

Koala Impact Mitigation Plan for ANSTO Hazard Reduction Burn

1. Objective

Where practicable, to capture and relocate any Koalas located within the planned Hazard Reduction Burn area prior to the burn being conducted, to avoid koala death or injury. If the capture and relocation is not achievable for individual Koalas, a fire avoidance zone will be established around the tree where an individual is situated.

2. Method

2.1. Identification/locating Koalas

A thermal imaging drone will be used to identify Koalas within the burn area during night-time hours on the night immediately prior to the commencement of the burn. The timing is proposed to enhance the thermal contrast and accuracy. There is high confidence that the drone operator will be able to locate any Koalas present based on the site landscape and conditions and experience of the proposed drone operator.

2.2. Capture and relocation of Koalas

2.2.1. *Capture process*

The methods and ultimate successful capture of a Koala will depend on the relative position of the Koala in the tree to ground level and the safety of the handler and Koala from the capturing process. Options available to the handler include the use of pole and rope from the ground or for the handler to climb the tree and either capture in the tree or use a rope to guide the Koala down the tree with assistance from ground support using a pole. Not all captures will be possible, and as mentioned above, if this is the case a fire avoidance zone will be established around the tree, see process below.

2.2.2. *Relocation process*

The preference will be to move any Koala captured to a location as close as possible to the burn area, preferably into a tree of the species with which it was found on nearby ANSTO land. If the same species of tree cannot be found at the preferred location, an alternative Koala foraging species of tree will be used. The minimum distance for relocation will be determined in consultation with the ecologist to ensure that any relocated Koalas do not move back into the burn area while the burn is occurring or when the ground is still hot post-burn. Where no suitable habitat is identified on ANSTO land, relocation to Sutherland Shire Council land or Crown land may be required following consultation with the relevant entity. If a suitable relocation site is within walking distance or a short drive, a catch bag will be used. If a longer drive is required, a dog cage stored in the cool dark space of the vehicle will be used. Any captured Koalas will have a health check conducted by a suitably trained veterinary specialising in native fauna.

2.3. Development of a Fire Avoidance Zone (Where capture is not possible)

Where capture of the koala is not possible, the next option will be to set up a fire exclusion zone around the tree. This will be completed by raking the flammable bark, leaves, twigs, and other vegetation away from the base of trees in which Koalas remain.

If any of these trees have flammable bark e.g., stringybarks, peppermints or boxes that extends more than a metre up the trunk, a rake-hoe will be used to scrape the bark off the trunk as far up as you can from ground level to stop the ground fire burning up the trunk into the canopy.

Raking the trees will be conducted based on the ability of the RFS, and/or ANSTO team, to safely access the trees due to the nature of the topography, and distance from access-trails.

The RFS will also avoid conducting ignition, particularly aerial ignition, immediately on/next to the identified trees with koalas left in them.

3. Protection of Koala habitat

The overall aim of the burn is to reduce the understorey fuel-load and not to impact the canopy. The burn plan will involve the use of aerial incendiaries deployed from a helicopter, commencing on the plateau at the northern extent of the burn area, progressing downslope towards the south and east to avoid any run-up of fire upslope and extending into the canopies. There is a risk that this method of moving downslope could force Koalas to move south toward Heathcote Road. A buffer zone for Melinga-Molong Creek, which generally flows parallel to Heathcote Road, will be established as a fire exclusion zone to protect its riparian characteristics. This will also act as a refuge for any Koala fleeing the fire before they encounter Heathcote Road.

Control measures to minimise the risk of vehicle impact strikes to Koalas which have not been relocated and are fleeing from the burn area will be implemented in consultation with NSW Roads and Maritime Services. These include:

- Closing or timing the burn to align with scheduled closures of adjacent roads (primarily Heathcote Road).
- Temporary lane closures.
- Temporary speed limit reduction.

Capture methods will be conducted to avoid forcing them onto adjacent major roads. Relocated Koalas will be positioned in areas away from major roads and far enough from the burn area to ensure that they do not return to the burn area while the understorey is still hot.

The burn intensity is intended to be low, controlled to have an average flame height of 1-1.5 metres and an average scorch height of 4 metres. While the burn plan aims to not impact the canopy or crown, the NSW Rural Fire Service estimates that due to the landscape, vegetation and topography, up to 30% of the canopy may be scorched, which will have a medium-term impact on the availability of Koala forage.