

National Koala Conservation and Management Strategy 2009-2014



First Implementation Report to the Natural Resources Management Ministerial Council

Photo on front cover by Dan Lunney

The Natural Resource Management Ministerial Council (NRMMC) consists of the Australian state, territory and New Zealand government ministers responsible for primary industries, natural resources, environment and water policy.

The Implementation Team consists of representatives of the Australian Government and the Queensland, New South Wales, Victorian and South Australian state governments.

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National Koala Conservation and Management Strategy Secretariat
Department of Sustainability, Environment, Water, Population and Communities
GPO Box 787
CANBERRA
ACT 2601

or by email to koala.strategy@environment.gov.au

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Introduction

This document is the first report by the implementation team for the National Koala Conservation and Management Strategy 2009–2014.

The implementation team's task has been to identify and coordinate measures to make the strategy happen. The strategy's goal is to conserve koalas by retaining viable populations in the wild throughout their natural range.

An independent review of the previous national strategy concluded that the actions proposed were sound, but that the strategy had been ineffective due to a lack of implementation.

The new strategy includes an implementation plan and a requirement that performance be reported annually to the relevant ministers.

To evaluate the performance of the strategy and the efforts made under it to conserve koalas, it is necessary first to establish the context. This will provide a reference or baseline against which to evaluate subsequent efforts and achievements. The goal of this report is to provide that baseline.

The report first provides a brief overview of the koala conservation efforts of each state government and the Australian Government, then details specific actions, underway or planned, in the table that follows, mapped against the strategy's implementation plan.

Jurisdiction summaries

Australian Government

The Department of the Environment, Water, Heritage and the Arts coordinated the development and publication of the new National Koala Conservation and Management Strategy 2009–2014. The department established a secretariat to support the implementation team and to improve coordination of information and action between jurisdictions.

The Department of the Environment, Water, Heritage and the Arts is exploring the development of a project with Queensland and New South Wales to produce a decision support framework to evaluate and prioritise koala conservation actions.

The national conservation status of the koala is being assessed by the Threatened Species Scientific Committee (TSSC) for potential listing as a threatened species under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The recommendation of the TSSC will be made by September 2010. The Minister for Environmental Protection, Heritage and the Arts will then have 90 business days to decide whether to list the koala. There are three possible outcomes:

- The koala may be ineligible for listing in any category
- It may be listed as Conservation Dependent, if appropriate plans are in place, or
- It may be listed as Vulnerable or higher, in which case the koala would become a matter of national environmental significance under the EPBC Act.

Queensland

The principal concern for koalas in Queensland has been the substantial declines in the koala population of the south-east of the state. The regional population was one of the largest in the country, but has suffered from urban development and consequent exposure to the threats of cars, dogs and disease. The Queensland Government implemented the Koala Response Strategy in December 2008 and has subsequently undertaken a broad range of actions aimed at arresting the decline.

The Koala Response Strategy has committed to:

- protect an additional 52 000 hectares of koala habitat
- implement a state freeze on clearing and disposing of all state-owned land in south-east Queensland until the state planning instruments are finalised
- undertake a comprehensive koala habitat mapping project
- release a model local law for councils to help reduce dog attacks on koalas
- release for public consultation draft state planning regulatory provisions and a draft state planning policy
- release a fencing for koala habitat guideline
- put an immediate hold on important bushland habitat being cleared in south-east Queensland
- commence planning for a \$10 million trial on retrofitting wildlife crossings and underpasses on south-east Queensland's hot spot roads to reduce koala strikes
- ensure all new state roads and upgraded state government main roads are koala-friendly
- introduce the Koala Habitat Acquisition Program and the Koala Nature Refuges Program – financial incentives targeted at private landowners to take action to personally contribute to the protection of koalas in south-east Queensland.

New South Wales

In NSW the koala mainly occurs on the central and north coasts, with some populations to the west of the Great Dividing Range. The koala was abundant in the Bega District on the far south coast of NSW for a brief period in the 1890s, but it now occurs in sparse and possibly disjunct populations. Koalas are also known from several sites on the southern tablelands. Koalas are concentrated on fertile, flat land much of which is outside the reserve system and found on private land. The principal threats remain land clearing, habitat fragmentation, fire, dogs, cars and climate change—especially drought.

