiene controls which apply from time to time under departmental guidelines to minimise the risk of spreading weeds, pathogens and diseases.

Water Management Act 1999

The Minister administering the *Water Management Act 1999* is authorised to exercise his or her powers under Section 180 of the Act subject to the following restriction:

- 1) The exercise of statutory powers is restricted so that it cannot be exercised to alter the River Derwent Hydro-Electric District beyond the area extending 25 metres either side of the centreline of the extent of the Beehive and Rufus Canals not within the current River Derwent Hydro-Electric District and within the triangular area bounded by the Beehive Canal and Burns Dam Road in the immediate vicinity of Burns Dam and may only be exercised for the purpose of altering the River Derwent Hydro-Electric District.

The Minister administering the *Water Management Act 1999*, as amended by the *Water Management Amendment (Dam Works) Act 2015*, is authorised to exercise his or her powers under Part 8 and Part 8A of the Act subject to the following restriction:

- 1) The exercise of statutory powers is restricted to existing dam infrastructure, in its current location within the TWWHA and to any infrastructure which is reasonably required to replace existing infrastructure in that location.

Mineral Resources Development Act 1995

The Minister administering the *Mineral Resources Development Act 1995* is authorised to exercise his or her powers under Part 4 of the Act subject to the following restriction:

- 1) Mining leases may only be granted for the purposes of gravel extraction for road and asset maintenance within the TWWHA.

Conservation Areas, Nature Recreation Areas and Regional Reserves in the TWWHA

Whilst the NPRMA does not prohibit or restrict the exercise of statutory powers in a conservation area, nature recreation area, regional reserve, private sanctuary or private nature reserve, it does provide in Section 27(6) that a management plan may prohibit

or restrict the exercise of statutory powers in those classes of reserved land. In accordance with Section 27(6), the exercise of the statutory powers referred to below in relation to land in a conservation area, nature recreation area or regional reserve in the TWWHA is subject to the following prohibitions and restrictions.

Electricity Supply Industry Act 1995

In so far as it relates to electricity infrastructure, the exercise of an electricity entity's statutory powers under Section 52 of the ESIA is subject to the following restrictions:

- 1) The exercise of statutory powers applies only to existing electricity infrastructure, owned and/or managed by the electricity entity, in its current location within the TWWHA and to any infrastructure which is reasonably required for the modification, addition to, or replacement of existing infrastructure in close proximity to that location.
- 2) An electricity entity must give written notice to the Director at least 14 days prior to the carrying out of any works to which Section 52(5) of the ESIA applies where it is practicable to do so.
- 3) The responsible authority's agreement to proposed works is not presumed for the purpose of Section 52 except in relation to work classified as being of minor environmental impact in Regulation 7(a), 7(b), 7(d) (but only for the removal, repair or maintenance of underground cables) and 7(e) of the *Electricity Supply Industry Regulations 2008*.

Roads and Jetties Act 1935

The exercise of the Minister's or a road authority's statutory powers under the *Roads and Jetties Act 1935* in relation to State highways and subsidiary roads within the TWWHA is subject to the following

prohibitions and restrictions:

- 1) The exercise of statutory powers is restricted to existing State highways and subsidiary roads, in their current location within the TWWHA.
- 2) In exercising statutory powers under the *Roads and Jetties Act 1935*, the Minister or road authority shall endeavour to minimise disturbance to the natural and cultural environment.
- 3) The exercise of powers under Section 35(3) of the *Roads and Jetties Act 1935* is restricted to the extraction of material from borrow pits or small quarries along the Lyell Highway and Gordon River Road. Such extraction is conditional upon the undertaking by the Minister or road authority of an environmental assessment, to be completed to the satisfaction of the Director. The assessment must identify any rehabilitation works required.
- 4) No gravel or other resources extracted from within the TWWHA may be used outside the TWWHA.
- 5) Plant and machinery utilised in undertaking works must be subject to any hygiene controls which apply from time to time under departmental guidelines to minimise the risk of spreading weeds, pathogens and diseases.

Survey Co-ordination Act 1944

The exercise of the Surveyor General's statutory powers under the *Survey Co-ordination Act 1944* in relation to survey marks located within the TWWHA is subject to the following restrictions:

- 1) The exercise of statutory powers under the *Survey Co-ordination Act 1944* is restricted to existing permanent survey marks in their current location within the TWWHA and to any infrastructure which is reasonably required to replace existing infrastructure in that location.

- 2) Access to existing and replacement permanent survey marks will be done in a manner that minimises environmental damage (such as vegetation clearance), and biosecurity measures which apply from time to time under departmental guidelines must be implemented to avoid the spread of weeds, pathogens and diseases.

Inland Fisheries Act 1995

The exercise of the Director of Inland Fisheries' statutory powers under the *Inland Fisheries Act 1995* is subject to the following prohibitions and restrictions:

- 1) Salmon are not to be released into any water body within the TWWHA that is not already inhabited by them.
- 2) The exercise of statutory powers under Division 4 of Part 8 is prohibited.

Marine and Safety Authority Act 1997

The exercise of the Marine and Safety Authority's (MAST) statutory powers under the *Marine and Safety Authority Act 1997* is subject to the following restriction:

- 1) The exercise of statutory powers under the *Marine and Safety Authority Act 1997* is restricted to existing marine facilities, owned and/or managed by MAST, in their current location within the TWWHA and to any infrastructure which is reasonably required to replace existing marine facilities in that location.

Water and Sewage Industry Act 2008

The exercise of statutory powers by regulated entities under Section 56E of the *Water and Sewage Industry Act 2008* is subject to the following restriction:

- 1) The exercise of statutory powers is restricted to existing water and sewerage infrastructure, owned and/or managed by the regulated entity,

in its current location within the TWWHA and to any infrastructure which is reasonably required to replace such existing infrastructure in close proximity to that location.

Local Government (Highways) Act 1982

The exercise of statutory powers by corporations under the *Local Government (Highways) Act 1982* in relation to local highways within the TWWHA is subject to the following restrictions:

- 1) The exercise of statutory powers applies only to existing local highways vested in corporations, in their current location within the TWWHA.
- 2) In exercising statutory powers under the *Local Government (Highways) Act 1982*, the corporation shall do what is reasonably practicable to minimise disturbance to the natural and cultural environment.
- 3) The exercise of powers under Section 26 of the *Local Government (Highways) Act 1982* is restricted to the extraction of material from borrow pits or small quarries. Such extraction is conditional upon the undertaking by the corporation of an environmental assessment, to be completed to the satisfaction of the Director. The assessment must identify any rehabilitation works required.
- 4) No gravel or other resources extracted from within the TWWHA may be used outside the TWWHA.
- 5) Plant and machinery utilised in undertaking works must be subject to appropriate hygiene controls which apply from time to time under departmental guidelines to minimise the risk of spreading weeds, pathogens and diseases.

Water Management Act 1999

The exercise of statutory powers by the Minister administering the *Water Management Act 1999*, as amended by the *Water Management (Dam Works) Act 2015*, under Part 8 and Part 8A of the Act is subject to the following restriction:

- 1) The exercise of statutory powers is restricted to existing dam infrastructure, in its current location within the TWWHA, and to any infrastructure which is reasonably required to replace existing infrastructure in that location.

Mineral Resources Development Act 1995

The exercise of powers by the Minister administering the *Mineral Resources Development Act 1995* under Part 4 of that Act is subject to the following restriction:

- 1) Mining leases may only be granted for the purposes of gravel extraction for road and asset maintenance within the TWWHA.

References to existing infrastructure and current locations

Where reference is made in this part of the Management Plan to existing infrastructure, including roads and highways, it is to be taken to be a reference to infrastructure in place in any class of reserved land at the time that the approval of both Houses of Parliament is granted under Section 27(3) of the NPRMA for the inclusion of provisions in the Management Plan authorising the exercise of the relevant statutory powers. References to 'current location' are to be understood in the same manner.

3.5 RECOGNITION OF EXISTING USES AND RIGHTS

There is provision within the NPRMA for existing leases, licences and other rights to remain in force following reservation of land (s 35(3)). The provisions are of particular importance within the 2013 boundary extension. For example, they include apiary licences granted by Forestry Tasmania for sites that are now within reserved land in the TWWHA. The intent and application of these provisions is acknowledged in the Management Plan. In particular, existing rights of access to private property through the TWWHA are acknowledged and will continue to be facilitated.

Private accommodation in the TWWHA is limited to existing leases. These generally consist of longstanding arrangements that pre-date the listing of the area within which they exist, for example the ski and bushwalking club huts at Mount Field. Existing leases may be renewed. No new leases for private or club accommodation are to be provided. The Nine Foot Users Group may continue to make use of and maintain the diversion canal from Westmorland stream through a partnership agreement with PWS.

3.5.1 Hydro-Electricity Generation and Transmission

Hydro-electricity generation and transmission is a pre-existing activity within the TWWHA. Generating assets are managed by Hydro Tasmania. Some assets, principally the Gordon Dam, are not within the TWWHA. Other assets, such as Scotts Peak Dam and Edgar Dam, are in the TWWHA but also within areas vested in Hydro Tasmania. Therefore, they are not subject to the Management Plan. Some related assets, such as roads, canals and minor dams, are on reserved land that is subject to the Management Plan.

The following are some of the more significant assets in the TWWHA in the area subject to the plan that are managed by Hydro Tasmania:

- Serpentine and Darwin (right abutment) Dams;
- Beehive, Rufus, Westons, Brumbies and Liffey Diversions;
- Sandbanks Creek Levee;
- Lake St Clair and Fisher Gauging Weirs;
- Fisher Tunnel; and
- remote resource investigation sites (for example, stream gauges).

Electricity transmission, distribution and communication assets are managed by TasNetworks. There are critical transmission assets in the TWWHA and on reserved land that are subject to the Management Plan, such as high-voltage transmission lines from the Gordon Power Station.

The importance of hydro-electricity generation and electricity transmission as a pre-existing activity in the TWWHA is recognised. The ability of electricity entities to operate and maintain generation and transmission assets within the TWWHA, and to conduct associated activities such as resource and environmental monitoring, is of critical and strategic importance to Tasmania.

The operational and maintenance activities required to be undertaken by electricity entities may include repairs, modification, replacement, addition to or renewal of dams, weirs, canals, roads, powerlines, transmission lines, substations, radio or telecommunications infrastructure and bridges. Vegetation maintenance, scientific research and monitoring and remote area management (monitoring) also have to be undertaken.

Replacement of assets typically applies to a component which wears out e.g. a tower, turbine or lining of a canal. Replacement of such items forms part of normal maintenance work. Renewal applies

to larger components. In renewal, the locations and general appearance are similar to existing infrastructure but the electricity entity may need to take account of new technology, design standards and safety. Examples of renewal include:

- raising the crest level of a dam without increasing the full supply level of the storage, or alternatively increasing the size of a spillway;
- gravel extraction for the purpose of maintaining infrastructure;
- dam safety upgrades;
- increasing the height of transmission towers;
- enlarging a switchyard; and
- minor deviations to the route of a road or canal or transmission line e.g. a few metres over 3–5 kilometres.

Installations no longer required by an electricity entity will be assessed for cultural significance and public safety. If not of significance, they will either be removed, in consultation with the Director and at the expense of the electricity entity, or allowed to decay. The electricity entity must remove unsafe installations.

Given the critical importance of scientific monitoring undertaken by Hydro Tasmania there is the potential for new monitoring-related infrastructure to be required in the TWWHA.

These activities may require specific approval including where they are undertaken through an authorisation of statutory powers as provided for in Section 3.4.

The extent of assets on reserved land for which electricity entities are responsible is to be represented by a GIS layer agreed with by the Director. It is to consist of a spatial representation of each electricity infrastructure asset, attributed with its accuracy, an asset category description and any other relevant information. The electricity infrastructure GIS layer may require updating from time to time due to the identification of additional assets, detection of

inaccuracies, removal of assets, installation of new approved assets, and rehabilitation of areas where assets are removed.

3.6 PRIMARY PRODUCTION

Use of the TWWHA for limited primary production is allowed where it is compatible with the protection and conservation of the area's values. In some instances, these uses pre-date the declaration of the area as a World Heritage property. Some historical uses, such as grazing, have been determined as having a significant impact on World Heritage values and are no longer permitted.

3.6.1 Beekeeping

The TWWHA's endemic leatherwood tree (*Eucryphia lucida*) is a vital resource of the State's honey industry. The industry in turn is vital for the State's agricultural industries through the provision of pollination services. The agricultural sector is a highly significant component of the State's economy. Although confined to areas of high rainfall and low fire frequency, the leatherwood is widespread in some parts of the TWWHA. For beekeepers, leatherwoods in the TWWHA provide a secure, long-term source of nectar that bees turn into highly prized leatherwood honey. The industry also uses other nectar sources in the TWWHA, such as eucalypts and manuka bush. Honey production is administered in the TWWHA through the provision of a licence for each apiary site. There is potential to expand production, and new sites will be permitted to undergo assessment and potential approval. Any such expansion may need to be a consideration in the management of the road network (See Section 8.5, page 180).

3.6.2 Huon Pine Salvage and Special Species Timber

The salvage of Huon pine from the shoreline of Macquarie Harbour pre-dates the declaration of the

TWWHA. The activity is permitted under a long-standing arrangement between the PWS and Forestry Tasmania. Most of the timber originates from the Gordon River and is sourced from trees that were cut down many decades ago during the height of the pining activities in the western rivers that are now in the TWWHA. Salvage operations, which occur mostly in response to flooding in the Gordon River catchment, make an important contribution to supplies of this rare and valuable timber, and are important for the economy of the region. Only commercial salvage is permitted and it must be in accordance with the PWS-Forestry Tasmania agreement, which is reviewed every five years. Salvage operations will be considered by the RAA process and any other applicable assessment and approval process.

The objectives of regional reserves and conservation areas, as set out in Schedule 1 of the NPRMA, provide for the harvesting of special species timber. Special species timber is defined within the *Forestry (Rebuilding the Forestry Industry) Act 2014* and includes blackwood (*Acacia melanoxylon*), myrtle (*Nothofagus cunninghamii*), celery-top pine (*Phyllocladus aspleniifolius*), sassafras (*Atherosperma moschatum*), Huon pine (*Lagarostrobos franklinii*), silver wattle (*Acacia dealbata*) and timber of any other species or timber with particular properties as may be prescribed through the associated regulations. Harvesting of special species timbers is not permitted, with the exception of Huon pine salvage as described, and the relevant management objectives are not applied for those reserves in the TWWHA.

3.6.3 Commercial Fishing

Port Davey is an important refuge for commercial fishermen working the West Coast. In recognition of this, restricted commercial fishing is permitted within the Port Davey area, in accordance with the *Living Marine Resources Management Act 1995* and the *Fisheries Rules 2009*.



4 CULTURAL VALUES MANAGEMENT

MANAGEMENT OBJECTIVES

To develop and implement a joint management arrangement that ensures the strategies and actions for identification, protection, conservation and presentation of the World Heritage and other values of the TWWHA are developed in partnership with Tasmanian Aboriginal people.

To understand the TWWHA as an Aboriginal cultural landscape, reflecting its long occupation, as a foundation for the management of its cultural values.

To identify, protect, conserve and restore cultural values in the TWWHA.

This section of the Management Plan provides prescriptions for the identification, protection, conservation, presentation and transmission of Tasmanian Aboriginal cultural values. Threats to cultural values are identified and Management Actions to mitigate those threats are provided. The management of cultural values is based upon the Statement of Values in Section 2.1 (page 38). As such, the management of the outstanding cultural values addresses not only the management of the values that underpin the World Heritage listing for the TWWHA, but also Tasmanian Aboriginal cultural values more broadly. Aboriginal people, through the engagement process developed for this Management Plan, identified these broader values. In this context, the values that underpin the listing criteria are part of a continuous relationship between Aboriginal people and the TWWHA. Management of cultural values must be concerned equally with all aspects of that continuous association, not least of which is the relationship with Country that Tasmanian Aboriginal people seek to continue and strengthen.

The bases for management of the cultural values are the World Heritage Convention, *Operational Guidelines for the Implementation of the World Heritage Convention*, Australia ICOMOS Charter for Places of Cultural Significance and the management objectives of the various reserve classes within the TWWHA. The 2001 Australia ICOMOS Statement on Indigenous Cultural Heritage provides important guiding principles that underpin the management of Tasmanian Aboriginal cultural heritage in the TWWHA.

Tangible Aboriginal cultural heritage is protected through the *Aboriginal Relics Act 1975* (ARA), where the definition of 'relic' provided under the Act is met. Any action that disturbs a relic requires a permit from the Minister administering the ARA. The issuing of permits is usually coordinated by Aboriginal Heritage Tasmania (AHT), within DPIPWE.

4.1 GOVERNANCE: JOINT MANAGEMENT

Development of the 1999 TWWHA Management Plan included extensive consultation with, and input from, Tasmanian Aboriginal people. This led to activities that promote Aboriginal participation in the identification, protection, conservation and interpretation of their heritage. However, many of the plan's Key Desired Outcomes (KDOs) for Aboriginal interests have not been fully achieved, particularly with regard to the integration of responsibilities for management of Aboriginal cultural values, leading to a view amongst some Aboriginal people that the management of natural values has overshadowed the management of Aboriginal cultural values. This Management Plan, which has again been formulated in consultation with Tasmanian Aboriginal people,

*Interpretive panels, Needwonnee Walk,
Melaleuca, Southwest National Park
Photo Jillian Mundy*



provides for a greater Aboriginal voice. It also provides greater capacity, responsibility and accountability for the management of cultural values through a joint management arrangement to ensure KDOs are achieved.

An important part of this arrangement is the establishment of a dedicated group within DPIPWE to oversee implementation of the Management Plan. The cultural management group will establish links between the natural and cultural heritage aspects of Aboriginal interests, provide advice on matters pertaining to Aboriginal cultural values in the TWWHA, and oversee project and policy development while working closely with Aboriginal people and organisations. As a minimum, the group will consist of the following full-time staff: a senior manager supported by an Aboriginal engagement officer and an Aboriginal heritage specialist.

The cultural management group's main functions will be:

- providing advice to the Director about the management of Aboriginal cultural values in the TWWHA;
- policy development and planning in the TWWHA;
- facilitating research, monitoring and evaluation in the TWWHA;
- coordinating and facilitating engagement with Aboriginal people, and advancing of joint management arrangements;
- facilitating a Reconnection to Country program and interpreting and promoting cultural tourism in the TWWHA; and
- implementing the relevant actions and policies in the Management Plan, in consultation with Aboriginal people, including a biennial review and report on progress towards KDOs.

The cultural management group will also establish a governance framework that provides a role for a non-government Aboriginal organisation in the management of Aboriginal cultural values in the TWWHA. This will be achieved through genuine engagement that ensures equitable Aboriginal involvement in TWWHA management.

KDO 4.1: Management of Aboriginal cultural values in the TWWHA is undertaken through a joint management governance arrangement that is supported by a dedicated unit within DPIPWE.

Two way rope, an example of Tasmanian Aboriginal cultural practice, Needwonnee Walk, Southwest National Park
Photo Jillian Mundy



Management Actions:

- Establish a cultural management group within DPIPWE to oversee implementation of the Aboriginal cultural management outcomes of the Management Plan and to provide ongoing support of Aboriginal cultural values management in the TWWHA.
- Establish governance arrangements that provide a role for a non-government Aboriginal organisation in the joint management of the Aboriginal cultural values of the TWWHA.

4.2 IDENTIFYING VALUES

A key threat to effective management of Aboriginal cultural values is a lack of understanding about both the nature of those values and their place in the landscape. The tendency to marginalise and limit Aboriginal cultural values to specific sites reflects a lack of awareness of the TWWHA as an Aboriginal landscape through time. A broader overall understanding can be achieved by increasing the cultural awareness of land managers, providing for joint management of cultural values, understanding the cultural landscape, increasing the employment participation of Aboriginal people in management and operations, and providing for cultural practice. In turn, these measures will increase opportunities to identify potential values and will help determine how they are managed.

Aboriginal cultural values in the TWWHA have not been identified or synthesised to the same extent as the area's natural values. Further study in consultation with Tasmanian Aboriginal people to provide more detailed information on the cultural values of the TWWHA is a priority in its future management. In support of the development of a retrospective SOUV, a synthesis of the archaeological research has been undertaken. Much of the archaeological work

was conducted in the 1980s and 1990s, although the research is ongoing. A project will plan and deliver an on-ground assessment of Aboriginal cultural values in the area of the TWWHA that was added in the 2013 boundary extension. Information gained through this work will then inform recognition of the cultural values across the entire TWWHA, including the retrospective SOUV. This work will also address the need to identify the cultural values of this area specifically. Further work has begun in the planning of a comprehensive multi-year cultural survey of the TWWHA. These projects are consistent with the intent of the Management Plan which is to establish ongoing and systematic assessment of cultural values to underpin its cultural management objectives. In particular, this work will form a basis for the recognition of the TWWHA as a World Heritage Cultural Landscape.

*Tasmanian Aboriginal girl, Needwonnee Walk,
Melaleuca, Southwest Tasmania
Photo Jillian Mundy*



KDO 4.2: There is an ongoing adaptive and systematic program of identification, inventory, assessment, mapping and documentation of World Heritage and other Aboriginal cultural values to support the Management Plan's Objectives and guiding Vision.

Management Actions:

- Conduct a comprehensive survey of the TWWHA, including the 2013 extension, to ascertain all Aboriginal values. The survey requires a desktop assessment, on-ground work, Aboriginal participation in all aspects of the project, organisation of Aboriginal access trips to areas and consultation with Aboriginal people.
- Analyse previous Aboriginal cultural heritage work to understand key knowledge gaps and to contribute to the development of a prioritised survey and research program for the TWWHA.

4.3 CULTURAL UNDERSTANDING AND PROTECTION

Protection of Aboriginal cultural values requires greater levels of understanding by land managers, scientific staff and other individuals and organisations in the TWWHA. Insufficient understanding increases the risk of adverse outcomes, such as inappropriate intrusion into culturally sensitive areas, or impact on cultural resources. These risks also need to be understood in the context of the TWWHA's broader management. For example, the spread of pests and diseases affects Aboriginal resources, including plants and animals with important cultural and spiritual associations. Such outcomes detract from cultural activities and point to the need for better integration and management of natural and cultural values. Therefore, management strategies for natural values need to fully consider cultural perspectives and build on the achievement of the DPIPWE

Natural Heritage Strategy 2013-2030 in considering cultural management perspectives. Protection and conservation of cultural and natural values must increasingly be understood as intertwined and complementary activities.

Greater cultural awareness will underpin more co-operative practices and improve relationships between Aboriginal people and the staff and agencies that help to manage the TWWHA. The progressive rollout of appropriate cultural awareness training for all of these staff and agencies is essential for the successful protection of Aboriginal cultural values. The training package should also be provided to volunteer organisations that conduct activities in the TWWHA, and then extended to other groups such as tourist operators.

Senior Aboriginal Heritage Officer, sharing knowledge of Country, Southwest National Park
Photo Jillian Mundy



KDO 4.3: All DPIPWE staff who have responsibility for and/or undertake regular management activities in the TWWHA have an appropriate level of knowledge and understanding of the area's Aboriginal cultural values.

Management Action:

- Develop and deliver an Aboriginal cultural awareness training package to all DPIPWE staff who undertake regular management, research or other activities in the TWWHA.

Several cultural heritage sites are at risk from either natural forces or human activity. Climate change events, such as rising sea levels and storm surges, have increased erosion and damaged coastal sites. Sheet erosion on the Central Plateau has exposed Aboriginal stone artefact scatters, leaving them vulnerable to other erosion events; and the incursion of tracks and off-road vehicles from adjacent areas has damaged Aboriginal heritage and landscapes. In a few places, risks from unplanned and inappropriate walking tracks are also evident.

Urgent action is needed at some of these sites due to climate change, natural processes and some anthropogenic activities. In some cases, proper recording of destroyed, damaged or at-risk sites may be the management priority if more active intervention is not appropriate. A set of agreed protocols is also needed for the recording of these sites and the possible relocation of their material, as relocation of material will potentially become an increasingly common part of management.

KDO 4.4: Aboriginal cultural heritage sites at greatest risk are identified, protective measures implemented and their effectiveness monitored.

Management Actions:

- Identify at-risk sites. Develop and implement a program of prioritised management actions for these sites.

- Develop protocols to guide appropriate responses to the imminent loss of sites to erosion and other processes, and to the exposure of material at these sites.

Fire management in the TWWHA is based upon a well-developed strategic risk-management approach that assesses, identifies, prioritises and manages the risk posed to reserve values. Operational strategies and tactics are implemented that take into account those values for prevention, preparedness, response and recovery at a regional level. Cultural values are recognised by this framework, but are not currently fully accounted for in operational implementation, as is the case for natural values, as the required cultural values data is currently unavailable for input into the Bushfire Risk Assessment Model (BRAM), a landscape-scale risk assessment tool. The data has

*Tasmanian Aboriginal people visiting a cultural site,
Southwest National Park
Photo Jillian Mundy*



been unavailable to date due to cultural sensitivities arising from the release and use of this information. Identifying cultural values for use in the BRAM requires appropriate input from Aboriginal people, so that those values can be properly determined, particularly for landscape scale values that relate to past Aboriginal burning practices, and protocols developed for the use of cultural information. Without this input, Aboriginal cultural values may be at risk from planned burn-offs, uncontrolled bushfires and some emergency response measures, such as the use of earth-moving machinery during fire suppression. Cultural values may also be placed at risk when a lack of controlled burn-offs leads to the alteration of the Aboriginal cultural landscape and a corresponding reduction in access to Country.

See also Section 5.1.2 (page 110), Section 5.2.1 (page 113) and Section 8.1 (page 169).

KDO 4.5: Aboriginal cultural values are adequately accounted for in fire planning in the TWWHA.

Management Action:

- Identify and implement measures that will fully incorporate Aboriginal cultural values in the BRAM and produce a resourced implementation plan for those measures.

4.4 INTERPRETATION AND PRESENTATION

There is increasing awareness about the important contributions of high-quality interpretation and presentation to the meaningfulness and depth of the visitor experience in the TWWHA. The richly layered stories of the Tasmanian Aboriginal people should form a central part of the experience. It is important that Aboriginal people control the representation and interpretation of their cultural heritage. This has been recognised by PWS in their approach to interpretation and it is important that this principle continue to be pursued, particularly in order to encourage this recognition more broadly. Cultural

values presented and interpreted by non-Aboriginal people with insufficient understanding may lead to visitors being exposed to a misleading or inaccurate presentation of Aboriginal cultural values in the TWWHA. Not only are these outcomes disturbing for Aboriginal people, they are counterproductive to the important role that proper interpretation and presentation of Aboriginal culture could play in the enrichment of the visitor experience and the wellbeing of Aboriginal people.

These types of enrichment depend on interpretation and presentation that are authentic. Only Aboriginal people can determine such authenticity. *Aboriginal Interpretation of the Tasmanian Wilderness World Heritage Area* (Lehman 1995) identifies the principles that empower Aboriginal people to make this determination.

The principles are:

- Interpretation and presentation of Aboriginal cultural values must be culturally appropriate.
- Interpretation and presentation of Aboriginal cultural values must involve Aboriginal people in all levels of decision-making; and that process must be based on acceptance of the need for cultural, economic and social outcomes to be developed by Aboriginal people.
- Aboriginal determination of presentation and interpretation must be supported by access to funding to an appropriate level of capacity.
- Interpretation and presentation of Aboriginal cultural values in the TWWHA must enhance their value for both Aboriginal and non-Aboriginal people.

Landscape previously fire-managed by Tasmanian Aboriginal people, Southwest National Park
Photo Jillian Mundy



KDO 4.6: Interpretation and presentation of the TWWHA's Aboriginal cultural values are determined by Aboriginal people.

Management Action:

- Fully revise and update the 1995 *Aboriginal Interpretation of the Tasmanian Wilderness World Heritage Area* as a stand-alone document, to guide interpretation and presentation of the area's Aboriginal cultural values over the life of the Management Plan. Develop the document in consultation with Aboriginal people, into a properly resourced action and implementation plan.

Traditional Tasmanian Aboriginal shell necklace and basket, Needwonnee Walk, Melaleuca, Southwest National Park
Photo Jillian Mundy



4.5 ACCESS TO COUNTRY

Aboriginal people possess a strong desire to exercise their right to access the TWWHA and its resources. The ability to be 'on Country' on a regular basis – to work, continue cultural practices, educate their people and gain respite – is a fundamental part of their wellbeing. However, the concept of 'on Country' should extend to participating in the full range of management and operational activities in the TWWHA, providing opportunities for regular access and using traditional resources. These opportunities should enable individuals, family groups and organisations to identify the areas where they want greater access and the values for which they want more responsibility. Facilitated access to traditional resources must be free of onerous and culturally inappropriate requirements.

Providing the opportunity to establish base camps will be an important part of facilitating broader Aboriginal presence and reconnection in the TWWHA. The camps would allow a variety of cultural practices to be conducted in culturally appropriate ways, provide for greater Aboriginal presence in areas of cultural significance, and become places of healing and inter-generational learning. Facilities for these and other Aboriginal cultural activities are permitted within all zones of the TWWHA.

Using fire as a land-management tool is a fundamental Aboriginal cultural practice that has shaped landscapes, plants and animals across the TWWHA. Cessation of traditional fire uses has led to changes in vegetation. Some other fire regimes have adversely affected Aboriginal values, including the cultural landscape. No processes or protocols currently exist for the continuation or examination of this cultural practice.

KDO 4.7: A range of opportunities is provided for Aboriginal people to access the TWWHA and its resources, to pursue cultural activities and to actively participate in management of the area.

Management Actions:

- The cultural management group will develop and implement a program of regular access visits to the TWWHA for Aboriginal people.
- Develop a range of procurement and employment strategies that will offer secure employment, with cultural sensitivity in employment conditions and training.
- Engage Aboriginal people to develop protocols that allow the use of fire as a traditional cultural practice.
- Implement an equitable policy and process that allows Aboriginal people access to, and use of, animal, plant and other materials in the TWWHA for cultural purposes.

Davey River, Southwest National Park
Photo Jillian Mundy



4.6 A CULTURAL LANDSCAPE

The use of the term 'wilderness' to describe the TWWHA is problematic for some Aboriginal people who believe the term wrongly implies that the TWWHA is a landscape empty of human culture and that its use, in this way, lends weight to a denial of the full extent of Aboriginal occupation and survival in the TWWHA, and of contemporary Aboriginal rights. Past management has drawn a distinction, in the definition of 'wilderness', between evidence of, or remoteness from, modern or post-colonial activities and that of Aboriginal culture, which is acknowledged as having been fundamental to the shaping of what non-Aboriginal people may perceive as wilderness. The Management Plan recognises a synthesis between concepts of wilderness and that of a Tasmanian Aboriginal cultural landscape.

The World Heritage Committee has formally recognised 'Cultural Landscapes' since 1992. These landscapes are the combined works of nature and of man (designated in Article 1 of the World Heritage Convention and in Annex 3 of the *Operational Guidelines for the Implementation of the World Heritage Convention*) that are illustrative of the evolution – in the context of the TWWHA – of Aboriginal society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.

The TWWHA has the potential to qualify as a World Heritage Cultural Landscape. Such recognition, through the World Heritage Convention, similar to that of Uluru-Kata Tjuta in Central Australia, would be additional to the recognised Outstanding Universal Value of the TWWHA. In keeping with Tasmania's Aboriginal and Dual Naming Policy, dual naming of the TWWHA will reinforce that it is a place of Aboriginal cultural significance. The assessment of the TWWHA

as a Cultural Landscape and the request to modify the name of the TWWHA to a dual name require acceptance by the Australian Government, as these requests can only be put forward by a State Party under the World Heritage Convention.

KDO 4.8: The TWWHA is assessed as an outstanding Aboriginal Cultural Landscape under the World Heritage Convention. This status would reflect Aboriginal occupation and cultural practices.

Management Actions:

- Undertake an assessment of the TWWHA as an Aboriginal Cultural Landscape of Outstanding Universal Value.
- Include reference to the TWWHA as a Cultural Landscape in the Retrospective Statement of Outstanding Universal Value.

*Shells contained in a midden site,
Southwest National Park* Photo Jillian Mundy



*Exploring ancient coastal landscapes,
Southwest National Park*
Photo Jillian Mundy



- Following protocols of the Tasmanian Government's Aboriginal and Dual Naming Policy, request a dual name for the TWWHA to reflect its Aboriginal heritage, and the relationship of the Tasmanian Aboriginal people to the area, to complement the existing recognition of its wilderness values.

4.7 RESOURCING FOR MANAGEMENT

A large proportion of the TWWHA's baseline funding has been allocated for the management of natural values since the area was first listed. In comparison, management of Aboriginal cultural values has received a relatively small proportion. KDOs for the management of cultural values are unlikely

to be achieved without a funding increase that is commensurate with the contribution of cultural values to the listing of the TWWHA. It is recognised that providing necessary funding to correct this imbalance, in tandem with an associated increase in the capacity that is needed to deliver the outcomes of the Management Plan, will require incremental change. Achievement of the short-term outcomes, as well as the longer-term vision for management of the TWWHA, will require the adoption of an implementation plan that sets out a pathway with clearly articulated and accountable responsibilities, timelines and review processes.

KDO 4.9: Baseline funding for the management of Aboriginal cultural values in the TWWHA is sufficient to implement the measures provided by the Management Plan.

Management Actions:

- Increase baseline funding for management of Aboriginal cultural values to a quantum that reflects their importance in the area's World Heritage listing.
- Produce an implementation plan that clearly outlines the steps to achieve adequate funding of management actions.

The implementation plan will determine the relationship between funding increases and actions within the plan that are contingent upon that funding; and identify the parties who are responsible for the implementation of the management actions, timelines and processes of review and consultation.

Southwest National Park
Photo Jillian Mundy



4.8 SUMMARY OF COMMITMENTS

Key Desired Outcome (KDO)	
Management Action	Evaluation
4.1 Management of Aboriginal cultural values in the TWWHA is undertaken through a joint management governance arrangement that is supported by a dedicated unit within DPIPWE.	
Establish a cultural management group within DPIPWE to oversee implementation of the Aboriginal cultural management outcomes of the Management Plan and to provide ongoing support of cultural values management in the TWWHA.	Unit fully staffed, resourced and operational within two years. Revise evaluation to consider outcomes of the unit's activities post-establishment.
Establish governance arrangements that provide a role for a non-government Aboriginal organisation in the joint management of the Aboriginal cultural values of the TWWHA.	Within 5 years.
4.2: There is an ongoing adaptive and systematic program of identification, inventory, assessment, mapping and documentation of World Heritage and other Aboriginal cultural values to support the Management Plan's Objectives and guiding Vision.	
Conduct a comprehensive survey of the TWWHA , including the 2013 extension, to ascertain all Aboriginal values. The survey requires a desktop assessment, on-ground work, Aboriginal participation in all aspects of the project, organisation of Aboriginal access trips to areas and consultation with Aboriginal people.	Desktop survey completed; interim report on the complete project provided.
Analyse previous Aboriginal cultural heritage work to understand key knowledge gaps and to contribute to the development of a prioritised survey and research program for the TWWHA.	Report provided within 3 years.
4.3 All DPIPWE staff who have responsibility for and/or undertake regular management activities in the TWWHA have an appropriate level of knowledge and understanding of the area's Aboriginal cultural values.	
Develop and deliver an Aboriginal cultural awareness training package to all DPIPWE staff who undertake regular management, research or other activities in the TWWHA.	Provider contracted; all DPIPWE staff who work regularly in the TWWHA have undertaken the course within two years of engagement of the provider.
4.4 Aboriginal cultural heritage sites at greatest risk are identified, protective measures implemented and their effectiveness monitored.	
Identify at-risk sites. Develop and implement a program of prioritised management actions for these sites.	Condition of identified sites monitored on a regular basis, before and after implementation of management actions.
Develop protocols to guide appropriate responses to the imminent loss of sites to erosion and other processes, and to the exposure of material at these sites.	Within 4 years.
4.5 Aboriginal cultural values are adequately accounted for in fire planning in the TWWHA.	
Identify and implement measures that will fully incorporate Aboriginal cultural values in the BRAM and produce a resourced implementation plan for those measures.	Implementation plan developed and resourced.

