

NSW Koala Strategy 2022–23 annual report

Delivering targeted action and investment

Department of Climate Change,
Energy, the Environment and Water





Acknowledgement of Country

The NSW Government acknowledges more than 60,000 years of continuous Aboriginal connection to the land that makes up New South Wales.

Aboriginal knowledge and management of the land are based on deep spiritual connections with Country. Country takes in everything within the physical, cultural and spiritual landscape – landforms, waters, air, trees, rocks, plants, animals, foods, medicines, minerals, stories and special places. It includes cultural practice, kinship, knowledge, songs, stories and art, as well as spiritual beings and people: past, present and future.

As part of the world's oldest living culture, Aboriginal and Torres Strait Islander Traditional Owners and Custodians of the Australian continent and adjacent islands share a unique bond to Country – a bond forged through thousands of years of travelling across lands and waterways for ceremony, cultural practice, trading and seasonal migration.



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Purpose of this report

This report summarises the progress made in implementing NSW Koala Strategy actions in year 2 (to 30 June 2023).

The annual report also outlines how advice from the Independent Koala Expert Panel is being considered for future koala conservation action.





NSW Koala Strategy

The NSW Koala Strategy was established to deliver targeted investment over 5 years, with an aim to double koala numbers in New South Wales by 2050. Actions are delivered under 4 pillars that work together to secure habitat, support local conservation, reduce threats and improve our knowledge.

During its second year of implementation, the NSW Koala Strategy has established key elements required for effective conservation action into the future, including:

- a statewide baseline survey program and a statewide monitoring program. These critical science programs will establish baseline information about koala populations across the state to identify priority areas for conservation interventions, track population trends and evaluate the ongoing effectiveness of the programs
- a regional partnership model delivering meaningful, locally led koala conservation actions. Since 2021, the NSW Koala Strategy has established 14 regional and strategic koala conservation partnerships with local councils, conservation groups (WWF-Australia and Country Women’s Association), Aboriginal communities and other partners to ensure community expertise and knowledge informs on-ground actions.

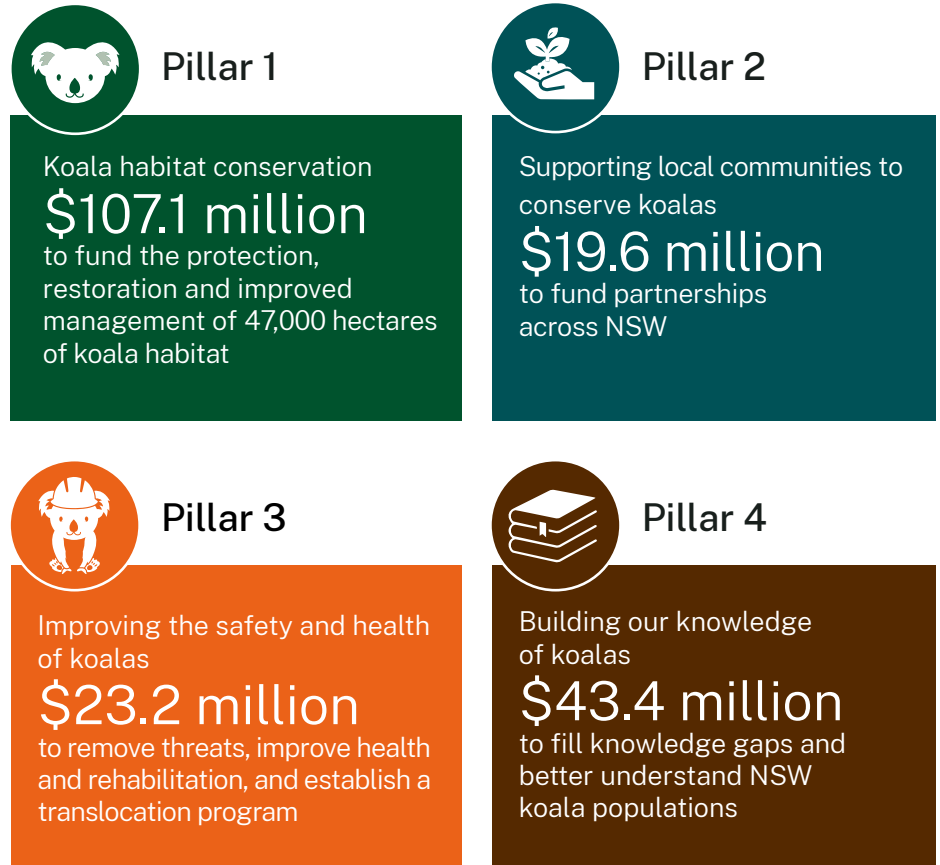


Figure 1 NSW Koala Strategy pillars and funding over 5 years



Budget summary

The total investment in the NSW Koala Strategy is \$193.3 million over 5 years (2021 to 2026). In the 2022–23 financial year, \$52 million was spent across the NSW Koala Strategy program.

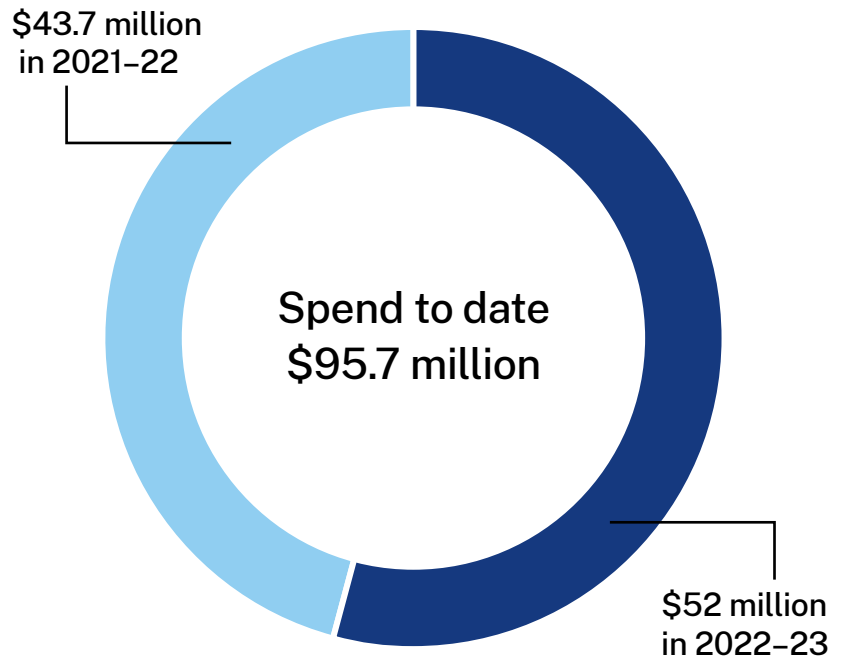


Figure 2 Investment under the NSW Koala Strategy to 30 June 2023



Priorities for 2023–24

Even with the investment of the NSW Koala Strategy, koalas in New South Wales face a range of threats, including habitat loss and fragmentation, climate change, bushfires, disease, declining genetic diversity, vehicle strike and dog attacks. These factors have resulted in significant population decline, with koalas now listed as ‘endangered’.

