

DRAFT Sunshine Coast

Macropod Conservation Plan



Acknowledgement of Country

Sunshine Coast Council acknowledges the traditional Country of the Kabi Kabi Peoples and the Jinibara Peoples of the coastal plains and hinterlands of the Sunshine Coast and recognise that these have always been places of cultural, spiritual, social, and economic significance. We wish to pay respect to their Elders – past, present, and emerging – and acknowledge the important role Aboriginal and Torres Strait Islander people continue to play within the Sunshine Coast Community.

Council is committed to ongoing communications and consultation with the Traditional Owners and the broader Aboriginal and Torres Strait Islander community of the Sunshine Coast in the implementation of the Macropod Conservation Plan.

^{*}The Macropod Conservation Plan – Background Paper prepared by Ecosure Ltd provided the foundation for the objectives and actions associated with this Plan. The Plan will undergo a complete review in 2032. The MCP Action Plan (Attachment 1 to this Macropod Conservation Plan) will be reviewed annually.

1 Introduction

1.1 Background

Sunshine Coast residents and visitors place a high value on the region's beautiful natural amenity and relaxed lifestyle. It is a region of abundant natural resources with 55% of its native vegetation remaining, over 78,000 ha of open spaces, and abundant wildlife. But it is also a rapidly developing region, with population expected to exceed 500,000 by 2041 (SCRC 2017). While this brings economic and lifestyle opportunities to the region, it also increases the necessity to protect the other species with whom we share this space.

The Sunshine Coast Environment and Liveability Strategy 2017 sets the long-term strategic direction for the region's natural environment, including maintaining viable populations of native animals and animal movement between priority habitat areas. The preparation of the Macropod Conservation Plan (MCP) is in response to Council's commitment to the long-term conservation of macropods within the region.

Macropods, particularly the eastern grey kangaroo, are iconic species in eastern Australia. But Council's aspirational vision for the *Macropod Conservation Plan* is about more than protecting iconic species. This Plan, with the assistance of the community, will help ensure that creating safe space for other species remains front of mind as the Sunshine Coast region continues to grow.

Kangaroos and wallabies are some of Australia's most recognisable and popular animals. Macropods appeal to our identity and culture, as well as being tourism icons, valued by both domestic and international visitors. Highly significant to Indigenous Australians, many traditional land management practices are related to macropods (Bowman et al. 2001).

There is a strong desire by the Sunshine Coast community to protect current and future macropod populations in the local government area (LGA). There are many dedicated residents, wildlife rescue/care groups, researchers, conservationists, and advocates who support the development of a conservation plan for our macropods. Commitment by Sunshine Coast residents, businesses, industry, and community groups is integral to the success of any species conservation plan.

1.2 Purpose

The purpose of this Macropod Conservation Plan (hereafter referred to as the MCP or the Plan) is to ensure that sustainable populations of eastern grey kangaroos (*Macropus giganteus*; EGK) and other macropods (Section 2) continue to thrive in the LGA.

The MCP will use a whole of landscape and integrated partnerships approach to macropod conservation by:

- spatially identifying macropod habitat, occurrence clusters and movement pathways (as well threats to survival) in the LGA.
- setting out the approaches to be adopted in maintaining wild populations of EGK and several other key macropod species.

• allocating responsibilities to stakeholders to ensure desired outcomes are reached during the life of this ten-year plan.

The MCP has considered and integrated a complex array of issues, data and expert advice and is supported by a literature review of the focus species' ecology, preferred habitat, home ranges and characteristics of the landscape that facilitate or limit movement of macropods (Ecosure 2020).

1.3 Desired outcomes

The success of the Plan relies on meeting objectives that are measurable, attainable, and prioritised according to resource availability. To achieve this, Council has a strategic framework for the MCP comprised of the following Desired Outcomes:

- 1. Management is evidence based and informed by contemporary research and knowledge of Sunshine Coast macropod populations.
- 2. Planning and development assessment processes and supporting guidelines are in place to support the protection of macropods and their habitat.
- 3. The impacts of threatening processes on macropods in the Sunshine Coast local government area are understood and minimized.
- 4. A landscape approach to macropod conservation is achieved through advocacy, education, and partnerships with the community.

This Plan can serve as a reference document for Council during the operational works phase of development assessment where possible.

1.4 Legislative and policy context

All species covered in this Plan are declared 'least concern wildlife' under the *Nature Conservation Act 1992* (NC Act) and supporting legislation. Other applicable legislation and policy is provided in Table 1.