Key Desired Outcome (KDO)	
Management Action	Evaluation
4.6 Interpretation and presentation of the TWWHA's Aboriginal cultural values are determined by Aboriginal people.	
Fully revise and update the 1995 <i>Aboriginal Interpretation of the Tasmanian Wilderness World Heritage Area</i> as a stand-alone document, to guide interpretation and presentation of the area's Aboriginal cultural values over the life of the Management Plan. Develop the document in consultation with Aboriginal people, into a properly resourced action and implementation plan.	Within 2 years of the establishment of the cultural management group. Subsequent evaluation against the recommendations of the revised report.
4.7 A range of opportunities is provided for Aboriginal people to access the TWWHA and its resources, to pursue cultural activities and to actively participate in management of the area.	
The cultural management group will develop and implement a program of regular access visits to the TWWHA for Aboriginal people.	Through assessment of the number of places offered per year and feedback from participants.
Develop a range of procurement and employment strategies that will offer secure employment, with cultural sensitivity in employment conditions and training.	Evaluate outcomes of strategies.
Engage Aboriginal people to develop protocols that allow the use of fire as a traditional cultural practice.	Through an ongoing Evaluated Case Study.
Implement an equitable policy and process that allows Aboriginal people access to, and use of, animal, plant and other materials in the TWWHA for cultural purposes.	Policy and process developed within two years of the establishment of the cultural management group; subsequent evaluation through survey of pass-holder satisfaction.
4.8 The TWWHA is assessed as an outstanding Aboriginal Cultural Landscape under the World Heritage Convention. This status would reflect Aboriginal occupation and cultural practices.	
Undertake an assessment of the TWWHA as an Aboriginal Cultural Landscape of Outstanding Universal Value.	Within 4 years.
Include reference to the TWWHA as a Cultural Landscape in the Retrospective Statement of Outstanding Universal Value.	Within 5 years.
Following protocols of the Tasmanian Government's Aboriginal and Dual Naming Policy, request a dual name for the TWWHA to reflect its Aboriginal heritage, and the relationship of the Tasmanian Aboriginal people to the area, to complement the existing recognition of its wilderness values.	Dual name gazetted within 3 years; renominate dual name of property within five years.
4.9 Baseline funding for the management of Aboriginal cultural values in the TWWHA is sufficient to implement the measures provided by the Management Plan.	
Increase baseline funding for management of Aboriginal cultural values to a quantum that reflects their importance in the area's World Heritage listing.	Through resources allocated to implement Management Plan actions and comparison with funding of natural values management.
Produce an implementation plan that clearly outlines the steps to achieve adequate funding of management actions.	Against the timelines provided in the implementation plan.



5 NATURAL VALUES

MANAGEMENT

MANAGEMENT OBJECTIVES

To identify, protect, conserve and restore natural biological and geological diversity and processes in the TWWHA.

To protect and conserve the natural landscapes in the TWWHA, particularly in areas of exceptional natural beauty, and aesthetic and cultural importance.

This section of the Management Plan provides prescriptions for identifying and conserving natural values. It identifies threats to natural values and provides management actions to mitigate those threats. The plan aims to protect natural diversity and the natural rates and magnitudes of change. Protection of World Heritage values is the highest priority of the plan. The best way to protect those values is to implement proactive management measures that identify and avert adverse effects and threats before they occur. A degree of impact is inevitable and acceptable under certain circumstances. There are also situations where there may not be the financial or management capacity to mitigate impact.

Priorities are reflected in the research and monitoring needs of the area. The prescriptions and actions listed in this section are complemented by the DPIPWE publication *Tasmanian Wilderness World Heritage Area, Research and Monitoring Priorities (2013-2018)* which establishes a strategic framework for scientific work in the TWWHA. The publication will be reviewed at the end of its lifespan and followed by an updated version that will continue to complement the Management Plan.

For Aboriginal people, natural values are inseparable from their cultural understanding of the natural world. The joint management governance established through this plan will ensure an appropriate level of integration of research and monitoring related to all values, undertaken in partnership with Aboriginal people. It is recognised that the optimal management of natural and Aboriginal cultural values is contingent upon an integrated approach.

5.1 KNOWLEDGE GAPS, IDENTIFICATION AND RESEARCH

5.1.1 Identifying Values

Additional and systematic identification, inventorying, assessment, mapping and documentation to build on the extensive work already undertaken will help increase the understanding and management of World Heritage-listed and other natural values in the TWWHA. This will be particularly important for the less-recognised values of its geodiversity, non-vascular plants and invertebrate fauna. A focus will be required on significant ecosystems and specialised habitats and ecosystems; for example, the Port Davey-Bathurst Harbour marine ecosystem. Some distributions of threatened species and cryptic

Alpine vegetation monitoring, Southwest National Park
Photo DPIWE



species are relatively unknown, which hinders the implementation of effective risk assessments and management actions.

KDO 5.1: There is an ongoing, adaptive and systematic program of identification, inventory, assessment, mapping and documentation of World Heritage and other natural values that supports the Management Plan's management Objectives and guiding Vision.

Management Actions:

- Conduct coordinated research to identify new World Heritage and other natural values; assess information gaps, including systematic analysis of geodiversity; improve knowledge of the area's taxonomic groups; and document the values of significant ecosystems.
- Assess the 2013 extension to identify additional values and research requirements for its conservation and management, particularly around the mid-Huon River; headwaters of the Styx River; slopes of the Great Western Tiers and parts of the extension to the north-east of Cradle Mountain.

5.1.2 Scientific Research and Monitoring

Scientific research and monitoring are bases for identifying, managing and protecting the natural values of the TWWHA. Researchers from around the world gather and analyse information that advances the understanding of its natural values. Long-term monitoring programs and appropriate reporting help to determine trends in the status and condition of those values and allow adaptive management programs to respond. Several areas would benefit from appropriate surveying and documentation of their natural values, particularly those that contribute to the Outstanding Universal Value of the TWWHA. For example, those parts within the recent boundary extension, those with geodiversity values, and those with specialised ecosystems, such as the Port Davey-

Bathurst Harbour marine ecosystem and isolated alpine habitats.

Scientific research and monitoring activities have the potential to adversely affect the values of the TWWHA. Destructive research is generally permitted only when it makes a contribution to identifying values and resolving specific scientific questions that are important for management and where it does not destroy irreplaceable values.

DPIPWE guidelines apply to the issuing of permits for:

- collection of wildlife for scientific research;
- dendrochronology research; and
- studies that seek to disturb vertebrate animals and cephalopods requires the approval of the DPIPWE Animal Ethics Committee.

Aquatic ecology research, Southwest National Park
Photo DPIPWE



KDO 5.2: Research and monitoring programs in the TWWHA provide an understanding of trends in the conservation status of priority natural values, identify risks to those values, support the development of management strategies, and allow for rigorous assessment of management effectiveness.

Management Actions:

- Develop and make publicly available a system for monitoring and reporting on TWWHA ecosystems that integrates biodiversity and geodiversity data, to inform management about the status and trends of natural values and the area's condition.
- Establish the World Heritage Ecosystem Baseline Study (WHEBS) as an integrated long-term monitoring program, to focus on research and assess questions that are important to the sound management and understanding of ecosystem processes.
- Systematically assess and document biodiversity, geodiversity and conservation values in the TWWHA, to support effective management of priority values.
- Identify new threats to TWWHA natural values and reassess known threats, including weeds, pests, diseases and anthropogenic impacts; and, where possible, develop or review mitigation options, including the strengthening of biosecurity arrangements and increased cultural and volunteer involvement in control and eradication.
- Establish a TWWHA research hub to improve communication and collaboration with stakeholders, increase and facilitate opportunities for external contribution to research and monitoring, improve presentation of the natural values to the public, and serve as a comprehensive data repository of the area's research and monitoring results.

The Warra Long-Term Ecological Research site was established in 1995 to encourage long-term ecological research and monitoring in wet eucalypt forests in Tasmania and is partly in the TWWHA. Research activities on the site are overseen by the Warra Policy Committee comprising members from nine site partners from Tasmanian and national research and land management agencies, including DPIPWE. Since Warra was established, more than 200 research projects have been undertaken including significant long-term projects. A high level of scientific oversight and governance is also provided through Warra being a member site of the Terrestrial Ecosystem Research Network (TERN) including:

- Australian Supersite Network
- OzFlux
- AusCover and
- AusPlots Forests

Research undertaken at the site is of international, national and state significance and can make an increasingly important contribution to the management of the TWWHA. The Warra Long-Term Ecological Research Site will be supported by working with other site partners to support long-term ecological research and monitoring in cool temperate forests, linking research undertaken at the site with national and international programs, and facilitating linkages with TWWHA management priorities.

Fire management in the TWWHA is directed by PWS policies, procedures, regional strategic fire management plans and subordinate specific fire management strategies. The risk model used by these plans accounts for natural values. However, there may be limited knowledge about the effect of fire on some values. Research about the role of fire in conserving and protecting natural values must be

Climate monitoring, Southwest National Park
Photo Nick Fitzgerald



directed towards informing the appropriate active management of fire.

Further information on fire management in general is provided in Section 8.1 (page 169).

KDO 5.3: Enhanced knowledge of the ecological role of fire in the TWWHA improves fire management practices.

Management Actions:

- Determine and review optimal fire regimes to better manage natural values based on present knowledge of soils, flora and fauna communities and the physical environment.
- Assess the efficacy of planned burns in ecosystem management including maintaining biodiversity in montane grasslands and buttongrass moorlands, and enhancing orange-bellied parrot feeding habitat.
- Determine life history attributes of species that are impacted or benefited by fire.
- Investigate and define environmental thresholds when fire-sensitive communities become flammable.

5.2 PROTECTING AND CONSERVING NATURAL VALUES

The natural values of the TWWHA have not faced greater or more rapid changes for thousands of years. Climate change, fire and incursions by invasive species are among the major threats to the area's natural values and processes. Responses can be complex and difficult to predict because of interactions between different components of the ecosystem. Additionally, lower-priority threats that are not covered by this section may need to be confronted if their status changes during the implementation of the Management Plan.

5.2.1 Fire

Fire is perhaps the greatest challenge for the management of the TWWHA, particularly in the context of a changing climate. Fire is also one of the most powerful tools land managers have to conserve and manage the cultural and natural values of the TWWHA.

Fire is an important ecological process, shaping landscapes and their biota in many terrestrial ecosystems around the world, including the TWWHA. The use of fire by Tasmanian Aboriginal people has influenced vegetation patterns in the area. A cessation of this activity, combined with the impacts of varied European burning practices and the effects of climate change, has altered vegetation patterns and landscape processes. A mosaic of fire ages in fire-adapted communities will benefit natural values and cultural landscapes, and provide for greater public safety.

Fire is considered one of the greatest threats to values that contribute to the Outstanding Universal Value of the property, while also being one of the most critical elements for maintaining others. Management of fire-sensitive and fire-adapted communities is complex because they often occur adjacent to each other in the TWWHA. For example, iconic King Billy pine, pencil pine and Huon pine communities are long-lived species that are at risk from fire with little chance of re-establishment if significantly impacted by bushfire. These species may often occur in close proximity to highly flammable buttongrass moorlands. In contrast, highland grassland areas are presently contracting and require reintroduction of fire to maintain diversity in this cultural landscape. Organic soil associated with buttongrass moorlands and some forest types can be destroyed in a single catastrophic fire, or may suffer incremental damage from repeated fires. Fire can impact ongoing geomorphic processes, changing active geomorphic forms, and in some cases eroding or covering relict forms. For example, fires in the 1960s have led to extensive and ongoing erosion on the Central Plateau.

According to climate change projections, the current trends of increased fire frequency and longer fire-season duration are likely to continue, together with an increase in the flammability of fire-sensitive communities and organosols. This is illustrated by the increased number of fire ignitions caused by dry lightning strikes and the number of peat fires burning under rainforest in recent years. From 2004-05 to 2013-14, there was a 29 per cent increase in recorded lightning fires compared with the previous 10-year period, a major change in ignition sources since the 1999 TWWHA Management Plan. The extensive fires across the TWWHA and Tasmania in 2016 commenced from a weather event where 889 ground strikes from lightning were recorded, starting over 80 fires. Organosols and old growth forests store significant amounts of carbon, and are likely to face a greater threat from fire because of climate

*Aftermath of a landscape-scale fire event,
Southwest National Park
Photo DPIWE*



change. At the same time, this climate change scenario may reduce the opportunities for planned burning to mitigate fire risk, as the fire weather window suitable for burning is likely to contract.

KDO 5.4: As climate change research matures, fire mitigation programs, including planned burning, that are implemented for the protection of fire-dependent and fire-sensitive values, are adapted in accordance with the findings of that research.

Management Actions:

- If the research suggests that planned burning continues to be a viable strategy, then substantially expand planned burning of moorlands and grasslands of the TWWHA to establish an appropriate age structure.
- Continue to adapt burning guidelines, including risk management programs, to maintain appropriate fire regimes in treatable vegetation types as suitable climate change projections become available.

See also Section 4.3 (page 98) and Section 8.1 (page 169).

5.2.2 Biosecurity

A high level of integrity is attributed to the natural values of the TWWHA. This integrity is a substantial part of the Outstanding Universal Value of the TWWHA. The dispersal of pests, weeds and pathogens is a major risk to those values. Small islands of high conservation value are particularly vulnerable to such threats. Additionally, areas within the 2013 extension require further assessment to determine the impact of pests and weeds and the risks posed by roads.

There are 70 introduced species in the TWWHA (25 vertebrates and 45 invertebrates), with nine having a wide distribution. There is limited knowledge about their impact on natural values. An inventory and risk-analysis framework for the management of these species has been completed.

There are 15 Declared Weeds (under the *Tasmanian Weed Management Act 1999*) in the TWWHA. Numerous environmental weeds may also pose a threat. All these species could potentially cause significant damage to ecosystems and threaten natural values in favourable circumstances. The management of weeds in remote areas is particularly challenging. In this regard, coastal, island, riverine and karst ecosystems are the most vulnerable.

Fauna and flora are vulnerable to the impact of new, emerging and existing pathogens. Potential risks are posed by a new species of *Phytophthora* root rot, the freshwater algae didymo (not currently present in Australia) and chytrid fungus. Ongoing monitoring and the development of response capabilities are needed for the proper management of established pathogens. Of 19 known potential disease threats to TWWHA wildlife, 13 have been recorded in the

TWWHA. Chytridiomycosis affecting frogs, devil facial tumour disease affecting Tasmanian devils, and psittacine circoviral disease affecting orange-bellied parrots are identified as the highest-priority diseases for management in the TWWHA. A strategy for managing wildlife disease in the TWWHA has been completed.

The prospect of eradicating an introduced species rapidly diminishes in the TWWHA when it becomes established beyond a narrow entry point. This is because of the area's limited access, topography, vegetation and climate constraints. However, these factors have also helped to minimise the number of introduced species and restrict their ability to spread.

Many control programs need to be implemented over long periods because seeds may lie dormant for many decades. Management, rather than eradication, is often the only feasible action; and appropriate scales of control must be developed for a wide range of places, from car parks to remote coastlines. Management programs are typically undertaken to reduce the impact of an introduced organism on a specified value in localised areas. Management or eradication plans are prepared that define the problem, management objectives and endpoints, and provide monitoring and evaluation criteria. The Biosecurity Overlay (Section 3.1.2.4, page 67) is a tool that can be used to apply specific management actions and prescriptions to an area in response to a biosecurity event or risk, or as a preventative, pre-emptive measure to reduce risk to particularly vulnerable areas or values.

Washdown station
Photo DPIPWE



KDO 5.5: A comprehensive suite of strategies is in place that minimises biosecurity risks to the natural values of the TWWHA.

Management Actions:

- In consultation with state and national agencies that are responsible for relevant biosecurity governance and policy development, identify and plan for key biosecurity threats to the TWWHA.
- In partnership with Aboriginal people, develop strategic biosecurity programs for the TWWHA, including consideration of access restrictions, to identify and protect vulnerable locations that are free of high-risk pests, weeds and pathogens.
- Update assessments of risks, impacts and control options for priority pests, weeds and pathogens.

Erosion monitoring, south coast, Southwest National Park
Photo DPIPWE



- Develop and implement biosecurity contingency plans for potential incursions of high-risk species, and improve coverage of surveillance and monitoring programs for new incursions.
- Where feasible, implement and maintain management and eradication programs for priority species.
- Increase public awareness of biosecurity threats and mitigation actions that can be implemented at the individual level.

The review of assessments of risks, impacts and management options for priority pests, weeds and pathogens must include consideration of the currency and resourcing of existing plans, strategies and programs. Biosecurity strategies for the TWWHA will be consistent with the State Biosecurity Strategy.

5.2.3 Climate Change

Climate change increasingly presents a major challenge for management of the natural and cultural values of the TWWHA. New issues will arise, the most obvious being sea level rise and associated shoreline erosion with its direct and indirect impacts on cultural, geodiversity and biodiversity values. Climate change is also considered likely to exacerbate existing stressors such as fire, weeds, diseases and habitat fragmentation. Other impacts through complex and cumulative interactions across the natural environment are likely to occur and are difficult to predict. It is clear that changes will occur, and some values will be lost. There is also the potential for the development of novel ecosystems as changing climate forces species to move and geo processes to alter. The size and integrity of the TWWHA are such that the natural systems are well placed to evolve into a new balance with an altered climate but without catastrophic disruption to ecosystem services and function.

Microtidal coastline and inlets will be critically affected by sea level rises. In fact, many of the TWWHA's

beaches and sandy landforms already show signs of impact, such as foredune erosion. Increased frequency of large swell and storm surge events will directly impact on coastal species such as saltmarsh plants, fur seals and nesting shorebirds. Alpine geomorphic processes, including frost heave, solifluction and nivation, are likely to become more limited in highland areas. A number of alpine ecosystems, including snowpatch, feldmark, conifers and coastal communities, are particularly vulnerable to the effects of climate change. Changes in hydrology and geomorphology are likely to affect freshwater and estuarine ecosystems. Possible outcomes include changes to water quality and temperature that increase algal production, and changes in species composition and ecosystem morphology.

Considerable work has already been undertaken to identify key natural values at risk from climate change in the TWWHA (Brown 2009, Sharples 2011 and Mallick 2013). This work has informed the identification of priority monitoring and management actions and some research programs are already underway. Further work is needed to understand how different systems are affected and to prioritise management responses, acknowledging that in some cases there may be management actions that can mitigate the impacts of climate change, while in other situations responses may be limited to documenting values that are likely to be lost.

KDO 5.6: Where practicable, mitigation strategies are developed and implemented that minimise the impact of climate change on priority TWWHA values.

Management Actions:

- Where possible and practical, implement strategies and actions to protect values threatened by climate change, such as identifying terrestrial and aquatic refugia that strengthen ecosystem resilience and support adaptation.

- Continue to monitor and investigate changes in priority ecosystems such as coastal and alpine areas, to identify where key threats can be mitigated through the development of management strategies.
- In partnership with Aboriginal people, identify and fully document sites that are likely to lose significant values, such as coastal dunes and lagoon systems.

5.2.4 Use of the TWWHA

The TWWHA is home to a diverse range of recreational and non-recreational uses. Some have the potential to adversely affect the area's natural values in the absence of appropriate management, particularly where there is large visitation or a limited capacity to sustain visitors. Impacts may result from either direct physical contact or indirect contact, such as the movement of pests, weeds and pathogens. Management overlays are important in the regulation and management of use in the TWWHA. For example regulation and control of access can be achieved through the application of the Special Management Overlay and Motorised Vessel Overlay, while the Karst Overlay could include specific measures for the management of use that may impact on karst values.

Usage may also be directly regulated through licences and leases. New proposals undergo assessments that enable mitigation strategies to be embedded in conditions should the proposal be approved. Other uses, such as recreational bushwalking, are generally not directly regulated and sometimes require responses that are more reactive. An understanding of these impacts can lead to improved planning and a strategic approach to their management. Long-term monitoring of walking track and campsite use helps to improve planning, and to build knowledge about management strategies that prioritise resources and minimise damage. Many other types of monitoring programs have been implemented throughout the

TWWHA, including the monitoring of bank erosion on the Gordon River. All of these programs examine specific impact issues, thereby supporting effective management practices.

Research and monitoring of impacts help to manage usage by:

- supporting assessment and approval processes;
- supporting the development of mitigation strategies;
- identifying how uses may be managed in the future, and the risks posed by changing trends of usage;
- identifying long-term trends in the priority values of areas that are subject to the highest rates of usage and impact; and
- contributing to an understanding of management effectiveness.

KDO 5.7: Monitoring of natural values supports both the development of management strategies and actions that prevent or mitigate the potential impact of usage in the TWWHA, and the evaluation of management effectiveness.

Management Actions:

- Monitor current risks posed by usage, to support ongoing adaptive management of the TWWHA's natural values.
- Identify critical knowledge gaps about the current and potential impact of usage in the TWWHA, to ensure research and monitoring activities support adaptive management.

5.2.5 Aesthetic Values

The TWWHA contains diverse landscapes of exceptional natural beauty. Rugged mountain ranges of varying form, often scattered with deep, glacial tarns, tannin-stained dark harbours, wild, high-energy coasts, sweeping buttongrass moorlands and wild

rivers are evident on a grand scale. Within the landscape are spectacularly ornamented cave systems, including superlative light displays by glow-worms. There are examples of the world's tallest forests dominated by flowering plants. Eucalypts tower above rainforest trees of substantial stature, forming awe-inspiring forests of truly exceptional beauty on a landscape and individual scale. Within the confines of forests, tarns and rainforest rivers, the aesthetics of the TWWHA are evident on a more intimate scale.

The extent and scale of the aesthetic values of the TWWHA and associated view fields are important components of its Outstanding Universal Value.

KDO 5.8: The aesthetic qualities of the TWWHA are maintained or improved.

Management Actions:

- Prioritise track work and road rehabilitation where it will mitigate visual impact.
- Design new facilities to blend into their locations.

5.2.6 Threatened Species

The TWWHA provides important habitat for more than 130 species of flora and fauna that are listed under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* and Tasmanian *Threatened Species Protection Act 1995*. These include the critically endangered orange-bellied parrot (*Neophema chrysogaster*), Pedder galaxias (*Galaxias pedderensis*), Kings holly (*Lomatia tasmanica*) and the Tasmanian pearlwort (*Sagina diemensis*), as well as the endangered Tasmanian devil (*Sarcophilus harrisii*) and drooping pine (*Pherosphaera hookeriana*).

Most rare and threatened species in the TWWHA are naturally rare or they are threatened by processes outside the TWWHA. Thus the protected habitats in the TWWHA are vital for the conservation of these species. A number of species are threatened by the spread of weeds, pests and disease into the

TWWHA as well as inappropriate fire regimes. The distribution and ecology of a number of rare and threatened species remain poorly known, particularly for invertebrates and non-vascular plant species.

The TWWHA contains 20 of the 39 listed threatened vegetation communities in the State including coniferous communities, alkaline pan communities, wetlands, rookery halophytic herbland and cushion moorlands. It also contains two nationally listed threatened communities, alpine sphagnum bogs and associated fens and giant marine kelp forests.

Seven key threatening processes persisting in the TWWHA are listed under the EPBCA. These are: dieback caused by the rootrot fungus (*Phytophthora cinnamomi*); infection of amphibians with chytrid fungus (*Batrachochytrium dendrobatidis*) resulting in chytridiomycosis; injury and fatality to vertebrate marine life caused by ingestion of, or entanglement in, harmful marine debris; loss of climatic habitat caused by anthropogenic emissions of greenhouse gases; predation by exotic rats on Australian offshore islands; predation by feral cats; and psittacine circoviral (beak and feather) disease affecting endangered parrot species.

KDO 5.9: Threatened species and ecosystems remain at least stable or increase in population or extent.

Management Action:

- Implement key actions in threatened species and community recovery plans and threat abatement plans.

It is important to acknowledge that the realisation of this KDO will be influenced by the impact of climate change on threatened species and ecosystems.

5.2.7 Restoring and Rehabilitating Values

While many parts of the TWWHA are largely undisturbed, there are some impacted areas. Some impacts, at campsites and on walking tracks, may be localised. An example of more extensive disturbance is the sheet-eroded areas of the Central Plateau. Additionally, some sites have been disturbed because of past patterns of use. In some instances, active management interventions help to boost natural recovery, limit damage and restore natural values. Some land in the 2013 minor boundary extension has previously been used for forestry production activities, including roadwork, native forest harvesting, small-scale quarrying and the minor establishment of plantations. Within the wider TWWHA, a number of areas have been, or currently are, subject to rehabilitation work that requires ongoing monitoring, such as the Melaleuca mine sites.

KDO 5.10: Priority areas that require restoration of their natural biological and geological processes are identified and monitored, and rehabilitation plans are developed and implemented.

Management Actions:

- Conduct rehabilitation trials in a range of priority environments, taking climate change into consideration.
- Assess the rehabilitation requirements of areas in the 2013 boundary extension, by conducting an audit of those areas and establishing a list of priority sites.
- After assessment of the 2013 extension's rehabilitation requirements is completed, develop a prioritised program of rehabilitation works within the TWWHA.

5.3 SUMMARY OF COMMITMENTS

Key Desired Outcome (KDO)	
Management Action	Evaluation
5.1 There is an ongoing, adaptive and systematic program of identification, inventory, assessment, mapping and documentation of World Heritage and other natural values that supports the Management Plan's management Objectives and guiding Vision.	
Conduct coordinated research to identify new World Heritage and other natural values; assess information gaps, including systematic analysis of geodiversity; improve knowledge of the area's taxonomic groups; and document the values of significant ecosystems.	<p>Surveys of priority geodiversity and biodiversity themes have been conducted and reported.</p> <p>Areas of palaeo-endemic plant species richness mapping have been integrated into management programs and databases.</p> <p>Distinctiveness of areas for threatened and uncommon plant species spatial analysis has been conducted.</p>
Assess the 2013 extension to identify additional values and research requirements for its conservation and management, particularly around the mid-Huon River, headwaters of the Styx River, slopes of the Great Western Tiers and parts of the extension to the north-east of Cradle Mountain.	Additional values and research requirements have been identified in key parts of the extension.
5.2 Research and monitoring programs in the TWWHA provide an understanding of trends in the conservation status of priority natural values, identify risks to those values, support the development of management strategies, and allow for rigorous assessment of management effectiveness.	
Develop and make publicly available a system for monitoring and reporting on TWWHA ecosystems that integrates biodiversity and geodiversity data, to inform management about the status and trends of natural values and the area's condition.	System established.
Establish the World Heritage Ecosystem Baseline Study (WHEBS) as an integrated long-term monitoring program, to focus on research and assess questions that are important to the sound management and understanding of ecosystem processes.	<p>Focus areas of WHEBS have been identified.</p> <p>Implementation plans developed for each focus area.</p> <p>Projects that contribute to focus areas have been initiated.</p>
Systematically assess and document biodiversity, geodiversity and conservation values in the TWWHA, to support effective management of priority values.	Improvement in management of priority values.

Key Desired Outcome (KDO)	
Management Action	Evaluation
Identify new threats to TWWHA natural values and reassess known threats, including weeds, pests, diseases and anthropogenic impacts; and, where possible, develop or review mitigation options, including the strengthening of biosecurity arrangements and increased cultural and volunteer involvement in control and eradication.	New threats identified and assessed; where apparent, responses have been evaluated. Strategies to mitigate impacts of known priority threats are developed and implemented; effectiveness of those strategies has been evaluated.
Establish a TWWHA research hub to improve communication and collaboration with stakeholders, increase and facilitate opportunities for external contribution to research and monitoring, improve presentation of the natural values to the public, and serve as a comprehensive data repository of the area's research and monitoring results.	Hub established and research data publicly accessible. Priority TWWHA data has been lodged in data portal.
5.3 Enhanced knowledge of the ecological role of fire in the TWWHA improves fire management practices.	
Determine and review optimal fire regimes to better manage natural values based on present knowledge of soils, flora and fauna communities and the physical environment.	Fire regimes for priority ecosystems reviewed.
Assess the efficacy of planned burns in ecosystem management including maintaining biodiversity in montane grasslands and buttongrass moorlands, and enhancing orange-bellied parrot feeding habitat.	Evaluation of planned burns undertaken.
Determine life history attributes of species that are impacted or benefited by fire.	Evaluate applied understanding of priority species' life attributes in burn planning.
Investigate and define environmental thresholds when fire-sensitive communities become flammable.	Thresholds determined and applied.
5.4 As climate change research matures, fire mitigation programs, including planned burning, that are implemented for the protection of fire-dependent and fire-sensitive values, are adapted in accordance with the findings of that research.	
If the research suggests that planned burning continues to be a viable strategy, then substantially expand planned burning of moorlands and grasslands of the TWWHA to establish an appropriate age structure.	Ecological burning has occurred in grasslands and moorlands.
Continue to adapt burning guidelines, including risk management programs, to maintain appropriate fire regimes in treatable vegetation types as suitable climate change projections become available.	Burn guidelines reflect current understanding.

Key Desired Outcome (KDO)	
Management Action	Evaluation
5.5 A comprehensive suite of strategies is in place that minimises biosecurity risks to the natural values of the TWWHA.	
In consultation with state and national agencies that are responsible for relevant biosecurity governance and policy development, identify and plan for key biosecurity threats to the TWWHA.	There is awareness of TWWHA border biosecurity concerns within national and State biosecurity bodies.
In partnership with Aboriginal people, develop strategic biosecurity programs for the TWWHA, including consideration of access restrictions, to identify and protect vulnerable locations that are free of high-risk pests, weeds and pathogens.	Biosecurity plans for the TWWHA evaluated against priority threats. Biosecurity management system to reduce the risks of invasive-species spread associated with management and research activities, and commercial and public use of the TWWHA, developed within two years. Publicly accessible distribution data for priority biosecurity threats has been provided.
Update assessments of risks, impacts and control options for priority pests, weeds and pathogens.	Risk assessments and report findings have been updated to include new information.
Develop and implement biosecurity contingency plans for potential incursions of high-risk species, and improve coverage of surveillance and monitoring programs for new incursions.	Contingency plans developed for the management of priority invasive species that are an appreciable threat to the TWWHA, particularly in significant uninfested areas.
Where feasible, implement and maintain management and eradication programs for priority species.	Feasible programs are implemented.
Increase public awareness of biosecurity threats and mitigation actions that can be implemented at the individual level.	Level of public awareness.
5.6 Where practicable, mitigation strategies are developed and implemented that minimise the impact of climate change on priority TWWHA values.	
Where possible and practical, implement strategies and actions to protect values threatened by climate change, such as identifying terrestrial and aquatic refugia that strengthen ecosystem resilience and support adaptation.	Emerging and continuing impacts of climate change have been identified. Mitigation strategies developed.
Continue to monitor and investigate changes in priority ecosystems such as coastal and alpine areas, to identify where key threats can be mitigated through the development of management strategies.	Establishment of an ongoing monitoring program, to identify the effects of climate change on coastal and alpine landforms and ecosystems, has been evaluated. Preliminary risk assessments have been conducted and priorities identified.
In partnership with Aboriginal people, identify and fully document sites that are likely to lose significant values, such as coastal dunes and lagoon systems.	Scientific and management value of documented information, and number of sites completed.

Key Desired Outcome (KDO)	
Management Action	Evaluation
5.7 Monitoring of natural values supports both the development of management strategies and actions that prevent or mitigate the potential impact of usage in the TWWHA, and the evaluation of management effectiveness.	
Monitor current risks posed by usage, to support ongoing adaptive management of the TWWHA's natural values.	Monitoring has been conducted on priority use. Outcomes and management-response recommendations have been reported where required.
Identify critical knowledge gaps about the current and potential impact of usage in the TWWHA, to ensure research and monitoring activities support adaptive management.	Critical knowledge gaps are identified and responded to.
5.8 The aesthetic qualities of the TWWHA are maintained or improved.	
Prioritise track work and road rehabilitation where it will mitigate visual impact.	Tracks and roads have reduced contrast with adjacent areas.
Design new facilities to blend into their locations.	Impact of new facilities on aesthetic values minimised.
5.9 Threatened species and ecosystems remain at least stable or increase in population or extent.	
Implement key actions in threatened species and community recovery plans and threat abatement plans.	Populations or extent of species and communities.
5.10 Priority areas that require restoration of their natural biological and geological processes are identified and monitored, and rehabilitation plans are developed and implemented.	
Conduct rehabilitation trials in a range of priority environments, taking climate change into consideration.	Results of trials have been gathered and applied to the rehabilitation of priority areas.
Assess the rehabilitation requirements of areas in the 2013 boundary extension, by conducting an audit of those areas and establishing a list of priority sites.	Rehabilitation assessment has been conducted and priority areas have been identified.
After assessment of the 2013 extension's rehabilitation requirements is completed, develop a prioritised program of rehabilitation works within the TWWHA.	A rehabilitation works program has commenced.



6 MANAGEMENT FOR PRESENTATION

MANAGEMENT OBJECTIVE

To provide a diversity of visitor experiences in a manner that is consistent with the conservation of natural and cultural values.

A key requirement of the World Heritage Convention, presentation is the facilitation of a diverse range of direct and indirect visitor experiences in the TWWHA. The term 'presentation' covers all aspects of the visitor experience: information, interpretation, recreation opportunities, management and facilities. These experiences comprise many strands, such as multi-day walks, hunting, fishing, rock-climbing and sightseeing from highways. There is also a range of day activities at major gateways such as Cradle Valley, Mount Field and Lake St Clair. The TWWHA's sites and activities are a particularly important component of the State's vibrant tourism industry, attracting millions of visitors and establishing the iconic status of destinations such as Strahan and Cradle Mountain, as well as being highly valued recreational assets.

Attracting visitors, both from Tasmania and beyond, and providing the opportunity for them to enjoy a diverse range of high-quality experiences, are fundamental aspects of the TWWHA's management and significant components of the State's socio-economic wellbeing. Tourism fosters a greater understanding of the area's values and, by benefiting local communities, it improves support for protected places. The role of PWS in the presentation of the TWWHA is both as a land manager and operator. PWS administers commercial leases and licences while also directly providing and managing a range of visitor facilities and services.

PWS has entered into a strategic action plan with the Tasmanian tourism industry, Parks 21. Parks 21 aims to facilitate environmental, social and economic sustainable tourism and enhance the visitor experience through mutually beneficial and cooperative understanding between PWS and the tourism industry. Management actions in this plan are intended to complement the relevant objectives of Parks 21.

Management strategies and actions aim to ensure that tourism and recreation activities continue to be compatible with the protection of natural and cultural values. Additionally, the TWWHA's presentation must continue to evolve in response to changing visitor demand and expectations.

KDO 6.1: Presentation of the TWWHA is a management priority that is driven and supported by a coherent, strategic framework.

Management Action:

- Develop a Tourism Master Plan for the TWWHA in consultation with the tourism industry, Tasmanian Aboriginal people and other key stakeholders. Release the plan for public comment.

The master plan will include the following elements:

- protection of natural and cultural values;
- development of a coherent marketing strategy for the TWWHA that integrates promotion of the area and its values with other statewide and regional strategies;
- examination of current and future visitor expectations, including demand analysis;
- Aboriginal cultural presentation;
- natural values presentation and conservation partnerships;
- historic heritage;
- prioritisation of investment in facilities and experiences;
- social inclusion;
- sustainable use;
- interpretation;
- commercial opportunities;
- opportunities for management support through tourism;
- strategic data collection and analysis;
- access;
- staff and operator training and accreditation;
- recreation opportunities and a recreation demand analysis; and
- strategic partnerships.

The Tourism Master Plan will provide additional guidance, context and policy direction for tourism in the TWWHA within the planning framework provided by the statutory management plan. Consideration of the presentation of Aboriginal cultural heritage in the Tourism Master Plan will reflect the policy intent articulated in Section 4.4 and Section 6.5.

Donaghys Lookout, Franklin-Gordon Wild Rivers National Park
Photo Joe Shemesh



6.1 VISITATION

Annual visitation to the TWWHA exceeded 700,000 people in 2015. Major visitor centres such as Cradle Mountain (203,000 people per annum) and Mt Field (162,000) are where the majority of people enter and experience the TWWHA. Interstate and international visitors are a significant component of overall visitation in these major entrance points. Tasmanians make up the biggest proportion of users in most of the remote and less well-known areas. However, Tasmanians mostly follow the general pattern for visitation experiences: seeking day experiences, particularly short walks and day walks. Tasmanians are likely to be repeat visitors to particular areas. Visitor numbers in backcountry areas outside of high-profile areas have remained steady or declined over the past decade.

