

# Conservation Action Plan

## Koala (*Phascolarctos cinereus*)

This plan has been prepared in accordance with the requirements of s.78C of the National Parks and Wildlife Regulation 2019 (Reg.) in relation to an Asset of Intergenerational Significance (AIS) as declared under s.153G of the *National Parks and Wildlife Act 1974*.

### Site details

|               |  |
|---------------|--|
| AIS site      | AIS-E0-178, AIS-E0-185, AIS-E0-193   |
| Site location | An area of 1325 hectares in Bangadilly National Park<br>An area of 3358 hectares in Guula Ngurra National Park<br>An area of 298 hectares in Wollondilly River Nature Reserve<br>An area of 24720 hectares in Upper Nepean State Conservation Area |
| NPWS contact  | Area Manager, Hawkesbury Nattai Area, Blue Mountains Branch  |

### Environmental values

This table sets out the environmental values for which the land was listed as an AIS (Reg. 78C(3)(a)).

| Identified value(s)             | Value description   |
|---------------------------------|---|
| Important habitat for the koala | The koala is an arboreal marsupial with a fragmented distribution throughout eastern NSW. This endangered species inhabits eucalypt woodlands and forests feeding on the foliage of more than 70 eucalypt species and 30 non-eucalypts species. Koalas are inactive during the day, feeding and moving mostly at night. |

## Key risks to environmental values

This table sets out the key risks to the environmental values of the land (Reg. 78C(3)(b)).

| Key risk(s)                            | Description  |
|--|--|
| Inappropriate fire regimes             | Inappropriate fire frequency and intensity that alters vegetation composition and structure may lead to a reduction in suitable habitat or food availability and affect the persistence of koalas at the sites.  |
| Feral predators                        | Predation of koala by wild dogs.   |
| Pathogens, diseases and microorganisms | Infection by <i>Chlamydia pecorum</i> , leading to chlamydial disease and koala retrovirus, can result in mortality of individuals and reduce reproductive success leading to a decline in koala populations at the sites.   |
| Anthropogenic climate change           | A combination of increased maximum temperatures and decreased rainfall may result in heat stress to koalas.<br><br>Changes to weather patterns and climatic conditions as a result of anthropogenic climate change that increases frequency and severity of drought conditions, fire and extreme temperature days may adversely impact the health of koala habitat and reduce the nutritional value of preferred food resources, leading to a decline in koala populations at the sites. |
| Unintended harm                        | Impact to species from vehicle strike.<br><br>Mortality of individuals resulting from domestic dog attacks.  |

## Conservation activities

This table sets out the conservation activities required to:

1. Control, abate or mitigate the key risks and
2. maintain, restore and remediate the environmental values of the land (Reg. 78C(3)(c)).

| Key risk(s)                | Impacted site(s) | Conservation activities   |
|----------------------------|------------------|---|
| Inappropriate fire regimes | All sites        | <ul style="list-style-type: none"> <li>• Develop guidance on the appropriate fire management for the habitat of the koala within 12 months of adoption of this plan and update as required. This guidance must provide for: <ul style="list-style-type: none"> <li>- maintenance of an appropriate fire regime by developing and implementing a site-specific burn plan for the declared areas</li> <li>- implementation of any required fire protection and response measures in the declared areas</li> <li>- Integration of site-specific requirements into NPWS and NSW Government bushfire planning, risk management and operational response arrangements.</li> </ul> </li> <li>• Implement fire management consistent with the guidance.</li> <li>• If required, implement supplementary food and water to maintain individuals after fire events until habitat has sufficiently recovered.</li> </ul> |

