

Addressing threats to koala populations in Southeast Queensland

Premier's Koala Taskforce Report

September 2008

Not Government Policy

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Not Government Policy

Table of Recommendations

Recommendation 1

As from the date of Government's response to this taskforce report, it is Queensland Government policy that there will be no net loss of Koala habitat in SEQ. It is government policy to provide a net gain.

Action 1

Retain all existing koala habitat areas as they are defined within the current SEQ Regional Plan.

Action 2

Undertake an urgent inventory over the next six months of all known good koala habitat including publicly owned land across SEQ not currently protected from urban development (including that in Investigation Areas), with an immediate focus on the Koala Coast.

Action 3

Protect all areas identified in Action 2.

Action 4

Upgrade and accelerate the habitat mapping program commenced under the Koala Plan in order provide a complete picture of koala habitat in SEQ within six months. Initially this should focus on the Koala Coast but then extend as a priority to all other areas of SEQ subject to high development pressures.

Action 5

Protect all habitat identified and recommended for protection in the GHD report for the Moreton Bay Regional Council area.

Action 6

Protect areas identified in Action 4.

Action 7

Review existing knowledge and undertake new surveys where required to identify all cleared and degraded land that could be rehabilitated to become effective habitat within the next 20 years.

Action 8

Temporarily cease for six months, clearing of mature koala habitat trees in existing koala habitat areas (as defined by the Koala Plan) and other areas identified by local governments in Southeast Queensland while the mapping under Actions 2 and 4 is undertaken.

Action 9

All existing and current development approvals are subject to Koala Plan requirements unless practical completion occurs within two years.

Action 10

The EPA becomes a concurrence agency for all developments within koala habitat areas. The EPA also be funded to undertake all mapping and development assessments in Southeast Queensland.

Action 11

Establish separate targets for each local government for the rehabilitation of koala habitat to enable a net gain of habitat to be achieved.

Action 12

List areas identified under Actions 4 and 7 as essential habitat under the *Vegetation Management Act 1999*.

Action 13

Amend the definition of committed development in the Koala Plan to be only development that has a development approval.

Action 14

Identify public land that can be rehabilitated to create habitat. Koala habitat to be recognised as the highest order use for State land not required for the use for which it was originally reserved or purchased.

Recommendation 2

Provide and or acquire funds to achieve Recommendation 1

Action 15

- establish a dedicated koala habitat acquisition and regeneration fund to receive funding from all levels of government and industry;
- require koala habitat protection to be a requirement of master planning, structure planning and priority infrastructure planning (where koala habitat is recognised as green infrastructure) and provide incentives for developers to preserve habitat when determining infrastructure charges;
- expand koala offset requirements, including bio banking, under a revised Koala Plan offset policy;
- make Southeast Queensland a priority for the Nature Assist program;
- provide incentive funding to be dispersed to landholders prepared to enter into binding nature refuge agreements through the EPA's Nature Assist program or ratified local government conservation agreements that include a statutory conservation agreement;
- introduce rating, transfer duty, and land tax concessions for landholders and local governments who enter into nature refuge agreements; and
- use part of the funding generated through developer contributions and offsets to provide incentives to landholders to enter into nature refuge agreements or ratified local government conservation agreements that include a statutory conservation agreement.

Recommendation 3
Implement community education and extension

Action 16

Undertake an education and extension program to modify behaviours detrimental to koalas and to develop a sense of community responsibility for koalas. This program should be well funded and modelled on the successful Target 140 Waterwise programme in that it involves practical advice on what individuals can do to protect the koala and koala habitat. The program needs to use TV, radio, social marketing networks and print media and personalities.

Action 17

In koala habitat areas, residents to be provided with information on:

- why it is important to protect koala and increase their numbers;
- where it is important to protect koalas;
- the measures that can be undertaken to protect koalas, decrease disease and mortality, and increase habitat;
- who should be undertaking these measures;
- basic information on koala first aid and how to get help; and
- involving the community in monitoring of local koala populations.

Recommendation 4
Reverse processes that contribute directly to the death and injury of koalas.

Action 18

Immediately amend the Koala Plan to require new development, including development in urban areas, to incorporate koala sensitive design that facilitates koala movement and habitation by:

- minimising the total footprint, locating development in areas that are already cleared, and include appropriate fencing design and traffic impact minimisation;
- rehabilitating areas identified as suitable koala habitat using funding from acquisition/rehabilitation fund by the actions in recommendation 2;
- identifying and retaining mature koala habitat trees; and
- ensuring development does not impact on koalas or koala habitat during construction.

Action 19

Amend the Koala Plan to give koala friendly design requirements primacy against other planning and development assessment considerations and to ensure that if a development cannot provide for koala sensitive design it does not proceed.

Action 20

Protect individual mature koala habitat trees within existing urban areas.

Action 21

The Department of Main Roads to implement koala friendly design criteria in the maintenance, upgrade and construction for arterial roads transecting koala habitat areas as part of normal business practice and costing.

Action 22

No new road or upgrading of existing roads to increase capacity, through KCA and KSA to proceed unless they conform to the following performance criteria:

- net gain in habitat;
- reduce existing mortality to zero on that section of upgraded/new road; and
- maintain effective connectivity of koala habitat.

Action 23

The Department of Main Roads is to systematically retrofit engineered koala crossing to arterial roads across koala habitat areas in Southeast Queensland. The target is to retrofit a least 45 road crossings within the next three years.

Action 24

That each local government to systematically retrofit engineered koala crossings to major roads across koala habitat areas in Southeast Queensland. The target is for each local government to retrofit a least three road crossings within the next three years.

Action 25

The Department of Main Roads to:

- provide signage on existing and new roads to impose speed limits on arterial roads near known koala crossings;
- install mobile LED matrix signs to remind drivers of their speed;
- install signage regarding 1300 ANIMAL as a contact for injured koalas; and
- use electronic variable speed signs on targeted roads (as used for the Tugan bypass).

