

Corridors and Core Habitat for Koalas Project

REDUCING THE THREAT OF FIRE ON KOALAS in the SENSW COASTAL FORESTS

The *Corridors and Core Habitat for Koalas Project* (C&CHfK) is a NSW government inter-agency project managed by the Office of Environment and Heritage (OEH) and funded by the Commonwealth Government's Biodiversity Fund. It is a cross-tenure landscape management project that commits to actions to support the conservation of the last known koala population in NSW Far South Coast forests.

One of these commitments is to prepare and implement threat management and koala habitat rehabilitation plans for the coastal forests koala population.

Probably the most significant threat to this population is that of fire. The project's surveys have delineated koala activity areas that extend over the 35,000ha coastal forests study area (Figure 1). These have been provided to agency staff to inform decision-making in regards to responses to a wildfire event in or near the study area and to assist the review (currently being undertaken) of the Bega Valley Risk Management Plan (BVRMP), particularly in regards to the Strategic Fire Asset Zones.

This document has been prepared to assist progress towards these plans. It proposes the delineation of koala fire protection areas (KFPAs) to enhance fuel reduction efforts in areas near to delineated koala activity areas, within which smaller patches could be managed in the same way as strategic Fire Asset Zones (SFAZs).

This approach could enable a reduction in the size of Strategic Fire Advantage Zone areas (as currently delineated in the BVRMP) in the central eastern side of the study area, particularly where they overlap with important areas of koala activity, yet still probably provide an outcome that enhances capacity to manage fire in this part of the region to that which currently exists.

Figure 1 shows both the existing SFAZs and the proposed Koala Fire Protection Areas KFPAs in the study area. At this stage these are indicative only pending further consultation. KFPAs have not yet been delineated in Kooraban National Park to the north; these are pending the results of surveys currently underway there.

Towards the centre of the study area the proposed KFPAs adjoin the existing Lizard Rd and Murrah River SFAZ's and extends the fuel reduction focus on the western side of the koala population further south and also into an area to the north of the Murrah River between the main area of koala activity in Mumbulla State Forest and scattered koala activity cells to the north and east. Figure 2 shows the proposed KFPZ areas in the southern part of the koala study area.