Koala (*Phascolarctos cinereus*):  
Conservation Action Plan

| Key risk(s)                            | Impacted site(s) | Conservation activities   |
|--|------------------|---|
| Feral predators                        | All sites        | <ul style="list-style-type: none"> <li>To the extent practicable, reduce the density of wild dogs to a level that is not having an ecologically significant impact on the koala, and maintain the density at or below that level by undertaking opportunistic wild dog control (e.g., shooting, trapping, baiting or other approved methods).</li> </ul>  |
| Pathogens, diseases and microorganisms | All sites        | <ul style="list-style-type: none"> <li>Define trigger points and associated interventions for koala decline resulting from disease outbreaks.</li> </ul>  |
| Anthropogenic climate change           | All sites        | <ul style="list-style-type: none"> <li>If required, assess direct impact of anthropogenic climate change on koalas and the species habitat.</li> <li>If a decline in species trajectory is attributed to impacts of anthropogenic climate change, implement protocols to mitigate the impacts of temperature extremes on the koala population at the sites.</li> </ul>  |
| Unintended harm                        | All sites        | <ul style="list-style-type: none"> <li>Install signage to educate drivers and raise awareness of the risk to koalas from vehicle strikes and domestic pet attacks.</li> </ul>   |
| All risks                              | All sites        | <ul style="list-style-type: none"> <li>If required, undertake conservation translocations to increase the size, health and/or genetic diversity of the populations at the site.</li> <li>If required, and subject to approvals, source animals from the site to re-establish populations in other NSW locations where they have become locally extinct (reintroduction), and/or to increase the size, health, and genetic diversity of existing populations (reinforcement) through conservation translocations.</li> <li>If required, undertake habitat restoration or improvement through supplemental planting and/or other practical methods to extend foraging habitat and improve the availability of palatable species and habitat tree diversity at the sites.</li> </ul> |

## Other land management activities

Within the declared land there are existing assets and infrastructure of NPWS and other external service providers, including public utilities.

Maintenance operations (including inspection, emergency works and routine and standard maintenance) that are exempt development in accordance with the Environmental Planning and Assessment Act 1979, and which are performed on and around existing assets and infrastructure, are authorised under this conservation action plan (CAP) provided such operations are undertaken in a manner that aims to minimise the risk to the declared environmental values of the land and with any other required consents or approvals.

All maintenance operations on the declared land are to be undertaken in accordance with this CAP.

## Measuring and reporting

This table sets out the requirements for measuring and reporting on health and condition (Reg. 78C(3)(d)).

| Attribute                                    | Metric  | Method  |
|--|---|---|
| Health and condition of the koala population | Population estimate, or if a population estimate is not feasible, area of occupancy | Design, and implement every 5 years, a survey to generate an estimate of the number of mature individuals at the sites.<br><br>If this is not feasible, design and implement every 5 years a survey to estimate the area of occupancy of koalas at the sites. |

