

Tweed Coast Koala Plan of Management Annual Report Year 3 (February 2017 – February 2018)

Background

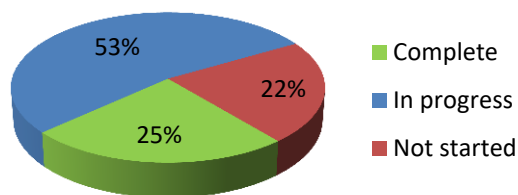
Council adopted the Tweed Coast Comprehensive Koala Plan of Management as a strategy of Council in February 2015. The adopted plan includes a five year works program incorporating the 45 actions identified in the plan.

Progress towards the implementation of the works program is reported to Council on a quarterly basis as a key performance indicator of the Natural Resource Management Unit. Further, this annual summary is prepared for general distribution and information and details key outcomes from the reporting period.

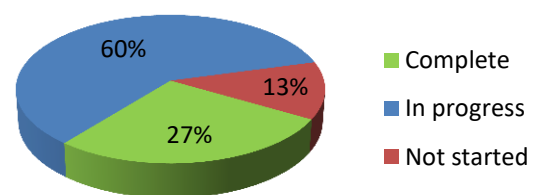
The complete implementation of all plan actions, in particular meeting the targets for the creation of new koala habitat, remain subject to securing relevant external funding support.

Overall action implementation status

All actions



Year 1-3 actions



General plan implementation actions

- The Tweed Coast Koala Management Committee commenced operation in March 2017 and held five meetings during the reporting period. The committee includes representatives of Council, Friends of the Koala, Team Koala and Tweed Coast community members.
- A refresher workshop regarding the operation and development provisions of the plan was held with the building services unit in June 2017.

Strategic planning

- The draft Biodiversity and Habitat Management DCP has been publically exhibited. The DCP incorporates the relevant provisions of the KPOM and is anticipated to be adopted by June 2018.
- Preparation of draft environmental zones in accordance with the KPOM and the Far North Coast E Zone Review is underway with intent to finalise for the Tweed Coast in 2018.

Koala habitat restoration



Image: Lot 919 at Pottsville was purchased by the NSW state government in August 2017 and provides a unique opportunity to create new koala habitat and protect and improve existing habitat.



Image: Publicly accessible mapping has been prepared to display the koala habitat restoration outcomes of the KPOM. Areas of planting (red) and habitat restoration (blue) throughout the Tweed Coast can be viewed together with koala sightings and koala activity survey outcomes.

- 2.25 ha of new koala habitat were established during Year 3. This consisted of the planting of 4,360 trees at eight sites.
- These plantings result in a cumulative outcome to date of 34,460 trees planted providing 23.25 ha of new habitat. This contributes to the KPOM target of the creation and ongoing maintenance of a minimum of 300 ha of additional koala habitat on the Tweed Coast.
- Monitoring of planting sites (February 2017) has revealed that koalas have started utilising koala habitat plantings at 66% of sites surveyed within two to three years of their establishment.
- Primary and follow-up bush regeneration works are continuing at Koala Beach, Pottsville Environment Park and Pottsville Wetland and on private land at Round Mountain, contributing towards the KPOM target of maintaining and improving existing preferred koala habitat
- Council successfully proposed that the NSW Government acquire 100 ha of koala habitat at Pottsville. The site was purchased in August 2017 and provides a critical opportunity for the creation of additional habitat, protection and improved connectivity of existing habitat and improved management of threats to koalas including high intensity bushfire.
- Koala habitat restoration outcomes have been compiled and published as publicly accessible maps. The interactive mapping tool enables viewing of koala habitat plantings, habitat restoration and KPOM management precincts at a property scale.
- The Environmental Trust funded project “Investing in the future of Pottsville’s Koalas” is in its second year with actions relating to revegetation, restoration, community engagement, vertebrate pest control and responsible pet ownership all on target. A community engagement highlight was the well-attended “*Wild About Pottsville*” event.
- \$200,000 grant funding was received from the Australian Government for the planting of 8,000 koala food trees and restoration of 15 ha of existing habitat. All site plans, landholder agreements and works contracts are in place. Site preparation, fencing and planting will be complete by June 2018.
- An additional \$20,000 was provided by the

NSW state government through the Saving Our Species program for the planting of 1,200 koala food trees on private property. Two sites have been secured and planting will be complete by June 2018.

