

Reconciliation of the calculations for Koala habitat to be impacted by the mine development for the EPBC assessment

2021-10-01 minor RFI

The BDAR (Appendix M of the Amendment Report) at s7.1.2 b states 123.03 ha of koala habitat will be impacted in the Commonwealth assessment.

However, the BDAR in Table 6.3 states the habitat is either 78.57 ha under SEPP 44 or 116.95 ha based on the Koala Habitat Protection SEPP 2019.

Table 5.11 indicates the various communities that constitute koala habitat polygon and calculations based on that reach a figure of 91.54 ha.

Table 6.13 of the BDAR shows a breakdown of the area of koala habitat which generates species credits and the total of that adds up to 123.02 ha, which matches the commonwealth summary.

Please confirm which figures are correct and populate the following table:

Vegetation Community (PCT)	Area (ha)	Box Gum Woodland	Habitat Area – Threatened Species likely to be significantly impacted		
			Koala	Superb Parrot	Latham's Snipe
Yellow Box – Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion (PCT 1330)	45.84	20.43	?	20.43	-
Broad-leaved Peppermint – Brittle Gum – Red Stringybark dry open forest of the South Eastern Highlands Bioregion (PCT 727)	48.78	-	?	-	-
Mountain Gum – Manna Gum open forest of the South Eastern Highlands Bioregion (PCT 951)	32.73	-	?	-	-
Carex sedgeland of the slopes and tablelands (PCT 766)	3.04	-	-	-	-
Native Vegetation Total	130.39	20.43	123.03	20.43	0

Memorandum



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14 October 2021

To: Mandana Mazaheri
Department of Planning, Industry and Environment
From: Nicole Armit
Subject: McPhillamys Gold Project SSD 9505 - Koala habitat minor RFI

Dear Mandana,

This letter provides a response to the minor request for information (RFI) from the NSW Department of Planning, Industry and Environment (DPIE) relating to the reconciliation of the calculations for Koala habitat to be impacted by the mine development for the EPBC Act assessment. The questions in the RFI are stated below in bold, followed by a response.

The Biodiversity Development Assessment Report (BDAR) (EMM September 2020, Appendix M of the Amendment Report) at s7.1.2 b states 123.03 ha of Koala habitat will be impacted in the Commonwealth assessment.

This is correct in the BDAR, which identified that 123.03 hectares (ha) of Koala habitat is predicted to be impacted by the project.

However, two things are noted in this regard. Firstly, the 123.03 ha includes the Koala habitat that will be both *directly* and *indirectly* impacted by the project. The indirect impacts are based on a weed management zone buffer of 20 m that has been assumed around the boundary of the mine development's direct disturbance footprint (as illustrated in Plate 4.1 in the BDAR). Secondly, post finalisation of the BDAR, an update to the Biodiversity Assessment Method (BAM) calculations was undertaken as part of the *Response to Government Agency Advice on the Amendment Report and Submissions Report* (EMM, November 2020). This update resulted in a minor change to the predicted impact of the project on Koala habitat, which is **123.06 ha** (refer to Appendix A of EMM, November 2020, also attached to this letter). The revised credit report submitted as part of *Response to Government Agency Advice on the Amendment Report and Submissions Report* superseded the BAM calculations in the Amendment BDAR.

However, the BDAR in Table 6.3 states the habitat is either 78.57 ha under SEPP 44 or 116.95 ha based on the Koala Habitat Protection SEPP 2019.

Table 6.3 presents the *direct* impacts of the mine development, not *direct and indirect* impacts, which is why the areas are less in Table 6.3 than that referenced in Section 7.1.2b.

Table 5.11 indicates the various communities that constitute koala habitat polygons and calculations based on that reach a figure of 91.54 ha.

The figure of 91.54 ha is not quoted in the BDAR.

