Australian Government

Department of Climate Change, Energy, the Environment and Water

State Party Report on the state of conservation of the Gondwana Rainforests of Australia (Australia)

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In response to the World Heritage Committee decision 45 COM 7B.79

1 December 2024

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Acknowledgement of Country

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past and present.

Cover page credits

1. Dorrigo National Park, John Spencer NSW DCCEEW

2. Chalan Falls, Lamington National Park, State of Queensland

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Acknowledgement of Country

Australia's First Nations peoples have a continuous and deep connection to their Country.

The Gondwana Rainforests of Australia spans the traditional Country of many First Nations communities.

The Australian Government acknowledges the First Nations peoples as the Traditional Custodians of the Gondwana Rainforests, including the Anaiwan, Banbai, Birpai, Bundjalung, Geawegal, Githabul, Gumbaynggirr, Jukumbal, Ngarrabul, Thunggutti, Wangerriburra, Widjabul Wia-bul, Wonnarua, Worimi, Yaegl, Yugambeh and Yuggera Ugarapul. We acknowledge their continuing connection to land and sea, waters, environment and community, and acknowledge that the Gondwana Rainforests represent areas of great spiritual and cultural significance to these First Nations peoples.

For First Nations peoples, the term 'Country' takes in everything within the physical, cultural and spiritual landscape – landforms, waters, air, trees, rocks, plants, animals, foods, medicines, minerals, stories and special places. It includes cultural practice, kinship, knowledge, songs, stories and art, as well as spiritual beings, and people; past, present and future.

We pay respect to Elders past and present, while recognising the strength, capacity and resilience of past and present First Nations people across the Gondwana Rainforests and beyond.

Throughout this report the term First Nations peoples is used to refer specifically to Australian Aboriginal peoples including Traditional Owners and Custodians of the lands, which comprise the reserves of the World Heritage listed Gondwana Rainforests of Australia. Australia recognises that First Nations peoples may identify themselves at local, state, national and international scale using a diversity of terms. These include but are not limited to: Aboriginal people, Aboriginal and Torres Strait Islanders, Indigenous people, clan groups, tribal groups, language groups, Traditional Owners, Custodians, First Nations peoples, First peoples, First Nations groups, native title holders, and common law holders.

We acknowledge the grief of First Nations peoples in response to the 2019–20 bushfires and recognise that the actions we take today impact on the Country of First Nations peoples. We commit to working with First Nations peoples to improve the way we manage our environment and heritage now and in the future.

Executive Summary

Australia is protecting the Outstanding Universal Value (OUV) of the Gondwana Rainforests of Australia (Gondwana Rainforests) and works constructively and closely with UNESCO, IUCN and ICOMOS to ensure the protection of all World Heritage properties in Australia.

This report responds to the request from the World Heritage Committee in 2023 (Decision 45 COM 7B.79 at Appendix A) for an updated report on the state of conservation of the Gondwana Rainforests to be submitted by 1 December 2024 for consideration by the Committee at its 47th session. The Committee requested an update on monitoring and recovery actions, implementation of recommendations and sharing lessons following the 2019–20 bushfires, and on efforts to assess and manage potential impacts from myrtle rust, climate change and possible water extraction on the OUV of the property.

As reported in 2020 and 2022, bushfires in the spring and summer of 2019–20 impacted approximately 196,000 hectares, or 53%, of the Gondwana Rainforests, including part of the ancient rainforests communities that are not adapted to regular fires. Ecological impacts from these fires were varied across the property and understanding their extent, as well as realising full recovery prospects, will take many years. Long term recovery efforts continue through adaptive management and alongside renewed prevention, preparedness and resilience building for future natural disasters. The conservation of the Gondwana Rainforests continues to be a strong collaborative effort by the Australian, New South Wales (NSW) and Queensland state governments and is supported by communities, including First Nations peoples, volunteers and researchers.

Climate change presents a significant challenge for conservation of Australia's ecosystems and environments. Since 2022, Australia has directed substantial efforts towards reducing emissions, which is a core component of the broader strategy to combat climate change. The Australian and state governments have advanced climate change policy both nationally and internationally. Australia is committed to taking climate action to protect all its World Heritage properties, including the Gondwana Rainforests. Australia recognises the impacts of climate change have significantly worsened the frequency and intensity of bushfires and is taking significant action to prepare for future extreme fire seasons.

This report provides details on the extensive measures Australia is taking to contribute to international efforts to mitigate the effects of climate change (see 0). It also provides updates on progress made in implementing recommendations from the Australian Government Royal Commission into National Natural Disaster Arrangements, and the NSW Bushfire Inquiry (see 2.4.1). The report also considers the potential impacts of possible water extraction projects adjacent to the World Heritage property (see Section 2.5) and describes other current conservation issues (see Section 3). Australia's process to regularly notify the UNESCO World Heritage Centre of proposed projects which may impact OUV at Australian World Heritage properties is also included in the report (see Section 4).

The involvement of First Nations peoples in managing and protecting the Gondwana Rainforests continues to be valued and prioritised. The report highlights collaborative development of land management plans, a research program developing a scientific evidence base for ecosystem responses to cultural burning, and efforts to better recognise First Nations cultural values.

Résumé

L'Australie protège la valeur universelle exceptionnelle (VUE) des forêts humides Gondwana de l'Australie (forêts humides Gondwana) et collabore de manière constructive avec l'UNESCO, l'UICN et l'ICOMOS pour assurer la protection de tous les biens du patrimoine mondial en Australie.

Ce rapport répond à la demande du Comité du patrimoine mondial en 2023 (décision 45 COM 7B.79 Appendix A) d'obtenir un rapport actualisé sur l'état de conservation des forêts humides Gondwana à soumettre avant le 1er décembre 2024 pour examen par le Comité lors de sa 47e session. Le Comité a demandé une mise à jour des actions de suivi et de rétablissement, de la mise en œuvre des recommandations et du partage des enseignements à la suite des feux de forêts de 2019-2020, ainsi que des efforts pour évaluer et gérer les impacts potentiels de la rouille du myrte, du réchauffement climatique et d'une éventuelle extraction d'eau sur la VUE du bien.

Comme indiqué en 2020 et 2022, les feux de forêts du printemps et de l'été 2019–2020 ont touché environ 196 000 hectares, soit 53 %, des forêts humides Gondwana, y compris une partie des communautés de forêts humides anciennes qui ne sont pas adaptées aux incendies périodiques. Les impacts écologiques de ces incendies ont été nombreux sur l'ensemble du bien et il faudra de nombreuses années pour en comprendre l'étendue et pour réaliser des perspectives de rétablissement complet. Les efforts de rétablissement à long terme se poursuivent grâce à une gestion adaptative et parallèlement à une prévention, une préparation et une résilience renouvelées pour les futures catastrophes naturelles. La conservation des forêts humides Gondwana continue de faire l'objet d'une collaboration étroite entre les gouvernements de l'Australie, de la Nouvelle-Galles du Sud (NSW) et du Queensland, et est soutenue par les communautés, y compris les peuples des Premières Nations, les bénévoles et les chercheurs.

Le réchauffement climatique représente un défi important pour la conservation des écosystèmes et des environnements australiens. Depuis 2022, l'Australie a déployé des efforts considérables pour réduire ses émissions, ce qui constitue un élément essentiel de la stratégie globale de lutte contre le réchauffement climatique. Le gouvernement australien et les gouvernements au niveau des États ont fait progresser la politique de lutte contre le réchauffement climatique tant au niveau national qu'international. L'Australie s'est engagée à prendre des mesures climatiques pour protéger tous ses biens du patrimoine mondial, y compris les forêts humides Gondwana. L'Australie reconnaît que les effets du réchauffement climatique ont considérablement aggravé la fréquence et l'intensité des feux de forêts et le pays prend des mesures importantes pour se préparer à de futures saisons d'incendies extrêmes.