Reducing koala road mortality

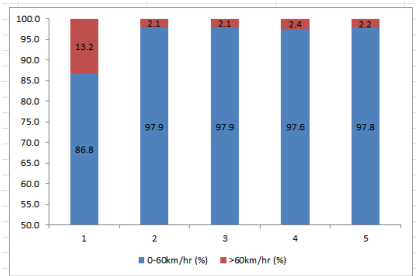


Image: Traffic monitoring data demonstrates a positive impact from the installation of koala zones. This data from Coronation Avenue at Pottsville shows that the installation of the koala zone has resulted in a 10% increase in the percent of drivers travelling at or below the speed limit.

- Ongoing traffic monitoring and maintenance of Clothiers Creek and Coronation Avenue 'koala roads'. Monitoring data indicates continuing value of koala zones at both locations as measured by the increased proportion of drivers travelling at or below the speed limit.
- Information regarding the intent, operation and outcomes of the koala zones has been provided on request to other councils and consultants investigating koala road mortality mitigation measures throughout NSW.
- Monitoring and reporting of koala use of the Pacific Highway fauna overpass near the Pottsville interchange has been continued throughout the reporting period.
- Formal liaison with NSW RMS was established through written correspondence and a subsequent meeting. The outcomes of the meeting included confirmation of a single point of contact for defect reports and vertebrate pest management issues. Agreement was also made to investigate recommended additional fence locations and to hold periodic meetings to maintain contact and issues management.

Reducing the risk of dog attack

- Remote camera monitoring throughout the Southern Koala Management Area of the KPOM has been continued and used to inform vertebrate pest control programs.
- Remote camera monitoring within the reporting period has shown that wild dog activity remains low and accordingly, control is not currently warranted. Two 1080 baiting control programs in the Round Mountain / Pottsville area were undertaken that focussed on control of foxes. This program was supplemented by site specific trapping programs in the Pottsville area, again targeting foxes.
- NSW NPWS continue to undertake 1080 baiting

programs to control wild dog and fox biannually (Spring and Autumn) in Cudgen Nature Reserve and Mooball National Park.

- Council adopted a Wildlife Protection Area Policy in November 2017. This policy provides the framework for the justification, proposal and declaration of public land in which dogs and cats are prohibited for the purpose of wildlife protection under the *Companion Animals Act 1998*.
- A review of the current off leash areas for dogs is underway, including the development of criteria for suitable location of off leash areas and assessment of the existing areas against these criteria.
- A Draft Operational Management Plan for the management of foxes on the Tweed Coast has been prepared. This Plan details a strategic management approach to provide for sustainable fox control to deliver biodiversity benefits on the Tweed Coast.
- Monitoring has been completed to inform the NSW Saving our Species program funded project aimed at reducing the risk of dog attacks in bushland reserves. The monitoring has identified the key audiences for a subsequent community engagement campaign.

Fire management



Image: A joint presentation with NSW NPWS was delivered at the Nature Conservation Council Bushfire Conference in June 2017. The presentation compared and contrasted approaches to managing the issue of fire and koalas in the far north and far south of the state.

- The methods and outcomes to date of the *Tweed Coast Koala Fire Management Plan (TCKFMP)* and *Guidelines for Hazard Reduction Burns in Koala Habitat* were presented at the Nature Conservation Council Bushfire conference in Sydney in May 2017. The presentation was delivered as a joint analysis and comparison of the approaches taken in the far north and far south of NSW to the issue of fire and koalas.
- Continued participation and provision of advice to relevant land managers including the Northern Rivers Fire and Biodiversity Consortium and on request to specific stakeholder groups. This included participation in a scoping workshop considering the relative merit of initiating a model similar to that used on the Tweed Coast in the Port Macquarie-Hastings area.
- A Review of Environmental Factors was prepared to address required planning approvals for proposed prescribed burns in Pottsville

Environment Park. This site was identified in the TCKFMP as a high priority for hazard reduction and as a land management zone, requiring hazard reduction treatment, in the Far North Coast Bushfire Risk Management Plan.

- A trial of the use of koala detector dogs to evaluate effectiveness for determining relative levels of koala activity to assist the prescribed burn planning process was undertaken in Pottsville Environment Park. At this site, the prevalence of koala scats and density of understorey vegetation precluded the successful application of this method.
- Koalas, koala habitat and koala habitat plantings have been integrated to the Far North Coast Bushfire Risk Management Plan 2017. The recognition of these values as assets in the plan are significant and an essential element of improved outcomes for koalas with regard to fire suppression, hazard reduction and habitat maintenance.

Koala care and welfare



Image: A koala holding facility is required to hold rehabilitated koalas for inclusion in the chlamydia vaccine project. Construction of a facility similar to the one pictured above was proposed as part of the recommendation to acquire Lot 919 at Pottsville.

