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WHC PLN VCM KOALA PLAN OF MANAGEMENT			

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EXECUTIVE SUMMARY

The Vickery Coal Mine (VCM) is located in the Gunnedah Coal Basin, approximately 25 kilometres (km) north of Gunnedah in New South Wales (NSW) (Figure 1-1). The VCM is operated by Vickery Coal Pty Limited (VCPL) (a wholly owned subsidiary of Whitehaven Coal Limited [WHC]).


Development Consent (SSD-7480) was granted to VCPL on 12 August 2020 by the NSW Independent Planning Commission as a delegate of the NSW Minister for Planning under Section 75J of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act). The Development Consent allows for the development of an open cut mine and associated infrastructure with a 25 year mine life, extracting run-of-mine (ROM) coal at up to 10 million tonnes per annum (Mtpa) and processing the coal, as well as coal from WHC's Tarrawonga Mine, at an on-site coal handling and preparation plant (CHPP) for off-site transport by rail.

During fauna surveys undertaken for the Project Environmental Impact Statement (EIS) (Whitehaven, 2018), Future Ecology (2018) identified potential habitat and core habitat for the Koala (*Phascolarctos cinereus*) within the Project area and wider study area. Koalas are listed as vulnerable under the NSW *Biodiversity Conservation Act 2016* (BC Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In recognition of this, a Koala Plan of Management (KPoM) has been prepared for the VCM.

The aim of the KPoM is to provide management strategies to minimise potential adverse impacts that may occur to the Koala and/or its habitat as a result of the Project. This version of the KPoM has been designed to focus on initial actions that are to be implemented for the Project, and the KPoM will be reviewed periodically, as per condition E4 and E5, Schedule 2 of SSD-7480. This KPoM has been prepared in accordance with the relevant provisions of *State Environmental Planning Policy No. 44 – Koala Habitat Protection* (SEPP 44) and the Gunnedah Koala Strategy (GSC, 2015) which superseded the draft Gunnedah Comprehensive Koala Plan of Management.

The Project area is located in a predominantly cleared landscape that has been subject to past and present agricultural land uses, mainly livestock grazing with some dry land cropping. As such, the extant native woodland/forest is highly fragmented with the largest continuous patches of woodland/forest immediately to the east of the proposed mining area in Vickery State Forest and to the west along the Namoi River. Parts of the Project mining area have been disturbed by previous mining activities associated with the former Vickery Coal Mine and the former Whitehaven Mine.

Several fauna surveys have been undertaken within the Project area or nearby surrounds since 2002. Future Ecology (2018) undertook targeted surveys for the Koala and recorded the species outside the study area. A review of available data indicates that a single Koala record exists within the Project area, occurring within the footprint of the Project rail spur (Kendall & Kendall, 2011). Three additional records occur within 1 km of the Project area, predominantly in vegetation along the Namoi River.

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Consistent with the *Archived BioMetric and Threatened Species Profiles Datasets* (NSW Office of Environment and Heritage [OEH], 2017), recovery plan (DECC, 2008) and SEPP 44, the following vegetation communities were identified as providing potential Koala habitat in the study area (Whitehaven, 2018):


- Poplar Box Woodland on Alluvial Clay Soils (NA185, PCT 101);
- Pilliga Box – Poplar Box Shrubby Woodland (NA324, PCT 397);
- White Box – Silver-leaved Ironbark Shrubby Open Forest (NA349, PCT 594);
- Narrow-leaved Ironbark – White Box Shrubby Forest (NA311, PCT 459); and
- River Red Gum Riparian Tall Woodland (NA193, PCT 78).

Dr Colin Bower (FloraSearch) reviewed which vegetation communities in the Project area could qualify as potential Koala habitat as defined in SEPP 44. Areas of potential Koala habitat on the Project area had White Box (*E. albens*) and Poplar Box (*E. populnea*) forming at least 15% of the upper strata component. Secondary feed trees were also recorded and included Pilliga Box (*E. pilligaensis*), Yellow Box (*E. melliodora*) and Blakely's Red Gum (*E. blakelyi*) (FloraSearch, 2018). Future Ecology (2018) concluded that the River Red Gum Woodland on the banks of the Namoi River constituted likely core habitat for the species.

Given the low number of Koala records within the Project area and nearby surrounds, and the highly fragmented nature of the habitats, it is likely that usage of the habitat by Koalas is relatively low compared to other more intact habitats.


A number of management measures would be implemented throughout the Project including:

- *Project design and avoidance:* The Project has been designed to minimise impacts to areas of core Koala habitat, mature riparian vegetation, and maximise the distance of operational areas from the Namoi River.
- *Koala Sightings and Register:* Inductions into the mine site would include education on Koalas, likely locations they could be found, speed limits on site, site protocols and Koala reporting. Whitehaven employees and contractors working on and adjacent to the mine would be asked to report any Koala sightings and WHC would maintain a documented Koala register.
- *Habitat management:* Measures will include pre-clearance and clearance surveys, weed mapping and control, and feral animal monitoring and control in accordance with the Biodiversity Management Plan, as well as post-construction and initial mining restoration of the River Red Gum Riparian Tall Woodland (NA193- PCT 78), and removal of fencing that may restrict Koala movement. The Project rail spur crossing of the Namoi River would be constructed within a 40 m construction corridor length.
- *Sick, Injured and Relocation Management of Koalas:* Whitehaven commits to develop procedures for the handling, management of sick and/or injured Koalas identified at the VCM. A procedure would also be developed for relocation of healthy Koalas prior to construction.
- *Strike Management:* Whitehaven commits to implement speed limits within the VCM and install Koala warning signs prior to construction, with locations based on results from the initial monitoring program and Koala sightings register.

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- *Monitoring programs:* Initial monitoring would be undertaken prior to construction using a range of methods, and results would inform the methods and locations of ongoing monitoring for the life of the VCM.
- *Local Koala research:* Based on the results of monitoring, the Proponent would consult with academic researchers regarding application of habitat modification in restricted Koala habitat to benefit populations by increasing the carrying capacity of the environment and/or improving the health of Koalas.

The KPOM will be reviewed within two years from the date of Development Consent SSD-7480. A summary of Koala monitoring results will be reported within the Annual Review.

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1 INTRODUCTION

Development Consent for the Vickery Coal Project (VCP) was obtained in 2014. The Vickery Coal Mine (VCM) is owned by Whitehaven Coal Limited (WHC) and is located approximately 25 kilometres (km) north of Gunnedah, in New South Wales (NSW) (Figure 1-1). Development Consent for the Vickery Extension Project (VEP) was obtained in 2020. The Vickery Coal Mine (the Project) is a combination of the VCP and VEP.

The Project includes a physical extension to the approved VCM to gain access to additional run-of-mine (ROM) coal reserves, an increase in the footprint of waste rock emplacement areas, an increase in the approved ROM coal mining rate and construction and operation of an on-site coal handling and preparation plant (CHPP), train load-out facility and rail spur. This infrastructure would be used for the handling, processing and transport of coal from the VCM, as well as other WHC mines. The Project area is the additional surface disturbance area outside of the approved VCM, an area of 775.8 hectares (ha).


During fauna surveys undertaken for the Project Environmental Impact Statement (EIS) (Whitehaven, 2018), Future Ecology (2018) identified potential habitat and core habitat for the Koala (*Phascolarctos cinereus*) within the Project area (Figure 5-2). In recognition of this, WHC committed to preparing a Koala Plan of Management (KPoM) for the Project.

1.1 Purpose and Scope

This KPoM has been prepared by WHC (with input from experienced and qualified ecologists [AMBS]) as per the requirements of Condition B65 Schedule 2 of SSD-7480 (Table 1).

