



Draft South East Queensland Koala Conservation Strategy 2019–2024

#31903 | 1019



Queensland
Government

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Contents

Minister’s foreword	2
Vision.....	3
Introduction	4
Government actions in progress.....	7
Proposed future actions.....	12
Targets.....	13
1. Strategic coordination	15
2. Habitat protection.....	17
3. Habitat restoration for koalas.....	21
4. Threat management	24
5. Community engagement.....	28
6. Improved mapping, monitoring, research and reporting	30
Have your say on this draft strategy.....	33

Minister's foreword



The koala is the quintessential Australian animal; a species of state, national and international importance—a natural and cultural heritage icon.

In Queensland, the greatest concentration of koalas is in South East Queensland where they compete for space with a rapidly growing population and high demand for development. As well as habitat loss, they face threats from vehicle strikes, dog attacks and disease.

Safeguarding the survival of koala populations and habitat amid our state's growing South East is a complex task—but one that must be addressed. The Queensland Government is committed to protecting koalas and appointed the Koala Expert Panel to provide advice on their future protection.

The South East Queensland Koala Conservation Strategy outlines how the Government is delivering on the Panel's six recommendations for improving koala conservation measures.

It is essential that we do not lose any more of the best quality koala habitat. As a core part of this Strategy, the Queensland Government has introduced new mapping of koala habitat across South East Queensland.

The identification of Koala Priority Areas will allow us to direct Government investment and other actions—such as restoration and threat mitigation—in places where they have the highest likelihood of success for koala conservation.

The Strategy also proposes new ways that we can further protect koalas through strategic coordination, habitat restoration, threat mitigation and community action.

I invite comments from all Queenslanders on this Strategy. Submissions can be made online at www.qld.gov.au/SEQkoalas.

This Strategy is an important step to delivering a strong coordinated approach to koala conservation in South East Queensland.

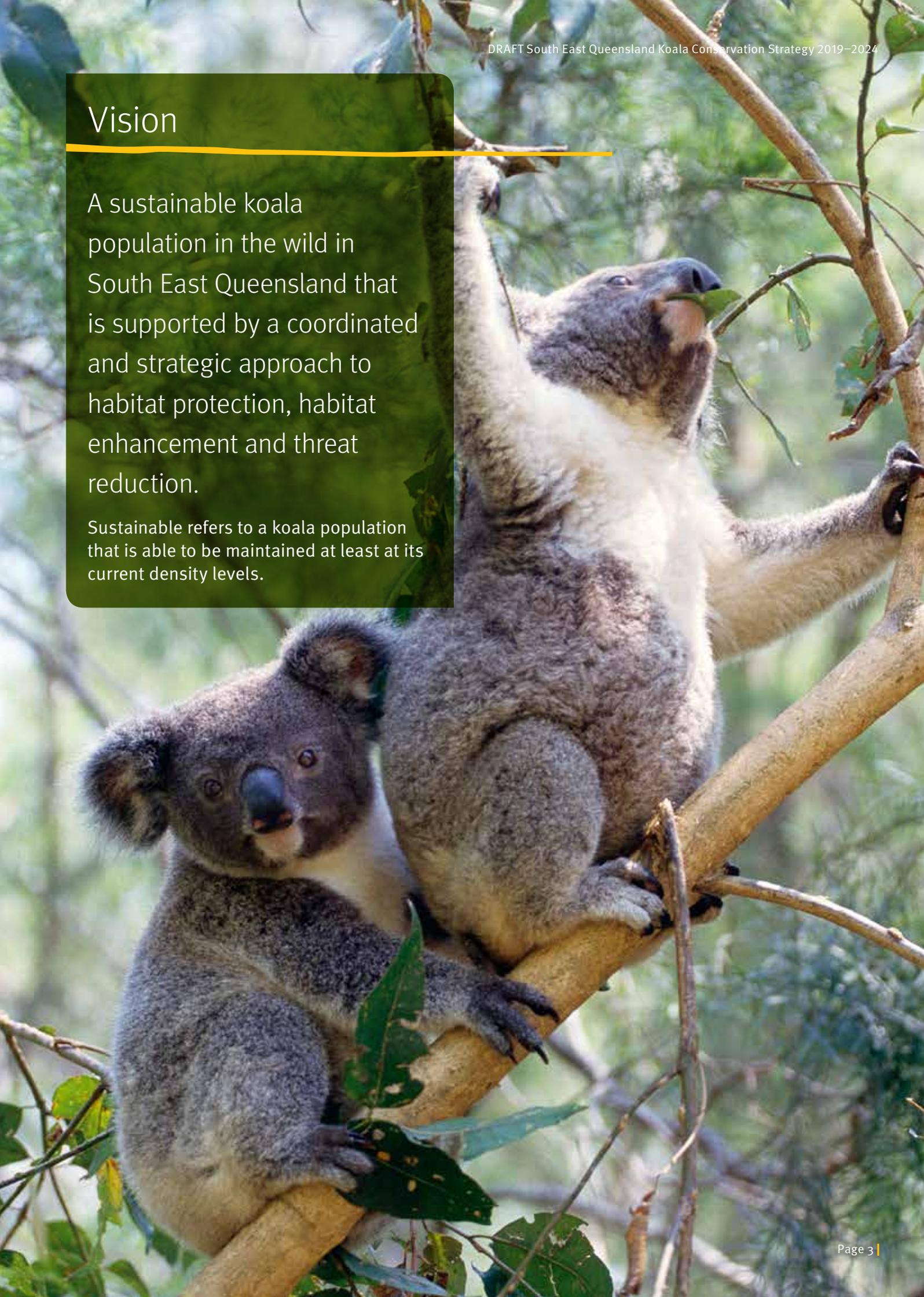
Leanne Enoch MP

Minister for Environment and the Great Barrier Reef
Minister for Science and Minister for the Arts

Vision

A sustainable koala population in the wild in South East Queensland that is supported by a coordinated and strategic approach to habitat protection, habitat enhancement and threat reduction.

Sustainable refers to a koala population that is able to be maintained at least at its current density levels.



Introduction

In Queensland, the greatest concentration of koalas is in South East Queensland (SEQ), where they now compete for space with a rapidly growing human population. Three quarters (74%) of core koala habitat has already been cleared in SEQ¹ since 1960 and the species is now listed as vulnerable.²

While habitat loss is the most significant problem affecting koalas in SEQ, it needs to be addressed in conjunction with other factors such as disease management, traffic, dog attacks and effective rescue and rehabilitation programs.

The draft *South East Queensland Koala Conservation Strategy 2019–2024* is underpinned by a proposal to direct investment to areas where there is the highest likelihood of success for koala conservation. Focusing on a coordinated approach to habitat protection, restoration and threat mitigation actions, it strikes the right balance between necessary development and koala conservation.

The draft Strategy proposes new ways we can further protect koalas into the future and has been developed in consultation with representatives from the conservation, building and development sectors, Traditional Owners and First Nations peoples, state and local government, through the Koala Advisory Council (KAC), to outline the actions needed to improve koala conservation.

Your feedback on this draft Strategy will inform the development of future policies, legislation and management actions. The Strategy will also draw upon meetings, workshops and other consultation measures with local government representatives and key stakeholders to ensure a collaborative and balanced approach.

The Queensland Government invites comments from all Queenslanders on the proposed actions in this draft Strategy. Submissions can be made online at the Queensland Government's Get Involved website (www.qld.gov.au/SEQkoalas).

The plight of the Queensland koala

Koalas are widely distributed across Queensland, with a nationally significant population in SEQ.

The Queensland Government has been monitoring koalas in SEQ for more than 20 years and in this time has amassed considerable data on koala distribution, density and demographic parameters.³

The South East Queensland Koala Population Modelling Study, presented to the Queensland Government, highlighted an 80% decline in koala population densities along the 'Koala Coast' (Wellington Point to the Logan River) and 54% decline in koala population densities in the Pine Rivers region between 1996 and 2014.³

This decline is the result of a number of factors, with habitat loss being the most significant. During this same period, Greater Brisbane's population increased at a rate faster than any capital city in Australia, growing by 40%.

The best habitat for koalas, with rich fertile soil for producing eucalyptus trees, are the areas that are also preferred for human settlement, agriculture and industry, this illustrates the competition for land in SEQ.

Current projections indicate the human population of SEQ will rise by two million people (to a total of 5.3 million) by 2041. This creates the need for, on average, more than 30,000 new dwellings each year.

1 Biodiversity Assessment Team, Queensland Herbarium, Department of Environment and Science.

2 Queensland's *Nature Conservation Act 1992* (NC Act), and the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

3 Rhodes, J.R., H. Beyer, H. Preece, and C. McAlpine. 2015. South East Queensland Koala Population Modelling Study. Uniquist, Brisbane, Australia.



Given the importance of the most suitable habitat for koalas (as it has the ability to sustain higher densities of koala populations) it is imperative that there is no further net loss of remaining habitat. Protection and restoration should be prioritised for these areas.

The Koala Expert Panel

In response to community concern about the rapid decline of koalas the Queensland Government appointed the Koala Expert Panel (KEP) in July 2016 to provide government with recommendations on the most appropriate and realistic actions to address the decline in, and ensure the persistence of, koala populations in the wild across SEQ.

The KEP, made up of experts in ecology, wildlife management, and planning and environment law, made six recommendations with supporting actions. The Queensland Government Response to the KEP report, committed to implementing all six recommendations and this draft Strategy outlines the proposed actions that respond to each recommendation.

The recommendations of the KEP were for:

1. A strategic and coordinated approach to koala conservation.
2. Ensure koala habitat is protected.
3. Strategic and landscape-scale koala habitat restoration.
4. Coordinated threat reduction and koala population management.
5. Strong community partnerships and engagement.
6. Targeted mapping, monitoring, research and reporting.



Government actions in progress

Achieving the vision of a sustainable koala population in the wild in SEQ requires a strategic commitment to the protection and expansion of koala habitat, and effective threat mitigation actions.

The government must be proactive and has already begun this work, implementing key reforms that will serve as the foundation of future actions:

- creating a Koala Advisory Council to coordinate, provide advice and ensure transparency and accountability
- developing new spatial modelling for koala habitat in SEQ
- defining Koala Priority Areas (KPA) to identify the optimum areas for koala habitat conservation and preparing changes to the SEQ planning framework to support this.

The fundamental principle behind the government's new approach for the delivery of koala conservation measures is the coordinated and strategic delivery of habitat protection, habitat restoration and threat mitigation actions. This approach differs from previous strategies, as it directs actions and policies to areas where there is the highest likelihood of success for koala conservation.