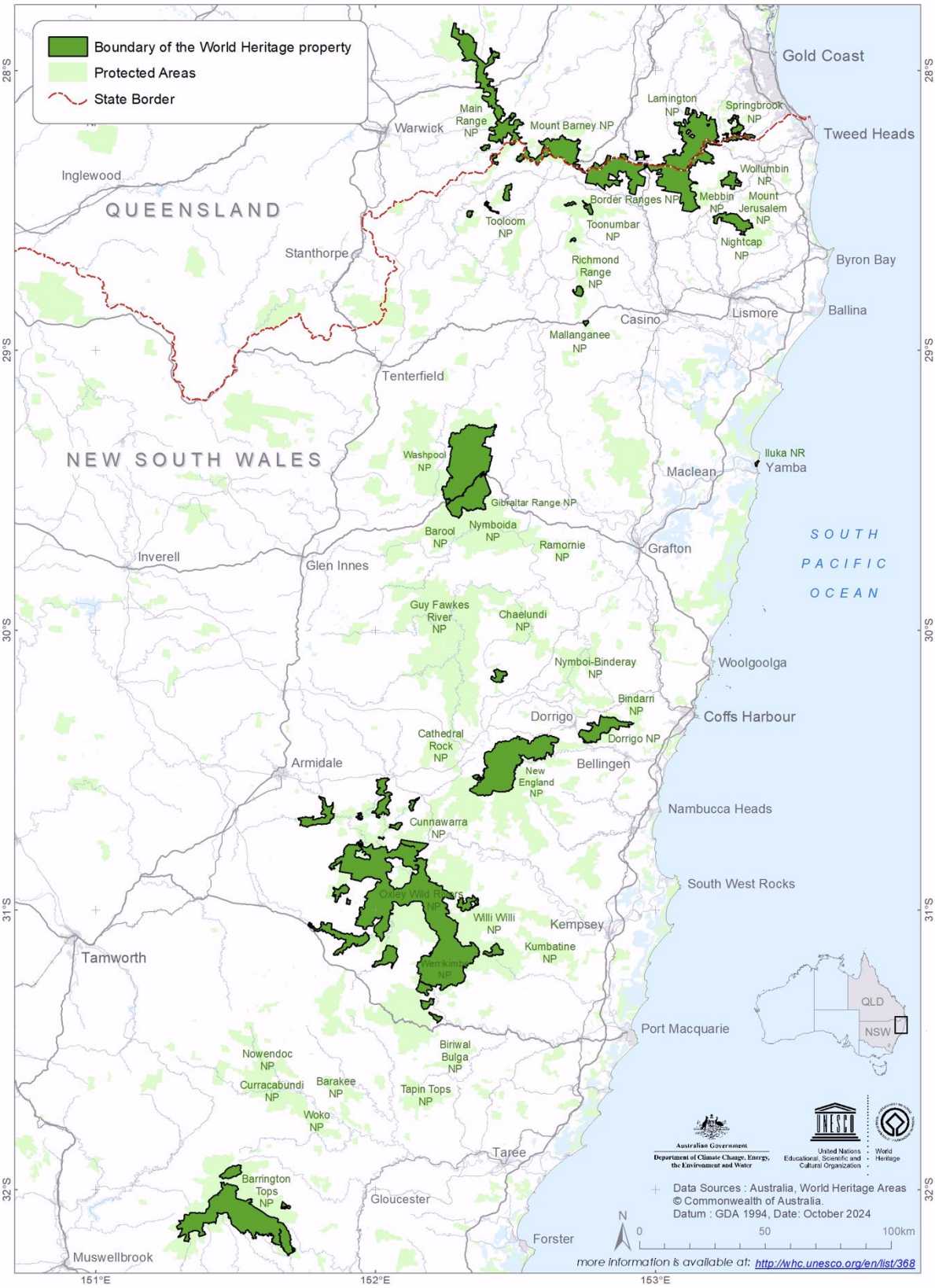
Ce rapport détaille les mesures importantes prises par l'Australie pour contribuer aux efforts internationaux visant à atténuer les effets du réchauffement climatique (voir Section 2.3). Il fait également le point sur les progrès réalisés dans la mise en œuvre des recommandations de la Commission royale du gouvernement australien sur les dispositions nationales en matière de catastrophes naturelles et de l'enquête sur les incendies de forêts en NSW (voir Section 2.4.1). Le rapport étudie également les impacts potentiels d'éventuels projets d'extraction d'eau adjacents au bien du patrimoine mondial (voir Section 2.5) et décrit d'autres problèmes de conservation actuels (voir Section 3). Le processus australien de notification régulière au Centre du patrimoine mondial de

l'UNESCO des projets proposés susceptibles d'avoir un impact sur la valeur universelle exceptionnelle des biens australiens du patrimoine mondial est également inclus dans le rapport (voir Section 4).

La participation des peuples des Premières Nations à la gestion et à la protection des forêts humides Gondwana continue d'être appréciée et considérée comme une priorité. Ce rapport souligne les plans de gestion des terres développés en collaboration, un programme de recherche visant à établir une base de données scientifiques sur les réactions des écosystèmes aux brûlages culturels, et les efforts déployés pour mieux reconnaître les valeurs culturelles des Premières Nations.

Albert River Circuit, Lamington National Park. Source: Queensland DETSI

Map 1 Gondwana Rainforests of Australia World Heritage property and adjacent reserves



1 Introduction

1.1 Decision of the World Heritage Committee

This report, prepared in cooperation with the New South Wales (NSW) and Queensland governments, responds to the 2023 decision of the World Heritage Committee (see Decision 45 COM 7B.79, at Appendix A).

In April 2020, following the 2019–20 bushfires, Australia provided a State Party Report on the state of conservation of the Gondwana Rainforests of Australia to the World Heritage Committee. An update was provided in February 2021, a full State Party Report was submitted in December 2022, and an update to that report in May 2023. The previous reports outlined the impacts from the bushfires and the commencement of recovery actions. This report provides updates on those actions, and to other requests made by the World Heritage Committee.

1.2 The Gondwana Rainforests of Australia

The Gondwana Rainforests of Australia (Gondwana Rainforests) is a serial World Heritage property comprising reserves (40 individual components) that are largely part of national parks and nature reserves, in north-east NSW and south-east Queensland. Listed for its biological and geomorphic values, it contains remnants of the once vast rainforests that covered Australia when the climate was cooler and wetter.

The Gondwana Rainforests was inscribed on the World Heritage List in 1986 and extended in 1994. It was inscribed under criteria (viii), (ix) and (x) and has strong integrity as the largest and most significant remaining stands of subtropical rainforest, Antarctic Beech cool temperate rainforests and warm temperate rainforest in Australia and the world. The Statement of Outstanding Universal Value (OUV) for the property, adopted by the World Heritage Committee in 2012, is at Appendix B.

1.3 Management and governance of the Gondwana Rainforests

Under Australia's federal system of government, management of the Gondwana Rainforests is the primary responsibility of the NSW and Queensland state governments for the components of the property in their respective jurisdictions. A management committee and a coordinating committee, both comprised of representatives of the managing agencies in each of the 3 jurisdictions (NSW, Queensland and the Australian Government), meet regularly to deliver strategic coordinated management.

Each reserve within the Gondwana Rainforests has a management plan or statement of management intent. Management planning for the property by the NSW and Queensland governments is collaboratively developed with First Nations peoples. A *Strategic Overview for Management 2000* provides high-level policy and strategic direction for the property. Updated strategic plans for the property are being prepared by each state in collaboration with First Nations peoples.

The Queensland Department of the Environment, Tourism, Science and Innovation's (DETSI) *Gurra Gurra Framework 2020–2026* and *Queensland First Nations World Heritage Strategy* provide

direction and guidance to work towards permanent and productive relationships with First Nations peoples across departmental business.

Each state jurisdiction administers advisory arrangements that allow for rightsholders, community, technical and scientific input into the management of the reserves that constitute the Gondwana Rainforests. The NSW components have several mechanisms for inputs, including 3 separate NSW National Parks and Wildlife Service (NPWS) regional advisory committees; the Githabul National Parks Management Committee, the Wollumbin Consultative Group and the Ngullingah Jugun (Our Country) Aboriginal Corporation Registered Native Title Body Corporate. The Queensland components of the property are represented by the Gondwana World Heritage Advisory Committee (Queensland Section).

1.4 Protection of the Gondwana Rainforests

The management and use of the Gondwana Rainforests is subject to national and state legislative instruments. Australia's national environmental law, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), provides an overarching level of protection for the OUV of the Gondwana Rainforests. Under the EPBC Act, World Heritage values (Outstanding Universal Value) are one of the protected 'matters of national environmental significance'. Any proposed activity that is likely to have a significant impact on the World Heritage values, whether the proposal is inside or outside the property, requires assessment and approval under the EPBC Act. Environmental impact assessments and decisions may also be required under state regulatory requirements.

Across NSW and Queensland, 18 additional legislative instruments protect and conserve the Gondwana Rainforests. Together these legal instruments ensure the Australian, NSW and Queensland governments can take necessary action to protect the property's OUV. This includes for example, developing and implementing plans of management, regulating development within and adjacent to the World Heritage property and controlling feral animals and weeds.

Australia also seeks to protect the Gondwana Rainforests through legislating climate commitments. Australia, along with all parties to the Paris Agreement, has committed to the global goal of holding the increase in global average temperatures to well below 2 °C of warming above preindustrial levels and pursuing efforts to keep warming to less than 1.5 °C. Further information about Australia's climate change actions is in Section 2.3 and Section 2.4.

1.4.1 Nature positive environmental reform

The Australian Government is reforming the EPBC Act based on its Nature Positive Plan. The Plan delivers on the government's commitment to strengthen and streamline Australia's environmental laws. This is in response to the Independent Review of the EPBC Act, undertaken by Professor Graeme Samuel AC in 2020 (the Samuel Review). Progress can be reviewed on the EPBC Act reform webpage.