Figure 1: Existing SFAZ and proposed Koala Fire Protection Areas in study area

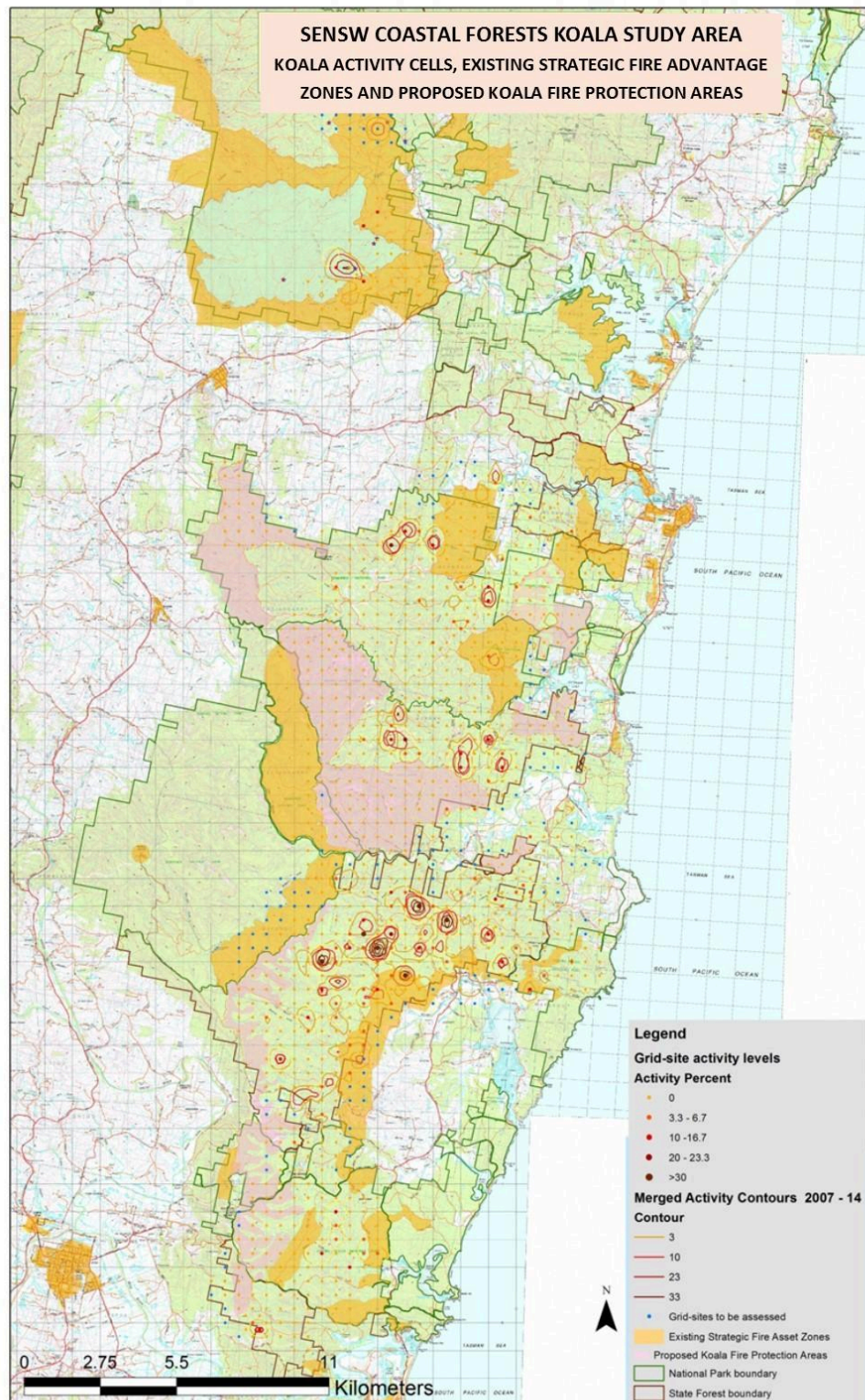
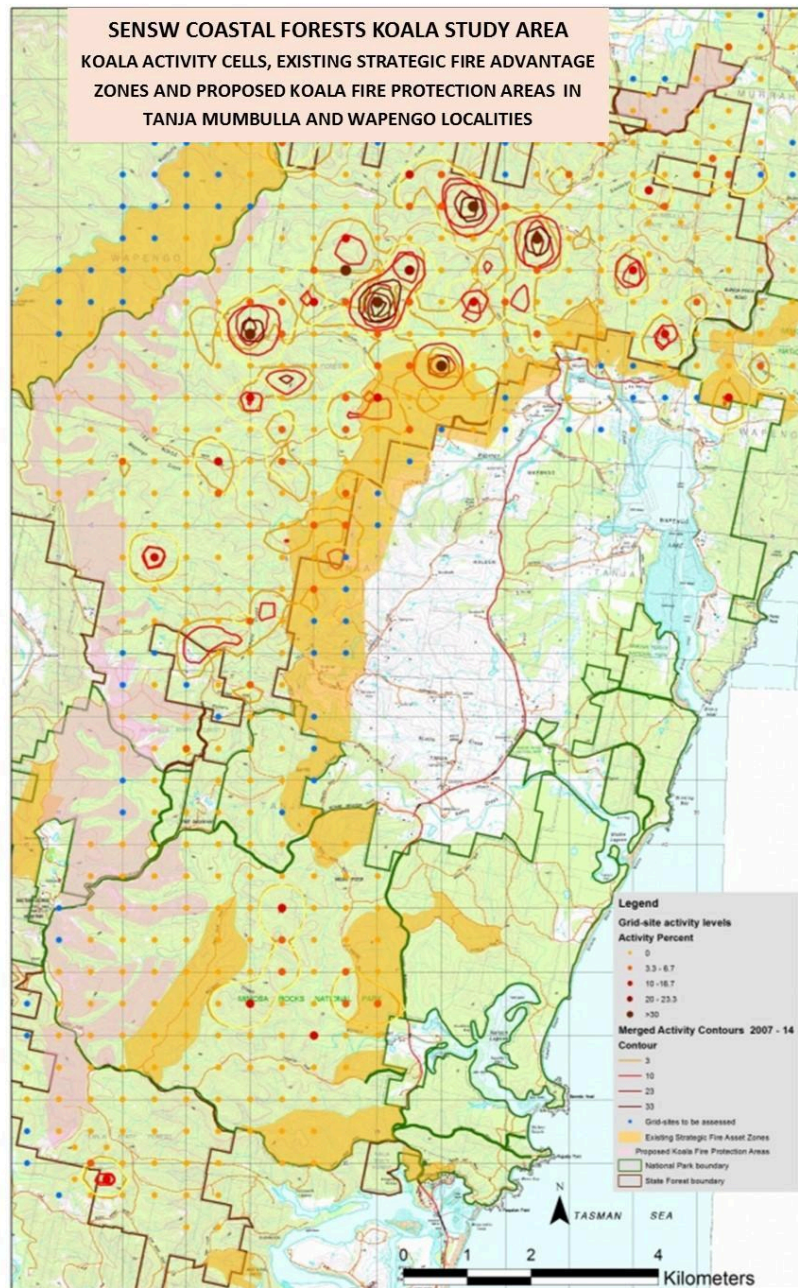


