APPROVAL

Olive Downs Project Mine Site and Access Road, near Moranbah, Queensland (EPBC 2017/7867)

This decision is made under sections 130(1) and 133(1) of the Environment Protection and Biodiversity Conservation Act 1999 (Cth). Note that section 134(1A) of the EPBC Act applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

Details

Person to whom the approval is granted (approval holder)	Pembroke Olive Downs Pty Ltd
ACN of approval holder	611 674 376
Action	To develop an open-cut coal mine and access road approximately 40 km south-east of Moranbah, Queensland, subject to the variation of the action accepted by the Minister under section 156B on Tuesday, 17 April 2018 [See EPBC Act referral 2017/7867 and variation request dated 21 December 2017].

Approval decision

My decision on whether or not to approve the taking of the action for the purposes of the controlling provision for the action is as follows.

Controlling Provisions

Listed threatened species and o	communities	
Section 18	Approve	
Section 18A	Approve	
Listed migratory species		
Section 20	Approve	
Section 20A	Approve	
Coal seam gas or large coal min	ing development impact on water resources	
Section 24D	Approve	
Section 24E	Approve	

Period for which the approval has effect

This approval has effect until 4 December 2123.

Decision-maker

Name and position

The Hon Sussan Ley MP

Minister for the Environment

Signature

Date of decision

14 may 2020

Conditions of approval

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.

ANNEXURE A - CONDITIONS OF APPROVAL

Part A - Conditions specific to the action

Maximum Clearance Limits

- 1. The approval holder must not clear outside of the project area.
- 2. During each stage of the action, the approval holder must not clear more than the areas (in hectares) of habitat for each listed threatened species and community as specified in the following table:

Matter of national environmental significance	Stage 1	Stage 2	Stage 3	Stage 4
Koala (<i>Phascolarctos cinereus</i>) (combined populations of Qld, NSW and the ACT) habitat	1,110.5	367.5	3,939.5	354
Greater Glider (Petauroides volans) habitat	978.5	303	3,937	389
Squatter Pigeon (Southern) (Geophaps scripta scripta) breeding habitat	855	216.5	3,100	322
Squatter Pigeon (Southern) (Geophaps scripta scripta) foraging habitat	135.5	68	656.5	6.5
Ornamental Snake (<i>Denisonia maculata</i>) mportant habitat	1,032	298	5,109	1,307
Australian Painted Snipe (Rostratula australis) breeding habitat	16	3	70	25
Brigalow TEC	0	0	13	0



Department of Agriculture, Water and the Environment

Stage 1 Environmental Offset Requirements

- To compensate for the clearance of habitat for listed threatened species and community for Stage 1 up to the limits as specified in condition 2, the approval holder must provide an environmental offset consistent with the Environmental Offsets Policy.
- 4. The environmental offset to compensate for the clearance of 978.5 ha of Greater Glider (Petauroides volans) habitat for Stage 1 must result in a measured increase in Greater Glider (Petauroides volans) habitat connectivity in the riparian zones within the Stage 1 environmental offset.
- 5. The approval holder must submit a Stage 1 Offset Area Management Plan (OAMP) prepared by a suitably qualified ecologist for the written approval of the Minister. The approval holder must not commence the action until the Stage 1 OAMP has been approved in writing by the Minister. The approved Stage 1 OAMP must be implemented.
- The Stage 1 OAMP must include the offset information to compensate for the clearance of listed threatened species and community habitat as provided for in condition 2 in accordance with the principles of the Environmental Offsets Policy.
- 7. To assess the effectiveness of the management actions in the Stage 1 OAMP to increase Greater Glider (Petauroides volans) habitat connectivity in the riparian zones within the Stage 1 environmental offset, the approval holder must engage an independent suitably qualified expert to undertake an assessment every 5 years from the implementation date of the approved Stage 1 OAMP until the approved Stage 1 OAMP offset completion criteria are achieved.
- 8. The approval holder must ensure each assessment of the effectiveness of the management actions in the Stage 1 OAMP is:
 - subject to a peer-review completed within 6 months of the completion of each such assessment; and
 - published on its website with the findings of the peer-review within 6 months of the completion of the peer-review and for the duration of this approval.

Legal Securing of the Stage 1 Environmental Offset

- 9. The approval holder must legally secure the Stage 1 environmental offset within 2 years from the date that the Stage 1 OAMP is approved by the Minister in writing. The approved Stage 1 OAMP must be attached to the legal mechanism used to legally secure the Stage 1 environmental offset.
- 10. The approval holder must notify the **Department** within 5 business days of the mechanism to legally secure the Stage 1 environmental offset being executed.