The Koala Advisory Council

The formation of the KAC was one of the recommendations made by the KEP and was essential to coordinate and provide advice to government on the development and implementation of this draft Strategy, including resourcing requirements, and to ensure transparency and accountability in decision making.

The KAC was appointed in 2018 to play a pivotal role in guiding and coordinating koala conservation effort by providing communication and collaboration pathways among state government departments, local governments, community organisations, non-government organisations and industry through:

1. providing advice to government on the preparation and implementation of the draft Strategy, including continuous improvement when the outcomes of the Strategy are evaluated

2. engaging stakeholders to support the delivery of the Strategy
3. ensuring transparency and accountability in government decision making by monitoring progress
4. evaluating the outcomes of the Queensland Government's monitoring and evaluation program and providing recommendations to ensure that government is on track to meet the targets, and endorsing the associated public report on changes to koala habitat over time
5. ensuring the long-term agenda for koala conservation is maintained
6. representing the views of stakeholder networks.

The KAC is chaired by Mr Mark Townend, former Chief Executive Officer, RSPCA Queensland, and membership includes representatives from Queensland Government departments, the Local Government Association of Queensland, non-government organisations and industry.

The KAC was instrumental in the development of this draft Strategy, upcoming planning reforms, and will continue to play a pivotal role in koala conservation in SEQ throughout the implementation of the final Strategy.

Spatial modelling for koala habitat in SEQ

The Queensland Government has developed state-of-the-art koala habitat mapping using advanced modelling techniques and its expertise in state-wide, comprehensive vegetation mapping. The new methodology, endorsed by the KEP, integrates a species distribution model with the Queensland Herbarium's regional ecosystem, mapping and validated koala occurrence records, to produce a comprehensive map that ranks koala habitat values across SEQ.

The new approach uses a set of key biophysical variables, associated with koala sightings, to construct a model linked to the regional ecosystem mapping.

Linking the new koala habitat mapping with the government's existing vegetation and land cover mapping allows the modelling to be updated and refined as new data becomes available.

Government actions in progress

The mapped koala habitat represents the best habitat for koalas, based on the combination of biophysical measures, suitable vegetation (for food and shelter) and koala occurrence records.

Based on the new modelling, the area of remnant and high-value regrowth koala habitat remaining in SEQ covers an area of 634,256 ha (Map B).

The new koala habitat mapping was developed to identify the habitat that koalas prefer based on vegetation type, expert analysis and modelling. Map C ranks the suitability of the different types of pre-clearing habitat for koalas and Map D, for current habitat.

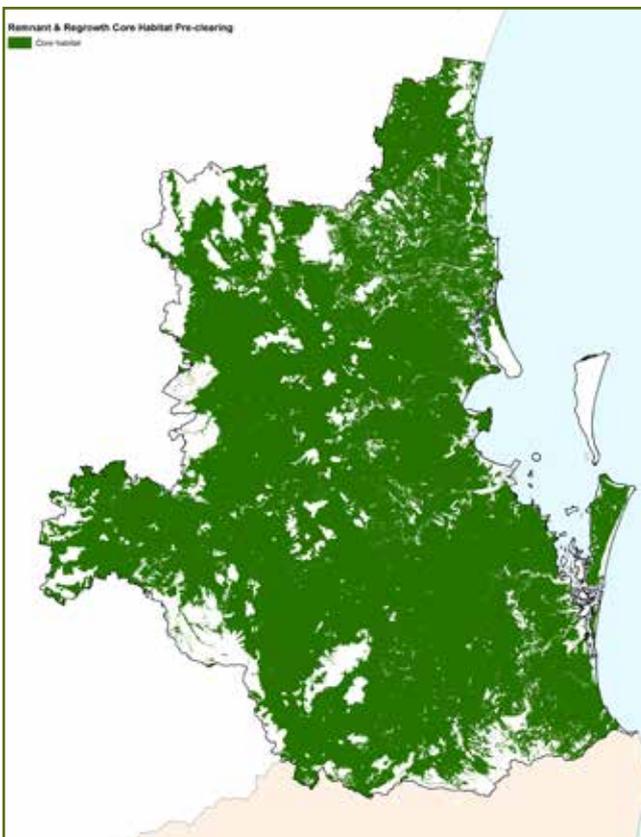
This state-of-the-art new koala habitat mapping was first introduced to update koala habitat regulated as Essential Habitat under the *Vegetation Management Act 1999* in December 2018. It identified an additional 190,000 ha of high quality koala habitat to be regulated to prevent the loss of biodiversity.

The habitat map produced by the new spatial modelling was the primary tool used to define KPA by identifying areas of high quality koala habitat, as well as areas where koala habitat could be restored through targeted conservation efforts.

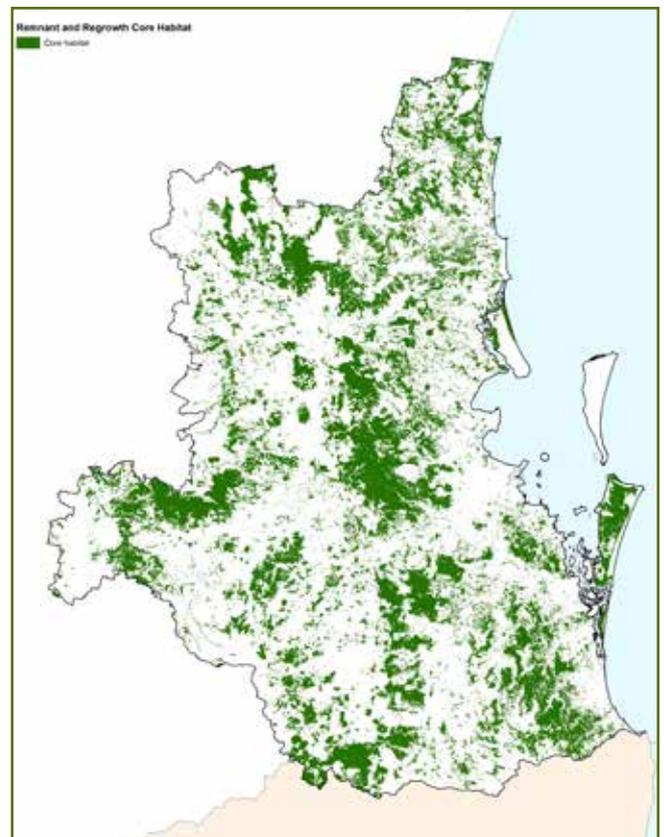
Koala Priority Areas

The Queensland Government is committed to implementing a single koala habitat map for SEQ, in accordance with the recommendations of the KEP. Koala habitat within KPA represents the best habitat suitable for sustaining populations of koalas.

KPA are large, connected areas that contain both koala habitat and restoration areas that will focus efforts for habitat protection, habitat restoration and threat mitigation actions to areas that have the highest likelihood of achieving conservation outcomes for koalas.



Map A: Pre-clearing (1960s) koala habitat extent



Map B: Remaining extent of remnant and high-value regrowth koala habitat



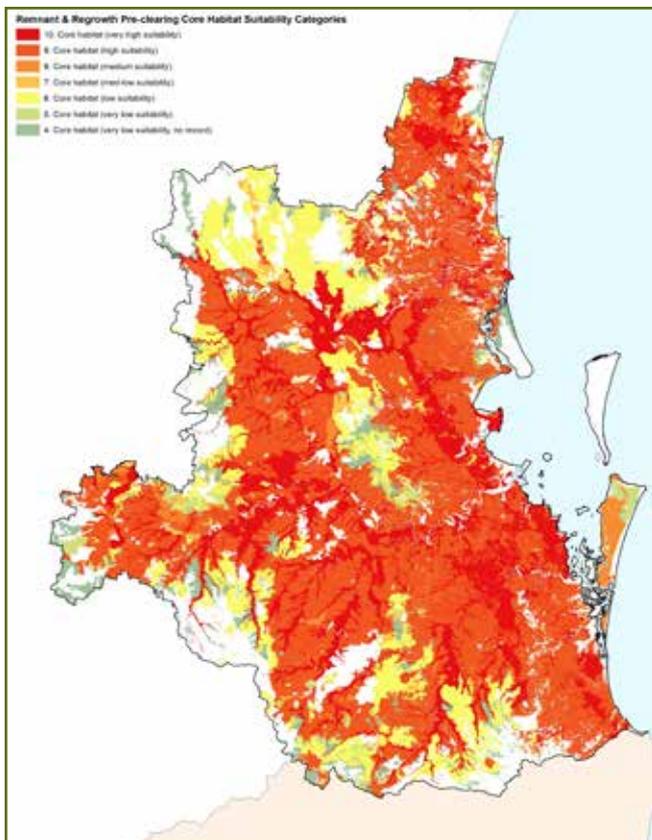
The Queensland Government intends to implement regulatory amendments to ensure KPA have the strictest clearing controls and are a focus for restoration actions to enhance existing protected habitat. The regulatory amendments will also protect koala habitat that is outside KPA.

The regulatory amendments will also provide details of specific exemptions for the controls on clearing koala habitat. Development will only be exempt from the controls on clearing koala habitat if it meets one of the specific exemptions.

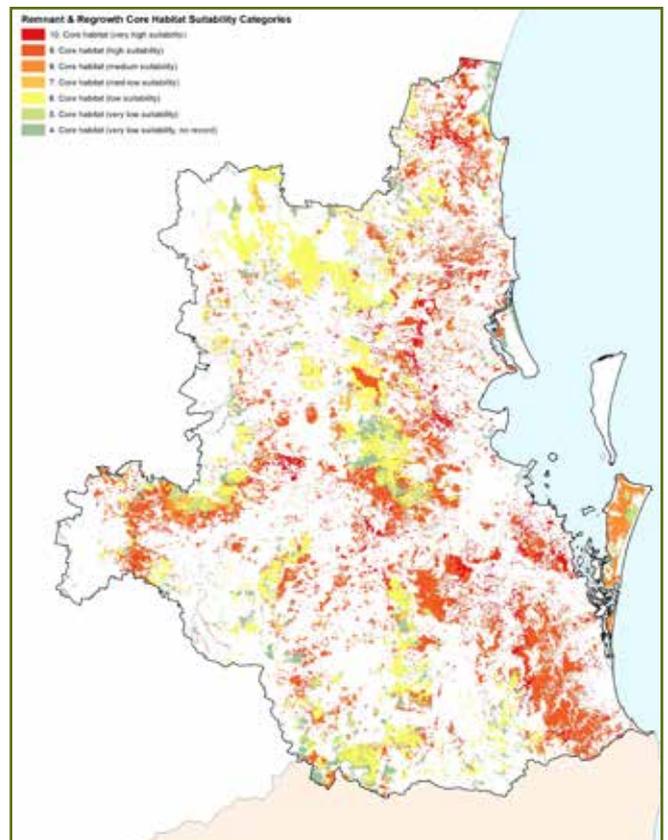
Both vegetation and koala habitat maps will be updated annually, allowing the Queensland Government to accurately identify the best quality koala habitat and track changes over time while also giving landholders certainty.