2 Response to the 2023 Decision of the World Heritage Committee 45 COM 7B.79

2.1 Update on the 2019–20 bushfires impacts and recovery

Decision 45 COM 7B.79 Paragraphs 3 and 4:

3. Noting with appreciation the State Party's continued collaborative efforts in post-fire monitoring and recovery actions, expresses its utmost concern about the negative impacts of the 2019-20 bushfires to the attributes of the property's Outstanding Universal Value (OUV), in particular species that are vulnerable to the impacts of fire

4. Also recalling that the State Party initiated an immediate management response following the fires including assessment of impacts, planning and funding commitments to ensure long-term recovery, takes note that some recovery efforts have been delayed due to the recent flooding in the region, and encourages the State Party to continue management actions to support the recovery of the property, including the monitoring of ongoing health and recovery of areas and species, as well as recovery actions and adaptive management strategies

As reported in 2020 and 2022, bushfires in the spring and summer of 2019–20 impacted approximately 196,000 hectares, or 53%, of the World Heritage property. As reported in 2022, fire impacts have been varied across the property and the extent of impacts as well as recovery will not be known for years to come.

Immediately following the 2019–20 bushfires significant funding was provided for bushfire recovery, as reported in 2020 and 2022. Severe bushfires have not occurred in the World Heritage property since 2019–20. The Australian Fire and Emergency Services Council releases a Seasonal Bushfire Outlook every season. Bushfire recovery continues to be part of the ongoing management at the property and lessons identified in the 2019–20 bushfire season are being used to inform bushfire preparedness as well as ongoing management.

Heritage places in Australia and globally are already experiencing impacts of climate change. Fire weather is projected to worsen, bushfires are likely to be of higher intensity, and bushfire seasons are likely to start earlier and last longer. This is decreasing the time in between fire seasons and may reduce opportunities for planned burning and fire-fighting resource sharing. Australia recognises the impact of climate change on the frequency and intensity of bushfires and has committed to national and international climate action (see Section 2.3).

2.1.1 Post-fire recovery and ongoing management

The Australian, NSW and Queensland governments continue to support and implement bushfire recovery actions. Management is shifting from immediate to longer-term recovery, and lessons identified in the 2019–20 bushfire season are being used to inform bushfire preparedness and ongoing management. To this end, land managers are working to enhance the application of

techniques that reduce the risk and impacts of severe bushfire in the World Heritage property and on OUV. This includes identifying habitats for intensive protection (including NSW Assets of Intergenerational Significance and the Queensland Values-Based Management Framework outlined in Section 2.1.4), implementing prescribed burns, pest management, monitoring programs, fire response planning, improved access and installation of water infrastructure.

Prescribed burning

With climate change increasing the intensity and frequency of bushfires, effective fire management is a priority for World Heritage property managers. Many species and ecosystems in Australia evolved with fire and need fire for their continued survival. First Nations people understand this relationship and have effectively used fire to manage the landscape over millennia. NSW and Queensland land management agencies apply prescribed burning to fire-adapted ecosystems including within the Gondwana Rainforests.

The National Position on Prescribed Burning is revised by the Australian and New Zealand National Council for fire, emergency services and land management to encompass lessons from significant events like the 2019–20 bushfire season. NSW and Queensland follow the National Position on Prescribed Burning and its associated guidelines and contribute to the development of both, along with land management agencies across Australia. Identifying the most effective prescribed burn strategies is an area of continual research in Australia, including by the Australian Government's National Environmental Science Program (NESP). Prescribed burning in fire-adapted ecosystems is important for reducing the risk of bushfire impacting fire-sensitive ecosystems. NSW and Queensland government agencies are engaging with First Nations peoples on fire management including strategic fire line construction and early stages of cooperative burning (further information included in Appendix C).

Feral animal and weed management

Post fire monitoring has observed invasive species as one of the major impediments to recovery in the immediate aftermath of the bushfires. Land managers conduct feral animal control across the World Heritage property, including control of feral pigs, cats, wild dogs and dingos. Control methods include baiting, fencing and surveillance. For example, NSW recently approved a feral horse management plan for Barrington Tops National Park as part of an integrated feral animal control program (further information included in Appendix C).

Weed control for invasive plant species is also carried out in the property. Targeted species and responses differ between various national parks within the World Heritage property, with prioritisation of control in each being guided by monitoring and surveillance measures. World Heritage land managers collaborate with surrounding private landholders and organisations to manage potential threats.

Fire response preparation

The 2019–20 bushfire season highlighted areas for improvement in immediate bushfire response, including within the Gondwana Rainforests. Park managers are reviewing and adjusting bushfire response plans to incorporate lessons identified from the 2019–20 bushfires. Site specific bushfire response plans are being developed for the individual national parks that make up the serial World Heritage property to help inform prescribed burn strategies and tactical decision-making during incident response. This includes identifying and locating conservation assets such as biodiversity

values, culturally significant areas and species, threatened species habitats, and attributes that contribute to OUV. These assets are identified through consultation with experts, including First Nations people, and incorporated into mapping where possible. A dedicated bushfire risk unit has been established in the NSW NPWS Conservation Branch to ensure threatened and significant species, and cultural and historical assets are explicitly considered in the new generation of bushfire risk management plans in NSW.

Monitoring and research

Extensive surveys have been conducted across the World Heritage property to assess the condition of ecosystems and priority species post-fire. Reports have been published for both NSW and Queensland national parks including post-fire assessment data as well as recommendations for management. Data from these assessments provides baseline information for monitoring and informs management practices. The NSW and Queensland governments have supported further research of the OUV of the property and threats, examples of which are found in Appendix C**.** Research and monitoring efforts provide continual input to inform adaptive management in the Gondwana Rainforests.

Capital works

Infrastructure is being improved in national parks to aid in fire management. Upgrades to fire response infrastructure include communication facility maintenance, upgraded water storage facilities and fire trail management to support efficient and adequate firefighting accessibility. Visitor experience services such as walking tracks and visitor amenities are also being repaired and upgraded following damage caused by extreme weather events.

2.1.2 Threatened species recovery and prospects

Threatened species recovery

Protecting threatened species remains a key priority in maintaining the OUV of the Gondwana Rainforests of Australia. The 2022 state of conservation report featured several recovery actions which are beginning to deliver positive outcomes.

- Rufus Scrub-bird: further habitat has been listed as a NSW Asset of Intergenerational Significance, and the NSW Government has partnered with the Australian National University to develop a range-wide monitoring plan based on a pilot program in Barrington Tops National Park.
- Eastern Bristlebird: a genetic management plan has been developed for this species, which supports the captive breeding and translocation program underway.
- Hastings River mouse/Koontoo: ongoing surveys have not detected the presence of Hastings River mice in some habitat where it was previously living. Habitat restoration efforts and ongoing monitoring projects are underway, supported by an Australian Heritage Grant.
- Mountain mist frogs (*Litoria* spp.) and Mountain frogs (*Philoria* spp.): a captive breeding program is underway at Southern Cross University, and invasive species management actions such as exclusion fencing and feral animal trapping are occurring at key habitat sites.
- Threatened flora: seed collection and flora surveys occur across the World Heritage property, as well as weed control and the expansion of biosecurity protocols.

Threatened Species frameworks

The Threatened Species Action Plan 2022–2032 maps the Australian Government's pathway to protect, manage and restore Australia's threatened species and important natural places. The 4 objectives outlined in the plan are to reduce the risk of extinction for all priority species, improve the condition of all priority places, prevent new extinctions and to protect and conserve at least 30% of Australia's land mass. The Action Plan prioritises 110 species, several of which occur in the Gondwana Rainforests, including the brush-tailed rock-wallaby and mountain frog.

In NSW, the NPWS Threatened Species Framework for zero extinctions outlines the priority initiatives for on-park threatened species conservation. In 2022–23 on-ground actions for more than 175 threatened species were delivered within national parks, in partnership with NSW Saving our Species program, addressing 13 threats such as climate change, habitat loss and invasion by feral animals and weeds. In 2022–23, 52 entities (including individual species and Threatened Ecological Communities) had active projects within the Gondwana Rainforests across 68 sites. Other initiatives under the Framework include Assets of Intergenerational Significance (see Section 2.1.4), the largest feral animal control program in NSW national park history (see Appendix C), the establishment of a dedicated ecological risk unit to ensure threatened species are considered in fire plans, and a world-class ecological health framework across national parks (see Section 3.2).

In Queensland, the Queensland Threatened Species Program details the state's long-term plan to conserve Queensland's most vulnerable flora and fauna species. The program goals are to ensure threatened species persist and recover, are resilient to changing environments, and Queensland people value threatened species and contribute to their recovery. To achieve these goals the program places emphasis on building partnerships to improve the capacity and capability to protect and recover threatened species.