The NSW Government is committed to addressing threats to koalas to ensure their protection into the future. To support this commitment, the NSW Government has provided an additional \$172 million investment for koalas. This new investment will:

- establish a Great Koala National Park on the mid-north coast
- fast-track a commitment under the Cumberland Plain Conservation Plan to transfer publicly owned lands between Appin and Long Point to establish a Georges River Koala National Park in Sydney’s south
- protect the Woronora wildlife corridor near Heathcote in Sydney’s south
- fund koala hospitals, vets and vet nurses, and vaccination trials and monitoring, particularly in regional New South Wales.

In addition, the NSW Government is committed to reviewing the NSW Koala Strategy to examine our current approach to koala conservation and identify future conservation priorities to protect this iconic species and ensure its long-term survival in the wild.

To support the review, the NSW Government delivered the NSW Koala Summit on 22 March 2024. The summit brought together stakeholders from across New South Wales who provided advice on the effectiveness of current koala conservation activities, identified gaps in the current approach, and developed recommendations for future priorities. Feedback from the Koala Summit will inform the review of the Strategy.



Independent Koala Expert Panel advice

Each year, the expert panel provides advice to the Minister for the Environment with recommendations for new priorities and adjustments to the NSW Koala Strategy. The panel's advice ensures the NSW Koala Strategy is continuously improved to deliver effective conservation for koalas.

In early 2023, the expert panel reviewed progress to date under the NSW Koala Strategy, recent monitoring data and research findings. The panel found that the current approach of the strategy is adequate, however, it is too early to determine the outcomes for koalas from the work undertaken to date.

Advice and recommendations from the expert panel informed this annual report and are driving the program priorities for 2023–24, including:

- delivering the statewide baseline survey to understand the distribution and abundance of the current koala population in New South Wales
- developing the monitoring program, supported by effective data management to determine future population trends, the drivers of those trends, and the effectiveness of management actions
- continuing to deliver conservation actions in collaboration with First Nations and regional partnerships
- continuing to deliver the Koala Research Plan
- adaptively managing the NSW Koala Strategy with clear governance arrangements
- continuing to protect and restore high-quality habitat to ensure koala habitat is retained within connected, functional and resilient landscapes across the state.

The expert panel's advice and recommendations will inform the NSW Government commitment to review and refocus the NSW Koala Strategy to ensure it is an effective recovery plan for NSW koala populations.



Pillar 1

Koala habitat conservation

2022-23 Highlights



9,016 ha of koala habitat purchased for inclusion in the national park estate



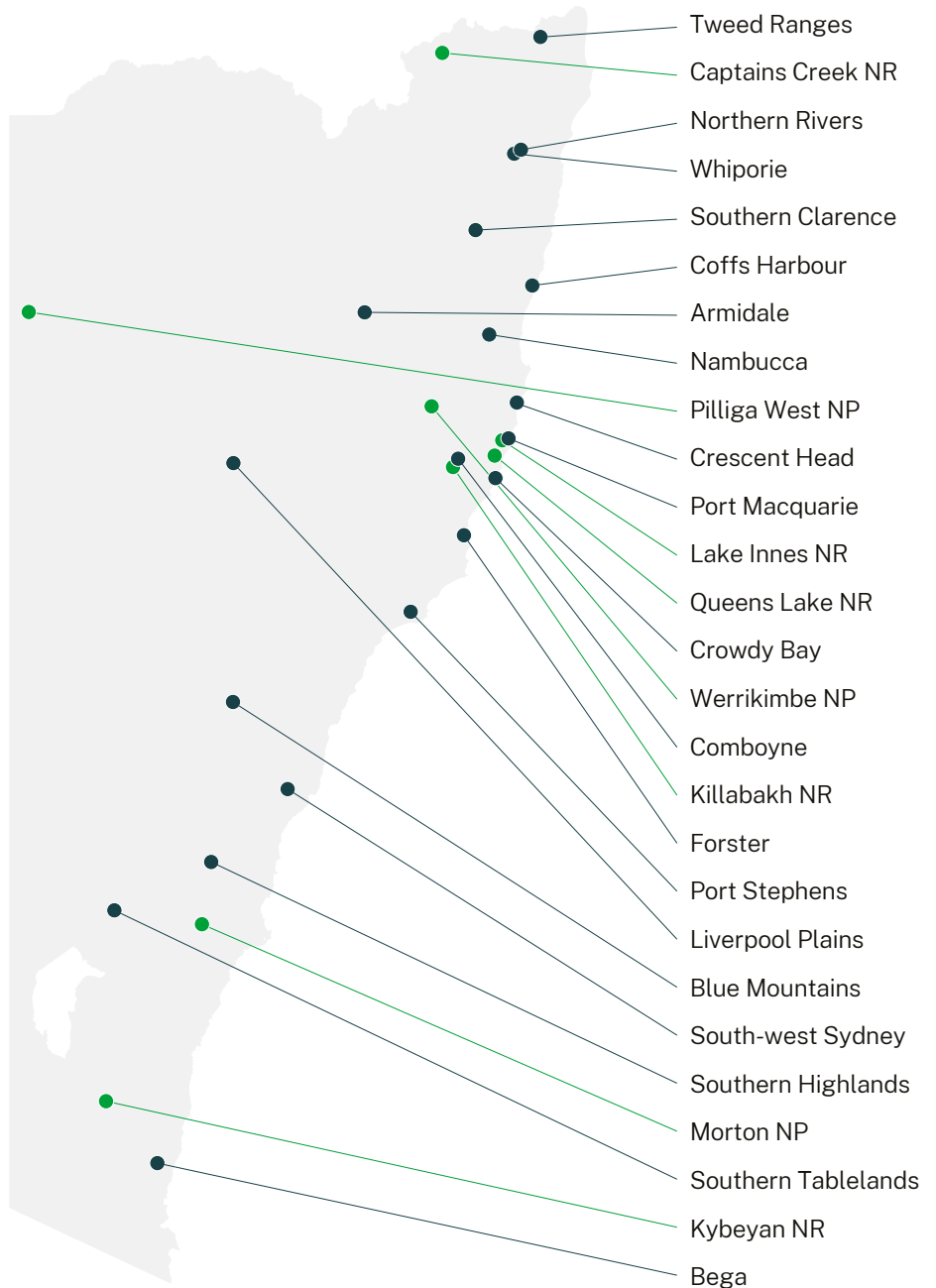
4,500 ha of koala habitat protected under 55 Biodiversity Conservation Trust agreements



5,885 ha of koala habitat restored including **143 ha** through premium carbon farming projects



565,094 trees purchased under NSW Koala Strategy



- Land acquired for national park estate
- Habitat restoration sites funded in 2022-23
- NP – national park
- NR – nature reserve



