ATTACHMENT A: Kurri Kurri Lateral Pipeline Project - EPBC Bilateral Assessment – 15 December 2022

Assessment of EPBC Act-listed threatened species and communities for projects
Suggested information for inclusion in the advice to DPIE

Kurri Kurri Lateral Pipeline Project (SSI-223382505) EPBC Bilateral Assessment – BCD Assessment (EPBC 2021/9113)

All section, table, figure, and appendix references in this document (below) refer to sections, tables, figures and appendices in the 'Kurri Kurri Lateral Pipeline Project: Biodiversity Development Assessment Report: Final' (BDAR) by Umwelt (Australia) Pty Limited ('Umwelt') (dated 25 November 2022), the letter 'RE: Response to BCD Comments on Kurri Kurri Lateral Pipeline Project (SSI-223382505) Biodiversity Matters' dated 9 December 2022 by Umwelt, and shapefiles provided by Umwelt on 13 December 2022

1. Background & Description of Action

Does the BDAR[1]:

☒ clearly show how operational and construction footprints, including clearing boundaries, structures to be built and elements of the action are situated with regard to MNES

☒ depict stages and timing of the action that may impact on MNES

☒ provide a map(s) of the subject land boundary showing the final proposal/disturbance footprint with respect to location of MNES, including GIS shape files

Provide advice on the adequacy of the background and action description with respect to MNES and identify any recommended additional information requirements:

On 21 February 2022 the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) determined that the project was a controlled action. The Project Assessment Notes (dated 21 February 2022) determined that the project was likely to have a significant impact on the following matters of national environmental significance (MNES):

- river-flat eucalypt forest CEEC
- koala (combined populations of Queensland, NSW and the Australian Capital Territory)
- grey-headed flying-fox
- regent honeyeater
- swift parrot.

These five MNES entities have been considered in the 'Revised Biodiversity Development Assessment Report' (BDAR) by Umwelt (Australia) Pty Limited (Umwelt) (dated 29 November 2022). However, the BDAR does not clearly show how operational and construction footprints, including clearing boundaries, structures to be built and elements of the action are situated with regard to MNES. Chapter 1 'Introduction & Description of Action' of the BDAR describes the proposed development. Its components are shown in Figures 1.3A-K 'Development Footprint' (Jemena Gas Networks offtake facility, transmission pipeline alignment, horizontal directional drilling entry and exit areas, vehicle turnaround areas, vegetation stockpile areas, pipe and equipment laydown areas, gas storage pipeline, turkey nest dam, interconnect pipeline and the compressor and delivery station).

[1] [1] Bilateral agreement (BLA) made under section 45 of the EPBC Act, including Amending Agreement No. 1 (2020).

[1] Or revisions of the BDAR and associated documentation made as a result of previous reviews or project changes post-exhibition3

Table 2 'Response to BCD Comments – Bilateral Assessment', and 1.2 'Project Description' in Appendix 3 'Matters if National Significance Assessment' in Umwelt's letter (dated 9 December 2022) describe the project's construction footprint as being the same as the project's operational footprint, with both areas considered to be completely cleared. This is also shown in Figure 1.1 'Locality Plan' in Appendix 3 of the letter dated 9 December 2022, and in the GIS shapefiles provided on 13 December 2022.

The BDAR states in Table 1.1 'Summary of Assessment Requirements for MNES under the Bilateral Agreement' in 'Appendix D 'Matters of National Environmental Significance Assessment' that the project will not be staged.

Section 8.5 'Impacts to Matters of National Environmental Significance' of the BDAR discusses the likely impact of the project in relation to five MNES entities:

- River-flat Eucalypt Forest on Coastal Floodplains of southern New South Wales and eastern Victoria (River-flat Eucalypt Forest) Critically Endangered Ecological Community (CEEC)
- koala (combined populations of Queensland, NSW and the Australian Capital Territory)
- grey-headed flying-fox
- regent honeyeater
- swift parrot.

Figure 4.3 J 'Threatened Ecological Communities on the Subject Land' shows the extent of River-flat Eucalypt Forest CEEC within the development footprint. Figures 5.1 J-K 'Species-credit Species Polygons' shows the species polygon for the regent honeyeater within the development footprint and Figure 9.1 'Locations of Habitat for Potential Serious and Irreversible Impact Entities' shows the regent honeyeater mapped important areas in relation to the proposed development footprint. Section 2.3 'Threatened Species within the Development Footprint' of Appendix D 'of the BDAR includes maps (Figure 2.1A-K 'EPBC Listed Entities within the Project Footprint') which shows the regent honeyeater species polygon and River-flat Eucalypt Forest CEEC within the development footprint, as well as four EPBC Act-listed threatened species that were found during surveys of the site. However, none of the other MNES species identified in the DEECCW determination for the project are shown on maps in the BDAR, as described below:

Koala – Table 8.6 'Summary of the Extent of Significantly Impacted EPBC Act listed entities' identifies 57.93 hectares of potential koala habitat, broken down into nine PCTs. Figure 4.2A-K 'Plant Community Types and Vegetation Zones' shows the PCTs in relation to the project's development footprint. Figure 2.2 A-K 'Operational and construction footprint in relation to MNES – Koala' in Appendix 3 of Umwelt's letter dated 9 December 2022 shows the project's footprint in relation to potential koala habitat.