Action 26

Increase compliance with speed restrictions by installing fixed speed cameras for koala speed zones and increased application of mobile speed cameras.

Action 27

Road design criteria for koala conservation are to be included in urban developments and roads maintained by local governments.

Action 28

Queensland Rail to systematically retrofit effective koala crossings and exclusion fencing where rail lines cross koala habitat.

Action 29

Develop uniform dog laws for keeping of dogs in existing and new developments within koala habitat that require owners to implement one of the following:

- incorporate exclusion fencing on part of a lot or premises to separate dogs and koalas but still allow koalas to traverse the property ; or
- keep the dog in a suitable enclosure at night that places a physical barrier between it and koalas (e.g. a koala proof pen, kennel, garage or house); or
- tethering the dog at night on a short leash, with the provision of appropriate shelter, food and water, to limit the area of premises where a dog could attack a koala.

Action 30

That a complementary enforcement programme be instigated. This programme would be funded by the Queensland government, local government and dog owners through an increase in the dog licence fee.

Action 31

The issue of dog free estates to remain an option to be considered by local governments and developers (supported by State Government when applied), noting that further restrictions may be necessary if the proposed measures in relation to dog controls are not effective.

Recommendation 5

Implement robust and transparent mechanisms for performance monitoring, reporting and research.

Action 32

Performance indicators for the Koala Plan and SEQ Regional Plan and implementation of the recommendations be:

- a restoration of the koala population to 7,000 koalas in the Koala Coast;
- restoration to an estimated viable population for other parts of Southeast Queensland; and
- a reduction of koala mortality from roads and dogs each by 50% within five years.

Action 33

Relevant State departments and authorities' performance measures to also include measures regarding maintenance of viable koala populations and results submitted to the EPA consistent with action 37.

Action 34

Establish formal and scientifically robust monitoring programmes to determine koala population size every two years in:

- the Koala Coast;
- Moreton Bay Regional Council; and
- any other area subject to development pressure.

Action 35

Establish formal and scientifically robust monitoring programme to determine koala habitat area every two years in the region.

Action 36

Report the results of monitoring, assessment and effectiveness of the following specific measures within a year of collection through the EPA website:

- amount of habitat rehabilitated in each local government area compared with the target;
- nett amount of habitat in the region;
- education campaigns;
- safe koala crossings;
- reduction in mortality from roads; and
- reduction in mortality from dogs.

Action 37

All available data in respect to koala habitat, mortality and morbidity should be:

- accessible through a single portal;
- available to the public through the EPA website;
- maintained, stored and disseminated by a single agency - the EPA;
- consistent with standards established by the EPA with respect to fauna surveys;
- submitted and included as part of the EPA Wildnet program; and
- required to be submitted to the EPA.

Action 38

Establish an overarching research program with dedicated funding for EPA and a capacity to leverage external funding sources (e.g.ARC linkage grants) to research topics including:

- koala ecology and biology including genetics;
- Koala Retrovirus (KoRV) infection and Chlamydia;
- Sustainable populations in South east Queensland; and
- dealing with koalas displaced by land clearing in an evidence based and compassionate manner.

Executive Summary

Taskforce members agreed that without significant immediate action koalas will decline to the brink of extinction in Southeast Queensland. An effective response will require short term and long term actions.

Specifically the Koala taskforce makes the following five recommendations:

1. As from the date of the Government's response to this taskforce report, it is Queensland Government policy that there will be no net loss of Koala habitat in SEQ. It is Government policy to provide a net gain.
2. Acquire funds to achieve Recommendation 1.
3. Implement community education and extension.
4. Reverse processes that contribute directly to the death and injury of koalas.
5. Publicly report on changes in koala numbers and habitat with full data accessibility.

A series of more detailed actions for implementing each of these recommendations is identified in the report.

The taskforce is very clear in its view that the most critical action that the Government must take to ensure the long term survival of koalas is to protect existing koala habitat and to develop new habitat (through acquisitions and regeneration). It is not sufficient to just retain all remaining habitat. The scale of acquisition and regeneration effort required will be significant and take up to 20 years but will have to be started immediately.

Action in any of the other areas identified in the terms of reference or the findings of this report without action to protect existing habitat and build additional habitat will be insufficient to save koalas.

This does not diminish the importance of the other recommendations which are all vital to ensuring the future of koalas in Southeast Queensland. Koalas are mobile animals and whilst having enough trees to shelter and eat in is obviously fundamental, the population will not survive if they continue to be killed or injured on our roads or killed by our dogs. Further, providing more trees is a long term prospect, even if we start tomorrow. So the other recommendations of the taskforce are essential to arrest the population decline in the short term.

The challenge confronting the Government and the community is considerable. New behaviours and attitudes will have to evolve and new regulatory restrictions accepted by a significant number of people living in Southeast Queensland. The taskforce emphasises the importance of education, transparent public reporting and extension in achieving this goal. It must not be seen as a soft option that can save koalas in its own right. A comprehensive and sustained community education program is needed to ensure the community is brought along with the changes that will be needed.

Background

The Premier requested that this taskforce be convened to consider measures to halt the decline in the koala population in Southeast Queensland. The *Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016*, known as the 'Koala Plan', commenced on 2 October 2006 to protect the koala throughout its range in Queensland and to stop the decline and recover the Southeast Queensland population.

Recent studies indicate that the rate of decline in the Southeast Queensland koala numbers is more severe than thought in 2006. A study considered by the Moreton Bay Regional Council on 5 August 2008 highlighted a 45 percent decrease in koala density in urban areas of Pine Rivers since 2001.

Since the commencement of the Koala Plan there is new evidence of a dynamic process operating between urban and bushland koala populations. Bushland koalas cannot persist without the urban koala population. The Koala Plan focuses its strongest protection on bushland areas and provides for koala conservation in urban areas to be subservient to broad urban development objectives. The Koala Plan needs strengthening to ensure the long term survival of koalas in Southeast Queensland.