Devils Hole lookout, Barrington Tops National Park. Source: John Spencer, NSW DCCEEW

2.1.3 Case study — Mount Ballow mountain frog

Mount Ballow mountain frog *Philoria knowlesi*

The Mount Ballow mountain frog, described in 2022, is a small ground dwelling species found only in rainforests and adjacent forests in the McPherson Ranges along the NSW-Queensland border. Critical habitat for several species of rainforest frogs, including the Mount Ballow mountain frog, was directly impacted by the bushfires in 2019–20.

To support their long-term ecological recovery following the bushfires, dedicated Queensland Parks and Wildlife Service rangers teamed up with neighbouring landholders to conduct a carefully planned conservation burn. The aim of the burn was to reduce the risk of future bushfires impacting rainforests and native species, and to help efforts to control invasive species within the World Heritage property. The successful conservation burn underscores the power of community collaboration and proactive land management in protecting and preserving endangered species and their habitats.

Mount Ballow mountain frog *Philoria knowlesi*. Source: Harry Hines, Queensland DETSI

2.1.4 Policies and frameworks

In partnership with the Australian Government, state and territory Environment Ministers are sharing progress made to incorporate environment considerations in their respective emergency response management and planning systems. To complement this work, all natural resource management regions across Australia now have a biodiversity emergency preparedness plan in place. These plans were initially established with funding from the Natural Heritage Trust and outline potential roles of regional natural resource management organisations, and key environmental priorities in response to disasters relevant to the region.

NSW Assets of Intergenerational Significance

The *NSW National Parks and Wildlife Act 1974* enables the NSW Minister for the Environment and Heritage to declare land in the national parks reserve system as an environmental or cultural Asset of Intergenerational Significance (AIS). AIS declarations are focused on enhancing the protection of threatened species habitat. NSW NPWS continues to declare land with exceptional environment value as AIS. As of April 2024, there are 43 AIS sites for 24 species, spanning 48,000 hectares within the Gondwana Rainforests of Australia. These AIS locations are explicitly considered in the new

generation of bushfire risk management plans. NSW NPWS has been undertaking a project to raise awareness and foster greater public appreciation for selected AIS through interpretation.

Queensland Values Based Management Framework

The *Qld Nature Conservation Act 1992* provides the legislative basis for the conservation of nature through the dedication, declaration and management of protected areas and the protection of native wildlife and its habitat. The Queensland Parks and Wildlife Service (QPWS) applies the Values-Based Management Framework to ensure that protected areas are being managed appropriately to protect values and achieve goals and objectives. This includes ensuring protected areas are well designed, have adequate and appropriate management, and deliver protected area objectives — particularly the conservation of values. The framework is built on international standards for adaptive management and evaluation.

2.1.5 Case study — Nightcap Oak

Nightcap oak *Eidothea hardeniana*

Australia's 2022 state of conservation report highlighted the Nightcap oak, a critically endangered species of relict Gondwanan flora. The 2022 report referenced a project to create insurance populations from cuttings and seeds. As of May 2024, there has been little success with cutting propagation. Seed collection is seeing better results and 74 seed grown plants have been planted at 12 sites within the World Heritage property. Ongoing seed collection is planned to be undertaken annually.

Fire suppression plans have been developed to protect at risk populations during wildfires, and sclerophyll species have been removed from trail areas within *Eiodothea* habitat to improve the recovery trajectory for the Nightcap oak's habitat and reduce future flammability. This species is part of the NSW Saving our Species program. The 2023 scorecard assessment infers the species is on track for recovery and details monitoring and management actions for the species in 2022–23.

Nightcap oak *Eidothea hardeniana*. Source: Justin Mallee NSW NPWS

2.2 Impacts of myrtle rust

Decision 45 COM 7B.79 Paragraph 5:

5. Notes with concern the impact of Myrtle rust (Austropuccinia psidii) across fire-affected areas of the property, requests the State Party to continue monitoring to address its impact on the property's OUV

Myrtle rust (*Austropuccinia psidii*) is a fungus that causes severe disease in species of the Myrtaceae family. Myrtaceae is one of Australia's largest native plant families and many of its species occur within the Gondwana Rainforests. Myrtle rust impacts regeneration of vegetation after fire as the rust prefers young leaves and the mass of regrowth and seedlings that develop after fire provide conditions that are ideal for the development and spread of the pathogen. Myrtle rust is also present in parts of the property that were not fire affected.

In 2022, the Australian Government established the National Myrtle Rust Working Group. The group brings together experts from across Australia and New Zealand to monitor and drive a coordinated response to myrtle rust. Myrtle rust is listed on national priority lists such as the National Priority List of Exotic Environmental Pests, Weeds and Diseases and the National Priority Plant Pest List. The primary purpose of these lists is to facilitate activities that help prevent the entry, establishment and spread of exotic pests, weeds and diseases that have the potential for nationally important negative impacts on Australia's environment and/or social amenity.

2.2.1 Monitoring and management

Myrtle rust has been identified as a factor in the listing of critically endangered flora species under the Australian, NSW and Queensland governments threatened species lists. Representative *ex situ* populations of some species have been established across botanic gardens in Australia, to protect the viability and genetics of the threatened populations. Research and monitoring projects are also underway to assess the most vulnerable species and better understand the interactions between myrtle rust infection levels and factors such as climate, soil, disturbance and land management. Examples of this research can be found in Appendix C.

Myrtle rust is an exotic (not naturally occurring) pathogen in Australia and specific resistance genes are limited in vulnerable populations. Researchers are closely observing samples of at-risk plant species for displays of full, or partial resistance to myrtle rust. *Rhodamnia rubescens* trials have seen the most success to date, recording partial resistance when exposed to the pathogen in trials. Building on these results, research has begun to test tree breeding techniques, aiming to build resistance in diverse, locally adapted populations of the species.

Species not listed as threatened but observed to be vulnerable to myrtle rust can have their competitive fitness and general health significantly reduced by infection. Consequently, many are also being monitored for signs of damage by myrtle rust in areas the pathogen is known to exist.

The Australian Government's Environmental Biosecurity Office also funds a project bolstering the capability of Indigenous rangers in northern NSW and south-east Queensland to prepare for, detect and respond to plant pests and diseases threatening Australia's forests, including myrtle rust.

2.2.2 Case study — Native guava

Native guava *Rhodomyrtus psidioides*

Native guava was once a common species in the southern Queensland Gondwana Rainforests and is now listed as critically endangered under the EPBC Act. Surveys of this species in the Gondwana Rainforests over the past 2 years have failed to find any remaining mature trees. In some cases, only the dead, decaying stems are evidence that this species was once present. Myrtle rust is wide spread within the rainforest with observations occurring at all but 3 or 4 survey locations. Preliminary susceptibility testing of the species has found no resistance to myrtle rust infection.

The aim is to now collect and conserve representatives from remaining populations, examine the genetic diversity and structure within the conserved material and assess these for disease tolerance. Ideally, breeding or selecting for resistance could allow for rewilding of the species.

Native guava is one of the many native Myrtaceae species under threat in the Gondwana Rainforests. Since the incursion of myrtle rust to the Australian mainland, populations *of Rhodamnia rubescens* and *Rhodamnia maideniana* have also significantly declined. Similarly, *Gossia hillii*, *Decaspermum humile* and *Lenwebbia spp*. are experiencing drastic population decline in some of the iconic tourist destinations, with severe dieback on *Lenwebbia prominens* at Twin Falls in Springbrook and *Lenwebbis sp.* in the Border Ranges. As with native guava, conservation efforts are focused on preserving *ex situ* populations of affected species and exploring resistance in populations.

Native guava (*Rhodomyrtus psidioides*) impacted by myrtle rust in Lamington National Park. Source: Geoff Pegg, Queensland Department of Agriculture and Fisheries

2.3 Managing climate change

Decision 45 COM 7B.79 Paragraph 6:

6. Welcomes the continued efforts of the State Party to develop an understanding of projected changes resulting from climate change in relation to the property's OUV, also requests the State Party to utilise the knowledge and understanding gained through these processes to guide adaptive management strategies to strengthen the climate and disaster resilience of the property

Responding to climate change is a priority for the Australian Government to protect our environment and people. Australia is already experiencing significant climate change impacts. Action at all levels of government is necessary to reduce the rate and adapt to the challenges. Australia is accelerating investment in emissions reduction, renewable energy production and adaptation efforts, while also investing in targeted climate adaptation projects.

2.3.1 Climate change policies

The Australian Government has demonstrated its commitment to the Paris Agreement by legislating targets to reduce Australia's emissions by 43% below 2005 levels by 2030 and achieving net zero by 2050. The *Climate Change Act 2022* outlines Australia's greenhouse gas emissions reduction targets. As part of this legislation, the Minister for Climate Change and Energy tables an Annual Climate Change Statement to Parliament.

The Australian Government has committed to setting successively more ambitious emissions reduction targets and by 2025 will be required to submit its 2035 emissions reduction target under the Paris Agreement. The Australian Government has passed legislation to establish the Net Zero Economy Authority to support regions, workers and communities to manage the impacts and share in the benefits of Australia's net zero transition.