Grey-headed flying-fox - Table 8.6 'Summary of the Extent of Significantly Impacted EPBC Act listed entities' identifies 52.66 hectares of potential grey-headed flying-fox habitat, broken down into five PCTs. Figure 4.2A-K 'Plant Community Types and Vegetation Zones' shows the PCTs in relation to the project's development footprint. Figure 2.4 A-K 'Operational and construction footprint in relation to MNES – Grey-headed Flying Fox' in Appendix 3 of Umwelt's letter dated 9 December 2022 shows the project's footprint in relation to potential grey-headed flying-fox foraging habitat.

Regent honeyeater - Table 8.6 'Summary of the Extent of Significantly Impacted EPBC Act listed entities' identifies 50.05 hectares of potential regent honeyeater habitat, broken down into three PCTs. Figure 4.2A-K 'Plant Community Types and Vegetation Zones' shows the

PCTs in relation to the project's development footprint. Figures 5.1 F-H 'Species-credit Species Polygons' shows regent honeyeater species polygons, as well as polygons for NSW-listed threatened species. Figure 9.1 'Locations of Habitat for Potential Serious and Irreversible Impact Entities' shows the regent honeyeater mapped important areas in relation to the proposed development footprint.

Swift parrot - Table 8.6 'Summary of the Extent of Significantly Impacted EPBC Act listed entities' identifies 53.09 hectares of potential swift parrot habitat, broken down into six PCTs. Figure 4.2A-K 'Plant Community Types and Vegetation Zones' shows the PCTs in relation to the project's development footprint. Figure 2.3 A-K 'Operational and construction footprint in relation to MNES – Swift Parrot' in Appendix 3 of Umwelt's letter dated 9 December 2022 shows the project's footprint in relation to potential swift parrot foraging habitat.

34 GIS shapefiles of maps from the BDAR were provided on 12 December 2022, of which five include details of MNES entities:

- ENVIRO_Umwelt_KoalaSATLocations_221116_GDA94z56.shp
- ENVIRO_Umwelt_PlantCommunityTypes_221116_GDA94z56.shp
- ENVIRO_Umwelt_RegentHoneyeaterMappedAreas_221201_GDA94z56.shp
- ENVIRO_Umwelt_RegentHoneyeaterSpeciesPoly_221201_GDA94z56.shp
- ENVIRO_Umwelt_ThreatenedPlantSpeciesPoly_221201_GDA94z56.shp

GIS shapefiles were not provided for the 'Koala Habitat Areas', 'Grey-headed Flying-fox Habitat Areas' or the 'Swift parrot Habitat Areas' from Figures 2.2, 2.4, and 2.3, respectively, from Appendix 3 of the letter dated 9 December 2022, but they can be derived from the Plant Community Types shapefile.

Table 4.2 'Avoidance and mitigation methods for residual impacts on MNES/EPBC listed threatened species and communities' from Appendix 3 of the letter dated 9 December 2022 propose rehabilitation as a mitigation method for impacts to River-flat Eucalypt Forest CEEC and the regent honeyeater. Section 4.1 'Assessment of Impacts to MNES' of Appendix 3 discusses the use of rehabilitation to mitigate impacts to MNES entities, with details to be developed in a rehabilitation plan for the project.

BCD considers that no further information is required in relation to the background and description of the action in relation to likely impacts to MNES.

2. Landscape Context of the MNES

Provide advice on the adequacy of the landscape context information and identify any additional information requirements:

Chapter 3 'Site context' of the BDAR and Section 2.0 'Landscape Context of the MNES" in Appendix D presents the landscape assessment in the BDAR. The landscape assessment for this project in the context of MNES is satisfactory and no further information is required.

3. EPBC Act Listed Threatened Species & Communities

Verify that the EIS/BDAR includes relevant information on the identification of all EPBC Act listed threatened species and communities on the site or in the vicinity[2] via:

☒ field based survey effort

[2] On land to which impacts may extend.