The Department of Environment, Climate Change and Water released the NSW Recovery Plan in 2008. At least \$1.2 million has been committed to actions identified in the plan.

The Department of Environment, Climate Change and Water works with a range of land managers to conserve koalas. They include national parks managers, Forests NSW, local councils and utility operators such as the NSW Roads and Traffic Authority (RTA). The RTA makes considerable investment in implementing connectivity measures to mitigate road impacts on koalas, such as land bridges and underpasses in the Pacific Highway upgrade.

In adopting a landscape scale approach to nature conservation, NSW continues to develop a range of policies and strategies designed to maintain and enhance the environmental conditions conducive to healthy koala populations across NSW.

Specifically, NSW is developing a biodiversity strategy which will lead to prioritising investment in habitat conservation and restoration as well as threat control and abatement that will directly benefit koalas. NSW is also developing a climate change statement of intent, which will identify plans for biodiversity adaptation to climate change relevant to koalas.

Further funding would enable survey, prioritisation and conservation work to be undertaken in specific high priority koala populations in partnership between government catchment management authorities, local councils and the community. The significant populations include Gunnedah, Port Stephens, Bellingen, Coffs Harbour and Iluka. The south-east forests and Campbelltown have significant but smaller populations

Victoria

While there are a few places in Victoria where koala populations have declined due to mortality from cars, dogs and habitat loss, the principal concern for managers is overabundant populations. Victorian koala populations have demonstrated that the koala population can grow beyond the carrying capacity of the habitat, resulting in collapse of the population in extreme cases. Overpopulation also results in overbrowsing of trees which can cause substantial defoliation of preferred food trees and changes in the composition of the ecological community. The results of overbrowsing are graphic and cause media attention and community concern.

Management therefore focuses on reducing koala numbers and maintaining them at levels low enough to prevent habitat damage.

Overpopulation used to be managed by moving koalas from overbrowsed areas to unoccupied habitat. However, options for translocation have diminished as most potential habitats are now occupied.

Population management is now primarily through sterilisation. This was initially surgical, but is increasingly achieved with hormone implants. Where pressure on the habitat is intense and immediate relief is necessary, koalas may still be translocated.

No matter which methods of population control are being used, it is still necessary to capture significant numbers of koalas, an expensive and labour-intensive exercise. The management of overpopulated koala populations and their habitat is an ongoing commitment.

South Australia

Koalas occur in four key regions in SA: Kangaroo Island, the Lower Eyre Peninsula, the Lower South East and the Adelaide Mount Lofty Ranges. Each region has its own set of environmental and welfare challenges in terms of koala management. Koala populations in some parts of in SA are increasing steadily in number.

Three key issues for the koala are:

- the ongoing management of an abundant koala population on Kangaroo Island
- the intervention to rescue peri-urban koalas which have been orphaned or have come into conflict with people, dogs or vehicles
- the fate of koalas in urban areas during prolonged periods of hot weather.

The koala population of Kangaroo Island has been reduced from a high of 27 000 in 2001 to less than 16 000 in 2006 via translocation and sterilisation. There is no more recent population estimate, but the proportion of sites with unsustainable koala population densities reduced between 2007–08 and 2008–09. These results were achieved with a budget of \$500 000 in 2008–09.

South Australia is drafting a policy on how to respond to emergency situations involving koalas. This is pressing issue for the Adelaide area where koalas have a high profile and are often visible. The South Australian Department of Environment and Heritage can get more than 100 koala callouts each week, often attending to koalas injured as a result of dog attacks and vehicle collisions.

National Koala Conservation and Management Strategy

Work Plan 2010

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (Issues/constraints)
Category 1 Habitat identification and protection				
1.01 Incorporate koala habitat conservation into existing multi-species or landscape-scale conservation programs				
National Reserve System	Australian Government	Ongoing	Addition of properties containing koala habitat to the National Reserve System (NRS).	Koalas are one of the matters included in the assessment of the values of properties proposed for inclusion in the NRS. A recent significant addition was "Marcussen" in SE Qld.
Koala Habitat mapping project in South East Queensland	Qld	Complete	Maps of koala habitat with value (high, medium and low) assigned in the eastern Local Government areas of South East Queensland	
GIS analysis of koala distribution overlap with other threatened species.	NSW	In progress	DECCW has carried out recent mapping of koala distribution on the south coast of NSW. This will be overlaid on existing Threatened species distributions,	Partnership program amongst range of conservation groups and agencies. DECCW one of the lead agencies.
Great Eastern Ranges Initiative	NSW	Planned, ongoing 2009/10	Establish a conservation corridor along the NSW section of the Great Eastern Ranges	
Northern Rivers Regional Biodiversity Management Plan	NSW/ Australian Government	Complete	Northern Rivers Regional Biodiversity Management Plan complete, incorporates koala management	