- A key aspect of the proposal for the acquisition of Lot 919 at Pottsville by the NSW state government was to enable the construction of a koala holding facility, soft release site and koala food tree plantation. This facility was proposed in response to a need identified by Currumbin Wildlife Sanctuary to hold rehabilitated koalas for inclusion in the current chlamydia vaccine research project. Whilst the land has been acquired, further progress on these proposals remains subject to resolution of the tenure of the land by NSW NPWS and Tweed Shire Council.
- Annual financial contribution of \$3000 provided to Friends of the Koala Inc.
- Improvement of koala data management and additional community engagement activities that benefit koala care and welfare have also been undertaken and are reported below.
- Two NRM officers attended the National Koala Conference in June 2017, enabling staff to gain insight into the complexities of koala disease and knowledge of the current state of koala disease research, results and future work.

Community awareness and engagement



Image: Kooee Koala and Jenny Hayes (Team Koala) at the *Wild about Pottsville* event in June 2017.

- Council is an active member of a regional group seeking to improve communications and engagement throughout the north coast area. The group is convened by Friends of the Koala and involves all north coast councils. Preparation of consistent messaging, development of education campaigns and engagement with NSW Office of Environment and Heritage has been completed to date.
- This group is also collaborating on the Koala Watch project, funded by the NSW government through the Environmental Trust. An extensive series of community workshops and supporting educational materials are being delivered throughout the project area.
- Council staff continue to engage with, and provide support to, Tweed Coast landholders, the local community and community groups (i.e. Team Koala, Friends of Cudgen NR) to collaboratively pursue conservation of Tweed Coast koalas.
- “*Wild About Pottsville*” was held in June 2017, promoting conservation of koalas, koala habitat and other local native fauna in the Pottsville area. It was well attended, attracting over 300 people. The event also enabled Council to collaborate with numerous community groups like Tweed Valley Wildlife Carers, Team Koala, Tweed Landcare, Birdlife Northern Rivers, Pottsville District Lions Club and Pottsville District Men’s Shed.

Monitoring, reporting and review

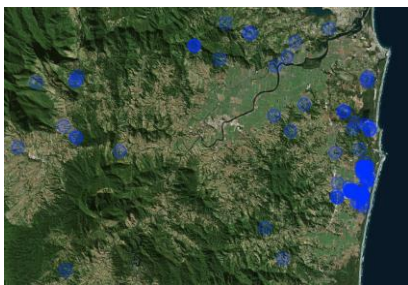


Image: The koala sightings online database has recorded more than 100 sightings from throughout Tweed Shire in the first six months of operation.

- An online koala sightings database has been established as a project under the Atlas of Living Australia. This database enables direct input of sightings data, including through a smartphone application. More than 100 verified koala sightings from throughout the Tweed Shire have been submitted within the first six months of operation. These sightings will be incorporated into the Tweed Coast monitoring program and inform broader regional research projects.
- A collaborative research project was completed to evaluate the potential use of unmanned aerial vehicles (drones) for detecting koalas and determining koala activity. The project was led



Image: The koala sightings database allows for uploading of photographs that assist with data verification, early reporting of diseased animals and possible identification of individual koalas.

by the Queensland University of Technology and involved Tweed Shire Council, City of Gold Coast and Logan City Council. The outcomes of the study included verification that drones can detect koalas in some situations and that further work is required to address limitations associated with dense vegetation and real time processing of data.

- Field surveys to detect koala activity and an online survey are underway to inform the Australian Research Council Linkage Project funded project. This project is led by University of Queensland with partners Sydney University, Southern Cross University, Friends of the Koala and Tweed, Ballina, Byron and Lismore councils. The outcomes of the two assessment components from throughout the four council areas will be combined to prepare a regional koala conservation strategy.

Issues and challenges

Koalas and fire

Securing the necessary approvals to undertake prescribed burns is challenging and impacts on the ability to complete burns within the short available timeframe. Implementing the burns is also dependent on the availability of others (NSW Rural Fire Service) which can further limit the ability to complete the burns. Three sectors within Pottsville Environment Park are currently proposed for low intensity prescribed burns. The burns are intended to reduce the existing fuel hazard and the risk of destructive wildfire, as well as maintain the ecological process of fire crucial to the health and function of existing vegetation communities and threatened species habitat. The burns were initially planned for 2017 but were unable to be completed due to the inability to finalise all approvals before the commencement of the fire danger period. This issue is being considered with relation to determining the most efficient manner to address the extensive remaining areas of council managed bushland on the Tweed Coast that have also been identified as high priority for hazard reduction.