Stage 2 Environmental Offset Requirements

- 11. To compensate for the clearance of habitat for listed threatened species and community for Stage 2 up to the limits as specified in condition 2, the approval holder must provide an environmental offset consistent with the Environmental Offsets Policy.
- 12. The environmental offset to compensate for the clearance of 303 ha of Greater Glider

 (Petauroides volans) habitat for Stage 2 must result in a measured increase in Greater Glider



Department of Agriculture, Water and the Environment

(Petauroides volans) habitat connectivity in the riparian zones within the Stage 2 environmental offset.

- 13. At least 12 months prior to the commencement of Stage 2, the approval holder must submit a Stage 2 OAMP prepared by a suitably qualified ecologist for the written approval of the Minister. The approval holder must not commence Stage 2 until the Stage 2 OAMP has been approved in writing by the Minister. The approved Stage 2 OAMP must be implemented.
- 14. The Stage 2 OAMP must include the offset information to compensate for the clearance of habitat for each listed threatened species and community as provided for in condition 2 in accordance with the principles of the Environmental Offsets Policy.
- 15. To assess the effectiveness of the management actions in the Stage 2 OAMP to increase Greater Glider (Petauroides volans) habitat connectivity in the riparian zones within the Stage 2 environmental offset, the approval holder must engage an independent suitably qualified expert to undertake an assessment every 5 years from the implementation date of the approved Stage 2 OAMP until the approved Stage 2 OAMP offset completion criteria are achieved.
- 16. The approval holder must ensure each assessment of the effectiveness of the management actions in the Stage 2 OAMP is:
 - a. subject to a peer-review completed within 6 months of the completion each such assessment; and
 - published on its website with the findings of the peer-review within 6 months of the completion of the peer-review and for the duration of this approval.

Legal Securing of the Stage 2 Environmental Offset

- 17. The approval holder must legally secure the Stage 2 environmental offset within 2 years from the date that the Stage 2 OAMP is approved by the Minister in writing. The approved Stage 2 OAMP must be attached to the legal mechanism used to legally secure the Stage 2 environmental offset.
- 18. The approval holder must notify the **Department** within 5 **business days** of the mechanism to **legally secure** the **Stage 2** environmental offset being executed.

Stage 3 Environmental Offset Requirements

- 19. To compensate for the clearance of habitat for listed threatened species and community for Stage 3 up to the limits as specified in condition 2, the approval holder must provide an environmental offset consistent with the Environmental Offsets Policy.
- 20. The environmental offset to compensate for the clearance of 3,937 ha of Greater Glider (Petauroides volans) habitat for Stage 3 must, at a minimum, result in a measured increase in Greater Glider (Petauroides volans) habitat connectivity in the riparian zones within the Stage 3 environmental offset.
- 21. At least 12 months prior to the commencement of **Stage 3**, the approval holder must submit a Stage 3 OAMP prepared by a **suitably qualified ecologist** for the written approval of the **Minister**. The approval holder must not commence **Stage 3** until the Stage 3 OAMP has been approved in writing by the **Minister**. The approved Stage 3 OAMP must be implemented.



Department of Agriculture, Water and the Environment

- 22. The Stage 3 OAMP must include the offset information to compensate for the clearance of habitat for each listed threatened species and community as provided for in condition 2 in accordance with the principles of the Environmental Offsets Policy.
- 23. To assess the effectiveness of the management actions in the Stage 3 OAMP to increase Greater Glider (Petauroides volans) habitat connectivity in the riparian zones within the Stage 3 environmental offset, the approval holder must engage an independent suitably qualified expert to undertake an assessment every 5 years from the implementation date of the approved Stage 3 OAMP until the approved Stage 3 OAMP offset completion criteria are achieved.
- 24. The approval holder must ensure each assessment of the effectiveness of the management actions in the Stage 3 OAMP is:
 - a. subject to a peer-review completed within 6 months of the completion each such assessment; and
 - published on its website with the findings of the peer-review within 6 months of the completion of the peer-review and for the duration of this approval.

Legal Securing of the Stage 3 Environmental Offset

- 25. The approval holder must legally secure the Stage 3 environmental offset within 2 years from the date that the Stage 3 OAMP is approved by the Minister in writing. The approved Stage 3 OAMP must be attached to the legal mechanism used to legally secure the Stage 3 environmental offset.
- 26. The approval holder must notify the **Department** within 5 business days of the mechanism to legally secure the Stage 3 environmental offset being executed.

Stage 4 Environmental Offset Requirements

- 27. To compensate for the clearance of habitat for listed threatened species and community for Stage 4 up to the limits as specified in condition 2, the approval holder must provide an environmental offset consistent with the Environmental Offsets Policy.
- 28. At least 12 months prior to the commencement of Stage 4, the approval holder must submit a Stage 4 OAMP prepared by a suitably qualified ecologist for the written approval of the Minister. The approval holder must not commence Stage 4 until the Stage 4 OAMP has been approved in writing by the Minister. The approved Stage 4 OAMP must be implemented.
- 29. The Stage 4 OAMP must include the offset information to compensate for the clearance of habitat for each listed threatened species and community as provided for in condition 2 in accordance with the principles of the Environmental Offsets Policy.