Habitat Protection

Recommendation 1

As from the date of Government's response to this taskforce report, it is Queensland Government policy that there will be no net loss of Koala habitat in SEQ. It is government policy to provide a net gain.

The taskforce unanimously believes that stronger habitat protection is critical to halting decline of koalas in SEQ. The taskforce advocates that other measures (such as reducing dog and vehicle deaths), whilst necessary, will be of limited value unless existing habitat is more strongly protected and expanded.

The first pivotal measure required is to prevent any erosion of existing habitat protection. Current protection relies heavily on the SEQ Regional Plan, which is currently under review. It is vital the SEQ Plan (and in particular in any changes to the urban footprint) does not provide for development in any koala areas currently protected from development. This includes cleared areas.

Action 1

Retain all existing koala habitat areas as they are defined within the current SEQ Regional Plan.

The taskforce is cognisant that not all good koala habitat that is currently identified as such is protected by existing arrangements. For example, areas of good habitat were included in the urban footprint when the SEQ Regional Plan was put in place in order to allow adequate capacity for human population growth and not designated under the Koala Plan. Similarly, good quality habitat is known to exist in areas set aside for investigation as to whether they should be added to the urban footprint.

Working on maintaining a minimum viable population in the Koala Coast of 7000 the taskforce believes that the land currently outside the urban footprint on the Koala Coast already identified and protected as koala habitat is not sufficient to support a viable population of koalas even if all of it was revegetated. It is therefore necessary to acquire or otherwise protect koala habitat areas within the urban footprint as well. It is vital that these areas be protected from further development, with redirection of development to less important areas.

Action 2

Undertake an urgent inventory over the next six months of all known good koala habitat including publicly owned land across SEQ not currently protected from urban development (including that in Investigation Areas), with an immediate focus on the Koala Coast.

Action 3

Protect all areas identified in Action 2.

A further step that needs to be taken is to identify any habitat that is currently not known about, particularly that which is currently not protected from development.

The knowledge of koala habitat in SEQ is patchy. It is best understood for the Koala Coast, less so for Pine Rivers/Caboolture and is more limited in other areas known to support koala populations, such as Ipswich, the Sunshine Coast and the Gold Coast.

The taskforce considers it essential that urgent steps be taken to complete this knowledge base. This includes by tapping into all exiting knowledge held by different parties as well as through further mapping.

The taskforce recognises the joint State Government/Local Government mapping being undertaken as part of the Koala Plan, including the report now finalised under this program for the Moreton Bay Region.

Action 4

Upgrade and accelerate the habitat mapping program commenced under the Koala Plan in order provide a complete picture of koala habitat in SEQ within six months. Initially this should focus on the Koala Coast but then extend as a priority to all other areas of SEQ subject to high development pressures.

Immediate consideration needs to be given to protecting as much currently unprotected habitat as possible as soon as it is identified. The taskforce believes this needs to be done as soon as information is available for particular areas, rather than waiting for a complete understanding of habitat across SEQ to be compiled.

Action 5

Protect all habitat identified and recommended for protection in the GHD report for the Moreton Bay Regional Council area.

Action 6

Protect areas identified in Action 4.

The taskforce is of the view that it is insufficient to protect only existing habitat. Expansion of habitat through restoration of cleared or degraded sites is also essential. This includes habitat areas that are currently protected. Indeed there is considerable potential for relatively low cost habitat restoration within areas currently afforded protection from further development.

The taskforce stresses that restoration is a long term measure and should not be seen as a substitute for protecting existing habitat and the other immediate actions needed to halt the decline in koala populations. Nonetheless, restoration of areas both already protected and not already protected is vital to secure the future of koalas in SEQ and must be researched/encouraged.

Action 7

Review existing knowledge and undertake new surveys where required to identify all cleared and degraded land that could be rehabilitated to become effective habitat within the next 20 years.

The taskforce also discussed the need for the immediate introduction of mandatory measures to apply in all areas of koala habitat. In particular it was considered that an immediate moratorium should be imposed on tree clearing in critical koala habitat areas while the mapping under Actions 2 and 4 is undertaken.

Action 8

Temporarily cease for six months, clearing of mature koala habitat trees in existing koala habitat areas (as defined by the Koala Plan) and other areas identified by local governments in Southeast Queensland while the mapping under Actions 2 and 4 is undertaken.

Development approvals for a material change of use or reconfiguring a lot requiring operational works lapse after four years. Consequently, many large areas of bushland have long standing development approvals that were issued prior to the Koala Plan commencement. The taskforce considered that there should be a sunset provision of two years for these approvals.

One taskforce member suggested a better way to deal with existing approvals would be rezoning under local government planning schemes. Local governments would have the option of assessing any extension of time under the new zoning rules if an extension of time was applied for.

Action 9

All existing and current development approvals are subject to Koala Plan requirements unless practical completion occurs within two years.

Taskforce members also considered the assessment role in urban areas should be made a responsibility of EPA rather than local governments. The taskforce considered that the EPA should be funded to undertake all mapping and development assessments in Southeast Queensland to provide a consistent approach in implementing the Koala Plan.

Action 10

The EPA becomes a concurrence agency for all developments within koala habitat areas. The EPA also be funded to undertake all mapping and development assessments in Southeast Queensland.

Action 11

Establish separate targets for each local government for the rehabilitation of koala habitat to enable a net gain of habitat to be achieved.

Taskforce members considered that greater protection could be afforded to koala habitat by listing critical habitat areas identified under Actions 4 and 7 as essential habitat under the Vegetation Management Act.

Action 12

List areas identified under Actions 4 and 7 as essential habitat under the *Vegetation Management Act 1999*.

There is a loophole for development that is considered committed whereby koala sensitive design is only required if it is practical. The definition of committed development is very broad and effectively gives an inappropriate concession to 75 per cent of development in rural areas and all development in urban areas. The taskforce believes that the term committed development should only refer to development that has an existing development approval. Where a proposed development already has some (but not all) development approvals it needs, then only existing approval rights should be exempted from the requirement to deliver koala sensitive design.