Table 1 – Specific Koala Plan of Management Conditions

VCM Development Consent (SSD-7480) Schedule 2	Relevant KPoM Section
B65. The Applicant shall prepare and implement a Koala Plan of Management for the development to the satisfaction of the Planning Secretary. This plan must:	This KPoM
a) be prepared by suitably qualified and experienced person/s in consultation with BCD, NSC and GSC;	Section 1.1
b) be submitted to, and approved by, the Planning Secretary prior to the commencement of construction under this consent;	Section 1.2
c) be prepared generally in accordance the Gunnedah Comprehensive Koala Plan of Management and the draft Koala Plan of Management in the EIS;	Section 3 & 4
d) include detailed performance and completion criteria for evaluating the performance of the plan, and triggering remedial action (if necessary);	Section 8
e) detail the implementation of the Applicant's commitments to indirect koala mitigation measures, which must include measures at least equivalent to those identified in the EIS;	Section 7
f) identify the potential risks to the successful implementation of the plan, and include a description of the contingency measures that would be implemented to mitigate against these risks; and	Section 9
g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.	Section 10 & 11
Note: The Koala Plan of Management should be integrated with similar measures in the Biodiversity Management Plan.	-

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This KPOM has been prepared in accordance with the standard requirement for management plans listed in Condition E4, Schedule 2 of SSD-7480 (Table 2). Table 2 presents these requirements and indicates where each is addressed within this KPOM.

Table 2 – General Management Plan requirements

Condition E4, Schedule 2 VCM Development Consent (SSD-7480)	Relevant KPOM Section
<i>E4. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include where relevant:</i>	Entire Document
(a) <i>summary of relevant background or baseline data;</i>	Section 6
(b) <i>details of:</i>	-
(i) <i>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</i>	Section 3
(ii) <i>any relevant limits or performance measures and criteria; and</i>	Section 8
(iii) <i>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</i>	
(c) <i>any relevant commitments or recommendations identified in the document/s listed in condition A2(c);</i>	Section 6 and 7
(d) <i>a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;</i>	Section 8
(e) <i>a program to monitor and report on the:</i>	Section 7 and 10
(i) <i>impacts and environmental performance of the development; and</i>	
(ii) <i>effectiveness of the management measures set out pursuant to paragraph (d);</i>	
(f) <i>a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</i>	Section 9.1
(g) <i>a program to investigate and implement ways to improve the environmental performance of the development over time;</i>	Section 9
(h) <i>a protocol for managing and reporting any:</i>	Section 11
(i) <i>incident, non-compliance or exceedance of any impact assessment criterion or performance measure;</i>	
(ii) <i>complaint; or</i>	
(iii) <i>failure to comply with other statutory requirements;</i>	
(i) <i>public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and</i>	Section 9
(j) <i>a protocol for periodic review of the plan.</i>	Section 10.1



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Figure 1-1

Figure 1-1 Location of Study Area


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On 11 December 2020, the Secretary approved the progressive submission of environmental management plans for the VCM in accordance with Condition A25(a), Schedule 2 of SSD 7480. The scope of this KPoM is specifically related to the VCM construction and initial mining activities. In accordance with condition B65 (b), the KPoM will be submitted to, and approved by, the Planning Secretary prior to the commencement of construction.

The construction and initial mining stage is anticipated to take approximately 30 months based on sequencing of the major construction activities, with the bulk of significant construction earthworks to occur within a 12 - 18 month period, and will include:

- construction of the CHPP;
- construction of the rail spur and loop and train load-out facility;
- construction of the mine industrial area (MIA);
- construction of ROM and product coal stockpile pads;
- initial development of the box cut;
- construction of temporary infrastructure facilities;
- construction of temporary ROM coal stockpiles;
- construction of workshops and offices;
- construction of water supply bores and Namoi River pump station and pipelines;
- construction of dams, sediment dams, up-catchment diversions, channels and other water management infrastructure;
- construction of soil stockpile areas;
- construction of access roads and internal roads;
- closure of a portion of Braymont Road;
- construction of connection to the existing 66 kilovolt (kV) powerline and construction of substations and power supply;
- construction of ancillary infrastructure including consumable storage areas, laydown areas, explosives storage facilities;
- ongoing exploration activities; and
- other associated minor infrastructure construction, use of other plant and other activities.

Earthworks associated with the development of the above infrastructure would include the excavation of waste rock, gravel and coal material from within the VCM open cut footprint. The earthworks would include the initial development of the box cut, with a small volume of ROM coal extracted for stockpile pad treatment, commissioning activities and transport to the Gunnedah CHPP. Additionally, a small volume of coal from WHC's other mines may be delivered to the VCM for stockpile pad treatment and CHPP commissioning activities.

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1.2 **CONSULTATION**


In accordance with Condition B65(a), Schedule 2 of SSD-7480, this KPoM will be provided to Biodiversity and Conservation Division (BCD) of Department of Planning, Infrastructure and Environment (DPIE), Gunnedah Shire Council and Narrabri Shire Council for their review and comment. Comments received during the specific time period have been considered during finalisation of the KPoM and prior to lodgement with the Secretary for approval.

Correspondence was provided to respective stakeholders noted above in October 2020. Final feedback was received from stakeholders in August 2021 and is addressed within this KPoM.

The BCD provided commentary in respect to administrative items, update figure, additional information on management controls, performance criteria, TARP and generic Management Plan items.


The Narrabri Shire Council had no specific comments, and Gunnedah Shire Council (GSC) noted the KPoM structure and reference to the GSC Koala Strategy is generally consistent with the GSC aims and objectives. Commentary was provided in relation to weed mapping and performance criteria timing in 2022.

Please refer to the consultation log in Appendix A.

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2 AIMS

The aim of the KPoM is to provide management strategies to minimise potential adverse impacts that may occur to the Koala and/or its habitat as a result of the Project. The KPoM has been designed to initially focus on actions that are to be implemented within two years from the commencement of development under the Consent, with additional strategies to be detailed in later versions. The KPoM has been prepared in accordance with the relevant provisions of *State Environmental Planning Policy No. 44 – Koala Habitat Protection* (SEPP 44).

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3 RELEVANT STATUTORY REQUIREMENTS AND POLICIES

WHC's statutory obligations relevant to koala management are contained in:

- the conditions of Development Consent SSD-7480;
- relevant licences and permits, including conditions attached to mining leases; and
- other relevant legislation.

3.1 DEVELOPMENT CONSENT SSD-7480

This KPoM has been prepared in accordance with the standard requirement for management plans listed in Condition E4, Schedule 2 of the VCM Development Consent.

The conditions of SSD-7480 relevant to the content and structure of this KPoM are described below.


3.1.1 Koala Plan of Management Requirements as per SSD-7480

Condition B65, Schedule 2 of SSD 7480 requires the preparation of a KPoM (refer to Table 1).

In accordance with B65, the VCM will implement a Koala Plan of Management for the development as approved to the satisfaction of the Planning Secretary.

3.1.2 General Management Plan Requirements as per SSD-7480

This KPoM has been prepared in accordance with the standard requirement for management plans listed in Condition E4, Schedule 2 of SSD 7480 (see Table 2).

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4 LEGISLATIVE CONTEXT

Koalas are listed as vulnerable under the NSW *Biodiversity Conservation Act 2016* (BC Act) and the *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act). Due to the presence of potential and core Koala habitat within the Project area and surrounds, WHC committed to preparing a KPoM for the Project, in accordance with SEPP 44 (Whitehaven, 2018).

The SEPP 44 aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for Koalas to ensure a permanent free-living population over their present range and reverse the current trend of Koala population decline. The policy aims to achieve this by requiring:


- appropriate investigation of the presence of core Koala habitat for any development application;
- the preparation of a KPoM to accompany a development application if core Koala habitat has been identified; and
- the preparation of a local environment study if a proposed rezoning of lands (other than to environmental protection) involves an area of potential or core Koala habitat.

Clause 9 of SEPP 44 (relating to the requirement to prepare a KPoM for core Koala habitat) does not apply to Part 4 development applications which are determined by a consent authority other than a local council and, more specifically, Clause 9 of SEPP 44 does not apply to State Significant Developments, such as the Project. However, due to the presence of potential and core Koala habitat within the Project area and surrounds, WHC committed to preparing a KPoM for the Project.