Figure 2: Proposed Koala Fire Protection Areas in the southern/central part of the koala study area



Primarily because of the history of intensive logging fuel loads are highly variable through much of the study area, with many of those patches where such logging was undertaken supporting dense regeneration with high vertical fuel loads, whilst those in adjoining patches of generally mature forest are lower.

A long-term program aiming to safely burn a significant portion of these high fuel-load patches would significantly reduce the risk these areas pose to the population posed by these high-fuel patches and reduce the threat of catastrophic wildfire more broadly.

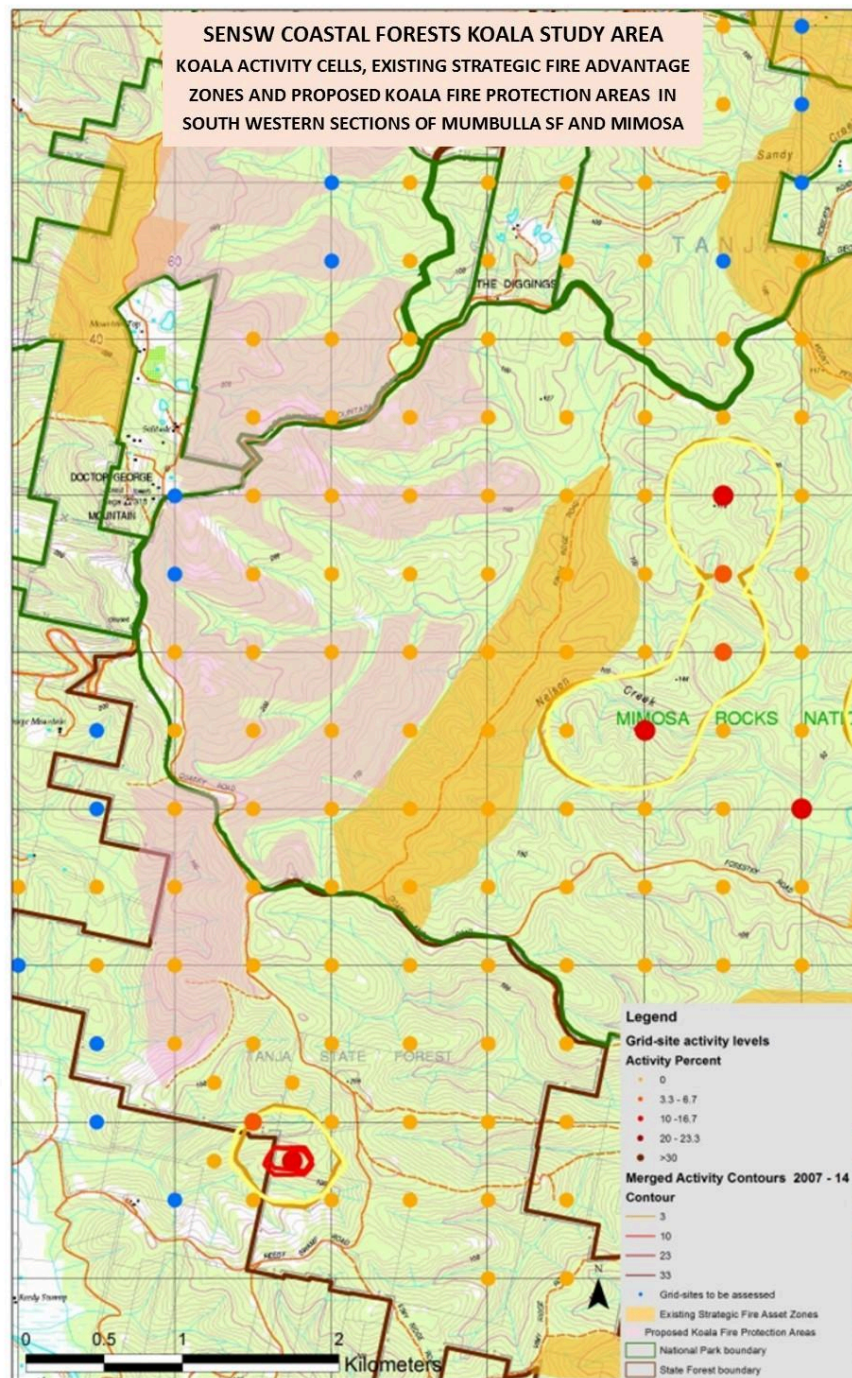
To burn safely will require careful planning and preparation that may involve establishing low fuel buffers in areas adjoining the targeted high fuel patches. These could be achieved using a variety of techniques including excavator mulchers along trails, rake-hoe lines and carefully implemented fuel reduction burns in adjoining areas before burning the patches with higher fuel loads.

Such a program is probably beyond the capacities of existing agency resources, but possibly an integration of existing fire management programs together with Environmental Trust Restoration and Rehabilitation and Green Army Programs (the latter with a particular focus on providing training and work experience for Aboriginal people) may provide sufficient resources to enable such an initiative to achieve a significant contribution to fire management in the region.

One impact of intensive logging is has been the reduction in the proportion of the most important koala browse species in the study area, woollybutt *E. longifolia*. Over several thousand hectares there are older woollybutts surrounded by dense regeneration of silvertop ash *E. sieberi* and forest oak *A. littoralis*. Enabling the widespread regeneration of this species is probably the most important koala habitat rehabilitation initiative that could be achieved for the coastal forests koala population in the short to medium term. This could probably be achieved through the above programs by removing the regeneration growing around the woollybutts and ripping before seed drop, thereby, with appropriate timing also reducing the impact that a hot burn would have on these trees.

One area delineated as a KFPA in the figures above is the western side of Mimosa Rocks NP, an area where relatively high fuel loads and poor species diversity occurs extensively. To the east, but still in the Park, small koala activity cells, with the evidence suggesting only a few animals persisting there (Figure 3, below). The high fuel loads to the west are probably the greatest threat faced by these koalas. Undertaking fuel management in the KFPA delineated in this area utilising the strategies discussed in this document, might be a first step in testing their applicability across the study area.

Figure 3: The Quarry Rd area on the western side of Mimosa Rocks National Park



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