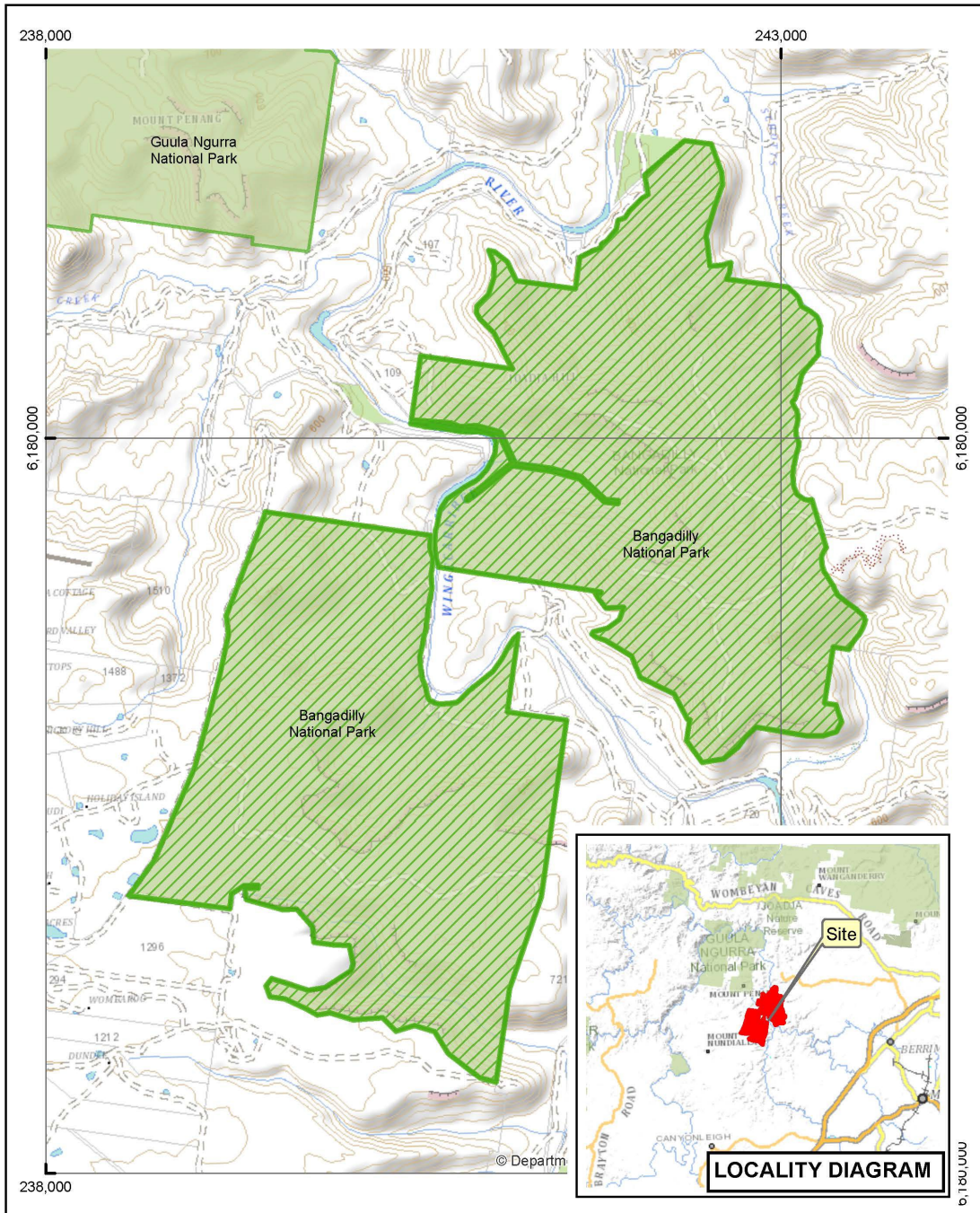
A report on the health and condition of the value for which this AIS was declared will be prepared and published on the Department of Planning and Environment website: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au). The report will summarise the baseline and current health and condition of the values of the declared land and its overall trajectory.

## Evaluation of conservation action plans



This CAP will be amended or replaced as new information becomes available that helps improve our management of the identified assets (Reg. 78H).

The Secretary must appoint a scientist, or a panel of scientists, to conduct a review, as soon as possible after the period of five years from the first approval of a CAP, to examine whether CAPs have been effectively implemented (Reg. 78J(1)).