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
NatureLinks	SA	Plans released	A landscape-scale approach to conserving the state's plants and animals by managing and restoring large areas of habitat within broad biodiversity corridors.	Key regions include koala habitat
			N.B. Both Victoria and South Australia have programs which benefit multiple species, via protecting habitat from overbrowsing by koalas. Severe overbrowsing can cause loss of dominant trees species and thus changes in the ecological community. The programs are listed under Category 2 below.	
			1.02 Habitat protection on public land	
Koala Habitat acquisition strategy	Qld	Underway	To be eligible, part or all of the property must be mapped as <i>high or medium value, suitable for rehabilitation</i> . The priority is securing habitat corridors and restoring cleared habitat, with a focus in the Pine Rivers and Koala Coast areas.	On 31 October 2009 the Queensland Government announced it is committing an additional \$15M to the Koala Response Strategy to protect south-east Queensland's koalas. These funds are for the Koala Habitat acquisition strategy and the Koala Nature Refuge Program.
				This program uses maps of existing koala bushland habitat and areas suitable for rehabilitation.
State Land Freeze	Qld	Underway expected to be finalised in mid 2010	The maintenance of koala habitat on state land in south east Queensland unless exempted for urgent social infrastructure.	Public land includes State Forests and local councils.
Gunnedah koala conservation	NSW	Complete	DECCW worked with the Liverpool Plains Land Management Committee and the Gunnedah Council to implement koala actions as identified.	
National Park Plans of Management actions for habitat protection	NSW	Complete (ongoing)	Fire management strategies to reduce size, intensity and frequency of fires in significant koala habitat. Planting of food sources. Strategies to liaise with neighbouring land-holders to minimise adjacent clearing	40 National Parks and Reserves (762 000ha) have actions in their Plans of Management which involve koalas. These strategies are typically supported by surveys of koala populations on-park.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
Review conditions of Eden Regional Forest Agreement Region Integrated Forestry Operations Approvals and Threatened Species Licence related to koala protection.	NSW	In progress	DECCW and Forests NSW have been gathering and analysing data to support the review process. DECCW has held preliminary discussions with Forests NSW about potential reserve options. Ongoing negotiations in south east regarding habitat in Mumulia, Murrrah and Bermagui State Forests.	Options limited by commitments in Regional Forest Agreements, Forest Agreements and Integrated Forestry Operations Approvals
Local Council Koala Plans of Management	NSW	In progress	Development and review of comprehensive Koala Plans of Management (PoM)	Coffs Harbour: five-year review on public exhibition Tweed LGA: \$40 000 provided to fund field surveys and habitat mapping for eastern coastal section Northern Rivers PoM to be updated with Biodiversity Management Strategy
River Red Gum forest conservation	NSW	Planned (Decision announced – pending legislation)	107,000 hectares of River Red gum forests and associated woodlands along the Major inland river systems in Southern NSW to be protected in a range of conservation reserves. Many of these reserves will adjoin newly created reserves in Victoria and create a national scale protected area corridor along the Murray, and parts of the Murrumbidgee and Lachlan Rivers. These riverine forests are known to be an important habitat for koala populations extending into semi arid regions of Southern NSW	The koala populations in many of these forests are believed to be a mix of koalas of local provenance and descendants of koalas introduced from other areas. The decision has been announced but has yet to pass through parliament.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (Issues/constraints)
1.03 Habitat protection on private land				
Koala conservation integrated into land use planning	Qld	Implemented, ongoing and planned	Improved protection of koala habitat and better designed developments to enable koala populations to persist and recover.	Koala conservation is included in the SEQ Regional Plan; Elements of the Koala Conservation Plan are operational; Two planning instruments are proposed to increase the level of protection provided to koalas and their habitat in SEQ — a state Planning Regulatory Provision (SPRP) and a state Planning Policy (SPP).
Koala Nature Refuges Program	Qld	Underway	Management for koala conservation on private property identified by the Koala Response Strategy as being of high- to medium-priority for rehabilitation of koala habitat. A binding, perpetual nature refuge over at least two hectares is required to receive funding.	Program assists landholders to restore koala habitat on private land and protect it for future generations,
Develop incentive-based mechanisms to incorporate koala conservation into planning processes	NSW	Complete	Incentive based mechanisms already exist in NSW including voluntary conservation agreements, property vegetation plans, biobanking, etc.	Key example is "Woodville" adjacent to population of breeding koalas near Bermagui. Initiated by Far South coast Landcare Association with steering committee representation by DECCW.
Local Council Koala plans of management	NSW	See 1.02		Local council koala plans of management provide a consistent approach to koala planning and management on private land.
Chain of Ponds Project	NSW	Ongoing March 2010–July 2010	Chain of Ponds project will enable conservation of 10ha of riparian vegetation (including primary koala habitat in Wapengo area adjacent to breeding association of koalas).	Southern Rivers Catchment Management Authority initiated project
The regulation of native vegetation removal in Victoria ensures that important habitat, including koala habitat, is protected.	Vic	Ongoing	Net gain sought.	Through the Native Vegetation Management Framework.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
Raymond Island habitat protection	Vic	Since 2004	Tree banding and exclusion plots by private landholders	Not monitored
Otways habitat protection	Vic	Ongoing	Protection of preferred food trees	Individual trees are protected with tree bands
1.04 Prioritise populations				
Expert workshop to identify priority populations in South Coast and Snowy Mountains Regions	NSW	Planned Dec 2010	Identify priority populations within the region.	Planned fieldwork will assist identification of priority populations
Prioritise populations in Namoi Catchment Management Area	NSW	Complete	Desktop survey undertaken to determine where priorities lie in this region. Report is available from Namoi CMA.	Gunnedah and Pilliga forests are the best koala habitats in NSW.
1.05 Revegetate habitat				
Koala Habitat programs	Qld	Underway	Two programs fall under this banner: the Koala Habitat Acquisition Program and the Koala Nature Refuges Program.	See 1.02 and 1.03
“Bear Care” habitat revegetation in Gunnedah study	NSW	Implemented (ongoing)	Determine the extent that the koala population uses environmental plantings of trees and how far they will travel across open paddocks to plantings.	Satellite-tracking project underway. Use of revegetated habitat is the central question being addressed. Revegetation was initiated to address rising water tables and associated salinity and trees planted were suitable for koalas. This population is of prime interest as it is expanding in contrast to the rest of the state.
Narrandera Common revegetation/restoration program	NSW	Ongoing	Narrandera Common revegetation/ restoration program for the 527 ha of River Red Gum forest.	Work undertaken by Narrandera Shire Council in conjunction with Murrumbidgee CMA river restoration project should improve important koala habitat.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
Nooramunga Marine & Coastal Park (Snake Island) – restoration of manna gum woodlands	Vic	Ongoing	To restore and maintain the condition of the manna gum woodlands. Use ecological burning as a tool to regenerate canopies. Replant areas where manna gums have been killed.	High koala densities have caused significant defoliation and death of manna gum. There has been no seedling regeneration of manna gum in recent years.
Raymond Island manna gum revegetation	Vic	Ongoing	Ad hoc planting of coastal manna gum seedlings	Opportunistic plantings rather than strategic. Were limited by poor rainfall years.
Kangaroo Island Management Plan	SA	Ongoing	Monitoring of habitat and tree condition on Kangaroo Island. Tree planting in critically damaged areas.	
1.06 Develop standard monitoring protocols				
Develop consistent protocols that enable population numbers or density to be compared between the same place at different times and between different habitats.	NSW	In progress	DECCW and Forests NSW have been gathering and analysing data and reviewing protocols for habitat assessment and monitoring, specific to koalas, on the south coast of NSW.	
Statewide koala distribution survey	NSW	Completed /in progress	Determine statewide geographic distribution of koalas and changes of distribution via 'public survey' technique. A 2010 low-cost web-based survey will follow-up on the 2006 NSW survey and 1986-87 national survey.	The statewide survey is community based. Whilst highly effective, the 2006 postal survey was in fact costly. The 2010 follow up is web-based and low cost, but to date is not as effective in its reach, but is quick and economical.
Workshop to review monitoring methods	NSW	Planned December 2010	Workshop to review monitoring methods (transect and RGBSAT)	