Circular B35 was issued by the then NSW Department of Planning (1995) to provide guidelines on the interpretation of SEPP 44. Table 3 provides a reconciliation of the requirements against this KPoM.

Table 3 - Reconciliation of SEPP 44 requirements against this KPoM

Koala Plan of Management Requirement*	Section Reference
I. <i>An estimate of population size.</i>	Section 6.2
II. <i>Identification of preferred feed tree species for the locality and the extent of resource available.</i>	Section 6.2 and 6.3
III. <i>An assessment of the regional distribution of koalas and the extent of alternative habitat available to compensate for that to be affected by the actions.</i>	Section 6.1 and 6.2
IV. <i>Identifications of linkages of core koala habitat to other adjacent areas of habitat and movement of koalas between areas of habitat. Provision of strategies to enhance and manage these corridors.</i>	Section 6.3
V. <i>Identification of major threatening processes such as disease, clearance of habitat, road kill and dog attack which impact on the population. Provision of methods for reducing these impacts.</i>	Section 6.2 and 7
VI. <i>Provision of detailed proposals for amelioration of impacts on koala populations from any anticipated development within zones of core koala habitat.</i>	Section 7
VII. <i>Identification of any opportunities to increase size or improve condition of existing core habitat, this should include land adjacent to areas of identified core koala habitat.</i>	Section 6
VIII. <i>The plan should state clearly what it aims to achieve (for example maintaining or expanding the current population size or habitat area).</i>	Section 2
IX. <i>The plan should state the criteria against which achievement of these objectives is to be measured (for example, a specified population size in a specific time frame or the abatement of threats to the population).</i>	Section 8

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Koala Plan of Management Requirement*	Section Reference
X. <i>The plan should also have provisions for continuing monitoring, review and reporting. This should include an identification of who will undertake further work and how it will be funded.</i>	Section 9 and 10

* As defined by Circular B35 SEPP 44 (Department of Planning, 1995).

This KPOM has been developed in consideration of the NSW Government Koala Strategy and Gunnedah Comprehensive Koala Plan requirements. The Gunnedah Comprehensive Koala Plan was superseded by the endorsed Koala Strategy by the Gunnedah Shire Council in October 2015. Obligations relevant to this KPOM are described below.


In 2015, the Gunnedah Shire Council resolved to prepare and apply the Koala Strategy. The Koala Strategy utilised the information from the draft Comprehensive Koala Plan of Management. The key objectives in the Strategy that have been considered and addressed in this KPOM are:

- Creating or enhancing habitat connectivity between this area and other habitat areas;
- Increasing community awareness and knowledge regarding the threat to Koalas and habitat usage in the area;
- Maximising protection of remaining Koala habitat areas through appropriate development controls;
- Requiring best practice assessment and development standards so as to minimise the potential for negative impacts arising from development; and
- Where best practice development standards cannot be met, providing alternative options with positive outcomes in terms of Koala management.

In 2018, the NSW Government released the NSW Koala Strategy which aims to secure the threatened species in the wild for the next 100 years (OEH, 2018c). The NSW Koala Strategy (OEH, 2018c) outlines the actions to stabilise and then increase Koala numbers over the longer-term, ensuring genetically diverse and viable populations across NSW based on four key strategies of:

- Koala habitat conservation;
- conservation through community action;
- safety and health of Koala populations; and
- building our knowledge and education.

The strategies and objectives of the NSW Government Koala Strategy and Gunnedah Koala Strategy are addressed in Section 7 of this KPOM.


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5 METHOD

Reports and information related to the VCM were reviewed, along with relevant documents relating to the Koala in the nearby surrounds. Key sources of information utilised during preparation this KPOM included:

- SEPP 44;
- Information requirements set out in clause 2.2.2 of Planning Circular B35;
- *Gunnedah Koala Strategy* (Gunnedah Council, 2015);
- *Vickery Extension Project Environmental Impact Statement* (Whitehaven, 2018);
- *Approved NSW Recovery Plan for the Koala* (Department of Environment and Climate Change [DECC], 2008);
- *Gunnedah Koala Conservation Plan for the Landcare and Community Groups* (North West Ecological Services, 2016);
- *NSW Koala Strategy* (Office of Environment and Heritage [OEH], 2018c);
- searches of the *BioNet* database (OEH, 2018a) for Koala records in the Project area or nearby surrounds;
- SPRAT Profile (Department of Environment and Energy [DEE], 2018);
- relevant scientific literature, such as Kavanagh *et al.* (2007), Lunney *et al.* (2012), Crowther *et al.* (2014); and
- other KPOM's in the Gunnedah Local Government Area (LGA) (e.g. Niche, 2014).

Preliminary consultation with Gunnedah Shire Council was undertaken by WHC to clarify the content of KPOM's that have been previously endorsed by Gunnedah Shire Council.

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6 KOALAS IN THE GUNNEDAH LGA


6.1 SPECIES PROFILE

Koalas are tree-dwelling, medium-sized marsupials. The Koala occurs throughout eastern Australia, from north-eastern Queensland to south-eastern South Australia, and to the west of the Great Dividing Range (DECC, 2008). In NSW it mainly occurs on the central and north coasts with some populations in the west of the Great Dividing Range (OEH, 2018b). The Koala's distribution is fragmented, occurring in a number of populations separated by cleared land or unsuitable habitat (Martin & Handasyde, 1999; OEH, 2018b).

The Koala is known to inhabit a range of eucalypt forest and woodland communities. These include coastal forests, the woodlands of the tablelands and slopes and riparian communities of the western plains (Phillips, 2000). The quality of forest and woodland communities as habitat for Koalas is influenced by a range of factors, including species and size of trees present, structural diversity of the vegetation, soil nutrients, climate, rainfall, and size and disturbance history of the habitat patch (DECC, 2008). Throughout NSW, Koalas are known to feed upon up to 70 different Eucalyptus species. In any one area, Koalas rely primarily on regionally specific primary and/or secondary food tree species (all of which are Eucalyptus species), which form the bulk of the diet (DECC, 2008). They utilise other species including non-eucalypts for shelter and a supplementary diet (DECC, 2008).

Koalas are solitary and occupy home ranges that vary depending on the habitat that they occupy. Some habitats are only occupied sporadically in response to background climatic conditions, stochastic events (i.e. fire) or behavioural ecology (i.e. dispersing males) (Kavanagh & Stanton, 2012; Ellis *et al.*, 2011; Ellis *et al.*, 2010). Home ranges for the species are highly variable, even within regions. Studies investigating use of plantations in the Gunnedah LGA have observed two male Koalas with home ranges between 200 and 500 ha in area (Kavanagh & Stanton, 2012). Within those reported ranges, the two male Koalas used 12 and 39 hectares (ha) of the total area more than 95% of the time. Other studies north of Gunnedah report home ranges of 12 ha for males and approximately 9 ha for females (Kavanagh *et al.*, 2007). In other habitats within the LGA, home ranges are smaller and overlap resulting in population densities that are much higher than home range occupancy models would suggest. For example, in the Gunnedah LGA, population densities have been estimated at 0.3 Koalas per ha in some areas (Greenloaning Biostudies, 2013 in Gunnedah Council, 2015).

The species will breed throughout the spring and summer months. Females will reproduce from the age of two and give birth to a single joey after a 35-day gestation. Females can give birth to one joey a year. Young are usually weaned by 12 months after which they will disperse. Female offspring will often form a new home range adjacent or overlapping their mothers. Male young will disperse and have been recorded traveling large distances before establishing a new home range. Koalas in the Pilliga Forest have been documented moving as far as 890 metres in a day, though the average movement was reported as 89 metres (Kavanagh *et al.*, 2007).