Table 1 Applicable legislation and policy

Legislation	Application and purpose of legislation
Nature Conservation Act 1992 (NC Act) and its subordinate legislation: Nature Conservation (Animals) Regulation 2020 Nature Conservation (Macropod) Conservation Plan 2017	"The protection of native wildlife and its habitat"
Animal Care and Protection Act 2001	"Provide standards for the care and use of animals" and to "Protect animals from unjustifiable, unnecessary or unreasonable pain"
Sunshine Coast Planning Scheme 2014	"Maintenance of the Sunshine Coast as one of the most biologically diverse areas in Australia through use of planning scheme features such as Strategic Framework Map 5 Natural Environment Elements" (Part 3 Strategic Framework, 3.7 Natural Environment)
Sunshine Coast Environment and Liveability Strategy 2017	Vision of a healthy and liveable Sunshine Coast in 2041. Sets the strategic framework for our natural environment, including biodiversity: 2.1 Natural ecosystems and the native plants and animals they support are preserved. 2.2 Priority habitat areas are protected, enhanced, connected and responsive to changing environmental conditions. 2.9 Biodiversity is valued, respected, and used sustainably to support our lifestyle, livelihoods and sense of place. Transformational Action 6: Connecting Nature with People included Task 6.9: Develop a macropod conservation plan.

2 Focus species

The Sunshine Coast region is home to seven macropod species of the genera *Macropus, Thylogale* and *Wallabia*, all of which are the subject of this plan (Table 2). Their status and habitat requirements are described below.

Table 2 Focus species conservation status and habitats

Common name	Scientific name	Queensland status	Commonwealth status	Habitat	
Eastern grey kangaroo	Macropus giganteus	Least concern	Not listed	Open, grassy plains close to grassy woodlands and forests for shelter.	
Swamp wallaby	Wallabia bicolor	Least concern	Not listed	Broad gradient of habitats – mainly thick forest undergrowth or coastal heath.	
Whiptail wallaby	Macropus parryi	Least concern	Not listed	Grassy open woodlands, particularly in hilly and sloped environments. Commonly found in mountainous areas.	
Black-striped wallaby	Macropus dorsalis	Least concern	Not listed	Shelters in dense vegetation during the day and ventures into the open at night. Dense patches of woody and shrubby vegetation, including lantana thickets for daytime shelter.	
Red-necked wallaby	Macropus rufogriseus	Least concern	Not listed	Eucalypt forests and coastal scrub within close to open areas for foraging.	
Red-legged pademelon	Thylogale stigmatica	Least concern	Not listed	Primarily a rainforest dwelling species but has been observed in dense sclerophyll forests. Occasionally forage in open pastures but remain alert and vigilant.	
Red-necked pademelon	Thylogale thetis	Least concern	Not listed	Wet sclerophyll forests and rainforests within close proximity to open grasslands and pastures.	

3 Objectives and actions

The strategic framework for the MCP comprises the following Desired Outcomes:

3.1 Desired outcome 1: Management is evidence based and informed by contemporary research and knowledge of Sunshine Coast macropod populations.

Objective: Develop a better understanding of macropod population dynamics and habitat on the Sunshine Coast to inform and strengthen EGK and other macropod conservation planning.

Actions:

- 3.1.1 Engage with research partners, including the University of the Sunshine Coast (USC) to continue to monitor and explore SC EGK population trends, and conservation genetics.
- 3.1.2 Contribute to habitat permeability and critical habitat mapping to identify where macropods could persist during unsuitable climatic periods, drought, bushfire and with urban development pressures.
- 3.1.3 Build on current data to create a more robust macropod dataset for future use.

Establish mapping and database resources to deliver continuous program delivery:

- integrate the findings of the *Sunshine Coast Planning for Improved Fauna Movement Study* where applicable
- create consistent data collection methods internally and with external partners
- seek opportunities to gather incidental macropod records from other programs (e.g. SCC Healthy Places invasive animals and uncontrolled domestic dogs monitoring).

3.2 Desired outcome 2: Planning and development assessment processes and supporting guidelines are in place to support the protection of macropods and their habitat.

Objective: Consider future development areas identified in Shaping SEQ and the Sunshine Coast Planning Scheme 2014 and associated amendments/new planning schemes to ensure proactive consideration of macropod populations and their habitat requirements.

Objective: Provide planning guidelines to help maintain a landscape that contains sufficient habitat to sustain a viable population of EGKs in the Sunshine Coast LGA, giving due consideration to quantity, connectivity, and condition of habitat in areas of urban growth.

