

## **Attachment 1: Macropod Conservation Plan – Action Plan**



Table 1 provides a summary of all the actions described under the Desired Outcomes and Success Indicators, along with proposed timeframes, estimated costs, funding source, action status and the responsible branch. The *Macropod Conservation Plan* will undergo a complete review in 2032. The *MCP Action Plan* (Attachment 1 to this *Macropod Conservation Plan*) will be reviewed annually.

**Table 1: Action plan summary**

No.	Action Summary	Success Indicator	Timeframe	Estimated cost	Funding source	Status	Branch Responsibility
<i>DO1: Management is evidence based and informed by contemporary research and knowledge of Sunshine Coast macropod populations.</i>							
<i>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.</i>							
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.	<ul style="list-style-type: none"> <li>phases 1 &amp; 2 of EGK genetic study have been completed and received by council.</li> <li>unique Sunshine Coast EGK genetic profile confirmed and recognised in SCC significant species database and communications.</li> <li>Prepare response to recommendations of SCC gene flow analysis.</li> </ul>	Ongoing	Low	SCC USC research Partnership's grant; EL, Op	Underway	EO
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.	<ul style="list-style-type: none"> <li>strategic mapping has been completed and incorporated into council's mapping system.</li> </ul>	Medium	High	EL	Future	EO, ESP
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	<ul style="list-style-type: none"> <li>business case finalised for database management staffing resource.</li> <li>Council's internal macropod data consolidated into a single</li> </ul>	On-going	Medium- high	Op; EL	Underway	EO

	<ul style="list-style-type: none"> <li>- integrate the findings of the <i>Sunshine Coast Planning for Improved Fauna Movement Study</i> where applicable</li> <li>- create consistent data collection methods internally and with external partners</li> <li>- seek opportunities to gather incidental macropod records from other programs (e.g. SCC Healthy Places invasive animals and uncontrolled domestic dogs monitoring).</li> </ul>	dataset, and investigations are underway into the feasibility of a built-for-purpose or existing app.					
No.	Action Summary	Success Indicator	Timeframe	Estimated cost	Funding source	Status	Branch Responsibility

*DO2: 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.*

3.2.1	Develop and maintain macropod mapping data.	<ul style="list-style-type: none"> <li>• modelling for macropods in the SCC Improved Fauna Movement Study updated bi-annually – including fauna records and USC EGK genetics research data.</li> <li>• movement pathways and high-quality macropod habitat mapped and ground-truthed for application in development areas.</li> </ul>	Ongoing	Medium	Op, EL	Underway	ESP and EO
3.2.2	Incorporate macropod mapping data outputs in policy and planning through: <ul style="list-style-type: none"> <li>- Preparation of mapping tools showing movement pathways and high-quality habitat for macropods</li> <li>- review of the correlation between macropod mapping and the new planning scheme</li> </ul>	<ul style="list-style-type: none"> <li>• a technical guideline is used for ground truthing requirements in new developments.</li> <li>• biodiversity layers to include the findings of the Sunshine Coast Planning for Improved</li> </ul>	Ongoing	Medium	Op, EL	Underway	ESP, TIP, EO & PSP

	<p>biodiversity mapping layers including vegetation/habitat (core and connecting) areas and riparian corridors.</p> <ul style="list-style-type: none"> <li>- developing a guideline that includes provisions for ground-truthing requirements for Macropods in new developments.</li> <li>- developing conditions within the Planning Scheme to regulate infrastructure associated with developments to mitigate the impacts on macropods. e.g., culverts and under/overpasses.</li> </ul>	<p>Fauna Movement Study.</p> <ul style="list-style-type: none"> <li>• identified unobstructed movement pathways for macropods are retained/protected.</li> </ul>					
3.2.3	<p>Develop guidelines to prevent macropod mortality associated with translocations, entrapment and forced dispersal at development sites.</p>	<ul style="list-style-type: none"> <li>• a technical guideline includes advice on how to avoid translocation and prevent entrapment and forced dispersal at development sites.</li> <li>• exclusion fencing for macropods has been incorporated into the Open Space Landscape Infrastructure Manual (LIM): Environmental Management of Flora and Fauna.</li> </ul>	Short	Low	Op	Complete	DS
3.2.4	<p>New developments include macropod sensitive design with the following range of developer-sponsored macropod impact mitigation options:</p> <ul style="list-style-type: none"> <li>- road design and speed limits to reduce macropod interactions with vehicles and facilitate safe movement for wildlife and people.</li> <li>- proven signage such as electronic signs, and road surface markings,</li> <li>- roadside plantings ensure visibility and discourage grazing</li> <li>- Kangaroo friendly planting in suitable locations</li> </ul>	<ul style="list-style-type: none"> <li>• Property fencing guidelines have been developed and incorporated into the Open Space Landscape Infrastructure Manual (LIM): Fences and Gates.</li> <li>• annual or biennial review of recent developments that presented opportunities for developer sponsored initiatives.</li> <li>• appropriate flora species selection guidelines have been</li> </ul>	Ongoing	Low	Op	Ongoing	P&G, DS, EO