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6.2 GUNNEDAH KOALA POPULATION

There were only sporadic records of the Koala in the Gunnedah LGA in the years prior to the 1980's (Lunney *et al.*, 2009). Regular detections during surveys in 1986-87 indicated that Koalas had established a population in the region and the Koala became a flagship species for revegetation programs (Lunney *et al.*, 2012). The Koala population in the area steadily increased in the LGA between 1986 and 2009 (North West Ecological Services, 2016). Studies conducted in areas revegetated in the LGA during the 1990's have shown that Koalas readily use replanted areas, especially if they are located close to existing remnant core habitat areas (Rhind *et al.*, 2014; Kavanagh & Stanton, 2012). There are now numerous records for the Koala throughout much of the Liverpool Plains (Figure 6-1). They utilise habitats ranging from riparian zones of major streams, floodplains, to lower slopes and hill remnants. However, the highest abundance appears to occur close to the township of Gunnedah, to the south and to the west (Figure 6-1). Fewer sightings of the species have been recorded in the vicinity of the Project area (north of the Namoi River) or nearby surrounds (Figure 6-1 & 6-2).

Throughout the Gunnedah LGA, there are important areas of Koala habitat under public ownership that are subject to varying levels of protection, however a greater proportion of Koala habitat is on privately owned land (Gunnedah Council, 2015). Over 80 per cent (%) of the vegetation within the LGA has been previously cleared, most of which occurred on the more fertile floodplains (Gunnedah Council, 2015; Rhind *et al.*, 2014). Remnant vegetation over the LGA comprises various types of eucalypt woodlands, with common tree species including White Box (*Eucalyptus albens*), Poplar Box (*E. populnea*), Tumbledown Gum (*E. dealbata*), White Cypress Pine (*Callitris glaucophylla*), ironbarks and River Red Gum (*E. camaldulensis*) along drainage lines.

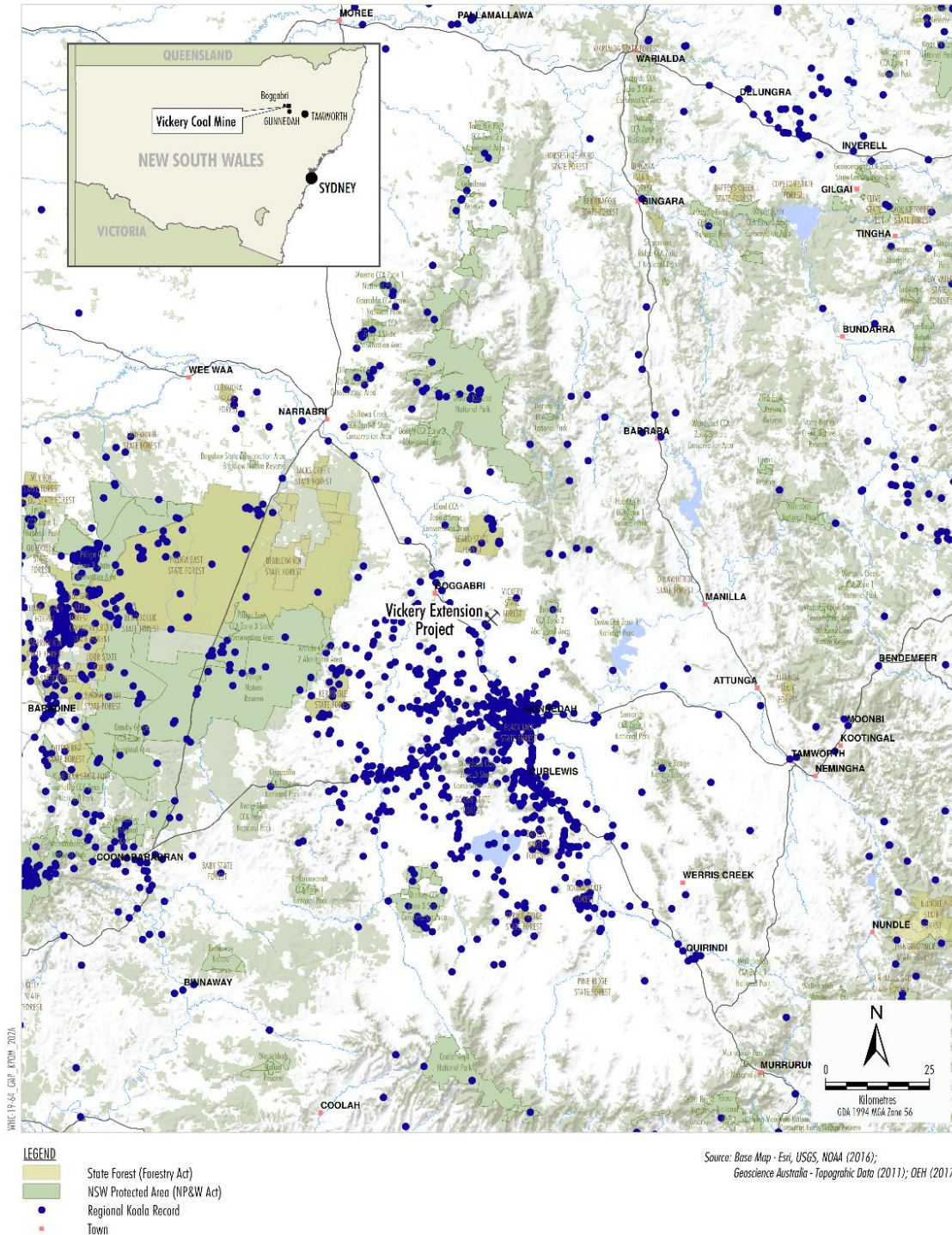
Within the Gunnedah Shire, primary, secondary and supplementary species as documented for the Western Slopes and Plains Koala Management area (DECC, 2008), are listed in Table 4.



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WHITEHAVEN COAL
VICKERY COAL MINE
Regional Koala Records