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (Issues/constraints)
1.07 Establish national database				
Assessment of national status	Australian Government	Complete September 2010	Collation of most recent available data on populations to determine status of koala at a national level.	Has included extensive literature review and an expert workshop in November 2009 to produce best estimate of the trends in the national koala population.
Atlas of Living Australia (ALA)	Australian Government	Ongoing	Central repository for data on wildlife locations from all sources	DEWHA in discussion with ALA to determine whether/how it can be used to produce a national koala database.
1.08 Establish/continue monitoring				
Contribute to central data repository	NSW	Implemented (ongoing)	All data from all surveys is logged onto the NSW Wildlife Atlas and is available to all users, including any national databases.	In addition to the repeated statewide survey, the NSW recovery plan has identified a series of locations for monitoring and assessment or audit of the effectiveness of previous surveys and management.
Koala Monitoring programs	Qld	Ongoing	Monitor the numbers and trend of key populations.	Monitor the behaviour of koalas in selected urban populations.
Develop larger-scale survey and monitoring programs.	NSW	In progress	Forests NSW is developing a landscape-scale biodiversity monitoring program, which should also be relevant for koala monitoring.	Pilot programs have been established in Western Region and in Central Region.
Statewide determination leading to prioritisation	NSW	Implemented/ planned	The NSW 2008 Koala Recovery Plan identified a series of local surveys and management plans to audit for their effectiveness.	Two areas implemented: Gunnedah and Campbelltown.
				These studies should yield an up to date determination of the status of the koala in NSW and a series of local areas.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
Continue Monitoring in the South Coast region	NSW	Ongoing July 2009 – June 2010	- Phase 1 of Escarpment and Hinterland Koala survey - Review of results of Escarpment and Hinterland Koala survey to assess whether additional work is required - Ongoing transect monitoring program in Morton and Tarlo NP (approximately 15 500 m x 40 m transects)	The Campbelltown population is historically significant
Study on distribution and movement of koalas across private and public land in Campbelltown	NSW	Complete	Publication in press that reports on distribution and movement of koalas across private and public land and assessment against five different koala habitat mapping techniques.	
Koala and vegetation monitoring at Mt Eccles National Park/Tower Hill Wildlife Reserve	Vic	Population surveys are undertaken annually. Vegetation surveys every 2 years	Monitor the koala population and manna gum woodland condition (6 000ha) in response to population control measures.	
Raymond Island koala population monitoring	Vic	Implemented	Total counts every one to two years that feedback into population management.	
Kangaroo Island monitoring	SA		Monitoring of habitat and tree condition on Kangaroo Island. Assessment of koala density on Kangaroo Island.	