Pillar 1 status update

Action	Description	Yearly progress (2022–23 FY)
1.1 Permanently conserving priority koala habitat as national parks*	The NSW Government will permanently conserve areas of high-quality koala habitat in strategic locations by adding them to the national park estate. Land that can help establish and secure stronghold areas will be prioritised.	<ul style="list-style-type: none"> • 9,016 ha of koala habitat purchased for inclusion in the national park estate • Mapping of high-quality koala habitat that would be suitable for protection in the national parks system, completed in areas of immediate investment to guide purchase priorities
1.2 Partnering with landholders to protect koala habitat on private land*	Private landholders with high-quality koala habitat in populations for immediate investment will be supported to permanently conserve their koala habitat. Support will be targeted towards stronghold areas and will occur via 2 programs administered by the Biodiversity Conservation Trust: Conservation Partners Program, and in-perpetuity conservation agreements with annual payments.	<ul style="list-style-type: none"> • 4,500 ha of koala habitat protected through 55 in-perpetuity agreements with landholders
1.3 Retiring biodiversity credits	The NSW Government will purchase and retire 1,500 koala credits from the biodiversity credit market, securing in perpetuity protection for koala habitat.	<ul style="list-style-type: none"> • 2,217 koala credits purchased and retired from the Biodiversity Offsets Scheme • 306 ha of koala habitat actively managed at sites of retired biodiversity credits
1.4 Restoring and managing koala habitat*	The NSW Government will restore 20,000 ha of koala habitat across different tenures, including natural and assisted regeneration and direct planting, supporting local restoration initiatives through regional restoration summits and training for local groups.	<ul style="list-style-type: none"> • 5,885 ha of koala habitat restored or underway • \$3,060,889 invested to deliver habitat restoration in agreement with landholders/land managers • Koala habitat restoration guidelines developed and publicly available • 565,094 trees planted under the NSW Koala Strategy
1.5 Engaging the private sector	The NSW Government will use partnerships to leverage private sector investment in koala conservation.	<ul style="list-style-type: none"> • Best practice Partnership Guidance for public–private partnerships published • 2 natural capital initiatives related to koala habitat considered • 2 concept partnerships with private sector entities developed • 7 cross-departmental collaboration opportunities engaging the private sector
1.6 Coordinating habitat restoration	The NSW Government will develop a statewide platform for capturing koala habitat restoration information to enable prioritisation and coordination of koala habitat restoration needs, including bushfire-affected regions.	<ul style="list-style-type: none"> • 560 active restoration sites recorded in the Habitat Restoration HUB • 49 organisations trained in using the Habitat Restoration HUB • 74 individuals trained in using the Habitat Restoration HUB

Action	Description	Yearly progress (2022–23 FY)
1.7 Driving investment through premium carbon markets	The NSW Government will work with private sector partners to deliver groundbreaking premium carbon market projects. Projects will actively regenerate areas of degraded koala habitat. The action will help build business and community confidence in the environmental, social and public co-benefits of premium carbon markets.	<ul style="list-style-type: none"> • 143 ha of koala habitat restored through premium carbon farming projects • 1 premium carbon initiative funded
1.8 Box-gum woodland restoration and rewilding	Taronga Conservation Society Australia will partner with the NSW Government to lead the largest ever box-gum woodland restoration and rewilding project. This action will deliver a landscape scale restoration project, creating more than 5,000 ha of climate-change-resilient habitat for koalas and other threatened species. Koalas will be translocated to the site once established.	<ul style="list-style-type: none"> • Project implementation plans and governance frameworks established • Engage with First Nations people and other key stakeholders • Target region confirmed and site selection process underway • Restoration and climate resilience planning underway • External review and validation of project financial model completed to leverage additional funding from non-government sources
1.9 Land-use planning initiatives	The NSW Government will direct and support councils to ensure koala habitat values are included in land-use planning decisions through regional plans, local strategic planning statements and local environmental plans. These will be informed by best available koala habitat mapping such as the Koala Habitat Information Base and koala plans of management in priority local government areas. This will mitigate habitat loss and deliver long-term habitat protection for koalas and other species that share their habitats.	<ul style="list-style-type: none"> • 4 councils supported to incorporate koala habitat values into their strategic planning instruments
1.10 Area of Outstanding Biodiversity Value for koalas	The Minister for Environment and Heritage will establish one Area of Outstanding Biodiversity Value (AOBV) for koalas under the <i>Biodiversity Conservation Act</i> . This will help to effectively manage an area that makes a significant contribution to the persistence of koalas.	<ul style="list-style-type: none"> • Investigation of sites for the establishment of an AOBV for koalas is underway
1.11 Assets of Intergenerational Significance for koalas	The Minister for Environment and Heritage will establish 20 new Assets of Intergenerational Significance (AIS) for koalas under the <i>National Parks and Wildlife Act 1974</i> .	<ul style="list-style-type: none"> • 15 areas covering 60,527 ha declared as Assets of Intergenerational Significance

*Actions continued from the NSW Koala Strategy 2018–21 with new investment



Kyogle property owner Tony Rowland.
Photo: WWF-Australia

Supporting private landholders to restore and protect koala habitat

At least 60% of Australia's land is privately owned or managed. To secure a future for koalas in the wild, it is critical we conserve, protect and restore existing koala habitat on private land.

More than \$20 million has been committed under the NSW Koala Strategy to permanently protect koala habitat on private land through the Biodiversity Conservation Trust (BCT). In 2022–23, 4,500 ha have been permanently protected under 55 BCT conservation agreements with private landowners.

The partnership between the NSW Koala Strategy, WWF-Australia, the BCT and Envite Environment aims to secure more than 500 ha of remnant koala habitat on private land in the Northern Rivers region of New South Wales across up to 24 conservation agreements.

Kyogle property owner Tony Rowland has become the first person to sign a permanent conservation agreement as part of a Collaborative Koala Habitat Protection project in the Northern Rivers.

The conservation agreement covers about 20 ha of the 28 ha property that contains a critically endangered shrub called scrub turpentine, koala food trees such as forest red gum, small-fruited grey gum and tallowwood, and is home to threatened species including koalas, black-striped wallabies, glossy black-cockatoos and giant barred frogs.

For the last 5 years, Tony has been removing a serious lantana infestation, which has allowed native grasses to return and animals to move through the property.

This is an example of how agreement holders can apply for grants to control weeds and pest animals, conduct supplementary revegetation with koala food trees, put up fencing to exclude stock, and install nest boxes.



Bangalow koalas

Restoring koala habitat is critical to reversing the decline of koalas in the wild in New South Wales. Under the NSW Koala Strategy, we are partnering with private sector organisations like Bangalow Koalas to increase suitable habitat available for koalas and connect quality patches of habitat to enable their safe movement.

Over the last 2 years, 100,000 trees have been supplied to Bangalow Koalas, contributing to the organisation's long-term goal to create a koala wildlife corridor across the Northern Rivers region of New South Wales. In March 2023, Bangalow Koalas reached the milestone of planting their 250,000th tree, halfway to reaching their ultimate goal of 500,000 trees by the end of 2025.

Tree planting. Photo: Paul Daley



Over 4,400 ha of koala habitat purchased in Port Macquarie region

Under the NSW Koala Strategy, up to 15,000 ha of high-quality koala habitat on private land will be added to the national park estate. One of the properties purchased is 'Waterfall', a 4,450 ha property, approximately 65 km west of Wauchope on the NSW mid-north Coast.

This parcel of land, within the traditional lands of the Birpai Nation, is uniquely placed to enhance habitat resilience and strengthen habitat corridors as it links 4 reserves including Werrikimbe State Conservation Area, Werrikimbe National Park, Mount Seaview Nature Reserve and Cottan-Bimbang National Park. It is also located between the 2 known koala strongholds in the region – at Comboyne and South Kempsey.