Action 13

Amend the definition of committed development in the Koala Plan to be only development that has a development approval.

Not Government Policy

Flexible Mechanisms for Resourcing the Protection of Koala Habitat

Recommendation 2

Provide and or acquire funds to achieve Recommendation 1

As covered in the previous section, the taskforce has identified the critical need to increase the protection and extent of existing habitat in order to address koala decline. This includes the need to (a) protect additional existing habitat currently within the urban footprint and (b) rehabilitate cleared/degraded areas both in and outside the footprint.

The taskforce believes that the current mechanisms for achieving this (through either public or private sector resourcing) are inadequate. A broader suite of funding, regulatory and incentive mechanisms are needed to provide flexibility and to ensure that every opportunity to protect and/or enhance habitat is taken.

Habitat can be secured through direct acquisition as many local governments are doing through funds raised by environmental levies. The taskforce is of the view that this effort needs to be increased and co-ordinated through a dedicated koala habitat acquisition fund with State Government contribution.

Another avenue available for attracting resources to purchase habitat would be to enable local governments to require infrastructure charges for environmental habitat purchases as part of the development assessment process. The taskforce considers the current ability of local governments to do this to be ambiguous and in need of affirmation. The taskforce also considers that incentives (such as increased residential yields in areas not of value to koalas) should be available to developers to increase their ownership and support for habitat protection (and for koala sensitive urban design as discussed later in this report).

The taskforce also believes the existing offsetting requirements under the Koala Plan to be inadequate in the scope of areas and types of development to which they apply. It sees the expansion of offset requirements (whilst ensuring offsets represent genuine additional protection and preserving the principle that provision of offsets should not be a means of allowing development where it would otherwise not occur) as an important strategy for accelerating the protection and rehabilitation of habitat.

Under the Queensland Government Environmental Offsets Policy developers will be able to register an interest in advance of their need for an offset. This is known as bio banking. It enables koala habitat to be secured in accordance with the Koala Offset Policy in a much earlier timeframe. The taskforce also considers that this avenue should be put in place for koala habitat as a matter of priority.

The taskforce noted that private lands can be secured for long term protection by the land owner entering into a conservation agreement to manage the land as a Nature Refuge under the Nature Conservation Act. State owned lands can also be protected under a Nature Refuge as an alternative to being transferred into protected areas estate or other form of public reserve. This mechanism has value not just for protecting intact habitat but also as a means of securing regrowth and re-planted areas. For example it may be cost effective for a developer to provide an offset required under an enhanced Koala Offset Policy (see recommendation 15) by negotiating with a landholder to replant cleared areas and then protecting the plantings from future clearing through a Nature Refuge.

It is also necessary to encourage private landholders to enter into such arrangements even if there is no offset requirement. Thus the taskforce considers it essential for greater incentives to be provided for private landholders to protect existing habitat and to rehabilitate cleared or degraded areas in order to increase the area of existing habitat.

Action 14

Identify public land that can be rehabilitated to create habitat. Koala habitat to be recognised as the highest order use for State land not required for the use for which it was originally reserved or purchased.

Action 15

- establish a dedicated koala habitat acquisition and regeneration fund to receive funding from all levels of government and industry;
- require koala habitat protection to be a requirement of master planning, structure planning and priority infrastructure planning (where koala habitat is recognised as green infrastructure) and provide incentives for developers to preserve habitat when determining infrastructure charges;
- expand koala offset requirements, including bio banking, under a revised Koala Plan offset policy;
- make Southeast Queensland a priority for the Nature Assist program;
- provide incentive funding to be dispersed to landholders prepared to enter into binding nature refuge agreements through the EPA's Nature Assist program or ratified local government conservation agreements that include a statutory conservation agreement;
- introduce rating, transfer duty, and land tax concessions for landholders and local governments who enter into nature refuge agreements; and
- use part of the funding generated through developer contributions and offsets to provide incentives to landholders to enter into nature refuge agreements or ratified local government conservation agreements that include a statutory conservation agreement.

Education and Extension

Recommendation 3

Implement community education and extension

The taskforce did not wish the inclusion of education and extension measures to be viewed as trite or an afterthought but felt such measures were critical when cultural issues were a major factor in the adoption of threat abatement for the koalas. The taskforce felt that cultural change was needed not only in the general population but also to the public sector especially State departments and authorities.

Maintaining a viable urban koala population in southeast Queensland is a good news story. From this, messages regarding matters such as dog control, speed limit reductions and habitat retention can be disseminated. The Koala Plan currently has a broad education focus on these issues along with koala friendly backyards. However the taskforce felt that this had not achieved the level of community behaviour change in any of those issues as evidenced by campaigns such as the Target140 Waterwise campaign. Parallel to specific behaviour programmes, the taskforce felt that a general broad community awareness programme was also warranted.

Action 16

Undertake an education and extension program to modify behaviours detrimental to koalas and to develop a sense of community responsibility for koalas. This program should be well funded and modelled on the successful Target 140 Waterwise programme in that it involves practical advice on what individuals can do to protect the koala and koala habitat. The program needs to use TV, radio, social marketing networks and print media and personalities.

Action 17

In koala habitat areas, residents to be provided with information on:

- why it is important to protect koala and increase their numbers;
- where it is important to protect koalas;
- the measures that can be undertaken to protect koalas, decrease disease and mortality, and increase habitat;
- who should be undertaking these measures;
- basic information on koala first aid and how to get help; and
- involving the community in monitoring of local koala populations.

Processes that contribute to death and injury of koalas

Recommendation 4

Reverse processes that contribute directly to the death and injury of koalas.

Poorly designed development

The taskforce noted that koalas will seek to use urban areas during and after development. It is also conscious of the dramatic recent declines in populations in urban areas as well as the increasing evidence that there is a dynamic process operating between koala populations in these areas and in retained bushland.