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (Issues/constraints)
1.09 Incorporate other causes of habitat loss in planning (e.g. drought, climate change) “Bear Care” habitat revegetation in Gunnedah study (see 1.05)	NSW	Implemented (ongoing)	Drought and climate change are two major components of the current population study in Gunnedah.	At west of range, extreme heat may be a limiting factor for koala populations.
Strategy to minimise impacts of fuel reduction burn	NSW	Ongoing July 2009 - June 2010	Implementation of strategy to minimise overlap between areas where fuel reduction burns are undertaken (particularly in Strategic Fire Advantage Zones areas) in the Bermagui, Murrrah, Mumbulla and adjacent private forests and koala activity cells delineated in 2007-9 koala survey	
Category 2 Over-browsed habitats				
2.01 Refine regulation of overbrowsed populations				
Mt Eccles National Park – Adaptive management project to model the impacts of the koala population on the forest and examine impacts on undertaking fertility control program.	Vic	This program commenced in 2004 and is ongoing.	Maintain the manna gum woodland (6 00ha), Stony Rises Herb-rich Woodland is a vulnerable EVC in Vic. Maintain a viable koala population	This project is using hormone implants to reduce the growth rate of the koala population. Incorporates koala population reduction at Tower Hill.
Nooramunga Marine & Coastal Park (Snake Island) – koala removal to allow restoration of manna gum woodlands	Vic	The program commenced in 1997 and is on going.	To restore and maintain the condition of the manna gum woodlands on the Island. To reduce the koala population by fertility control and relocation with the aim of removing all koalas from Snake Island.	High koala densities have caused significant defoliation and death of manna gum. There has been no seedling regeneration of manna gum in recent years.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
Raymond Island – koala removal to allow restoration of manna gum woodlands	Vic	Ongoing	To reduce the koala population below carrying capacity and thus restore the manna gum woodlands on the Island.	High koala densities have caused significant defoliation and death of manna gum.
French Island National Park and private land koala control program	Vic	Ongoing	Reduce the French Island koala population below carrying capacity	Transitioning from translocation to hormone implants for population control but will still require translocation for some years.
Workshop for Victorian koala management and policy practitioners	Vic	Planned for April 2010	Refined management of koala populations which overbrowse their habitat.	South Australian DEH officers attended the 2009 workshop to share information and refine procedures.
Meeting of French Island koala population managers	Vic	Planned for April 2010	To refine management and monitoring of the French Island population as the program transitions from translocation to hormone implants.	
Kangaroo Island Koala Management Program	SA	In progress	Maintain habitat values, including trees favoured by koalas; To reduce the koala population by fertility control and relocation with the aim of maintaining a sustainable koala population?	Since 2006 10 602 koalas have been managed on Kangaroo Island of which 9 340 have been sterilised. Of these 3 801 have been translocated (primarily to the South-East of South Australia). 2 600 Manna Gum and Blue Gum trees have been planted in critically damaged areas and most sites show and improvement on preferred food trees.
Kangaroo Island management review	SA	Ongoing	Implementation of recommendations from the 2008 independent review of the Kangaroo Island Koala Management Program by Dr Alistair Melzer, of the Koala Research Centre of Central Queensland.	