A number of state and territory governments have also recently passed legislation to embed their climate change targets. For example, the NSW Government has legislated whole-of-government climate action in the *Climate Change (Net Zero Future) Act 2023* (NSW). As committed under Stage 1 of the implementation plan for the Act, NSW NPWS has prepared a Task Force on Climate-related Financial Disclosures (TCFD) Statement, which sets out the economic, financial and physical impacts, risks and opportunities of climate change and planned future priorities for NPWS operations. World Heritage is listed as a priority in the TCFD along with sites impacted by the 2019–20 bushfires, the 2021–22 floods, and AIS (Assets of Intergenerational Significance) sites. NSW NPWS has also developed a portfolio Carbon Positive Plan which sets out the approach to become carbon positive by 2028.

In addition, on 18 April 2024, the Queensland Government passed the *Clean Economy Jobs Act 2024*, legislating a 75% emissions reduction target by 2035. This is significant given Queensland represents approximately 29% of total national emissions. Legislating these targets will provide greater accountability to reduce emissions across Australia, leading to better global outcomes for climate.

2.3.2 Climate change adaptation

Reducing the impacts of climate change on Australia's World Heritage properties through adaptation planning and building resilience is a key focus of the Australian Government. The Australian

Government is investing AUD$27.4 million over 2 years to deliver a National Climate Risk Assessment and National Adaptation Plan. The National Adaptation Plan will establish a framework for adapting to nationally significant, physical climate risks identified in the risk assessment.

The framework will help Australia 'mainstream' adaptation action, drive private sector investment, support people and communities in disproportionately vulnerable situations, and manage climate risks as part of the business-as-usual work of government, organisations, communities and by individuals across Australia. The National Adaptation Plan is integrated with the National Climate Risk Assessment to continuously inform the adaptation planning process. The Risk Assessment will provide Australia's first shared understanding of the most important risks facing the nation from climate change. More of the Australian Governments climate adaptation actions are outlined in Section 2.4.3.

NSW NPWS has developed the *NSW National Parks Climate Change Adaptation Strategy*, which applies adaptation pathways to identify proactive solutions to protect key park values. The NSW Government is also delivering Aboriginal climate change adaptation programs and working cooperatively with First Nations land managers to make proactive and informed decisions about how to respond to climate change impacts, both now and into the future. NSW climate planning is guided by the AdaptNSW online hub, which has recently released updated climate projections, NARCliM 2.0.

The Queensland Climate Adaptation Strategy 2017–2030 provides a framework for climate resilience and climate risk management in Queensland's diverse communities, landscapes and economies. This includes the development of 7 industry-led adaptation plans to address the specific climate adaptation needs of key sectors. These plans outline the adaptation measures relevant to each sector, address complex issues and make sure adaptation measures complement each other. The Queensland Government has collaborated with Griffith University's Queensland Climate Ready Initiative to develop guidance material to assist Queensland Government departments respond to key challenges from climate change.

2.3.3 Key projects

Tweed Caldera project

NSW NPWS has finalised a climate change adaptation management plan to protect the OUV of the Tweed Caldera group of Gondwana Rainforests reserves. The plan identifies actions to protect climate refugia, genetically rescue populations at risk and support the transition of habitats to maximise the conservation of biodiversity. Actions include fire management strategies to enhance protection of biodiverse climate refugia and establishing additional populations of native species in lower risk locations. A Macquarie University Climate-ready Revegetation guide has been applied to identify seeds and species for revegetation to build resilience against fires and maintain habitat structure while protecting refugia. This plan is the first on-ground application of holistic climate change adaptation measures undertaken in the Gondwana Rainforests. Lessons and recommendations from this project are being implemented across NSW national parks. The NSW Government's commitment to climate adaptation in the World Heritage property reflects the importance of the OUV of the Gondwana Rainforests as a World Heritage property and as a carbon sequestration tool.

Gondwana Rainforests (Queensland section) climate change adaptation project

The Queensland Government is developing a Climate Change Adaptation Plan for the Gondwana Rainforests (Queensland section). This plan will facilitate integration of climate adaptation into World Heritage strategic planning, park management activities and the identification of priority projects to

maximise protection of OUV and other values, under threat from climate change. This work will be undertaken collaboratively with research institutions, local governments, First Nations peoples with rights and interests in the Gondwana Rainforests and non-government organisations who contribute to the protection of the World Heritage property. This project will build on lessons and learnings from other climate adaptation planning undertaken in Queensland for the Wet Tropics of Queensland and K'gari (Fraser Island) World Heritage properties.

Northern Rivers region climate adaptation

The Australian Government NESP is funding a project to develop a climate change adaptation plan for threatened species and ecosystems of the Northern Rivers region in NSW. This region includes several of the Gondwana Rainforest reserves, including the Wollumbin and Border Ranges National Park. The project is taking a co-design approach with First Nations organisations and involves consultations with multiple community groups, state and local governments to develop an online tool to assist with climate adaptation by local communities and governments.

2.3.4 Case study — Mountain angelica

Mountain angelica *Gingidia rupicola*

Mountain angelica is found within 2 locations in the Gondwana Rainforests. At the time of the 2022 report, population size was estimated to be 50 individuals, and the species was considered at high risk to climate change, as it exists in the cloud forests.

In 2023, a comprehensive population survey was undertaken. A total of 270 individual plants were recorded across 2 subpopulations, with 20-25% of plants recorded to be juveniles. The surveys also detected an increase in the known area of occupancy. The species was encountered in a variety of habitats on cliffs and boulders, usually in small groups. Habitats include large boulders in subalpine eucalypt grassy woodland, rocky cliffs near Nothofagus forest, and herbfield and mossland on cliffs, ledges and cracks. Plots have been established to monitor plant response to climate factors. This species is part of the NSW NPWS Saving our Species program – the 2023 scorecard assessment is available online.

Mountain angelica *Gingidia rupicola*. Source: Lachlan Copeland, NSW DCCEEW

2.4 Cooperative learning and knowledge exchange

Decision 45 COM 7B.79 Paragraph 7 and 8:

7. Further requests the State Party to continue implementing the recommendations of the Royal Commission into National Natural Disaster Arrangements in order to strengthen emergency management as well as climate and natural disaster risk reduction; and also welcomes the development of an updated climate variability assessment methodology and climate change toolkit for the World Heritage properties

8. Appreciates the efforts of the State Party to share the lessons learned with other States Parties to the Convention facing similar threats, promoting knowledge exchange on fire management strategies at World Heritage properties

Australia aims to be an international leader in emergency management and climate change action. Australia is continually striving to improve our responses to emergencies to build a resilient environment, learning from past experiences and leading by example in best practice adaptive management and the recognition of First Nations values and perspectives. Australia is supporting capacity building and knowledge sharing efforts internationally so we can collectively address the challenges posed to World Heritage. Australia's National Emergency Management Agency collaborates internationally to share resources and experiences between fire affected jurisdictions.

Australia has shared examples of post-fire recovery projects at international fora. At the 2023 G20 Environment and Climate Sustainability Working Group, Australia shared examples of recovery projects following the 2019–20 bushfires, such as feral animal control, seed banking, and pollinator monitoring. These case studies were included in the Compendium of Best Practices: Restoration of Forest Fire Impacted Areas.

2.4.1 Royal Commission into National Natural Disaster Arrangements

In October 2023, approaching the third anniversary of the Royal Commission into National Natural Disaster Arrangements, the Australian Government joined with all states and territories to provide an update on implementation and released an interim report on the progress of the Royal Commission's recommendations.

Substantial achievements have been realised in response to implementation of the Royal Commission recommendations. On 14 December 2023, the former Australian Government Minister for Agriculture, Fisheries and Forestry announced the completion of all 15 recommendations directed solely to the Australian Government. The implementation of these recommendations has significantly strengthened Australia's ability to support communities before, during, and after disasters. Key measures include:

- Establishment of the National Emergency Management Agency.
- Creation of the Disaster Ready Fund to improve disaster resilience and bolster Australia's ability to reduce disaster risk by investing in important disaster mitigation projects.
- Establishment of the National Coordination Mechanism to support national situational awareness and coordination of effective consequence management of complex crises.

- Establishment of the Australian Fire Danger Rating System to improve fire agencies' ability to consistently communicate the fire threat across Australia.
- Establishment of the Australian Climate Service to support better decision-making through improved climate, disaster risk and impact information, services and tools.

Good progress has been made on the remaining 65 recommendations, which are the responsibility of state and territory governments either independently or in partnership with the Australian Government.

To strengthen resilience to future disasters, the Australian Government and state and territory governments are striving to continuously improve approaches to natural hazard management through the application of lessons and consideration of climate impacts. To support this, the Royal Commission findings and strategic objectives are being incorporated into ongoing work programs. Further information about the Australian Government's response to the Royal Commission and other Independent Reviews can be found on the National Emergency Management Agency's website.