- ☒ published peer reviewed literature
- ☒ local data
- ☒ supporting databases (such as the NSW BioNet Vegetation Classification, NSW BioNet Threatened Biodiversity Data Collection, NSW BioNet Atlas, Commonwealth Species Profile and Threats Database search results)
- ☒ Verify that the EIS/BDAR includes appropriate mapping of all EPBC Act listed threatened species and communities in accordance with the relevant Commonwealth Listing Advice. The EIS/BDAR should include important populations and critical habitat as defined in Approved Listing Advice, Approved Conservation Advice and Recovery Action Plans.

Provide advice on the adequacy of the identification methods and mapping information / any additional information requirements:

Field-based survey effort:
Section 3.1 'Biodiversity Surveys for Listed threatened Species and Communities' in Appendix D of the BDAR describe the survey effort for MNES entities assessed for this project, but the information provided by the proponent does not state the minimum survey effort required for each MNES entity. The proponent has not been able to demonstrate the adequacy of survey effort in relation to BAM 2020 requirements or any additional Commonwealth survey requirements. Additional details of survey effort and minimum survey requirements were provided in Attachment 1 'Survey Effort' of the letter dated 9 December 2022. The new information is considered to have met the Commonwealth's requirement.

BCD notes that for new areas of the development footprint since the previous BDAR that the proponent is assuming presence of all threatened species with the potential to occur there, including MNES (shown in Table 5.14 'Species Assumed Present in Additional Refined Area' in the main part of the BDAR). No additional information is required for this matter.

Published peer reviewed literature:
Chapter 12 'References' in the main part of the BDAR includes some citations of Commonwealth survey guidelines and the recovery plan for the regent honeyeater. However, Chapter 8 'References' in Appendix D has a more comprehensive list of Commonwealth conservation advice, threatened species survey guidelines, and some data bases. The BDAR does not cite any peer reviewed papers from academic journals. BCD is not aware of any key publications missing from the references and considers that no further information is required.

Local data:
BCD notes that in Section 5.4 'Expert reports and use of more appropriate local data' that the biodiversity assessment did not use any expert reports and did not use any locally-derived benchmark values in the BAM calculator. No further information is required for this point.

Supporting databases:
Section 3.0 'EPBC Act Listed Threatened Species and Communities' states (on page 20) that the BioNet Atlas of NSW Wildlife Atlas Database and the DCCEEW Protected Matters Search Tool were accessed in November 2021 to identify threatened species with the potential to be impacted by the proposed development. A copy of the Protected Matters Search Tool results is available in Attachment 2 of the EPBC Act Referral for the project (dated 21 December 2021). Section 7.0 'Other Considerations' of Appendix D cites Approved Conservation Advice, Recovery Plans, Threat Abatement Plans, Listing Advice and other Commonwealth policy documents and guidelines for the MNES entities considered for this project. However, the NSW BioNet Vegetation Classification dataset and the Commonwealth Species Profile and Threats Database search results was not cited in the BDAR but were evidently used in its preparation. BCD consider that no further information is required for this component of the bilateral assessment.

Appropriate mapping of all EPBC Act-listed species and communities in accordance with relevant Commonwealth Listing Advice:
Figure 2.1A-K 'EPBC Listed Entities within the Project Footprint' show species polygons of the regent honeyeater, *Eucalyptus parramattensis* subsp. *decadens*, *Grevillea parviflora* subsp. *parviflora*, and the squirrel glider. They also show the mapped extent of River-Flat Eucalypt Forest on Coastal Floodplains of southern NSW and eastern Victoria CEEC. Figures 2.2, 2.3, and 2.4 show habitat areas for the koala, swift parrot and the grey-headed flying-fox, respectively, and therefore appropriate maps have been provided for all EPBC Act-listed species and communities. No further maps are required.

Any important populations and critical habitat, as defined in Approved Listing Advice, Approved Conservation Advice and Recovery Action Plans:
Table 1.1 'Summary of Assessment Requirements for MNES under the Bilateral Agreement' in Appendix D of the BDAR (on page 2) states that there are no 'important populations' to be considered for this bilateral assessment. 'Important populations' can be declared for the koala – as per the 'Conservation Advice for *Phascolarctos cinereus* (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory' (DAWE, 2022: pages 13 and 14). The Assessment of Significance for the koala (Appendix A of Appendix D (page A-5) of the BDAR did not identify any 'important population' in or adjacent to the subject site. BCD is satisfied with that assessment.

The project has been identified as containing 'critical habitat' for the koala (Appendix D of the BDAR: pages A-2 and A-4)'. BCD is satisfied with this assessment.

