

Tweed Coast Koala Plan of Management Annual Report – Year 2 (February 2016 – February 2017)

Background

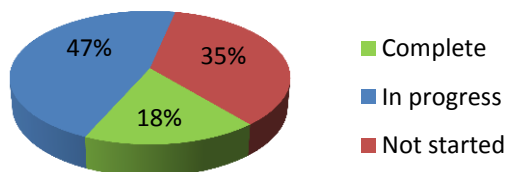
Council adopted the Tweed Coast Comprehensive Koala Plan of Management as a strategy of Council in February 2015. The adopted plan includes a five year works program incorporating the 45 actions identified in the plan.

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.

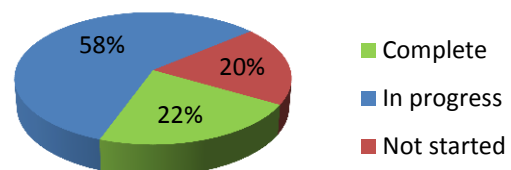
The complete implementation of all plan actions, in particular meeting the targets for the creation of new koala habitat, remain subject to securing relevant external funding support

Overall action implementation status

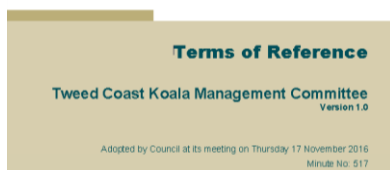
All actions



Year 1 & 2 actions



General plan implementation actions



- Council adopted Terms of Reference for the Tweed Coast Koala Management Committee in November 2016 and endorsed membership of the new committee in February 2017.
- The first meeting of the new committee has been scheduled for March 2017.

Koala habitat rehabilitation



Image: Koala habitat planting at Duranbah (Photo: Tanya Fountain)

- 3.8 ha of new koala habitat were established comprising the planting of 2,900 trees at 8 sites during Year 2.
- These plantings contribute to a cumulative outcome to date of 30,100 trees providing 21 ha of new habitat towards the KPOM target of an additional 200 ha
- 1,700 trees planted were funded by the NSW



Image: Koala habitat corridor connecting existing areas of habitat at Round Mountain
(Photo: Tanya Fountain)



Image: Koala habitat planting to connect to fauna underpass at Eviron
(Photo: Tanya Fountain)

State Government's Saving our Species program. This project enabled the successful identification of new sites and establishment of additional habitat in the Round Mountain Koala Linkage Precinct.

- Council's application to the NSW Environmental Trust for the project '*Investing in the future of Pottsville's koalas*' was successful. This project will involve creation of additional primary koala habitat via koala habitat plantings, restoration of 20 ha of koala habitat and reducing the impact of domestic pets and vertebrate pests on koalas. These actions will complement similar work Council is undertaking across 268 ha of its adjoining coastal reserve system at Pottsville.
- \$200,000 was pledged for koala habitat restoration on the Tweed Coast by the Nationals Party in association with the 2016 federal election. An application has been submitted to access these funds through the Improving Your Local Parks and Environment funding program.
- Council continued to work with WetlandCare to deliver the NSW Environmental Trust funded project, "*Restoring Koala Habitat in Cudgen Nature Reserve*", along with project partners NSW NPWS and Friends of Cudgen Nature Reserve.
- The Tweed Byron Koala Connections project was successfully completed in June 2016. As one of the largest koala habitat restoration and recovery projects delivered in Australia, this project resulted in the following key koala habitat related outcomes:
 - 76,000 trees (13,000 more than the project target) planted, creating 56 ha of new habitat for koalas
 - Regeneration of an additional 100 hectares of koala habitat
 - 120 (45 more than the project target) landowners have contributed land, time and money to improve koala habitat and become part of an effective network of people with increased skills, understanding and connections to the benefit of environmental outcomes in the region
 - Great community buy in, with hundreds of landholders, community volunteers and community groups contributing to the success of the project.
 - Proven success of chemical free techniques for large scale revegetation projects at two sites

- Corridor linkages have been established between properties, which together with areas of clustered project sites create landscape scale improvement for koala habitat and connectivity
- Monitoring and evaluation of project sites continues to demonstrate excellent planting establishment rates of consistently greater than 90%

Reducing koala road mortality



Image: Installation of traffic control measures at Coronation Avenue, Pottsville have resulted in an increase in drivers travelling at or below the speed limit. (Photo: Marama Hopkins)