Map E illustrates the proposed Koala Conservation Plan map, including the location of the KPA, koala habitat areas, and locally refined koala habitat areas and encompasses both urban and rural koala populations.

The Koala Conservation Plan map has been released for community feedback. The map is based on the new modelling for koala habitat areas, and incorporates locally refined koala habitat areas, which have been nominated for protection in several local government areas.

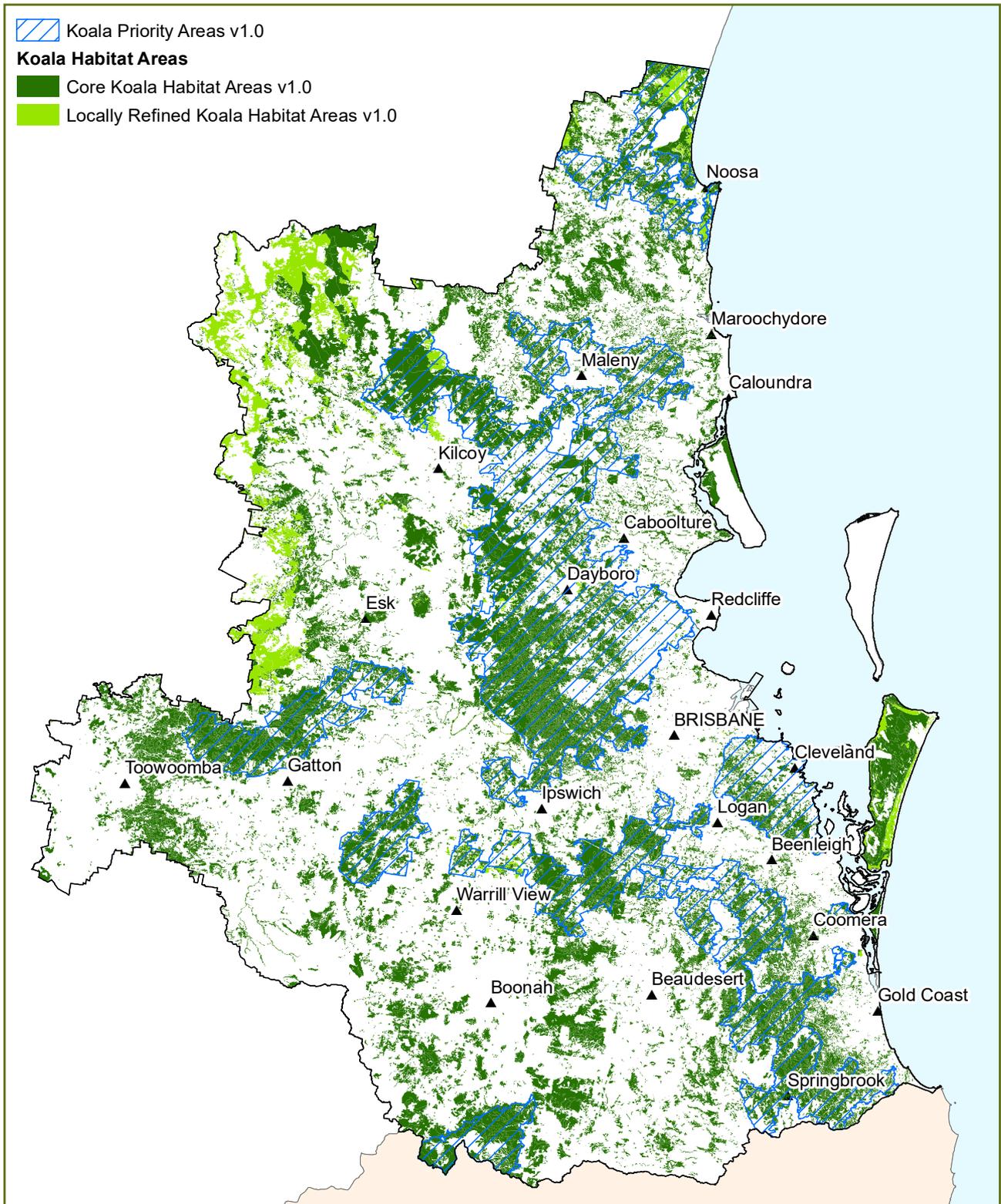


Map C: Pre-clearing koala habitat by suitability (1960s)



Map D: Remaining extent of remnant and high-value regrowth koala habitat by suitability

Government actions in progress



Map E: Proposed koala conservation plan map



Proposed future actions

The first priority for koala conservation in SEQ is to secure koalas in the wild through landscape-scale management focused on habitat protection and restoration, and complemented by threat mitigation actions to deliver a holistic response to reduce the pressures on SEQ's koala populations.

Community interest and engagement in the conservation of koalas is also vital to their preservation. This involves recognising both the cultural and economic importance of koalas. Developing community partnerships to deliver conservation projects is critical for achieving long-term koala conservation success and for enhancing the coordination of koala conservation initiatives across SEQ. Investing in community engagement for koala conservation has the added benefit of raising broader awareness of Queensland's threatened plants and animals and the need for protective measures.

The six areas for action outlined in this draft Strategy detail how the Queensland Government proposes to implement each of the six recommendations and associated objectives from *The Queensland Koala Expert Panel: A new direction for the conservation of koalas in Queensland*.

The KEP also provided recommendations about how the approach, outlined in this draft Strategy could be extended to the rest of Queensland (Appendix 1).

Each action area includes an illustration of the work underway or proposed actions to achieve the Queensland Government's objectives, as well as how they contribute to koala conservation targets.

Details on each action and how they align to the KEP recommendations are available at Appendix 2.

Targets

The Queensland Government is committed to undertaking strong action to address the threats to koala populations in SEQ, and has set ambitious targets for koala habitat, population trajectories and threat reduction for the life of this draft Strategy. This draft Strategy proposes ongoing monitoring of progress towards the targets, which will be reported annually to inform future actions. These actions are designed to be scalable so delivery can be managed subject to funding availability.

1. Koala habitat

The Queensland Government has already made the commitment of no net loss in koala habitat in *ShapingSEQ* South East Queensland Regional Plan. The Queensland Government will continue to monitor koala habitat in accordance with *ShapingSEQ*'s target of no net loss in koala habitat through its Measures that Matter online dashboard.

2. Koala habitat restoration

The Queensland Government proposes to broker further partnerships to **commence rehabilitation to restore 1000 ha** of cleared habitat in KPA in SEQ over the life of the Strategy. This will support existing investment by the Queensland Government, which is already investing \$2 million into establishing a five-year partnership agreement with the Queensland Trust for Nature to deliver on-ground koala habitat restoration in KPA. The estimated area of restoration is based on available funding.

3. Koala population

To meet the vision of the Strategy, it is necessary to ensure that koala populations in SEQ are healthy and persist across a variety of landscapes within the region. The Strategy sets out a clear plan to address the ongoing decline, however that reversal will be difficult to achieve within the life of the Strategy, and some short-term declines may remain. There has been no comprehensive study undertaken to determine the exact numbers of koalas in SEQ in recent years, so further surveys will be needed to set the target of **no long-term decline in koala population density at key, representative monitoring sites across SEQ.**

1. Koala habitat

No decline in total area of core koala habitat in SEQ from 2017 levels

2. Koala habitat restoration

Commence rehabilitation to restore 1000 ha of cleared habitat

3. Populations

No long-term decline in koala population numbers in SEQ

4. Threat reduction

25% reduction of injury and mortality across ten sites

4. Threat reduction

The holistic approach provided in this draft Strategy recognises that, in order to maintain koala numbers, it is necessary to have a comprehensive threat mitigation strategy that addresses the ongoing losses and injury to koalas from vehicles, dogs and disease. To address the impacts of vehicle strikes, **the target is to reduce koala injury and mortality by 25% across 10 key road threat hotspots in SEQ, where threat mitigation measures are implemented**, within the life of the Strategy. Risk modelling and assessment, together with input from local landholders, will identify key sites. Other targets for threat reduction may be set, after a comprehensive threat map and threat mitigation program has been developed.

The following sections provide an overview of the strategies and actions that the government proposes to undertake to meet the targets and implement the recommendations of the Koala Expert Panel.





1. Strategic coordination

Objective: A strategic and coordinated approach to koala conservation

Mechanisms that enable the coordination of protection efforts across multiple levels of government, community, non-government organisations and industry are critical to achieve the long-term recovery and persistence of koalas in SEQ. Improving governance arrangements will ensure the coordination of koala conservation efforts, and provide opportunities for leveraging extra resources and capability to support management actions. This is particularly important given the high profile of koalas, and the relatively high level of investment in projects designed to promote their survival.

The Queensland Government proposes to take a collaborative approach to build the knowledge base in a number of areas, such as using koala hospital admission data to identify areas of high threat, and apply appropriate mitigation measures. Restoration efforts can also be enhanced by leveraging other habitat restoration initiatives, such as local government habitat restoration programs.

In addition to establishing the KAC, identifying a network of connected priority areas and setting targets for koala habitat and population trajectories, further proposed actions to support a strategic and coordinated response include

Koala Expert Panel recommendation:

Develop a mechanism for implementing a strategic action plan for koalas that ensures coordination across multiple levels of government, community, non-government organisations and industry to achieve the long-term recovery and persistence of koalas in SEQ.

actions such as developing a central web presence for koala conservation information, sharing research learnings through dedicated Koala Collab conferences and working with Indigenous Land and Sea Rangers to manage koala habitat.

Sharing knowledge online

The KEP identified the need for increased knowledge exchange by means of a multifaceted communication strategy. It is proposed that this is provided in part through the development of a central web presence for the collection of up-to-date data to assist decision makers, such as local governments and koala conservation groups, and will include koala hospital admissions data, interactive habitat mapping and results of Queensland Government-funded koala research.

Case study: The Yurol and Ringtail Project

In November 2017, the Queensland Government endorsed the Yurol and Ringtail project that will result in 2,400 ha of land within Yurol and Ringtail state forests transitioning to national park status over the next 10 years. The project, which was initiated by the Noosa Shire Council and Noosa Parks Association, will result in the state forests being converted to protected area tenure, and permanent protection for the corridor between Cooloola and Tewantin national parks.

The 2,400 ha will be rehabilitated through a \$3.5 million investment, jointly funded by the Queensland Government, Noosa Council and Noosa Parks Association. This collaborative initiative, the Noosa Koala Corridor Pilot, will rehabilitate koala habitat within the Noosa hinterland, enhancing and linking fragmented habitat. The approach used for this project is an example of how conservation gains can be achieved through partnerships across stakeholder groups.