Confirm that all EPBC Act listed threatened species and communities that occur on the subject land, or in the vicinity, have been identified in the BDAR/EIS including those that are ecosystem credit species.
Section 3.1 'Biodiversity Surveys for Listed Threatened Species and Communities' in Appendix D of the BDAR (page 20) describes that '…surveys were undertaken for all MNES entities considered to have reasonable potential to occur on the Project Area.'

The Project Assessment Notes for the Kurri Kurri Lateral Pipeline Project (dated 21 February 2022) determined that the project was likely to be a significant impact on:

- River-flat Eucalypt Forest on Coastal Floodplains of southern New South Wales and eastern Victoria (River-flat Eucalypt Forest) Critically Endangered Ecological Community (CEEC)
- koala (combined populations of Queensland, NSW and the Australian Capital Territory)
- grey-headed flying-fox
- regent honeyeater
- swift parrot.

No additional MNES entities were listed in the Project Assessment Notes and none were added by the proponent. BCD is satisfied that all MNES with the potential to occur on the Subject Land have been considered and that no further information is required.

If any species and communities identified in the referral documentation (provided by CCEEW) have been ruled out because they don't occur on or near the site, verify that there is robust analysis and justification for why these species can be ruled out.
None of the five MNES entities identified in the Project Assessment Notes as likely to be on the project area have been ruled out in this assessment. Table 6.1 'Ecosystem and Species-

credit Species Relevant to impacted MNES' in Appendix D of the BDAR, provides the area of impact and credits required for each of the five MNES entities. No further information is required.

Provide advice on whether there are any other MNES species or communities that are missing from the assessment based on BCS knowledge and experience.
BCD has reviewed BioNet records, project reports and available peer-reviewed publications and has not added any addition MNES species or communities to the list of those to be considered for this species. No further information is required.

Advise whether there is appropriate justification and supporting evidence for the addition and/or exclusion of any EPBC Act listed threatened species and/or communities from the list (if applicable):
No EPBC Act-listed threatened species or communities have been added by the proponent to the list from the Project Assessment Notes and none have been excluded. No further information is required for this point.

4. Avoidance, Minimisation, Mitigation & Management

Verify that the EIS/BDAR demonstrates all feasible alternatives and efforts to avoid and minimise impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including an analysis of alternative:

- ☒ designs and engineering solutions
- ☒ modes or technologies
- ☒ routes and locations of facilities
- ☒ sites within the subject site
- ☒ Verify that the EIS/BDAR identifies any other site constraints in determining the location and design of the proposal (such as bushfire protection requirements, flood planning levels, servicing constraints, etc).

Verify that the EIS/BDAR provides feasible measures to mitigate and/or manage impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including:

- ☒ techniques, timing, frequency and responsibility
- ☒ identify measures for which there is risk of failure
- ☒ evaluate the risk and consequence of any residual impacts
- ☒ any adaptive management strategy proposed to monitor and respond to impacts.

Provide advice on whether all feasible impact avoidance, minimisation, mitigation and management measures have been considered and are adequately justified:
Section 4.2 'Avoidance Strategies' in Appendix D of the BDAR discusses avoidance strategies considered for this project. They include different design concepts and alignments for the project, the strategic location of components of the project preferentially to already cleared land to avoid new clearing, and trenchless crossings for the area of Kurri Sand Swamp Woodland near the gas-fired power station site. Mapped areas of important habitat for the swift parrot have been completely avoided by the project. Components of the project have also been located within the approved development footprints of other projects to reduce the requirement for new clearing.

Section 4.3 'Mitigation Measures' in Appendix D of the BDAR describes the mitigation measures proposed for the project. They include the salvage and re-use of biodiversity features, a pre-clearing procedure to be implemented to minimise potential impacts on native fauna, and weed management. Table 8.7 'Summary of proposed mitigation and management measures for residual impacts (direct, indirect and prescribed)' identifies the techniques,

timing, frequency and responsibility for proposed mitigation and management measures. Table 8.8 'Implementation details for proposed impact mitigation and management measures' includes adaptive management triggers where monitoring detects a failure to meet objectives. No further information is required.

5. Impact Assessment

Verify that the EIS/BDAR:

☒ identifies the residual adverse impacts likely to occur to **each** EPBC Act listed threatened species and/or community after the proposed avoidance and mitigation measures are taken into account

☒ provides adequate justification and evidence for the predicted level of impact, with reference to the:

- Commonwealth's Significant Impact Guideline*:* *https://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf*
- DPIE Guidance to Assist a Decision-Maker to Determine a Serious and Irreversible Impact (SAII): (*https://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf*)

Confirm the level of predicted impact (cross appropriate):

☒ high risk of impact (requiring offsets)[#] or SAII ☐ Low risk of impact (not requiring offsets)

[#] For purposes of EPBC approval, as a minimum, significant adverse residual impacts **must** be offset (significant impact can be evaluated with reference to the significance impact guidelines)

Appendix A 'Assessments of Significance' of Appendix D of the BDAR provides details of the impact assessment for the five MNES entities likely to be significantly impacted by the project. The impacts are summarised in Table 1 (below).