Figure 6-1

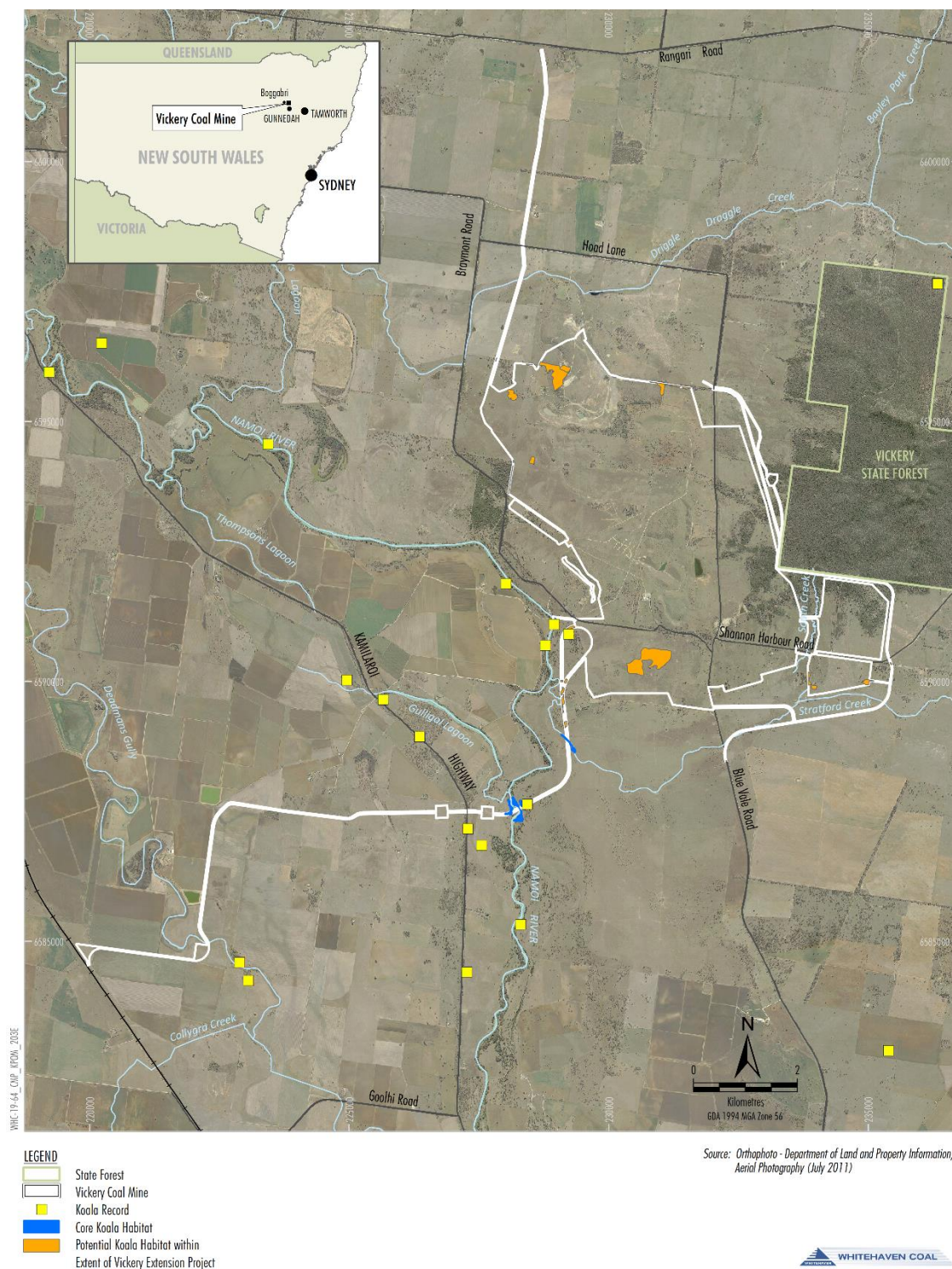
Figure 6-1 Regional Koala Records



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Source: (1) Future Ecology (2018)
(2) CEH (2018a)
(3) Kendall & Kendall Ecological Services (2011)

Figure 6-2

Figure 6-2 Koala Records and Potential habitat in the Project Area



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Table 4 - Koala feed tree species in the Western Slopes and Plains Koala Management Area

Food tree category	Food tree species
Primary Food Trees	River red gum <i>E. camaldulensis</i> *
	Coolabah <i>E. coolabah</i>
Secondary Food Trees	Dirty gum <i>E. chloroclada</i>
	Blakely's red gum <i>E. blakelyi</i>
	Bimble box <i>E. populnea</i> *
	Apple-topped box <i>E. bridgesiana</i>
	Pilliga box <i>E. pilligaensis</i>
	Black box <i>E. largiflorens</i>
	Fuzzy box <i>E. conica</i>
	Mallee red gum <i>E. nandewarica</i>
	Western grey box <i>E. macrocarpa</i>
	<i>E. vicina</i>
	Yellow box <i>E. melliodora</i>
	<i>E. volcanica</i>
	White box <i>E. albens</i> *
	Red box <i>E. polyanthemus</i>
	Dwyer's red gum <i>E. dwyeri</i>
	Orange gum <i>E. prava</i>
	Tumbledown gum <i>E. dealbata</i>
Supplementary Food Trees	Red Stringybark <i>E. macrorhyncha</i>
	Narrow-leaved stringybark <i>E. sparsifolia</i>

Note: * listed on Schedule 2 of SEPP 44 as a feed tree species.

In addition to the species identified in Table 4, studies within the region have documented use of a number of other trees species by Koalas. Kavanagh *et al.* (2007) recorded Koalas frequently in White Cypress Pine, Pilliga Box (*Eucalyptus pilligaensis*), Narrow-leaved Ironbark (*E. crebra*), as well as Red gums (*E. blakelyi*). Tree species such as White Cypress Pine (*C. glaucophylla*), were more frequently utilised as a day time shelter tree to escape hot weather, rather than representing an important feed tree (Kavanagh *et al.*, 2007). Similarly, Crowther *et al.* (2014) found Koalas frequently utilised Kurrajong (*Brachychiton populneus*) and Belah (*Casuarina cristata*) during hotter days for shelter, and utilised box eucalypts and red gum more often at night for feeding.

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Greenloaning Biostudies (2013 in Gunnedah Council, 2015) undertook a detailed study of the Gunnedah Koala population, including an assessment of the extent of potential habitat throughout the Namoi Catchment Management Area (CMA) based on Regional Vegetation Mapping, as well as analysis of the approximate levels of Koala occupancy within the available habitat. The study determined eleven of the vegetation communities present within the CMA would likely qualify as Koala habitat, including areas with primary, secondary and supplementary feed trees. Data analysis generated a density estimate of approximately 0.3 Koalas per ha, implying a population size estimate of approximately 12,753 Koalas for their study area (Greenloaning Biostudies, 2013 in Gunnedah Council, 2015). The estimate was considered conservative given it was only based on mappable vegetation. The Gunnedah Koala population is recognised as the largest population in the western side of the Great Dividing Range (Gunnedah Council, 2015; Crowther *et al.*, 2009; Lunney *et al.*, 2009).


Population modelling based on Koala activity data in the two focus areas at Curlewis and Gunnedah identified substantive areas of Core Koala Habitat in both areas (Greenloaning Biostudies, 2013 in Gunnedah Council, 2015). Much of the habitat exists as islands in a largely rural landscape, which is at risk of long-term degradation from weed invasion, grazing and subsequently low recruitment levels of food tree species. Consequently, the enhancement of existing habitat and improvement of habitat linkages to facilitate dispersal of individuals are considered crucial for increasing the likelihood of the ongoing persistence of the Gunnedah Koala population (Gunnedah Council, 2015).

Throughout their range Koalas are subject to a wide range of threats, the presence and severity of which vary across their range (Threatened Species Scientific Committee, 2006). The Koala Habitat Management Report (Greenloaning Biostudies, 2013 in Gunnedah Council, 2015) identified a number of issues that needed to be addressed within the Gunnedah Shire in order to ensure a sustainable future for Koalas inhabiting the Gunnedah area:

- Existing fragmentation of Koala habitat;
- Long term degradation of Koala habitat through weed invasion and/or tree dieback;
- Potential lowering of the Koala carrying capacity of woodland habitat as larger trees are lost from the landscape;
- Isolation of the population and potential problems arising from inbreeding;
- The potential for increased domestic dog attack rates with increased urban development, such as in the two focus areas of west Gunnedah and Curlewis;
- Increasing heavy industrial development within the Gunnedah LGA and region, potentially resulting in a commensurate increase in vehicle movements and thus koala road mortalities; and
- Susceptibility of Koalas to stochastic events such as drought and fire, some aspects of which may be elevated by the uncertainty associated with climate change.

The steady increase in the Koala population of the Gunnedah LGA experienced between 1986 and 2009 was halted in 2009 when a series of heatwaves hit the LGA. Studies have indicated that up to 25% of the population may have died during these heatwaves (Lunney *et al.*, 2012; Mella *et al.*, 2019).

It is also noted that following the 2019-2020 bushfires in NSW and the general trend of population decline, the current estimated number of koalas in NSW is outdated and unreliable (NSW Legislative Council, 2020).

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6.3 **KOALAS IN THE PROJECT AREA AND SURROUNDS**

The Project area is located in a predominantly cleared landscape that has been subject to past and present agricultural land uses, mainly livestock grazing with some dry land cropping, historic mining and rehabilitation. As such, the extant native woodland/forest is highly fragmented with the largest continuous patches of woodland/forest immediately to the east of the proposed mining area in Vickery State Forest and to the west along the Namoi River.

For the Project, Future Ecology (2018) undertook targeted surveys for the Koala. During the surveys, Koalas were recorded calling from outside the study area. No individuals were recorded within the study area or Project area.