Actions:

- 3.2.1 Develop and maintain macropod mapping data.
- 3.2.2 Incorporate macropod mapping data outputs in policy and planning through:
 - preparation of mapping tools showing movement pathways and high-quality habitat for macropods.
 - review of the correlation between macropod mapping and the new planning scheme biodiversity mapping layers including vegetation/habitat (core and connecting) areas and riparian corridors.
 - developing a guideline that includes provisions for ground-truthing requirements for macropods in new developments.
 - developing conditions within the Planning Scheme to regulate infrastructure associated with developments to mitigate the impacts on macropods. e.g., culverts and under/overpasses.
- 3.2.3 Develop guidelines to minimise macropod mortality associated with translocations, entrapment and forced dispersal at development sites.
- 3.2.4 New developments include macropod sensitive design with the following range of macropod impact mitigation options:
 - road design and speed limits to reduce macropod interactions with vehicles and facilitate safe movement for wildlife and people.
 - proven signage such as electronic signs, and road surface markings,
 - roadside plantings ensure visibility and discourage grazing
 - Kangaroo friendly planting in suitable locations
- 3.2.5 Develop property fencing guidelines for macropod movement pathways and high human use areas:
 - that prevents isolation of genetic movement for macropods and all wildlife between critical habitats.

- to stipulate acceptable methods for construction and materials.
- 3.2.6 Undertake inventory of all existing fauna connectivity structures, assets and purpose-built fauna exclusion fencing across entire LGA.

3.3 Desired outcome 3: The impacts of threatening processes on macropods in the Sunshine Coast local government area are understood and minimized.

Objective: Identify and recommend measures that reduce macropod mortality and protect and enhance macropod populations and their habitat.

Objective: Identify best practice strategies that are being used to protect urban macropod populations elsewhere in Australia.

Actions:

- 3.3.1 Install appropriate and effective injury/mortality mitigation measures (such as strategic sign installation; underpasses; virtual fencing; and targeted traffic calming) at kangaroo-related road accident hot spots. Explore innovative options and monitor for efficacy. (Refer to Appendix 5: MCP Background Paper).
- 3.3.2 Continue to record information regarding macropod-vehicle accidents, trauma to macropods and negative human/ macropod interactions as applicable
- 3.3.3 Continue monitoring and control (if required) of wild canids and mapping of wild canid data.
- 3.3.4 Continue to monitor and respond to problematic behaviour by domestic dogs that impact on macropods and other wildlife.
 - Develop a responsible dog ownership brochure dealing with wildlife generally and kangaroos specifically.
- 3.3.5 Contribute to the incorporation of environmental threats to macropods into relevant drought and bushfire response plans.

3.4 Desired outcome 4: A landscape approach to macropod conservation is achieved through advocacy, education, and partnerships with the community.

Objective: Connect community, government, industry, and research bodies in a collaborative approach to macropod conservation.

Objective: Increase understanding and ownership of macropod conservation actions across all sectors of the community, including through the development of a "Living with Kangaroos" information package with a focus on EGKs.

Actions:

- 3.4.1 Create opportunities to engage the community and other partners to investigate important habitat or movement pathways close to urban centres with a view to:
 - identifying preferred macropod movement pathways around residential developments, schools, or golf courses where interactions between macropods and humans may increase.
 - promote macropod populations as a valuable tourism attraction.
- 3.4.2 Actively seek to enhance habitat connectivity on private land within southeast Queensland utilising existing programs such as Voluntary Conservation Agreements (VCAs), Land for Wildlife, and other partnerships.
- 3.4.3 Engage with traditional owners to incorporate traditional knowledge and practices into education and on-ground management.
- 3.4.4 Encourage community adoption of science opportunities in partnership with community.
- 3.4.5 Develop targeted educational material and a communication plan—consistent with background paper key messages and incorporating the "save my mob" marketing tool.
- 3.4.6 Collaborate with State government agencies for a coordinated fauna movement approach including the installation of signage and fauna movement infrastructure at priority locations.

References

Bowman D, Garde M, and Saulwick A, 2001, Kunj-ken makka man-wurrk Fire is for kangaroos: interpreting Aboriginal accounts of landscape burning in Central Arnhem Land. In *Histories of Old Ages: Essays in honour of Rhys Jones* (ed O'Connor S), Pandanus Books, Research School of Pacific and Asian Studies, Australian National University, Canberra.

Brunton E, Conroy G, Ogbourne S, Brunton A, Hohwieler K, 2021, *Sunshine Coast eastern grey kangaroo conservation genetics: Phase 1*, University of the Sunshine Coast. Prepared for Sunshine Coast Council.

Ecosure Ltd, 2020, Sunshine Coast Macropod Conservation Plan: Background Paper.

Sunshine Coast Regional Council, 2017, Environment & Liveability Strategy 20