Since its listing, the TWWHA has been an important feature in the development and ongoing evolution of Tasmania's tourism industry, now a vital component of the State's economy. This has been largely due to the profile of iconic destinations in the TWWHA such as Cradle Mountain, Lake St Clair and the Gordon River (Strahan). Visitation rates over recent years to these areas have declined, and although they have begun to significantly improve with the overall statewide increase in tourist numbers, the improvement has not necessarily been proportional. Overall, the proportion of visitors to Tasmania who visited the TWWHA has declined during the past ten years. This is also apparent in proportional visitation to regional areas more generally. This outcome may be reflective of declining rates of visitation to protected areas in developed countries, changing patterns in domestic travel such as decreases in stay length, increased competition from a more diverse array of attractions and changing demand, particularly for both adventure activities and 'comfort' based experiences. For example, while rates of people seeking bushwalking experiences have increased only marginally, the number of visitors seeking adventure experiences

such as mountain biking has increased substantially.

A strategic approach to presentation is required to enable the TWWHA to be a competitive attraction in the tourism market, to meet visitor expectations and to ensure that tourism and recreation in the TWWHA is socially and environmentally sustainable. Regional economies, as well as the overall tourism sector, will benefit from strategies that boost visitation in the TWWHA. It is vital that presentation of the area evolves to ensure that it continues to play an important role in the overall tourism sector in Tasmania, and for Tasmanians and visitors alike to continue to experience the values of the TWWHA. In considering the profile of the TWWHA, it is important to acknowledge that often visitors identify more strongly with a particular location, such as Cradle Mountain, than the area as a whole. The strategic approach outlined in the Tourism Master Plan will ensure that individual areas within the TWWHA are promoted and considered in a complementary way.

KDO 6.2: Sustainable visitation to the TWWHA increases at suitable sites consistent with the zoning and protection of natural and cultural values.

Management Actions:

- Provide a strategic approach to improving visitation in the TWWHA through the Tourism Master Plan.
- Review or prepare Visitor Services Zone or Recreation Zone plans as required.

6.2 DIVERSITY AND QUALITY OF EXPERIENCE

The size of the TWWHA and the diversity of its landscapes present challenges and provide opportunities for the delivery of recreational and visitor experiences. A wide range of activities and experiences are available, from multi-day rafting trips,

sea kayaking and surfing, to guided multi-day walks, short walks and car-based sightseeing. It is a challenge to deliver recreational opportunities at the local level while continuing to meet overall demand for different experiences. Visitor experiences must be allowed to evolve in order for the TWWHA to continue offering them in engaging and inspiring ways that also contribute to an understanding of its values.

There are five primary streams of visitor experience in the TWWHA and they are often interconnected. The streams are:

- virtual: technology and print-delivered experiences and information that increase awareness. They may inspire a visit or form a basis for visitor planning;
- drive-through: largely applicable to the Lyell

Du Cane Range, Cradle Mountain-Lake St Clair National Park

Photo Tourism Tasmania & Gabi Mocatta



Highway and peripheral areas. Large volumes of travellers may be untapped, in terms of their exposure and engagement to the TWWHA;

- experience from the edge: a large number of visitors experience the TWWHA from key visitor nodes, such as Lake St Clair, as well as peripheral facilities, such as lookouts, picnic shelters and short nature walks;
- in from the edge: visitors conduct day-long and shorter experiences away from TWWHA entrance points. This group includes visitors who use on-reserve or off-reserve accommodation for one or more nights and are more likely to engage in commercial experiences. A greater proportion of Tasmanians are in this group; and
- backcountry: self-reliant visitors conduct long and challenging day walks or multi-day trips, including journeys to remote areas. Some participate in commercially guided experiences, such as walking on the Overland Track or rafting on the Franklin River. These experiences tend to be immersive.

Each experience is supported by the provision of infrastructure, social context, and appropriate thematic interpretation and by management presence and planning. These relationships are managed through the PWS Reserve Standards Framework (RSF) policy, which provides guidance for the delivery of recreation opportunities that are consistent with natural and cultural values in the parks and reserves that are managed by the PWS. The policy establishes standards for providing and maintaining services and facilities that align with the identified visitor experience.

The diversity of visitor experiences in each stream is a key driver of visitor satisfaction, particularly for visitors who seek to experience the TWWHA through the main nodes, accommodation bases and day experiences. They are more likely to have facilitated experiences: for example, self-guided

experiences with high levels of infrastructure and management; high-quality interpretive experiences; and commercial adventure experiences and guided walks. Development of infrastructure, resourcing of management presence, creation of appropriate commercial opportunities and provision of opportunities for self-reliant recreation must all be prioritised where visitor demand is highest or there are gaps in presentation opportunities.

It is essential that facilities, management and experiences match the expectations of visitors to the TWWHA. Visitor satisfaction, while more difficult to measure than visitor numbers, is a key component of delivering successful services across all strands of the visitor experience. Research on visitor satisfaction should be integrated with the strategic delivery and facilitation of visitor experiences. They should also be

*Start of the Overland Track,
Cradle Mountain-Lake St Clair National Park
Photo DPI/PWE*



statistically robust, deliver long-term data sets that point to appropriate performance benchmarks, and support the development of data sets in other key groups.

KDO 6.3: A diverse and accessible range of quality visitor experiences that are consistent with the protection of values is provided in the TWWHA.

Management Actions:

- Review current visitor experiences through the Tourism Master Plan; identify key gaps in meeting demand for current and trending visitor experiences.
- Identify opportunities through the Tourism Master Plan for the future delivery of additional visitor experiences.
- Ensure that appropriate research and quantitative and qualitative data collection, including statistically valid visitor satisfaction surveys, support the delivery of the Tourism Master Plan.
- Review RSF zones in the TWWHA following completion of the Tourism Master Plan.

6.3 ACCESS

Access is a fundamental aspect of visitor experiences in the TWWHA. All forms of access require careful management, to protect both the values of the area and the experiences of user groups. For example, access pathways, whether they are road, track, waterway or by air, are potential vectors for the introduction of pests and diseases. The provision of roads or tracks often requires a significant input of resources to ensure that they meet standards for their use. Poorly positioned roads and tracks are costly to maintain, may cause irreparable erosion and damage or impact natural and cultural values. Roads and tracks detract from the visitor experience if their quality does not match visitor expectations. A diverse range of appropriately managed access opportunities

in the TWWHA provides for equity in the enjoyment of its experiences.

6.3.1 Walking Tracks

The TWWHA contains some of the most highly regarded bushwalking opportunities in Australia. Experiences range from short, high-grade nature walks to extended expeditions in remote, rugged and trackless country. The area contains more than 1,300 km of walking track, including the internationally renowned Overland Track, as well as other high-profile walking destinations, for example, the South Coast Track, the Walls of Jerusalem and Frenchmans Cap. There is also an extensive network of day-walk tracks on the fringes of the TWWHA, including 22 high-standard trails that are promoted as 'Great Short Walks'. The network is a key asset of the TWWHA's

*Frenchmans Cap Track,
Franklin-Gordon Wild Rivers National Park
Photo Dan Broun*



presentation. Some tracks are important for other recreational activities. For example, tracks in the Western Lakes area of the Central Plateau provide access for trout fishing.

Usage initially dropped when a booking system was introduced on the Overland Track in 2005. However, usage has steadily increased in recent years. As at 2015-16, there are approximately 8,000 walkers per annum on the Overland Track. Usage of the Walls of Jerusalem tracks and Frenchmans Cap track has also increased, but walker numbers in most other backcountry areas are static. Short walks at major nodes, such as Cradle Mountain and Mount Field, may attract more than 100,000 people a year.

Recreation Zone Plans (for example the Walls of Jerusalem Recreation Zone Plan 2013), are non-statutory plans that provide guidance for the management of more intense usage in particular areas. A Recreation Zone Plan is being developed for Frenchmans Cap, largely in response to a track upgrade funded by philanthropy and the need to replace ageing infrastructure, and a draft plan was prepared for the Overland Track in 2006, which will need to be revised and finalised. The South Coast Track, which is one of the more popular extended walks after the Overland Track and Walls of Jerusalem, also requires a Recreation Zone Plan.

All walking tracks are classified and managed according to a PWS Walking Track Classification System. The system is set out in the Walking Track Classification Policy.

The system assigns physical characteristics and infrastructure standards to each track type. Corresponding RSF categories provide associated standards for risk management and level-of-service delivery. The *Walking Track Management Strategy for Tasmania's National Parks and Reserves (2011-2020)* is a comprehensive statewide track strategy for reserved land and provides guidance for the management of walking tracks in the TWWHA.

Further information on tracks and campsites is provided in Section 6.4.3 (page 139).

KDO 6.4: A range of recreational walking experiences is provided and maintained in the TWWHA through the provision of appropriate levels of corresponding track infrastructure and management.

Management Actions:

- Ensure walking-track conditions are consistent with the limits and prescriptions outlined in the PWS Walking Track Classification System and the levels of service outlined in the Reserve Standards Framework, and that they are also in accordance with the principles of the *Walking Track Management Strategy for Tasmania's National Parks and Reserves (2011-2020)*.

Road and facilities previously managed by Forestry Tasmania, Big Tree Conservation Area
Photo DPIPWE



- Prioritise the delivery of track infrastructure through the methodology of the *Walking Track Management Strategy for Tasmania's National Parks and Reserves (2011-2020)*.
- Develop and monitor key indicators that provide an overview of the condition of the track system in the TWWHA, and the recreation opportunities that are provided by the system, to allow for an evaluation of the effectiveness of the Walking Track Management Strategy's application in the TWWHA.
- Develop indicators and programs for the assessment and monitoring of visitor experiences, including visitor satisfaction, on priority walking tracks throughout the TWWHA.
- Develop Recreation Zone Plans for the South Coast Track, Frenchmans Cap and Overland Track.
- Ensure that tracks within the 2013 extension are assessed and included in management systems.

Low-level alternative routes to the Ironbound Range and South Cape Range sections of the South Coast Track are permitted to be surveyed and established subject to assessment and approval. Should an alternative route be constructed, it will be zoned as Recreation Zone with a 200m width either side of the track centreline as prescribed for tracks generally and with the same general zone prescriptions that apply, in addition to any prescriptions specific to the South Coast Track.

6.3.2 Roads

Roads and vehicle tracks allow many people to access the TWWHA. They create tourism and recreation opportunities for two-wheel-drive vehicles, four-wheel drives, trail-bikes and all-terrain vehicles, in addition to their use for walking, cycling and horseriding. As such, they are the means for the greatest range of visitors to find a way of connecting to the area's values. They allow for park management, fire management and facilitation of visitor services, and provide access for commercial activities such as honey production.

In some cases, the presence of roads poses risks to the area: they are potential conduits for biosecurity threats; may have unintended visual impact; increase wildlife mortality and the likelihood of deliberate or accidental fire ignition; may allow inappropriate access; and may disturb sensitive cultural and natural values. Management of the TWWHA's roads and

tracks strives to balance their recreation, visitation and primary industry opportunities with protection of the natural and cultural values.

The 2013 extension increased the length of the TWWHA's road network from approximately 200 km to more than 1,100 km. The network includes four-wheel drive tracks, unsealed two-wheel drive roads, sealed arterial roads and the Lyell Highway. The key road authorities in the TWWHA are the Department of State Growth, Parks and Wildlife Service, Forestry Tasmania, Hydro Tasmania and local councils.

The area's roads serve various functions. A number of them, such as the Cockle Creek and Jackeys Marsh roads, are public roads that also provide access to private residential land. Dove Lake Road and the Lake Dobson Road are the main access routes to major recreation areas. Access is restricted on a number of four-wheel drive roads, either seasonally or through a permit system. Other roads are used only for management purposes.

The 2013 boundary extension includes land that previously was managed for forestry production or as forest reserves. Extensive road networks service these areas. While many of the roads were constructed to facilitate commercial forestry operations, they have also been used for a range of other purposes, in particular, for accessing recreational opportunities and honey production areas. Some roads are subject to legal rights of access, such as when they provide access for pre-existing uses or for forestry operations in adjacent areas. In regard to presentation of the TWWHA, the use of roads without legal rights of access will need to be determined, as the significant resourcing that is needed for road maintenance will not allow all of them to remain in use (see Section 8.5, page 180 for further information).

Melaleuca airstrip, Southwest National Park
Photo DPIWE



KDO 6.5: The road network provides a range of recreational opportunities consistent with the protection of natural and cultural values.

Management Actions:

- Conduct a strategic review of the road network's uses for presentation of the TWWHA.
- Enter into agreements with relevant road authorities for the use and maintenance of key roads.

6.3.3 Aircraft

Aircraft landings in the TWWHA are generally restricted to those required for management purposes and to limited commercial operations. Commercial operations are regulated through a licence under the NPRMA. All aircraft landings in

the TWWHA, as well as the dropping of any article from an aircraft, require an authority from the Director. Commercial and private overflights also occur. These are not within the scope of the NPRMA and therefore cannot be regulated as part of the management of the TWWHA.

With proper consideration and management of issues such as biosecurity and disturbance to fauna, the impact on the environment of aircraft access can be minimised. A key area of management is the impact of aircraft on other users in the TWWHA. The areas of interest to those who see the TWWHA from the air are often the same as those who seek an experience on the ground, and the presence of aircraft may intrude on the often hard-won experiences of isolation and solitude that are sought by ground-based travellers to remote areas. Additionally, signature experiences of popular areas

New River Lagoon, Southwest National Park
Photo Jillian Mundy



may be affected by the adverse effects of low-flying aircraft. The development of 'Fly Neighbourly Advice' guidelines has been well received by operators of scenic and charter flights. Voluntary restrictions are the principal means of mitigating the potential impact of over-flights on other users of the TWWHA, and this approach will continue with its effectiveness subject to ongoing review.

Aerial access is a significant component of presentation in the TWWHA. It provides opportunities for visitors to enjoy the area in short timeframes and contributes to the diversity of experiences that are offered. Measures that minimise the impact of aerial access on other users include: selection of landing-site approaches that minimise the extent of over-flights; careful site-selection to avoid unnecessary conflict with other users; and low volumes and consideration of cumulative impacts.

The Melaleuca Landing Area (the Landing Area) allows unique access to a range of activities in a remote part of the TWWHA and is an important access point for users of the South Coast and Port Davey tracks. Commercial aircraft are permitted to use the Landing Area. If required, and subject to relevant assessment and approval processes, the Landing Area may be extended provided that the ends of the extension are at least 30 metres from both Moth and Melaleuca Creeks and it has the same alignment as the present Landing Area. The Landing Area is a private airstrip, as distinct from a licensed airport that must be available for conditional public use. The Landing Area is owned and managed by PWS. Non-commercial private landings may be authorised under exceptional circumstances; however, the Landing Area is not intended to be available for regular, private use. PWS is not bound to accept any application to use the Landing Area.

Use of the Landing Area by private pilots (non-commercial flights) may be authorised if specific requirements are met, based on the following

considerations:

- It is the pilot's responsibility to determine whether the aircraft is appropriate and able to safely undertake landings and take-offs at the Landing Area. Only VH registered aircraft are considered suitable. In addition, the pilot must ensure that the individual aircraft is designed, capable and loaded in such a way for it to safely undertake short-field landings and take-offs on the Landing Area based on the weather conditions at that time.
- The pilot must have written permission from the owner of the aircraft to use the Landing Area.
- The pilot must provide evidence that they have \$10 million (or other amount as required) public liability insurance.
- The pilot must provide evidence of their pilot's licence. Evidence of relevant qualifications or experience may also be required.
- Pilots must follow the 'Fly Neighbourly Advice' guidelines to minimise potential detrimental impacts to values and visitors.

Commercial aircraft use: landings are permitted in the Visitor Services Zone, Recreation Zone and Self-Reliant Recreation Zone (no landings are permitted in the Wilderness Zone) subject to the following conditions:

- Within the Self-Reliant Recreation Zone landing sites are limited to a maximum of 5.
- Aircraft landings are not permitted in the Recreation Zone adjacent to Lake Augusta in the Central Plateau Conservation Area (the area generally known as the 'Nineteen Lagoons' system), in the Eastern and Western Arthur Range above 300 m in elevation, at Lake Rhona, in the Anne Range or in the Walls of Jerusalem National Park within the Central Walls area or within 500 m of the Wild Dog Creek campsite.

- Aircraft landings are not permitted within the Self-Reliant Recreation Zone of the Franklin River.
- Float plane landings in Port Davey-Bathurst Harbour must be within the Motorised Vessel Overlay, with disembarkation limited to the shoreline in the Recreation Zone and the (second-westernmost) Celery Top Island (subject to appropriate biosecurity measures).
- Resupply and maintenance of commercial huts and standing camps by helicopter, including the use of long lines, is permitted.
- Helicopter use for resupply must be minimised and any landings must be at the nearest practical location to the hut or standing camp.
- Except for the purposes of resupply of huts or standing camps as provided above, landings are not permitted within 200 m of the Overland Track (including side tracks), Frenchmans Cap Track or the South Coast Track.
- Use of aircraft to drop articles is limited to areas where landings are permitted.
- Use of landing sites will be subject to monitoring and evaluation as a condition of operation.

Aircraft operations for management purposes typically comprise helicopter operations in remote areas for the purposes of infrastructure maintenance and construction (for example track work), research and monitoring activities, servicing of PWS huts and toilets, fire management, compliance, and search and rescue. Aircraft use to facilitate KDO 4.7 (Section 4.5 page 102) is considered to be for management purposes. Such use may occur as required by written authority from the Director. Aircraft use for management purposes in the Wilderness Zone should be minimised.

6.3.4 Motorised Boats

Motorised boats are used in the TWWHA for a range of recreational and commercial reasons. Sightseeing and fishing vessels ply the waters of Port Davey-Bathurst Harbour and Macquarie Harbour. The lower Gordon River cruises carry more than 100,000 tourists a year and are an important component of the West Coast's tourism industry. A commercial ferry service operates at Lake St Clair. Recreational boats are allowed on designated inland waterways. The TWWHA can also be accessed from Lake Burbury, Lake Gordon and Lake King William although these lakes are not within the TWWHA.

Well-managed motorised boating has minimal environmental impact and is a means for people to visit and enjoy the TWWHA without need of significant infrastructure. Its key management issues are: the impact of motorised boats and their wake on

Port Davey, Southwest National Park

Photo Tourism Tasmania & Lois Ryan



shallow waterways, river and lake banks, and estuarine shoreline; biosecurity risks; discharge of waste; wildlife disturbance; anchor impacts; and the impact of boating on the visitor experience of other users.

The Motorised Vessel Overlay limits the use of motorised boats to selected waterways. Education and compliance efforts are central to ensuring that the activity is compatible with the protection of values in the TWWHA.

Motorised boating is permitted, within the Motorised Vessel Overlay, at the following locations:

- Port Davey-Bathurst Harbour (restrictions apply - includes some rivers)
- Macquarie Harbour
- Gordon River (restrictions apply)

Conocladus australis, Bathurst Harbour,
Southwest National Park
Photo Graham Edgar



- Lake Pedder
- Lake St Clair
- Lake Ada
- Pillans and Julian lakes
- Double Lagoon
- Lake Fergus (electric motors only)

Lake Augusta and Lake Mackenzie, which are managed by Hydro Tasmania, are not subject to the Management Plan.

Motorised boats may be subject to localised restrictions for speed and other regulations to minimise environmental or social impacts or for safety purposes. Boats must use designated facilities, where provided, to enter and leave waterways.

6.4 SUSTAINABLE USE

This section is about specific management issues that arise from presentation of the TWWHA with respect to particular locations or activities.

6.4.1 Port Davey-Bathurst Harbour

Formed from a drowned valley, the landscape and seascape of Port Davey-Bathurst Harbour are unique and striking features of the TWWHA. Four major rivers feed into the waterway, which also contains a small number of islands. People have long been attracted to this part of the TWWHA. In recent times, there has been a sustained increase in access and use by recreational motorboats and yachts.

The waters of Port Davey-Bathurst Harbour contain a diverse range of unique marine environments. Tannin-rich fresh water overlays denser, clear salt water, creating a stratified effect that is most pronounced in Bathurst Harbour and Bathurst Channel. More common marine ecosystems exist along the coast within Port Davey, which is exposed to the Southern Ocean. Beneath the freshwater-saltwater boundary

(halocline), an unusual marine environment has evolved in response to the restricted penetration of sunlight, due to the tannin-stained water, and very low nutrient levels. Colourful and delicate marine invertebrates are a feature in this zone. Port Davey-Bathurst Harbour was gazetted as a marine nature reserve through the *Fisheries Amendment Rules 2005* issued under the *Living Marine Resources Management Act 1995*. The reserve extends to the high water mark of all rivers, bays and estuaries and is within the Southwest National Park. The boundaries of the marine nature reserve are shown in Schedule 2 Part 2 of the *Fisheries Rules 2009*. The TWWHA includes Pedra Branca and other islands off the south coast.

Like its surrounding terrestrial environment, the marine environment is vulnerable to the impact of visitation, particularly its delicate and unique invertebrate ecosystems and the creeks and rivers that enter the estuary. The main threats are:

- disturbance of the halocline;
- physical damage to invertebrate communities from anchors and scuba-diving;
- nutrient increases;
- introduction of marine pests;
- introduction or spread of *Phytophthora* root rot, chytrid fungus and other pathogens, and the introduction of introduced plants and animals;
- streambank erosion from boat wake;
- damage to cultural heritage, particularly on shoreline and stream banks; and
- impact from shore access.

A comprehensive set of guidelines for users of this area has been developed. The Management Plan applies specific provisions from those guidelines to usage and activity in Port Davey-Bathurst Harbour Marine Reserve. They are:

- Anchoring is not permitted within the Sensitive Area of Bathurst Channel.
- Anchoring and diving is not permitted within the Reference Areas within Bathurst Channel.
- Bilge water is not to be released within Port Davey-Bathurst Harbour.
- Where discharge of greywater and sewage is unavoidable, it must be discharged in accordance with the EPA Director's Directive, *The Discharge of Sewage from Certain Vessels into State Waters*.

Areas designated as Sensitive Area and Reference Area are shown in Maps 17 and 18. The Sensitive Area excludes the small bay at the base of the Mt Rugby track to allow for anchorage and access to the track. All commercial vessel use within Port Davey-

*Wake monitoring, Gordon River,
Franklin-Gordon Wild Rivers National Park
Photo DPIWE*



Bathurst Harbour is guided by the PWS *Commercial Visitor Guidelines Port Davey Marine Reserve*.

KDO 6.6: Appropriate monitoring, education and compliance support sustainable management of visitation and use in Port Davey-Bathurst Harbour.

Management Actions:

- Monitor Port Davey marine invertebrate communities that are vulnerable to impact from visitation and use.
- Continue stream-bank erosion monitoring and instigate additional monitoring of at-risk Aboriginal cultural sites.
- Support education and compliance with on-water management presence during peak usage.

*Tent platform, Eastern Arthur Range,
Southwest National Park
Photo DPIWE*



6.4.2 Gordon River

The lower Gordon River is an iconic destination for visitors who access the TWWHA from Strahan and a mainstay of the region's tourism industry. It is also a popular destination for private recreation. The Gordon River's narrow estuary is a legacy of progressive sedimentary filling in a steep-sided river valley after it was drowned by rising sea levels after the last Ice Age.

It became apparent in the 1980s that the wake of cruise boats on the lower Gordon was causing severe erosion of stream banks. Management measures that restrict commercial operations are in place and are articulated in the *Lower Gordon Recreation Zone Plan 1998*. Commercial vessel licensing uses a 'wash rule' that is related to vessel speed and associated wake characteristics.

An ongoing monitoring program informs the management measures that mitigate the impact of vessel wake on the river. From February 2004 to March 2013, estuarine banks near the river mouth were found to have eroded at double the average rate of that expected from sea level rise alone, with an increasing trend evident. Erosion rates are declining in the zones above where commercial vessels operate. Management of bank erosion, and of commercial and private vessel operations, requires the continuation of a comprehensive monitoring program and suitable levels of management presence at times of peak use.

Pending updating of the Recreation Zone Plan, use of the Gordon River will continue to be guided by the *Lower Gordon Recreation Zone Plan 1998*, with the following additional provisions:

- Maximum speed limit within the Gordon River is 5 knots for all private vessels.
- The 'wash rule' is to be used to determine the licensing of commercial vessels.

KDO 6.7: Appropriate monitoring, education and compliance support sustainable management of visitation and use in the Gordon River.

Management Actions:

- Conduct erosion pin monitoring and continuous turbidity monitoring in Zone 1.
- Support education and compliance with on-water management presence during peak usage.
- Review and update the *Lower Gordon Recreation Zone Plan 1998* as the basis for management to reflect the current understanding of erosion rates and management of use.

*Impact of camping, Western Arthur Range,
Southwest National Park
Photo DPIPW*



6.4.3 Tracks and Campsites

Bushwalking is a popular activity with a long tradition in the TWWHA. Many of the now iconic tracks through the TWWHA were established by pioneer walkers, particularly members of some of the long-established walking clubs in Tasmania, who ventured into the area when little was known about its terrain by the wider community. Many of the tracks retain considerable social value to many bushwalkers through these historic associations. Management of walking tracks and campsites is therefore directed at continuing to facilitate access to the TWWHA by walkers while protecting the natural and cultural values of the areas people seek to visit.

Many areas are susceptible to impact from the use of walking tracks, routes and campsites, often by low numbers of walkers. Key management issues are: the deterioration of tracks through erosion and widening; formation of new tracks in formerly trackless country; the expansion and deterioration of campsites; and the spread of pathogens such as *Phytophthora* through areas of susceptible vegetation. Steep terrain, fragile vegetation and soils, high rainfall, waterflow and the poor siting of some tracks exacerbate these problems. In some areas, unplanned routes are likely to become tracks that are susceptible to erosion. Monitoring has revealed an increasing incidence of illegal fires, ongoing extension of campsites and inappropriate toilet practices in some places.

Track and campsite management throughout most areas of the TWWHA has focused on addressing environmental impacts at highly susceptible sites and extensive hardening and construction of infrastructure in high use areas, such as the Overland Track. More than 200 km of track has been hardened or stabilised, while the majority of the TWWHA track network remains unimproved and many problem areas remain.

User behaviour has been managed through such campaigns as 'Minimal Impact Bushwalking' and the current program, 'Leave No Trace'. These programs

have been reinforced by information at visitor centres and, at times, by on-ground staff, particularly hut wardens and track rangers. On-ground presence is very effective for appropriate user education and to ensure compliance with sustainable practices. It also contributes to the collection of data on track condition, user numbers and visitor experience.

In place since the mid-1990s, the comprehensive and robust track-monitoring program undertaken by PWS in the TWWHA is of world standard. Campsite monitoring occurs alongside this program or opportunistically. However, comprehensive, long-term, campsite-specific monitoring is conducted on the Overland and South Coast tracks and on the Franklin River. Complementary usage data adds value to monitoring data and allows for better understanding of the link between usage levels, track and campsite condition and environmental impact. Qualitative and

quantitative data on user experience also inform management in this regard.

KDO 6.8: There is sustainable management of walking tracks and recreational walking throughout the TWWHA.

Management Actions:

- Continue to implement and develop a program to monitor walking tracks, campsites and their users.
- Review usage data collection and effort. Ensure that the data collection effort is strategic and value-adds to track and campsite monitoring in the TWWHA.
- As funding allows, provide track rangers during the peak walking season (November to Easter), focusing on the Eastern and Western Arthurs, Frenchmans Cap, South Coast Track, Anne

Hardened track, Western Arthur Range, Southwest National Park
Photo DPIPWE



Range, Central Plateau and Walls of Jerusalem, in addition to their periodic presence in other areas such as the Denison ranges. Continue to provide track rangers on the Overland Track.

- Conduct an effective, ongoing 'Leave No Trace' walker education program.
- Continue to support and offer volunteer participation in visitor services and walker education through volunteer hut wardens, campground hosts and on-track education programs.

6.4.4 Presentation of Cave and Karst Features

The TWWHA contains outstanding karst systems and karst caves. They occur across a range of environments, from formerly glaciated alpine regions to offshore islands. The karst's distinctive attributes are recognised as contributing to the Outstanding Universal Value of the TWWHA. Many of the karst areas contain numerous and extensive caves, which provide habitat for specialised biota that occur nowhere else. They also preserve sediments that contain important evidence of environmental conditions over long periods.

Aboriginal people occupied many of the caves and all are highly significant to Tasmanian Aboriginal people today. The sites include caves that shed light on the culture of the first people in Tasmania. The Aboriginal Land Council of Tasmania holds title, on behalf of Tasmanian Aboriginal people, to three land parcels that contain caves: Wargata Mina, Ballawinne and Kuti Kina. The titles, including their caves, are not subject to the Management Plan but are managed to protect and conserve their OUV.

Most caves in the TWWHA do not provide for public access via pathways and lighting. Management of these sites requires systems that provide a spectrum of recreational opportunities while ensuring that visitors do not degrade their natural and cultural values.

TWWHA caves provide extensive opportunities for caving at a range of skill and experience levels. The caves include some of the most extensive, physically challenging and spectacularly decorated caves in Australia. Some caves receive hundreds of visitors annually. However, most of the sites are subject to less frequent visits, mostly by experienced speleologists. Some remote karst areas are only visited rarely, either for recreational or scientific purposes.

Three sites have been developed for presentation as show caves: Newdegate, Marakoopa and King Solomons. The caves are operated as PWS business enterprises. Management presents them as quality tourism products that depend on the maintenance of their environmental integrity. Maintenance and monitoring of both the environment and the infrastructure are critical considerations. Private concessionaires present selected additional caves on a commercial basis.

Researching endemic cave fauna, Southwest National Park
Photo DPIPWE



Visitor impact is the principal threat to the integrity of caves in the TWWHA. Some damage is caused by a lack of awareness about minimal-impact caving practices and some by the cumulative effect of numerous minor impacts over time. This is especially true in caves that are visited annually by hundreds of people but lack the protective infrastructure of show caves. A number of significant management issues are common at many sites, including congestion and conflicts at popular caves, evidence of unacceptable rates of environmental degradation, and demand for access to additional caves by existing and new commercial operators.

A Cave Access Policy has been developed to establish procedures for the zoning of caves for different purposes and the regulation of access in accordance with conditions that are appropriate for different levels of cave sensitivity. The policy provides a strategic context for balancing conservation objectives with the demand for cave-based activities. The PWS will seek to establish ongoing partnership arrangements with approved caving clubs to ensure they have certainty and ease of access, particularly for gated sites.

KDO 6.9: Opportunities to enjoy recreational use of caves are provided while ensuring that natural rates and magnitudes of environmental change (both physical and biological) in karst ecosystems are not accelerated through inappropriate levels or types of use.

*A remote alpine cave, Southwest National Park
Photo DPIPWE*



Management Actions:

- Manage access, including commercial use, in accordance with the Cave Access Policy.
- Identify priority TWWHA caves for consideration under the Cave Access Policy, and develop associated timelines for their consideration.
- Develop a monitoring and reporting program to assess the effectiveness of the Cave Access Policy in achieving sustainable visitation.

6.4.5 Franklin River

As the prime canoeing and rafting river in the TWWHA, the Franklin River provides a challenging trip with an international reputation. The longest trips take up to 14 days, but there are shorter, mostly commercial trips that approach by the Mt McCall vehicular track. Commercial operators have improved their ability to run the river in less time, with a full trip now possible in seven days.

Most of the river's users were in private parties during the Gordon-below-Franklin Dam controversy in the early 1980s. In recent years, more than 70 per cent of the 400-500 annual users are clients of commercial trips. Several of the campsites have become large, and some contain basic portage infrastructure that is considered appropriate and adequate for the zone and experience. The Mt McCall road will remain open to provide access to the river:

The main impact of usage occurs at campsites and on portage routes. Commercial rafting companies remove all of their human faecal waste. The following prescriptions further reduce the social and environmental impact of use:

- Human faecal waste must be removed by commercial and recreational users.
- Commercial rafting companies are provisionally increased from a maximum of 13 to a maximum of 15 people (guides and clients) per trip. The retention of this maximum is subject to monitoring and review of the carrying capacity of campsites on the river. In the event that monitoring shows unacceptable levels of impact due to the increased party size, it will be reduced back to 13.
- Regular inspection and monitoring of portage structures and routes, campsites, general condition and usage of the area will be undertaken in accordance with PWS operational policies and procedures.

6.4.6 Climbing and Canyoning

Some of the TWWHA's many cliff and rock faces are established venues for rock climbing. They include Frenchmans Cap, which is the most popular destination, the Acropolis, Mt Geryon, Federation Peak and Mt Anne. Climbers also conduct occasional trips to more remote mountains.

The sport is generally compatible with the area's natural values when climbers minimise the use of fixed anchors, such as bolts, and practise minimal-impact bushwalking and climbing techniques. In this regard, the climbing community has a history of self-regulation. For example, the Climbers Club of Tasmania recently developed a Code of Conduct.

Traditional free climbing, with little or no use of permanent anchors, has been the predominant form of rock climbing in the TWWHA for five decades. Heavily bolted 'sport' routes – an increasingly popular style that relies on the placement of protection before a climb is attempted – have recently appeared in some remote parts of the TWWHA. They damage affected rock faces and are generally considered

to have reduced aesthetic qualities. Maintaining permanent anchors at remote locations is not practical.

Other potential management problems include damage to vegetation, and erosion of rock faces and access routes. In particular, there are concerns that access routes to crags may develop all of the problems that are associated with heavily used bushwalking tracks.

Canyoning, which also uses ropes, is an emerging activity. While its environmental impact is potentially similar to that caused by rock climbing, the current impact of canyoning is minimal because of low usage.

Ice climbing is occasionally attempted on higher peaks, such as Mt Geryon and Cradle Mountain, but conditions are rarely suitable.

The following prescriptions allow for climbing and other related activities to continue in the TWWHA, except where they cause unacceptable environmental damage or impact on the experience of other users:

Franklin River, Franklin-Gordon Wild Rivers National Park
Photo DPIWE



- The TWWHA will be predominantly maintained as a traditional climbing area.
- The establishment or maintenance of routes that are protected primarily or exclusively using fixed anchors (i.e. 'sport' climbs) is generally prohibited.
- Existing routes in the 2013 minor boundary extension that use fixed anchors may be maintained. New routes may be established in existing locations where fixed anchors are utilised subject to approval by PWS.
- Based on historical precedence, the occasional limited installation (or replacement) of permanent anchors at Mt Geryon, The Acropolis, Frenchmans Cap and Mt Anne is permitted.
- Written authority must be obtained from the PWS before using power-driven equipment to install or replace any permanent anchor in the TWWHA.
- Limited use of permanent abseil anchors for canyoning activities may be approved by the PWS, subject to site-specific considerations.
- Access tracks that are used by climbers and canyoners will be managed in a manner consistent with the PWS Track Classification Scheme.
- Development of emergent activities, such as canyoning, and their associated impacts, will be monitored.

6.4.7 Snow Skiing

Downhill and cross-country skiing have been traditional and popular activities within Mount Field National Park since the 1920s, and in particular since rope tows were installed in the 1950s, and are an integral part of the history of this area. The Southern Tasmania Ski Association runs the downhill skifield at Mount Mawson for the benefit of its members and the public. The skifield's use may be limited in the long term by increasingly marginal conditions resulting from climate change, the nature of the site itself and environmental values. However, its low-key, family-orientated atmosphere provides a unique attraction. The long-established ski and bushwalking club huts are a feature of this area.

Cross-country skiing is likely to remain viable, given that its participants use a greater extent of snow-covered terrain. Self-reliant cross-country skiing and

Mount Mawson ski field, Mount Field National Park
Photo DPIPWE



snow-shoeing is also undertaken, as conditions allow, in backcountry areas such as the Labyrinth, Snowy Range, Walls of Jerusalem and Cradle Mountain.

Specific planning is needed in the main skiing zone, Lake Dobson and nearby walking tracks. The development of the Mt Mawson Skifield Site Management Plan, as an action of the Mount Field Management Plan, has not been completed. The site plan is especially required following removal of Sitzmark Lodge and now that temporary shelters are in use. Planning for this area should also consider public access to Lake Dobson and from the lake to the skifields. The site plan will guide the provision of appropriate facilities for this area into the future while recognising the rich history of community involvement in this area.

A site plan for the Lake Dobson-Mt Mawson area will be developed, in consultation with stakeholders within two years of the gazettal of this plan. The site plan will consider:

- providing a public shelter and interpretative facility at the skifield area;
- slope-grooming and ski infrastructure, including viability of the Rodway Tow;
- potential climate change impacts on the snow resource for downhill skiing;
- other snow-based activities;
- new and existing walking opportunities;
- facilities at Lake Dobson; and
- access from Lake Dobson and the provision of public transport to Lake Dobson.