1. Strategic coordination

A centralised website would provide an opportunity for stakeholders to share and access survey and monitoring data, and koala hospital admissions information. It would also provide transparency to the management activities that are being undertaken by the Queensland Government, and promote the work being done by others to identify new opportunities and promote community participation in monitoring and conservation activities.

The website would also contain information for koala carers such as regarding advances in treatment protocols.

‘Koala Collab’

The Queensland Government invited veterinarians, rescue groups, policy makers and other interested parties to ‘Koala Collab’, a collaborative research outcomes sharing event at Lone Pine Koala Sanctuary’s research facility, the Brisbane Koala Science Institute, on 19 July 2018.

Researchers presented their findings and answered questions as to how the findings can be practically translated into meaningful action.

Building on the success of the 2018 event, Koala Collab 2020 will present the findings of government-funded Koala Disease Research grant recipients and provide opportunities to share the results of the research with policy makers, veterinarians and conservation groups.

First Nations—Caring for koalas

The Queensland Government is proposing to develop guidance materials with Indigenous Land and Sea Rangers to help manage koala habitat. This will facilitate knowledge exchange between ranger groups and other land use managers on effective methods for caring for koalas and their habitats.

For more detailed information on these proposed koala conservation actions and goals, and how they link to the KEP recommendations refer to Appendix 2.





2. Habitat protection

Objective: Koala habitat is protected

Protecting koala habitat from the impacts of clearing is a fundamental requirement. The South East Queensland Koala Population Modelling Study revealed that, despite protection measures to date, the decline in peri-urban koala populations may be accelerating.⁴ This study concluded that the continuing decline is, in part, related to ongoing habitat loss in SEQ resulting from urbanisation, and that the current pattern of urban development is incompatible with viable koala populations.

Queensland has strong vegetation clearing laws, since the passing of the amendments to the *Vegetation Management Act 1999* in May 2018, however more improvements need to be made to a number of environmental and planning laws to ensure that koala conservation targets can be realised. This is particularly important as there is only 26% of remnant habitat, and 10% of the highest value remnant habitat, remaining in SEQ, compared to pre-clearing extent.

The KEP was supportive of the general structure of Queensland's land-use planning framework, it identified that it had generally been ineffective at sufficiently conserving koala habitat in SEQ.

Its recommended actions include the development of new assessment provisions for SEQ that address clearing requirements, reducing the number, scope and complexity of exemptions, and ensuring consistency in the approach to development assessment through a Queensland Government assessment role.

Prohibition of clearing koala habitat areas in Koala Priority Areas

The Queensland Government intends to introduce major reforms to the SEQ planning framework to ensure the protection of over 300,000 ha of koala habitat in KPA.

Koala Expert Panel recommendation:

Simplify and strengthen the planning framework to ensure the effective and consistent long-term protection of koala habitats across SEQ, and resource incentive and partnership mechanisms to protect koala habitat on private land.

These reforms include:

- prohibiting the clearing of koala habitat areas within a KPA, unless otherwise exempt
- assessing development on koala habitat areas within a KPA, where clearing is not proposed, to ensure other conservation outcomes, such as habitat quality protection and safe movement are achieved.

The clearing restrictions are proposed to apply to all koala habitat within a KPA, regardless of whether the area is inside or outside the urban footprint. The prohibition on clearing will make the government's intentions unambiguous, in its efforts to prevent the further loss of koala habitat in KPA.

Exemptions will apply, including for clearing for a development footprint up to 500 m², and clearing for firebreaks around buildings and structures.

The exemptions are proposed to provide a balance between protecting koala habitat while still allowing for necessary property maintenance and safety.

Regulation for clearing koala habitat areas outside of Koala Priority Areas

In addition to the planned prohibition on clearing in KPA, an amended planning framework will also protect koala habitat in SEQ outside of KPA. It is anticipated that the Queensland Government will assess applications that involve clearing of koala habitat outside the KPA.

⁴ Rhodes, J.R., H. Beyer, H. Preece, and C. McAlpine. 2015. South East Queensland Koala Population Modelling Study. Uniquist, Brisbane, Australia.

2. Habitat protection

The planned amendments will also provide that, where a development requires clearing in a koala habitat outside a KPA, the ‘avoid, minimise and offset’ hierarchy will apply. Similar exemptions to those allowed in the KPA will apply.

A new state code for SEQ koala habitat will be developed to ensure that development in the region:

- delivers no net loss of koala habitat area
- maintains or improves connectivity within and between koala habitat to ensure safe koala movement
- is constructed and undertaken in such a way that does not increase the risk of injury to, or death of, koalas
- avoids, minimises and mitigates environmental impacts and provides an offset for significant unavoidable impacts.

The Queensland Environmental Offsets Policy will be amended to reflect the changes to the planning framework. The amendments will make the Queensland Government responsible for imposing offset conditions for koala habitat, in SEQ. Offsets may be delivered as either a financial settlement or as a land-based offset.

Financial settlement will be paid to the state’s offset account, which is managed by the Department of Environment and Science which will coordinate the on-ground delivery. However, local governments will be encouraged to collaborate with the state to identify suitable offset areas.

If a proponent chooses a land-based offset, they will be required, under the existing offset multiplier, to conserve three new koala habitat trees for every one non-juvenile koala habitat tree impacted. This ratio may be adjusted in the future, in response to further consultation and scientific review.

The strategic placement of offsets will support the overall koala habitat protection and restoration targets.

Reducing the number, scope and complexity of exemptions

The KEP made a recommendation to reduce the scope and complexity of exemptions, as clearing for exempt activities has had an impact on koala habitat.

In particular, the KEP recommended removing, or reducing the impact, upon koala habitat, of exemptions under the Vegetation Management Act, particularly for:

- clearing for urban purposes in an urban area
- material change of use, or reconfiguration of a lot less than 5 ha.

The Queensland Government’s planned koala conservation reform will not change the Vegetation Management Act, however these exemptions will not be replicated for impacts upon koala habitat areas, in line with KEP recommendations.

Some exemptions are proposed to apply, such as the ability to clear a development footprint up to 500 m², which is also allowed under the previous planning regulation. Other exemptions will include clearing for fire breaks, maintenance and other activities that are considered reasonable to allow landholders to live on, and manage, their properties, in line with existing regulation.

Consistency in the approach to development assessment

For development involving the clearing of koala habitat outside a KPA, it is proposed that the development will be assessed by the state government and ‘avoid, mitigate and offset’ requirements will apply. This assessment was previously a role of local government.

Under the planned amendments, development that doesn’t involve clearing of koala habitat inside a KPA will be assessed by local government using new assessment benchmarks. The assessment benchmarks will help local government manage potential risks for proposed development close to koala habitat.

Assessment benchmarks will ensure that:

- development does not result in fragmentation of koala habitat (this may mean that the placement of buildings, structures or works is at least 50 m from the edge of koala habitat)
- the condition of koala habitat is not impacted by factors such as changes to soil condition, or the introduction of weeds or pests
- the development allows safe movement of koalas.



A new code in the State Development Assessment Provisions will be introduced to provide the criteria for assessing clearing of koala habitat areas that are:

- outside of KPA
- for an extractive industry in a key resource area in a KPA.

Updating the mapping and amending errors

The new koala habitat model uses regional ecosystem and high-value regrowth mapping provided by the Queensland Herbarium.

Although the new koala habitat mapping is based on the best available data, there may be some circumstances where the mapping incorrectly identifies koala habitat. The Queensland Government is encouraging landholders to validate

mapping on their property to ensure developed areas and water courses are excluded from the final map.

A map amendment process will be provided to enable landholders to apply to have the map amended where anomalies exist. Unlike the previous process where map amendments can only occur in conjunction with a development application, map amendments can occur at any time.

The new koala habitat model provides for robust and repeatable analysis, allowing mapping to be updated on an annual basis. This will translate into more frequent updates of the koala conservation map.

Locally refined koala habitat areas will be included in the new koala habitat map for a transitional period of two years, during which time the Queensland Government will work with local governments to consider local biodiversity protections.

Proposed planning framework for areas mapped as a KPA:

Changes to:	Existing provisions	Proposed provisions
Types of controls for koala habitat	Koala assessable development areas/ priority koala assessable development areas	Koala priority areas
Affect	Contain planning controls (some SEQ local governments have PKADA/KADAs)	Contain planning controls (only Toowoomba has no KPA)
What's prohibited	Urban activity in non-urban area (open space, conservation zones, etc.)	Clearing koala habitat
What's assessable	Clearing koala habitat	Development that would not result in clearing of koala habitat areas
Assessment	Local governments conduct development assessment, in line with state and local planning regulation	Local governments conduct development assessment in line with new benchmarks within the Planning Regulation (development not resulting in clearing only)
Offset recipient	Local government	Not applicable; clearing of koala habitat areas prohibited

Proposed planning framework for areas outside of a KPA:

Changes to:	Until 2019	Commencing in 2019
Types of controls for koala habitat	No specific koala habitat protection; general controls for clearing habitat regardless of species	Specific controls for clearing koala habitat
Assessment	Local governments conduct development assessment, the state considers impacts on Matters of State Environmental Significance only	The state government conducts development assessment in line with updated State Development Assessment Provisions
Assessment framework	Local government: avoid, minimise state: avoid, minimise, offset	Avoid, minimise, offset

Where the land is not a koala habitat area, no koala conservation controls are proposed to apply.

2. Habitat protection

Comparison of habitat protection

The above tables provide an overview of the difference between the previous planning controls for clearing in koala habitat areas and the proposed changes. The proposed changes to the development assessment framework for koala habitat are to apply to the SEQ defined boundary in *ShapingSEQ* Regional Plan. Intended changes will include the identification of KPA, a new role for the state and a new koala state code for assessment in the State Development Assessment Provisions.

Strategic assessment for SEQ

A key implementation action for the *ShapingSEQ* South East Queensland (SEQ) Regional Plan, is 'to investigate the delivery of a strategic assessment for SEQ'. A strategic assessment can enable upfront and streamlined assessment for impacts on matters that trigger the Commonwealth *Environmental Protection and Biodiversity Act 1999* (EPBC Act), including koalas. A strategic assessment process would ensure all relevant matters of national environmental significance have been properly addressed when developments proceed.

A strategic assessment aims to establish a basis on which applications, which would have otherwise been referred to the Australian Government, may be appropriately dealt with by the Queensland Government.

Subject to approval of the Commonwealth Environment Minister, this would have the effect of ensuring that both national and state interests in koala protection can be accommodated through a single regulatory regime to deliver improved environmental outcomes through a more strategic, landscape-scale approach to impact assessment.