Image: Mt St Patrick Primary students displaying bumper stickers designed to increase driver awareness of koala zones (Photo: Chris Kimble)

- Traffic control measures including pavement treatments, slow point, solar lighting and koala zone signage were installed as part of resurfacing of Coronation Avenue at Pottsville. Traffic monitoring results indicate a high level of positive impact on driver behaviour with an increase from 87 – 98% of drivers travelling at or below the posted speed limit after installation.
- Ongoing traffic monitoring and maintenance of Clothiers Creek ‘koala road’ measures. Monitoring of this site has identified a decreasing trend in effectiveness. This is likely due to drivers becoming accustomed to the signs and pavement treatments.
- A highly successful program has been delivered in collaboration with Team Koala targeting local schools. This project has involved working with school representatives to prepare a communication strategy that is then delivered by the students. The rationale for this program is based on traffic monitoring data identifying the peak users of Clothiers Creek koala road as commuters between Murwillumbah, Pacific Motorway and coastal villages. Three schools have been involved to date with outcomes including presentations to peers, posters, short films, koala focussed whole school assemblies, bumper stickers and a ‘koala zone’ song.
- Monitoring and reporting of koala use of the Pacific Highway fauna overpass near the Pottsville interchange has been continued throughout the reporting period.
- Baseline traffic monitoring has been completed for Round Mountain Road due to the presence of significant koala habitat, koala activity and known koala mortalities resulting from vehicles. The results of the monitoring will be used to develop and implement strategies to reduce koala road mortality at this location.

Reducing the risk of dog attack



Image: Wild dog activity continues to be monitored throughout the Tweed Coast to inform management actions. (Photo: Tweed Shire Council)



Image: Roaming domestic dog on fauna overpass at Pottsville (Photo: Tweed Shire Council)

- Three Wildlife Protection Areas (WPAs) under the *Companion Animals Act (1998)* have been identified and will be presented to Council for consideration in 2017. The declaration of WPAs protects wildlife in public land by placing responsibility on pet owners to keep dogs and cats out of protected areas; raising awareness of the conservation area; issuing larger fines to deter repeat offenders; and providing clearer rules for the community and Council Rangers.
- 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 but focussed on control of 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.
- Draft mapping and analysis has been completed to identify high risk areas for conflict between domestic dogs and koalas. This mapping has been used to assist to identify criteria to contribute to a current review of off-leash areas and the identification of proposed WPAs.
- Funding has been provided by the NSW State Government through the Saving our Species program for a project aimed at reducing the risk of dog attacks in bushland reserves. This project will evaluate the effectiveness of a targeted community awareness campaign and additional compliance through monitoring and analysis of domestic dog activity in bushland reserves before and after project delivery.

Fire management



Image: A hazard reduction burn planned for Cudgen Nature Reserve at Hastings Point was pre-empted by arson. Measures to limit impact to koalas were still applied by the NSW RFS and NPWS in suppressing the fire. (Photo: Andy Baker)



Image: Measures employed to reduce the impact of fire on koala habitat include clearing of fuel from around habitat trees. (Photo: Andy Baker)

- *Tweed Coast Koala Fire Management Plan, Hazard Reduction Burn Guidelines for Koala Habitat on the Tweed Coast and Wildfire Response Procedure* have been completed, published and promoted through stakeholder networks.
- Koala conservation and welfare issues have been integrated to burn planning and wildfire suppression. Two fires (Hastings Pony Club (~21 ha) and Cudgen Nature Reserve (~80 ha)) occurred in koala habitat on the Tweed Coast during the reporting period. Both fires were initiated by arson, although the Hastings Pony Club burn was scheduled for a hazard reduction burn 2 days after the wildfire event. Back-burning was applied to both sites for fire suppression and in both instances was generally applied at a low intensity.
- Planning works for the implementation of the *Tweed Coast Koala Fire Management Plan* has commenced. This will consist of the preparation of a Review of Environmental Factors to inform a 3 year works program of hazard reduction burns on Council managed land. Council will work with NSW Rural Fire Service to implement the burns in accordance with the guidelines developed.
- Council have also been requested to provide advice to other land managers to promote the plan and guidelines. This has included input to the development of a similar approach for Port Macquarie-Hastings Council and as an abstract submitted for the 2017 NSW Nature Conservation Council Bushfire Conference.