Table 5.11 in the BDAR (Appendix M of the Amendment Report), lists some, however not all of the species polygons (vegetation zones) used to calculate impacts to Koala. To clarify, the following vegetation zones are included in the mine development BAM calculator (BAM-C) for Koala (as per the latest BAM-C for the project,

provided in Appendix A of the *Response to Government Agency Advice on the Amendment Report and Submissions Report* (EMM, November 2020):

- 951_Poor (33.8 ha);
- 1330_High (1.6 ha);
- 1330_Medium (21 ha);
- 1330_Poor (25.3 ha)
- 1330_Other (0.76 ha);
- 727_High (3.9 ha), and
- 727_Medium (36.7 ha).

This totals **123.06 ha** (noting the minor change described above from the 123.03 ha stated in the BDAR, due to slight refinement of the project (refer to section 3.4.1 of EMM November 2020) as well as some rounding differences in the BAM – C).

Table 6.13 of the BDAR shows a breakdown of the area of koala habitat which generates species credits and the total of that adds up to 123.02 ha, which matches the commonwealth summary. Please confirm which figures are correct and populate the following table.

The areas quoted in the second column in the RFI (Area (ha)) are the areas to be *directly* impacted by the mine development. This has been clarified in the table below. The area of Koala habitat likely to be significantly impacted by the mine development is listed in Tables 6.12 and 6.13 of the BDAR, and updated in Appendix A of EMM, November 2020, and has been included in the table below. Note these areas include both direct and indirect impacts, and therefore require offsetting.

In relation to the Superb Parrot, the RFI quoted 20.43 ha as being significantly impacted by the mine development. However, the BDAR concluded that the Superb Parrot *will not* be significantly impacted by the project. Table 7.7 of the BDAR provides an assessment of significance for the removal of up to 20.43 ha of potential Superb Parrot habitat, in accordance with the assessment criteria for vulnerable species. The assessment of significance concluded that:

The clearance of potential Superb Parrot foraging habitat will not result in a significant impact on the species, important populations will not be adversely affected, the area to be removed does not represent habitat critical to the survival of the species and the project will not interfere with recovery of the species. Impacts are known, predictable and irreversible.

The area quoted in the table in the RFI in relation to Superb Parrot should therefore be 0 ha, as now shown in the table below.

	Area within the disturbance footprint (ha) – ie area to be directly impacted by the project		Habitat Area – Threatened species likely to be significantly impacted ²		
	PCT	Box Gum Woodland ¹	Koala	Superb Parrot	Latham's snipe
Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion (PCT 1330)	45.84	20.43	48.66	-	-
Broad-leaved Peppermint – Brittle Gum – Red Stringybark dry open forest of the South Eastern Highlands Bioregion (PCT 727)	48.78	-	40.60	-	-
Mountain Gum - Manna Gum open forest of the South Eastern Highlands Bioregion (PCT 951)	32.73	-	33.80	-	-
Carex sedgeland of the slopes and tablelands (PCT 766)	3.04	-	-	-	-
Total (ha)	130.39	20.43	123.06	0	0

Notes: 1: EPBC Act listed White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland; ie PCT 1330 - High and medium condition (refer to Table 6.2 of BDAR)
2: Includes direct and indirect impacts

If you require any further detail or wish to discuss the information provided, please do not hesitate to contact me on the details below.

Yours sincerely

Nicole Armit

Director

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Attachment: BAM Credit Summary Report for the McPhillamys Gold Project - Mine Development

Proposal Details

Assessment Id	Proposal Name	BAM data last updated *
00016791/BAAS17013/19/00016792	McPhillamys Gold Project - mine development	19/11/2020
Assessor Name	Report Created	BAM Data version *
	25/11/2020	32
Assessor Number	BAM Case Status	Date Finalised
	Open	To be finalised
Assessment Revision	Assessment Type	
0	Major Projects	

* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

Ecosystem credits for plant communities types (PCT), ecological communities & threatened species habitat