Needwonnee walk, Southwest National Park
Photo Jillian Mundy



6.5 CULTURAL HERITAGE

Tasmanian Aboriginal people assert a right of ownership over Aboriginal resources within the TWWHA. This extends to the use of Aboriginal cultural heritage in the presentation of the area. Aboriginal culture, both tangible and intangible, has been identified as a key element in a revitalised approach to presentation of the TWWHA. Therefore, the control of its use is a vital part of the TWWHA's contribution to Aboriginal health and wellbeing. Inappropriate use of cultural heritage greatly concerns Aboriginal people, particularly because the potential for their empowerment through culturally appropriate presentation and the importance of presentation to the support of their aspirations for management of the TWWHA are well recognised. The Management Plan provides direction in the presentation of Aboriginal cultural values through the management of cultural values. In this respect, revision of the 1995 *Aboriginal Interpretation of the Tasmanian Wilderness World Heritage Area* will provide important guidance.

Resourcing and capacity-building are key parts of

enabling Aboriginal people to develop sustainable and culturally appropriate presentation. The cultural management unit will facilitate capacity-building and engage with Aboriginal people, to ensure that they are empowered to exploit opportunities for cultural tourism and to determine and control the presentation of cultural heritage.

Aboriginal cultural values are afforded protection under the *Aboriginal Relics Act 1975* where those values meet the definition of 'relic' under the Act. Relics may not be disturbed or interfered with in any way without a permit issued under the Act by the relevant Minister. Aboriginal Heritage Tasmania (AHT), within DPIPW, maintains a database, the Aboriginal Heritage Register (AHR), of known sites protected under the Act and administers the regulation of the Act. Presentation of Aboriginal values must be in accordance with the provisions of the Act.

Twilight Tarn historic hut, Mount Field National Park
Photo Tourism Tasmania and Geoff Murray



6.6 HISTORIC HERITAGE

The TWWHA contains a considerable wealth of historic heritage material and associated stories. The heritage and stories are derived chiefly from such activities as exploration, whaling, penal settlement, pining and timber getting, mining, grazing, snaring, early tourism, bushwalking, hydro-electric development and conservation protests. These activities are important elements of Tasmania's history and have been a feature of the TWWHA's presentation and interpretation since the area was listed. The future presentation of historic heritage must adopt contemporary methods that match the changing expectations and needs of visitors.

Properly developed presentation of historic heritage requires a strategic, thematic and resource-efficient approach. For example, Churchill's Hut in the upper Florentine Valley is of historical interest and has been restored. However, its location, history and place in the story of the wider area are poorly publicised. There is considerable potential to make the site part of a coherent approach to the presentation of historic heritage and extant infrastructure over a wider area that includes the Adamsfield pack track and the Florentine River huts, which are associated with historic mine workings.

Presentation of built heritage is inextricably linked with its ongoing conservation. Innovative solutions are required to bring historic heritage to life and to generate resources for conservation, including through private investment.

It is important to acknowledge that local communities have ongoing connections to the history of the TWWHA. Some links stretch back to the earliest European experiences of landscapes and resources, while others relate to activities within living memory. For example, snaring has a long tradition and still occurred on the Central Plateau in the 1970s. The pack tracks, huts and other fabric of such activities,

and the landscape itself, remain highly significant to many people. Presentation of this historic heritage is chiefly concerned with access, continued use and the opportunity for local communities to provide management direction.

The *Historic Cultural Heritage Act 1995* provides a process whereby heritage sites of significance at a State level may be listed under the Tasmanian Heritage Register. The Act provides for a number of controls on works that may be undertaken to listed sites. Presentation of listed sites must be consistent with the Act.

KDO 6.10: The profile and value of historic heritage, in the presentation of the TWWHA, increase, including historic heritage of significance to local communities.

Management Actions:

- Through the Tourism Master Plan for the TWWHA, consider regional-based opportunities for presentation of historic heritage, such as those on the Lyell Highway and in the Adamsfield-Florentine region.
- Review opportunities, including commercial, to link conservation with the presentation of historic heritage.
- Support local sustainable community involvement in the management and presentation of historic heritage.
- Allow for sustainable continued access to and use of tracks and huts of historical significance, and for the maintenance of those assets through partnership arrangements.
- Identify tracks of historical interest and develop criteria that allow for the consideration of historic heritage in track management.

6.7 PRESENTATION WITHIN THE 2013 BOUNDARY EXTENSION

The 2013 boundary extension contains a number of places where a range of recreational activities have occurred over a long period and the opportunity to continue them remains of importance to surrounding communities. In some cases, the activities have occurred over several generations. Apart from existing reserves, the extension mainly consists of production forest and forest reserves previously managed by Forestry Tasmania. An overarching 'multiple use' approach to management was adopted in both of these areas. It provided for a broad range of recreational activities that were consistent with the management priorities of forest production and conservation. Including those areas within the TWWHA requires that their allowable activities be consistent with protecting its natural and cultural values, and with the objectives of the relevant reserve class. In most instances, the new reserve classes are consistent with current recreation use.

It is acknowledged that recreation in those areas has, for the most part, been consistent with the protection of values. Continuing those activities is an important aspect of TWWHA presentation that will continue to be facilitated and supported. However, where any recreational practice causes, or is likely to cause, impact on values, the activity will be monitored and where necessary assessed. Any activity that has an ongoing unacceptable impact on natural and cultural values will require a management response to mitigate its impact. Appropriate action, which may include stopping or relocating the activity, will be taken in consultation with affected users should impacts approach unacceptable levels.

As community recreation assets, these places will increase the diversity of presentation opportunities in the TWWHA. For example, the Great Western Tiers is relatively close to touring routes and population

centres. Maintaining access is a critically important issue for users. Given that considerable amounts of resource are required to maintain roads, the strategic review will need to identify priority roads. Management of this issue will also require cooperative arrangements with land managers and owners, as many roads cross tenure boundaries.

The boundary extension also provides additional presentation opportunities for the TWWHA. For example, the rehabilitation of roads and logged coupes may occur in balance with the development of suitable recreational activities that are limited elsewhere in the TWWHA. There may be opportunities to develop mountain-bike trails, designated four-wheel drive, all-terrain vehicle and trail-bike routes, adventure activities such as ziplining, horseriding and educational facilities. It is important that these opportunities are identified and considered in the necessary review of boundary-extension assets, particularly roads, and in the adaptive management of this area. Such management will be based on a principle of maintaining the current recreational opportunities where they do not impact on World Heritage and other natural and cultural values.

KDO 6.11: Current use and future presentation opportunities within the 2013 extension are identified and facilitated.

Management Actions:

- Through the Tourism Master Plan, identify opportunities for future presentation within the 2013 extension.
- Through community consultation, identify current patterns of use in priority areas of the 2013 extension and address any impacts on the continuation of use that arise from a change of tenure in those areas, consistent with the protection of natural and cultural values and the reserve management objectives.

6.8 COMMERCIAL TOURISM

Commercial tourism is a legitimate and important component of meeting the obligation of presentation under the World Heritage Convention and in meeting the management objectives under the NPRMA for the encouragement of tourism and recreation. Presentation of the values of the TWWHA and the provision of tourism and recreation opportunities must be met in a manner consistent with other management objectives as applied in this plan and with the obligation to protect, conserve, rehabilitate and transmit the values of the TWWHA as described in the guiding Vision of this Management Plan.

PWS has entered into a strategic action plan, Parks 21, with the tourism industry, represented by the Tourism Industry Council of Tasmania. The plan has a focus on three key objectives: an enhanced tourism focus for PWS, sustainable experience delivery, and enterprise and economic activity. The plan reflects the importance of sustainable commercial tourism and includes a commitment to support the development of appropriate, demand-driven, commercially successful public and private opportunities for sustainable and high-quality visitor experiences and to identify opportunities and attract private capital investment in nature-based tourism activities and infrastructure, both in and around Crown land, parks and reserves.

The NPRMA allows for commercial activities on reserved land. The Act requires that commercial activities on reserved land be undertaken in accordance with a business licence (s 38) and provides the Minister with the power to grant such a licence (s 40). The NPRMA also provides the Minister with the power to grant a licence or lease to occupy reserved land (s 48). The prescriptions and measures provided for the regulation of use in the TWWHA, in particular the zoning system and the associated Table of Use, are intended to ensure that the balance between tourism and recreation and the protection

of natural and cultural values is met. These also apply to commercial tourism proposals and activities. To further ensure commercial tourism proposals are consistent with protection of values and the objective of providing diverse and high-quality values-based experiences as the basis of the presentation of the TWWHA, the following criteria also apply to commercial tourism proposals in the TWWHA.

A proposal must:

- describe how the experience is based on the values and features of the TWWHA;
- submit a case for why it should be situated within reserved land and address compatibility with existing services and infrastructure;
- describe how it will contribute to the guiding Vision and management Objectives for the TWWHA as articulated in the management plan;
- describe how potential impacts on the legitimate enjoyment and experience by others of TWWHA features and values will be managed;
- describe how it will be constructed and/or operate in a manner compatible with the protection and conservation of World Heritage and other values;
- incorporate environmentally sustainable operational practices and the use of environmentally 'best practice' goods and technologies;
- detail any external costs resulting from the proposal including ongoing monitoring and compliance; and
- demonstrate economic viability.

There are currently five commercial huts on the Overland Track. The Overland Track model, which provides both public and commercial huts, has proven over many years to be both a successful and accepted feature of the experience of that area. Providing the opportunity, subject to assessment and approval, for additional commercial huts on the Overland Track and for commercial huts on the South Coast Track has been provided in this Management Plan, as it is considered appropriate in the presentation of these areas. It is also recognised that there is a limit to how many additional huts can be reasonably accommodated on both tracks from a cumulative social, economic and environmental perspective, and a prescribed cap is appropriate over the life of the plan. A cap does not imply that any proposal for additional huts within that limit is necessarily appropriate; all proposals will need to be assessed on their merits through the relevant approval processes.

- The number of commercial huts permitted on the Overland Track is limited to 11.
- The number of commercial huts permitted on the South Coast Track is limited to 7.

6.9 VISITOR SAFETY

The PWS has a duty of care to visitors in the parts of the TWWHA where it is the managing authority. The duty is complex, particularly because many visitors seek a level of challenge as part of their recreational experience. In regard to presentation, it is important that a visitor's sense of freedom and ability to seek adventure are not unduly restricted. The key management obligation to protect natural and cultural values may also place limits on the degree to which risk can be mitigated. It is also accepted that the ability of the PWS to manage all risks in the TWWHA is limited.

A systematic response is applied to determining risks and prioritising actions that mitigate them. The response, which applies throughout the reserve estate that is managed by the PWS, relies on the appropriate

matching of visitor skills and abilities to the level of user risk at sites. The Reserve Standards Framework is the primary system for achieving this outcome.

KDO 6.12: Visitors are educated and encouraged to adopt safe practices, and they are provided with sufficient and appropriate information about potential hazards to enable them to make responsible decisions.

Management Actions:

- Provide information, interpretation and educational material that raise visitor awareness of individual responsibility for personal safety, with the focus on ensuring that visitors understand potential hazards and are sufficiently well prepared.
- Develop an appropriate information management system and related procedures to

*Canyoning, Cradle Mountain-Lake St Clair National Park
Photo Cradle Mountain Canyons*



systematically monitor public health and safety incidents in the TWWHA, to enable routine reporting of public safety performance and to enhance PWS's ability to identify and respond to emerging public health and safety issues.

- Systematically monitor and evaluate the incidence and cause of all deaths, serious injuries and lost persons in the TWWHA.

6.10 INFORMATION, INTERPRETATION AND EDUCATION

Information, interpretation and education are the means by which the values of the TWWHA are presented to people. They increase awareness, understanding and appreciation of the area. Interpretation also enriches the experience of visitors and, at the same time, aims to influence visitor behaviour by presenting information that supports management strategies. Interpretation is currently guided by the PWS *Interpretation Framework 2007*.

Information helps people choose where, when and how to visit the TWWHA. Through the use of contemporary media, the existence and significance of the TWWHA, along with its natural and cultural values and recreational opportunities, are presented and promoted to local, interstate and international audiences. Formal educational materials, programs and campaigns help to promote targeted management messages such as the 'Leave No Trace' campaign.

Interpretation provides inspiration and insight for visitors and surrounding communities, particularly in regard to the values of the TWWHA. It also enhances visitor understanding, appreciation and affinity with the area. High-quality interpretation and the delivery of information and education services need to be contemporary, distinctive and integrated with overarching presentation strategies that highlight World Heritage values.

KDO 6.13: The delivery of interpretation and information for the TWWHA is integrated with presentation strategies and supports management objectives.

Management Actions:

- After the Tourism Master Plan is completed, update the *Interpretation Framework 2007* to produce a strategic TWWHA interpretation plan that addresses the following key elements:
 - Provision of overall direction and coordination of themes and approaches for major interpretive developments;
 - An implementation and evaluation plan for prioritised sites and programs in the TWWHA; and
 - Value-adding to major strategies of the Tourism Master Plan.
- Develop behaviour guidelines for walkers and other users of the TWWHA about biodiversity threats and minimisation, including 'Leave No Trace'.
- Support the provision of written information and interpretation skills training for commercial tourism operators.
- Develop a communication strategy for the TWWHA.

Education is a lifetime pursuit and can occur both formally and informally. Presentation of the TWWHA provides a range of opportunities for both visitors and the wider community to benefit from a more profound understanding of its cultural and natural values according to their level of interest and engagement. The development of educational material, community and institutional programs, and online content allows this opportunity to be extended beyond those who visit the TWWHA. Providing education opportunities in the TWWHA can also be facilitated through developing and implementing programs and partnerships that encourage and

facilitate educational experiences.

This approach is reflected in a number of existing programs that are supported and implemented by PWS in the TWWHA. The Discovery Ranger Program offers visitors the opportunity during the peak summer period to participate in activities such as guided walks, presentations and children's activities. The Wilds'Cool Program is a partnership with local schools, volunteers and PWS aimed to encourage students to have an active role in local parks and reserves. The Get Outside with Community Program provides opportunities for people from culturally and linguistically diverse (CALD) backgrounds to acquire the skills to become self-sufficient in undertaking a visit to parks and reserves.

*PWS Discovery Ranger Program, Mount Field National Park
Photo DPIPWE*



KDO 6.14: Education for schools, visitors and the wider community will highlight and build awareness of the natural and cultural values of the TWWHA.

Management Actions:

- Engage with key neighbouring schools, through programs such as the Wilds'Cool program, to build partnerships for education, access and volunteering.
- Engage with members of CALD communities, through programs such as the Get Outside with Community Program, to foster social inclusion, health and wellbeing, access and skills development.
- Provide the summer Discovery Program in key TWWHA sites.
- Support school excursions by providing a school rate for access, recreation and accommodation in the TWWHA.
- Develop curriculum materials that explore TWWHA concepts and values
- Support the provision of training to TAFE students undertaking related tourism and conservation land management studies.
- Ensure that the role of low-cost accommodation in the educational use of the TWWHA is a consideration in visitor and site planning.

6.11 SUMMARY OF COMMITMENTS

Key Desired Outcome (KDO)	
Management Action	Evaluation
6.1 Presentation of the TWWHA is a management priority that is driven and supported by a coherent, strategic framework.	
Develop a Tourism Master Plan for the TWWHA in consultation with the tourism industry, Tasmanian Aboriginal people and other key stakeholders. Release the plan for public comment.	Within 3 years; subsequent evaluation against outcomes of the strategies in the Tourism Master Plan.
6.2 Sustainable visitation to the TWWHA increases at suitable sites consistent with the zoning and protection of natural and cultural values.	
Provide a strategic approach to improving visitation in the TWWHA through the Tourism Master Plan.	Visitation rates.
Review or prepare Visitor Services Zone or Recreation Zone plans as required.	Required plans produced.
6.3 A diverse and accessible range of quality visitor experiences that are consistent with the protection of values is provided in the TWWHA.	
Review current visitor experiences through the Tourism Master Plan; identify key gaps in meeting demand for current and trending visitor experiences.	Evaluated outcome of the Tourism Master Plan.
Identify opportunities through the Tourism Master Plan for the future delivery of additional visitor experiences.	Evaluated outcome of the Tourism Master Plan.
Ensure that appropriate research and quantitative and qualitative data collection, including statistically valid visitor satisfaction surveys, support the delivery of the Tourism Master Plan.	Evaluate data collection against identified needs of the Tourism Master Plan.
Review RSF zones in the TWWHA following completion of the Tourism Master Plan.	Within one year of the Tourism Master Plan's completion.
6.4 A range of recreational walking experiences is provided and maintained in the TWWHA through the provision of appropriate levels of corresponding track infrastructure and management.	
Ensure walking-track conditions are consistent with the limits and prescriptions outlined in the PWS Walking Track Classification System and the levels of service outlined in the Reserve Standards Framework, and that they are also in accordance with the principles of the <i>Walking Track Management Strategy for Tasmania's National Parks and Reserves (2011-2020)</i> .	Evaluate monitoring results against standards.
Prioritise the delivery of track infrastructure through the methodology of the <i>Walking Track Management Strategy for Tasmania's National Parks and Reserves (2011-2020)</i> .	Track infrastructure resourcing reflects the work priorities identified through the methodology.
Develop and monitor key indicators that provide an overview of the condition of the track system in the TWWHA, and the recreation opportunities that are provided by the system, to allow for an evaluation of the effectiveness of the Walking Track Management Strategy's application in the TWWHA.	Indicators developed and monitoring applied on priority tracks. Evaluation undertaken at five-year intervals.
Develop indicators and programs for the assessment and monitoring of visitor experiences, including visitor satisfaction, on priority walking tracks throughout the TWWHA.	Monitoring within selected locations.

Key Desired Outcome (KDO)	
Management Action	Evaluation
Develop Recreation Zone Plans for the South Coast Track, Frenchmans Cap and Overland Track.	Plans completed within three years.
Ensure that tracks within the 2013 extension are assessed and included in management systems.	Length of track assessed.
6.5 The road network provides a range of recreational opportunities consistent with the protection of natural and cultural values.	
Conduct a strategic review of the road network's uses for presentation of the TWWHA.	Evaluated outcome of the Tourism Master Plan.
Enter into agreements with relevant road authorities for the use and maintenance of key roads.	Percentage of eligible key roads subject to current agreements.
6.6 Appropriate monitoring, education and compliance support sustainable management of visitation and use in Port Davey-Bathurst Harbour.	
Monitor Port Davey marine invertebrate communities that are vulnerable to impact from visitation and use.	Monitoring effort is sufficiently robust to identify impacts and support adaptive management.
Continue stream-bank erosion monitoring and instigate additional monitoring of at-risk Aboriginal cultural sites.	Monitoring effort is sufficiently robust to identify impacts and support adaptive management.
Support education and compliance with on-water management presence during peak usage.	Management presence enables education and compliance.
6.7 Appropriate monitoring, education and compliance support sustainable management of visitation and use in the Gordon River.	
Conduct erosion pin monitoring and continuous turbidity monitoring in Zone 1.	Monitoring effort supports adaptive management.
Support education and compliance with on-water management presence during peak usage.	Management presence enables education and compliance.
Review and update the <i>Lower Gordon Recreation Zone Plan 1998</i> as the basis for management to reflect the current understanding of erosion rates and management of use.	Within 3 years.
6.8 There is sustainable management of walking tracks and recreational walking throughout the TWWHA.	
Continue to implement and develop a program to monitor walking tracks, campsites and their users.	Monitoring effort across priority areas.
Review usage data collection and effort. Ensure that the data collection effort is strategic and value-adds to track and campsite monitoring in the TWWHA.	Extent to which usage data improves track and campsite monitoring as a management tool.
As funding allows, provide for track rangers during the peak walking season (November to Easter), focusing on the Eastern and Western Arthurs, Frenchmans Cap, South Coast Track, Anne Range, Central Plateau and Walls of Jerusalem, in addition to their periodic presence in other areas such as the Denison ranges. Continue to provide track rangers on the Overland Track.	Review effectiveness against key management issues.
Conduct an effective, ongoing 'Leave No Trace' walker education program.	Application, effectiveness and awareness of the program.
Continue to support and offer volunteer participation in visitor services and walker education through volunteer hut wardens, campground hosts and on-track education programs.	Level of participation.

Key Desired Outcome (KDO)	
Management Action	Evaluation
6.9 Opportunities to enjoy recreational use of caves are provided while ensuring that natural rates and magnitudes of environmental change (both physical and biological) in karst ecosystems are not accelerated through inappropriate levels or types of use.	
Manage access, including commercial use, in accordance with the Cave Access Policy.	Evaluate access against the policy.
Identify priority TWWHA caves for consideration under the Cave Access Policy, and develop associated timelines for their consideration.	Caves identified; subsequent evaluation against timelines.
Develop a monitoring and reporting program to assess the effectiveness of the Cave Access Policy in achieving sustainable visitation.	Monitoring of priority caves considered by the policy.
6.10 The profile and value of historic heritage, in the presentation of the TWWHA, increase, including historic heritage of significance to local communities.	
Through the Tourism Master Plan for the TWWHA, consider regional-based opportunities for presentation of historic heritage, such as those on the Lyell Highway and in the Adamsfield-Florentine region.	Evaluate through the Tourism Master Plan; development of identified opportunities.
Review opportunities, including commercial, to link conservation with the presentation of historic heritage.	Identification of priority sites and conservation outcomes.
Support local sustainable community involvement in the management and presentation of historic heritage.	Number of individual sites; partnerships agreements developed.
Allow for sustainable continued access to and use of tracks and huts of historical significance, and for the maintenance of those assets through partnership arrangements.	Outcomes of partnership agreements.
Identify tracks of historical interest and develop criteria that allow for the consideration of historic heritage in track management.	Asset management systems consider any identified historic value of specified tracks.
6.11 Current use and future presentation opportunities within the 2013 extension are identified and facilitated.	
Through the Tourism Master Plan, identify opportunities for future presentation within the 2013 extension.	Evaluate through the Tourism Master Plan.
Through community consultation, identify current patterns of use in priority areas of the 2013 extension and address any impacts on the continuation of use that arise from a change of tenure in those areas, consistent with the protection of natural and cultural values and the reserve management objectives.	Level of understanding of use for priority areas.
6.12 Visitors are educated and encouraged to adopt safe practices, and they are provided with sufficient and appropriate information about potential hazards to enable them to make responsible decisions.	
Provide information, interpretation and educational material that raise visitor awareness of individual responsibility for personal safety, with the focus on ensuring that visitors understand potential hazards and are sufficiently well prepared.	Evaluate through visitor research.

Key Desired Outcome (KDO)	
Management Action	Evaluation
Develop an appropriate information management system and related procedures to systematically monitor public health and safety incidents in the TWWHA, to enable routine reporting of public safety performance and to enhance PWS's ability to identify and respond to emerging public health and safety issues.	Effectiveness of the information management system in improving safety and health outcomes.
Systematically monitor and evaluate the incidence and cause of all deaths, serious injuries and lost persons in the TWWHA.	Monitoring report is used to develop new information that minimises and prevents accidents and injuries.
6.13 The delivery of interpretation and information for the TWWHA is integrated with presentation strategies and supports management objectives.	
After the Tourism Master Plan is completed, update the <i>Interpretation Framework 2007</i> to produce a strategic TWWHA interpretation plan.	Within 2 years of the completion of the Tourism Master Plan.
Develop behaviour guidelines for walkers and other users of the TWWHA about biodiversity threats and minimisation including 'Leave No Trace'.	Visitor awareness of guidelines.
Support the provision of written information and interpretation skills training for commercial tourism operators.	Level of uptake by commercial tourism operators.
Develop a communication strategy for the TWWHA.	Within 2 years of the completion of the Tourism Master Plan.
6.14 Education for schools, visitors and the wider community will highlight and build awareness of the natural and cultural values of the TWWHA.	
Engage with key neighbouring schools, through programs such as the Wilds'Cool program, to build partnerships for education, access and volunteering.	Number of schools actively engaged.
Engage with members of CALD communities, through programs such as the Get Outside with Community Program, to foster social inclusion, health and well-being, access and skills development.	Number of participants or active programs.
Provide the summer Discovery Program in key TWWHA sites.	Provision of activities at key sites and participation rates.
Support school excursions by providing a school rate for access, recreation and accommodation in the TWWHA.	Level of provision of school rates.
Develop curriculum materials that explore TWWHA concepts and values.	Development and use of curriculum material.
Support the provision of training to TAFE students undertaking related tourism and conservation land management studies.	Active involvement in accredited courses.
Ensure that the role of low-cost accommodation in the educational use of the TWWHA is a consideration in visitor and site planning.	Explicit consideration in relevant planning policies, plans and strategies.

7 MANAGEMENT FOR COMMUNITY ENGAGEMENT



MANAGEMENT OBJECTIVE

To promote and facilitate the role of the TWWHA as an integral and valued component of the social, environmental and economic wellbeing of the international, national and Tasmanian communities, and to involve these communities in its management.

Local communities have a right to participate in the ongoing management of reserved land. At local and State levels, interest in management of the TWWHA is high. There is a clear need to meet the community's demand to be involved in practical management and decision-making for the area. Significant community involvement occurred in many parts of the area prior to its listing and, as a consequence, community members and user groups hold knowledge and expertise that is of value for its management.

The World Heritage Convention requires the adoption of a general policy that gives natural and cultural heritage a function in the life of the community. Rather than being separate from the socio-economic life of local communities, the TWWHA must become an integral part of their wellbeing. Recognition and acceptance of the area's value to local communities are vital to its effective management.

Community engagement offers an opportunity for people to influence decisions that affect their interests and lives, and to make a difference in their community and environment. It is recognised that all Tasmanians share a responsibility with the PWS for management of the TWWHA.

7.1 INFORMATION, CONSULTATION AND PARTNERSHIPS

Community engagement consists of three broad elements: provision of information; consultation; and collaboration through formal partnership arrangements, including mechanisms for volunteering. The PWS will ensure community involvement, through ongoing consultation, in the management of the TWWHA and its associated areas of concern and interest.

Provision of information will be the starting point for engagement with communities. Accurate, up-to-date information will allow for better informed engagements, particularly in local communities that are adjacent to the 2013 minor boundary extension.

Community consultation will be a fundamental component of policy development and decision-making. Inputs from individuals, community groups and organisations, businesses, industry and government sectors will be essential for the design and implementation of policies and decisions about public land management. Inclusive management will

produce better decisions that enjoy a higher level of community support. Consultation will be geared to match levels of interest, concern and complexity. It may range from informal discussions with identified stakeholders to more formal consultation processes.

KDO 7.1: Communities have access to a range of sources that provide up-to-date information about TWWHA management issues, as well as opportunities for their involvement in management of the TWWHA in their regional or local area.

Management Actions:

- Include in the development of the TWWHA communication strategy a review of the delivery of TWWHA management information that is relevant to local communities and the wider public. The strategy will examine but not be limited to:
 - web upgrade with better Geographic Information System-based information;
 - social media;
 - events;
 - communication of fire and emergency management issues;
 - communication methods tailored to the needs of local communities adjacent to the TWWHA;
 - improvement in the communication of activities and deliberations of the National Parks and Wildlife Advisory Council that are relevant to the TWWHA; and
 - publication of research data, monitoring results, visitor information and other relevant data.
- Establish a stakeholder register for the TWWHA that identifies the consultation interests of registered groups and develops consultation agreements. Where appropriate, enter stakeholder information into the PWS asset database against assets of interest, such as

huts, tracks and historic sites.

- Provide an appropriate level of community engagement when developing subsidiary plans and policies.

Community engagement, through partnership and volunteering arrangements, provides constructive opportunities for individuals, community groups and organisations, businesses and government sectors to work cooperatively with the PWS to effectively manage the natural, cultural, social and economic values of the TWWHA.

In 1997, the PWS developed WILDCARE Inc as a way of encouraging and supporting volunteers. WILDCARE Inc was incorporated in 1998 and has a membership of approximately 6,000 members. As the TWWHA's primary volunteering organisation, its activities are an invaluable part of the overall effort to conserve the area's values and those in other reserves. Additional volunteer projects are conducted through specific partnerships between PWS and community groups. For example, maintenance and restoration of some historic huts is conducted through an agreement between PWS and the Mountain Huts Preservation Society. The PWS will continue to form collaborative partnerships with communities and groups that wish to be involved in the management of specific parts and aspects of the TWWHA. A Partner Volunteer Organisation Register will be maintained for these groups.

KDO 7.2: Supporting processes are provided for meaningful and active community, business and local government involvement in management of the TWWHA.

Management Actions:

- Develop and implement a comprehensive strategy for effectively involving the community in TWWHA planning and management, with the focus on streamlining administrative processes, workplace health and safety, and management oversight.

- PWS will continue to support community members and PWS staff operating cooperatively in the TWWHA.
- Develop a cooperative process for the PWS to identify projects and ongoing responsibilities that may be undertaken through partnerships, and for community groups to develop proposals.

The Management Plan requires the development of subsidiary planning and other management documents. In addition, over the life of the plan, other statutory and non-statutory plans may be prepared. Within the requirements of any statutory process, subsidiary plans made under this Management Plan are to be prepared in a manner that is consistent with its community engagement policy intent and prescriptions.

*Track work undertaken through community partnership,
Great Western Tiers Conservation Area
Photo DPI/PWE*



7.2 ENGAGEMENT WITH TASMANIAN ABORIGINAL PEOPLE

This plan provides for a range of opportunities, through the management of cultural heritage, so that Tasmanian Aboriginal people can access the TWWHA, conduct cultural activities and be involved in the area's management. Facilitation of these opportunities will require effective, ongoing engagement processes that are specifically developed for Aboriginal people. Engagement with Aboriginal people will be a key task of the cultural management group, which will develop a stand-alone Community Engagement Agreement. The agreement will reflect what Aboriginal people have identified as the culturally appropriate way to be engaged with the TWWHA. The agreement is to be developed with reference to relevant ethical guidelines, including the Australian Institute of Aboriginal and Torres Strait Islander Studies *Guidelines for Ethical Research in Australian Indigenous Studies* 2012.

7.3 PHILANTHROPY

The WILDCARE Gift Fund was created by WILDCARE Inc to support reserve management and nature conservation in Tasmania. In recognising the fund as the preferred method for receiving individual and corporate donations, the PWS works closely with WILDCARE Inc to identify projects that are appropriate and worthy of support.

KDO 7.3: To increase philanthropic contributions that support investment in research, innovation and excellence in TWWHA management.

Management Action:

- Develop strategies for the promotion and facilitation of philanthropic contributions to TWWHA management through the TWWHA communication strategy, including the

promotion of projects identified as requiring philanthropic support.

7.4 ECONOMIC AND SOCIAL WELLBEING OF LOCAL COMMUNITIES

The TWWHA can provide significant benefits to local communities through the provision of recreational, social, environmental and economic opportunities. Therefore, management of the area can contribute significantly to levels of socio-economic wellbeing in those communities. This must be an important consideration of management decision-making. Constructive relationships with community – individuals, organisations and businesses – and with local government help to build an important understanding about the implications and

opportunities of TWWHA management for these stakeholders.

KDO 7.4: Social and economic implications of TWWHA management for local communities are fully considered and, consistent with protection of the natural and cultural values, social and economic benefits for local communities are maximised.

Management Actions:

- Consider local and regional social and economic strategies in management decisions; PWS to seek input and consultation in the development of any new strategies relevant to areas local to the TWWHA.
- Recognise and consider the value of local businesses to the community when seeking goods and services for TWWHA management.

*Northern boundary of the TWWHA, Great Western Tiers
Photo DPIPWE*



- Ensure that full consideration is given in Reserve Activity Assessments of activities in the TWWHA to the social and economic benefit and impact in local communities. Consideration must be conducted with a level of detail and expertise that is appropriate to the potential impact of the activity.

7.5 NEIGHBOURS

7.5.1 Adjacent Private Land

Before the 2013 boundary extension, the TWWHA largely bordered on to other reserved land, production forest managed by Forestry Tasmania or land controlled by Hydro Tasmania. The amount of private land within, or adjoining, the TWWHA was relatively small, except on the lower Central Plateau. However, the 2013 extension significantly increased the length of boundary that now adjoins private land, particularly along the extent of the Great Western Tiers, where it now abuts multiple private titles that are used for timber extraction or farming. A specific focus may be required on the coexistence of the very different regimes that now apply on either side of the boundary, and on addressing issues raised by the change in land management in many places since the extension.

Given the number of affected landowners, the management of boundaries will need to facilitate cooperative strategies and joint initiatives for specific issues and projects of common interest. Key issues are:

- access;
- fire management;
- weed and disease management; and
- control of browsing animals.

KDO 7.5: In consultation with key organisations and landholders, the PWS has developed mutually beneficial processes and procedures that support cooperative planning and action with the owners of property that adjoins reserved land managed by PWS in the TWWHA.

Management Actions:

- Incorporate neighbour issues in the TWWHA communication strategy, to ensure that neighbouring landowners are provided with relevant and timely information, and to clearly set out appropriate communication channels and responsibility for local areas.
- Establish procedures that allow, as required, for the ongoing development of good neighbour management in local and regional areas.

These processes and procedures will be complementary to, and integrated with, the Tasmanian Government's Good Neighbour Charter which will articulate the rights and responsibilities of both the Government and rural landholders regarding management of fire, wildlife and weeds across property boundaries.

7.5.2 Permanent Timber Production Zone Land

The TWWHA shares an extensive common boundary with Permanent Timber Production Zone Land managed by Forestry Tasmania (see Section 10.2.4, page 213). In establishing the 2013 minor boundary extension, the boundary was placed, where possible, on readily identifiable features of the landscape, such as streams, existing cadastral boundaries and roads. Wherever practicable, there was appropriate operational separation between wood production areas and the boundary. In addition, Forestry Tasmania committed to protecting and conserving the values of the identified corridors between wood production coupes and the TWWHA, by identifying and managing these areas as informal reserves. This commitment is reflected in an EPBCA Conservation Agreement for the protection of Operational Separation Zones adjacent to the TWWHA boundary.

Notwithstanding those actions, some parts of the boundary are very close to wood production areas within Permanent Timber Production Zone Land.

The ability of Forestry Tasmania to make available the minimum legislated quantities of wood products is predicated on it retaining appropriate access for the management and harvesting of those areas.

To ensure no significant adverse impact on values, and to provide operational clarity to the PWS and Forestry Tasmania, management of the boundary between the TWWHA and Permanent Timber Production Zone Land will be in accordance with the following principles:

- PWS and Forestry Tasmania will consult with each other to provide reasonable advance notice of activities planned in the vicinity of the boundary.
- Consistent with existing Tasmanian approval processes in place from time to time, and following reasonable notice of planned operations by Forestry Tasmania, the PWS, as
- manager of reserved land within the TWWHA, will cooperate with Forestry Tasmania to enable fuel-reduction operations in flammable vegetation on land it manages within one kilometre of wood production assets.
- The intent of the TWWHA boundary that adjoins plantations is to provide for an adequate firebreak to be maintained or constructed between the plantation edge and the boundary. This may require that access tracks or firebreaks around plantations extend into the TWWHA. Any such extensions must be consistent with all applicable laws, including the EPBCA, and be limited to the extent necessary for responsible forest practices.
- In accordance with the current *Tasmanian Interagency Fire Management Protocol* and other relevant Tasmanian approval processes

Picton River Conservation Area and Permanent Timber Production Zone Land (foreground) and Hartz Mountains National Park
Photo DPIPWE



in place from time to time, it is acknowledged that Forestry Tasmania may need to enter the TWWHA and use reasonable means (including the use of heavy equipment where appropriate) to suppress a fire that is within or threatening the TWWHA and/or adjacent Permanent Timber Production Zone Land.

- As part of forestry operations for commercial purposes, and in addition to harvesting and related operations in wood production coupes, Forestry Tasmania may need to undertake other land and forest management operations, including access, occupational health and safety, and fire management. This may occur up to the boundary of the TWWHA, and these operations may require the use of heavy machinery and felling of trees, which may have a minor impact on values on both sides of the boundary.

7.5.3 Land Managers within the TWWHA

Apart from the land managed by the PWS, various areas within the TWWHA are either owned or managed by other organisations, public authorities, private interests or other authorities. These are detailed in Section 10, page 206. Within particular areas – for example, the northern edge of the Great Western Tiers and on the Central Plateau – the relationship between land tenures may be complex and land managed by other entities proportionally significant.

Effective conservation and protection of World Heritage and other values across boundaries of responsibility within the TWWHA will require cooperative approaches. In addition, there is a range of other issues such as access and use, compliance, fire management and biosecurity that will also require a cooperative approach. PWS will seek to facilitate an ongoing collective approach to the management of key issues across areas of responsibility within the TWWHA through the establishment of a TWWHA

Land Managers Group. Where there are specific issues – for example, use of the Lake Augusta and Lake Mackenzie areas – PWS will seek to develop Memorandums of Understanding to provide for consistency across areas of responsibility. These agreements will ensure consistency of management for users and efficient and commonsense approaches to management issues.