Koala care and welfare



- Initial investigation is currently underway to identify a suitable site on Council land for the establishment of a koala food tree plantation for use by koala carers and Currumbin Wildlife Hospital.
- A location for a soft release site on the Tweed Coast is also being investigated. This would provide for the release of rehabilitated koalas to the Tweed Coast which is currently prevented by

the lack of an appropriate facility.

- Annual financial contribution of \$8000 provided to support key koala welfare organisations - Friends of the Koala Inc. and Tweed Valley Wildlife Carers.

Community awareness and engagement



Image: More than 80 participants attended the Tweed Byron Koala Connections Forum, held at the Byron Community Centre in May 2016

- A highly successful forum was held in May 2016 sharing the outcomes and lessons learned from the Tweed Byron Koala Connections project with more than 80 participants from throughout NSW and Qld. The forum covered all aspect of koala recovery from habitat restoration, fire management and koala roads to the extraordinary people behind the sites and where to from here. The forum presentations were filmed and are available via the Tweed Koalas webpage.
- Council has collaborated with Friends of the Koala and neighbouring councils to prepare and launch a regional koala communications strategy. This strategy will assist to ensure that consistent, strategic and effective communications are used by all partners. This approach will also provide efficiencies for all partners through resource sharing.
- An audit of Council's online materials was commissioned as part of the preparation of a KPOM communication strategy. The outcomes of this audit have been applied and the Tweed Koalas website updated accordingly.
- A draft KPOM communications strategy has been prepared that identifies all communication goals and actions of the KPOM and presents relevant communication tactics. Implementation of this strategy has to date been restricted to improvement of Council's koala website information and evaluating incidental communication activities for consistency with the strategy.

Monitoring, reporting and review

- A reassessment of koala activity for the Tweed Heads Koala Management Area was completed in June 2016. This work was undertaken in conjunction with Southern Cross University and reported no significant koala activity at the sites investigated within the study area and a sub-



Image: Test drone flight in progress at Pottsville Wetland Black Rocks

- population of koalas in the North Tumbulgum area based on koala records.
- Collection, vetting, collation and submission of koala sightings data to NSW BioNet Wildlife Atlas have been ongoing. A web based koala sighting portal and smartphone app is in development for standardised collection and sharing of koala sightings in conjunction with the CSIRO Atlas of Living Australia.
- A research project is underway with Qld University of Technology and South East Qld Councils into the use of Unmanned Aerial Vehicle (drone) for koala survey. Trial flights have been flown at four sites in conjunction with ground based survey. The final report from the project is due in June 2017.
- A successful application was made to the Australian Research Council Linkage Grant program in partnership with University of Queensland, Southern Cross University, Friends of the Koala Inc. and Northern Rivers Councils. This project will involve regional assessment of koala populations, an innovative social research investigation and the preparation of a regional conservation strategy.

Issues and challenges

Excellent momentum has been maintained beyond the completion of the Tweed Byron Koala Connections program through Council's investment in implementation of the KPOM works program.

Numerous innovative approaches to koala recovery implemented by Council have delivered positive outcomes and have been applied in other locations. A key aspect of the successful outcomes to date continues to be partnerships. During the current reporting period, active partnerships include collaborations with key koala welfare and conservation organisations, neighbouring councils in NSW and Qld, research institutions in NSW and Qld, NSW state government agencies, local schools and landholders.

The year one and two actions that remain not started are predominantly dependent on other actions and the majority of 'in progress' actions are ongoing actions that will continue throughout implementation of the works program.

Koalas and fire

Whilst koala conservation and welfare issues have been integrated into the *Hazard Reduction Burn Guidelines for Koala Habitat on the Tweed Coast* and the *Wildfire Response Procedure*, the ability to fully deliver these actions during the two fires that occurred during the reporting period has identified some challenges.

For example, after the bush fire in Cudgen Nature Reserve, Council staff and wildlife carers were provided very limited access to the fire ground due to safety reasons.

This limited greatly the ability to initiate a post-burn koala survey and undertake rescue and care of any injured koalas (if required).

And despite the Pony Club burn being planned as a hazard reduction burn, it was deliberately lit on the weekend prior to the date set for the planned burn. This then meant the pre-burn koala survey was restricted – again due to the need to ensure the safety of persons on the fire-ground under the control of RFS and NPWS.