A wildfire occurred as a result of accidental ignition in January 2018 on private land at Kings Forest. The vast majority of the area burnt was paddocks and heath. Some areas of potential koala habitat were burnt, mainly through the understorey but with some areas of crown scorching. Inspection on the first day after the fire was completed in an attempt to identify any immediate direct impacts to koalas. The inspection was limited to the edges of vegetated areas as there were some patches still alight and occasional branches dropping. Whilst it was determined in this instance that there was a low likelihood of koala occurrence in the areas burned, the capacity to respond to wildfire incidents remains problematic. Continuing liaison with the NSW RFS brigades including provision of direction on what to do if a koala is sighted during wildfire suppression remains the best available action at this time.

Wildfire events also generate a significant level of community concern, including in relation to any possible impact on koalas and their habitat. Council's role as a conduit of information during and after the event is highly significant in this regard and measures to improve the effectiveness of this role will continue to be identified and implemented.

Koala Habitat Restoration Program

Encouraging new landholders to participate in Council's koala habitat restoration program has continued to be slow and will make it difficult to reach KPOM targets for new koala habitat creation. Council recently initiated a media campaign to promote Council's koala habitat restoration program to Tweed Coast landholders. There was a good response to the media campaign but all landholders that did respond were outside of the KPOM area. This is a key challenge for delivery of KPOM habitat restoration actions. There appears to be a range of barriers to Tweed Coast landholders participating in a Council-led koala habitat restoration program. These barriers and more effective means of communicating with landholders need further analysis to address this challenge.

The KPOM requires the "identification of a long term mechanism by which restoration areas on privately-owned land are to be retained and managed for the benefit of koala recovery in perpetuity". This has not yet been progressed but the need for this to be explored has been highlighted with a number of participating properties being sold and with new land owners not fully engaged in koala conservation initiatives. In pursuing a long-term mechanism for protection of koala habitat restoration on private land, there will need to be a balance between not deterring private land owners from participating in the program, the current legislative framework and ensuring publicly funded habitat restoration works are protected.

Year 4 priority actions

- Reassessment of koala activity throughout the Tweed Coast will be completed in 2018. This is a three-yearly action of the KPOM and will also involve reporting on the results and provision of any recommendations for amendment of the KPOM. In addition to reassessment of sites from the previous two surveys, it is proposed to include some extra sites where new koala habitat has been established.
- Additional promotion of the koala sightings database will be completed through print, radio and social media. Ongoing database maintenance, including seeking to ensure that coordination and data sharing is functioning effectively and efficiently between key databases (BioNet and Atlas of Living Australia) is occurring, will also be continued. It is hoped that this will generate additional contemporary sighting data for incorporation into monitoring and research programs.
- Finalise tenure arrangements for Lot 919 with NSW NPWS. This will enable progress on the full range of potential koala recovery activities for this location. This includes the development of a detailed site plan and commencement of detailed planning for a soft release site, koala holding facility and koala food tree plantation.
- Identification of additional sites for the creation of new koala habitat and the improvement of existing habitat will be continued throughout the KPOM area. Any significant maintenance requirements for sites worked to date will also be continued.

- Continuing development of koala communications strategy in order to better communicate activities being done under the KPOM works program, the results of the 2018 koala activity reassessment and encourage community understanding and participation.
- Opportunities to supplement the ongoing Council investment in the KPOM works program through external funding opportunities will be identified. Based on information from NSW OEH, it is anticipated that there may be further funding available for koala recovery actions through the Saving our Species program.
- Three Wildlife Protection Areas will be initially proposed for declaration in accordance with the Wildlife Protection Area policy and *Companion Animals Act 1998*, providing additional awareness and compliance ability in these bushland reserves. Further areas will also be considered for declaration.
- Assessment and planning work will be commenced for a prescribed burn program for the Koala Beach estate bushland reserve. This work will include fuel hazard assessments to assist in prioritising hazard reduction works throughout the 175 ha of Koala Beach reserve identified as high priority by the Tweed Coast Koala Fire Management Plan.
- Finalisation of draft Tweed Coast environmental zones in accordance with the KPOM and the Far North Coast E Zone Review and adoption of the draft Biodiversity and Habitat Management DCP.
- Finalise the off leash areas for dogs review to enable implementation.

Conclusion

The multi-disciplinary approach to koala conservation and recovery continues to deliver outcomes in accordance with the Tweed Coast Comprehensive Koala Plan of Management. In addition to significant outcomes in relation to habitat restoration, community engagement initiatives have been delivered that enable direct community involvement in the koala recovery program. Innovative responses to management of the threats of road mortality and fire management continue to demonstrate positive outcomes and are now being implemented in other locations in NSW.