The property contains high-quality koala habitat and is home to at least 45 other threatened species, including the endangered Hastings River mouse, spotted-tailed quoll, hollow-dependent species such as the greater glider, yellow-bellied glider, glossy black-cockatoo, and a range of birds such as the varied sitella, flame robin, white-throated needletail and wompoo fruit-dove.

The acquisition also enhances protection for declared wilderness areas that abut the property, which form part of the Gondwana Rainforests of Australia World Heritage Area.

'Waterfall' park acquisition outside Port Macquarie. Photo: John Spencer/DCCEEW



Pillar 2

Supporting local communities to conserve koalas

2022-23 Highlights



5 additional Regional Partnerships established with local councils, conservation groups and Aboriginal communities



78 First Nations people involved in regional partnership working groups and advisory panels



266 individual stakeholders engaged to protect koalas and areas of important koala habitat



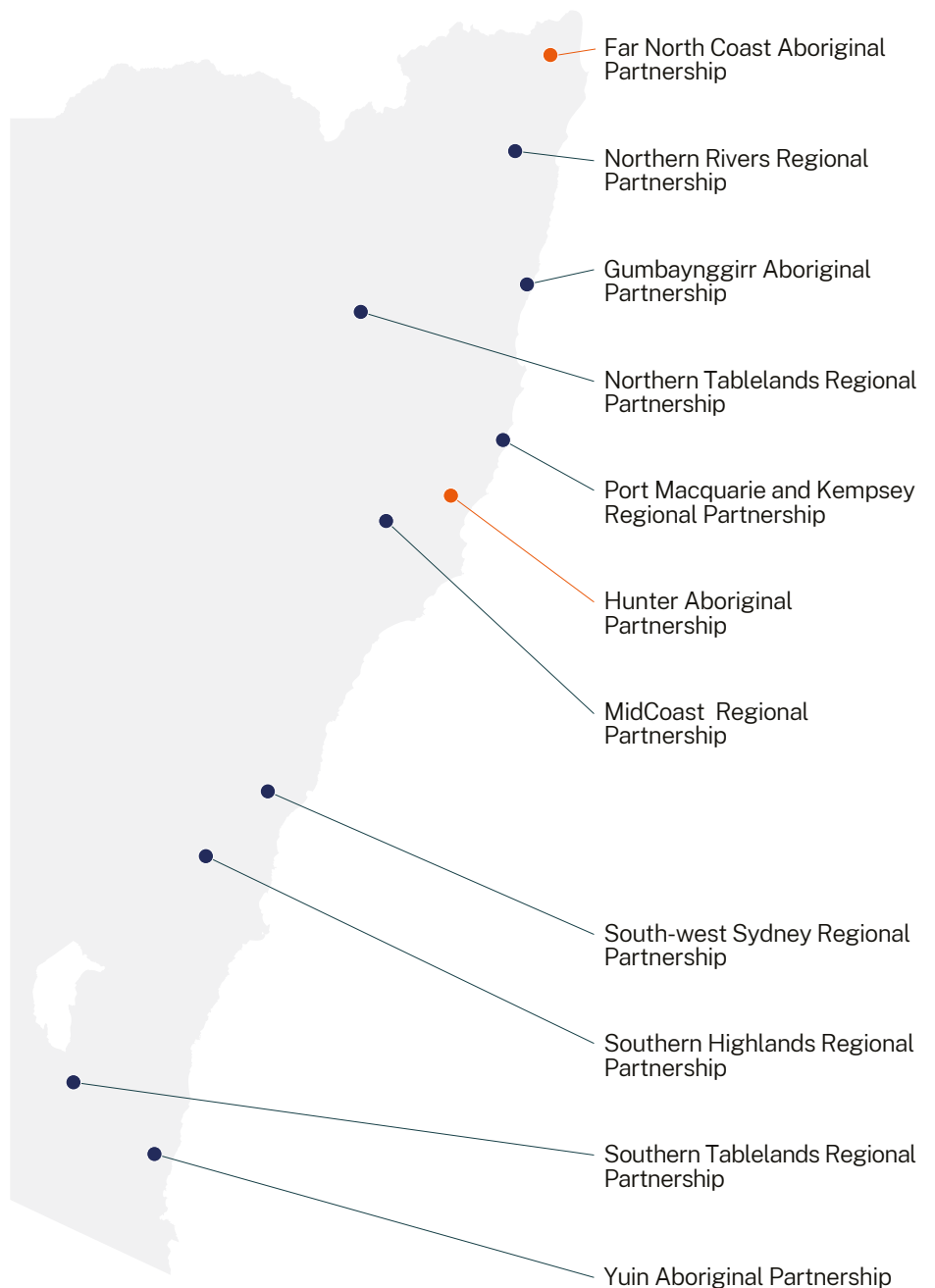
4 local councils supported to develop koala habitat maps



656 I Spy Koala sightings recorded



73 NSW educators participated in Koala Smart



- Regional partnerships
- Regional partnerships in development



Pillar 2 status update

Action	Description	Yearly progress (2022–23 FY)
2.1 Partnering with regional experts to deliver on-ground actions*	The NSW Government will deliver up to 8 regional koala conservation partnerships with councils, conservation groups, Aboriginal communities and other partners to ensure community expertise and knowledge are informing on-ground actions.	<ul style="list-style-type: none"> • 5 additional regional partnerships established with local councils, conservation groups and Aboriginal communities • Aboriginal Advisory Panel established as a governance body to inform on-ground koala conservation actions
2.2 Engaging the community*	The NSW Government will continue to work closely with the NSW community to protect koalas and areas of important koala habitat. Regional partnerships from Action 2.1 will engage communities in local koala actions.	<ul style="list-style-type: none"> • 78 First Nations people involved in regional partnership working groups and advisory panels • 266 individual stakeholders engaged to protect koalas and areas of important koala habitat
2.3 Supporting councils to deliver koala habitat maps	The NSW Government will draw on expertise within Local Land Services and the Department of Climate Change, Energy, the Environment and Water to assist local councils to carry out rigorous on-ground ecological assessments and appropriate community consultation to develop koala habitat maps and strategically conserve koala habitat in their local area.	<ul style="list-style-type: none"> • 4 local councils supported to develop koala habitat maps • 5 councils commenced on-ground ecological assessments to inform habitat maps • Standardised methodology developed for councils
2.4 Partnering with the Australian Government and other states	The NSW Government will continue to work collaboratively with state and federal governments to protect koalas throughout Australia. Koala management in other states and work led by the Australian Government can provide useful insights and opportunities for collaboration, such as completing the recovery plan for the listed populations of koalas, and establishing a national monitoring framework for koalas.	<ul style="list-style-type: none"> • Strong cross-jurisdictional relationships have ensured koala recovery projects funded by Commonwealth grants in New South Wales are aligned with actions under the NSW Koala Strategy • The NSW Government is represented on the National Koala Recovery Team with the focus to deliver the National Recovery Plan for the Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) • The NSW Government is collaborating with the Australian Government to deliver the National Koala Monitoring Program