Several other fauna surveys associated with mineral developments have been undertaken within or close to the Project area since 2002, including surveys for the VCP (Cenwest Environmental Services, 2011; Kendall & Kendall, 2011; Niche, 2013), Canyon Coal Mine (Countrywide Ecological Service, 2004) and Rocglen Coal Mine (Countrywide Ecological Service, 2007; RPS Harper Somers O'Sullivan, 2010), as well as monitoring reports for the Rocglen Coal Mine (Eco Logical Australia, 2017a) and Tarrawonga Coal Mine (Eco Logical Australia, 2017b).

A review of available data indicates that a single Koala record exists within the Project area, occurring within the footprint of the Project rail spur (Kendall & Kendall, 2011) (Figure 6-2). Three additional records occur within 1 km of the project area, predominantly in vegetation along the Namoi River (Figure 6-2).

The extent of potential Koala habitat in the Project area and surrounds is shown on Figure 6-2, along with records of the species. Consistent with the *Archived BioMetric and Threatened Species Profiles Datasets* (OEH, 2017), recovery plan (DECC, 2008) and SEPP 44, the following vegetation communities were identified as providing potential Koala habitat in the study area (Whitehaven, 2008):

- Poplar Box Woodland on Alluvial Clay Soils (NA 185, PCT 101);
- Pilliga Box – Poplar Box Shrubby Woodland (NA 324, PCT 397);
- White Box – Silver-leaved Ironbark Shrubby Open Forest (NA3 49, PCT 594);
- Narrow-leaved Ironbark – White Box Shrubby Forest (NA 311, PCT 459); and
- River Red Gum Riparian Tall Woodland (NA 193, PCT 78).

Dr Colin Bower (FloraSearch) reviewed which vegetation communities in the Project area could qualify as potential core Koala habitat as defined in SEPP 44. Areas of potential core Koala habitat on the Project area had White Box (*E. albens*) and Poplar Box forming at least 15% of the upper strata component. Secondary feed trees (see Table 4) were also recorded and included Pilliga Box (*E. pilligaensis*), Yellow Box (*E. melliodora*) and Blakely's Red Gum (FloraSearch, 2018). Future Ecology (2018) concluded that the River Red Gum Tall Woodland on the banks of the Namoi River constituted likely core habitat for the species (Whitehaven, 2018).

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7 KOALA MANAGEMENT STRATEGIES

The aim of this KPoM is to provide management strategies to minimise potential adverse impacts that may occur to the Koala and/or its habitat as a result of the Project. Management strategies for the Koala outlined in this KPoM initially focus on actions that are likely to be implemented prior to commencement of construction and within two years from the date of development commencement. The Proponent commits to reviewing this KPoM within two years of Development Consent being granted for the Project, including the analysis of outcomes and results of mitigation measures and monitoring, to inform any changes or recommendations.

The threat to Koalas as a result of the VCM include the clearance of potential and/or core Koala habitat and potential breeding and foraging habitat. This section details the management strategies to manage the threats to Koalas. Additionally, in accordance with Condition B59 of the Project Approval, the 'retirement' or acquirement of biodiversity credits will be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects within the meaning of the BC Act. This will include 1308 credits retired or acquired related to the koala species as specified in Table 11 of the Project Approval SSD-7480. The VCM Biodiversity Offset Strategy includes details in relation to the biodiversity offset commitments of the Project.

7.1 PROJECT DESIGN AND AVOIDANCE

The Project has been designed to minimise impacts to areas of Core Koala Habitat. The Project rail spur has been sited such that impacts on mature riparian vegetation would be minimal (i.e. it would cross the Namoi River at a location where the coverage of large trees is sparse). Further, the Project rail spur crossing of the Namoi River would be constructed within a 40 m construction corridor length. Management controls to minimise the indirect mitigation measures will be implemented as per applicable EMP's including the Water Management Plan, Biodiversity Management and Noise Management Plan to address noise impacts, vegetation management, and erosion and sediment control during the construction period. The Project has also been designed to maximise the distance of operational areas from the Namoi River (i.e. reduced mining footprint close to the Namoi River).


There is approximately 50.3 ha of potential Koala habitat that would be impacted by the Project, of which approximately 1 ha contains primary feed trees (Whitehaven, 2018).

7.2 KOALA SIGHTINGS AND REGISTER

Inductions into the mine site will include education on Koalas, likely locations they could be found, speed limits on site, site protocols and Koala reporting. WHC employees and contractors working on and adjacent to the mine will be asked to report any Koala sightings (including health/mortality observations if possible), and WHC will maintain a documented Koala register and reported in the Annual Review.

7.3 HABITAT MANAGEMENT

WHC commits to implementing pre-clearance and clearance surveys of potential and core Koala habitat during applicable vegetation clearance activities. This process is captured in the land disturbance permit (LDP) process.

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A Land Disturbance Permit (LDP) protocol will be used to manage the clearance process and to document all licensing, and relevant environmental management requirements. The protocol will use an environmental checklist that must be completed for each stage of clearing by the person responsible for the clearing activities, the relevant technical expert and signed off by the VCM's Environmental representative or an authorised delegate and final authorisation by the Environmental Superintendent/Manager or authorised delegate.

All surface disturbance areas will also be subject to due diligence inspections by a qualified archaeologist and attending Registered Aboriginal Parties. Aboriginal cultural heritage management at the VCM is detailed in the Aboriginal Heritage Management Plan.

Pre-clearance surveys and habitat assessment would be undertaken by a suitably trained or qualified Ecologist within two weeks prior to the commencement of clearing operations to reduce the potential for species to re-occupy surveyed habitat.

If a Koala is identified during pre-clearance and clearance surveys the following habitat management measures will be applied:


- Disturbance of vegetation will be limited to the minimum necessary for each stage of the clearing. The current limits of clearing will be marked either by high visibility tape at appropriate intervals, fencing or an equivalent boundary marker that will be installed prior to clearing. The person responsible for the clearance activities will be responsible for ensuring that the boundary markers are installed to enable the suitable environmental technical inspections of the proposed disturbance can be undertaken, and ultimately that disturbance can be limited to the marked area approved for disturbance. The completion of this activity will be recorded and signed off in the LDP form.
- No trees with a Koala present will be cleared.
- Clearance of habitat will occur in stages, in accordance with the pre-clearance and clearance procedures of the Biodiversity Management Plan with a period of no clearing between each stage, to ensure Koalas have sufficient opportunity to move out of the site without human intervention.

7.3.1 Weed Management

Weed management is particularly important in areas with potential and core Koala habitat, new plantings (i.e. rehabilitation), and where natural regeneration may occur. For example, thick weed infestations or spiky weeds (e.g. Tiger pear [*Opuntia aurantiaca*], African Boxthorn [*Lycium ferocissimum*]) growing at the base of Koala feed trees may prevent Koalas from accessing the trees (North West Ecological Services, 2016). The Proponent commits to undertaking weed mapping in potential and core Koala habitat found at the Project within two years of Development Consent being granted for the Project. The weed mapping will aim to quantify and map infestations of priority weeds listed under the *Biosecurity Act 2015*) and weeds of national significance. Prioritised control will be identified from the results and will form a component of the Weed Mapping Report and will be detailed in the next review of this KPOM. Weed management will be implemented consistent with the Biodiversity Management Plan.

7.3.2 Rail Corridor plantings

The Project rail spur crossing of the Namoi River would be constructed within a 40 m construction corridor length. Species representative of the River Red Gum Riparian Tall Woodland (NA 193) will be restored where impacted within the rail corridor in accordance with the VCM Biodiversity Management Plan.

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7.3.3 Koala movement

Redundant and derelict fences not required for ongoing management of the VCM would be removed (excluding fencing for stock management etc) to minimise the impacts of fences to Koala movement.