Thus the taskforce believes that the protection of intact bushland and land suitable for regeneration as discussed previously has to be supported by strong and unambiguous controls over the design of urban development in surrounding areas (to ensure these areas are safe for koalas to live and move through). The loss of koalas that occurs when koalas attempt to travel between isolated bushland patches through backyards and across busy roads can be reduced significantly if a development is 'koala sensitive'. This is particularly important in urban areas which support breeding populations of koalas that can repopulate bushland areas. In places such as the Redlands this means virtually all urban areas.

The Koala Plan provides development controls in certain urban areas. These controls include a requirement to apply koala sensitive design. The Plan sets out measures to achieve koala sensitive design including undertaking a site assessment, constraint analysis, vegetation clearing, rehabilitation, habitat linkages, fencing, local government roads design, use of covenants and community education.

However the taskforce has identified a number of substantial deficiencies in the current regime that are preventing the Koala Plan from ensuring all new development is koala friendly.

Firstly the taskforce considers the assessment criteria for koala sensitive design in urban areas to be inadequate. It contemplated the potential to apply the stronger criteria that currently apply in bushland areas (which for example preclude developments that increase night time traffic) to urban areas. However it was considered that this would potentially exclude development that could deliver the required outcomes for koala sensitive design for urban areas in other ways, for example through traffic calming.

Action 18

Immediately amend the Koala Plan to require new development, including development in urban areas, to incorporate koala sensitive design that facilitates koala movement and habitation by:

- minimising the total footprint, locating development in areas that are already cleared, and include appropriate fencing design and traffic impact minimisation;
- rehabilitating areas identified as suitable koala habitat using funding from acquisition/rehabilitation fund by the actions in recommendation 2;
- identifying and retaining mature koala habitat trees; and
- ensuring development does not impact on koalas or koala habitat during construction.

Secondly, the taskforce considered that the current requirement that makes the requirement for koala sensitive design a parallel consideration to be weighed up against other planning requirements significantly weakens the Koala Plan and should be removed.

Action 19

Amend the Koala Plan to give koala friendly design requirements primacy against other planning and development assessment considerations and to ensure that if a development cannot provide for koala sensitive design it does not proceed.

Action 20

Protect individual mature koala habitat trees within existing urban areas.

Requirements for Roads and Rail in Koala Habitat

The latest koala hospital statistics show an average of 345 koala presentations for koalas that have been hit by cars per year in SEQ. Of these an average of more than 295 per year are fatal. Statistics show an average of 269 koala deaths are attributed to road kills each year on the Koala Coast.

Design criteria

The taskforce suggested koala conservation design criteria for arterial roads transecting koala habitat areas should be developed and implemented as part of normal business practice and costing in the same way as standard engineering solutions is done for other elements such as stormwater. The current road design codes of Queensland Main Roads do not address koala crossings though it understood there is a draft in preparation. Koala crossings can include bridge spans and pedestrian tunnels under roadways, and engineered crossings over road ways and may involve improved lighting. These crossings can serve multiple purposes like bike ways and school crossings and should include fencing to direct koalas to the crossings.

An example is the engineered crossing over the Newcastle to Sydney highway built by NSW Road Transport Authority. These design measures are about mitigating threats from motor vehicles and are to be considered separately to offsets provided for the loss of habitat. Taskforce members expressed strong views against current practices regarding the clearing of habitat for road widening, upgrades and maintenance.

Special consideration needs to be given to temporary barriers around road works. Koala safety depends on koalas being able to exit the road work area quickly. For example, recent work on Dohles Rocks road resulted in six koala deaths due to car strikes when koalas became trapped on the road by temporary barriers.

Retrofitting roads

The taskforce's view is that retrofitting of roads was required to complement improved habitat measures.

Speed

Controlling speed was raised as an issue that needed a whole of government response. In recognition of the patterns of koala movement the taskforce considered there was a need to vary speed at different times of the day and season and that the technology was available to be able to do that. Tugan bypass was used as an example of effective speed control. The taskforce was also clear that speed limits were unlikely to be effective without corresponding compliance actions.

New roads

The consensus view was that as a principle, new through roads should not be built in core koala habitats and that all new roads in koala habitat should include the design elements for safe crossing for koalas. In urban developments, the design speed may inherently limit the speed. A suggestion was made that new road design should include a vegetated buffer, held in public ownership between the road boundary and the property boundary similar to a stock route.

Rail

The taskforce also discussed koala deaths from train strikes particularly in places such as Ormiston.

Action 21

The Department of Main Roads to implement koala friendly design criteria in the maintenance, upgrade and construction for arterial roads transecting koala habitat areas as part of normal business practice and costing.

Action 22

No new road or upgrading of existing roads to increase capacity, through KCA and KSA to proceed unless they conform to the following performance criteria:

- net gain in habitat;
- reduce existing mortality to zero on that section of upgraded/new road; and
- maintain effective connectivity of koala habitat.

Action 23

The Department of Main Roads is to systematically retrofit engineered koala crossing to arterial roads across koala habitat areas in Southeast Queensland. The target is to retrofit a least 45 road crossings within the next three years.

Action 24

That each local government to systematically retrofit engineered koala crossings to major roads across koala habitat areas in Southeast Queensland. The target is for each local government to retrofit a least three road crossings within the next three years.

Action 25

The Department of Main Roads to:

- provide signage on existing and new roads to impose speed limits on arterial roads near known koala crossings;
- install mobile LED matrix signs to remind drivers of their speed;
- install signage regarding 1300 ANIMAL as a contact for injured koalas; and
- use electronic variable speed signs on targeted roads (as used for the Tugan bypass).

Action 26

Increase compliance with speed restrictions by installing fixed speed cameras for koala speed zones and increased application of mobile speed cameras.

Action 27

Road design criteria for koala conservation be included in urban developments and roads maintained by local governments.

Action 28

Queensland Rail to systematically retrofit effective koala crossings and exclusion fencing where rail lines cross koala habitat.