7.6 RESEARCH

While the importance of collaborative research for the management of natural values in the TWWHA has been well recognised, many other aspects of management would also benefit from a collaborative approach to protected-area research. They include tourism and visitor management, fire management, planning, Aboriginal cultural values, historic heritage and social and economic perspectives. Collaborative research partnerships and arrangements increase funding opportunities and provide contemporary cross-disciplinary inputs for management of the area, while raising its profile within the professional protected-area management community. The demonstrable benefit to management of the TWWHA of any research will be a key consideration in the support of research.

KDO 7.6: Ongoing collaborative research is supporting and informing evidence-based management of the TWWHA.

Management Actions:

- Develop research partnerships with selected institutions.
- Develop a component of the TWWHA website for the publication of research activities, results and opportunities; and maintain a central database for all TWWHA-related management research and monitoring.
- Establish a research steering committee to identify and direct research priorities.

7.7 SUMMARY OF COMMITMENTS

Key Desired Outcome (KDO)	
Management Action	Evaluation
7.1 Communities have access to a range of sources that provide up-to-date information about TWWHA management issues, as well as opportunities for their involvement in management of the TWWHA in their regional or local area.	
Include in the development of the TWWHA communication strategy a review of the delivery of TWWHA management information that is relevant to local communities and the wider public.	Evaluate through the communication strategy.
Establish a stakeholder register for the TWWHA that identifies the consultation interests of registered groups and develops consultation agreements. Where appropriate, enter stakeholder information into the PWS asset database against assets of interest, such as huts, tracks and historic sites.	Register established; consultation interests established; evaluate completeness of database against consultation interests.
Provide an appropriate level of community engagement when developing subsidiary plans and policies.	Review the level of public engagement in the production of subsidiary plans and policies.
7.2 Supporting processes are provided for meaningful and active community, business and local government involvement in management of the TWWHA.	
Develop and implement a comprehensive strategy for effectively involving the community in TWWHA planning and management, with the focus on streamlining administrative processes, workplace health and safety, and management oversight.	Review of community involvement.
PWS will continue to support community members and PWS staff operating cooperatively in the TWWHA.	Outcomes facilitated by cooperative partnerships.
Develop a cooperative process for the PWS to identify projects and ongoing responsibilities that may be undertaken through partnerships, and for community groups to develop proposals.	Projects identified and taken up by community groups.
7.3 To increase philanthropic contributions that support investment in research, innovation and excellence in TWWHA management.	
Develop strategies for the promotion and facilitation of philanthropic contributions to TWWHA management through the TWWHA communication strategy, including the promotion of projects identified as requiring philanthropic support.	Increased philanthropic contribution.

Key Desired Outcome (KDO)	
Management Action	Evaluation
7.4 Social and economic implications of TWWHA management for local communities are fully considered and, consistent with protection of the natural and cultural values, social and economic benefits for local communities are maximised.	
Consider local and regional social and economic strategies in management decisions; PWS to seek input and consultation in the development of any new strategies relevant to areas local to the TWWHA.	Identification of relevant strategies; level of consultation.
Recognise and consider the value of local businesses to the community when seeking goods and services for TWWHA management.	Evidence of consideration; proportion of expenditure.
Ensure that full consideration is given in Reserve Activity Assessments of activities in the TWWHA to the social and economic benefit and impact in local communities. Consideration must be conducted with a level of detail and expertise that is appropriate to the potential impact of the activity.	Audit RAA approvals.
7.5 In consultation with key organisations and landholders, the PWS has developed mutually beneficial processes and procedures that support cooperative planning and action with the owners of property that adjoins reserved land managed by PWS in the TWWHA.	
Incorporate neighbour issues in the TWWHA communication strategy, to ensure that neighbouring landowners are provided with relevant and timely information, and to clearly set out appropriate communication channels and responsibility for local areas.	Evaluate through the communication strategy.
Establish procedures that allow, as required, for the ongoing development of good neighbour management in local and regional areas.	Issues effectively addressed.
7.6 Ongoing collaborative research is supporting and informing evidence-based management of the TWWHA.	
Develop research partnerships with selected institutions.	Partnership outcomes.
Develop a component of the TWWHA website for the publication of research activities, results and opportunities; and maintain a central database for all TWWHA-related management research and monitoring.	Evaluate content.
Establish a research steering committee to identify and direct research priorities.	Steering committee established within one year; evaluate steering committee outcomes through identified and developed research activities.



8 GENERAL

MANAGEMENT

A number of areas, such as fire planning and response and wilderness values, have broad implications across the management of World Heritage values. The Management Plan also functions as the statutory plan under the *State National Parks and Reserves Management Act 2002* for the various reserves and must therefore include provisions that set out how values that are not recognised as part of the Outstanding Universal Value of the TWWHA are to be managed. This section also details other, more general, management direction.

8.1 FIRE MANAGEMENT

There is a clear need to reintroduce a significantly greater level of fire back into the landscape to help maintain specific cultural and natural values, and to provide for public safety and asset protection, particularly in light of climate change predictions. However, due to the changes in the fire environment since European settlement, contemporary information on fire risks and fire behaviour that also accounts for ongoing climate change will be critical in the development of appropriate, adaptive fire-management practices.

Projected increases in fire frequency, together with expected increases in visitation and visitor facilities in the TWWHA, have significant consequences for public safety, management of values and asset protection that will require mitigation. The new TWWHA extensions increase the ignition risks by adding to the existing network of roads and tracks within this area.

Section 30(3)(ca) of the NPRMA gives authority to the Director to 'take any steps or undertake any activities that the managing authority considers necessary or expedient for the purposes of preventing, managing or controlling fire in reserved land, having regard to the management objectives for that reserved land'. The manner in which that power is exercised is indicated in the provisions of this Management Plan in accordance with Section 27(1) of the NPRMA. In addition to the requirements of the NPRMA, the PWS, as land manager, has additional responsibilities under both the *Fire Service Act 1979* and common law. As an occupier of land, the PWS is obligated under Section 64 of the *Fire Service Act 1979* to take diligent steps to extinguish fire or prevent it from spreading and to report the fire. The *Fire Service Act 1979* also sets out requirements for hazard removal (Section 49) and requires that the State Fire Commission, established under the Act, performs its functions on reserved land in a manner

that is consistent with any management plan in force (Section 8(7)).

Fire management in the TWWHA is governed by a set of principles in the *PWS Fire Management Policy 2014*. An overriding principle of the policy is that bushfire suppression in parks and reserves, and on adjoining public and private land, takes priority over all other activities. All reasonable steps will be taken to ensure that the impact of planned fires, prevention and fire-suppression activities on natural and cultural values is minimised.

The PWS uses a risk management approach to fire management. Risks are systematically identified and assessed, and risk treatments are applied with the aid of a landscape zoning system. This allows fire suppression planning and operations to be undertaken on the basis of actual, rather than perceived risk. PWS developed the Bushfire Risk Assessment Model (BRAM) to identify areas of risk and priority. The BRAM calculates risk according to fire behaviour potential, ignition potential, suppression capability and the nature of any values at risk. It is a statewide landscape-scale tool that is updated annually and can include natural, cultural, historic and built values or assets. Aboriginal cultural values are not currently in the system. However, their inclusion is a prescription of this Management Plan and project work to that effect is currently underway. World Heritage values are specifically mapped and accounted for in the BRAM. However, there is limited knowledge of the impacts of fire on some values, and these are not included where knowledge is scant. As information becomes available, it is added during annual updates. This allows for continued improvement of the effectiveness of the BRAM. However the collective experience and expertise of PWS and other DPIPWE staff will always remain an important component in its effective application in fire planning and operations, particularly in the situation where there are complex fires or a number of competing priorities. Strategic plans have been

developed for each region setting out how the risks identified in the BRAM are managed.

Fire management in the TWWHA is conducted in accordance with the following policies, plans and procedures or any subsequent policies or revisions that serve the same purpose:

- *Fire Management Policy 2014*;
- *Fire Planning Policy 2014*;
- regional strategic fire management plans;
- wildfire response procedures;
- Fire Duty Officer procedures; and
- Fire Action Plan.

Fire management within the TWWHA is also integrated with statewide, cross-tenure, fire and emergency management planning and governance arrangements. These arrangements are governed primarily through the *Emergency Management Act 2006* and the *Fire Service Act 1979*. The State Fire Management Council is an advisory group to the relevant Minister and the State Fire Commission, which was established under the *Fire Service Act 1979*. Arrangements for Incident Response are set out in the *Tasmanian Emergency Management Plan* which identifies that PWS is the Response Management Authority for fire suppression on reserved land. The Council is made up of the major land managers in the State along with government agencies responsible for the management of bushfires in Tasmania. PWS is a member of the State Fire Management Council. PWS is also represented on the Fire Management Area Committees which sit under the Council. Each Committee is required to prepare a Regional Fire Protection Plan in accordance with the *Fire Service Act 1979*. The Plans describe the prevention and preparation arrangements for one or more hazards within the fire management area. A number of other cross-tenure policies and plans apply to bushfire management in the TWWHA:

- The *Tasmanian Emergency Management Plan*, established under the *Emergency Management Act 2006*, is the overarching framework to assist emergency services and emergency management partners to prepare for, respond to and recover from emergency events.
- The *State Fire Protection Plan* was made under the *Fire Service Act 1979*, the purpose of which is to ensure that effective fire and emergency prevention and protection measures are provided throughout Tasmania.
- The *State Bushfire Safety Policy* is a high-level management policy providing guidance to Government, agencies and other stakeholders in the development of strategic policies and plans and is reviewed and evaluated annually.
- The *State Vegetation Fire Management Policy 2012*, developed by the State Fire Management Council, is used as a basis for all fire management planning.

A key measure in the effective management of bushfires in Tasmania is the Interagency Fire Management Protocol (the Protocol) between the Tasmania Fire Service, PWS and Forestry Tasmania. The Protocol sets out the responsibility for responding to any fire and arrangements for jointly dealing with fires, regardless of land tenure. While the Protocol establishes individual responsibilities for the three agencies, a guiding principle is that the most immediate and effective response by any of the agencies to a fire is to be the priority, regardless of tenure. These arrangements are supported by agreements to ensure interoperability between the agencies. This arrangement was assessed during the Royal Commission into the Black Saturday fires in Victoria in 2009 and was found to be a good example of an interagency arrangement to ensure coordination, cooperation and interoperability between responding agencies.

Fire is managed by controlling the sources of ignition, planned burning and suppressing wildfire. Human

sources of ignition can be reduced through such policies as Fuel Stove Only Areas and by limiting campfires to designated fireplaces. As well as achieving cultural and ecological goals, planned burning helps to control fuel loads, thereby improving the capacity to suppress or contain wildfires. However, the use of planned burning is constrained by its expense, limited windows of appropriate weather, and its potential to adversely affect cultural and natural values if used too frequently or on inappropriate types of vegetation.

Suppression of bushfires in remote areas is difficult and some techniques, such as using heavy machinery to enforce firebreaks, are not available or may be inappropriate. There are occasions where the demand on fire suppression resources across the State may result in remote area fires receiving lower priority and that only high priority areas of large remote fires are actively suppressed. Where there are multiple fires ignited, for example in a lightning storm, fire suppression will be prioritised and suppression activities may have to be suspended during periods of dangerous weather. In some circumstances the prioritisation of fires bordering the TWWHA may actually be higher than a fire in the TWWHA due to the potential for neighbouring fires to seriously impact on the OUV or other values of the TWWHA. Within the various constraints expected during suppression operations, suppression activities in areas where lives are not threatened will be prioritised to protect the OUV over easily replaceable infrastructure.

Fire risks may be partly mitigated by: the application of relevant codes, guidelines and planning approvals for building in bushfire-prone areas; development of emergency response plans for proposed commercial operations and developments; withdrawal from the area when daily fire risk warrants it; development of an overall TWWHA fire-response plan for visitor safety; and visitor education about the way to respond and cooperate in an emergency.

A holistic fire plan is required for the TWWHA

that ensures all aspects of fire management are considered, integrated and implemented. The plan will:

- include objectives to guide the use of fire management in the protection and conservation of the values of the TWWHA, in particular the OUV;
- provide further guidance as required regarding the manner and the circumstances in which the protection of the OUV of the TWWHA are to be prioritised over other values or built assets and the strategies and tactics that are appropriate for the many different scenarios that can develop in the TWWHA;
- integrate cultural and ecological burning objectives with the legislative requirements for public safety and asset protection;
- use modelling of fire management outcomes to

Planned burn, Franklin-Gordon Wild Rivers National Park
Photo DPIWE



identify and map strategic and priority areas for burning;

- identify areas for strategic protective burning and cultural landscape burning; and
- guide an increase in the level of planned burning in the TWWHA to meet modelled risk management requirements.

KDO 8.1: Integrated fire management planning is undertaken in the TWWHA for public safety; asset protection; Aboriginal cultural practices and values; and management of natural values and processes.

Management Actions:

- Develop a holistic fire plan for the TWWHA.
- Implement and periodically update regional strategic fire management plans.

Lightning strikes accounted for 85 per cent of the area burnt by bushfires in the TWWHA in the past ten years. However, there has been a considerable decline in arson, which was a significant cause of fires in the 1980s and 1990s. Only a relatively small area was burnt by bushfires emanating from abandoned or unattended campfires. However, this type of risk remains a concern across all reserved land. The use of campfires may also have localised environmental impact. To mitigate fire risks:

- The TWWHA is designated as a Fuel Stove Only Area, except where designated fireplaces have been provided, including functioning fireplaces in huts and buildings that have been provided and authorised for that purpose.

In regard to the 2013 extension, there will need to be a period of transition, consultation and review for areas where fireplaces or fire have been used at campgrounds and long-established informal camping sites. The overall provision of designated fireplaces in the TWWHA will also require review, to clarify the delivery of visitor information about usage and locations, use of signage, and the use and location

of current sites. The previous Management Plan specifically prescribed designated fireplaces at the South Coast Track locations of Surprise Bay and Little Deadmans Bay. They may continue to be used, pending the outcome of the review of designated fireplaces, noting that the outcome of the review may result in their continued use being prohibited.

KDO 8.2: Risk of bushfire ignition from visitors is reduced and illegal campfire occurrence is reduced or eliminated.

Management Actions:

- Review the provision of designated fireplaces across the TWWHA, particularly within the 2013 extension, and provide an interim position to clarify key areas within the extension.
- Review and improve, including through the TWWHA communications strategy, the delivery of information about use of designated fireplaces and the status of the TWWHA as a Fuel Stove Only Area to ensure visitors have a high level of awareness of permitted campfire use in the TWWHA.

Further information on the role of fire management and the management of cultural and natural values is provided in the following sections: cultural values - Sections 4.3 (page 98), 4.5 (page 102) and natural values - Sections 5.1.2 (page 110) and 5.2.1 (page 113).

Visitor risk during periods of high fire danger is an important management consideration. Some areas have very high rates of visitation during the summer period, and this is also a period when people seek to access remote areas. Management of large numbers of visitors requires appropriate levels of planning. Those that are in remote areas may not be aware of the risk posed to them when there are fires in the area, or have the means to extricate themselves or move to a safe location in a timely manner when a fire starts or approaches them. As a result there is an increased need for PWS to take an active approach

to ensuring visitor safety during periods of high fire danger, or when fires ignite in or near the TWWHA.

KDO 8.3: The risk of bushfires to visitor safety is actively managed according to a visitor management strategy.

Management Action:

- Develop an overall TWWHA visitor management strategy for visitor safety and education regarding appropriate ways to respond and cooperate in an emergency.

Current research is looking at how climate change will affect the annual window of opportunity for fuel reduction burning in the TWWHA as well as changes to the fire danger indices over the next 100 years. This work will inform the assessment of the viability of fuel reduction burning as a risk mitigation and ecological management tool, the impact on vulnerable communities, changing fire risk and suitable fire management strategies.

KDO 8.4: Knowledge of climate change informs and improves changing fire risk and associated fire management practices.

Management Actions:

- Continue climate change research in the TWWHA to determine the viability of planned burning as a long-term management tool, determine the changing fire weather and inform future fire risk assessments.
- Determine strategies suitable for the projected fire weather and fire risk scenarios.

8.2 WILDERNESS VALUES

The wilderness values of the TWWHA are significant internationally, as only two other areas in the southern hemisphere (Fiordland in New Zealand and Patagonia in South America) contain significant areas of protected temperate wilderness. The TWWHA

contains the largest areas of wilderness in south-eastern Australia.

The large extent of remote and largely undisturbed country forms the tangible component of wilderness value in the TWWHA. These areas are fundamental to the integrity of the TWWHA and many of the natural and aesthetic values that form part of its Outstanding Universal Value. The scale and remoteness of these areas is also important in the protection of the Aboriginal cultural values contained within them.

Wilderness also has an intangible value. In the TWWHA, wilderness is valued both for the recreational opportunities it provides and from a social and intrinsic perspective. The recreational value of wilderness in the TWWHA arises principally from the opportunity it provides for people to experience large remote areas that have little or no facilities, management presence or evidence of modern society and are largely free from disturbance and mechanical access. The recreational value of wilderness areas in some places is under threat from unplanned tracks and campsites. These not only diminish the experience but ultimately may require management intervention in areas where such intervention is intended to be avoided.

The intrinsic value of wilderness was a key element in the advocacy for the protection and listing of the TWWHA. Its continuing integrity is therefore an important social value for many people. It is a central element in what many people value with respect to the TWWHA as a whole, and in effect it is often viewed as the principal value of the TWWHA. This value may not always be directly associated with tangible elements of wilderness; it may often relate to areas within which exist, for example, substantial tracks and other built infrastructure. It must also be acknowledged that some areas viewed as wilderness by some may be viewed by others as places where local and family histories have played out over time through activities such as prospecting and snaring. Historic heritage values associated with these activities may be maintained and conserved where appropriate.

As acknowledged in the Cultural Values Management chapter (A Cultural Landscape, Section 4.6, page 103), the notion of 'wilderness' is problematic for some Tasmanian Aboriginal people and conceptually alien to their understanding of Country. Wilderness management has previously attempted to differentiate between the measurable impact of post-European society and an essentially universal imprint on the landscape from long occupation by Aboriginal people. Some Aboriginal people view management of the TWWHA for wilderness values as a denial of their rights to access Country and conduct cultural practices, as wilderness, in their view, implies an empty land, both historically and in the present day. It is important to note that there are diverse views on this issue held among Tasmanian Aboriginal people.

There is, however, opportunity for an important synthesis. Many people greatly value remote areas that are largely free of impact from modern society. These areas provide an opportunity for immersion in a landscape that represents how the world was for most of human history while many people take comfort from the existence of such places even if they never experience them first hand. Aboriginal people also view it as very important to protect this aspect of the TWWHA, provided that their access to Country, use of its cultural resources and the conduct of cultural practice are not restricted as a consequence. Although traditional Aboriginal fire practices have been absent for a period of time, the wilderness areas of the TWWHA must also be seen as an Aboriginal cultural landscape, with ongoing cultural practice, including the reintroduction of fire, a fundamental part of its character.

A management objective of national parks under Schedule 1 of the NPRMA is 'to preserve the natural, primitive and remote character of wilderness areas'. However, there is no associated legislative definition of wilderness. Management of wilderness values in the TWWHA is also not restricted to this reserve class, although the most significant areas of wilderness

are largely within it. Although the cornerstone of managing wilderness values is the inclusion of the majority of the TWWHA in the Wilderness Zone, a principle guiding the management of wilderness is that the whole area of the TWWHA has some wilderness value. For example, the Wilderness Zone is traversed in some areas by corridors of Recreation Zone or Self-Reliant Recreation Zone centered on significant tracks. These areas clearly have wilderness values; however, some level of permitted infrastructure, as determined by the relevant zoning prescriptions, is appropriate given their existing use.

To provide guidance for the management of wilderness in the TWWHA, a definition is useful. The following definition is based largely on that provided in the *Tasmanian Wilderness World Heritage Area Management Plan 1999*.

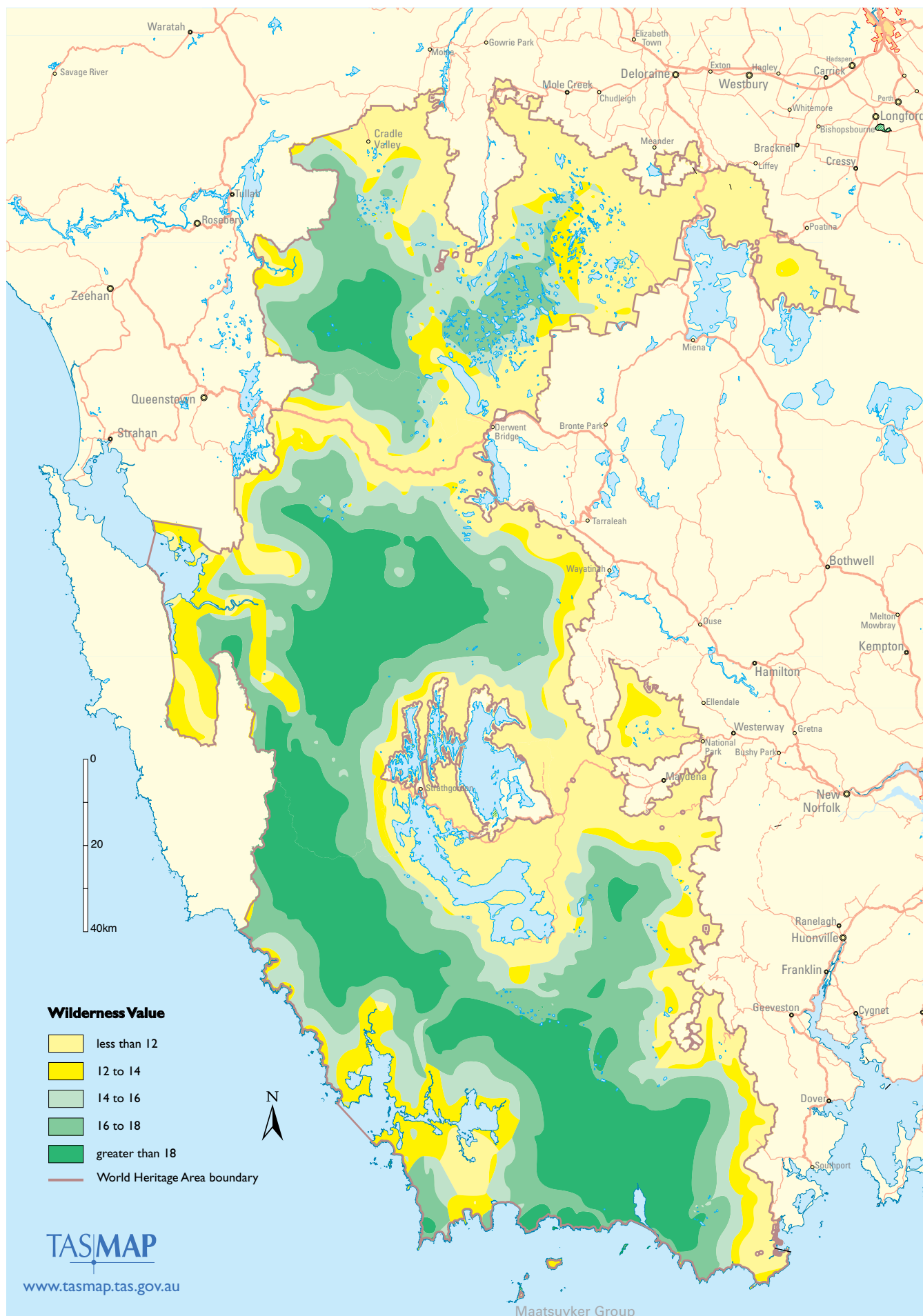
A wilderness area is an area that is of sufficient size, remoteness and naturalness to enable the long-term integrity of its natural systems, diversity and processes, the maintenance of cultural landscapes and the provision of a wilderness recreational experience.

This definition is intended to ensure that future management of the wilderness values of the TWWHA continues to protect those values through the restriction of built infrastructure and mechanical access while also allowing for Tasmanian Aboriginal people to enjoy access to Country, use of cultural resources and the opportunity to continue and re-establish cultural practices. The management of wilderness on this basis will also allow for the recreational experience it provides to be maintained.

KDO 8.5: Wilderness is managed for the protection of the integrity and the natural and cultural values of the TWWHA and the quality of the recreational experience it provides.

Remote expanses of the Southwest National Park
Photo DPIPWE





Management Actions:

- Designate the majority of the TWWHA as a Wilderness Zone and enforce zoning prescriptions that manage physical development and human use in a manner that protects wilderness and other values.
- Ensure that impacts on wilderness values are considered in any assessment of activities in the TWWHA.

It is useful in the management of wilderness to be able to quantify elements of wilderness value. The Australian Heritage Commission first established a useful tool in 1995 (National Wilderness Inventory methodology), which has subsequently been modified to reflect the specific conditions in Tasmania, principally by better accounting for vegetation and terrain in assessing access remoteness. Many values associated with wilderness are not quantifiable, nor is the methodology restricted to accounting only for the impact on biophysical processes. However it allows for an effective approximate measurement of elements of wilderness values and an overview of the distribution of wilderness values across the TWWHA.

The modified method determines a Wilderness Value as the sum of four independent components: Remoteness from Settlement, Apparent Naturalness, Biophysical Naturalness and Time Remoteness. The calculated values (0-20) represent a continuum of disturbance and remoteness; they are not used to determine a threshold for wilderness. Wilderness Values from a TWWHA-wide 2015 assessment are shown in Map 7 on page 176.

The values derived from the 2015 assessment were used in the determination of the Wilderness Zone boundaries. A threshold value of 12 was used in combination with an understanding of existing use and future rehabilitation outcomes. There are some areas where the wilderness value may exceed 12 that are not in the zone, such as in the Central Plateau. There are also areas where the values may be less

than 12. The inclusion of these areas was on the basis that they act as a buffer for adjacent areas or where the degree of naturalness might be expected to increase over time.

8.3 CLIMATE CHANGE

Several of the predicted consequences of climate change have implications for management of the TWWHA. They include increased storm surges and flooding in coastal areas, rising sea levels, increased storm intensity, high rainfall, and greater frequency and intensity of fire. The likelihood of such events will need to be considered in providing and maintaining infrastructure, visitor safety and planning.

KDO 8.6: Analysis of climate change risks is integrated into relevant management and planning activities in the TWWHA.

Management Actions:

- Provide and maintain infrastructure that accounts for projected climate change.
- Assess development proposals in the TWWHA against projected climate change.
- Develop subsidiary plans, particularly site plans, that account and allow for future climate projections.

8.4 HISTORIC HERITAGE

The TWWHA contains a rich legacy of historic heritage places that reflect the area's use since European settlement. The major historic heritage themes represented in the TWWHA include:

- places associated with early European exploration and maritime activity, such as the coastal environment of Cockle Creek and Recherche Bay and the activities of French explorers in 1792 and 1793;
- first contact and early European settlement sites;

- early sealing and whaling activity at sites such as Recherche Bay and Port Davey;
- convict stations, penal settlements and associated infrastructure;
- hydro-electric infrastructure such as Pumphouse Point;
- maritime navigation aids such as the Maatsuyker Island lighthouse;
- mining enterprises such as Melaleuca, Pillinger and Cox Bight;
- timber getting and forestry activity across the region and on the western rivers;
- hunting, snaring and stock keeping, such as on the Central Plateau;
- sites associated with social movements for environmental protection; and
- hunting, bushwalking and recreational huts across the region.

The PWS manages the conservation of any such heritage under the NPRMA. Specifically, this includes the management objective: 'to conserve sites or areas of cultural significance' (NPRMA Schedule 1) which applies to all reserve classes in the TWWHA with the exception of historic sites. The NCA allows for the creation of the reserve class of historic site for the purpose of 'the conservation of the historic features of the area of land and the presentation of those features for public appreciation and education' (NCA Schedule 1). In the TWWHA, the Macquarie Harbour Historic Site, at 15,300 ha, is the largest reserve of its type in the State. This reserve class has the following management objective under the NPRMA: 'to conserve sites or areas of historic cultural significance'.

The *Historic Cultural Heritage Act 1995* requires the establishment and maintenance of the Tasmanian Heritage Register (THR) for places of State heritage significance. The Act requires that approval be sought for works on places listed on the THR. The Tasmanian Heritage Council is established under the Act and

provides that approvals function. Within DPIPWE, Heritage Tasmania supports the Tasmanian Heritage Council, coordinates historic heritage strategy and facilitates development of the historic heritage sector. There are currently seventeen heritage places in the TWWHA that are listed under the Act.

The principles of the Australia ICOMOS Charter for Places of Cultural Significance inform the management of historic heritage values in the TWWHA. This charter, known as the Burra Charter, provides an internationally accepted standard for the conservation of cultural property. Conservation planning mechanisms contained in the charter, and established interpretations of these mechanisms, are used to protect historic heritage resources from both cultural and natural impacts.

The Historic Heritage Section of PWS is responsible for data gathering, project management and providing advice relating to historic heritage within Tasmania's parks and reserves. PWS maintains the Tasmanian Heritage Places Inventory (THPI) to capture places that may not be recorded on the THR or other heritage listings. There are more than 870 THPI listed sites within the TWWHA. As part of its management regime, the PWS has also produced management plans and heritage assessments for a number of historic heritage sites within the TWWHA such as Sarah Island, the Maatsuyker Island lighthouse and 33 individual huts. PWS also initiates conservation and interpretation works at historic heritage sites within the TWWHA.

Protecting and conserving built historic heritage often requires significant resources, and it is acknowledged that some of the tangible heritage sites cannot be conserved in their entirety. For heritage sites within the TWWHA and other State reserves, the PWS has developed an internal ratings system that determines where resources will be allocated. For example, many of the sites registered in THPI are considered as purely archaeological features that

require little or no intervention. In contrast, sites such as Sarah Island that have over 100,000 visitors per year will have proportionally more resources spent on them. Works at heritage sites may include building and ruin stabilisation, routine maintenance, archaeological investigation, interpretation signage, and the installation of visitor facilities.

Community interest in heritage sites is another factor in determining the use of resources. Partnerships that allow community groups to take some responsibility for historic heritage are an important means of increasing capacity to protect and conserve. Many of the partnership arrangements currently in place involve the conservation and continued use of huts within the Central Plateau region, but also include groups under the PWS Wildcare organisation, such as the Friends of Melaleuca and the Friends of Maatsuyker Island.

There are a number of historic heritage sites and areas in the TWWHA that may have historic cultural landscape values, that is the recognition that broader landscapes and the sites they contain may reflect their historic use. A 2002 study (Lennon) identified 11 possible historic cultural landscapes within the TWWHA. Under Tasmanian legislation there is currently no provision for the specific declaration, or management, of historic cultural landscapes. Within the TWWHA, the Macquarie Harbour Historic Site would most closely match the definition of a historic cultural landscape, as it encompasses a range of sites connected to early convict settlement and resource exploitation. Although highly significant to Australian convict history and part of the original World Heritage nomination for the TWWHA in 1982, the TWWHA was not World Heritage listed for historic values. Macquarie Harbour Historic Site was not included in the 2010 serial World Heritage listing of Australian Convict Sites, as it was already managed under the TWWHA management plan. The historic values of the site are protected under State legislation.

KDO 8.7: Historic heritage management is supported by a systematic program of identification, recording and documentation, inventory, assessment and conservation.

Management Actions:

- Undertake coordinated research to identify historic heritage values and assess gaps in values information, including thematic assessments of historic heritage values, to inform strategic management of those sites.
- Facilitate partnership agreements to identify, protect and conserve historic heritage.
- Produce or upgrade management plans for the most significant historic heritage sites within the TWWHA.
- Undertake protection, conservation and interpretation works at the most significant historic heritage places and sites within the TWWHA.

8.5 ROADS

Parts of the 2013 extension include land that was previously managed for production forestry. Construction and maintenance of the extensive road network in these areas was based on the needs and economics of that industry. The network cannot be maintained in its entirety; nor is such an option likely to be compatible with the management obligations of the TWWHA. A strategic review of the TWWHA's overall road network is required, to assess the use and maintenance of roads against World Heritage management criteria, existing legal rights and the availability of resources for maintenance. Identifying roads and vehicular tracks that require rehabilitation will also be an important component of the process. The network will be assessed against the following criteria:

- existing legal rights – for example, leases and licences, rights of access to existing quarries and apiary sites;

- future opportunities of use – for example, possible apiary expansion;
- access to private property;
- fire management;
- access to recreation areas and infrastructure such as tracks;
- protection and conservation of natural and cultural values;
- costs of maintenance;
- traffic volume;
- management needs – for example, emergency response; and
- rehabilitation.

Roads and vehicular tracks that are judged to be necessary for achieving the various objectives of management or any other lawful requirement will be maintained. Presentation opportunities of the various roads and vehicular tracks will also be considered.

Roads and vehicular tracks within the TWWHA will remain open pending the outcome of the review with some exceptions (detailed below). However, the PWS may temporarily or permanently close roads or vehicular tracks, in accordance with the *National Parks and Reserved Lands Regulations 2009*, where their use is no longer appropriate because of management issues, including safety and the protection of natural and cultural values. In some cases, existing roads or vehicular tracks already have access restricted through the use of locked gates to protect natural and cultural values, to reduce fire risk, to reduce biosecurity risk or to prevent illegal activities, or where they do not meet appropriate standards. Access will remain restricted pending the outcome of the strategic review.

The Forest Manager, within the meaning of the *Forest Management Act 2013*, manages adjacent Permanent Timber Production Zone Land. The Act allows for roads in such land tenure to be declared as forest roads, thereby enabling a range of specific provisions for the effective management of roads for the purposes of forest operations by the Forest

Manager. However the Act does not apply to land reserved under the NCA. In some cases, roads that service production-forest areas on Permanent Timber Production Zone Land pass into and through the TWWHA, or may be required to do so. Those roads may be constructed and maintained by the Forest Manager, subject to assessment and approval by the Director. Any approval for the Forest Manager to construct or maintain roads must consider liability and responsibility for rehabilitation following cessation of use of that road for forest management purposes.

KDO 8.8: The TWWHA road network's potential future uses and rehabilitation requirements are identified.

Management Actions:

- Conduct a strategic review of the road network in the TWWHA.
- Through the strategic review, develop an implementation plan for the rehabilitation of roads and vehicular tracks designated as requiring closure.

A number of roads in the TWWHA are available for use by registered four-wheel drive vehicles, all-terrain-vehicles (ATVs) and trail bikes through the granting of an authority. They are:

- Patons Road;
- Mt McCall Road; and
- Saw Back Range Track and Adamsfield Track, from Saw Back Range Track to Clear Hill Road.

The Pillans/Julian and Talinah Lagoon vehicle tracks are opened, on a seasonal basis, to registered four-wheel drives and ATVs. ATVs and trail bikes are only allowed on Yeates Track through an authority that is issued for special purposes. The authority is not issued for general recreational use. The Low Rocky Point Track is open for ATV use through an authority; however, the condition of tracks and bridges may limit accessibility.

Roads for general vehicle usage are available only for

registered vehicles. Bicycles can be taken on roads and vehicular tracks that are available to four-wheel-drive and ATV use without the requirement for a written authority under the regulations.

In order to maintain the road network in the TWWHA for public use and for management purposes, supplies of gravel are required. There are existing sources of gravel within the TWWHA, in addition to areas containing gravel that have been deliberately excluded from the TWWHA but are within its boundaries. Bringing gravel into the TWWHA constitutes a significant biosecurity risk and an increased risk to fauna from vehicle strikes. It is also costly and reduces the amenity of access roads into the TWWHA for other users through additional truck movements. Biosecurity will be an increasingly significant challenge in the management of the TWWHA, and the ability to source gravel

from within the TWWHA for road maintenance is important in the mitigation of this risk. Sourcing gravel from within reserved land in the TWWHA is required in order to meet the management objectives of the various reserve classes, particularly the prevention of introduced species and diseases. Use of gravel from local sources also contributes to the aesthetics of places. For example, tracks maintained with gravel from local sources are more likely to blend into the surrounding environment.