The KEP recommended that the state's commitment to a SEQ strategic assessment with the Commonwealth under the EPBC Act should be finalised as soon as possible. In response, the Queensland Government is working to execute a SEQ strategic assessment agreement with the Australian Government, to develop a more coordinated and strategic approach to resolving environmental assessments and approvals.

For more detailed information on these proposed koala conservation actions and goals, and how they link to the KEP recommendations refer to Appendix 2.

3. Habitat restoration for koalas

Objective: Strategic and landscape-scale koala habitat restoration

Given the decline in koala populations and habitat, habitat restoration, to complement any protection measures, is necessary for population recovery.

Meaningful engagement with, and appropriate incentives for, landholders is proposed, in order to encourage koala habitat restoration on private land. Restoration is critically important as this can increase the overall habitat available for koalas and increases the connectivity between areas of habitat.

KPA include areas that are suitable for offset delivery and habitat restoration programs. These areas have been identified as appropriate for rehabilitation, based on the suitability of regional ecosystems, and consideration of threats such as proximity to major roads, heat stress, urban development, and opportunities such as proximity to existing conservation areas.

A large proportion of koala habitat in SEQ is on privately-owned land. Hence, conservation on private land is crucial for the species' survival. Targeted investment will encourage and assist landholders to manage their land for conservation of koala habitat.

The Queensland Government's \$500 million Land Restoration Fund may contribute to koala habitat rehabilitation by supporting carbon farming projects that deliver clear environmental and economic benefits, including improved soil and landscape health.

Habitat restoration within the Koala Priority Areas

The methodology used to define the mapping for koala habitat areas has also been used to identify areas that will be most suited for habitat restoration and offset liabilities.

Within KPA, 150,700 ha has been identified as being suitable for restoration.

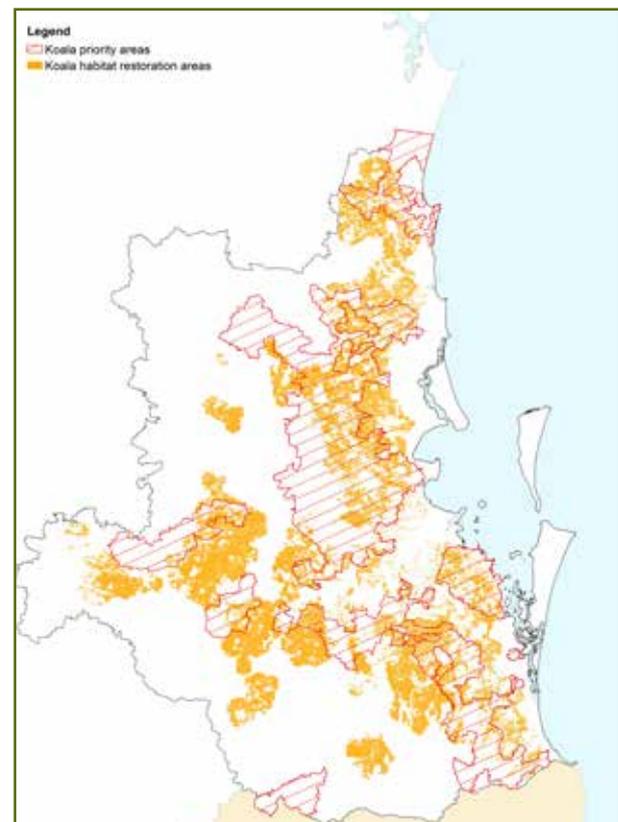
Koala Expert Panel recommendation:

Develop and adequately resource regulatory, incentive and partnership mechanisms to achieve strategic koala habitat restoration at landscape-scales in SEQ, particularly in identified priority areas.

An advantage of prioritising restoration in KPA is that over time, as areas are established, they will be protected through updates to mapping. Map F identifies the priority areas for habitat restoration, identified as 'Koala Rehabilitation Areas'.

Koala Habitat Restoration Partnership Program

The Queensland Government has established a five-year partnership agreement with Queensland Trust for Nature to deliver on-ground koala habitat restoration in priority areas through partnerships with landholders and local governments.



Map F: SEQ—restoration areas map

3. Habitat restoration for koalas

Koala habitat restoration on local government conservation estates and through local government conservation programs will be prioritised. This approach provides an opportunity to leverage funding and in-kind support to deliver better outcomes compared to working in isolation.

Land Restoration Fund

The Queensland Government's \$500 million Land Restoration Fund aims to expand carbon farming in the state by supporting land-sector projects that deliver clear environmental and economic co-benefits.

Carbon farming refers to land management activities that either stop carbon pollution from entering the atmosphere or capture and hold carbon in vegetation or soil. This can be achieved by planting trees, protecting native forest by reducing land clearing, managing bushfires through savanna burning and changing farming practices to increase soil carbon.

The Land Restoration Fund values not only the carbon stored in forests, but also the broader social and environmental benefits of conservation.

Environmental Offsets Framework

Queensland's Environmental Offsets Framework consists of an Act, regulations and policies. The purpose of the *Environmental Offsets Act 2014* is to compensate for unavoidable impacts on significant environmental values (for example, koala habitat).

A comprehensive review of the Queensland Environmental Offsets Framework is underway and will aim to result in greater investment in activities that counterbalance the impacts from development on koalas and other matters, and ensure offsets are only used as a last resort.

Specifically, the review will examine how environmental offsets can be redesigned to provide a strategic and coordinated approach for the protection of koalas.

In the short-term, specific amendments to the Queensland Environmental Offsets Framework will be made to enable significant residual impacts on koala habitat outside a KPA to be offset. The amendments will provide that the Queensland Government will be responsible for imposing the offset condition.

For more detailed information on these proposed koala conservation actions and goals, and how they link to the KEP recommendations refer to Appendix 2.

Case study: Trees for koalas

The Land Restoration Fund’s first large-scale project will be the planting of 150,000 trees to create a new koala habitat and home for the glossy black cockatoo at Lake Wivenhoe.

The \$1.2 million project is a partnership between the Department of Environment and Science, SEQwater, and CO₂ Australia.

In addition to creating habitat, the project

will also reduce sediment run-off into the dam and generate carbon credits.

The project aims to be registered by the Australian Government’s Clean Energy Regulator to create Australian Carbon Credit Units (ACCUs)—an ACCU is a tradable unit equivalent to one tonne of carbon dioxide avoided from being released to the atmosphere. At the current market rate one ACCU is worth about \$12.



4. Threat management

Objective: Coordinated threat reduction and koala population management

Habitat loss, dog attacks, car strikes and disease are some of the compounding key threatening processes that affect koalas. Climate change also poses a serious threat to koalas in SEQ. Some climate models forecast significant declines in koala numbers in the western parts of SEQ, as a direct result of heat stress or bushfire.

The koala habitat protections and rehabilitation activities proposed in this draft Strategy are intended to be complemented by threat mitigation measures, with a focus in KPA. This will ensure that areas where investment is made in habitat protection and restoration are afforded improved chances of delivering koala conservation outcomes.

The aim of this aspect of the program is to develop targeted strategies for managing threats to koalas using the best available information. Priorities for investments will be guided by scientific evidence, cost effectiveness and transparency. Priorities for on-ground activities will also be guided by a map of priority areas for threat management.

Threat mitigation is essential for ensuring the long-term viability of koalas in SEQ, particularly given the increased vulnerability of populations due to habitat loss and fragmentation. The integration of threat mitigation with other koala programs within KPA will help to improve the effectiveness of any investments.

The Queensland Government proposes to develop strategies for improving the management of threatening processes using expertise from the Department of Environment and Science, the Department of Transport and Main Roads, local governments, non-government organisations, and Natural Resource Management organisations with knowledge in managing the threats.

The Queensland Government proposes to use spatial modelling, information from hospital admissions, local koala rescue groups and local governments to identify threats to koalas, and priority areas and programs for threat reduction.

Koala Expert Panel recommendation:

Resource and implement a new coordinated threat reduction and koala population management strategy that complements habitat protection and restoration activities, particularly in identified priority areas.

The recent work on the Eton Range Realignment—a koala research project, undertaken by state and local government to understand the biology and population dynamics of koalas, will enable a robust spatial model to be developed and improved over time. This modelling will indicate threat hotspots so a targeted and coordinated threat response can be undertaken. Threat reduction programs will be delivered in two streams: management programs and awareness campaigns.

SEQ Hospital Network and Moggill Koala Rehabilitation Centre

The SEQ Hospital Network provides care for over 1000 koalas each year. Disease, in particular Chlamydia, is an increasing threat for koalas, and it is vital to support the work of the koala hospitals in treating and researching disease. The Queensland Government provides funding for the RSPCA's 1300 ANIMAL hotline, which provides assistance to people that have found distressed animals, including koalas.

Improvements will be made to the Moggill Koala Rehabilitation Centre, a specialist koala rehabilitation facility, to allow it to meet best practice standards. Over 200 new koalas arrive at the Centre each year, and the facility serves the wider koala hospital network.

Koala carers

Rehabilitation permit holders provide an important supporting role to the hospital network by rescuing and caring for sick, injured and orphaned koalas. The Queensland Government will work with carers and the hospital network to standardise record keeping and reporting, and share advances in treatment protocols.



Implementing the results of the Community Sustainability Action Grant Program: Koala Research

Targeted research has benefit to policy and management decisions, and plays a vital role in continuous improvement.

The Queensland Government recognises the importance of supporting high quality scientific research into Queensland's koalas. This research is considered instrumental to inform the development of more effective koala conservation policy and management activities.

In 2016, the Queensland Government awarded almost \$600,000 to 10 researchers, who were recipients of targeted koala research funding, through the Community Sustainability Action Grants program. The Queensland Government will continue to actively promote the results of research through forums like Koala Collab, and investigate opportunities to incorporate funded research projects to inform policy and management approaches.

An evidence-based approach to program and policy development will be informed by the results of grant programs to:

- complement existing survey data, or activities by using accurate and cost-effective koala abundance data collected by the Queensland University of Technology, using Unmanned Aerial Vehicles (UAVs)
- prepare Koala Translocation Methods and Guidelines, as these guidelines will help inform a revised translocation policy
- work with the Central Queensland University to incorporate remote-sensing based, landscape-scale habitat management tools. These tools will include climate change scenario assessments and habitat health checks
- use the University of Southern Queensland's modelling and mapping of koala habitat and threats in southern inland Queensland to investigate threat mitigation actions
- engage the University of Queensland to develop technical, policy-ready information that can be used to improve the Environmental Offsets framework in relation to koala habitat.