2.4.2 Implementation of recommendations from the NSW Bushfire Inquiry

NSW agencies continue to progress actions to implement the recommendations of the NSW Bushfire Inquiry. The status of this work is provided on the NSW Government Department of Premier and Cabinet website. Key actions and progress on the 76 accepted recommendations include:

- Completion of a national bushfire database that monitors trends and impacts of bushfire activity across all land tenures and vegetation types.
- Extension of the Applied Bushfire Science Program until 2026 to enhance capability to assess priority at-risk species and ecosystems and identify long term recovery actions.
- The Wildlife in Emergencies Sub Plan provides a framework for wildlife response in emergency management under NSW state emergency management arrangements.
- Wildlife first response training for NSW firefighters and nationally accredited bushfire awareness training for wildlife rehabilitators and veterinarians.
- Approximately AUD$19 million for 2020–24 allocated through the Fire Access and Fire Trail program to upgrade works across NSW, including in the Gondwana Rainforests and adjacent areas.

2.4.3 Climate vulnerability assessment methodology and climate change toolkit for the World Heritage properties

The Australian Government has published an updated climate vulnerability assessment of Australia's World Heritage properties and a climate change toolkit. The assessment and toolkit were developed for the Australian Government by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) – Australia's national science agency. The toolkit includes a detailed handbook to support property managers to understand and address the complexities of climate change and undertake adaptation planning, and a workbook that can be used in planning workshops.

While this toolkit was designed for use on Australian World Heritage properties, it could be used to inform climate adaptation planning internationally. The toolkit is available online and Australia has promoted its use for World Heritage, domestically and internationally. Representatives from CSIRO and the Australian Government presented on the toolkit at the ICOMOS General Assembly 2023 and

at online workshops for the development of the Climate Action for World Heritage through Capacity Building project (the CAT project).

2.4.4 International sharing and capacity building

Australia is working closely with other States Parties, UNESCO and the Advisory Bodies to progress the implementation of the UNESCO Policy Document on Climate Action for World Heritage. Australia is supporting capacity building through the World Heritage Leadership Programme by providing funding for the First Phase of the Climate Action for World Heritage through the CAT Project. Australia is also sharing lessons with other States Parties to build capacity across the World Heritage system in better responding to climate change impacts and recognising First Nations values and approaches. This includes engaging in international knowledge sharing initiatives, such as Panorama, and an officer-level technical exchange program between Australia and representatives from other States Parties.

The CAT Project will develop standardised guidance and a toolkit to enable more consistent treatment and consideration of climate change impacts on World Heritage properties. Australia's involvement with this project has been informed by lessons learnt from previous disaster responses and will continue to facilitate knowledge exchange.

The NSW Government has a range of initiatives that address the increasing pressures on World Heritage including climatic change and more intense bushfires. These initiatives include the Tweed Caldera Climate change adaptation action plan which is the first in Australia to showcase the range of adaptation actions available based on risk level (see Section 2.3.3). These actions are being implemented including assisted migration, genetic rescue and climate ready revegetation.

NSW NPWS has also demonstrated a commitment to threatened species conservation in the Zero Extinction Framework (see Section 2.1.2), including protection of Assets of Intergenerational Significance (see Section 2.1.4), and the EcoHealth Framework (see Section 3.2). NPWS has also prioritised World Heritage in the Task Force on Climate-related Financial Disclosures Statement which includes measures to risk manage and adapt to the impacts of climate change that have already been 'locked in' by present emissions (see Section 2.3.1). NSW welcomes further opportunities to share climate change and bushfire initiatives with other World Heritage managers.

2.5 Springbrook National Park water extraction proposal

Decision 45 COM 7B.79 Paragraph 9:

9) Also noting the information that the approval process for the granting of a water mining license to extract water from the vicinity of Springbrook National Park is not completed, requests furthermore the State Party to inform the World Heritage Centre once the Australian Government has received the proposal referral and determined whether the proposed activity will be subject to further impact assessment in relation to the property

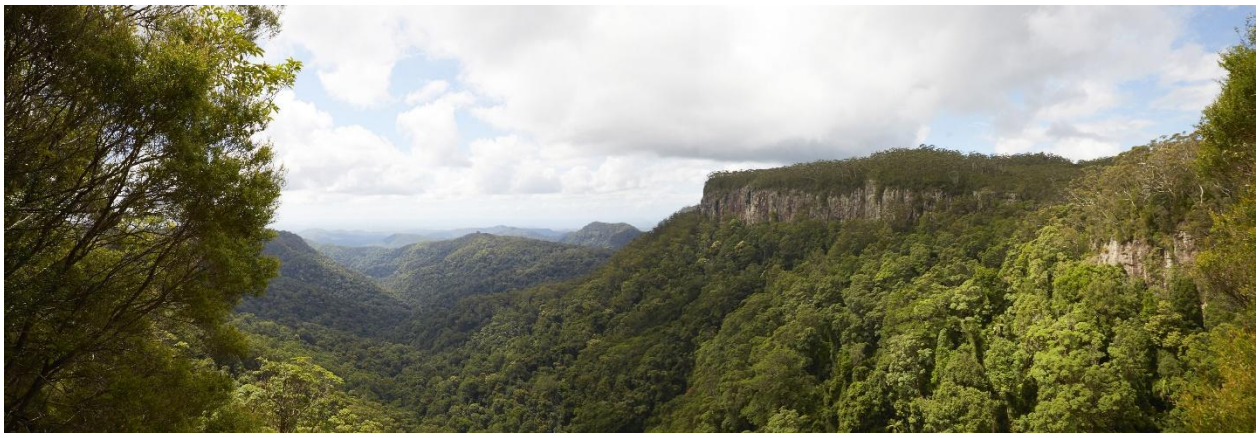
As detailed in Section 1.4, Australia's national environmental law (the EPBC Act) protects the OUV of the Gondwana Rainforests. Any action that will have, or is likely to have, a significant impact on World Heritage values must be referred to the Australian Government Minister for the Environment

for a decision on whether the action is a 'controlled action'. Controlled actions undergo rigorous impact assessment and are not permitted to proceed without approval.

As reported in correspondence from Australia to the UNESCO World Heritage Centre in April 2023, a development proposal to extract groundwater has not been referred for assessment under the EPBC Act. In accordance with paragraph 172 of the *Operational Guidelines*, the Australian Government will advise the World Heritage Centre if a proposed action proceeds and is determined to require assessment for potential significant impacts on the OUV of the property.

The Springbrook community and some First Nations peoples have raised concerns about local water extraction. Since March 2020, the Queensland Department of Regional Development, Manufacturing and Water has a moratorium notice preventing the construction of new underground water works for commercial use.

The Springbrook plateau and its water resources are locally managed by the Council of the City of Gold Coast. In 2021, the City of Gold Coast, in partnership with the Queensland University of Technology, and state and local government, launched the Springbrook Groundwater Investigation to study the interaction between rainfall, groundwater, and surface water on the Springbrook plateau. Over 3 years (2021–2024), during an unusually wet La Niña period, the project established a network of rainfall, bore, and surface water monitoring sites, revealing that groundwater discharge drives surface water flows, particularly in dry weather, though the study lacks significant dry season data. Plans for long-term monitoring and research are being developed and implemented to address climate change and human impacts. This work will build on the existing monitoring network focusing on threatened species, the ecohydrology of rainforest canopy species, and cloud moisture input to the cloud forest areas.



Springbrook National Park. Source: Maxime Coquard, Queensland DETSI

3 Other current conservation issues identified by the State Party which may have an impact on the property's Outstanding Universal Value

Australia continues to innovate and improve adaptive management across the World Heritage property including by considering new ways to achieve best practice.

3.1 First Nations Heritage values

First Nations peoples in Australia have an ongoing connection to the Country which cannot be separated from the natural values of the place. Acknowledging and incorporating First Nations peoples' relationships with land, and including First Nations perspectives in management, leads to better outcomes for the community and the land. Australia values collaboration with First Nations peoples in our natural World Heritage properties and recognises that First Nations peoples' participation in management of land and sea is crucial to environmental outcomes.

The Australian Government recognises that First Nations peoples are the experts on their heritage, and it is vital that their voices are heard when deciding how their heritage is recognised, managed and protected.

3.1.1 First Nations cultural heritage surveys on the Dorrigo escarpment

The NSW Government is developing the Dorrigo Escarpment Great Walk, a 46 km multi-day walk through Dorrigo and Bindarri national parks, in Gumbaynggirr Country. Members of the Gumbaynggirr Nation worked with NPWS to survey 40 km of the proposed track and identify and protect cultural values or objects within the project area.