Koala (*Phascolarctos cinereus*):  
Conservation Action Plan





**Legend**

-  Declared Land
-  NPWS Estate

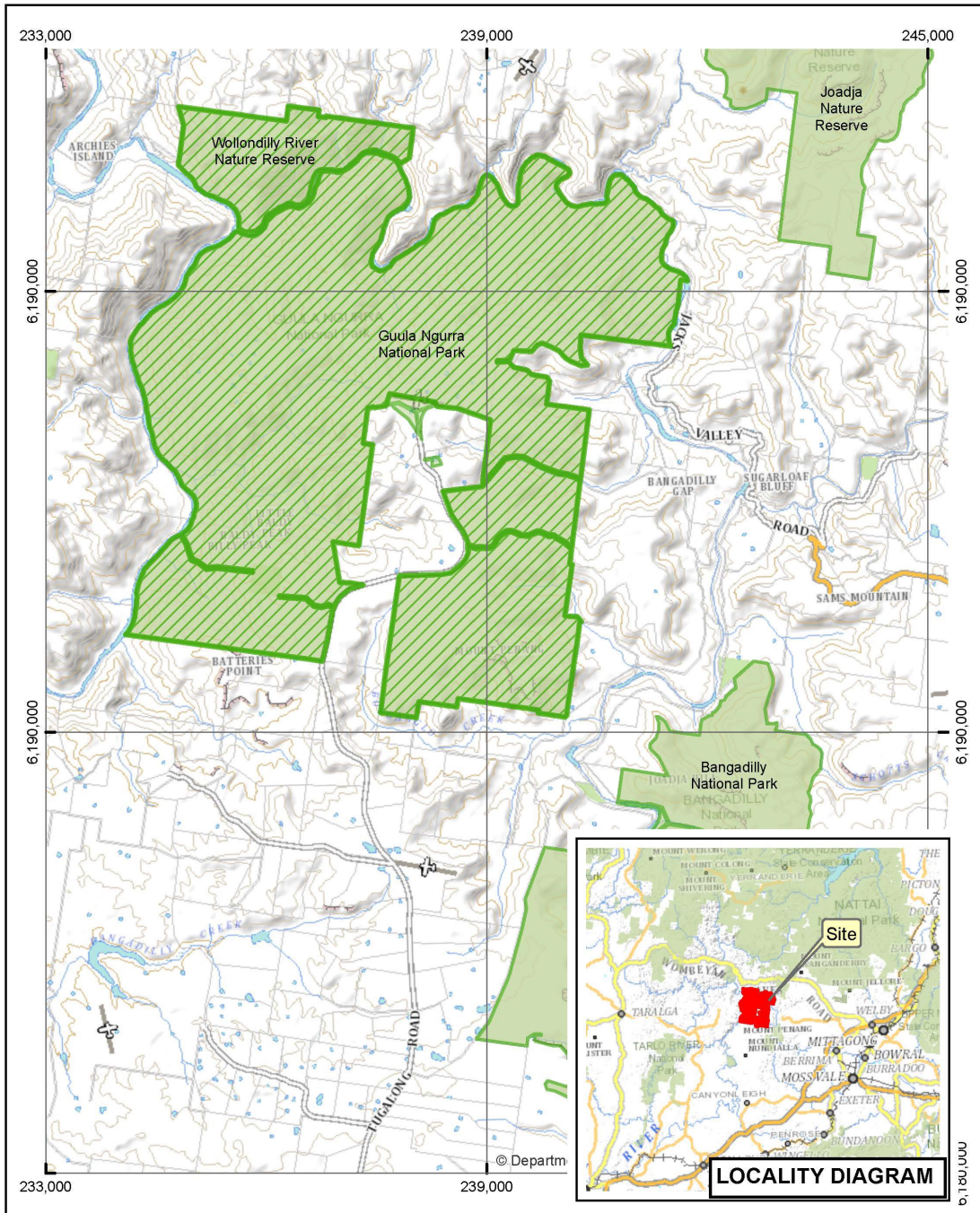
**AIS-E0-178**  
Asset of  
Intergenerational Significance  
Koala  
(*Phascolarctos cinereus*)  
Bangadilly National Park

Copyright of Department of Planning Industry and Environment  
This map is not guaranteed to be free from error or omission. The Department and its employees disclaim liability for any act done on the information in the map, and any consequences of such acts or omissions.