		included in the Open Space Landscape Infrastructure manual (LIM): Environmental Management of Flora and Fauna.					
3.2.5	Develop property fencing guidelines for macropod movement pathways and high human use areas <ul style="list-style-type: none"> <li>- that prevents isolation of genetic movement for macropods and all wildlife between critical habitats.</li> <li>- to stipulate acceptable methods for construction and materials.</li> </ul>	<ul style="list-style-type: none"> <li>• property fencing guidelines have been developed and incorporated into the Open Space Landscape Infrastructure Manual (LIM): Fences and Gates</li> </ul>	Ongoing	Low	Op	Complete	DS, P&G, EO
3.2.6	Undertake inventory of all existing fauna connectivity structures assets and fauna exclusion fencing across entire LGA.	<ul style="list-style-type: none"> <li>• an inventory of fauna infrastructure has been completed and a process for updating has been developed.</li> </ul>	Medium	High	Op, EL	Underway	EO, ESP, DS
<b>No.</b>	<b>Action Summary</b>	<b>Success Indicator</b>	<b>Timeframe</b>	<b>Estimated cost</b>	<b>Funding source</b>	<b>Status</b>	<b>Branch Responsibility</b>

DO3: 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.

3.3.1	Install appropriate and effective injury/mortality mitigation measures (such as strategic sign installation 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).	<ul style="list-style-type: none"> <li>• signage locations mapped</li> <li>• signage installation guide developed and added to LIM</li> <li>• mitigation measures, such as virtual fencing, underpasses, and signage etc continue to be installed at appropriate locations</li> </ul>	Ongoing	Low to High	Op, EL	Underway	EO, TIM, TIP
3.3.2	Continue to record information regarding macropod-vehicle accidents, trauma to macropods and negative human/ macropod interactions as applicable	<ul style="list-style-type: none"> <li>• roadkill app finalised</li> </ul>					
3.3.3	Continue monitoring and control (if required) of wild canids and mapping of wild canid data.	<ul style="list-style-type: none"> <li>• monitoring of wild canids is</li> </ul>	Ongoing	High	Op, EL	Underway	HP, EO

		routinely undertaken and needs- based control is being implemented.					
3.3.4	Continue to monitor and respond to problematic behaviour by domestic dogs that impact on macropods and other wildlife.	<ul style="list-style-type: none"> <li>data collected by Australia Zoo Wildlife Hospital and Council's Community Response team is being monitored by EO and community education has been amended as required.</li> </ul>	Long	Low	Op	Underway	CR, EO
3.3.5	Contribute to the incorporation of environmental threats to macropods into relevant drought and bushfire response plans.	<ul style="list-style-type: none"> <li>the Bushfire Management Guidelines: Appendix 5 Ecological Guidelines for prescribed burn planning and implementation addresses macropods and other wildlife.</li> <li>the updated Local Disaster Management Plan (2019-2022) includes actions relating to macropods and/or wildlife in general.</li> </ul>	Medium	Low	Op	Underway	EO, ESP
<b>No.</b>	<b>Action Summary</b>	<b>Success Indicator</b>	<b>Timeframe</b>	<b>Estimated cost</b>	<b>Funding source</b>	<b>Status</b>	<b>Branch Responsibility</b>