Action	Description	Yearly progress (2022–23 FY)
2.5 Working with landholders*	<p>The NSW Government will partner with farming organisations to explore new ways to encourage landholders to protect koala habitat on their land while maintaining agricultural production values.</p> <p>The NSW Government will collaborate with the Country Women’s Association (CWA) of New South Wales to develop a dedicated communications and engagement campaign to share practical information with CWA members and regional communities in areas of NSW with koala habitat.</p>	<ul style="list-style-type: none"> • CWA Koala Conservation Partnership established • 20 CWA members participating in Partnership’s Working Group to lead on-ground action • 656 I Spy Koala sightings recorded
2.6 Increasing engagement of schools and local community groups*	<p>The NSW Government will support the involvement of school children and local Lions clubs in koala conservation through the Koala Smart program.</p>	<ul style="list-style-type: none"> • 73 NSW educators participated in Koala Smart • 52 educators in priority koala population regions participated in Koala Smart’s program • Koala Champion Program established to support students delivering koala projects • Long-term funding agreement for Koala Smart program established

*Actions continued from the NSW Koala Strategy 2018–21 with new investment



Koala between the Tweed and Brunswick rivers east of the Pacific Highway, Threatened Population. Photo: Scott Hetherington/DCCEEW

Working with landholders

In the Black Mountain area of the New England highlands, there is a stunning property containing significant koala habitat. The landholders, Teesh Wright and her family, have made some significant conservation achievements for high country koalas. By working closely with the Northern Tablelands Regional Partnership, established between the NSW Koala Strategy and Southern New England Landcare (SNEL), efforts have been made to understand koala presence on the property. Past surveys have found koala scat, while a recent drone survey located 3 koalas – including a mother with a joey.

By entering into a conservation agreement with SNEL, Teesh and her family will manage 82 ha of the property for koala conservation. This agreement includes funding for approximately 4 km of fencing, to exclude livestock and manage grazing pressure on the existing koala habitat. The efforts of Teesh and her family highlight the valuable role landholders play in conserving koalas, particularly in rural areas.



Armidale landowner, Teesh Wright. Photo: Thunderbox Films/DCCEEW



Increasing engagement with schools and local community groups

Students planting koala habitat trees as part of the Koala Champions field day.
Photo: Spinning Reel Audio Visual/DCCEEW

In collaboration with Koala Smart, students from across New South Wales are being educated about koala conservation.

Koala Smart is an educational program aligned with the NSW school syllabus that provides classroom-ready resources that allow teachers to deliver information about koala conservation to their students.

In April and May 2023, secondary schools in the Snowy Mountains participated in the Koala Champions program, a collaboration between Koala Smart and the Kosciuszko Education Centre. Students engaged in classroom exercises to learn about koalas, their threats, and the NSW Koala Strategy. They then embarked on a field trip, planting koala habitat trees and assessing habitat quality with guidance from Local Land Services and Landcare staff. During the field trip, students interviewed conservation and land management experts to learn how the community can reduce the threats to koalas within their region. As part of their projects, students created posters, videos, or other community messages to raise awareness about these threats and promote community actions for koala protection.

Koala Smart was developed in partnership with the NSW Koala Strategy and serves as its educational component for regional implementation. Students involved in this program are our future leaders and Koala Smart may be their first introduction to the world of conservation. By investing in education, children can become empowered to take actions that promote positive change and contribute to a positive future for koalas.



Cultural burn on Yuin Country.
Photo: Dan Morgan/Firesticks Alliance
Indigenous Corporation

Partnering with First Nations communities

Regional partnerships deliver meaningful, locally led koala conservation action. In 2022–23, 5 regional partnerships have been developed. These include Aboriginal-led partnerships focused on embedding traditional ecological knowledge to conserve koalas.

The far south coast of New South Wales is home to an important koala population with deep cultural significance to the Yuin people. On Yuin Country, a 4-year partnership with Firesticks Alliance Indigenous Corporation has been established to achieve targeted koala conservation actions, including cultural burning. Firesticks Alliance is an Indigenous-led network that empowers Aboriginal communities to care for Country through cultural land and fire practice.

The partnership with Firesticks Alliance is helping to drive an Indigenous-led reinvigoration of cultural burning and traditional management of koala habitat on Yuin Country, and draws on tens of thousands of years of First Nations knowledge and experience in managing these forests.

Firesticks Alliance facilitates cultural learning pathways for the Yuin community to share cultural knowledge and to mentor and support cultural land management practitioners. The partnership supports a dedicated First Nations Koala Officer to deliver on-ground actions informed by cultural knowledge to protect local koala populations and their habitat.

On-ground actions include:

- identifying and mapping important koala habitat areas within the cultural landscape
- establishing culturally informed monitoring sites and sharing bio-cultural knowledge within the Yuin community
- protecting and enhancing koala health and habitat through cultural fire land management
- facilitating and supporting Indigenous-led research projects for koala conservation in the region.

Aboriginal communities throughout New South Wales have a strong role to play in ensuring the long-term health of koalas and their habitat, and the NSW Koala Strategy will continue to recognise and support Aboriginal communities and work with them to support local conservation projects such as this.



Pillar 3

Improving the safety and health of koalas

2022-23 Highlights



18 best practice vehicle strike mitigation measures funded



17 koala rehabilitation organisations supported through professional development training

565 vets and vet nurses completed Taronga wildlife care training



801 ha of koala habitat within priority population areas of national park estate treated by bushfire hazard reduction activities



1 translocation project implemented



● Vehicle strike hotspots funded for mitigation measures



Pillar 3 status update

Action	Description	Yearly progress (2022–23 FY)
3.1 Fixing priority koala vehicle strike hotspots*	The NSW Government will identify and take action at 10 or more vehicle strike hotspots across the state to reduce koala injury and mortality and improve the viability of koala populations.	<ul style="list-style-type: none"> • 3 projects funded to improve our understanding of the most effective ways to mitigate vehicle strike, including the efficacy of koala grids, dynamic sign effectiveness and the feasibility of integrating AI into vehicle activated signs • 18 best practice vehicle strike mitigation measures funded
3.2 Addressing attacks by domestic dogs*	The NSW Government will reduce attacks on koalas by domestic dogs by working with local councils to engage dog owners in key areas where attacks occur.	<ul style="list-style-type: none"> • Increased community awareness of domestic dog attacks on koalas through information campaigns and community events • 3 projects mitigating dog attacks implemented with local councils
3.3 Supporting koala rehabilitators*	The NSW Government will continue to support koala rehabilitators by providing ongoing professional development training for volunteer carers and wildlife rehabilitators, and providing equipment and access to transport for injured koalas and other wildlife for rehabilitation groups.	<ul style="list-style-type: none"> • \$9,200 of funding provided to assist koala rehabilitators to attend the National Koala Conference • 36 microchip readers provided to 13 koala rehabilitation providers across the state • 17 koala rehabilitation organisations supported through professional development training
3.4 Training vets and vet nurses in wildlife care*	The NSW Government will work with Taronga Zoo to continue to deliver professional training in wildlife treatment for vets and vet nurses.	<ul style="list-style-type: none"> • Partnership agreement established with Taronga Zoo to deliver wildlife care training to vets and vet nurses • 565 vets and vet nurses completed Taronga wildlife care training
3.5 Monitoring rehabilitated koalas after release*	The NSW Government will work with wildlife rehabilitators and researchers to monitor rehabilitated koalas released back into the wild.	<ul style="list-style-type: none"> • Research agreement for a 4-year koala post-release monitoring project established with Sydney University
3.6 Facilitating chlamydia vaccine trials, translocations and captive breeding	The NSW Government will facilitate the policy and regulatory pathways to support scientific developments to improve the health and viability of koala populations, including for koala chlamydia vaccine trials, captive breeding of koalas, and translocation.	<ul style="list-style-type: none"> • 2 chlamydia vaccine trials completed and findings disseminated • 2 chlamydia vaccine trials on track • Recent advances in vaccine research were presented at the 2023 Koala Research Symposium • Koala Translocation Licensing Expert Panel established to streamline application process