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (Issues/constraints)
2.02 Identify emerging overbrowsing problems	Develop ecological rationale for Great Otway NP	Vic	Is dependent on incoming information.	The Otways has been identified as an area where koala numbers and manna gum death and defoliation are increasing. Options for management are limited. Limited by lack of existing information
2.03 Develop national translocation guidelines	State translocation policy	All states	Implemented/ ongoing	All states have policies on translocations in place or in development. Priorities may vary, particularly as Victoria and SA translocate to remove browsing pressure at source site.
Category 3 Direct mortality of individual koalas	3.01 Develop road design guidelines	Qld	Underway	This \$10 million trial will examine the effectiveness of retrofitting existing bridges and culverts with structures that allow koalas to safely cross state-managed roads.
Committed to ensuring all new state roads and upgrades are koala-friendly		Qld	Underway	New roads and upgrading existing roads will incorporate design and location to reduce impact on koalas
				Installing structures that allow koalas to cross roads (such as underpasses and overpasses), along with fencing, will allow koalas to move more safely between adjacent habitat, reduce road mortality and better protect koala populations.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
3.02 Implement protection of koalas from dogs				
New model local law for councils to help reduce dogs attacks on koalas	Qld	Underway	Implementation by local government will lead to reduced dog attacks on koalas	
Population Viability Analysis of effect of dog predation	NSW	Complete	A Population Viability Analysis was conducted by DECCW and published in 2007 on the koala populations in Port Stephens. This analysis informed the development of the Port Stephens Koala Plan of Management under SEPP44.	PVA showed that mortality due to dog predation is a significant threat to koala populations.
Fox and dog baiting	NSW	Ongoing from July 2009	Fox and dog baiting program throughout areas sustaining koalas in Morton NP and Bungonia SRA, Biamanga NP, Bermagui NR, Murrah and Mumbulla SF and in Nature Reserves sustaining koalas in North East Monaro.	
Dogs controlled near koala population on Raymond Island.			Dogs to be kept under control or on leash	The Shire (East Gippsland Shire Council by-law) and Parks Victoria are responsible for compliance.
Dog control information	SA	Planned	Developing website information and brochures to promote its 'Living with Wildlife' approach to koala issues.	
3.03 Disease assessment and treatment				
The Koala Disease Fund	Qld	Underway an expression of interest has been called	The Koala Disease Research Fund has been established to support high quality research into mitigating the effects of disease on wild populations of koalas.	The Koala Disease Research Fund will have a total value of \$400 000. Funding will be allocated through an open competitive funding round.
Moggill Koala Hospital	Qld	Ongoing	Injured and diseased koalas are treated.	Koalas are also treated at the Wildlife Warriors' Australian Wildlife Hospital, at the Currumbin Wildlife Sanctuary Hospital, and at various private veterinarian clinics.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
Monitoring	NSW (DECCW and DII)	Complete (ongoing)	Fauna rehabilitation groups are licensed by DECCW and work with veterinarians to assess and treat disease in koalas.	
	NSW	Planned	Discussions are underway with veterinarians at the University of Sydney to study the prevalence and geographic distribution of koala diseases, particularly Chlamydia.	
Koala disease program - Victoria	Vic	Planned	TBA	Zoos Victoria is starting a koala disease research program
Raymond Island Wildlife Health Surveillance	Vic	Current and opportunistic	Monitoring for Chlamydia, Mycobacterium ulcerans, Retrovirus	
Raymond Island ocular coloboma testing.	Vic	Completed	Tested sample of population for Ocular coloboma. Feeds into criteria for translocation.	Slow process for examination and very close encounter required
Category 4 Community involvement				
4.01 Provide extension and advisory services for koala protection on private land	Qld	Ongoing	Interpretive information provided to visitors, community groups, and to schools on koala conservation issues, particularly mortality due to habitat loss, disease, cars & dogs.	Visitor Centre in Koala Coast area of SEQ. DHKC was refurbished last year.
Daisy Hill Koala Centre (DHKC)				
Great Eastern Ranges Landscape scale conservation program	NSW	Planned, ongoing 2009/10	As per 1.01	
Website/brochures	SA	Planned	Developing website information and brochures to promote 'Living with Wildlife' approach to koala issues.	