*DO4: 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.*

3.4.1	<p>Create opportunities to engage the community and other partners to investigate important habitat or movement pathways close to urban centres with a view to:</p> <ul style="list-style-type: none"> <li>identifying preferred macropod movement pathways around residential developments, schools, or golf courses where interactions between macropods and humans may increase.</li> <li>consider promoting macropod populations as a valuable tourism attraction.</li> </ul>	<ul style="list-style-type: none"> <li>USC Eastern Grey Kangaroo research project</li> <li>NatureWatch Sunshine Coast—Councils new citizen science engagement platform—has included at least one Macropod project/platform.</li> <li>finalised scoping discussions with USC re tourism</li> </ul>	Short	Medium	EL	Underway	EO; IT
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		opportunity					
3.4.2	Actively seek to enhance habitat connectivity on private land within southeast Queensland—utilising existing programs such as VCAs, Land for Wildlife, and other partnerships	<ul style="list-style-type: none"> <li>the Conservation Partnerships programs such as LFW, VCA and EL Grants &amp; Partnerships continue to be funded and implemented by council.</li> <li>connectivity opportunities identified in the LFWSEQ Geospatial Analysis 2022 (Draft) are being implemented by council and other SEQ local governments.</li> </ul>	Ongoing	Medium	Op, EL	Underway	EO
3.4.3	Engage with Traditional Owners to incorporate traditional knowledge and practices into education and on-ground management.	<ul style="list-style-type: none"> <li>in accordance with council's Reconciliation Plan, Traditional Owners continue to be included in environmental management issues that affect biodiversity, including, e.g. cultural burning.</li> </ul>	Ongoing	Low	Op	Underway	EO, ESP
3.4.4	Encourage community adoption of science opportunities in partnership with the community. - e.g. project in iNaturalist app or similar.	<ul style="list-style-type: none"> <li>a community project for surveying macropods in iNaturalist (or similar) has been assessed and progressed if deemed suitable. Future new opportunities for citizen science are assessed as required.</li> </ul>	Ongoing	Low	Op	Underway	EO
3.4.5	Develop targeted educational material and a communication plan —consistent with the background paper key messages and incorporating the “save my mob” marketing tool. . - . -	<ul style="list-style-type: none"> <li>a Living with Kangaroos suite of interpretive material has been developed and is publicly available.</li> <li>liaison with internal SCC teams has been undertaken to modify the existing Responsible Dog Ownership fact sheet to include dog behaviour around macropods</li> </ul>	Short	Low	Op, HP, EO	Future	EO, CB, HP, CR

		<p>and other wildlife.</p> <ul style="list-style-type: none"> <li>• a planting guide for residents who would like to encourage/discourage kangaroos on their property</li> <li>• kangaroo awareness and safety information available to SCC caravan parks, holiday parks, aged-care facilities, golf courses and schools as required.</li> </ul>					
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.	<ul style="list-style-type: none"> <li>• fauna movement project priorities identified and added to this plan</li> <li>• active collaboration between council and State Government (DTMR, DES) is continuing in relation to fauna movement on state roads.</li> <li>• At least one additional EGK movement structure has been installed and monitored at a priority location.</li> <li>• Discussion paper for single road network approach to the management of fauna movement and/or installation of signage and fauna movement infrastructure at priority locations.</li> </ul>	Ongoing	Low	Op	Underway	ESP, EO, TIM, TIP



Table 2. Definitions of attributes

Implementation	Definitions
<b>Timeframe</b>	
On-going	Actions that will continue to be undertaken for the life of the MCP
Short	Actions that will commence within the next 12 months
Medium	Actions that will commence within the next two years
Long	Actions that will commence within the next five years
<b>Cost</b>	
High	Over \$100,000
Medium	\$10,000-\$100,000
Low	Below \$10,000
<b>Branch Responsibility</b>	
EO	Environmental Operations
ESP	Environment, Sustainability & Policy
BP	Information Technology
TIM	Transport Infrastructure Management
TIP	Transport Infrastructure Planning
CB	Communications Branch
DS	Development Services
SP	Strategic Planning
P&G	Parks and Gardens
HP	Healthy Places
CR	Community Response