Upgrade the Fauna Sensitive Road Design Manual

The Fauna Sensitive Road Design Manual provides assistance to practitioners to design, construct and maintain roads that better accommodate the needs of fauna. It is proposed that an update be made to this manual to achieve koala conservation outcomes by utilising the measures that have proved effective for road design and maintenance.

The upgrade will have multiple benefits as it can be applied to different sectors, not just state-controlled roads, and can provide guidance on treatments, case studies, research opportunities and data management, with information being published on a centralised website.

Reducing dog attacks

Research has indicated that wild dog attacks are a serious threat to koalas. The Queensland Government is committed to investigating further collaborative approaches for wild dog control with a focus on KPA (including state land).

The Queensland Government proposes to work with local governments to review their existing local laws with respect to dogs, to focus actions in KPA, and to consider ways to mitigate the impacts of domestic dogs. The review will consider both the effectiveness of, and compliance with, local laws. Behavioural change programs designed to build support for dog control are proposed for areas with a high incidence of domestic dog attacks.

Translocation and release policies

Translocation has historically resulted in limited conservation or welfare outcomes for koalas.

However, translocation can be an appropriate management tool if supported by strict criteria, such as consideration and assessment of the take and receive sites, and their populations, the koala demographic makeup, the vegetation types and habitat suitability, and the prevalence of threats.

Under the *Nature Conservation (Koala) Conservation Plan 2017* there are requirements to release rehabilitated koalas to prescribed natural habitat (suitable habitat, preferably within one kilometre of the capture site but not greater than five kilometres from the capture site).

4. Threat management

In some circumstances however, the requirement has resulted in welfare issues where threats remain or habitat has been cleared.

In order to provide improved outcomes for koalas that need to be released outside of prescribed natural habitat, a streamlined approach has been developed in the Operational Policy—release of rehabilitated koalas and the take and release of koalas in imminent danger. The policy provides clear guidance to applicants and assessors to make a decision on releasing a rehabilitated koala to a location other than its capture site. A streamlined approval process will reduce the amount of time an otherwise releasable koala spends in rehabilitation and reduces the burden on the busy wildlife hospital network.

In addition to streamlining the process for releasing rehabilitated koalas, an authorised person may take and release an apparently healthy koala in the wild, when it is found to be in clear and imminent danger. The koalas in such circumstances must either not be able to disperse without human intervention, or unassisted movement is likely to result in death or injury to the koalas.

The Queensland Government's translocation policy aims to achieve better conservation outcomes for koalas, not to facilitate development that impacts koala habitat. Amendments to a broad translocation policy are being investigated and will be drafted in 2020. The development of this proactive management response requires time in order to understand and address the scientific principles and practical issues associated with translocation.

Any policy allowing the translocation of koalas will carefully consider the potential impacts that population ecology, genetics or infectious disease dynamics and epidemiology could have on the translocated individuals or recipient population, and be consistent with standards set by the International Union for Conservation of Nature.

Local government partnerships

Local governments manage a number of highly successful threat abatement programs, such as the Koala Safe Neighbourhoods partnership between Redland City Council and Griffith University, which is a collaborative science-based approach to improve habitat and conservation planning, koala threat mitigation initiatives, and includes a koala education campaign.

The Queensland Government proposes to work with local governments to support and promote their existing and new threat mitigation programs.

Koala awareness campaigns

The breeding season for koalas (August–February) represents a time of high koala mortality. Koalas are more active, venturing into new or unusual territory, and crossing roads, particularly young males seeking new habitat.

This high level of movement exposes them to risks such as vehicles and dogs. In conjunction with the City of Gold Coast, the Queensland Government trialled an awareness campaign for the Gold Coast throughout the 2018–19 breeding season. Key messages encouraged changing community behaviours, such as the need to drive slowly, and being aware of rescue contacts. The campaign included initiatives such as radio advertising, digital displays and social media. The Queensland Government proposes to expand this program to other local government areas in future breeding seasons.

Threat mapping

A comprehensive threat map, and threat mitigation program is proposed, based on wildlife hospital admissions data and other datasets to create a comprehensive picture of where the threats to koalas are occurring. By understanding where the threats are occurring, and specifics of threatening processes, effective mitigation actions can be introduced.

For more detailed information on these proposed koala conservation actions and goals, and how they link to the KEP recommendations refer to Appendix 2.



5. Community engagement

Objective: Strong community engagement and partnerships

Successful koala conservation relies on a collaborative approach across all sectors of the community, and particularly for actions that are focused within KPA. The high level of community support for the conservation of koalas provides an opportunity for the Queensland Government to work with the community through a range of actions from formal partnerships for habitat protection to awareness campaigns to reduce dog attacks and vehicle strikes.

Koala conservation projects will include the critical actions needed to secure koalas in the wild, and will either be funded in full by the Queensland Government or in part through partnerships with other organisations. In addition, koala projects will emphasise engagement, communication and capacity building, with actions designed to promote more partnerships with the community, stakeholders and volunteers. A priority will be in improving the skills and the capacity of partners to conserve koala populations.

This means that koala conservation projects have activities that encourage and improve engagement, communication and capacity building, in addition to on-ground (e.g. threat mitigation) activities.

Encouraging the community to help deliver the management of koala habitat and threat reduction will promote a sense of ownership of the solutions for koala conservation for the wider public.

Koala Expert Panel recommendation:
To develop and implement a strategy for partnership development and engagement with the broader community, utilising an approach that is sensitive to the nature and views of local communities.

The iconic status of koalas will attract wide interest, leverage investment and engage partners in the program. All strategies, however, must put the protection of the koala first.

Citizen science

The interest in koala conservation from the public, and the number of volunteer organisations provide an opportunity to build the knowledge base on koala populations and threats. Citizen science programs are proposed to be used to help inform policy and management in two stages: the first stage can work with conservation groups to promote initiatives such as koala sighting days and citizen science activities at the Daisy Hill Koala Centre, and to consolidate the results. A review of existing citizen science programs can then be conducted to identify potential gaps and opportunities that can be used to direct and prioritise future programs.

Caring for koalas

Koalas are part of Aboriginal cosmology, they are connected to the trees whose roots go into the ground and the earth that sustains us. These iconic Australian animals are not only part of the natural environment, but also deeply embedded in the spiritual and cultural life of Aboriginal families throughout SEQ.

There are many different language names for koalas across the corridor.

Traditional Owners will play an important role in the conservation of koalas through contributing to the management of koala trees on their land.



Education and extension

It is proposed that partnerships are used to deliver state-wide community engagement campaigns that provide consistent clear messaging and community actions.

Throughout the life of the Strategy, it is proposed that various community engagement campaigns are delivered, ranging from driver awareness during breeding season through to information about amendments to clearing controls for koala habitat. Neighbours of important protected koala habitat may be engaged through tailored engagement to reduce edge effects from invasive plants and domestic animal attacks.

The Daisy Hill Koala Centre

Built as a dedicated koala education facility, the Daisy Hill Koala Centre was opened to the public in 1995. Nestled amongst eucalypt trees and featuring a large outdoor koala enclosure and many interactive displays, the Daisy Hill Koala Centre is a unique place to learn about koalas and their conservation.

The Daisy Hill Koala Centre has capacity for over 100,000 visitors per year, making it an ideal location to be the public face of koala conservation initiatives. The Daisy Hill Koala Centre will continue to deliver community awareness campaigns, citizen science and education programs, and be a shopfront for engaging the community.

For more detailed information on these proposed koala conservation actions and goals, and how they link to the KEP recommendations refer to Appendix 2.



6. Improved mapping, monitoring, research and reporting

Objective: Continuous monitoring and improvement based on best available science

Improved science will drive improvements in koala conservation in SEQ and boost our understanding of their distribution and threats. High quality koala habitat mapping, threat mapping, monitoring and research programs will help to measure changes in koala populations and threats over time, inform management decision making and communicate outcomes in improving the conservation of koalas. In particular, effective monitoring will be critical if we are to adapt to the inevitable impacts of climate change in SEQ. The focus of monitoring and reporting, and application of research will be within KPA to monitor the effectiveness of habitat protection, restoration and threat mitigation.

To facilitate better communication between researchers, policy makers and planners, the Queensland Government proposes to convene public forums (at least once every five years) to share knowledge on koala conservation. In addition, citizen scientists and volunteers will be encouraged to undertake research and support science projects.

It is proposed that koala conservation projects be designed and implemented under an adaptive management framework that will deliver continuous improvements based on monitoring. This proposed framework would work by firstly requiring that koala projects have monitoring programs that are linked to objectives within the Strategy. The patterns and trends revealed from the monitoring programs would inform the evaluation of objectives of the koala program, and link those outcomes to the investment.

Projects would then be reviewed and updated according to the results of threats and population monitoring to maximise effectiveness. Using this proposed adaptive management approach allows the way changing threats are addressed to inform an understanding of the success of management interventions.

Koala Expert Panel recommendation:

Developing targeted and high quality koala habitat mapping, threat mapping, monitoring and research programs that aim to: (1) identify key koala ecological values and threats, (2) measure changes in koala ecological values and threats over time, as well as understand the drivers of those changes, (3) inform policy and management decision making, and (4) communicate trends and outcomes transparently and publically to enhance engagement.

The KAC would play a key role in evaluating the effectiveness of this proposed framework through reviewing the implementation of initiatives. To improve the transparency of the overall koala program, monitoring data may be reported through an annual koala report card. Community engagement activities would also be included in the report card, as part of a wider evaluation plan. Reviewing the communication, engagement and capacity building activities would form part of the koala program's reporting plan.

Survey program

A koala survey and monitoring program will play an important role in evaluating management success and communicating progress towards koala conservation targets to support the Strategy. The Queensland Government has had a koala monitoring program in place since 1996, which has been instrumental in recognising rapid declines in koala populations in SEQ. The KEP recommendations have acknowledged that the previous survey program should be revised to be suitable to evaluate the effectiveness of actions within the Strategy and to assess progress towards policy objectives.

The Queensland Government commenced development of a revised koala survey program, in alignment with the KEP review.

Trial surveys were conducted at the Daisy Hill Conservation Park and the Venman Bushland National Park; and density data and Bio-Condition habitat assessment data were also collected.

Peer review provided feedback on how the proposed methodologies addressed the KEP recommendations for the program and has suggested a review of all available survey methodologies to gather data on koala populations.

The review feedback and learnings from the field trial will be used in the program finalisation to address the recommendations.



6. Improving, mapping, monitoring, research and reporting

The survey program seeks to address the KEP recommendation to monitor koala densities at 10 to 20 sites across SEQ which are representative of koala populations in urban and rural landscapes, and report on changes every two years. Program finalisation will consider further survey methods, viability analyses, and the development of monitoring design options to measure progress towards targets and evaluate the success of management initiatives in the Strategy.