Keeping of Dogs in Koala Habitat Areas

The latest SEQ koala hospital statistics show an average of 116 koala presentations for koalas that have been attacked per year. Of these, an average of more than 90 per year are fatal. These deaths are primarily young males travelling through urban areas in search of mates. This loss is contributing to a decline on the reproductive rate of koalas in urban and bushland areas.

Almost all dog attacks occur during the night when koalas are moving around. Some 96 % of recorded attacks are by dogs larger than 10kg in weight with few attacks by dogs weighing less than 7kg. To protect koalas it is considered that all dogs need to be separated from koalas at night.

The Redland City Council has introduced a night kennelling local law for dogs kept in rural areas to help protect native wildlife. This law could be extended to all local government areas where dog attacks on koalas have been recorded.

Options for dog control in existing residential areas within koala habitat include developing uniform dog laws that require owners to:

- incorporate exclusion fencing on part of a lot or premises to separate dogs and koalas; or
- keep the dog in a suitable enclosure at night that places a physical barrier between it and koalas (e.g. a pen, kennel, garage or house); or
- tethering the dog at night on a short leash, with the provision of appropriate shelter, food and water, to limit the area of premises where a dog could attack a koala.

In new estates within koala habitat, prevention of the conflict can be achieved by establishing dog free estates either using covenants or community title to prohibit in perpetuity the keeping of dogs or by not allowing dogs there through use of the *Animal Management (Cats and Dogs) Bill 2008*. The Taskforce considered dog free estates should remain an option for local governments and developers and supported by State Government when applied noting that further restrictions may be necessary if the proposed measures in relation to dog controls are not effective.

Action 29

Develop uniform dog laws for keeping of dogs in existing and new developments within koala habitat that require owners to implement one of the following:

- incorporate exclusion fencing on part of a lot or premises to separate dogs and koalas but still allow koalas to traverse the property ; or
- keep the dog in a suitable enclosure at night that places a physical barrier between it and koalas (e.g. a koala proof pen, kennel, garage or house); or
- tethering the dog at night on a short leash, with the provision of appropriate shelter, food and water, to limit the area of premises where a dog could attack a koala.

Action 30

That a complementary enforcement programme be instigated. This programme could be funded by the Queensland government, local government and dog owners through an increase in the dog licence fee.

Action 31

The issue of dog free estates to remain an option to be considered by local governments and developers and supported by State Government when applied noting that further restrictions may be necessary if the proposed measures in relation to dog controls are not effective.

Not Government Policy

Performance Indicators, Monitoring and Research

Recommendation 5

Implement robust and transparent mechanisms for performance monitoring, reporting and research.

The taskforce considered that the intertwined issues of performance indicators, research and monitoring were not adequately addressed by the Koala Plan.

The initial requirement was to set a performance indicator such as the viable population number. Though there was discussion about which method was appropriate to establish the number, there was general agreement that 7,000 koalas in the Koala Coast was a reasonable performance indicator and that a figure was required to be set for other parts of Southeast Queensland. Koala populations are also key indicator of the performance of the SEQ Regional Plan (State of the Region Sustainability Indicators Baseline Review 2006).

Monitoring

Coupled with adopting performance indicators the taskforce identified that a monitoring program to scientifically determine population is required for evaluation.

The taskforce also identified other monitoring programmes necessary to assess the effectiveness of specific measures such:

- amount of habitat rehabilitated in each local government area compared with the target;
- nett amount of habitat in the region;
- education campaigns;
- safe koala crossings;
- reduction in mortality from roads; and
- reduction in mortality from dogs.

Data management and availability

The taskforce discussed the range of surveys and studies on koala factors that have been done by government, non-government organisations, universities and industries. An example used was fauna surveys by developers which generally were not readily publicly available. They considered general unavailability of information was wasteful of resources and led to poorer decision making by all segments of the community. The taskforce believed this could be overcome by requiring collation of such information in one location accessible by all interested parties.

In addition a subset of data management was about consistent record keeping about injured and sick koalas by all carer groups and vet clinics and the notification to the EPA. The taskforce felt that a common record form should be developed so the information gathered at various locations can be compared and analysed. The EPA advised that such a form – the Koala Record Sheet – has been in use by SEQ koala hospitals for some time and an upgraded form is now required to be completed and returned to the EPA by all persons holding koala Rehabilitation Permits.

Research

There is disagreement within the taskforce on whether or not all koala habitat is “full” and introducing koalas would lead to the resident population either being displaced or dying due to starvation or disease. As a consequence there are different views on the merits of translocation and the taskforce considered that more research was needed to estimate the carrying capacity of koala habitat and the effects of translocation and dispersal.

Another area identified as requiring additional research was disease. The percentage of koalas showing symptoms of disease in the recent GHD survey was low. However, Australian Wildlife Hospital records suggest the infection rate is as high as 50% in other populations. Koala Retrovirus (KoRV) infection and Chlamydia are still poorly understood in terms of pathogenesis, interaction, ecological impact and distribution. Although active research on both infections is occurring at the University of Queensland and Queensland University of Technology, our understanding of the real impacts of these infections is rudimentary. Increased funding would assist in gaining a better understanding of the role these diseases play in the population dynamics of koalas.

Action 32

Performance indicators for the Koala Plan and SEQ Regional Plan and implementation of the recommendations be:

- a restoration of the koala population to 7,000 koalas in the Koala Coast
- restoration to an estimated viable population for other parts of Southeast Queensland.
- reduction of koala mortality from roads and dogs each by 50% within five years.

Action 33

Relevant State departments and authorities’ performance measures to also include measures regarding maintenance of viable koala populations and results submitted to the EPA consistent with action 37.

Action 34

Establish formal and scientifically robust monitoring programmes to determine koala population size every two years in:

- the Koala Coast;
- Moreton Bay Regional Council; and
- any other area subject to development pressure.

Action 35

Establish formal and scientifically robust monitoring programme to determine koala habitat area every two years in the region.