Action	Description	Yearly progress (2022–23 FY)
3.7 Improving our approach to fire management to protect koalas and koala habitat*	The NSW Government will develop bushfire management approaches to better protect koalas and their habitat while also protecting people and property. The government will incorporate traditional ecological knowledge and cultural burning practices into these approaches. Improved understanding of the impacts of hazard reduction burns on koalas will help inform future hazard reduction burns.	<ul style="list-style-type: none"> • 801 ha of koala habitat within priority population areas of national park estate treated by bushfire hazard reduction activities • 2 cultural burns undertaken within priority population areas of national park estate • 36 National Parks and Wildlife Service (NPWS) prescribed burn plans completed identifying koalas as an asset to be protected • Yuin and Gumbaynggirr regional partnerships undertook cultural burns in koala habitat on private property
3.8 Improving emergency response actions for koalas and other wildlife	The NSW Government will work with volunteer wildlife rehabilitators, vets and other partner organisations to enhance coordination of emergency response for koalas and other wildlife due to bushfire or extreme weather events.	<ul style="list-style-type: none"> • Over 700 NPWS firefighters completed the online Wildlife First Responder Training and 2,000 Wildlife First Response handbooks were ordered for firefighting crews • 2 Bushfire Wildlife Workshops hosted providing simulated injured-wildlife response scenarios with NPWS fire-trained staff, vets and wildlife rehabilitators from the Wildlife Emergency Response Team
3.9 Translocation program	The NSW Government will use the lessons from previous translocation research to undertake koala translocations. Translocations will be accompanied by special consultation with local Aboriginal groups.	<ul style="list-style-type: none"> • 5 candidate sites assessed for translocation feasibility • 1 translocation project implemented • Statewide translocation framework developed

*Actions continued from the NSW Koala Strategy 2018–21 with new investment

Vehicle strike mitigation at Deadmans Creek, southern Sydney

Heathcote Road crosses Deadmans Creek in southern Sydney and is a known koala vehicle strike hotspot. As one of the 10+ locations prioritised for funding under the NSW Koala Strategy, the project aims to prevent koalas from getting onto Heathcote Road by directing them to travel under the existing bridge at Deadmans Creek.

Stage 1 of work has been completed on the fauna path under the Deadmans Creek bridge, where Transport for NSW built a platform on the western side of the creek and a concrete walkway on the eastern side to improve access.

Stage 2, currently in planning, will involve fencing either side of Heathcote Road to the north and south of Deadmans Creek bridge to prevent animals from entering the road corridor and instead direct them to the bridge underpass and to a small culvert known to be used by koalas about 400 m from the bridge.

This project was initiated under the previous NSW Koala Strategy (2018–21) and involves collaboration between Transport for NSW, the department, the Australian Government Department of Defence (in their capacity as a land manager) and other key stakeholders.

Ongoing monitoring will take place once the project is complete to examine the effectiveness of the measures and identify how many species use the underpass to safely move through the landscape.



Koala using pipe culvert installed along Heathcote Road. Photo: Transport for NSW

Training vets and vet nurses with Taronga Conservation Society

The NSW Koala Strategy has committed \$3.5 million to support the wildlife rehabilitation sector and improve outcomes for sick and injured koalas.

A core component of this work is to deliver professional development training for vets and vet nurses targeted at improving the knowledge and skills of veterinary staff related to wildlife triage, first aid, treatment and care.

Delivered by Taronga Conservation Society, the program has trained a total of 1,656 vets and vet nurses since its commencement in June 2020. In the 2022–23 financial year, 565 vets and vet nurses completed Taronga wildlife care training.

The course is specifically designed with a focus on NSW wildlife with one module, developed by the Koala Health Hub at the University of Sydney, focused specifically on koala treatment and care.

The course includes several downloadable take-home resources and links to external resources, so participants may refer back to important information as needed.



Taronga vet leading wildlife care training. Photo: Taronga Conservation Society Australia



Supporting koala rehabilitators in south-west Sydney

Sydney Wildlife Rescue carer Rhonda Pascoe with joey Teddy. Photo: Thunderbox Films/DCCEEW

Wildlife vets and volunteer rehabilitators play a crucial role in koala conservation efforts, often rescuing and caring for koalas affected by habitat fragmentation, vehicle strike, disease, dog attack, fires and drought.

Through a regional koala conservation partnership in south-west Sydney, the NSW Government works closely with koala rehabilitators and wildlife veterinary professionals to support them in their work, including:

- purchasing a rapid chlamydia testing machine – this investment enables rapid diagnosis, ensuring that affected koalas receive timely treatment and can be released back into their home range as quickly as possible
- strengthening capacity through workshops and training – the NSW Government is committed to empowering koala vets and rehabilitators in the region by organising workshops and training sessions. These initiatives are designed to enhance their skills and knowledge, enabling them to provide even better care for injured or orphaned koalas during the rehabilitation process
- addressing veterinary support gaps – by collaborating with local stakeholders and organisations, the NSW Government aims to establish improved veterinary services that can cater to the needs of koalas in the area
- providing support in the management of the important data associated with koala rescue and rehabilitation such as ear tag and vehicle strike data.



Pillar 4

Building our knowledge of koalas

2022-23 Highlights



6 new research projects addressing priority knowledge gaps in the Koala Research Plan awarded funding