Table 1 Summary of Impact Assessment

EPBC Act entity	Nature & consequence of impact (direct & indirect)	Duration of impact (e.g., construction, operation, life of project)	Quantum of impact	Consequence of impact at local, state and national scale	Level of impact (is an offset required?)
River-flat Eucalypt Forest CEEC	Direct clearing of 1.2 hectares of CEEC	Life of project	50 ecosystem credits*	Local: Small impact - the proposal will clear 1.2 hectares of this CEEC. There is 553 hectares of Cabbage Gum – Rough-barked Apple grassy woodland on alluvial floodplains of the lower Hunter mapped in the Cessnock LGA, a large proportion of which is likely to be the CEEC.	Significant (an offset is required)

EPBC Act entity	Nature & consequence of impact (direct & indirect)	Duration of impact (e.g., construction, operation, life of project)	Quantum of impact	Consequence of impact at local, state and national scale	Level of impact (is an offset required?)
				State: Small impact - the proposal will clear 1.2 hectares of the 10,600 hectares estimated to occur in NSW. National: Small impact - the proposal will clear 1.2 hectares of the 20,500 hectares estimated to occur in Australia	
regent honeyeater	Direct clearing of 50.05 hectares of habitat and 0.46 hectares of mapped important habitat	Life of project	1,163 ecosystem credits and 24 species credits	Local: Small impact – the only population recognised is the national population. 50.05 hectares of suitable foraging habitat, and 0.46 hectares of mapped important habitat would be cleared for the project within the local area. State: Small impact - the proposal will clear 50.05 hectares of suitable foraging habitat, which is a small extent of the area of potential foraging habitat	Significant (an offset is required)

EPBC Act entity	Nature & consequence of impact (direct & indirect)	Duration of impact (e.g., construction, operation, life of project)	Quantum of impact	Consequence of impact at local, state and national scale	Level of impact (is an offset required?)
				mapped for NSW. National: Small impact - the proposal will clear 50.05 hectares out of a national extent of occurrence of about 600,000 km^2 and an area of occupancy of about 300 km^2.	
swift parrot	Direct clearing of 53.09 hectares of habitat	Life of project	1,301 ecosystem credits	Local: Small impact – the only population recognised is the national population. 53.09 hectares of suitable foraging habitat would be cleared for the project within the local area where large areas of forest with suitable foraging canopy species occur. State: Small impact - the proposal will clear 53.09 hectares out of a large area of mapped suitably foraging habitat in the eastern third of NSW. National: Small impact - the proposal will clear 53.09	Significant (an offset is required)

EPBC Act entity	Nature & consequence of impact (direct & indirect)	Duration of impact (e.g., construction, operation, life of project)	Quantum of impact	Consequence of impact at local, state and national scale	Level of impact (is an offset required?)
				hectares out of a national extent of occurrence of about 57,000 km^2.	
koala	Direct clearing of 84.34 hectares of habitat	Life of project	1,321 species credits	Local: Small impact - the proposal will clear 84.34 hectares of suitable habitat out of a large area of suitable habitat within the LGA. State: Small impact - the proposal will clear out of a large area of mapped suitably foraging habitat in the eastern half of NSW. National: Small impact - the proposal will clear 84.34 hectares out of the 1,665,850 km^2 of potential suitable habitat estimated to occur in the region covered by this determination.	Significant (an offset is required)
grey-headed flying-fox	Direct clearing of 52.66 hectares of foraging habitat	Life of project	1,192 ecosystem credits	Local: Small impact – the only population recognised is the national population. The 52.66 hectares of suitable foraging habitat to be	Significant (an offset is required)

EPBC Act entity	Nature & consequence of impact (direct & indirect)	Duration of impact (e.g., construction, operation, life of project)	Quantum of impact	Consequence of impact at local, state and national scale	Level of impact (is an offset required?)
				cleared for the project within the local area. The area of potential foraging habitat is large, but not provided in the BDAR. State: Small impact – the species occurs widely in the eastern third of the state. National: Small impact – the species occurs widely in South Eastern Australia.	

* The BDAR (Table 8.6 in Appendix D) gives the total number of ecosystem credits for the River-flat Eucalypt Forest CEEC as '59' credits, however this includes 9 credits generated from 1.1 hectares of Derived Native Grassland form of PCT 1594 which does not meet the definition of the CEEC, as described in Section 4.2.10 of the BDAR.