Ignition of fires by arson, the inability to safely access the site directly after the burn and the low density of koalas throughout the Tweed Coast also make it very difficult to accurately assess any impact of the burns on koalas.

Koala Habitat Restoration Program

A great deal has been achieved already with regard to creating new koala habitat and engaging landholders in koala conservation. A challenge will be to continue to engage landholders in key linkage areas. Landholder take-up of opportunities to create koala habitat on their property in some of the Tweed Coast KPOM linkage and activity precincts has been quite low. Innovative engagement strategies and/or mechanisms may need to be used to engage these landholders in critical linkage or habitat areas.

Whilst the specified action for the preparation of a habitat restoration program indicates the publication of a single document, preparatory work and experience gained through the Tweed Byron Koala Connections project has prompted an alternate approach. This approach involves the confirmation of priority areas, existing and target properties and prioritisation of investment based on ensuring that the annual works program includes each of the following:

- Short term outcomes – trees planted in areas where koalas are known to be using planted habitat
- Medium term outcomes – improve existing habitat with a focus on areas of significant koala activity as identified by the 2015 koala habitat study
- Long term outcomes – tree planting and habitat improvement in KPOM Koala Linkage Precincts.

Mapping of works to date, priority areas and implementation of on ground works in accordance with these principles is currently in progress for Year 3.

Reducing the risk of dog attack

Council will continue to work with NSW Local Land Services, other public land managers (NSW NPWS) and private landowners in the Southern Koala Management Area of the KPOM to monitor and control vertebrate pests, including wild dogs. Council will continue to do this in a holistic way, with consideration to biodiversity conservation on the Tweed Coast but also management of risks to the public on land under its care and control and adherence to legislative obligations to control declared pests. Whilst the koala is one of the target species for monitoring and control of wild dogs, all of Council's vertebrate pest control programs will consider and be undertaken to ensure any potential negative implications to other species of conservation significance are minimised.

With regard to domestic dog attack on koalas, Council has been very proactive in this reporting period in working towards solutions to minimise the risk of dog attack to koalas on public land under its management. However Council has limited tools it can use to minimise the risk of dog attack to koalas on private land, particularly

within rural residential areas where koala habitat is interspersed on large private holdings. This will be a future challenge for Council where it must first establish the extent of the issue before developing innovative engagement strategies and potentially also behaviour change solutions.

Development and legislative review

As an adopted strategy of Council, the KPOM is applied as a key consideration for ecological assessment of development proposals and Tree Preservation Order applications. The plan has provided to date a functional and effective framework to ensure that proposed development does not have an adverse impact on koala conservation or recovery.

During the reporting period, the NSW State Government has initiated review of significant legislative instruments. This includes the adoption of the *Biodiversity Conservation Act 2016* and review of State Environmental Planning Policy No. 44 Koala Habitat Protection. Both instruments have implications for the implementation of the KPOM and Council staff have participated in consultation and lodged technical submissions accordingly. The full extent of the implications for koala conservation and recovery are not yet known but concerns identified include in relation to the proposed offsets scheme, code approved clearing, erosion of council's role in land use planning and the potential for inconsistency between these instruments and the proposed NSW Koala Strategy.

Year 3 priority actions

The priority actions for Year 3 are a continuance of works currently in progress. This includes actions that are by necessity ongoing such as securing external funding, liaison with key stakeholders, Koala Management Committee, fire management, koala care and welfare, community awareness and habitat restoration. These actions will remain in progress and form the bulk of works in year three. In addition, the following specific actions will be completed during this period:

- Secure land and assist establishment of a koala food tree plantation for use by koala welfare groups
- Identification and implementation of strategies to reduce koala road mortality on the eastern extent of Round Mountain Road
- Implementation of priority actions of the *Tweed Coast Koala Fire Management Plan* including preparation of a Review of Environmental Factors to inform a 3 year works program of hazard reduction burns on Council managed land. Council will work with NSW Rural Fire Service to implement the burns in accordance with the guidelines developed.

Conclusion

The multi-disciplinary approach to koala conservation and recovery identified by the Tweed Coast Koala Plan of Management ensures that implementation of the plan is consistent with best practice. Highly significant outcomes in relation to habitat restoration and innovative approaches to threat abatement continue to be achieved through Council's ongoing investment with supplementation from external funding as available.