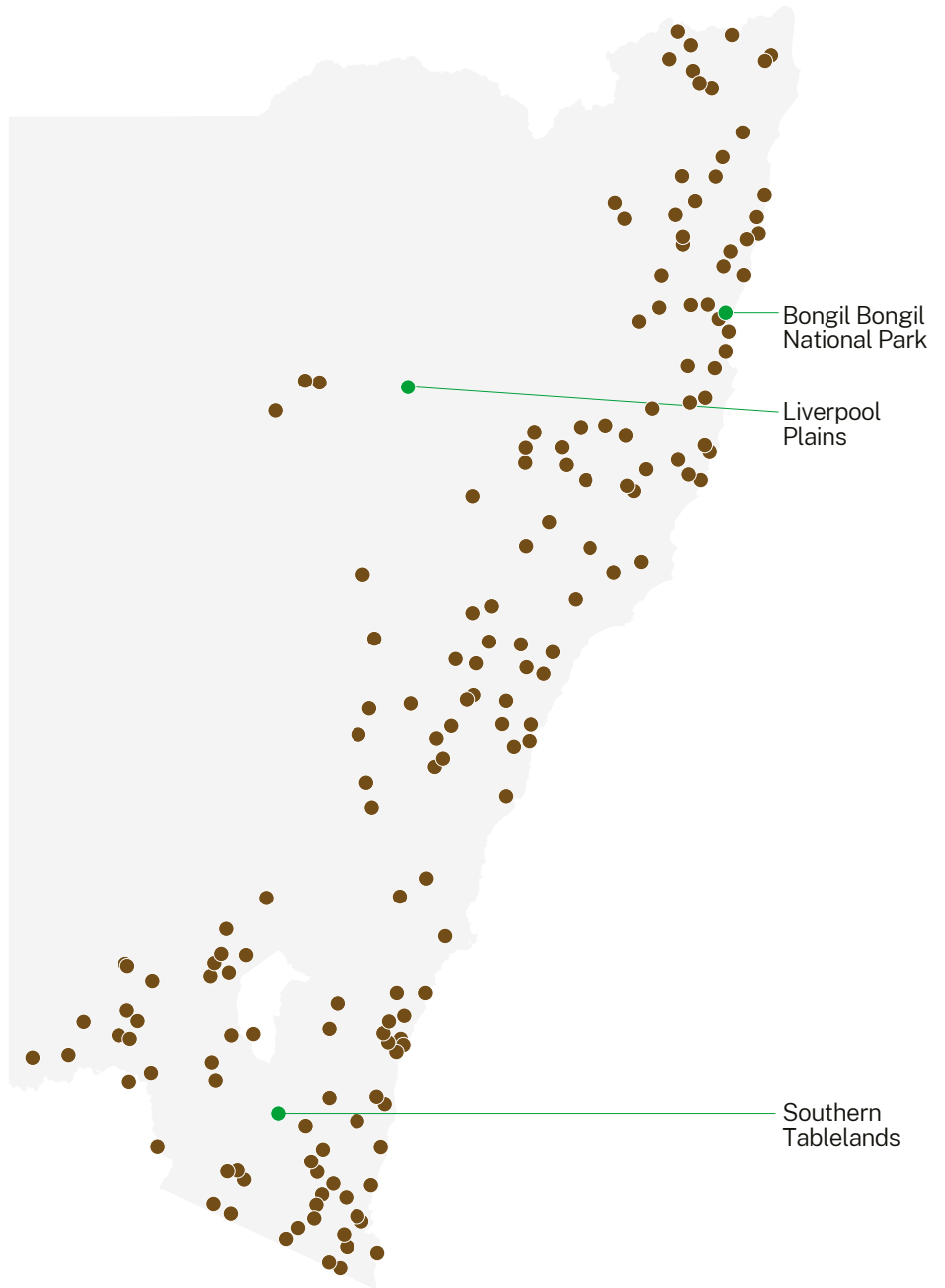
5 more research projects completed
8 research projects reached first milestones



1 biennial research symposium hosted



20 Aboriginal Advisory Panel meetings held



- Sites surveyed for the baseline program
- Sites surveyed for the koala monitoring program



Pillar 4 status update

Action	Description	Yearly progress (2022–23 FY)
4.1 Implementing a statewide monitoring program	The NSW Government will monitor populations, habitat, disease, genetic diversity and threats at a minimum of 20 sites across New South Wales, enabling future measurement of progress against the 30-year goal. A dashboard will track the effectiveness of actions delivered under this strategy.	<ul style="list-style-type: none"> Initial occupancy surveys of 3 priority koala population monitoring areas undertaken in spring 2022 Occupancy surveys of a further 8 priority koala populations across New South Wales will commence in spring 2023 Intensive monitoring to improve knowledge of drivers of koala population health and dynamics, including disease and genetics, (the Koala Population Sentinel Program) will commence in the Blue Mountains in November 2023 Evaluation and reporting on koala monitoring partner projects has commenced to increase understanding of NSW koala population status
4.2 Establish baseline information about koalas	The NSW Government will implement innovative and cost-effective methods to deliver a baseline of the current statewide occurrence, distribution and relative abundance of koalas within 3 years. This work will also collect baseline health and genetics status in up to 50 koala populations. The program will use the best available science and encourage private sector input.	<ul style="list-style-type: none"> Statewide koala baseline assessment of koala distribution, occupancy and relative abundance underway 162 surveys completed as part of the baseline assessment
4.3 Research to support innovation and adaptive management*	The NSW Government will continue to oversee the Koala Research Plan. The NSW Government will incorporate cultural knowledge systems into the plan and coordinate research and data collection on key knowledge gaps. The NSW Government will hold biennial research symposia to review progress and update key knowledge gaps identified in the plan. The research program will seek to leverage significant co-investment from aligned programs such as the Australian Research Council Linkage Program.	<ul style="list-style-type: none"> 6 new research projects addressing priority knowledge gaps in the Koala Research Plan awarded funding in 2022–23 5 research projects completed and findings disseminated 8 research projects reached first milestones 1 biennial research symposium hosted
4.4 Keeping our evidence base up to date	The NSW Government will continue to refine and improve the Koala Habitat Information Base and supporting spatial and mapping products. This will include further refuge modelling to identify areas that may serve as refuges from fire, heat stress or drought.	<ul style="list-style-type: none"> Information system established to securely and adequately store data 5 new koala data assets uploaded to the Information Asset Register 10 data assets released publicly on SEED (Sharing and Enabling Environmental Data in New South Wales)

Action	Description	Yearly progress (2022–23 FY)
4.5	Research into koala responses to intensive harvesting of native forests*	The Natural Resources Commission will continue to deliver an independent research project to better understand how koalas are responding to intensive harvesting on the NSW north coast.
4.5		<ul style="list-style-type: none"> • Expert panel established comprising koala and forestry experts • Callout for research projects addressing knowledge gaps identified in the Koala Research Plan completed
4.6	Integrating traditional ecological knowledge	The NSW Government will support monitoring on Aboriginal-owned lands and facilitate integration of traditional ecological knowledge into on-ground actions.
4.6		<ul style="list-style-type: none"> • 3 Aboriginal regional partnerships established • 20 Aboriginal Advisory Panel meetings held • 4 Koala Strategy actions received advice from the Aboriginal Advisory Panel
4.7	Australian Museum as the biobank for NSW koala genetic material*	The NSW Government will continue to coordinate the delivery of koala genetic material to the Australian Museum through a new phase of sample collection and storage.
4.7		<ul style="list-style-type: none"> • Coordination process established with the Australian Museum
4.8	Developing a baseline map of koala genetics	The NSW Government will partner with researchers, communities and other stakeholders to deliver a baseline map of genetic diversity to fill knowledge gaps in the first 3 years. The data will be open source for all researchers and koala rehabilitators to access and build on.
4.8		<ul style="list-style-type: none"> • Baseline map of genetic diversity in koala populations complete • The Koala Population Sentinel Program has commenced to evaluate the influence of genetics on koala population dynamics
4.9	Improving the effectiveness of conservation actions	The NSW Government will explore the links between conservation actions and their relative contribution to increasing koala numbers through effective monitoring and evaluation. This work will inform future prioritisation of investment and action. Research will be undertaken to identify least-cost pathways to protecting, restoring and creating habitat by understanding trends in habitat loss, relevant drivers and the likely viability of koala habitat by region.
4.9		<ul style="list-style-type: none"> • Monitoring, Evaluation, Improvement and Reporting (MERI) Framework and adaptive management frameworks developed • Internal and external review of the effectiveness of conservation actions in the strategy complete