The data in the above Table comes from Table 6.1 in Appendix D of the BDAR. The extent of occurrence of River-flat Eucalypt Forest on the coastal floodplain EEC in NSW and Nationally comes from the Approved Conservation Advice for this CEEC. The national extent of occurrence for the regent honeyeater and swift parrot, and the extent of the koala population in Queensland, New South Wales and the Australian Capital Territory comes from their approved conservation advice, with comments on the extent of suitable habitat in NSW based on their SPRAT profiles. Comments on the extent of likely suitable habitat in the Cessnock Local Government Area are based on vegetation mapping by Bell and Driscoll (2007).

6. Offsets

Verify that the EIS/BDAR:

☒ identifies any MNES that haven't been offset using the BAM

☒ identifies how impacts requiring offsets correlate to MNES impacts

☒ identifies the plant community types (PCTs) requiring offset and the number and type of ecosystem credits required for impacts to MNES

☒ identifies threatened species requiring offset and the number of species credits required for impacts to MNES

☒ correctly uses the BAM (and BAM calculator) to identify the number and class of biodiversity credits that need to be offset to achieve a standard of 'no net loss' of biodiversity

☒ identifies if ecological rehabilitation and/or biodiversity conservation actions are proposed for offsetting

☒ if known, identifies any other offsetting approach proposed, such as land-based offsets, retiring credits by payment into the Biodiversity Conservation Fund and/or through supplementary measures[#]

[#] In accordance the BAM there is no longer a requirement to define the offsetting approach at EIS stage.

Section 6.1 'Proposed Biodiversity Offset Strategy' of Appendix D of the BDAR describes (on page 34) the proposed offset strategy for the project, which is where the proponent may use on or more of the available options:

- retiring credits on a like-for-like basis in accordance with the Biodiversity Conservation Regulation 2017
- funding biodiversity conservation actions that are listed in the Ancillary rules: Biodiversity conservation actions that directly benefit the threatened entity impacted
- pay into the Biodiversity Conservation Fund.

Table 6.1 'Ecosystem and Species-credit Species Relevant for Impacted MNES' summarises the area of impact for each of the five affected MNES entities, and the BAM credits required to offset those impacts. Those details are summarised in Table 2 (below).

TABLE 2: MNES IMPACT AND OFFSET SUMMARY [See Table 6.1 of the MNES Report]

Threatened Species / Community listed under EPBC Act	PCTs associated with the ecosystem credit species / ecological community (if applicable)	Area of Impact (ha)	Credits Required	Offsetting Approach	Reference (EIS, revised BDAR)
River-flat Eucalypt Forest CEEC	PCT 1594 Cabbage Gum – Rough-barked Apple grassy woodland (thinned/disturbed condition)	1.2	50	Retire credits and/or fund biodiversity conservation areas and/or pay into the Biodiversity Conservation Fund	Section 6.1 of Appendix D of the BDAR
TOTAL		**1.2**	**50**		
regent honeyeater	PCT 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (moderate/good condition)	12.71	386	Retire credits and/or fund biodiversity conservation areas and/or pay into the Biodiversity Conservation Fund	Section 6.1 of Appendix D of the BDAR
	PCT 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (thinned/disturbed condition)	0.7	26		
	PCT 1592 Spotted Gum – Red Ironbark – Grey Gum shrub-grass open forest in the Lower Hunter (moderate/good condition)	1.9	129		
	PCT 1592 Spotted Gum – Red Ironbark – Grey Gum shrub-grass open forest in the Lower Hunter - (thinned/disturbed condition)	3.83	129		
	PCT 1600 Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Gum shrub-grass open forest of the Lower Hunter (moderate/good condition)	3.43	120		
	PCT 1600 Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Gum shrub-grass open forest of the Lower Hunter (thinned/disturbed condition)	27.48	373		