Josh Marsden, Philip Marsden and Malakai from Dorrigo Aboriginal Land Council looking out over Dorrigo National Park as part of Aboriginal cultural heritage surveys. Source: T Denman, NSW DCCEEW

3.1.2 Gondwana Rainforests Hastings Macleay group First Nations values assessment

The NSW Government has been awarded an Australian Heritage Grant to support work with Aboriginal communities and knowledge holders in the Hastings Macleay group of reserves of the Gondwana Rainforests. This project will support First Nations peoples to gather information on their cultural values and deliver increased opportunities for First Nations people to engage with Country, establish a consultative network and prepare a report outlining the First Nations heritage values of the area.

3.1.3 Queensland Cultural values assessment

The Queensland Government have been working with the Githabul, Yuggera Ugarapul, and Yugambeh First Nations peoples in the Queensland components of the Gondwana Rainforests to gather information about First Nations cultural values which will inform better management, protection, and interpretation of those values, and to support First Nations peoples in continuing their cultural practices. Outcomes of this project will help inform the Climate Change Adaptation Plan for the Gondwana Rainforests referenced in Section 2.3.3.

3.2 Ecological Health monitoring

The Ecological Health Performance Scorecards (EcoHealth Program) aims to enhance the health of NSW national parks by tracking key ecological indicators and using that data to refine management actions. On-ground monitoring data and park management actions will be used to develop scorecards, providing annual snapshots of what is happening with native plants and animals, important ecological processes, and threats to ecological health, such as feral animals and weeds. The data will be used for park evaluations and reserve planning to guide adaptive decision-making and increase transparency and trust in management of the NSW national parks system in the face of climate change. An example region under this program is outlined in Appendix C**.**

In Queensland, Health Checks are qualitative tools for efficiently and routinely assessing the condition of key natural, historic and visitor values on parks. They use indicators that can be applied consistently state-wide and across a diversity of values. Health Checks are based on the impacts of threatening processes and parameters that are good indicators of condition. Health Checks use the IUCN condition categories and definitions to describe the overall condition of a value across the park. Health Checks sit within a hierarchical framework of monitoring and complement other basic monitoring.

3.3 IUCN Green List

Lamington National Park, one of the Queensland National Parks that make up the World Heritage property, was admitted to the IUCN Green List on 20 April 2024. The Green List evaluation for Lamington was twofold: firstly to showcase international standards of management at a World Heritage protected area, and secondly to act as a peer review of the Values Based Management Framework to confirm that state-wide QPWS park management is in line with IUCN Best Practice. The Green List assessment process highlighted QPWS's ability to react to stochastic impacts such as bushfires with a timely and strategic approach, linking monitoring and directing pest and weed management to the protection of key values like Lamington's fire sensitive ecosystems. It also showcased QPWS's collaboration with southeast Queensland's Healthy Land and Water Catchment

Group to undertake vegetation management. Monitoring of key ecosystems and priority threatened species has revealed the success of recovery actions undertaken by QPWS.

3.4 Retrospective Inventory Project

As part of the UNESCO World Heritage Centre's Retrospective Inventory Project, Australia has been asked to submit updated maps of the Gondwana Rainforests of Australia. Work is continuing to update maps to reflect the complex boundaries of this World Heritage serial property as inscribed on the World Heritage List in 1986 and extended in 1994.

Dorrigo Rainforest Centre, Dorrigo National Park. Source: John Spencer, NSW DCCEEW

4 Potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other areas, where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity

4.1 Quarterly reporting to the UNESCO World Heritage Centre

In accordance with paragraph 172 of the *Operational Guidelines*, the Australian Government routinely informs the UNESCO World Heritage Centre of potential development activities that may affect the Outstanding Universal Value of Australia's World Heritage properties.

Notification reports and a full list of proposed, approved and withdrawn proposals relating to the Gondwana Rainforests (and other World Heritage properties) that require consideration under the EPBC Act are available at World Heritage Committee notification of development proposals.

The most recent proposed development included in the notification reports for the Gondwana Rainforests was the Doughboy Wind Farm proposal, reported in June 2021. A decision has been made that this project will require assessment and approval under the EPBC Act before it can proceed.

Appendix A: Decision 45 COM 7B.79 on the Gondwana Rainforests of Australia adopted by the 45th session of the World Heritage Committee (Riyadh, 2023)

Gondwana Rainforests of Australia (Australia) (N 368bis)

Decision: 45 COM 7B.79

The World Heritage Committee,

1. Having examined Document WHC/23/45.COM/7B.Add,
2. Recalling Decision **44 COM 7B.89**, adopted at its extended 44th (Fuzhou/online, 2021) session,
3. Noting with appreciation the State Party's continued collaborative efforts in post-fire monitoring and recovery actions, expresses its utmost concern about the negative impacts of the 2019-20 bushfires to the attributes of the property's Outstanding Universal Value (OUV), in particular species that are vulnerable to the impacts of fire;
4. Also recalling that the State Party initiated an immediate management response following the fires including assessment of impacts, planning and funding commitments to ensure long-term recovery, takes note that some recovery efforts have been delayed due to the recent flooding in the region, and encourages the State Party to continue management actions to support the recovery of the property, including the monitoring of ongoing health and recovery of areas and species, as well as recovery actions and adaptive management strategies;
5. Notes with concern the impact of Myrtle rust (*Austropuccinia psidii*) across fire-affected areas of the property, requests the State Party to continue monitoring to address its impact on the property's OUV;
6. Welcomes the continued efforts of the State Party to develop an understanding of projected changes resulting from climate change in relation to the property's OUV, also requests the State Party to utilise the knowledge and understanding gained through these processes to guide adaptive management strategies to strengthen the climate and disaster resilience of the property;
7. Further requests the State Party to continue implementing the recommendations of the Royal Commission into National Natural Disaster Arrangements in order to strengthen emergency management as well as climate and natural disaster risk reduction; and also welcomes the development of an updated climate variability assessment methodology and climate change toolkit for the World Heritage properties;
8. Appreciates the efforts of the State Party to share the lessons learned with other States Parties to the Convention facing similar threats, promoting knowledge exchange on fire management strategies at World Heritage properties;
9. Also noting the information that the approval process for the granting of a water mining license to extract water from the vicinity of Springbrook National Park is not completed, requests

furthermore the State Party to inform the World Heritage Centre once the Australian Government has received the proposal referral and determined whether the proposed activity will be subject to further impact assessment in relation to the property;

10. Finally requests the State Party to submit to the World Heritage Centre, by **1 December 2024**, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 47th session.

Appendix B: Statement of Outstanding Universal Value for the Gondwana Rainforests of Australia, adopted by the World Heritage Committee in 2012

Brief synthesis

The Gondwana Rainforests of Australia is a serial property comprising the major remaining areas of rainforest in southeast Queensland and northeast New South Wales. It represents outstanding examples of major stages of the Earth's evolutionary history, ongoing geological and biological processes, and exceptional biological diversity. A wide range of plant and animal lineages and communities with ancient origins in Gondwana, many of which are restricted largely or entirely to the Gondwana Rainforests, survive in this collection of reserves. The Gondwana Rainforests also provides the principal habitat for many threatened species of plants and animals.

Criterion (viii): The Gondwana Rainforests provides outstanding examples of significant ongoing geological processes. When Australia separated from Antarctica following the breakup of Gondwana, new continental margins developed. The margin which formed along Australia's eastern edge is characterised by an asymmetrical marginal swell that runs parallel to the coastline, the erosion of which has resulted in the Great Divide and the Great Escarpment. This eastern continental margin experienced volcanicity during the Cenozoic Era as the Australian continental plate moved over one of the planet's hot spots. Volcanoes erupted in sequence along the east coast resulting in the Tweed, Focal Peak, Ebor and Barrington volcanic shields. This sequence of volcanos is significant as it enables the dating of the geomorphic evolution of eastern Australia through the study of the interaction of these volcanic remnants with the eastern highlands.

The Tweed Shield erosion caldera is possibly the best-preserved erosion caldera in the world, notable for its size and age, for the presence of a prominent central mountain mass (Wollumbin/Mt Warning), and for the erosion of the caldera floor to basement rock. All three stages relating to the erosion of shield volcanoes (the planeze, residual and skeletal stages) are readily distinguishable. Further south, the remnants of the Ebor Volcano also provides an outstanding example of the ongoing erosion of a shield volcano.

Criterion (ix): The Gondwana Rainforests contains outstanding examples of major stages in the Earth's evolutionary history as well as ongoing evolutionary processes. Major stages represented include the 'Age of the Pteridophytes' from the Carboniferous Period with some of the oldest elements of the world's ferns represented, and the 'Age of Conifers' in the Jurassic Period with one of the most significant centres of survival for Araucarians (the most ancient and phylogenetically primitive of the world's conifers). Likewise the property provides an outstanding record of the 'Age of the Angiosperms'. This includes a secondary centre of endemism for primitive flowering plants originating in the Early Cretaceous, the most diverse assemblage of relict angiosperm taxa representing the primary radiation of dicotyledons in the mid-Late Cretaceous, a unique record of

the evolutionary history of Australian rainforests representing the 'golden age' of the Early Tertiary, and a unique record of Miocene vegetation that was the antecedent of modern temperate rainforests in Australia. The property also contains an outstanding number of songbird species, including lyrebirds (Menuridae), scrub-birds (Atrichornithidae), treecreepers (Climacteridae) and bowerbirds and catbirds (Ptilonorhynchidae), belonging to some of the oldest lineages of passerines that evolved in the Late Cretaceous. Outstanding examples of other relict vertebrate and invertebrate fauna from ancient lineages linked to the break-up of Gondwana also occur in the property.