The monitoring program is expected to report on results against the program objectives publically every five years. There will also be a mechanism for the data to be provided to the KAC every five years for review and evaluation of koala conservation initiatives in the Strategy.

Engagement with external stakeholders is a crucial aspect of the ongoing survey program, and delivers on the KEP recommendation to work in partnership with local governments to develop standard approaches to koala monitoring that could facilitate the integration of monitoring data.

Koala Advisory Council's annual report

The KAC will provide advice to the Queensland Government about progress on the implementation of the Strategy, with a focus on continuous improvement, monitoring and evaluation.

The KAC annual report for the Queensland Government will contain:

- a summary of matters considered by the KAC for the reporting period and any relevant advice provided in relation to these matters
- the outcomes of the Queensland Government's mapping and monitoring programs for the reporting period
- an evaluation of the progress towards the targets outlined in the Strategy for each annual reporting period
- details of the Queensland Government's actions undertaken for the reporting period
- recommendations on implementing the Strategy, following the principles of adaptive management.

Updates to koala habitat mapping

The koala habitat mapping will be systematically updated with new data to improve accuracy and track the changes in koala habitat over time. This process will ensure that only the highest quality koala habitat which offers the best opportunity for koala persistence is mapped, and therefore protected through the new planning framework.

Regular updates to the mapping also provides certainty to landholders that clearing controls are only placed on the areas that contain high koala habitat values.

Outside of the property-scale map amendment process, all koala habitat mapping across SEQ will be updated annually, and the boundary of KPA will be reviewed and updated every five years.

For more detailed information on these proposed koala conservation actions and goals, and how they link to the KEP recommendations refer to Appendix 2.

Have your say on the draft SEQ Koala Conservation Strategy



The Queensland Government invites comments from all Queenslanders on the actions proposed in this draft Strategy.

Submissions close **31 January 2020**.

To find out more about how to get involved, visit www.qld.gov.au/SEQkoalas or contact SEQKoalaStrategy@des.qld.gov.au

Koala conservation across Queensland



Several proposed actions under the draft Strategy have the potential to benefit koala populations outside of South East Queensland (SEQ), including investments in research and behaviour change programs. Additionally, Queensland Government programs, such as the Land Restoration Fund, and Queensland Environmental Offsets Policy, also have the potential to conserve koalas and their habitat across Queensland.

Planning controls to support the maintenance of koala habitat have historically focused on SEQ as this is where the greatest pressures from urban growth occur, however increasingly this pressure is impacting other areas of Queensland. Upcoming koala habitat mapping, and planning regulations, will only apply to SEQ, however future reviews may consider expanding these controls to other areas of Queensland.

This is in line with a Koala Expert Panel (KEP) recommendation, to expand the new SEQ koala mapping and planning regulations across the koala's entire range in Queensland. Conservation of koalas outside SEQ was not part of the KEP initial terms of reference, and so has not yet been considered by the Queensland Government within the scope of this review or draft Strategy.

The KEP also recommended that:

- the Queensland Government focus investment on consolidating existing koala populations, and landscape-scale recovery across Queensland
- regional studies be undertaken to fill knowledge gaps around koala distribution, abundance, habitat utilisation and environmental drivers of population dynamics, especially in north Queensland
- state-wide habitat mapping be undertaken to identify ecological values and land use conflicts and to guide sustainable investment in koala habitat conservation
- a strategy for community engagement and extension be developed and implemented, at a regional level, to address local cultural needs.

Subject to successful implementation of a new koala conservation planning framework and *South East Queensland Koala Conservation Strategy 2019–2024*, the Queensland Government will consider options for more strategic conservation of koalas across their entire Queensland extent.

Detailed responses to the Koala Expert Panel's recommendations



The Queensland Government's draft *South East Queensland Koala Conservation Strategy 2019–2024* has a vision of a sustainable koala population in the wild in South East Queensland (SEQ), which is supported by a coordinated and strategic approach to habitat protection, habitat enhancement and threat reduction.

The vision and targets set by the Strategy are based upon recommendations of the Koala Expert Panel (KEP) and include six priority areas for proposed action over the next five years.

The Queensland Government is already taking action to address some of the KEP most pressing recommendations and has identified potential future actions to conserve koala populations in SEQ made by the KEP.

Action area 1: Strategic coordination

KEP objective: A strategic and coordinated approach to koala conservation

KEP recommendation	2018 government response
1a) Develop an implementation strategy for koala conservation in SEQ that adopts the recommendations made in this report.	<ul style="list-style-type: none"> The Queensland Government will prepare a new SEQ Koala Conservation Strategy that details how the KEP recommended actions are to be achieved, and the timeframes for achieving these actions. The Queensland Government will establish priority areas for koala conservation measures. The Queensland Government will establish targets for koala habitat and population trajectories, as part of the SEQ Koala Conservation Strategy. The Queensland Government will develop an implementation and investment strategy, as part of the SEQ Koala Conservation Strategy. The Queensland Government will develop and execute a monitoring and evaluation strategy, as part of the SEQ Koala Conservation Strategy.
1b) Establish a Koala Advisory Council (KAC) to coordinate the implementation of the koala conservation strategy.	<ul style="list-style-type: none"> The Queensland Government will appoint a Koala Advisory Council to coordinate the implementation of the SEQ Koala Conservation Strategy.

Early action

The Queensland Government has already:

- established the Koala Advisory Council
- released the draft *South East Queensland Koala Conservation Strategy 2019–2014* for public consultation
- mapped Koala Priority Areas, for protection within the planning framework
- set targets regarding koala habitat, koala density, and koala mortality, and invested in habitat restoration.

2019–2024 potential future action

- Koala Advisory Council participation in implementation and evaluation.
- Advocate for holistic impact assessment through strategic assessment under the Commonwealth Government's *Environmental Protection and Biodiversity Conservation Act 1999*.
- Build an online hub of koala-related information.
- Develop guidance for Indigenous Land and Sea Rangers to recognise the importance of koalas to First Nations communities.

Action area 2: Habitat protection

KEP objective: Ensure koala habitat is protected

KEP recommendation	2018 government response
2a) The state government to assume responsibility for the assessment of koala-related planning and development issues to ensure consistency of approach across SEQ.	<ul style="list-style-type: none"> The Queensland Government will strengthen state development assessment requirements to improve consistency in approach to koala habitat protection across SEQ. The Queensland Government will incorporate koala related policy in future reviews of the State Planning Policy and <i>ShapingSEQ</i>. The Queensland Government will identify and manage inconsistencies in development standards between state and private sector development requirements for koala habitat protection.
2b) Reduce the number and complexity of exemptions from development assessment and put in place a transparent system of conditional approval across different habitat classes and land uses.	<ul style="list-style-type: none"> The Queensland Government will address development assessment exemptions that have an adverse impact on koala habitat.
2c) Broaden triggers for koala-related development assessment in SEQ based on the new koala habitat mapping.	<ul style="list-style-type: none"> The Queensland Government will work with stakeholders to tighten clearing requirements, inside and outside of the urban footprint, and establish appropriate assessment provisions based on new habitat mapping. The Queensland Government will apply the habitat mapping to the development of priority areas and development assessment provisions.
2d) Develop new development assessment requirements for SEQ.	<ul style="list-style-type: none"> The Queensland Government will work with stakeholders to tighten clearing requirements, inside and outside of the urban footprint, and establish appropriate assessment provisions based on new habitat mapping.
2e) Biodiversity offsets for koala habitat should continue to be imposed as conditions on development approvals only as a 'last resort', and not as an automatic 'licence to clear habitat'.	<ul style="list-style-type: none"> The Queensland Government will review the offsets framework regarding koala habitat, including how the framework is to relate to the identified koala priority areas and subject to the outcomes of the strategic assessment process. The Queensland Government will encourage the delivery of koala offsets within koala priority areas once identified through the SEQ Koala Conservation Strategy.
2f) Any future expansion of the Urban Footprint, undertaken by the state as part of revisions to the SEQRP, should not occur over areas where core koala habitat (remnant and regrowth) has been identified through the mapping, or where koala populations are known to occur.	<ul style="list-style-type: none"> <i>ShapingSEQ</i> includes principles to govern the future expansion of the urban footprint including preventing the expansion of the footprint into areas containing predominately matters of national or state environmental significance and the regional biodiversity network, including koala habitat. This will include consideration of any impacts on the region's ability to accommodate future growth.
2g) Ensure that locally significant koala habitat, not captured by the mapping, or not in identified priority areas for koalas, can still be protected through local government planning schemes.	<ul style="list-style-type: none"> The Queensland Government will work with local governments to ensure habitat not mapped by the state can be protected.
2h) Reduce the complexity of the current planning framework.	<ul style="list-style-type: none"> The Queensland Government will improve the planning framework for koala-related development to improve consistency and simplicity.
2i) Review coordination between state departments in relation to different legislative instruments.	<ul style="list-style-type: none"> The Queensland Government will review coordination between legislative instruments and processes for koala-related development.
2j) The state's commitment to a SEQ strategic assessment with the Commonwealth under the EPBC Act should be undertaken as soon as possible to give certainty to all stakeholders and permit strategic planning for koalas with respect to the protection of habitat.	<ul style="list-style-type: none"> The Queensland Government has commenced the strategic assessment process via a \$5 million funding commitment.



KEP recommendation	2018 government response
2k) Develop a communication, education and extension strategy to ensure community and business awareness and understanding of new and revised koala habitat protection measures.	<ul style="list-style-type: none">The Queensland Government will deliver a communication and education strategy to support any changes to the koala regulatory framework.
2l) Develop and resource effective models of habitat protection incentives and partnerships that have the potential for broad uptake amongst industry and rural enterprise sectors.	<ul style="list-style-type: none">The Queensland Government will develop, and identify resource requirements for effective models of habitat protection for use by industry and other stakeholders.

Early action

The Queensland Government has already:

- identified reforms to the planning framework to ensure strategic conservation of koalas and koala habitat in SEQ
- prepared amendments to the Queensland Environmental Offsets Policy to align with new mapping and koala conservation objectives
- reviewed the Koala-sensitive Design Guideline.

2019–2024 potential future action

- 2.1 Incorporate koala conservation into the State Planning Policy and *ShapingSEQ* Regional Plan.
- 2.2 Identify and manage any inconsistencies between State and private sector development outcomes.
- 2.3 Review the Offsets Framework with regards to koala conservation strategies and priorities
- 2.4 Use the land-use planning framework to safeguard koala habitat by avoiding new expansion of the urban footprint into koala habitat.
- 2.5 Build capacity to understand the new planning framework by developing an education and extension strategy to development assessment officers.
- 2.6 Explore the use of incentives and design standards, in partnership with natural resource management groups and local governments.
- 2.7 Protect biodiversity in local planning schemes by working with local governments to identify priorities.