TOTAL		**50.05**	**1,163**		
swift parrot	PCT 1568 Blackbutt – Turpentine – Sydney Blue Gum mesic tall open forest on ranges of the Central Coast	0.89	26	Retire credits and/or fund biodiversity conservation areas and/or pay into the Biodiversity Conservation Fund	Section 6.1 of Appendix D of the BDAR
	PCT 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (moderate/good condition)	12.71	396		
	PCT 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (thinned/disturbed condition)	0.7	26		
	PCT 1592 Spotted Gum – Red Ironbark – Grey Gum shrub-grass open forest in the Lower Hunter (moderate/good condition)	1.9	129		
	PCT 1592 Spotted Gum – Red Ironbark – Grey Gum shrub-grass open forest in the Lower Hunter (thinned/disturbed condition)	3.83	129		
	PCT 1598 Forest Red Gum grassy open forest of the Lower Hunter (thinned/disturbed condition)	1.08	58		
	PCT 1600 Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Gum shrub-grass open forest of the Lower Hunter (moderate/good condition)	3.43	120		
	PCT 1600 Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Gum shrub-grass open forest of the Lower Hunter (thinned/disturbed condition)	27.48	373		
	PCT 1633 Parramatta Red Gum – Narrow-leaved Apple – Prickly-leaved paperbark shrubby woodland in the Cessnock – Kurri Kurri area	1.07	54		
TOTAL		**53.09**	**1,301**		
koala	PCT 1568 Blackbutt – Turpentine – Sydney Blue Gum mesic tall open forest on ranges of the Central Coast	0.89	26	Retire credits and/or fund biodiversity conservation areas and/or pay into the Biodiversity Conservation Fund	Section 6.1 of Appendix D of the BDAR
	PCT 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (moderate/good condition)	12.71	386		
	PCT 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (thinned/disturbed condition)	0.7	26		
	PCT 1592 Spotted Gum – Red Ironbark – Grey Gum shrub-grass open forest in the Lower Hunter (moderate/good condition)	1.9	74		
	PCT 1592 Spotted Gum – Red Ironbark – Grey Gum shrub-grass open forest in the Lower Hunter (thinned/disturbed condition)	3.83	129		
	PCT 1594 Cabbage Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (thinned/disturbed condition)	1.2	50		
	PCT 1598 Forest Red Gum grassy open forest of the Lower Hunter (thinned/disturbed condition)	1.72	58		
	PCT 1600 Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Gum shrub-grass open forest of the Lower Hunter (moderate/good condition)	3.43	120		
	PCT 1600 Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Gum shrub-grass open forest of	27.48	373		

	the Lower Hunter (thinned/disturbed condition)				
	PCT 1619 Smooth-barked Apple – Red Bloodwood – Brown Stringybark – Hairpin Banksia heathy open forest of coastal lowlands (moderate/good condition)	27.48	23		
	PCT 1633 Parramatta Red Gum – Narrow-leaved Apple – Prickly-leaved paperbark shrubby woodland in the Cessnock – Kurri Kurri area (thinned/disturbed condition)	2.93	54		
	PCT 1728 Swamp Oak – Prickly-leaved paperbark – Tall Sedge swamp forest on coastal lowlands on the Central Coast and Lower North Coast (moderate/good condition)	**0.07**	2		
TOTAL		**84.34**	**1,321**		
grey-headed flying-fox	PCT 1568 Blackbutt – Turpentine – Sydney Blue Gum mesic tall open forest on ranges of the Central Coast	0.89	26	Retire credits and/or fund biodiversity conservation areas and/or pay into the Biodiversity Conservation Fund	Section 6.1 of Appendix D of the BDAR
	PCT 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (moderate/good condition)	12.71	386		
	PCT 1590 Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (thinned/disturbed condition)	0.7	26		
	PCT 1592 Spotted Gum – Red Ironbark – Grey Gum shrub-grass open forest in the Lower Hunter (moderate/good condition)	1.9	74		
	PCT 1592 Spotted Gum – Red Ironbark – Grey Gum shrub-grass open forest in the Lower Hunter - (thinned/disturbed condition)	3.83	129		
	PCT 1598 Forest Red Gum grassy open forest of the Lower Hunter (thinned/disturbed condition)	1.72	58		
	PCT 1600 Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Gum shrub-grass open forest of the Lower Hunter (moderate/good condition)	3.43	120		
	PCT 1600 Spotted Gum – Red Ironbark – Narrow-leaved Ironbark – Grey Gum shrub-grass open forest of the Lower Hunter (thinned/disturbed condition)	27.48	373		
TOTAL		**52.66**	**1,192**		
regent honeyeater	mapped important area	**0.46**	**24**	Retire credits and/or fund biodiversity conservation areas and/or pay into the Biodiversity Conservation Fund	Section 6.1 of Appendix D of the BDAR

All MNES entities likely to be impacted by the project have been assessed by the BAM. The proponent plans to undertake further threatened species surveys for the koala, which for the current assessment is assumed to be present (Appendix D of the BDAR: page 35).

The proponent states (Appendix D of the BDAR: page 34) that the offsets will be retired in a like-for-like manner to meet the requirements of the EPBC Act.

7. Other considerations

Verify if any relevant Commonwealth guidelines and policy statements are applicable to the action and listed threatened species and/or community, including but not limited to:

☒ International environmental obligations

☒ Recovery Plans

☒ Approved Conservation Advice

☒ Threat Abatement Plans

The relevant Commonwealth guidelines and policy statements for each species and community are available at: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl

For each EPBC Act listed threatened species and/or community, provide advice on whether the assessment has been adequately informed by applicable Commonwealth guidelines and/or policy statements. For example, the interaction between the proposed action and important populations or critical habitat identified in policy documents and/or the interaction between the proposed action and threatening processes or recommended conservation actions outlined in Commonwealth policies and plans.

