

PEMBROKE

Olive Downs Coking Coal Project

Additional Information to the
Environmental Impact Statement

Section 19

**Matters of State Environmental
Significance – Essential Habitat**

19 MATTERS OF STATE ENVIRONMENTAL SIGNIFICANCE – ESSENTIAL HABITAT

1. ***Update habitat mapping to reflect that the project site contains areas mapped as essential habitat for the ornamental snake (*Denisonia maculata*), koala (*Phascolarctos cinereus*), and death adder (*Acanthophis antarcticus*).***

Pembroke originally lodged the draft EIS on 18 May 2018 with the OCG for review. The submissions received on the original draft EIS (including providing further information regarding impacts to threatened fauna within the main text of the EIS) were addressed by Pembroke and a revised draft EIS was lodged with the OCG on 27 July 2018.

At the time of finalising the ecological assessments for the Project and submission of the draft EIS in July 2018, there was no essential habitat mapped for threatened fauna species listed under the *Nature Conservation Act 1992* (NC Act) within the Project area. The DES has subsequently requested that habitat mapping presented in the Terrestrial Fauna Assessment be updated to reflect newly mapped areas of essential habitat for the Ornamental Snake, Koala and Death Adder.

DPM Envirosciences (2019) has produced figures showing the extent of essential habitat for the Ornamental Snake, Common Death Adder and Koala (Figure 19-1).

It is understood that the updated essential habitat mapping has been produced by DES to reflect DPM Envirosciences' fauna survey records which were submitted to DES in accordance with DPM Envirosciences' Scientific Purposes Permit (i.e. the mapping is based on the survey results presented in the draft EIS).

DPM Envirosciences has conducted an assessment of the areas of essential habitat proposed to be removed by the Project (refer to Item 3 below).

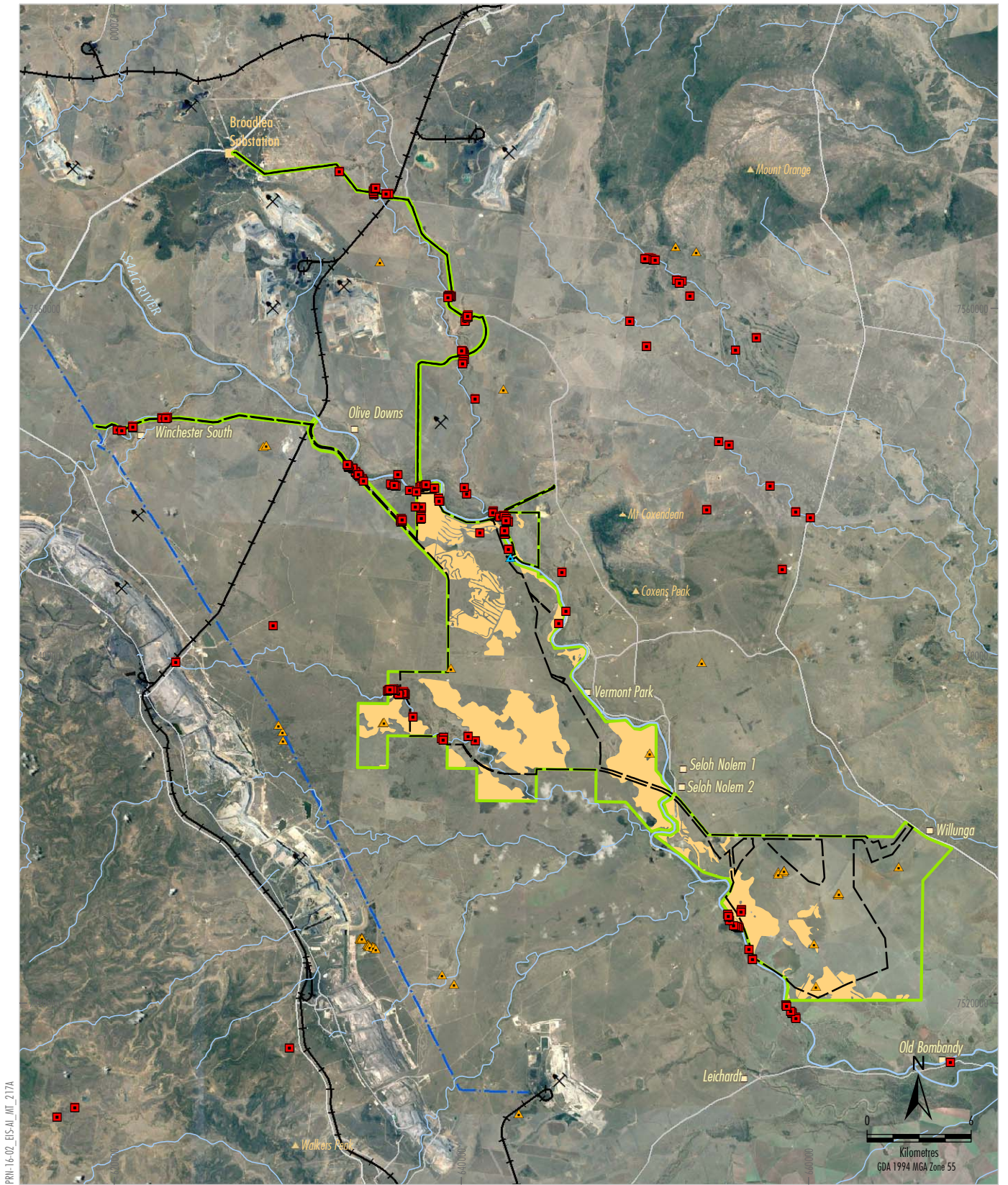
2. ***For areas mapped as essential habitat which ground-truthing indicates absence of the suitable habitat on the ground, provide justification for why these areas do not provide suitable habitat for these species (i.e. absence of essential habitat factors).***