Gravel extraction is permitted for management purposes, principally road maintenance, and is guided by the following principles:

- Gravel used for management purposes is to be extracted from sources assessed as being 'low risk' of containing weeds and diseases.
- Gravel is not to be exported for use outside the TWWHA.
- Use of new gravel sources is to be avoided.
- Gravel demand is to be minimised.
- Gravel is not to be imported into the TWWHA.
- Any proposed action to change gravel use that has, will have or is likely to have a significant impact on the World Heritage values of the TWWHA will be referred to the Australian Government Minister for the Environment and Energy for assessment under the EPBCA. The World Heritage Committee will be informed of the proposal as part of the Australian Government's quarterly reporting to the World Heritage Centre. Quarterly reports are published on the Australian Government's Department of the Environment and Energy's website.

Disused forest road, Florentine River Regional Reserve
Photo DPI/PWE



8.6 SUMMARY OF COMMITMENTS

Key Desired Outcome (KDO)	
Management Action	Evaluation
8.1 Integrated fire management planning is undertaken in the TWWHA for public safety; asset protection; Aboriginal cultural practices and values; and management of natural values and processes.	
Develop a holistic fire plan for the TWWHA.	Plan finalised and implemented, subsequent evaluation against the outcomes identified in the fire plan.
Implement and periodically update regional strategic fire management plans.	Currency of plans appropriate to achieve the fire management outcomes of the management plan.
8.2 Risk of bushfire ignition from visitors is reduced and illegal campfire occurrence is reduced or eliminated.	
Review the provision of designated fireplaces across the TWWHA, particularly within the 2013 extension, and provide an interim position to clarify key areas within the extension.	Locations provided and information available within 2 years.
Review and improve, including through the TWWHA communications strategy, the delivery of information about use of designated fireplaces and the status of the TWWHA as a Fuel Stove Only Area to ensure visitors have a high level of awareness of permitted campfire use in the TWWHA.	Number of ignitions and illegal campfires.
8.3 The risk of bushfires to visitor safety is actively managed according to a visitor management strategy.	
Develop an overall TWWHA visitor management strategy for visitor safety and education regarding appropriate ways to respond and cooperate in an emergency.	Visitor awareness and response.
8.4 Knowledge of climate change informs and improves changing fire risk and associated fire management practices.	
Continue climate change research in the TWWHA to determine the viability of planned burning as a long-term management tool, determine the changing fire weather and inform future fire risk assessments.	Climate change research undertaken.
Determine strategies suitable for the projected fire weather and fire risk scenarios.	Strategies reflect projected scenarios.

Key Desired Outcome (KDO)	
Management Action	Evaluation
8.5 Wilderness is managed for the protection of the integrity and the natural and cultural values of the TWWHA and the quality of the recreational experience it provides.	
Designate the majority of the TWWHA as a Wilderness Zone and enforce zoning prescriptions that manage physical development and human use in a manner that protects wilderness and other values.	Status of wilderness values over time; compliance with zoning system.
Ensure that impacts on wilderness values are considered in any assessment of activities in the TWWHA.	Audit of assessments.
8.6 Analysis of climate change risks is integrated into relevant management and planning activities in the TWWHA.	
Provide and maintain infrastructure that accounts for projected climate change.	Integration with standard processes.
Assess development proposals in the TWWHA against projected climate change.	Articulated within the PWS Reserve Activity Assessment (RAA) process.
Develop subsidiary plans, particularly site plans, that account and allow for future climate projections.	All plans contain sections that account for climate change.
8.7 Historic heritage management is supported by a systematic program of identification, recording and documentation, inventory, assessment and conservation.	
Undertake coordinated research to identify historic heritage values and assess gaps in values information, including thematic assessments of historic heritage values, to inform strategic management of those sites.	Strategic overview of historic heritage values including major historic themes developed, reviewed and published. Development of heritage asset schedules for major historic themes and regions and identification of high significance sites that enable strategic management.
Facilitate partnership agreements to identify, protect and conserve historic heritage.	Outcomes of partnerships.
Produce or upgrade management plans for the most significant historic heritage sites within the TWWHA.	Management Plans completed or upgraded.
Undertake protection, conservation and interpretation works at the most significant historic heritage places and sites within the TWWHA.	State of conservation of significant heritage places.
8.8 The TWWHA road network's potential future uses and rehabilitation requirements are identified.	
Conduct a strategic review of the road network in the TWWHA.	Review completed within 2 years.
Through the strategic review, develop an implementation plan for the rehabilitation of roads and vehicular tracks designated as requiring closure.	Implementation plan developed; evaluated against the plan's rollout.



9 MONITORING, EVALUATION AND REPORTING



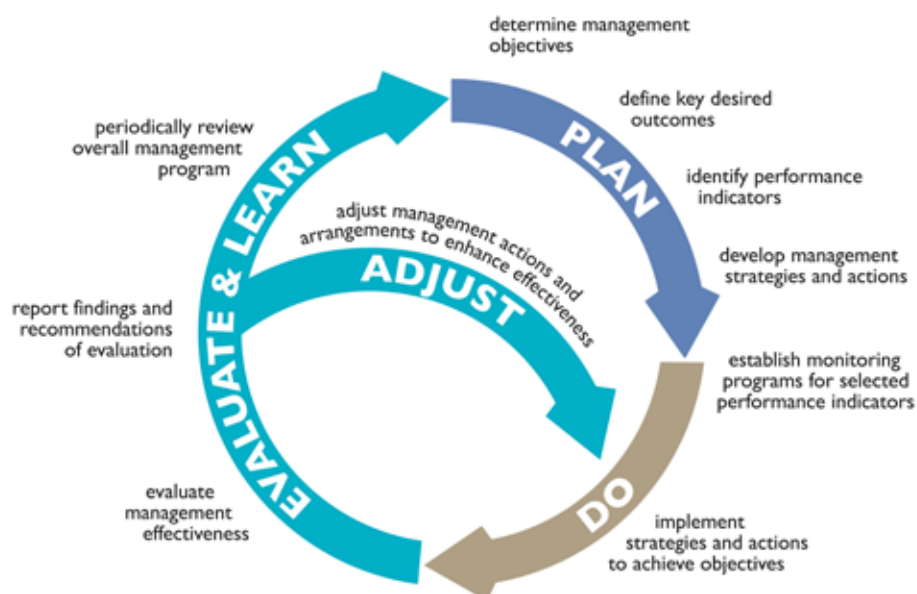
MANAGEMENT OBJECTIVE

To support the delivery of an informed, effective and transparent adaptive management regime for the TWWHA.

9.1 ADAPTIVE MANAGEMENT, EVALUATION AND REPORTING

The Management Plan has been developed and structured to support adaptive management of the TWWHA. The plan's guiding Vision, overarching Objectives and underlying Key Desired Outcomes (KDOs) provide a focus for the implementation of the associated Management Actions. A key requirement of adaptive management is the monitoring, evaluation and reporting, at appropriate points in time, of the effectiveness of management in achieving KDOs. The findings of that evaluation then inform a review of the future implementation of management actions, and of the outcomes that they are expected to achieve. The plan's evaluation criteria guide this process. The adaptive management cycle is shown in Figure 9.1 on page 186.

Figure 9.1 Adaptive management cycle in Tasmanian reserve management



The PWS has developed a statewide Monitoring and Reporting System for management effectiveness, to measure evidence of management progress, achievements and challenges across Tasmania's national parks and reserves. The system is outcome-focused, evidence-based, operationally practical and transparent to stakeholders. It is the key process for measuring the management effectiveness of the Management Plan.

Three types of evaluation reports are used to evaluate the plan's effectiveness. They are:

- Periodic Evaluation Reports, which are occasional reports on the evaluated effectiveness of a specific management plan in achieving the planned outcomes;
- Evaluated Case Study Reports, which provide an in-depth evaluation of the monitored effectiveness of significant and selected projects in achieving project objectives. They may also be used for reporting on the monitored condition of selected reserve values and/or issues; and
- Status and Trends Reports, which provide regularly updated brief overviews of performance in key areas of management, such as fire management.

Periodic Evaluation Reports for the TWWHA are known as 'State of the TWWHA' Reports. These are the primary type of evaluation report for the TWWHA. They will be supported by a range of Evaluated Case Study Reports and Status and Trends

Reports. Over the life of the plan it is anticipated concise State of the TWWHA Reports will be prepared every three years.

Evaluated Case Study Reports allow for the targeted assessment of key management aspects and effective use of resources. The case study, which can serve as a model for ongoing management, may be a major project or emerging issue, or it may provide insight for systemic issues. A number of Evaluated Case Study Reports have been completed for the TWWHA. Some of them, such as Fire Management reports, are likely to continue. Additional Evaluated Case Study Reports are key components of the plan.

Projects selected to be Evaluated Case Studies will be required to provide a clear statement of the overall management goal and a three-tiered method for assessing performance as: Great Result, Acceptable Result and Unsatisfactory/Unacceptable Result. The plan's evaluation criteria will either form the basis of this assessment or simply provide the measurement indicator.

In association with the *State of the TWWHA Report*, new case studies will be conducted in the following areas:

- community partnerships;
- access to Country for Tasmanian Aboriginal people;
- management of the road network; and
- monitoring and data collection for priority areas of the walking track network.

Status and Trends Reports help to track effectiveness by providing brief statewide overviews of how reserve management is performing in areas of ongoing interest. Reports present best-available information on the status and trends of up to five performance indicators, together with supporting evidence and documentation (where this exists). They are ongoing and are regularly updated. Regular Status and Trends Reporting will be made publicly available for:

- levels and sources of funding for the TWWHA, and the allocation of funding and staff resources for management of the area, including management actions of the plan;
- a Status and Trends Report on the status and condition of natural values in the TWWHA;

- a Status and Trends Report, starting five years from plan approval, on the status and condition of Aboriginal cultural values in the TWWHA; and
- a Status and Trends Report on the monitored condition of selected sites, based on aerial photographic monitoring of popular and/or vulnerable areas.

The Management Plan requires a number of subsidiary plans and strategies to be developed. Initial evaluation of these actions will be against the plan or strategy being produced. Subsequent evaluation will be of the outcomes realised by the implementation of the relevant plans and strategies. The plans and strategies must provide for evaluation criteria to aid in that assessment.

Louisa Plains, Southwest National Park
Photo Jillian Mundy



9.2 RESOURCING

Monitoring and evaluation processes require resourcing in the same ways as other management activities. Without a rigorous understanding of the effectiveness of management actions in achieving KDOs, effective levels of adaptive management cannot be achieved. In addition, public accountability for allocating resources and for management effectiveness is an important component of community involvement in management of the TWWHA. It also provides a greater level of understanding and support for this management.

KDO 9.1: The evaluation measures provided by the Management Plan, in support of adaptive management of the TWWHA, are adequately resourced.

Management Action:

- Allocate appropriate resources to measure evidence for the evaluation of management effectiveness.

9.3 INTERNATIONAL REPORTING

To meet its obligations as a State Party to the World Heritage Convention, the Australian Government undertakes a number of reporting exercises on the state of the conservation and management of the TWWHA. The Tasmanian Government collaborates with and provides assistance to the Australian Government to meet these reporting obligations. These reports form an important public record with respect to the management of the TWWHA over time.

9.3.1 Periodic Reporting

Every six years Australia, as State Party to the World Heritage Convention, is invited to submit to the World Heritage Committee a periodic report on the application of the Convention, including the state of conservation of the World Heritage properties located on its territories.

Periodic reporting on the application of the Convention is intended to serve four main purposes, as outlined below:

1. to provide an assessment of the application of the World Heritage Convention by the State Party;
2. to provide an assessment as to whether the World Heritage values of the properties inscribed on the World Heritage List are being maintained over time;
3. to provide updated information about the World Heritage properties to record the changing circumstances and state of conservation of the properties; and
4. to provide a mechanism for regional cooperation and exchange of information and experiences between States Parties concerning the implementation of the Convention and World Heritage conservation.

From the information collected through the periodic reporting exercise, a final report is prepared for presentation to the World Heritage Committee. The final report will form the baseline for the development of targeted action plans at national and regional levels, which will respond to the needs, challenges, threats, strengths and opportunities identified and presented as a result of the Periodic Reporting exercise. After the last Periodic Reporting cycle finished in 2015 the World Heritage Committee endorsed a 2-year 'reflection period'. At the time of preparation of this plan it is unclear as to what the timetable and requirements for Periodic Reporting will be.

9.3.2 State of Conservation Reporting

The Operational Guidelines for the Implementation of the World Heritage Convention include obligations for the State Party to prepare reports about the state of conservation of the various protection measures put in place at their sites, as requested. These reports allow the World Heritage Committee to assess the conditions at the sites and, eventually, to decide on the necessity of adopting specific measures to resolve recurrent problems.

State of conservation reports include responses to decisions from the World Heritage Committee, current conservation issues and potential major restorations and alterations and/or new constructions within the property that may have an impact on the property's Outstanding Universal Value, including authenticity and integrity.

9.3.3 Major Restorations and New Construction

State Parties to the World Heritage Convention are invited to inform the World Heritage Committee of developments that may affect the Outstanding Universal Value of a World Heritage property (Paragraph 172, Operational Guidelines).

Australia established a notification procedure in November 2011 to inform the World Heritage Centre on a quarterly basis of the following new decisions:

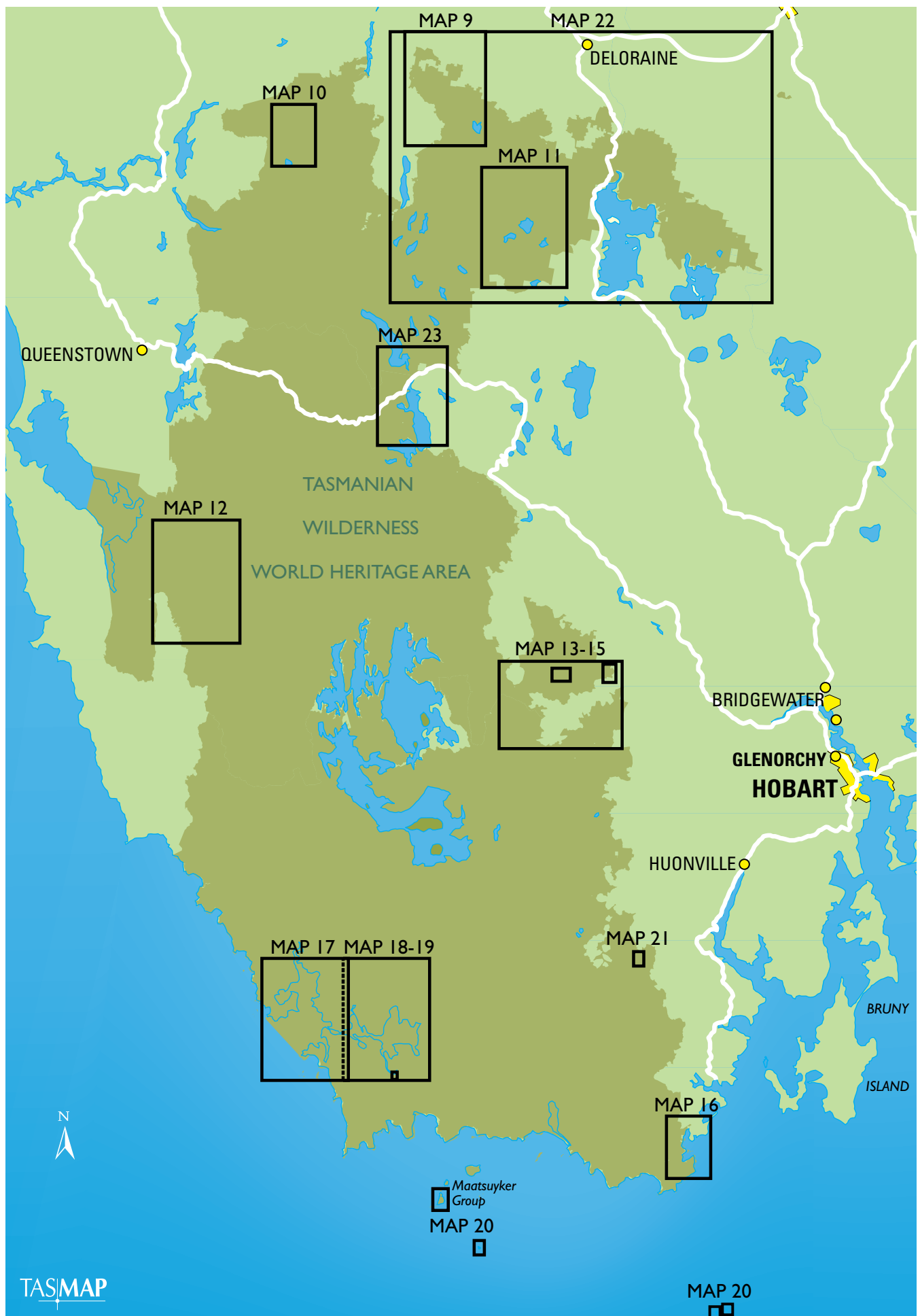
- Controlled Actions with a trigger under section 12 of the EPBCA (World Heritage); and
- withdrawal of a previously notified Controlled Action by a proponent.

A 'Controlled Action' is an action that is subject to the assessment and approval process under the EPBCA. The EPBCA provides a rigorous assessment of proposed actions which may have a significant impact on World Heritage values.

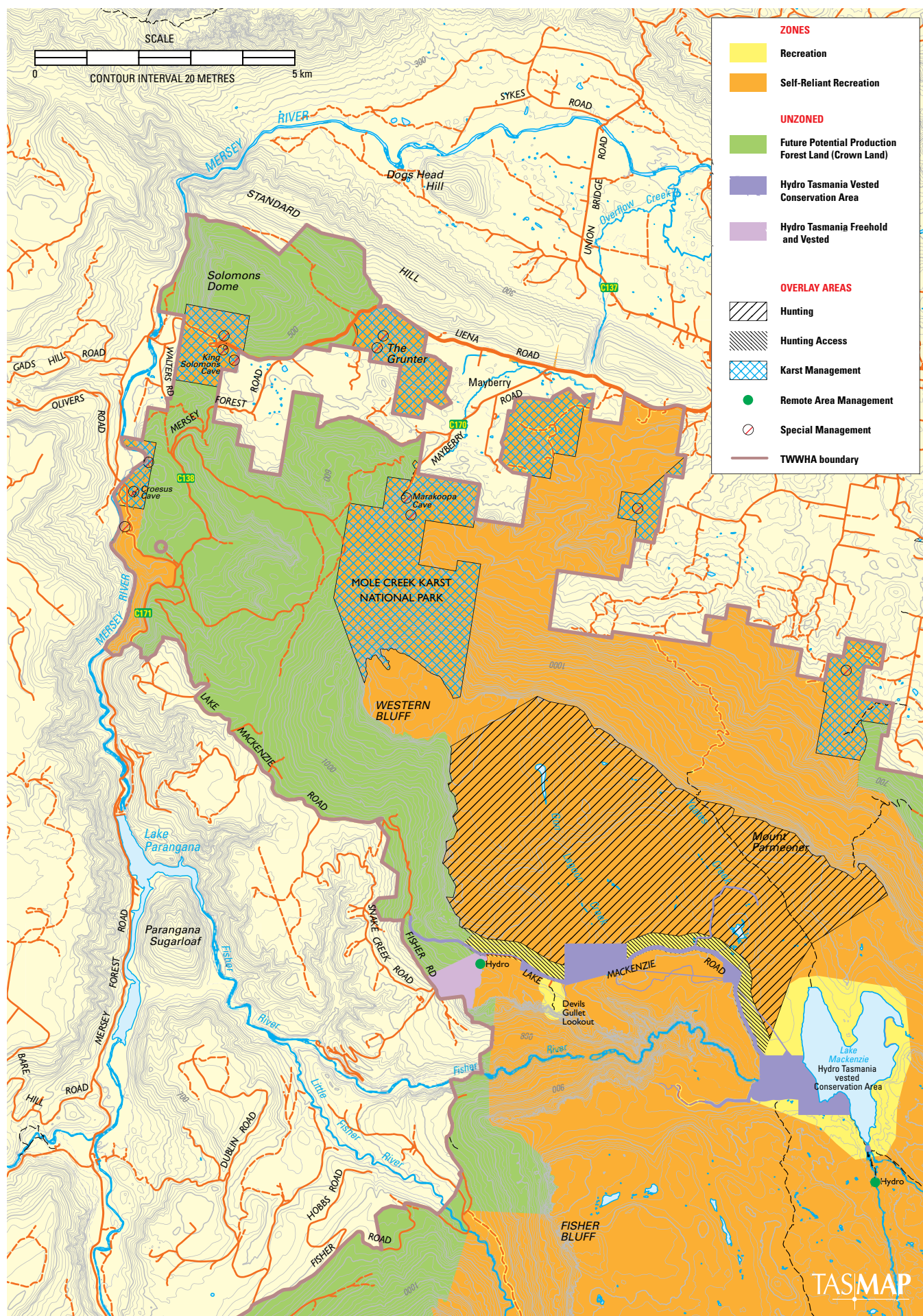
Reports are sent to the World Heritage Centre providing details of all such decisions made during the relevant quarter.

9.4 SUMMARY OF COMMITMENTS

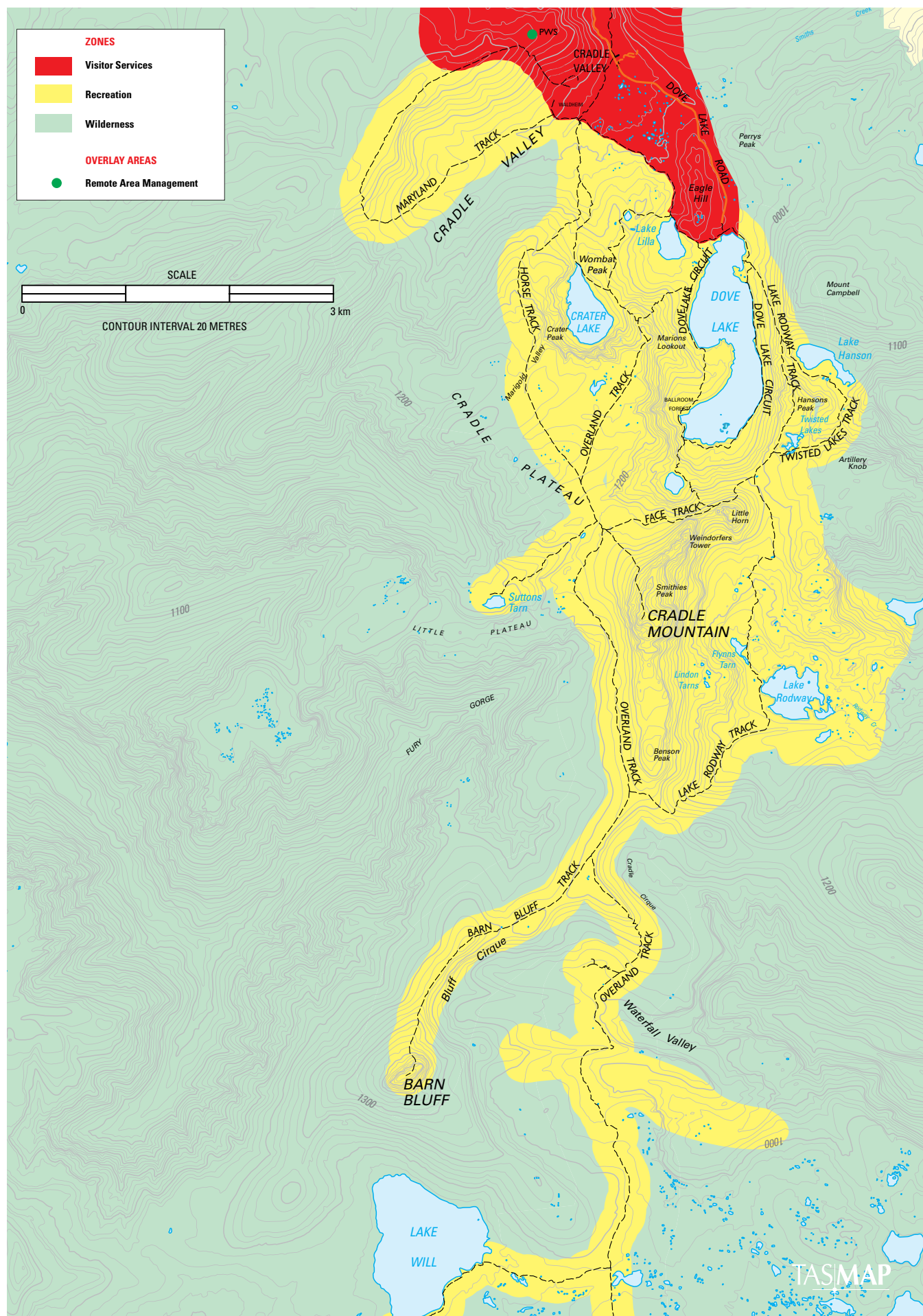
Key Desired Outcome (KDO)	
Management Action	Evaluation
9.1 The evaluation measures provided by the Management Plan, in support of adaptive management of the TWWHA, are adequately resourced.	
Allocate appropriate resources to measure evidence for the evaluation of management effectiveness.	Resources allocated for evaluating management effectiveness. Frequency of <i>State of the TWWHA Reports</i> . Implementation of identified Status and Trends Reports. Evaluated Case Studies.

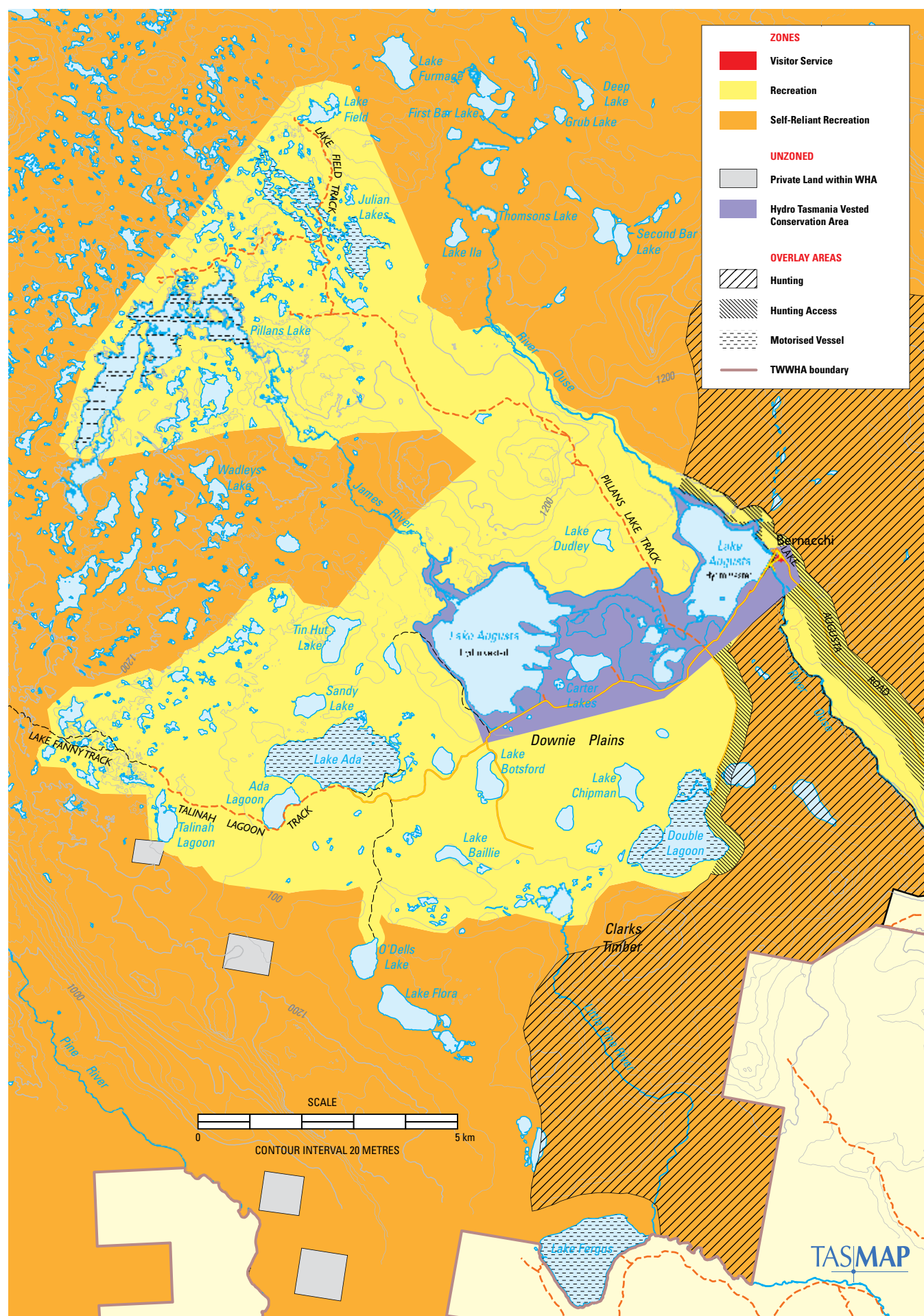


Map 9 TWWHA management zones and overlays
- north-west Central Plateau and Mole Creek Karst National Park

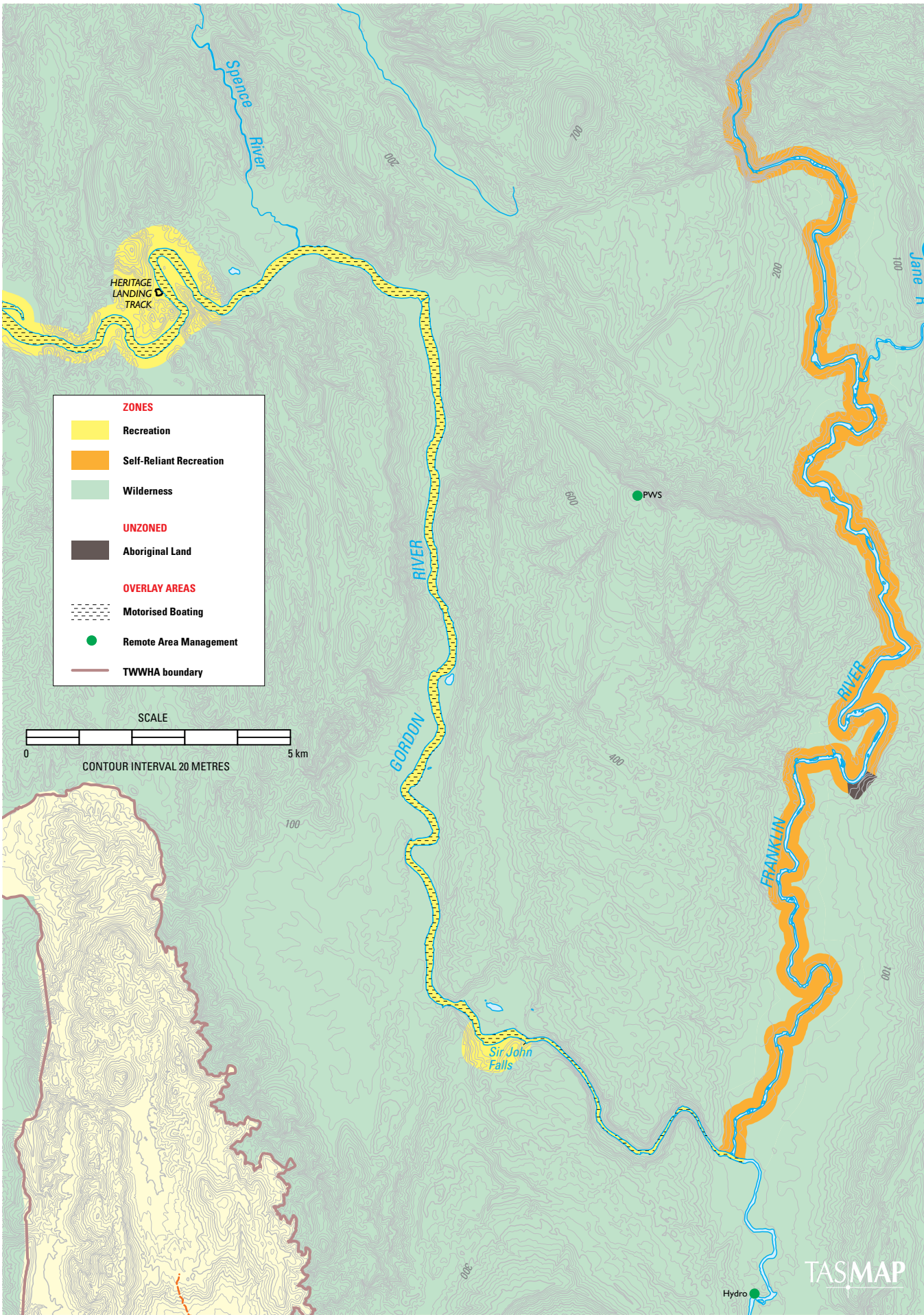


Map 10 TWWHA management zones and overlays - Cradle Mountain

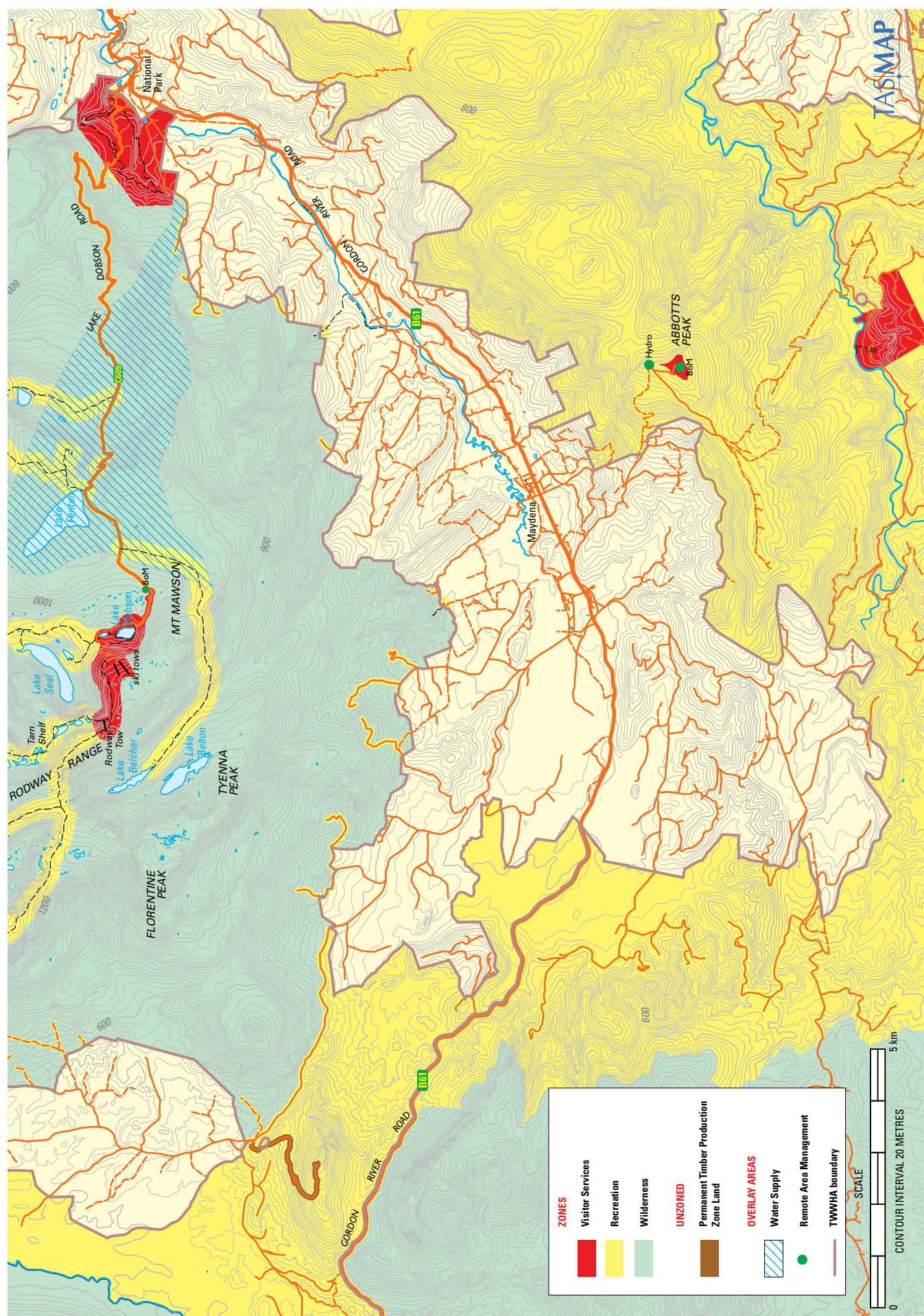




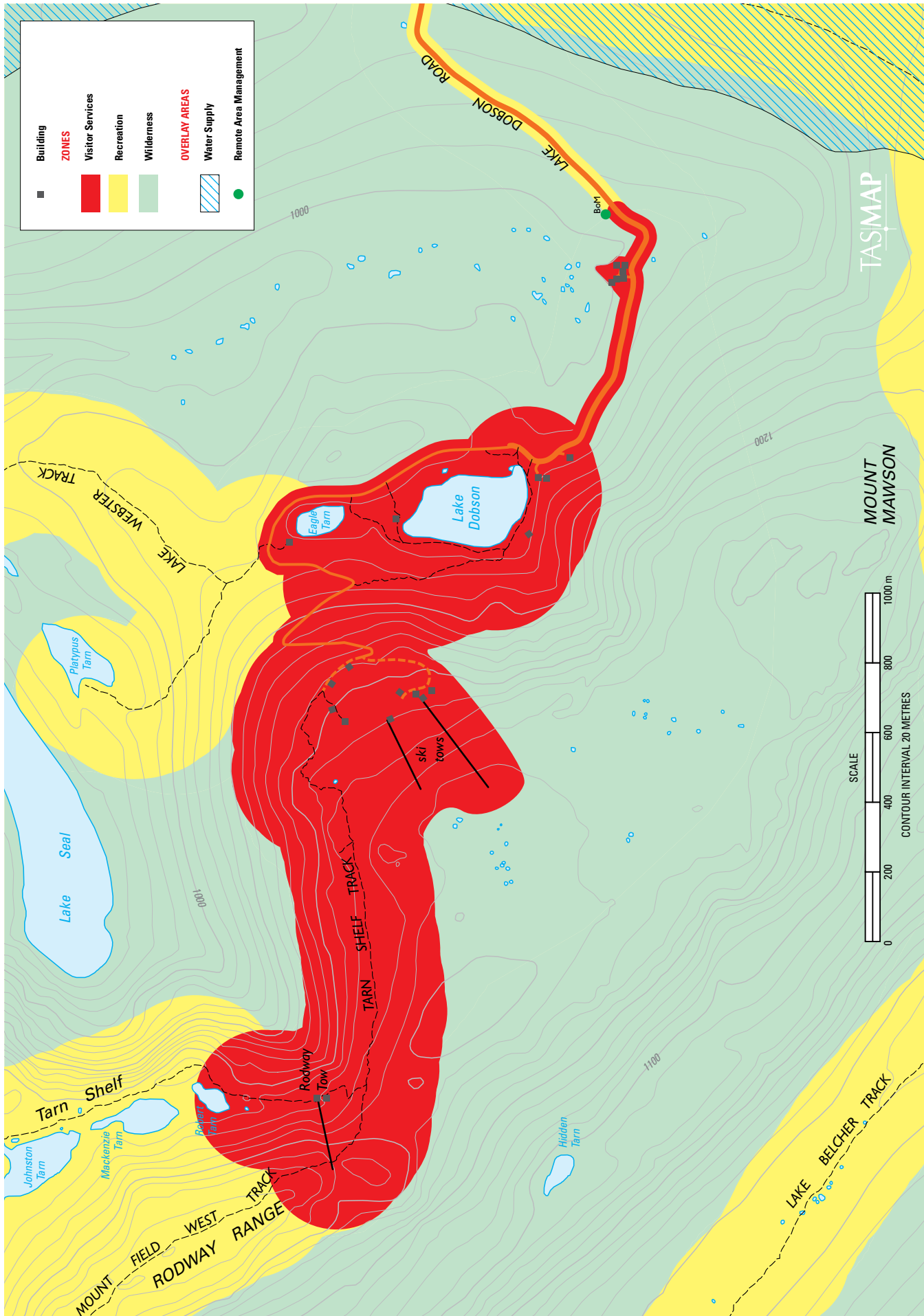
Map 12 TWWHA management zones and overlays - Gordon River