Threats to Koalas from feral/pest animals will be mitigated through the implementation of monitoring and control programs for the main pest species such as fox, pigs and cats which are detailed in the Biodiversity Management Plan. As per the Project EIS (Whitehaven, 2018), the Proponent commits to integrating the VCM into WHCs routine Feral Animal Program which occurs on an annual basis. The goal of feral animal management is to reduce the abundance of feral animals in the VCM Project Boundary and to maintain a medium level of abundance of feral animals as per DEC & CSIRO (2005).

7.3.4 Rehabilitation


On site rehabilitation will include woodland/forest zones to enable connectivity between the Namoi River and Vickery State Forest. This connectivity will enhance linkages for native flora and fauna species, which may assist the Koala. The woodland connection is in a conceptual stage and will be further refined in the Mining Operations Plan and Rehabilitation Management Plan.

In addition to the above, the following measures that relate to the VCM will also be implemented for the Project:

- strategic fencing to exclude livestock and allow woodland regeneration;
- establishing 11 km of native vegetation woodland corridors adjacent to the Blue Vale Road realignment (immediately adjacent to the realignment (on its western side) as shown in Figure 1-2, vegetation plantings are not specific to koala feed trees);
- management of Priority weeds and weeds of national significance ;
- feral animal monitoring and control; and
- establishing native vegetation and fauna habitat on the mine rehabilitation.

7.3.5 Local Koala Research

Research has been undertaken in the Gunnedah LGA into whether Koala health improves and mortality reduces from habitat modification such as providing arboreal water sources (Mella *et. al.*, 2019). If monitoring identifies that Koalas are being adversely impacted at the VCM, WHC would consult with academic researchers regarding application of habitat modification to benefit Koala populations by increasing the carrying capacity of the environment and/or improving the health of Koalas.

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7.4 **MONITORING PROGRAMS**

The Proponent commits to undertaking monitoring of Koalas in a staged approach for the Project.

Initial monitoring was completed in 2021, with no records of Koala's identified, and will expand upon baseline monitoring undertaken for the Project EIS (Whitehaven, 2018) and involve a range of methods that will be considered such as strip transects, distance sampling, spotlight surveys, mark-resight, koala scat surveys and/or acoustic songmeters. Results of the completed initial monitoring will be used to inform and refine the methods and locations of ongoing Koala monitoring throughout the life of the VCM. Monitoring will be undertaken by a suitably qualified ecologist.

Ongoing monitoring would be detailed in the revision of this KPoM.

This staged approach to monitoring has been developed in response to the absence of Koala records identified during detailed baseline assessments; as well as low number of historical records found within the Project area.

Interpretation of monitoring results will consider the incidence of environmental conditions that could impact the local Koala population, including increased populations of feral predators and extreme heat waves. Monitoring results will also inform the frequency of future monitoring.


7.5 **SICK, INJURED AND RELOCATION MANAGEMENT OF KOALAS**

WHC commits to developing procedures for the handling and management of sick and/or injured Koalas identified at the Project. If a sick and/or injured Koala is identified, a suitably qualified Koala expert will be contacted to provide guidance and assistance.

WHC will also contact the relevant Koala expert to assist in the procedures for relocating healthy Koalas if found at the Project, and are at risk of injury due to mining activities (e.g. vegetation clearing).

7.6 **STRIKE MANAGEMENT**

The Proponent commits to implement speed limits within the Project (excludes public road and/or road diversions) to minimise the risk of Koala road injury or mortality. An on-site speed limit of 60 kilometres per hour (km/hr) would be applied to Project haul roads and internal roads. Speed limit signs and warning signs will be installed prior to construction in suitable locations along roads to advise drivers of the speed limit and that Koalas may be present. The location of signage will be determined based on results of the initial monitoring program (Section 7.4) and Koala sightings register (Section 7.2).

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8 PERFORMANCE CRITERIA

A summary of the key performance criteria is provided in Table 5.

Table 5 - Key Performance Criteria


Mitigation Measures	Performance Criteria	Timing*
Project design and avoidance	The Project rail spur crossing of the Namoi River would be constructed within a 40 m construction corridor length during construction. Species representative of the River Red Gum Riparian Tall Woodland (NA193- PCT 78) will be restored where impacted within the rail corridor in accordance with the VCM Biodiversity Management Plan.	Construction and operational period
Koala Sightings Register	Koala register established and operational prior to construction. Inductions into the mine site during construction to include education on Koalas, likely locations they could be found, speed limits on site, site protocols and Koala reporting.	Construction period
Habitat Management	The LDP process will be followed for every vegetation removal activity during the construction period and mine commencement.	Ongoing during the period of this plan.
Koala monitoring	Initial Koala monitoring to commence prior to construction. Results of the initial monitoring will be used to inform the methods and locations of ongoing Koala monitoring throughout the life of the VCM.	Prior to construction
Strike management	Implementation of speed limits and warning signs prior to construction and applicable during construction.	This plan period
Koala movement	Redundant and derelict fencing removed prior to construction.	Prior to construction
Weed management	Weed mapping of potential and core Koala habitat to be undertaken by 11 August 2022 (two years from date of Development Consent).	By 11 August 2022
Pest management	Implementation of pest monitoring and control programs for the main pest species such as fox, pigs and cats following the commencement of construction as detailed in the Biodiversity Management Plan. Maintain a medium (or lower) level of pest animal abundance for the pest species identified in the BMP.	After commencement of construction

* Timing may vary with approval by the Secretary or revision of the KPoM as required and subject to commencement of construction timing.


Table 6 provides trigger points for contingency measures to be implemented if the monitoring program identifies the performance criteria in Table 5 are not met.

Table 6 – Trigger Action Response Plan

Aspect	Trigger	Response
Project design and avoidance	Riparian vegetation removed outside of the approved clearance boundary.	Cease clearing activity and report incident as per Section 11.1. Evaluate and quantify the disturbance.
	Species representative of the River Red Gum Riparian Tall Woodland (NA193- PCT 78) are not restored in accordance with the VCM Biodiversity Management Plan.	Review restoration plan in accordance with the VCM Biodiversity Management Plan.
Koala Sightings Register	Register not established or maintained prior to construction.	Establish or maintain register as soon as possible.
	Inductions don't include detail on site specific Koala protocols.	Review induction package and update to include detail on site specific Koala protocols.

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Aspect	Trigger	Response
Habitat Management	LDP process not followed.	<p>Cease works immediately.</p> <p>Investigate why LDP process was not followed.</p> <p>Report incident as per Section 11.1.</p> <p>Enact the LDP process.</p>
Strike Management	Inspection identifies that signs are not installed prior to construction.	Install signs.
Koala movement	Regular inspection identifies redundant fencing not removed	Investigate what fencing requires removal and organise fence removal.
Weed management in potential and core Koala habitat	Initial weed mapping in core and potential Koala habitat not undertaken by 11 August 2022.	Organise weed mapping in core and potential Koala habitat immediately.
	Trend increasing in number of priority weeds and weeds of national significance	<p>Site inspection to verify.</p> <p>Engage contractor to undertake weed control measures as per the Biodiversity Management Plan</p>
Pest management	Abundance score is above medium for pest species identified in this BMP.	Engage contractor to undertake feral animal control measures as per the Biodiversity Management Plan.

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9 CONTINGENCY PLAN

In the event that Koala management criteria (detailed in Section 8) may not have been met or a performance indicator is considered to have been exceeded, WHC will implement the following Contingency Plan for the VCM:

- The Environmental Superintendent or authorised delegate will report the event as an incident, in accordance with Section 11.1.
- WHC will apply adaptive management (Section 9.1).
- WHC will identify the appropriate course of action with respect to the identified impact(s), in consultation with technical specialists, Secretary and any other relevant agencies, as necessary. For example, contingency measures, such as, but not limited to, those described in Table 6.
- WHC will, in the event there is a dispute over the proposed remedial course of action or if the actions conflict with current approvals, submit the appropriate course of action to the Secretary for the approval.
- WHC will implement the appropriate course of action to the satisfaction of the Secretary.