Action	Description	Yearly progress (2022–23 FY)
4.10	Recognising the economic and cultural value of koalas The NSW Government will deliver a study to quantify the market and non-market values of koalas to the NSW community, including cultural, reputational, intrinsic and Aboriginal values.	<ul style="list-style-type: none"> • Study of the economic (market and non-market) value of the koala completed
4.11	Innovation and leading the way with cutting-edge technology The NSW Government will explore innovative ways to incorporate cutting-edge technology in koala conservation, such as thermal detection of koalas using drone technology and novel habitat restoration techniques.	<ul style="list-style-type: none"> • Contemporary and innovative technologies such as drones, artificial intelligence data exploration, cutting edge genomic technologies, koala tracking in real time and data management systems and dashboards are being applied in koala research, the statewide baseline assessment and monitoring programs

*Actions continued from the NSW Koala Strategy 2018–21 with new investment



Koalas in the Koala Hospital in Macquarie Nature Reserve, Port Macquarie. Photo:John Spencer/DCCEEW



Baseline survey

The NSW Koala Strategy is undertaking the first comprehensive statewide koala baseline assessment of the distribution and abundance of koalas across New South Wales.

Currently taking place on carefully chosen sites in national parks, state forest, Crown and privately-owned land across the range of the koala in New South Wales, the survey will provide a baseline population estimate from which to evaluate the NSW Koala Strategy's conservation targets and commitments and contribute to identifying priority areas for targeting koala conservation and management.

In 2022–23, 162 sites were surveyed using a combination of methods, including infrared drones, acoustic recordings, diurnal transects, cameras and opportunistic sampling. Of the sites that have been surveyed, koalas have been detected at 50, a promising finding given many of these early survey sites were in areas of low koala population occurrence.

Surveys will be complete and a final report delivered prior to the conclusion of the NSW Koala Strategy in June 2026.

Thermal drone image of a koala. Photo: L Hall/DCCEEW



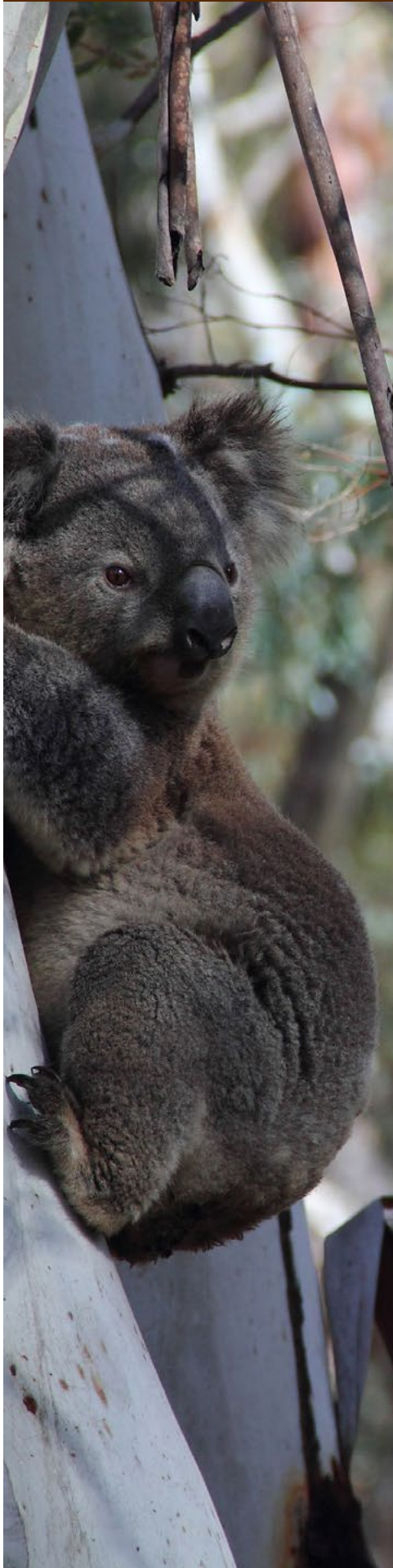
Integrating traditional ecological knowledge

The NSW Koala Strategy is collaborating with Gundungurra Traditional Owners in the Southern Highlands to demonstrate the traditional ecological knowledge that Guula/Goola (koala) are unlikely to be attacked or eaten by predators in intact ecosystems.

This project is pairing traditional ecological knowledge with genetic analysis techniques to assess the impact of predators on koalas. The project collected 500+ predator scats (including dingoes, foxes and cats) from the Burratorang Valley (Gundungurra Country, low-density koala population) and Woronora Plateau (Dharawal Country, high-density koala population). University of NSW scientists are extracting all eDNA from the scats to identify which prey species are in the scats of which predator species. The results from the project are still being analysed but they will have implications for Goola and other threatened species' management.

Scat collection. Photo: Margot Law/DCCEEW

Koala research symposium



In February 2023, 160 researchers and koala conservation practitioners attended the third biennial koala research symposium. Held across 2 days, the symposium focused on:

- sharing knowledge from contemporary koala research
- developing new research projects to address critical knowledge gaps and to ensure conservation efforts are guided by best available science.

Biennial koala research symposia are a key deliverable under the 10-year Koala Research Plan launched under the previous NSW Koala Strategy (2018–21).

At the koala research symposium, research projects awarded funding under the Koala Research Plan were announced. These important projects are tackling priority research areas identified under the Koala Research Plan. The 6 projects funded in 2022–23 include:

- University of Sydney – to vaccinate koala populations that are at risk of getting chlamydia from nearby positive populations, and to understand the impact of heat stress on koala deaths through climate change
- University of Queensland – to investigate if environmental stressors exacerbate disease in koalas and increase infectious viral activity, and to understand drivers and identify solutions to koala habitat loss and degradation
- University of Sunshine Coast – to evaluate the newly developed koala chlamydia vaccine at the population level
- Science for Wildlife – to evaluate how koalas use their habitat, to inform management strategies under climate change
- Australian National University – to understand the effect of fire on koala diets
- Biolink – to create a quantitative model of tree use by free-ranging koalas.

Research projects build on existing work, help NSW Government to understand new and emerging threats to koalas, address some of the key knowledge gaps in koala conservation, improve conservation outcomes, secure a safer future for koalas in the wild, help to make well-informed decisions about the management and conservation of koalas across New South Wales, and support healthy koala populations.

On day 2 of the symposium experts and researchers came together with NSW Government scientists, managers and policy personnel to scope new priority research projects to address critical knowledge gaps. A further 6 research projects were subsequently identified for funding in 2023.

Since the commencement of the NSW Koala Research Plan in 2018, \$5.7 million has been committed to fund 18 koala-focused research projects.

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Photos

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