Action area 3: Habitat restoration for koalas

KEP objective: Strategic and landscape-scale koala habitat restoration

KEP recommendation	2018 government response
3a) Resource greater investment in koala habitat restoration, focused primarily in identified priority areas for koalas.	<ul style="list-style-type: none"> The Queensland Government will invest in koala habitat restoration and provide incentives to private landholders to restore koala habitat, including through the recently announced Land Restoration Fund. The Queensland Government will work with NGOs and community groups to restore koala habitat in important koala conservation areas. In partnership with local government, NGOs and community groups, explore opportunities to appoint dedicated extension officers. The Queensland Government will restore koala habitat on state-owned land including the protected area estate.
3b) Review and modify the Offsets Policy and associated regulation.	<ul style="list-style-type: none"> The Queensland Government will identify priority areas for the strategic placement of environmental offsets for koala habitat. The Queensland Government will investigate appropriate mechanisms, including the environmental offsets framework, to deliver koala related offsets in priority areas. The Queensland Government will facilitate advanced offsets for koala habitat. The Queensland Government will consider barriers to the delivery of offsets, cost effectiveness, enforcement, monitoring and transparent delivery as part of its review of the offsets framework and strategic assessment. The Queensland Government will identify unnecessary barriers to the delivery, enforcement and monitoring of offsets, and increase transparency and cost effectiveness in offset delivery. The Queensland Government will improve financial settlement offsets for koala habitat and remove unnecessary complexities associated with offset delivery as part of its review of the offsets framework and strategic assessment. The Queensland Government will work with local landholders, state landholders and offset providers to deliver cost effective koala related offsets. The Queensland Government will work with partners to design and implement a new system to improve coordination, reporting and monitoring.

Early action

The Queensland Government has already:

- mapped Koala Restoration Areas for strategic placement of habitat restoration investment and environmental offsets
- established a partnership with the Queensland Trust for Nature to restore approximately 1000 ha of koala habitat in SEQ
- prepared amendments to the Queensland Environmental Offsets Policy to align with new mapping and koala conservation objectives.

2019–2024 potential future action

- 3.1 Further invest in a Koala Habitat Restoration Program.
- 3.2 Strategically identify offset locations through new restoration mapping.
- 3.3 Restore habitat on state land in partnership with non-government organisations.
- 3.4 Collaborate to deliver offsets and enhance habitat with local governments, landholders and land managers.



Action area 4: Threat management

KEP objective: Coordinated threat reduction and koala population management

KEP recommendation	2018 government response
4a) Undertake a threat assessment across SEQ to quantify and map threats to koalas from habitat loss, vehicle collisions, dog attacks (domestic and wild dogs), disease, fire, and climate change.	<ul style="list-style-type: none"> The Queensland Government will use spatial modelling to identify threats to koalas and priority areas for threat reduction. The Queensland Government will develop a consistent approach to mapping threats to koalas.
4b) Identify priority locations for investment in reducing existing and future threats from vehicle collisions, dog attacks (domestic and wild dogs), disease, and fire.	<ul style="list-style-type: none"> The Queensland Government will use spatial modelling to identify threats to koalas and priority areas for threat reduction.
4c) Resource a targeted and transparent threat reduction program across SEQ, in partnership with local governments, particularly in identified priority areas for koalas, NGOs, industry, and the community using a range of initiatives.	<ul style="list-style-type: none"> The Queensland Government will deliver a targeted and transparent threat reduction program and evaluate initiatives including the retrofitting of existing roads.
4d) Review and develop a new koala translocation policy.	<ul style="list-style-type: none"> The Queensland Government will prepare a new Koala Conservation Strategy consistent with best practice management for translocation, release of rehabilitation koalas, and the release of captive bred koalas.
4e) Review policy on release of rehabilitated koalas (currently in the State Koala Conservation Plan) to consider allowing release more than 5 km from the capture site when ongoing threats to the individual in the vicinity of the capture site remain high.	<ul style="list-style-type: none"> The Queensland Government will prepare a new Koala Conservation Strategy consistent with best practice management for translocation, release of rehabilitation koalas, and the release of captive bred koalas.
4f) Identify where there is empty habitat in SEQ and consider the reintroduction of koalas to these areas.	<ul style="list-style-type: none"> The Queensland Government will identify areas of empty koala habitat and reintroduce koalas where appropriate.
4g) Integrate zoo-based koala populations more explicitly into the management of wild koala populations in SEQ, particularly in urban areas.	<ul style="list-style-type: none"> The Queensland Government will prepare a new Koala Conservation Strategy consistent with best practice management, including the recognition of both wild and captive koala populations.

Early action

The Queensland Government has already:

- released the draft *South East Queensland Koala Conservation Strategy 2019–2014* for public consultation
- partnered with the City of Gold Coast to trial community engagement and behaviour change activities, in the 2018–19 breeding season.

2019–2024 potential future action

- 4.1 Partner with local government to deliver threat abatement opportunities.
- 4.2 Update the Fauna Sensitive Design Guide.
- 4.3 Integrate koala conservation into local government’s biosecurity planning.
- 4.4 Support the mitigation of threats of domestic dogs by working with local governments across SEQ.
- 4.5 Develop best-practice policies for koala rehabilitation.
- 4.6 Support training and development for koala carers.
- 4.7 Upgrade Moggill Rehab Centre.

Action area 5: Community engagement

KEP objective: Strong community partnerships and engagement

KEP recommendation	2018 government response
5a) Recognise and properly engage with Traditional Owner communities in recognition that Indigenous rangers could play a major part in data collection and management.	<ul style="list-style-type: none"> The Queensland Government will develop a communication, education and extension strategy in consultation with Traditional Owners. The strategy will recognise the importance of koalas to Traditional Owner communities and outline a strategy for engagement with Traditional Owner communities.
5b) Engage regional extension officers, drawn from local communities, to work within local governments or catchment groups.	<ul style="list-style-type: none"> The Queensland Government will develop a communication, education and extension strategy. This strategy will give consideration to an extension officer program.
5c) Enhance partnerships to deliver state-wide community engagement campaigns that provide consistent clear messaging, community action, and the potential for citizen science.	<ul style="list-style-type: none"> The Queensland Government will develop a communication, education and extension strategy.
5d) Enable knowledge exchange through a multi-faceted communication/extension strategy that includes workshops, conferences, local media (radio and newspapers), and rural community contacts.	<ul style="list-style-type: none"> The Queensland Government will develop a communication, education and extension strategy.
5e) Encourage active community participation through citizen science and field activities.	<ul style="list-style-type: none"> The Queensland Government will develop a communication, education and extension strategy. The strategy will include citizen science and field activity programs.

Early action

The Queensland Government has already:

- commenced working with communities, industries and local in preparation for the new koala conservation framework
- hosted the Koala Collab 2018 conference.

2019–2024 potential future action

- 5.1 Host Koala Collab 2020.
- 5.2 Deliver education and extension to landholders on ways to manage their land for improved koala outcomes.
- 5.3 Use citizen science to support behaviour change and community participation in conservation.
- 5.4 Invest in breeding-season community engagement to reduce vehicle-related koala injuries, in partnership with local governments.
- 5.5 Engage with neighbours to improve connectivity of potential koala habitat across property boundaries.



Action area 6: Improved mapping, monitoring, research and reporting

KEP objective: Targeted mapping, monitoring, research and reporting

KEP recommendation	2018 government response
6a) Develop consistent mapping of koala habitat across SEQ at a fine resolution that addresses the problems of the previous mapping and implements a systematic mechanism for updating this mapping to improve accuracy and track changes in koala habitat over time.	<ul style="list-style-type: none"> The Queensland Government will continue to develop and update koala habitat mapping. The Queensland Government will apply the habitat mapping to the development of priority areas and development assessment provisions.
6b) Develop: (a) broad-scale assessment tools to measure the extent and condition of koala habitat, and (b) ground based rapid habitat assessment tools that can be integrated to provide statistics on trends and metrics on condition of koala habitat across SEQ.	<ul style="list-style-type: none"> The Queensland Government will develop tools to assess koala habitat condition.
6c) Develop a consistent approach to mapping threats to koalas across SEQ and implement a systematic mechanism for updating this mapping to track changes in threats over time.	<ul style="list-style-type: none"> The Queensland Government will develop a consistent approach to mapping threats to koalas.
6d) Develop a comprehensive koala monitoring program that explicitly evaluates and communicates progress towards koala conservation targets and evaluates policy and management success.	<ul style="list-style-type: none"> The Queensland Government will develop a monitoring and evaluation strategy, as part of the SEQ Koala Conservation Strategy.
6e) Implement a mechanism (e.g. workshops, synthesis and evaluation) for review of the outcomes of the mapping, monitoring and evaluation by the Koala Advisory Council every five years and for the Koala Advisory Council to make recommendations on the revision of policy and management that arise from this review.	<ul style="list-style-type: none"> The Queensland Government will appoint a Koala Advisory Council to coordinate the implementation of the SEQ Koala Conservation Strategy.
6f) Incentivise multi-disciplinary research that explicitly addresses key management and policy priorities and the development of partnerships between researchers, the state government and other end-users.	<ul style="list-style-type: none"> The Queensland Government will develop a fully costed implementation plan, as part of the SEQ Koala Conservation Strategy. The strategy will include directions for multi-disciplinary research and mechanisms for funding.
6g) Explore mechanisms to enhance the cost effectiveness of koala research through targeted leveraging of funding (e.g. through Australian Research Centre Linkage Projects and other Commonwealth funding opportunities such as Cooperative Research Centre).	<ul style="list-style-type: none"> The Queensland Government will develop a fully costed implementation plan, as part of the SEQ Koala Conservation Strategy. The strategy will include directions for multi-disciplinary research and mechanisms for funding.
6h) Run a koala conference every five years that brings together researchers (across a broad range of disciplines), policy makers and planners from across different levels of government, NGOs, industry, and the community from across Queensland.	<ul style="list-style-type: none"> The Queensland Government will develop a communication, education and extension strategy. The strategy will include a koala conference.

Early action

The Queensland Government has already:

- established the Koala Advisory Council
- set targets regarding koala habitat, koala density, and koala mortality, and invested in habitat restoration
- mapped Koala Priority Areas, for protection within the planning framework
- identified processes for map amendments and updates
- hosted the Koala Collab 2018 conference.

2019–2024 potential future action

- Review mapping at conclusion of the Strategy period to assess progress and establish new targets.
- Develop tools to monitor koala habitat condition.
- Identify koala threats through new mapping.
- Provide funding for koala conservation research.
- Develop a monitoring and evaluation strategy.