As outlined in response to Item 1, at the time of writing the ecological assessments for the Project, there was no essential habitat mapped for threatened fauna species listed under the NC Act.

It is understood that the essential habitat mapping prepared by DES subsequent to lodgement of the draft EIS has been produced as a result of records collected by DPM Envirosciences during the field assessments for the Project. Given the mapping has been produced as a result of DPM Envirosciences survey records, there are no areas of essential habitat mapping where ground-truthing indicates the absence of suitable habitat.

3. ***Provide an estimate of how much essential habitat would be removed for the ornamental snake, koala, and death adder and discuss any overlaps with the areas of suitable habitat identified in the draft EIS.***

Table 19-1 identifies the area (in ha) of essential habitat proposed to be removed by the Project for the Ornamental Snake, Common Death Adder and Koala.



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- LEGEND**
- Study Area
 - Approximate Extent of Proposed Surface Development
 - Approved/Operating Coal Mine
 - Eungella Pipeline Network
 - Railway
 - Peaks
 - Dwelling
 - Essential Habitat Mapping
 - Ornamental Snake
 - Common Death Adder
 - Koala

Source: DPM (2018), Queensland Department of Environment and Science (2019), Pembroke (2018), Queensland Department of Natural Resources, Mines and Energy (2017)
 Orthophoto: Google Image (2016)



OLIVE DOWNS COKING COAL PROJECT
Essential Habitat Mapping

Figure 19-1

All areas of essential habitat identified within the Project area overlap with the areas of suitable habitat for the Ornamental Snake, Common Death Adder and Koala as identified in the draft EIS (i.e. there are no areas of essential habitat which were not identified as suitable habitat for these species in the draft EIS). Given this, clearance of these areas of essential habitat would not change the conclusions made within the draft EIS regarding potential significant impacts to these species.

It should be acknowledged that the full extent of Ornamental Snake habitat (7,666 ha) and Koala habitat (5,583.5 ha) mapped within the Project area would be offset as described in Sections 10 and 11.

Further to this, it was concluded in Appendix B and Table 4-3 of the draft EIS that the Project is not expected to have a significant impact on the Common Death Adder given this species has only been detected in Project area once in the past 5 years, and the next closest database record is located approximately 90 km from the Project area. As such, it was determined that it is unlikely that the Project area supports a local population of this species, and if the species were to occur, it is expected only to be in very low numbers.

**Table 19-1
Area of Essential Habitat to be Cleared by the Project**

Species	Area of Essential Habitat to be Cleared (ha)
Ornamental Snake	4,341
Common Death Adder	18
Koala	4,827