Potential risks to the implementation of the KPOM may include the ineffective communication of the requirements of the plan and no periodic review of the plan required by Conditions E5 and E6. The contingency measures that will be implemented to mitigate these risks include the implementation of the Whitehaven Coal compliance management system, inductions to support communication and review, and subsequent revision if required, as per sections 10.1 and 10.2 of this document.

9.1 ADAPTIVE MANAGEMENT

In accordance with Condition E3, Schedule 2 of SSD-7480, WHC will assess and manage risks to comply with the criteria and/or performance measures outlined in Schedule 2 of SSD-7480.

Where any exceedance of the criteria and/or performance measures occurs, at the earliest opportunity WHC will:

- take all reasonable and feasible steps to ensure that the non-compliance does not recur;
- consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Secretary describing those options and any preferred remediation measures or other courses of action; and
- implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.

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10 REVIEW AND IMPROVEMENT OF ENVIRONMENTAL PERFORMANCE

10.1 ANNUAL REVIEW

In accordance with Condition E9, Schedule 2 of SSD-7480, WHC will review the environmental performance of the VCM for the previous calendar year and report results within the Annual Review to the satisfaction of the Secretary.

In relation to Koala management, the Annual Review will (where relevant):

- describe the development that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;
- include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;
 - monitoring results of previous years; and
 - relevant predictions in the EIS;
- identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
- identify any trends in the monitoring data over the life of the development;
- identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- describe what measures will be implemented over the next year to improve the environmental performance of the development.

All Annual Reviews will be made publicly available on the WHC website in accordance with Condition E14, Schedule 2 of SSD-7480.


10.2 KOALA PLAN OF MANAGEMENT REVISION

In accordance with Condition E5 and E6, Schedule 2 of SSD-7480, this KPoM will be reviewed, and if necessary revised (to the satisfaction of the Secretary), within three months of the submission of:

- an Annual Review (Condition E9, Schedule 2);
- an incident report (Condition E7, Schedule 2);
- an Independent Environmental Audit (IEA) (Condition E10, Schedule 2); or
- any modification to the conditions of SSD-7480 (unless the conditions require otherwise).

The reviews would be undertaken to ensure this KPoM is updated on a regular basis and to incorporate potential measures to improve the environmental performance of the VCM.

The revision status of this KPoM is indicated on the final page of each copy. The approved KPoM will be made publicly available on the WHC website, in accordance with Condition E14, Schedule 2 of SSD-7480.

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10.3 INDEPENDENT ENVIRONMENTAL AUDIT

In accordance with Condition E10, Schedule 2 of the SSD-7480, an IEA of the VCM will be conducted by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Secretary and be conducted and reported to the satisfaction of the Planning Secretary. The IEA will be carried out in consultation with the relevant agencies and the CCC.

The IEA will assess the environmental performance of the VCM and review the adequacy of this KPoM. If necessary, appropriate measures or actions to improve the environmental performance of the VCM in regards to management of the Koala will be recommended.

In accordance with Condition E11, Schedule 2 of the SSD-7480, within three months of commencing an Independent Environmental Audit, or other timeframe agreed by the Planning Secretary, a copy of the audit report will be provided to the Planning Secretary, and any other NSW agency that requests it, together with a response to recommendations contained in the audit report, and a timetable for the implementation of the recommendations.

Within 1 year from the commencement of construction and every 3 years thereafter, WHC shall commission an IEA of the VCM. The IEA and WHC's response to recommendations in the Audit, will be made publicly available on WHC's website as per Condition E14, Schedule 2 of SSD-7480.

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11 REPORTING PROCEDURES

In accordance with Condition E4(h), Schedule 2 of SSD-7480, WHC has developed a protocol for managing and reporting the following:

- incidents;
- complaints;
- non-compliances with statutory requirements; and
- exceedances of the impact assessment criteria and/or performance criteria.

These protocols are described in the VCM's Environmental Management Strategy (EMS).

In accordance with Condition E14(a), Schedule 2 of SSD-7480, WHC will provide regular reporting on the environmental performance of the VCM on the WHC website.

11.1 INCIDENT AND NON-COMPLIANCE REPORTING


An incident is defined as an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance. A non-compliance is define as an occurrence, set of circumstances or development that is a breach of the condition of SSD-7480.

In the event that review of Koala performance indicators identifies an incident has occurred, the incident will be reported in accordance with Condition E7 and E8, Schedule 2 of SSD-7480 and relevant conditions of EPL 21283 and mining leases. WHC will immediately notify the Secretary and any other relevant agencies.

The notification will be provided to the Secretary in writing via compliance@planning.nsw.gov.au and will identify the VCM (including the development application number and name) and set out the location and nature of the incident.

Within seven days of the date of the incident, WHC will provide the Secretary and any other relevant agencies with a report on the incident. The report will include details required within the approval, including:

- describe the date, time and nature of the exceedance/incident;
- identify the cause (or likely cause) of the exceedance/incident;
- describe what action has been taken to date; and
- describe reasonable and feasible options to address the incident and identify the preferred option to address the incident (Section 9.1).

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11.2 COMPLAINTS

WHC will maintain a Community Complaints Line and online contact via the WHC website (www.whitehavencoal.com.au) for the sole purpose of receiving community complaints, or enquiries. The Community Complaints Line number will be available on the website. The Community Complaints Line will be staffed 24 hours a day, seven days a week during construction and operations. WHC will respond to callers on the next business day.

Detailed records of each complaint are kept in WHC's record management systems.

In accordance with Condition E14(ix), Schedule 2 of SSD-7480, a complaints register will be made available on the WHC website during the construction and operational stages of the VCM. The complaints register will include:

- the date and time of the complaint;
- the method by which engagement was made;
- any personal details provided or, if no such details were provided, a note to that effect;
- the nature of the complaint; and
- any actions (if any required) taken by WHC in relation to the complaint.

Investigations into complaints will generally commence within 24 hours of receipt, or as soon as practical. The cause of the complaint will be analysed and actions to attempt to address the complaint taken as soon as reasonably possible. In complex cases where resolution will take more than 48 hours, WHC will commit to updating the community member.

11.3 NON-COMPLIANCE WITH STATUTORY REQUIREMENTS


A protocol for managing and reporting non-compliances with statutory requirements has been developed as a component of the VCM's EMS and is described below.

Compliance with all approvals, plans and procedures is the responsibility of all personnel (staff and contractors) employed on or in association with WHC and the VCM.

A VCM representative will undertake required inspections during the construction and initial mining period and initiate directions to address any actions identified, if required, and areas of actual or potential non-compliance.


As described in Section 11.1, WHC will report incidents in accordance with Condition E7, Schedule 2 of SSD-7480 and dependent on the incident and potential environmental harm, in accordance with the protocol for industry notification of pollution incidents under Part 5.7 of the PoEO Act.

WHC will notify the Secretary and any other relevant agencies immediately after the authorised person becomes aware of the incident which causes or threatens to cause material harm to the environment. Within seven days (or other specified or approved time period) of the date of confirmation of the incident, WHC will provide the Secretary and any other relevant agencies with a report on the incident and any subsequent information that may be requested.

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A review of compliance with all conditions in SSD-7480 and all other applicable approvals and licences will be included within each Annual Review (Section 10.1).

Additionally, in accordance with Condition E10, Schedule 2 of SSD-7480, an IEA (Section 10.3) would be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary to assess whether WHC is complying with the requirements in SSD-7480, and any other relevant approval and tenement conditions.

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Appendix A Consultation Log

Date	Consultee	Comment
26/10/20	GSC	No comment.
26/10/20	NSC	No change to document.
26/10/20	BCD	Administrative items, update figure, additional information on management controls, performance criteria, TARP and generic Management Plan items.
August 2021	GSC	Comment received
August 2021	DPIE	Comment received

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Edition	Rev.	Comments	Date
1	0	Initial draft following consultation as first submitted	29/01/21
1	1	Incorporating GSC and DPIE comment	September 2021