Action 36

Report the results of monitoring, assessment and effectiveness of the following specific measures within a year of collection through the EPA website:

- amount of habitat rehabilitated in each local government area compared with the target;
- nett amount of habitat in the region;
- education campaigns;
- safe koala crossings;
- reduction in mortality from roads; and
- reduction in mortality from dogs.

Action 38

All available data in respect to koala habitat, mortality and morbidity should be:

- accessible through a single portal;
- available to the public through the EPA website;
- maintained, stored and disseminated by a single agency - the EPA;
- consistent with standards established by the EPA with respect to fauna surveys;
- submitted and included as part of the EPA Wildnet program
- required to be submitted to the EPA.

Action 39

Establish an overarching research program with dedicated funding for EPA and a capacity to leverage external funding sources (e.g. ARC linkage grants) to research topics including:

- koala ecology and biology including genetics,
- Koala Retrovirus (KoRV) infection and Chlamydiosis
- Sustainable populations in South east Queensland dealing with koalas displaced by land clearing in an evidence based and compassionate manner.

Appendix 1 Terms of Reference

The terms of reference for the Koala taskforce were set by the Premier to urgently examine measures such as, but not limited to, the following to enable the Government to consider a report within four weeks:

- Protecting key koala habitat from further development,
- Funding to provide safer road crossings for koalas,
- Regulation of dogs, including prohibiting dogs in particular new developments,
- Mandating koala-friendly fencing around new housing,
- Prohibiting the clearing of koala habitat trees in new development areas.

Not Government Policy

Appendix 2 Koala taskforce members

Chair Mr Terry Wall, Director General, EPA

Taskforce members

Mr John English, Member for Redlands
Mr Phil Weightman, Member for Cleveland
Cr Melva Hobson, Mayor, Redland City Council
Cr Alan Sutherland, Mayor, Moreton Bay Regional Council
Dr Mandy Symons, RSPCA
Mr Simon Baltais, Wildlife Preservation Society Qld
Prof. Frank Carrick, University of Queensland
Prof. Hugh Possingham, University of Queensland
Mr Ken Rawlins, Koala Action Group
Mr Jon Hanger, Australian Wildlife Hospital
Mr Alex Beavers, Department of the Premier and Cabinet
Mr Lindsay Enright, Department of Infrastructure and Planning
Mr Gary Hargraves, Fox & Bell Group
Mr Chris Walton, Land Matters

EPA Secretariat

Mr Geoff Clare, EPA
Ms Rebecca Williams, EPA
Mr David Baker, EPA
Mr Paul Roff, EPA
Mrs Lucy Evans, EPA

Meetings

11 August 2008
20 August 2008
1 September 2008

Appendix 3 Glossary of Terms

Development commitment: means any of the following:

- (a) a development with a current development approval; or
- (b) a material change of use clearly consistent with:
 - (i) if within the Regional Landscape and Rural Production Area, Rural Living Area, Investigation Area — the regulatory provisions of the SEQ Regional Plan; and the purposes of codes (or equivalent policy intents) of the relevant zone (or equivalent) and any applicable overlays in the relevant planning scheme; or
 - (ii) if within the Urban Footprint — the purposes of codes (or equivalent policy intents) of the relevant zone (or equivalent) and any applicable overlays in the planning scheme; or
- (c) reconfiguring a lot consistent with:
 - (i) if within the Regional Landscape and Rural Production Area, Rural Living Area, Investigation Area — the regulatory provisions of the SEQ Regional Plan; and the purposes of codes (or equivalent policy intents) of the relevant zone (or equivalent) and any applicable overlays in the relevant planning scheme; or
 - (ii) if within the Urban Footprint — the purposes of codes (or equivalent policy intents) of the relevant zone (or equivalent) and any applicable overlays in the planning scheme; or
- (d) building or operational work:
 - (i) arising from and necessarily associated with a valid development approval for a material change of use or reconfiguring a lot; or
 - (ii) consistent with the planning scheme; or
 - (iii) that is a development consistent with a community infrastructure designation.

Extractive industry development: means assessable development that is for:

- (a) the extraction and processing of extractive resources for use in infrastructure or construction; and
- (b) activities associated with the extraction and processing.

However, extractive industry development does not include the extraction of rock in slab form for a building or monument.

Footprint: of a building and associated structure, or an extension of an existing building and associated structure, means the total area of land developed for the building and structure, or the extension, including, for example, the areas covered by following:

- (a) the floor area of the building and structure or the extension;
- (b) landscaping and fencing for the building and structure or the extension;
- (c) a car park, driveway or other facility associated with the building and structure or the extension.

General development: means any assessable development with the exception of a domestic activity, extractive industry or community infrastructure.

Habitat linkage: means koala habitat that allows for and promotes the movement of koalas into, within, or out of an area.

Key resource area: means an area identified as a key resource area in a State planning policy about extractive resources made under the *Integrated Planning Act 1997*, chapter 2, part 4.

Koala:

- (a) means a mammal of the species *Phascolarctos cinereus* and
- (b) includes the reproductive material of a mammal mentioned in paragraph (a).

Koala classification: means a Koala Conservation Area, Koala Sustainability Area, Urban Koala Living Area or Koala Living Area.

Koala Coast: means the geographical area comprising portions of Redland Shire, Brisbane City and Logan City as identified in the repealed State Planning Policy 1/97:Conservation of Koalas in the Koala Coast.

Koala Conservation Area: means

- (a) each part of the State shown on the SEQ map as a koala conservation area; and
- (b) if a local government has an approved local government map for its area—each part of the local government’s area shown on the map as a koala conservation area.

Koala conservation criteria: means development assessment criteria applied to or within a Koala Habitat Area.

Koala district: means:

- (a) koala district A; or
- (b) koala district B; or
- (c) koala district C.

Koala district A: means the area described in schedule 1, section 1 of the *Nature Conservation (Koala) Conservation Plan 2006*.

Koala district B: means the area described in schedule 1, section 2 of the *Nature Conservation (Koala) Conservation Plan 2006*.