Zone	Vegetation zone name	TEC name	Current Vegetation integrity score	Change in Vegetation integrity (loss / gain)	Area (ha)	BC Act Listing status	EPBC Act listing status	Species sensitivity to gain class (for BRW)	Biodiversity risk weighting	Potential SAI	Ecosystem credits
Broad-leaved Peppermint - Brittle Gum - Red Stringybark dry open forest on the South Eastern Highlands Bioregion											
1	727_High	Not a TEC	41	31.6	3.9			High Sensitivity to Potential Gain	1.75		54
2	727_Poor	Not a TEC	42	36.5	12.1			High Sensitivity to Potential Gain	1.75		193

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3	727_Medium	Not a TEC	45.4	44.1	36.7		High Sensitivity to Potential Gain	1.75		708
									Subtotal	955
Carex sedgeland of the slopes and tablelands										
4	766_Poor	Not a TEC	17.4	17.4	3		High Sensitivity to Potential Gain	2.00		26
									Subtotal	26
Mountain Gum - Manna Gum open forest of the South Eastern Highlands Bioregion										
5	951_Poor	Not a TEC	28.3	28.2	33.8		High Sensitivity to Potential Gain	2.00		477
									Subtotal	477
Yellow Box - Blakely's Red Gum grassy woodland on the tablelands, South Eastern Highlands Bioregion										
6	1330_Other	White Box Yellow Box Blakely's Red Gum Woodland	26.4	26.4	0.76	Endangered Ecological Community	High Sensitivity to Potential Gain	2.00	TRUE	10
7	1330_High	White Box Yellow Box Blakely's Red Gum Woodland	39.4	35.9	1.6	Endangered Ecological Community	High Sensitivity to Potential Gain	2.00	TRUE	29
8	1330_Medium	White Box Yellow Box Blakely's Red Gum Woodland	55	49.8	21	Endangered Ecological Community	High Sensitivity to Potential Gain	2.00	TRUE	523
9	1330_Poor	White Box Yellow Box Blakely's Red Gum Woodland	43.2	42.2	25.3	Endangered Ecological Community	High Sensitivity to Potential Gain	2.00	TRUE	534
									Subtotal	1096
									Total	2554

Species credits for threatened species

Vegetation zone name	Habitat condition (Vegetation Integrity)	Change in habitat condition	Area (ha)/Count (no. individuals)	BC Act Listing status	EPBC Act listing status	Biodiversity risk weighting	Potential SAI	Species credits
<i>Petaurus norfolcensis</i> / Squirrel Glider (Fauna)								
951_Poor	28.2	28.2	33.8	Vulnerable	Not Listed	2	False	477
1330_High	35.9	35.9	1.6	Vulnerable	Not Listed	2	False	29
1330_Medium	49.8	49.8	21	Vulnerable	Not Listed	2	False	523
1330_Poor	42.2	42.2	25.3	Vulnerable	Not Listed	2	False	534
1330_Other	26.4	26.4	0.76	Vulnerable	Not Listed	2	False	10
727_High	31.6	31.6	3.9	Vulnerable	Not Listed	2	False	62
727_Medium	44.1	44.1	36.7	Vulnerable	Not Listed	2	False	809
727_Poor	36.5	36.5	12.1	Vulnerable	Not Listed	2	False	220
							Subtotal	2664
<i>Phascolarctos cinereus</i> / Koala (Fauna)								
951_Poor	28.2	28.2	33.8	Vulnerable	Vulnerable	2	False	477
1330_High	35.9	35.9	1.6	Vulnerable	Vulnerable	2	False	29
1330_Medium	49.8	49.8	21	Vulnerable	Vulnerable	2	False	523
1330_Poor	42.2	42.2	25.3	Vulnerable	Vulnerable	2	False	534
1330_Other	26.4	26.4	0.76	Vulnerable	Vulnerable	2	False	10
727_High	31.6	31.6	3.9	Vulnerable	Vulnerable	2	False	62
727_Medium	44.1	44.1	36.7	Vulnerable	Vulnerable	2	False	809
							Subtotal	2444