The flora and fauna of the Gondwana Rainforests provides outstanding examples of ongoing evolution including plant and animal taxa which show evidence of relatively recent evolution. The rainforests have been described as 'an archipelago of refugia, a series of distinctive habitats that characterise a temporary endpoint in climatic and geomorphological evolution'. The distances between these 'islands' of rainforest represent barriers to the flow of genetic material for those taxa which have low dispersal ability, and this pressure has created the potential for continued speciation.

Criterion (x): The ecosystems of the Gondwana Rainforests contain significant and important natural habitats for species of conservation significance, particularly those associated with the rainforests which once covered much of the continent of Australia and are now restricted to archipelagos of small areas of rainforest isolated by sclerophyll vegetation and cleared land. The Gondwana Rainforests provides the principal habitat for many species of plants and animals of outstanding universal value, including more than 270 threatened species as well as relict and primitive taxa.

Rainforests covered most of Australia for much of the 40 million years after its separation from Gondwana. However, these rainforests contracted as climatic conditions changed and the continent drifted northwards. By the time of European settlement rainforests covered only 1% of the landmass and were restricted to refugia with suitable climatic conditions and protection from fire. Following European settlement, clearing for agriculture saw further loss of rainforests and only a quarter of the rainforest present in Australia at the time of European settlement remains.

The Gondwana Rainforests protects the largest and best stands of rainforest habitat remaining in this region. Many of the rare and threatened flora and fauna species are rainforest specialists, and their vulnerability to extinction is due to a variety of factors including the rarity of their rainforest habitat. The Gondwana Rainforests also protects large areas of other vegetation including a diverse range of heaths, rocky outcrop communities, forests and woodlands. These communities have a high diversity of plants and animals that add greatly to the value of the Gondwana Rainforests as habitat for rare, threatened and endemic species. The complex dynamics between rainforests and tall open forest particularly demonstrates the close evolutionary and ecological links between these communities.

Species continue to be discovered in the property including the re-discovery of two mammal species previously thought to have been extinct: the Hastings River Mouse (*Pseudomys oralis*) and Parma Wallaby (*Macropus parma*).

Integrity

The Gondwana Rainforests contains the largest and most significant remaining stands of subtropical rainforest and Antarctic Beech (*Nothofagus moorei*) cool temperate rainforests in the world, the

largest and most significant areas of warm temperate rainforest and one of only two remaining large areas of Araucarian rainforest in Australia.

Questions related to the small size of some of the component parts of the property, and the distance between the sites for the long-term conservation and continuation of natural biological processes of the values for which the property was inscribed have been raised. However, noting that the serial sites are in reasonable proximity and are joined by corridors of semi-natural habitats and buffers, compensation for small size and scattered fragments is being made through intensive management consistent with approved management plans and policy.

Since inscription, there have been significant additions to the protected area estate in both New South Wales and Queensland in the region encompassing the Gondwana Rainforests. These areas have undergone a rigorous assessment to determine their suitability for inclusion in the property and a significant extension of the property is planned as indicated by the addition of the property extension to Australia's Tentative List in May 2010. In relation to ongoing evolution, the level of legislative protection provided for World Heritage properties will minimise direct human influence and enable the continuation of natural biological processes.

Protection and management requirements

Institutional arrangements for the protection and management of Gondwana Rainforests are strong. The property is made up of 41 reserves, almost all of which are within the protected area estate, and primarily managed by the Queensland Parks and Wildlife Service and the New South Wales National Parks and Wildlife Service. Both States have legislation relating to protected areas and native flora and fauna that provide protection for the values of the Gondwana Rainforests.

In 1993, Governments agreed to establish a Coordinating Committee, comprised of on-ground managers from these agencies and the Australian Government, to facilitate the cooperative management of the property at an operational level. A Technical and Scientific Advisory Committee and a Community Advisory Committee have also assisted with management advice since their establishment in 2002.

In 1994 when the property was extended, the World Heritage Committee requested the Australian authorities to complete the management plans of individual sites, particularly those within Queensland. Management plans have been produced for the majority of individual reserves within the property, and are in draft form or planned for the remainder.

In 2000 a Strategic Overview for Management for the Central Eastern Rainforest Reserves of Australia (now Gondwana Rainforests) World Heritage Area was published. This overarching document is a major element in guiding cooperative management by the three Governments in relation to the identification, protection, conservation, rehabilitation and presentation of the Gondwana Rainforests.

All World Heritage properties in Australia are 'matters of national environmental significance' protected and managed under national legislation, the Environment Protection and Biodiversity Conservation Act 1999. This Act is the statutory instrument for implementing Australia's obligations under a number of multilateral environmental agreements including the World Heritage Convention. By law, any action that has, will have or is likely to have a significant impact on the World Heritage

values of a World Heritage property must be referred to the responsible Minister for consideration. Substantial penalties apply for taking such an action without approval. Once a heritage place is listed, the Act provides for the preparation of management plans which set out the significant heritage aspects of the place and how the values of the site will be managed.

Importantly, this Act also aims to protect matters of national environmental significance, such as World Heritage properties, from impacts even if they originate outside the property or if the values of the property are mobile (as in fauna). It thus forms an additional layer of protection designed to protect values of World Heritage properties from external impacts.

On 15 May 2007, the Gondwana Rainforests of Australia was added to the National Heritage List; National Heritage is also a matter of national environmental significance under the EPBC Act.

The impacts of climate change and high levels of visitation, undertaking effective fire management, and mitigating the effects of invasion by pest species and pathogens present the greatest challenges for the protection and management of Gondwana Rainforests. Climate change will impact particularly on those relict species in restricted habitats at higher altitudes, where particular microclimatic conditions have enabled these species to survive. Management responses include improving the resilience of the property by addressing other threats such as inappropriate fire regimes and invasion by pest species, and trying to increase habitat connectivity across the landscape.

Appendix C: Research and operational activities in the Gondwana Rainforests of Australia

Prescribed burning
NESP is funding a project in the Bunya mountains. This project takes place outside of the World Heritage property and includes working with First Nations people to examine ecosystem responses to cultural burning and creating a scientific evidence base for promoting cultural burning as a tool for land management outside of the project area.

In spring 2023, *Grow, Harvest, Heal*, a First Nations led project to re-establish connection to Country, gathered for what is believed to be the first Community-led cultural burn in Barrington Tops in NSW since European colonisation. As part of the project, a vulnerable orchid (Bulgarr-Gulga Watuun*, Diuris venosa*) is being protected in the World Heritage property.

Feral animal management
A feral horse management plan for Barrington Tops National Park has recently been approved in NSW. The plan aims to protect natural, cultural and recreational values, including World Heritage values, and outlines how the population and impact of horses will be monitored. Control measures have been implemented as part of an integrated feral animal control program and the numbers of feral horses and other feral species has been reduced by 660. This is the most extensive feral animal control program in the park's history.

Surveys, monitoring and research
In the Gondwana Rainforests, there has been research on lifting cloud base, calling phenology and distribution of threatened frogs, monitoring techniques, status and threat assessments, and projects on various threatened species. Newly identified species continue to be described, including ancient and endemic lineages (for example, new species of frogs mentioned in the 2022 report). This is in addition to ongoing bushfire recovery monitoring efforts conducted across the property for species and areas impacted by the 2019–20 fire event.

Myrtle rust
Understanding the impacts from myrtle rust on rainforest community structure and composition, biosecurity protocols, interaction with fire, and managements programs is still being refined. This is an active area of research, with studies examining the impacts of the pathogen on fire affected regions being conducted in and around the Gondwana Rainforests. These projects include Fensham & Radford-Smith 2021 and Stevenson et al 2023.

The Australian Government's NESP funds a project researching myrtle rust in World Heritage forests, aiming to guide investment, fortify biosecurity monitoring protocols, and understand the vulnerability of species and ecosystems to myrtle rust. Research aims to understand what makes an ecosystem vulnerable to myrtle rust to identify how to direct investment, management, and restoration efforts.

Ecological Health Performance Scorecards

One of the pilot regions included as part of this project is the Northern Forests region, which includes much of the Hastings Macleay group of the Gondwana Rainforests of Australia. Extensive monitoring of the site has commenced and the first report card for the area is expected to be published in 2025. Monitoring and conservation plans developed for this region will be used to inform management across the National Parks. Further scorecard regions may be identified in the future, and monitoring plans can be designed to measure outcomes identified as high priority in each region.

Coomera Falls, Lamington National Park. Source: Queensland DETSI