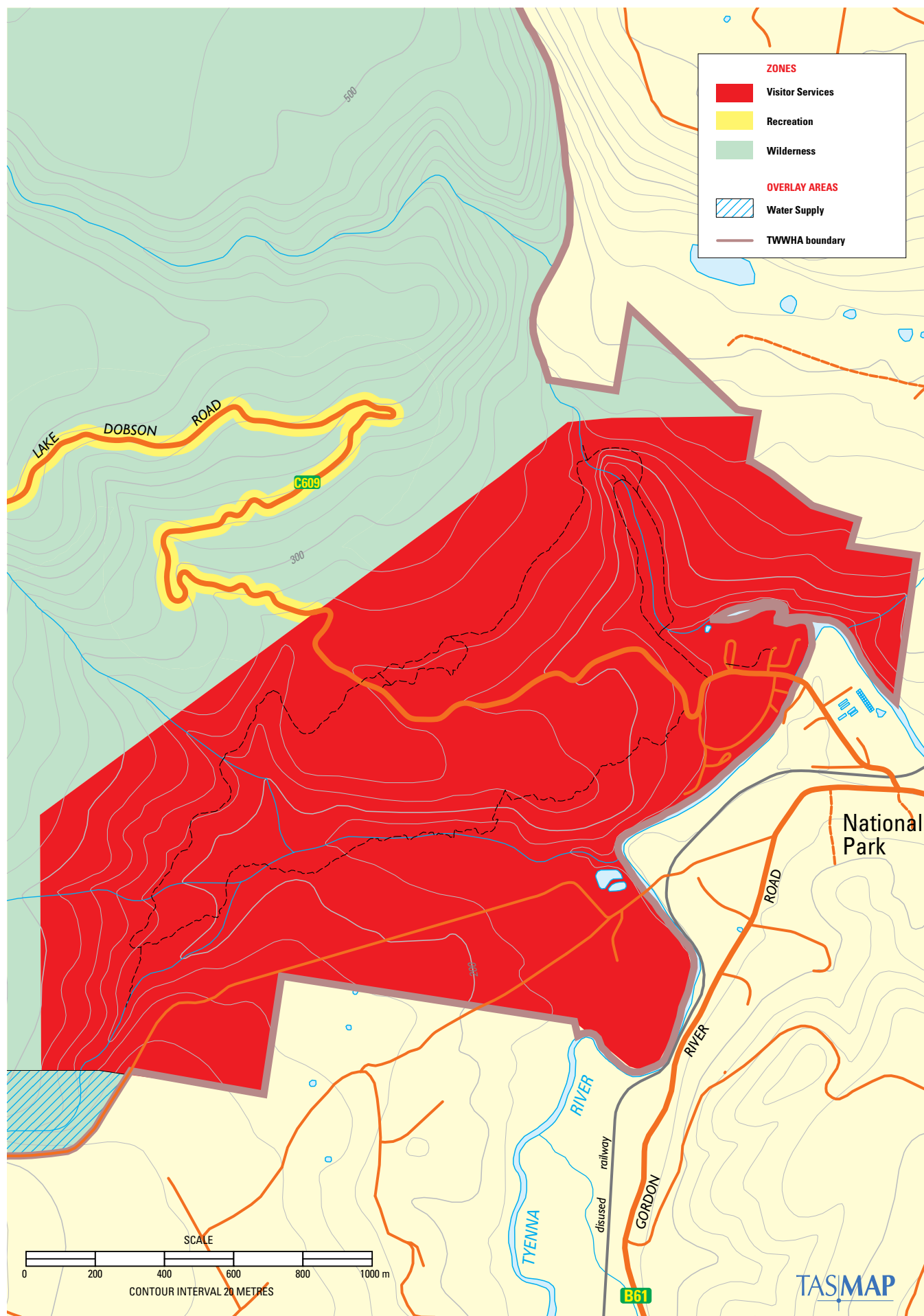
Map 13 TWWHA management zones and overlays - Mount Field National Park and Styx Valley



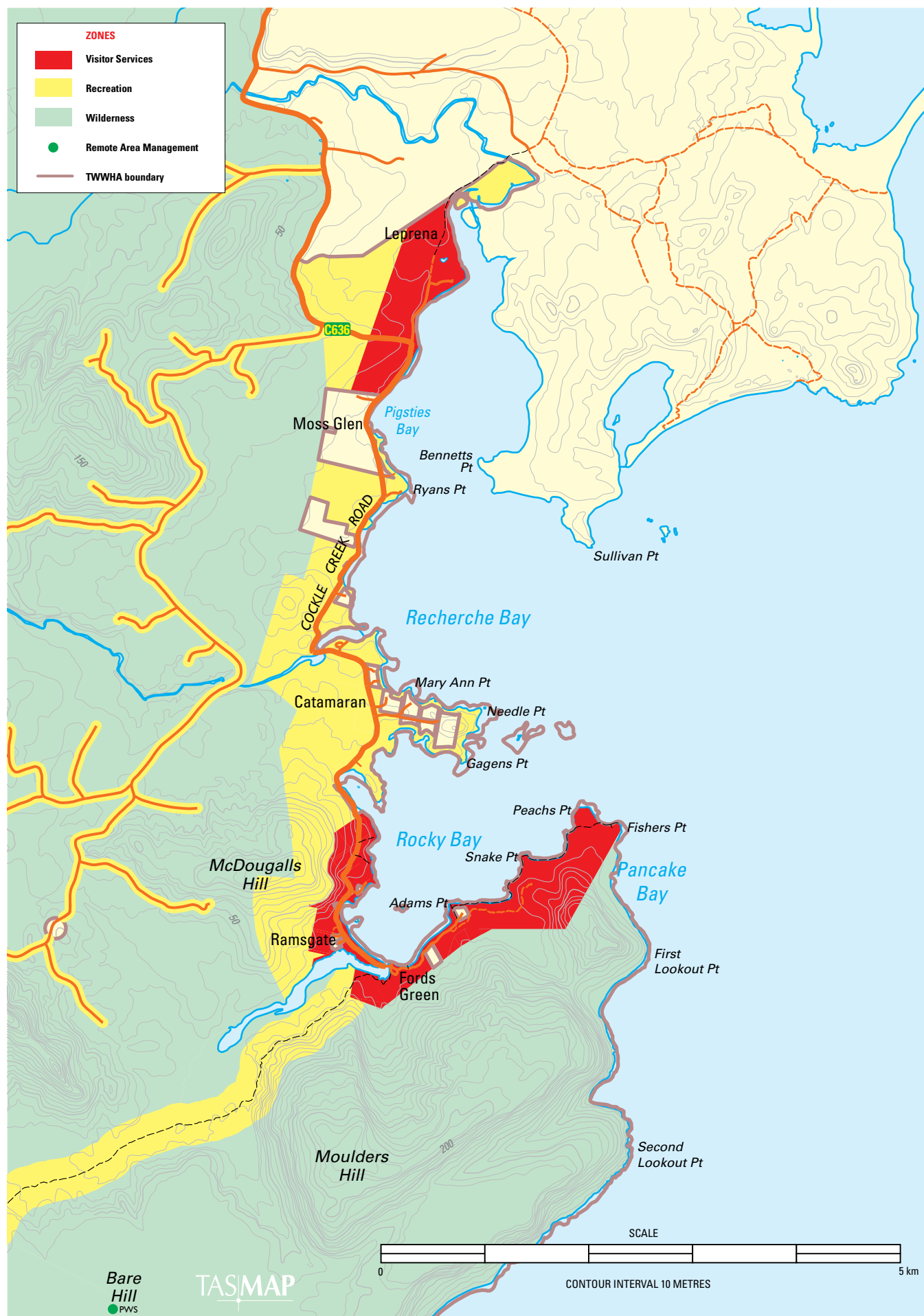
Map 14 TWWHA management zones and overlays - Lake Dobson/Mount Mawson, Mount Field National Park



Map 15 TWWHA management zones and overlays - Russell Falls, Mount Field National Park



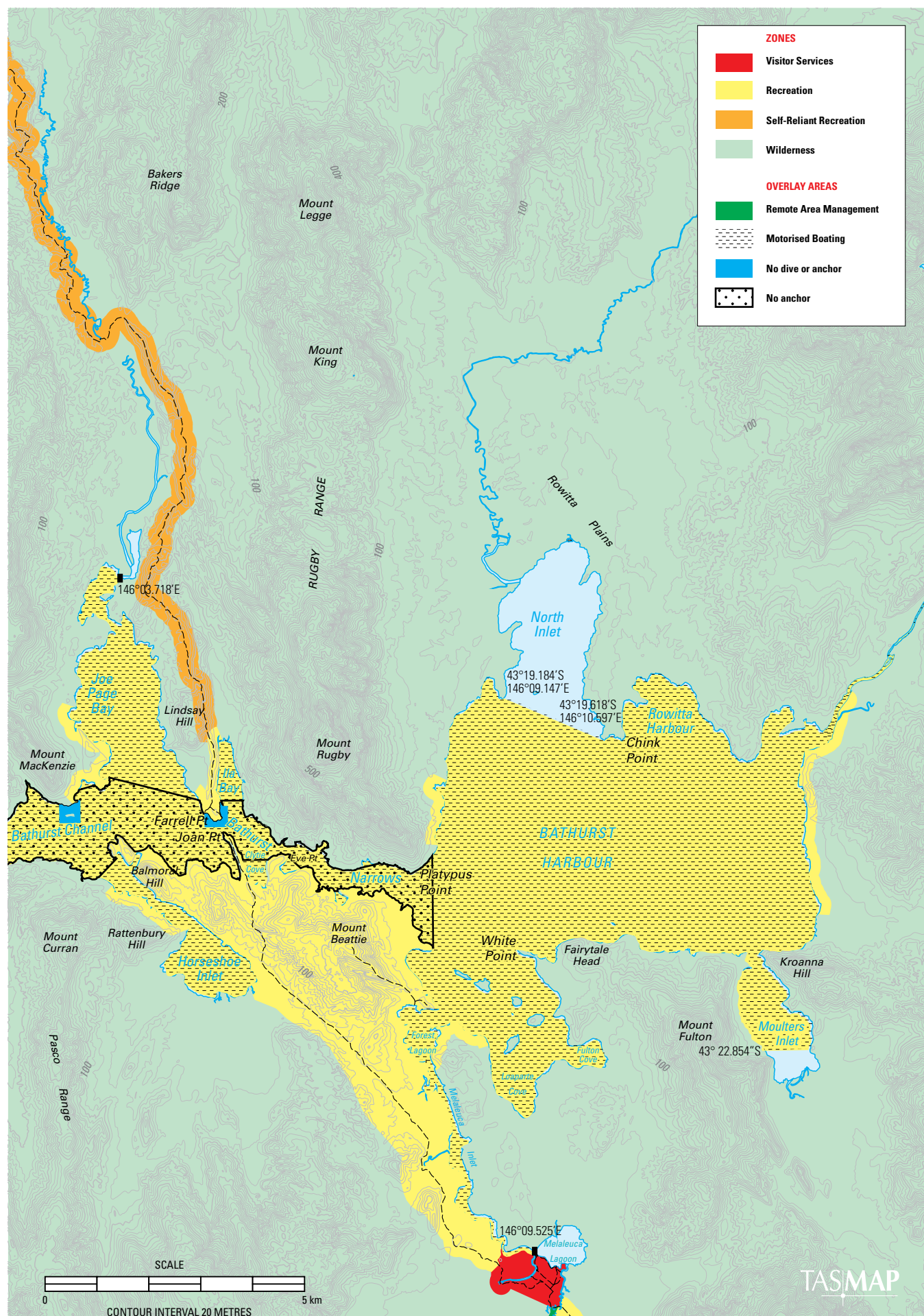
Map 16 TWWHA management zones and overlays - Recherche Bay



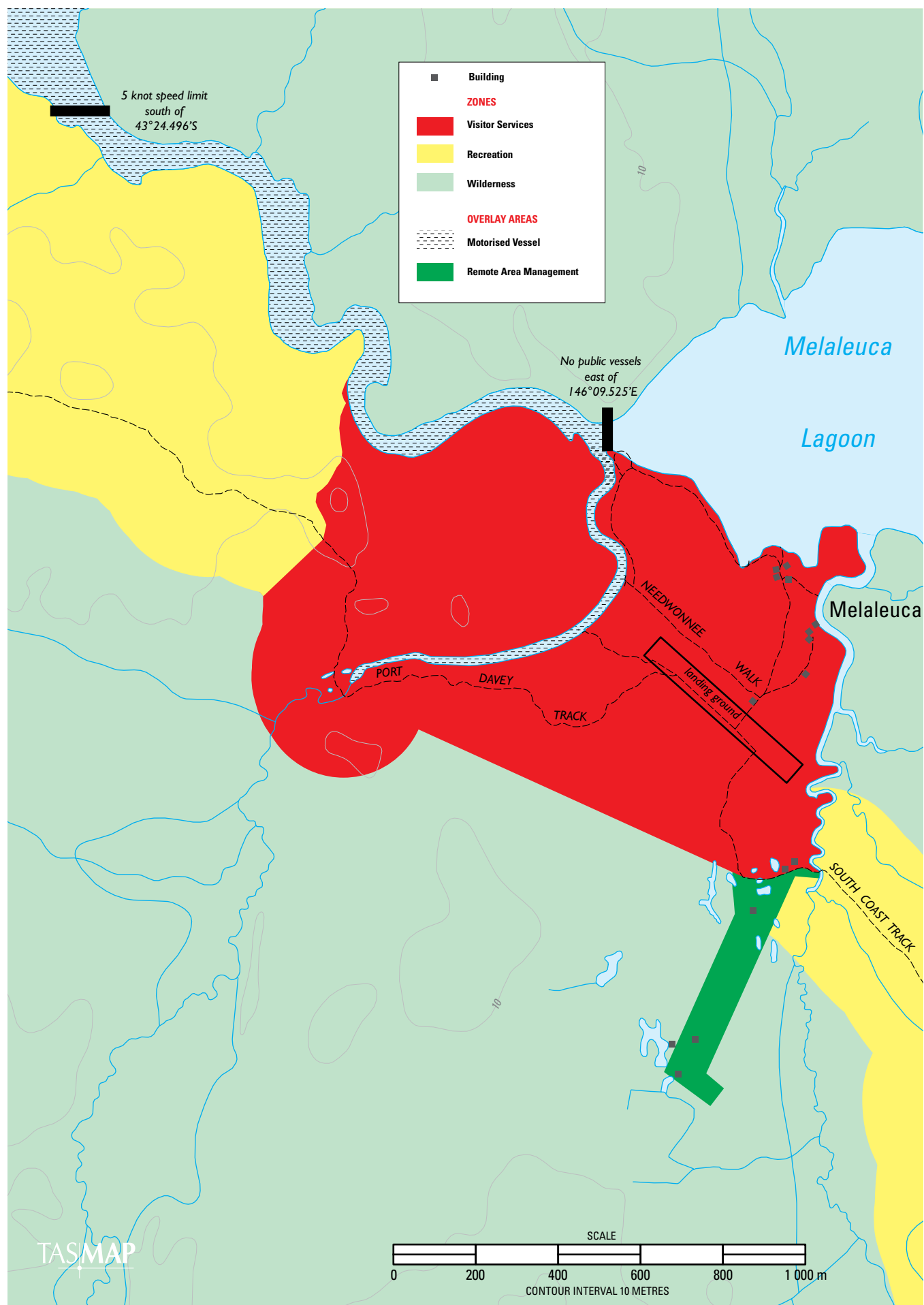
Map 17 TWWHA management zones and overlays - Port Davey



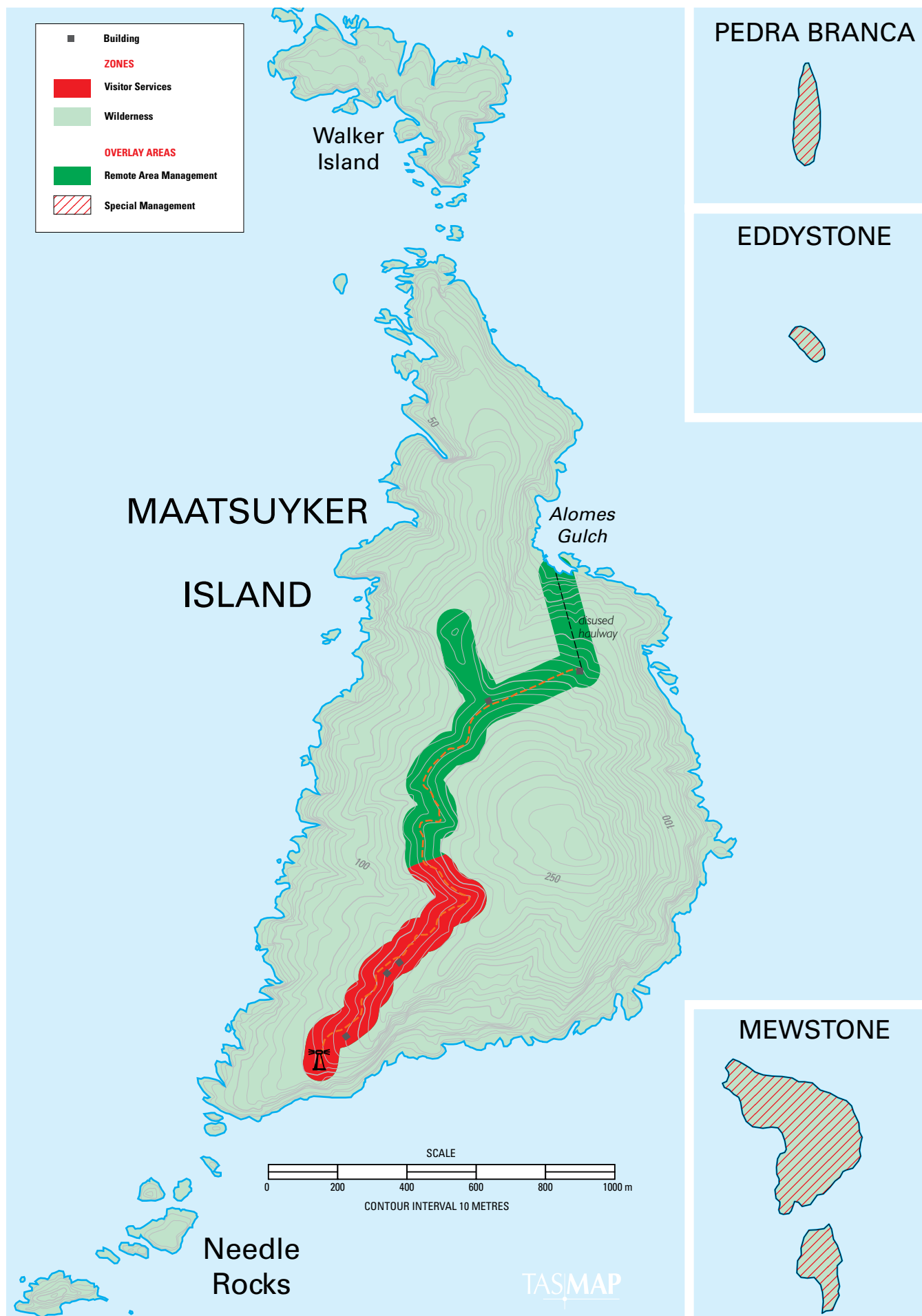
Map 18 TWWHA management zones and overlays - Bathurst Harbour



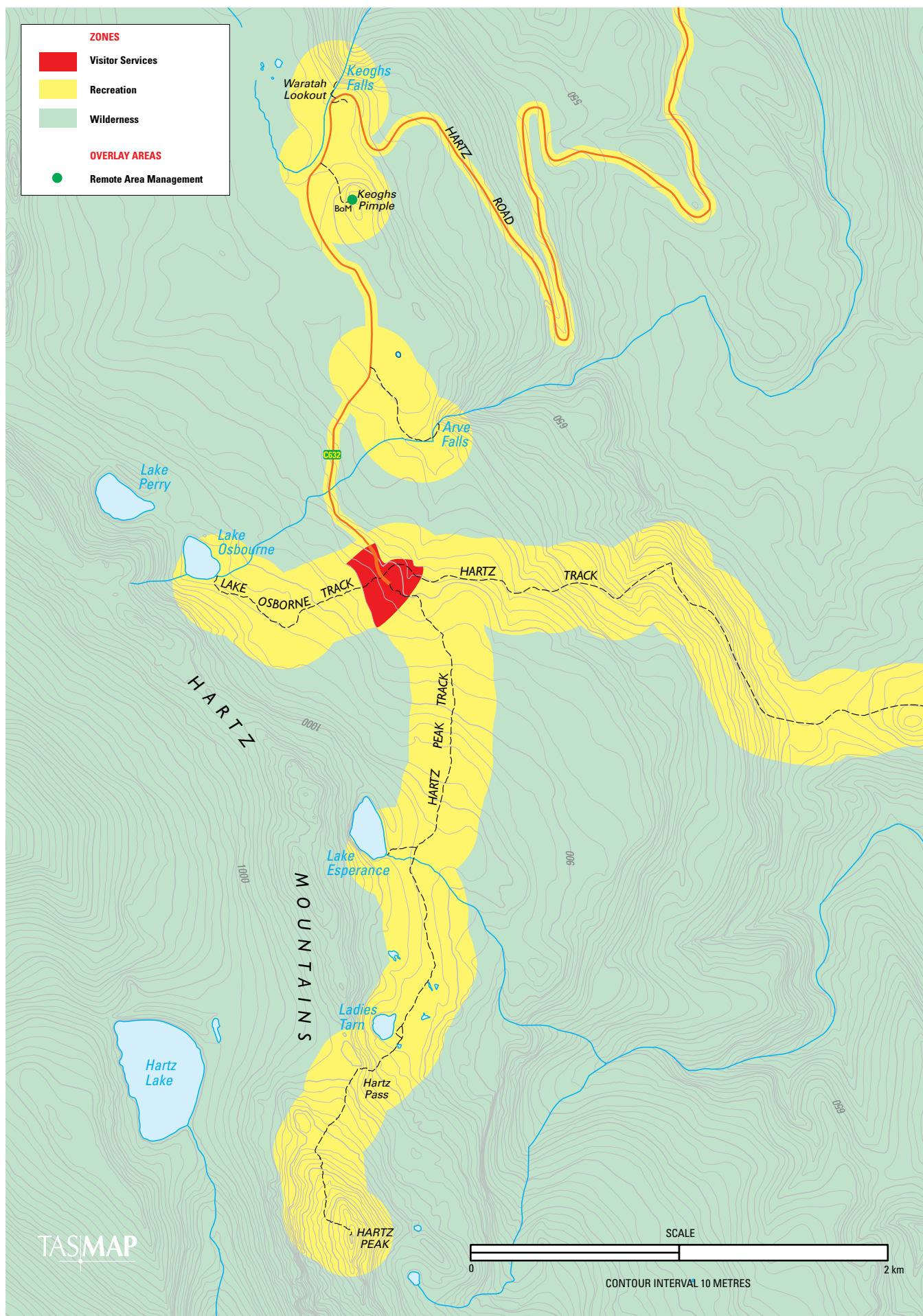
Map 19 TWWHA management zones and overlays - Melaleuca



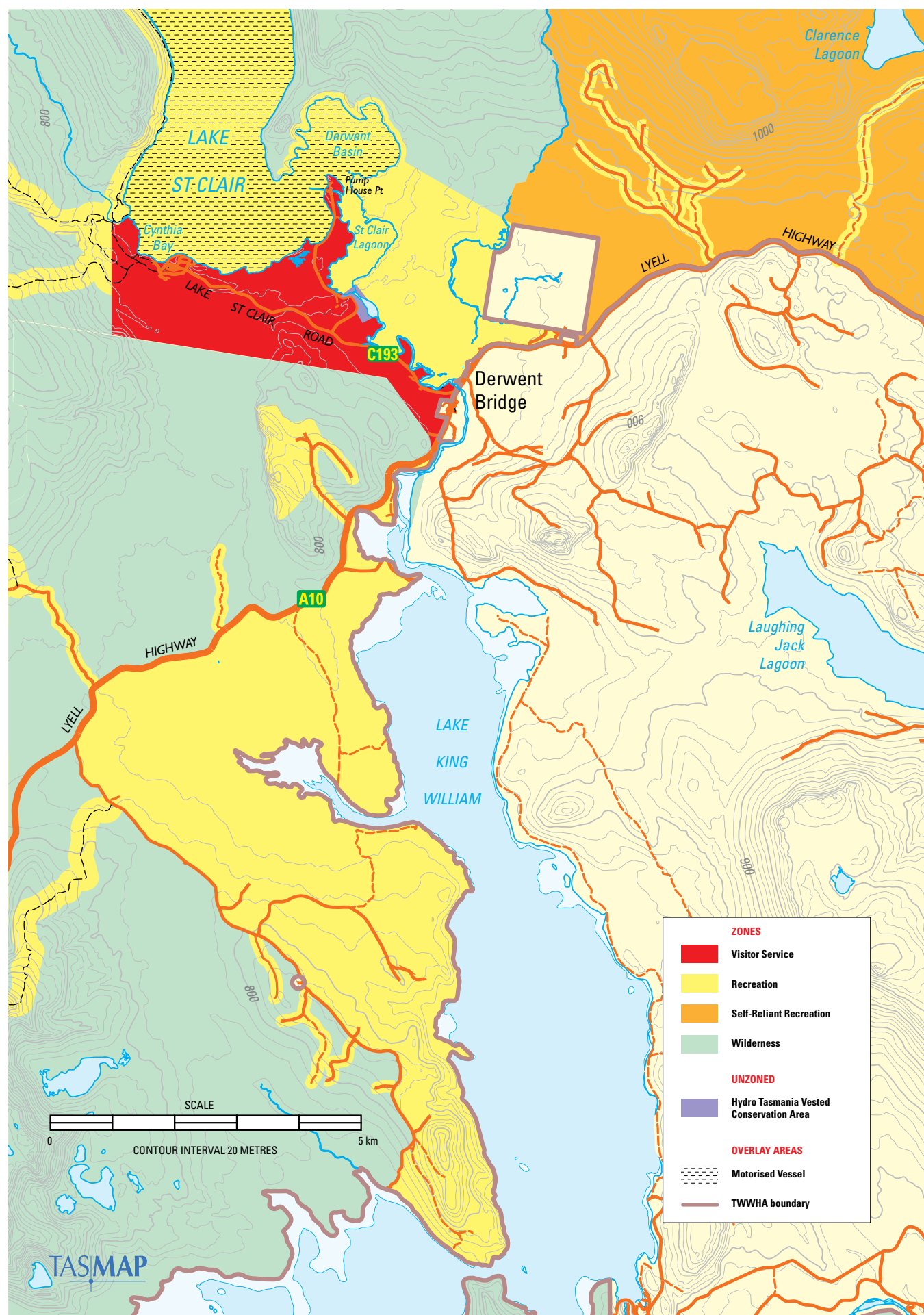
Map 20 TWWHA management zones and overlays - Maatsuyker Island



Map 21 TWWHA management zones and overlays - Hartz Mountains National Park



Map 23 TWWHA management zones and overlays - Lake King William and Clarence Lagoon



A photograph of a forest stream with a waterfall, framed by a teal and white header. The stream flows over rocks, surrounded by lush green trees and ferns. The header has a teal background with a white box containing the title text.

I O TWWHA STRATEGIC MANAGEMENT STATEMENT

The TWWHA Strategic Management Statement details management arrangements for tenures that cannot be subject to the statutory management plan. It includes policy statements for unreserved public lands. The statement is intended to allow for the Management Plan to provide details on management across the full extent of the TWWHA.

10.1 INTRODUCTION

The TWWHA Management Plan is formulated under the *National Parks and Reserves Management Act 2002* (NPRMA) and can only apply to reserved land where the Director of National Parks and Wildlife (the Director) is the managing authority. Within the TWWHA there are some reserves for which the Director is not the managing authority. There are also other land tenures that are not reserved land. As the NPRMA does not apply to those tenures there is no provision for the plan to apply to them. These areas comprise approximately 3 per cent of the total area of the TWWHA.

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) requires that the Australian Government uses its best endeavours to ensure that a plan for managing the property is developed and implemented in cooperation with the State. The EPBC Regulations set out principles for management of World Heritage properties and the content of management plans for those properties.

As a State Party to the World Heritage Convention, the Australian Government has an obligation to ensure that the requirements of the Convention are fully met. In particular, it is required to identify, protect, conserve, present, transmit, and, where appropriate, rehabilitate, the cultural and natural heritage of the TWWHA.

These obligations are intended to be met through the TWWHA Management Plan. The purpose of this Strategic Management Statement is to provide an overview of how areas that are not subject to the statutory management plan are managed in order to ensure that this obligation is met to the fullest extent possible. In particular, it indicates how the Outstanding Universal Value (OUV) of those areas is protected. The OUV of the TWWHA is recognised, through its listing, as occurring throughout the extent of the property.

The inclusion of the Strategic Management Statement in the TWWHA Management Plan enables the plan to be the single guiding document that meets international, national and state obligations with respect to management planning for the TWWHA.

The Strategic Management Statement is confined to providing factual material regarding the management regimes for the majority of the tenures it covers. However, for land managed by the Crown, it is possible to provide statements of policy intent and additional management direction. The Tasmanian Government has a policy of not allowing commercial logging, including special species timber harvesting, commercial mineral exploration or extraction within the TWWHA, including on land covered by the Strategic Management Statement. The Strategic Management Statement is not part of the statutory component of the TWWHA Management Plan.

There are a number of State laws that apply to all of the tenures within the TWWHA, including private land and all forms of Crown Land, that protect natural and cultural values. These include the *Threatened Species Protection Act 1995*, *Aboriginal Relics Act 1975*, *Historic Cultural Heritage Act 1995*, *Nature Conservation Act 2002* and the *Weed Management Act 1999*, which is the principal legislation concerned with the management of declared weeds in Tasmania. The application of the Commonwealth EPBCA is detailed in Section 10.4, page 216.

10.2 MANAGEMENT REGIMES

10.2.1 Aboriginal Land

There are three cave sites in the TWWHA that are vested in the Aboriginal Land Council of Tasmania (ALCT) in trust for Aboriginal people in perpetuity

under the *Aboriginal Lands Act 1995*. They are the Wargata Mina, Ballawinne and Kuta Kina caves, which together total around 730 hectares of land within the TWWHA.

Each cave site has significant Aboriginal cultural and historical values and contributes to the OUV of the property. Access and control are managed by the ALCT to ensure minimal disturbance at each site, given the delicate nature of the art contained within the caves.

The remoteness and inaccessibility of the cave sites act as a form of protection. Access is usually by helicopter, although the sites can also be reached via bushwalking and/or kayaking and rafting. The integrity of the caves may be impacted by activities within their catchments. Activities involving significant disturbance to soils, vegetation, water flows and water quality could cause downstream impacts that impinge on the natural processes within the caves and compromise their significant values. Within the area subject to the statutory management plan the catchments are largely within remote areas and would not be subject to activities that have the potential to create such impacts.

10.2.2 Private Land Under Conservation Covenant

10.2.2.1 Tasmanian Land Conservancy

The Tasmanian Land Conservancy (TLC) owns and manages the Skullbone Plains Reserve¹, Lower Liffey Reserve and Gordonvale Reserve within the property. Each has World Heritage status, and in total they comprise 1,742 ha. Each reserve has its own nature conservation plan as well as a five-year management plan developed by the TLC. A conservation covenant for Gordonvale is being progressed to protect the

¹ The term 'reserve' in this section refers to private land under conservation covenant.

natural and cultural values of this property.

Management of Skullbone Plains Reserve and Liffey Reserve is in accordance with their statutory conservation covenants registered on the property title under the *Nature Conservation Act 2002*. Skullbone Plains Reserve has been partly surveyed for its cultural heritage values. Aboriginal sites, including artefact scatters and usage, and several European cultural heritage sites, especially hut remains, are recorded on the TLC's GIS database. Their importance and protection have been identified in the reserve management plan. Access to the Skullbone Plains Reserve is controlled via a series of locked gates and other deterrents to illegal access; thus the property has a low level of unregulated access. General public access is controlled by the TLC, and visitors are required to comply with the conditions of access. Those seeking access for other

purposes are required to sign a waiver of liability and an access licence agreement.

Work plans with associated budgets are produced annually identifying specific actions, the timing of these and the resources required, to ensure TLC has appropriate capacity to deliver adaptive management over this period.