Chapter 7 'Other Considerations' of Appendix D of the BDAR includes a table (Table 7.1 'Assessment of MNES entities and relevant guidelines') of the Commonwealth guidelines and policy statements considered in the assessment of potential impacts to MNES entities by this project. The table lists the approved conservation advice, listing advice, recovery plan, threaten abatement plan, referral guidelines, where available, and other Commonwealth documents available for each of the five MNES entities considered likely to be significantly impacted by this project. The proponent states (on page 38 of Appendix D of the BDAR) that these relevant Commonwealth guidelines and policy statements '…were reviewed to inform the assessments for the likely impacted entities' without demonstrating how this was done.

Table 1.1 'Summary of Assessment Requirements for MNES under the Bilateral Agreement' in Appendix D of the BDAR refers (on page 6) to 'international environmental obligations' being considered in the 'Assessment of Significance'. However, there is no text to support this in the 'Assessment of Significance' in Appendix A of Appendix D of the BDAR, or in Table 1.1 'Summary of Assessment Requirement for MNES under the Bilateral Agreement' or Section 7.0 'Other Considerations' of Appendix 3 of the letter dated 9 December 2022. However, the Project Assessment Notes did not identify that the project would likely have a significant impact of any MNES entities covered by international environmental obligations.

BCD have referred to approved conservation advice, listing advice, recovery plan, threaten abatement plan, and other policy documents relevant to the five MNES entities considered for this bilateral assessment to develop recommended conditions for this project, if approved. No further information is therefore required for this part of the bilateral assessment.

8. Recommendations

Provide advice on any recommended conditions and reasons for imposing the conditions:

BCD has reviewed the objectives and recommend actions from the Approved Conservation Advice, Recovery Plan, Threat Abatement Plans etc that are available for each of the five MNES entities considered for this proposal. Based on this review, BCD recommends that if this project is approved by DCCEEW that any consent issued includes some or all of the proposed approval conditions below:

For River-flat Eucalypt Forest on coastal floodplains of southern New South Wales and eastern Victoria:

1. Maintains existing areas of the CEEC that are relatively intact and of high quality rather than trying to restore or replace areas that have been lost or degraded
2. Undertakes restoration in accordance with the *National Standards for the Practice of Ecological Restoration in Australia* (SERA 2016)
3. Considers the likely interaction of various management Actions being undertaken on existing areas of the CEEC on the project land in relation to the health and persistence of the CEEC
4. That the proponent contributes funds for the identifying of key threats to occurrences of the CEEC within the Cessnock Local Government Area.

For the koala:

1. That the proponent finds or funds land to increase the area of protected habitat for the listed koala population
2. That the proponent contributes funds for some or all of the following:
   - the strategic restoration of listed koala habitat
   - the active management of listed koala metapopulations.

For the grey-headed flying-fox:

1. That the proponent contributes funds for some or all of the following:
   - the identification of land critical to the survival of the grey-headed flying-fox
   - the identification and protection of important foraging resources in native vegetation that are poorly represented in current reserves
   - the increase in the extent and viability of foraging habitat for the grey-headed flying-fox that is produced during winter and spring by planting appropriate tree species in the appropriate soil and landscape position
   - the protection and increase in roosting habitat for grey-headed flying-foxes, particularly in low-conflict areas

For the regent honeyeater:

2. That the proponent identifies any key areas of regent honeyeater habitat, or degraded areas that were previously commonly used by the regent honeyeater on their land and rehabilitates then and extends them
3. That the proponent contributes funds for some or all of the following:
   - quantify the impacts of noisy miners on the wild population
   - develop silvicultural techniques that accelerate maturity of key food species
   - captive breeding and release programs for the species
   - noisy miner control actions in key areas important to the regent honeyeater
   - rehabilitating degraded areas that were previously commonly used by the regent honeyeater
   - enhancing habitat patches or corridors in order to facilitate landscape scale movement of the regent honeyeater.

For the swift parrot:

1. That the proponent implements management strategies to protect and improve habitats and sites for the swift parrot across its land
2. That the proponent includes feral cat management into the management plans for the project
3. That the proponent contributes funds for some or all of the following:
   - The monitoring of population trends and the distribution of swift parrots throughout the range

- the identification of movement patterns of swift parrots throughout their range
- establish habitat phenology data collection in existing research and monitoring studies, to analyse the findings and incorporate the results into the recovery program.