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
4.02 Develop and distribute education material				
Koala conservation and management information on the DERM website	Qld	Ongoing	High quality and appropriate information on the DERM website updated regularly.	An example is the recently released fencing for koala habitat guideline
Distribute education material in NSW South Coast region	NSW	Completed March 2010	Public release of <i>Interim Report on Surveys conducted in 2007-2009 for Koalas in the Coastal Forests of the Bermagui/Mumbulla Area</i> and associated media, website and email networks distribution	Distribution of bilingual (English and Dhurga, the main Aboriginal language of the NSW South Coast) booklet to schools and Aboriginal land councils on local koala history and ecology
			Distribution of survey methods educational kit (RBGSAT method) to science students from local high schools, Bournda Environmental Educational Centre and Crossing Land Education Centre	DECCW maintains a threatened species website which includes a profile page for the koala and the listed endangered populations. Links are also included to the State Koala Recovery Plan, the National Koala Conservation Strategy and other reports.
Publication: <i>Climate Change How will it affect the natural environment in NSW?</i>	NSW	Complete	Publication on the effects of climate change on the natural environment in NSW published in September 2009, including information on the koala.	

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (Issues/constraints)
Develop Emergency protocols for the rescue of wildlife during bushfires	Vic	Ongoing, currently implemented	Coordinated, efficient and safe response to wildlife rescue from bushfires.	Conducted information sessions and sent document to practitioners. Volunteers must attend pre-season briefings and meet all requirements before they can attend firegrounds.
Website/brochures	SA	Planned	Developing website information and brochures to promote its 'Living with Wildlife' approach to Koala issues.	
4.03 Extend community involvement and engagement				
Queensland Koala Fund	Qld	Planned	The Queensland Government is establishing the Queensland Koala Fund to allow businesses, householders, local government and other organisations to contribute to the Koala Response Strategy.	All donations are fully tax-deductible and will be used for koala conservation activities in south-east Queensland
Develop and maintain community partnerships and involvement in the South Coast Region	NSW	Ongoing July 2009 - June 2010	<ol style="list-style-type: none"> 1. Koala Survey program involving volunteers undertaking approximately 50 field trips to assess sites for koala evidence. 2. Koala survey program working with Aboriginal Land Council representatives undertaking approximately 20 field trips to assess sites for koala evidence 	Part of a broader program in which the distribution and abundance of Koalas in escarpment and hinterland forests to the south west of Bega (primarily South East Forests National Park). Participants search for Koala faecal pellets at predetermined locations (grid intersections) using a consistent and repeatable method. Analysis of data gathered enables koala activity to be quantified. Other ecological data are also gathered at the sites.
Local council engagement	NSW	Implemented (ongoing)	DECCW is working with councils (eg. Great Lakes Council and the Hawks Nest Koala Working Group) to implement actions from the Hawks Nest Koala Recovery Plan.	