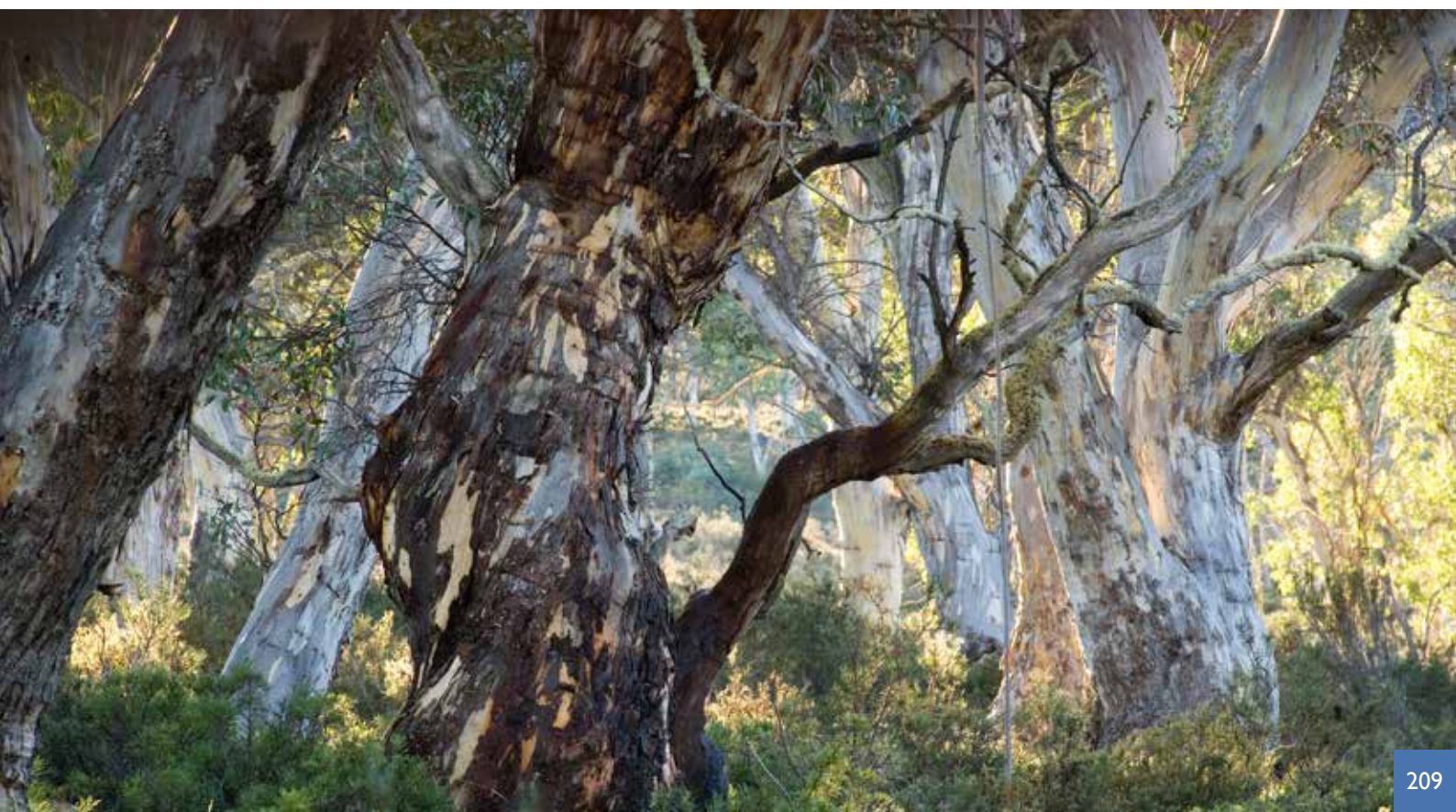
Ecological parameters are also considered when scheduling works, to ensure that projects are undertaken when they are most likely to succeed. Progress against activities in the work plan is reviewed annually.

Skullbone Plains Management Plan

Skullbone Plains comprises 1,618 ha of land adjoining the south-eastern boundary of the Central Plateau Conservation Area. The property contains a range of

Skullbone Plains

Photo Matthew Newton



significant conservation values including several rare and threatened flora and fauna species, threatened vegetation communities and sites of important geo-heritage and cultural significance. It was purchased by the TLC in 2010. Skullbone Plains Reserve has excellent context with surrounding protected areas, including within the TWWHA.

Skullbone Plains forms the heart of a focal landscape that was identified by a bio-regional planning process for Tasmania carried out by the National Reserve System's Protected Areas on Private Land (PAPL) Program in 2009. More than half of Skullbone Plains Reserve (approximately 950 ha) falls within the top 10 per cent of the highest rated conservation areas in the State, and about 250 ha is in the top one per cent of the State. The protection of Skullbone Plains Reserve has secured over 70 per cent of the private land that was identified in this focal landscape.

The TLC's Management Plan Vision for Skullbone Plains is: *'to identify, conserve and assist people to appreciate and, where necessary, restore Skullbone Plains Reserve's natural and cultural heritage values, and to ensure these values are passed on to future generations in as good or better condition than at property purchase in 2010.'*

The primary management objective is to maintain, conserve and restore species and habitats.

Other objectives are:

- to protect vegetation patterns or other biological features through traditional management approaches;
- to protect fragments of habitats as components of landscape-scale conservation strategies;
- to develop public education and appreciation of the species and/or habitats concerned; and
- to provide a means by which urban residents may obtain regular contact with nature.

Lower Liffey Reserve Management Plan

Comprising 13.73 ha, the Lower Liffey Reserve is managed by the TLC to protect and conserve natural values. It was purchased by the TLC in 2010 with the aim of managing the area as a permanent reserve to allow natural regeneration processes to occur.

The Lower Liffey Reserve is a steep easterly facing block with a small floodplain adjacent to the Liffey River. The floodplain contains several very old myrtle trees and areas of regenerating myrtle and blackwood forest. Because of the encroachment of weed species in the Reserve, the TLC has a Weed Management Strategy complementing the Reserve Management Plan.

The General Objectives address the broader goals of protection and conservation of the diversity of species, habitats and communities in the Lower Liffey Reserve. The specific management objectives for natural values, which are focused primarily on natural vegetation, are:

- to maintain the structure of the vegetation community and allow for regeneration of native species;
- to implement appropriate fire regimes;
- to protect the habitat of threatened and/or priority species; and
- to eradicate or control weeds and feral animals and prevent any further introduction(s) of exotic species.

Gordonvale Reserve Management Plan

The Gordonvale Reserve is 80.87 ha in size and located in the remote south-west portion of the TWWHA. It is completely surrounded by the Franklin-Gordon Wild Rivers National Park. It is managed according to the World Heritage Convention objective; that is, to identify, protect,

conserve, present and, where appropriate, rehabilitate the natural and cultural values, and to transmit that heritage to future generations in as good or better condition than at present. The area is managed in sympathy with the wilderness values of the wider region.

Gordonvale is nestled in a large glacial valley known as the Vale of Rasselas, traditional home territory of Tasmania's Aboriginal Pangerninghe clan of the Big River nation. It boasts spectacular scenery, including the peaks of Great Dome and Wylids Craig and forms part of a wide landscape of undulating buttongrass plains, riparian vegetation, scrub and forest, which are home to many of Tasmania's distinctive wildlife. Gordonvale is also known to many bushwalkers, both past and present, as the iconic home of a legendary Tasmanian pioneer, Ernie Bond.

One of the natural features of Gordonvale is the myriad of small pools in the buttongrass moorlands, which may provide potential habitat for species such as mountain shrimp and the rare Hickman's pygmy mountain shrimp. Other notable species, such as the ground parrot, occur in the wider area, and the endemic scrub tit has been observed foraging in tree ferns along creek lines of the reserve.

10.2.2.2 Bush Heritage Australia

Bush Heritage Australia (BHA) has a strong planning and adaptive management framework as documented in its Conservation Management Process. Its objectives for the reserves are to achieve, by 2020, a reduction of the impact of high-threat weeds and prevent new infestations; to reduce the impact of feral animals to within acceptable population densities; and to identify and maintain cultural values.

*Conservation area managed by PWS and private land managed by Hydro Tasmania, north of Arthurs Lake
Photo DPIPW*



BHA has four reserves in the Liffey Valley, two of which are within the TWWHA – the Liffey River Reserves and the Coalmine Creek Reserve. The Reserves total 125.5 ha and provide habitat for significant plants and vegetation communities and important foraging habitat for endangered animal species.

To ensure the natural and cultural values of BHA's properties are not compromised, they are managed for fire prevention and weed control. Arson and fire escaping from bush camps have been problems in the past; however, active fire management is not feasible in the Liffey Valley. As such, BHA remains focused on preventative management of fire outbreaks. Campfires are banned in all BHA reserves in the Liffey Valley. This is especially important to protect the fire-sensitive rainforest and old growth eucalypts found along the rivers and creeks in the area.

Weed control occurs annually, with a focus on controlling the spread of foxglove in the Liffey Valley. While the flowering stems produce large volumes of fine seed that allows it to multiply rapidly, it is easy to hand weed, and even cutting the flowering stem can reduce seed-set if the stem is cut at the right time.

BHA has identified the following targets (values) for conservation at the Coalmine Creek and Liffey River Reserves:

- stringybark forests;
- threatened fauna;
- Liffey River and tributaries; and
- cultural values.

The goal is to improve and maintain the health of these targets.

The Liffey Falls region was a meeting place for three Tasmanian Aboriginal groups – the Big River, North and North Midlands peoples. The area's sandstone overhangs provided shelter, and stone artefacts still mark old Aboriginal campsites. Management of cultural heritage is informed by assessments conducted in partnership with Aboriginal people.

10.2.3 Private Land, Vested Land and Reserved Land Managed by Hydro Tasmania

Hydro Tasmania manages approximately 14,000 ha of land, both vested and freehold, within the TWWHA. The area of vested land includes significant areas of reserved land in the class of conservation area.

Hydro Tasmania is the managing authority under the NPRMA for its vested, reserved land within the TWWHA. Hydro Tasmania must manage these areas in a manner consistent with the purpose of the reservation under the NCA and objectives of the reserve class as prescribed in Schedule 1 of the NPRMA.

Hydro Tasmania intends to deliver and implement a land management framework based on the PWS *Tasmanian Reserve Code of Practice*. This will ensure that Hydro Tasmania operates and maintains its assets and manages land located within the TWWHA in a consistent and transparent manner that is consistent with adjoining land management practices. The framework will draw upon Hydro Tasmania's existing externally accredited Environmental Management System and current land management practices under this system. It is envisaged that this will extend to matters including, but not limited to:

- identifying values (flora, fauna, Aboriginal heritage, historic heritage, geodiversity, landscape etc.);
- land management practices (fire management, control of access, weed/pathogen management, rehabilitation, chemical management etc.);
- visitor services and infrastructure;
- recreation management and public access;
- licensing; and
- enforcement.

10.2.4 Permanent Timber Production Zone Land (PTPZL)

10.2.4.1 Management Requirements

PTPZL occurs within the TWWHA because at the time of the 2013 minor boundary extension nomination there were a number of coupes subject to existing Forest Practices Plans. These were mostly 'transitional coupes' where it was understood they would be harvested. The transitional coupes have now been harvested in accordance with certified Forest Practices Plans and have been or will be regenerated. There are also a small number of plantation coupes in PTPZL within the TWWHA. These plantation coupes require ongoing management, including thinning, and are expected to be harvested and regenerated to native forest. The existence of these coupes was explained in the documentation provided to the World Heritage Committee and noted in the report of the 2015 Reactive Monitoring Mission. Additional areas of PTPZL were also retained in the TWWHA during the reservation process under the *Tasmanian Forest Agreement Act 2013*; these areas consist of standing forest. A minor area has been retained around road infrastructure on Mt Tim Shea. The total area of PTPZL in the TWWHA is 942.3 ha.

Forestry Tasmania manages all PTPZL in Tasmania, including in the TWWHA. It has an overarching Forest Management Plan for its forestry estate, which is reviewed every five years.

Forestry Tasmania also has a Sustainable Forest Management Policy which sets out a suite of principles designed to ensure that it operates in an environmentally, socially and economically responsible manner.

Forestry Tasmania recognises that the existence and locations of Tasmanian Aboriginal cultural sites may need to remain confidential, and has procedures in

place to ensure that this occurs. There are a number of procedures and consultative arrangements that govern the management of cultural values, including access provisions.

Complementing Forestry Tasmania's overarching Forest Management Plan is a separate and comprehensive Assessment and Management Plan for high conservation value (HCV) forested areas. The HCV Plan implements a precautionary approach in the assessment process and in the development of management prescriptions for HCV forests, and focuses on maintaining and/or enhancing high conservation values.

The Forest Stewardship Council (FSC) developed the HCV concept in 1999 as a component of the FSC certification process, to ensure the maintenance and/or enhancement of significant environmental and social values in a responsible forest management context.

The HCV concept provides an acknowledgement that, while many forest areas contain values that are of conservation significance, some values and therefore forest areas containing these values are more important than others. Identifying areas as HCV essentially means that extra management efforts may be required in a forestry context to ensure that the values they contain are maintained and/or enhanced.

10.2.4.2 Future Reservation and Additional Management Policy

The Tasmanian Government has a policy of not allowing any form of commercial harvesting, including special species timbers, within the TWWHA, with the exception of Huon pine salvage from Macquarie Harbour. Thinning and harvesting of plantations in PTPZL may occur for the purposes of management and, ultimately, rehabilitation.

The policy intent of the Tasmanian Government is to

table in Parliament proclamations for the reservation of PTPZL in the TWWHA. Any parcels of PTPZL that become reserved land during the life of the current TWWHA Management Plan will be managed in accordance with that plan. Reserve class will be determined following broad community consultation. For the purpose of zoning, individual parcels of PTPZL will be included in the same zone as the immediate surrounding area, with any retained roads zoned as Recreation Zone.

10.2.5 Future Potential Production Forest Land (FPPFL)

10.2.5.1 Management Requirements

FPPFL in the TWWHA consists of unallocated Crown Land (25,428.4 ha) managed operationally by the PWS in accordance with the *Crown Lands Act 1976*, and vested or freehold land managed by Hydro Tasmania (9,734.9 ha). FPPFL is subject to the *Forestry (Rebuilding the Forest Industry) Act 2014*.

There are Tasmanian Government policy positions that apply to FPPFL with respect to the reservation of unallocated Crown Land, the revocation of the FPPFL designation for land managed by Hydro Tasmania, and a prohibition on mining and forest harvesting, including special species timber harvesting. These are detailed below in Section 10.2.5.2.

The Crown Lands Minister, as the managing entity for Crown Land FPPFL, must have regard to the objectives for management for FPPFL set out in Schedule 3 of the *Forestry (Rebuilding the Forest Industry) Act 2014*. Those objectives are:

- (a) to conserve natural biological diversity;
- (b) to conserve geological diversity;

- (c) to preserve the quality of water and protect catchments;
- (d) to conserve sites or areas of cultural significance;
- (e) to encourage education and research, consistent with the land's natural and cultural values;
- (f) to protect the future potential production forest land against, and rehabilitate that land following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on that land's natural and cultural values and on assets within and adjacent to that land;
- (g) to encourage tourism, recreational use and enjoyment consistent with the conservation of the land's natural and cultural values;
- (h) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the other management objectives;
- (i) to provide for the taking, on an ecologically sustainable basis, of designated game species for commercial or private purposes, or both;
- (j) to provide for the controlled use of natural resources including special species timber harvesting¹;
- (k) to provide for exploration activities and utilisation of mineral resources¹; and
- (l) to allow for private, commercial or industrial uses.

The Tasmanian Reserve Management Code of Practice applies to this land. Land management practices, including arrangements for cultural heritage (in particular for the control of access to archaeological sites and sites of cultural significance) have regard to the World Heritage status of the property. A priority for management is investigation of existing uses, threats and risks to values. New activities

¹ See Section 10.2.5.2, page 215.

on Crown Land require approval under the *Crown Lands Act 1976*.

10.2.5.2 Future Reservation and Additional Management Policy

The following additional management actions and policies are to be applied to Crown Land FPPFL in the TWWHA to ensure protection of the OUV and to ensure that the overarching management obligations for this area as part of the TWWHA are met:

- Mineral exploration and extraction will not be a permitted use within FPPFL with the exception of quarrying of gravel for the purposes of road and asset maintenance where it is required to meet objective f in Schedule 3 of the *Forestry (Rebuilding the Forest Industry) Act 2014* which requires protection of FPPFL from introduced species and diseases.
- FPPFL will not be exchanged or converted to PTPZL, ensuring that commercial harvesting of eucalyptus forests will not occur.
- Special species timber harvesting will not be permitted.
- Management of FPPFL will be guided by the relevant provisions of the TWWHA Management Plan to ensure protection of the OUV of the TWWHA.

The policy intent of the Tasmanian Government is to table in Parliament proclamations for the reservation of Crown Land FPPFL in the TWWHA and for the removal of the designation FPPFL over land managed by Hydro Tasmania (this has no effect on underlying land tenure, which is private or vested). Any parcels of Crown Land FPPFL that become reserved land during the life of the current TWWHA Management Plan will be managed in accordance with that plan. Reserve class will be determined following broad community consultation. Crown Land FPPFL that becomes

reserved land will be zoned according to Maps 24 and 25 and will be managed in accordance with any associated prescriptions for those zones set out in the TWWHA Management Plan.

10.3 COOPERATIVE MANAGEMENT

The OUV of the TWWHA is recognised across its extent. World Heritage and other significant natural and cultural values occur throughout the various land tenures that make up the TWWHA. Catchments, karst systems, cultural values and landscapes, habitats, ecosystems and landscape features are overlain by these tenures. Threats to those values are independent of tenure boundaries. Roads, walking tracks and other infrastructure extend across tenures and across the boundary itself. Important areas for presentation lie outside or partially outside of reserved land. The TWWHA now has a significant common boundary with private land, with over 350 properties adjacent to the area of the 2013 minor boundary extension.

Cooperative management arrangements are therefore imperative if the guiding Vision articulated in the Management Plan is to be realised equally across the TWWHA. Engagement with neighbouring landowners will be another important element of management to ensure mutually beneficial outcomes with respect to cross-boundary issues.

These issues are recognised and addressed in the Management Plan, in particular through the identification in Section 7.5.3 of the benefits of establishing a TWWHA Land Managers Group and in Section 7.5.1 with respect to adjacent private land. The establishment of a TWWHA Land Managers Group will be important for developing consistent and cooperative management approaches throughout the TWWHA.

While management of unallocated Crown Land

(FPPFL) is to be guided by the relevant prescriptions of the Management Plan, the following specific measure will further address cross-boundary issues:

- KDO 7.5 (Section 7.5.1 page 163) and associated management actions will apply to the management of FPPFL.

The management actions will complement and integrate with the Tasmanian Government's whole-of-government Good Neighbour Charter. The PWS 'Working Neighbours Program' will be a central component of achieving this objective. This program is aimed at the development of agreements between reserve managers and landholders to address shared cross-boundary natural and cultural management issues with an emphasis on biosecurity. Agreements will be developed with individual landholders or collectives such as Landcare groups.

10.4 APPLICATION OF THE ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 (EPBCA)

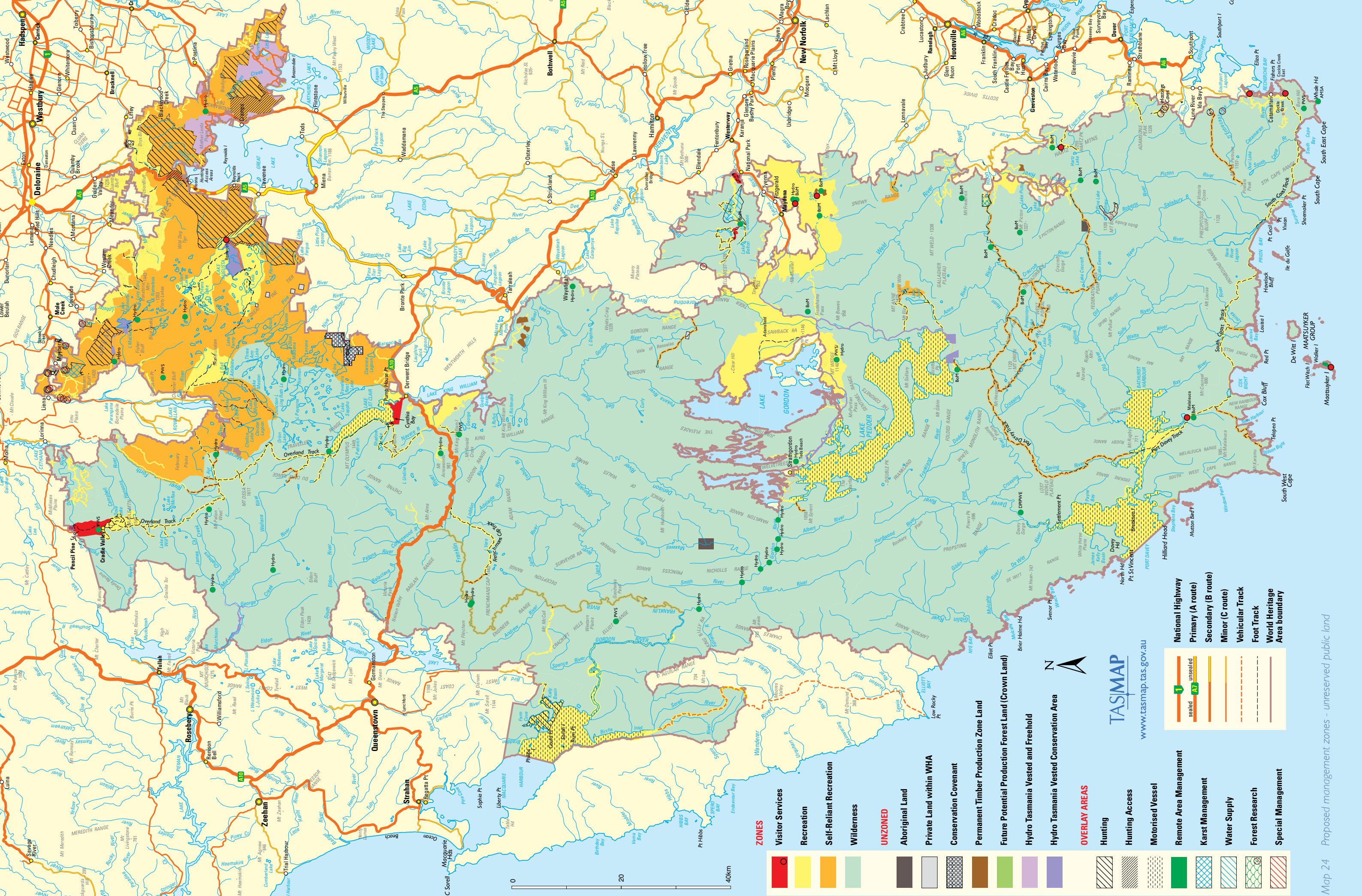
World Heritage listing does not affect ownership rights or control of World Heritage properties. Ownership and/or management responsibilities for the land tenures within the TWWHA are determined by the applicable laws that apply to those tenures.

However, as a signatory to the World Heritage Convention, the Australian Government has an international obligation to protect, conserve, present and transmit all of Australia's World Heritage properties. The Australian Government also has additional obligations arising from the Convention, most notably those set out in Article 5.

Australia has enacted legislation to implement its obligations under the World Heritage Convention.

The EPBCA ensures the protection of World Heritage by providing a direct link to Australia's obligations under the World Heritage Convention.

Under the EPBCA, an action that will have or is likely to have a significant impact on World Heritage values may be taken only if the action is approved by the Australian Government Environment Minister or is taken in accordance with a management plan accredited by the Australian Government Environment Minister. Under the EPBCA, anyone who takes, or is considering taking, an action must ensure that it will not have a significant impact on World Heritage values and may be required to refer that action under the EPBCA. World Heritage values are the natural and cultural heritage values contained within the property within the meaning given in the World Heritage Convention. The EPBCA applies to the whole TWWHA, regardless of the underlying State tenures detailed in Table 1.1, and also applies to actions taken outside the TWWHA boundary where that action may have a significant impact on the World Heritage values of the property. Further information on the application of the EPBCA is provided in Section 3.3.3.



ZONES

Visitor Services

Recreation

Self-Reliant Recreation

Wilderness

UNZONED

Aboriginal Land

Private Land within WHA

Conservation Covenant

Permanent Timber Production Zone Land

Future Potential Production Forest Land (Crown Land)

Hydro Tasmania Vested and Freehold

Hydro Tasmania Vested Conservation Area

OVERLAY AREAS

Hunting

Hunting Access

Motorised Vessel

Remote Area Management

Karst Management

Water Supply

Forest Research

Special Management

National Highway

Primary (A route)

Secondary (B route)

Minor (C route)

Vehicular Track

Foot Track

World Heritage Area boundary

sealed

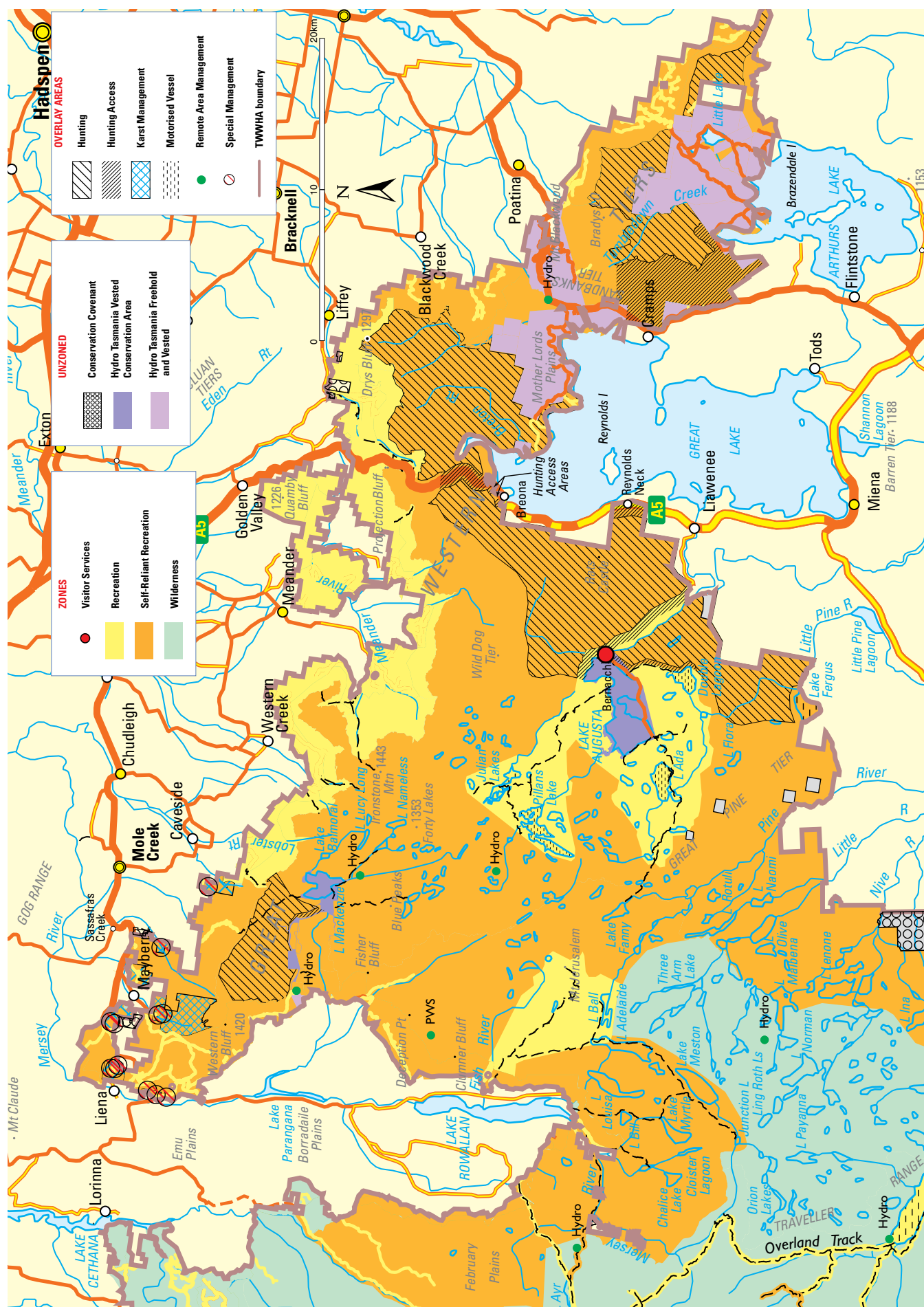
unsealed

A3

TASMAP
www.tasmap.tas.gov.au



Map 25 Proposed management zones - unreserved public land - north



APPENDIX A MANAGEMENT OBJECTIVES FOR RESERVE CLASSES IN THE TWWHA

Schedule 1 *National Parks and Reserves Management Act 2002*

National park

The following objectives:

- (a) to conserve natural biological diversity;
- (b) to conserve geological diversity;
- (c) to preserve the quality of water and protect catchments;
- (d) to conserve sites or areas of cultural significance;
- (e) to encourage education based on the purposes of reservation and the natural or cultural values of the national park, or both;
- (f) to encourage research, particularly that which furthers the purposes of reservation;
- (g) to protect the national park against, and rehabilitate the national park following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the national park's natural and cultural values and on assets within and adjacent to the national park;
- (h) to encourage and provide for tourism, recreational use and enjoyment consistent with the conservation of the national park's natural and cultural values;
- (i) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives;
- (j) to preserve the natural, primitive and remote character of wilderness areas.

State reserve

The following objectives:

- (a) to conserve natural biological diversity;
- (b) to conserve geological diversity;
- (c) to preserve the quality of water and protect catchments;
- (d) to conserve sites or areas of cultural significance;
- (e) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives;
- (f) to encourage education based on the purposes of reservation and the natural or cultural values of the State reserve, or both;
- (g) to encourage research, particularly that which furthers the purposes of reservation;
- (h) to protect the State reserve against, and rehabilitate the State reserve following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the State reserve's natural and cultural values and on assets within and adjacent to the State reserve;
- (i) to encourage tourism, recreational use and enjoyment consistent with the conservation of the State reserve's natural and cultural values.

Game reserve

The following objectives:

- (a) to conserve natural biological diversity;
- (b) to conserve geological diversity;
- (c) to preserve the quality of water and protect catchments;
- (d) to conserve sites or areas of cultural significance;
- (e) to provide for the taking, on an ecologically sustainable basis, of designated game species for commercial or private purposes, or both;
- (f) to encourage appropriate tourism, recreational use and enjoyment, particularly sustainable recreational hunting;
- (g) to encourage education based on the purposes of reservation and the natural or cultural values of the game reserve, or both;
- (h) to encourage research, particularly that which furthers the purposes of reservation;
- (i) to protect the game reserve against, and rehabilitate the game reserve following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the game reserve's natural and cultural values and on assets within and adjacent to the game reserve;
- (j) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives.

Conservation area

The following objectives:

- (a) to conserve natural biological diversity;
- (b) to conserve geological diversity;
- (c) to preserve the quality of water and protect catchments;
- (d) to conserve sites or areas of cultural significance;
- (e) to provide for the controlled use of natural resources including special species timber harvesting, and including as an adjunct to utilisation of marine resources;
- (f) to provide for exploration activities and utilisation of mineral resources;
- (g) to provide for the taking, on an ecologically sustainable basis, of designated game species for commercial or private purposes, or both;
- (h) to provide for other commercial or industrial uses of coastal areas;
- (i) to encourage education based on the purposes of reservation and the natural or cultural values of the conservation area, or both;
- (j) to encourage research, particularly that which furthers the purposes of reservation;
- (k) to protect the conservation area against, and rehabilitate the conservation area following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the conservation area's natural and cultural values and on assets within and adjacent to the conservation area;
- (l) to encourage appropriate tourism, recreational use and enjoyment (including private uses) consistent with the conservation of the conservation area's natural and cultural values;
- (m) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives.

Nature recreation area

The following objectives:

- (a) to conserve natural biological diversity;
- (b) to conserve geological diversity;
- (c) to preserve the quality of water and protect catchments;
- (d) to conserve sites or areas of cultural significance;
- (e) to encourage tourism, recreational use and enjoyment consistent with the conservation of the nature recreation area's natural and cultural values;
- (f) to encourage education based on the purposes of reservation and the natural or cultural values of the nature recreation area, or both;
- (g) to encourage research, particularly that which furthers the purposes of reservation;
- (h) to protect the nature recreation area against, and rehabilitate the nature recreation area following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the nature recreation area's natural and cultural values and on assets within and adjacent to the nature recreation area;
- (i) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives;
- (j) to provide for exploration activities and utilisation of mineral resources.

Regional reserve

The following objectives:

- (a) to provide for mineral exploration activities and utilisation of mineral resources;
- (b) to provide for the controlled use of other natural resources including special species timber harvesting;
- (c) to conserve natural biological diversity;
- (d) to conserve geological diversity;
- (e) to preserve the quality of water and protect catchments;
- (f) to conserve sites or areas of cultural significance;
- (g) to encourage education based on the purposes of reservation and the natural or cultural values of the regional reserve, or both;
- (h) to encourage research, particularly that which furthers the purposes of reservation;
- (i) to protect the regional reserve against, and rehabilitate the regional reserve following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the regional reserve's natural and cultural values and on assets within and adjacent to the regional reserve;
- (j) to encourage tourism, recreational use and enjoyment consistent with the conservation of the regional reserve's natural and cultural values;
- (k) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives;
- (l) to provide for the taking, on an ecologically sustainable basis and where appropriate, of designated game species for commercial or private purposes, or both.

Historic site

The following objectives:

- (a) to conserve sites or areas of historic cultural significance;
- (b) to conserve natural biological diversity;
- (c) to conserve geological diversity;
- (d) to preserve the quality of water and protect catchments;
- (e) to encourage education based on the purposes of reservation and the natural or cultural values of the historic site, or both;
- (f) to encourage research, particularly that which furthers the purposes of reservation;
- (g) to protect the historic site against, and rehabilitate the historic site following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the historic site's natural and cultural values and on assets within and adjacent to the historic site;
- (h) to encourage tourism, recreational use and enjoyment consistent with the conservation of the historic site's natural and cultural values;
- (i) to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent with the purposes of reservation and the other management objectives.

GLOSSARY AND ACRONYMS

AHR Aboriginal Heritage Register.

Authority Unless otherwise specified, the use of this term refers to an authority for an act or omission granted in accordance with Regulation 28 of the *National Parks and Reserved Land Regulations 2009*. The granting of an authority allows for activities to occur that would otherwise be restricted or prohibited through the Regulations.

BRAM Bushfire Risk Assessment Model

Director Director of National Parks and Wildlife

DPIPWE Department of Primary Industries, Parks, Water and the Environment

EPBCA Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. The EPBCA is the Australian Government's key piece of environmental legislation.

Fuel Stove means a device for cooking that does not:
(a) affect, or interact with, in any way, soil or vegetation; or
(b) use or burn coal, wood, plant material or any other solid fuel.

Fuel Stove Only Area An area designated where only fuel stoves may be used. Fires may not be lit in a Fuel Stove Only Area except for in an emergency where a fire is needed for survival and the fire is carefully lit.

FPPFL Future Potential Production Forest Land.

KDO Key Desired Outcome.

Managing Authority Unless specified otherwise, this term refers to the Director.

NCA *Nature Conservation Act 2002*. This Act is the mechanism for the proclamation of reserved land.

NPRMA *National Parks and Reserves Management Act 2002*. This Act sets out the basis of management for reserved land.

OUV Outstanding Universal Value. According to the *Operational Guidelines for the Implementation of the World Heritage Convention*, Outstanding Universal Value 'means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity'. The EPBCA outlines the way Australia implements the World Heritage Convention. The Act provides for the protection and management of 'World Heritage values' of World Heritage properties. These values are derived from the SOUV or from the nomination dossier for those properties where there is not yet a SOUV. World Heritage values of the TWWHA can change over time as new information comes to light.

Permitted	The use of this term in the plan generally describes activities considered to be a normal part of the enjoyment of the TWWHA. In some instances, the term 'permitted by authority' has been used to indicate that the activity requires the granting of an authority. Some activities, while described as permitted, are required to undergo assessment and approval processes, and this is generally indicated in the plan. For the avoidance of doubt, permitted does not, on its own, constitute the relevant grant of authority for the carrying out of the permitted activity or use for the purposes of the <i>National Parks and Reserved Land Regulations 2009</i> .
PTPZL	Permanent Timber Production Zone Land.
PWS	Parks and Wildlife Service, a division of DPIPW.
RAA	Reserve Activity Assessment, a systematic way of assessing the environmental, social and economic impacts of an activity on land managed by the PWS.
RSF	Reserve Standards Framework. This is the PWS visitor risk and service standards system of classification.
SOUV	Statement of Outstanding Universal Values.
TWWHA	Tasmanian Wilderness World Heritage Area.
Vessel	As defined in the <i>National Parks and Reserved Land Regulations 2009</i> .

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