Koala district C: means the area described in schedule 1, section 3 of the *Nature Conservation (Koala) Conservation Plan 2006*.

Koala habitat: means

- (a) a woodland where koalas currently live; or
- (b) a partially or completely cleared area that is used by koalas to cross from one woodland where koalas currently live to another woodland where koalas currently live; or
- (c) a woodland where koalas do not currently live if the woodland:
 - i. primarily consists of koala habitat trees; and
 - ii. is reasonably suitable to sustain koalas.

Koala Habitat Area means:

- (a) a Koala Conservation Area; or
- (b) a Koala Sustainability Area; or
- (c) an Urban Koala Area.

Koala habitat tree: means a tree of any of the following genera:

- (a) *Angophora*;
- (b) *Corymbia*;
- (c) *Eucalyptus*;
- (d) *Lophostemon*; and
- (e) *Melaleuca*.

Koala habitat values: means those characteristics of an area that make it suitable as habitat or refuge for koalas. These characteristics include the nature, extent, condition and connectivity of an area and its relation to other areas of habitat.

Koala Living Area means:

- (a) generally — each part of the State shown on Map 3 as a Koala Living Area; and
- (b) if a local government has prepared a local government koala habitat map for its area — each part of the area shown on its map as a Koala Living Area.

Koala spotter: means a person who has demonstrated experience in locating koalas in koala habitats or conducting fauna surveys.

Koala sensitive development: means development that reflects the integration of targeted planning, design, construction and operational measures which avoid (where possible), minimise and mitigate the impacts associated with development and associated infrastructure, on koalas and koala habitat. It creates permeable environments that:

- provide for the safe movement of koalas within and across the landscape; and
- reduces the threats to koalas.

Koala Sustainability Area: means

- (a) each part of the State shown on the SEQ map as a Koala Sustainability Area; and
- (b) if a local government has an approved local government map for its area—each part of the local government's area shown on the map as a koala sustainability area.

Local government road: see the *Transport Infrastructure Act 1994*.

Nature refuge: a nature refuge is a signed conservation agreement between the landholder and the Queensland Government to preserve an area of land valued for its significant biodiversity and/or cultural heritage. Once the conservation agreement is signed, the land has permanent protection, even if the landholder sells the land.

Net benefit to koalas and koala habitat: an overall improvement in the long term viability of koala populations in the wild.

Offset: an offset is an action in conservation undertaken by an applicant to compensate for an adverse environmental impact elsewhere.

Other development: means development other than an extractive industry or community infrastructure.

Predominantly cleared habitat: means areas where less than 20 percent of the area is vegetated.

Prescribed natural habitat: means

- (a) for a koala taken from the wild, or a koala that is the progeny of a koala taken from the wild:
 - (i) the area within 1 km of where the koala was taken, but only if at least part of the area is koala habitat; or
 - (ii) if subparagraph (i) does not apply — any koala habitat to the extent it is within 5km of where the koala was taken; or
- (b) for another koala — a koala habitat, research into which shows the following:
 - (i) the release of the koala into the koala habitat will not adversely affect any species of wildlife in the koala habitat;
 - (ii) the genetic make-up of the koala is similar to the genetic make-up of koalas currently living in the koala habitat.

Prescribed release conditions: for the release of a koala, means: all of the following:

- (a) the koala is to be released into a koala habitat;
- (b) research about the koala and the koala habitat shows the following:
 - (i) the release of the koala into the koala habitat will not adversely affect any species of wildlife in the koala habitat;
 - (ii) the genetic make-up of the koala is similar to the genetic make-up of koalas currently living in the koala habitat;
- (c) the release of the koala into the habitat is a key component of the research project for which the application for the permit, under which the koala is to be released, is made;
- (d) the research project provides for the recapture of the koala if the chief executive (EPA) requires the recapture.

Regional Activity Centre: see SEQ Regional Plan.

Regrowth: means vegetation that is not remnant vegetation under the *Vegetation Management Act 1999*.

Rehabilitation permit: means a permit to allow particular persons to care for and rehabilitate:

- (a) a sick, injured or orphaned protected animal; or
- (b) a protected animal whose habitat has been, or will be, destroyed by human activity or a natural disaster;

under the *Nature Conservation (Wildlife) Regulation 1994*.

Remnant vegetation: see *Vegetation Management Act 1999*.

Scientific purposes permit: means a permit allowing particular persons to take, keep or use a protected, international or prohibited animal only for conducting scientific research for a genuine scientific purpose, under the *Nature Conservation (Wildlife) Regulation 1994*.

SEQ map: means map 5 of the SEQ Regional Plan.

SEQ region: means the SEQ region as described in the *Integrated Planning Act 1997*, section 2.5A.2

SEQ Regional Plan: means the *Southeast Queensland Regional Plan 2005-2006* made under the *Integrated Planning Act 1997*.

Sequential clearing: see the *Nature Conservation (Koala) Conservation Plan 2006*, section 15.

Source areas: means areas which are the least fragmented, highest density habitat areas where the koala populations with high birth rates and low disease incidence from which koalas disperse into adjoining areas.

State map: see the *Nature Conservation (Koala) Conservation Plan 2006*, section 10.

Structure Plan: see SEQ Regional Plan.

Translocation: means the deliberate transfer of a koala from a natural population or release of a koala that has been taken from the wild into a part of the wild that is not a prescribed natural habitat for the koala.

Trust for Nature: means the not-for profit organisation sponsored by the EPA and which is currently operating a revolving fund with funds provided by the Queensland Government. The Trust for Nature seeks philanthropic support for its activities for a variety of sources in an ongoing manner.

Uncommitted development: means development that is not a development commitment.

Urban activity: see SEQ Regional Plan.

Urban Koala Area: means

- (a) each part of the State shown on the State map as an Urban Koala Area; and
- (b) if a local government has an approved local government map for its area—each part of the local government's area shown on the map as an Urban Koala Area.

Vulnerable: means as defined under s78(2) of the *Nature Conservation Act 1992*.

Not Government Policy