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (Issues/constraints)
“Backyard Buddy” program and the Foundation for National Parks and Wildlife	NSW	Implemented (ongoing)	The Foundation for National Parks and Wildlife continues to support fund raising for koala conservation, improving public awareness and engagement in koala conservation by providing discussion forums, information and access to scientists.	The “Backyard Buddy” program includes a koala mascot.
Sam the koala on display at Melbourne Museum	Vic	Implemented	Increased community awareness of koala ecology.	Sam was the koala made famous when a photograph was published of her being offered water by a firefighter.
Raymond Island community involvement with population management	Vic	Ongoing	Community involvement with translocations, fertility control, counts and welfare rescues. Community supportive of the program	Includes wildlife shelter operators directly involved in the program and tours of the program for the local community.
Policy for dealing with koalas	SA	Planned	The development of a policy on dealing with koalas in emergency situations will explore an expanded role for the community in koala conservation, management and care.	
Category 5 Caring for koalas in captivity				
5.01 Develop guidelines for handling and care				
Guidelines	Qld	Complete	Guidelines exist	
Guidelines	NSW	Complete	DECCW has ‘Guidelines for the Care of Koalas’ (June 1997). The document will be reviewed within the next two years.	
Develop guidelines for rescue, handling, rehabilitation, and release	Vic	June 2011	Statewide consistent guidelines document for use by rehabilitators.	DSE and Healesville Sanctuary are working with academics, veterinarians and rehabilitators.

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (Issues/constraints)
Develop state-wide training for rehabilitators	Vic	Planned	Improved standards of care.	
Policy for dealing with koalas	SA	Planned	The development of a policy on dealing with koalas in emergency situations is proposed. Guidelines for handling and care of koalas in captivity will be drafted as part of this process.	
5.02 Review export conditions				
Review export conditions	Australian Government	Complete		Guidelines for export of koalas reviewed by DEWHA in 2009
Category 6 Research				
6.01 Develop and use broad-scale habitat analysis				
Bermagui-Mumbulla Forests surveys	NSW	Ongoing Jan 2010 - June 2010	Peer review of statistical analysis of data gathered in 2007–09 in Bermagui-Mumbulla Forests. Based on review, kernel density estimation will be undertaken to map habitat attributes.	
Leaf-compound study (ANU & DECCW) undertaken in Bermagui-Mumbulla Forests completed and results factored into habitat mapping	NSW	Complete	Understanding of role of leaf nutrients in determining koala habitat suitability	
Broadscale habitat analyses	NSW	Complete	A series of broadscale habitat analyses undertaken with the University of Queensland over the last 6 years, enabled by National ARC linkage grants. Papers have been published linking on ground conservation problems with broadscale landscape approaches.	

Policy/measure/action	Jurisdiction	Status/timing (Planned, Implemented, Complete)	Outcome sought/achieved	Comments (issues/constraints)
6.02 Identify and prioritise knowledge gaps				
Develop tool to evaluate and prioritise koala conservation actions	Australian Government/ Qld/NSW	Planned	A joint project is under discussion between NSW, Queensland and DEWHA to evaluate the cost-effectiveness of existing strategies for koala conservation	
6.03 Identify climate change research				
6.04 Facilitate develop of koala research network				
6.05 Develop methods to compare disparate data on koala distribution and abundance	Develop standard methods on the South Coast	NSW	Ongoing	Participation in process comparing disparate data on koala distribution and abundance
National mapping workshop	Australian Government	Planned 2010	Identify method for consistent mapping and evaluation of koala habitat	
6.06 Develop mechanisms to fund and disseminate research				