N  
0 0.35 0.7 1.05 km

Koala (*Phascolarctos cinereus*):  
Conservation Action Plan



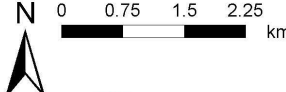


**Legend**

-  Declared Land
-  NPWS Estate

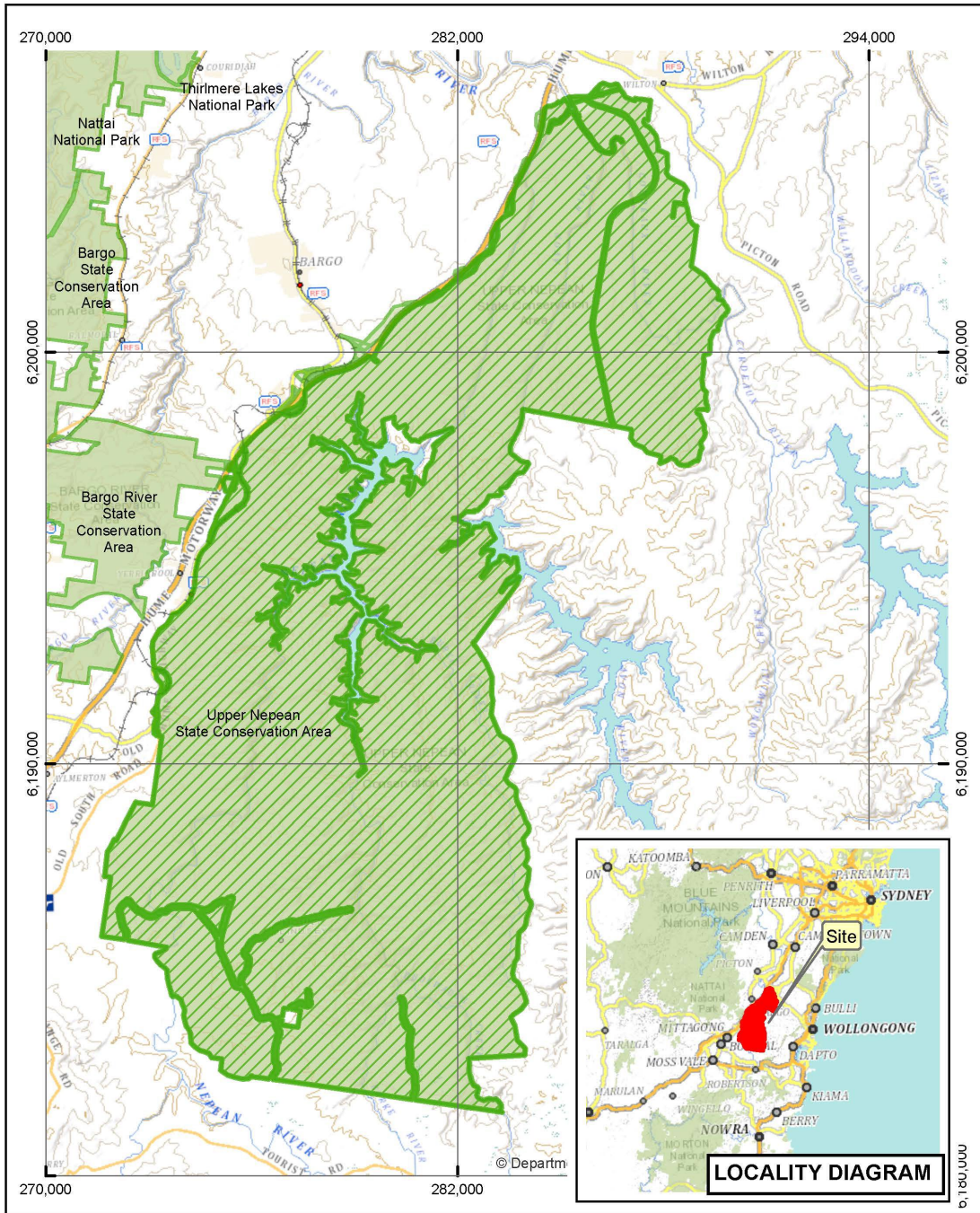
**AIS-E0-185**  
Asset of  
**Intergenerational Significance**  
**Koala (*Phascolarctos cinereus*)**  
**Guila Ngurra National Park and**  
**Wollondilly River Nature Reserve**

Copyright of Department of Planning Industry and Environment.  
This map is not guaranteed to be free from error or omission. The Department and its employees disclaim liability for any act done on the information in the map and any consequences of such acts or omissions.



N 0 0.75 1.5 2.25 km

Koala (*Phascolarctos cinereus*):  
Conservation Action Plan



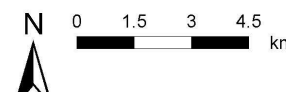
**Legend**



-  Declared Land
-  NPWS Estate

**AIS-E0-193**  
**Asset of**  
**Intergenerational Significance**  
**Koala**  
*(Phascolarctos cinereus)*  
**Upper Nepean State Conservation Area**

Copyright of Department of Planning Industry and Environment.  
 This map is not guaranteed to be free from error or omission. The Department and its employees disclaim liability for any act done on the information in the map and any consequences of such acts or omissions.

N 0 1.5 3 4.5 km



Date prepared March 2023

Koala (*Phascolarctos cinereus*):  
Conservation Action Plan

|                |   |
|----------------|---|
| Date approved  | June 2023   |
| Approved by    | Atticus Fleming, Acting Coordinator General, Environment and Heritage Group |
| Due for review | June 2028   |

---

Environment and Heritage, Department of Planning and Environment  
Locked Bag 5022, Parramatta NSW 2124  
Phone: 1300 361 967; email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au); [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)  
ISBN 978-1-923018-24-2; EHG2023/0136: July 2023.