Legal Securing of the Stage 4 Environmental Offset

- 30. The approval holder must legally secure the Stage 4 environmental offset within 2 years from the date that the Stage 4 OAMP is approved by the Minister in writing. The approved Stage 4 OAMP must be attached to the legal mechanism used to legally secure the Stage 4 environmental offset.
- 31. The approval holder must notify the Department within 5 business days of the mechanism to legally secure the Stage 4 environmental offset being executed.



Conservation of the Koala and Greater Glider in the Bowen Basin

- 32. In addition to its obligations under the **Environmental Offsets Policy**, the approval holder must contribute \$100,000 (GST exclusive and indexed in line with **CPI** for each year to be equal to the value of \$100,000 on the date of commencement of **Stage 2**) each year for 10 years to a program where the total contribution will be used for the better protection and long-term conservation of the Koala and Greater Glider in the Bowen Basin.
- 33. The approval holder must submit a framework to make financial contributions to the program for the written approval of the Minister at least 3 years prior to the commencement of Stage 2. The approved framework must be implemented.
- 34. The approval holder must not commence **Stage 2** until it has provided notice, with documentary evidence, to the **Department** that the:
 - a. framework required under condition 33 has been approved by the Minister in writing; and
 - b. the first financial contribution has been made.
- 35. For each subsequent annual financial contribution, the approval holder must provide notice, with documentary evidence, to the **Department** within 20 **business days** after each such financial contribution has been made.
- 36. The activities funded by the program must target in the Bowen Basin, at a minimum:
 - a. translocation programs to translocate Koala and Greater Glider individuals from the project area during pre-clearance surveys and clearing to determine its success in reducing individual mortality and its effects on the population size of the Koala and Greater Glider;
 - revegetate, rehabilitate and restore habitat in the riparian zones associated with watercourses to create and maintain Koala and Greater Glider habitat connectivity;
 - c. surveys to determine Koala and Greater Glider population density and carrying capacity across the Bowen Basin; and
 - implement priorities identified in relevant recovery plans, threat abatement plans and/or approved conservation advices, and evaluate their success and cost effectiveness.
- 37. At a minimum, the following information, prepared by an independent suitably qualified expert, must be provided to the Department prior to commissioning each activity:
 - a. commitments, including financial commitments and proposed timeframes, that will be implemented to support the undertaking of the activity;
 - the proposed timeframe for undertaking the activity;
 - the independent suitably qualified expert/s who has designed and will implement the activity;
 - d. timing of a peer-review of the outcomes of the activity;
 - the proposed peer-reviewed scientific journal and/or other method/s to ensure the outcomes of the activity is made publicly available; and



Department of Agriculture, Water and the Environment

- f. details, with supporting evidence, of the consultation undertaken (including with the Queensland Government and relevant Recovery Teams) on how the activity can complement and/or align with other studies for the Koala and Greater Glider in the Bowen Basin.
- 38. The outcomes of each activity must be subject to a **peer-review** and must, at a minimum, be published on the approval holder's **website** for the remaining period of effect of this approval.
- 39. A review of outcomes from the financial contributions must commence 5 years after the date of the first financial contribution or as otherwise agreed by the Minister in writing. This review must take into account progress of each activity and any subsequent on-ground actions, as well as the involvement of other holders of approvals under the EPBC Act making financial contributions.
- 40. A detailed report of the outcomes of the review must be provided to the **Department** within 6 months of the date of commencement of the review.

Ripstone Creek Diversion - Greater Glider Habitat Connectivity

- 41. At least 15 years prior to the commencement of the Ripstone Creek Diversion, the approval holder must submit a Ripstone Creek Diversion Program (RCDP) for the written approval of the Minister to ensure Greater Glider (Petauroides volans) habitat connectivity is maintained along Ripstone Creek for the duration of this approval.
- 42. The RCDP must be prepared by a suitably qualified ecologist and include details, with detailed justification, of:
 - a. the activities, and associated timing, for the Ripstone Creek Diversion;
 - the description, ecological values and location (maps and shapefiles) of the existing Ripstone Creek channel to be impacted by the Ripstone Creek Diversion;
 - the extent (in hectares) and quality of Greater Glider (Petauroides volans) habitat in the
 existing Ripstone Creek channel to be impacted by the Ripstone Creek Diversion;
 - d. baseline data, including results from field validation surveys, and quantifiable ecological
 data on the quality of Greater Glider (Petauroides volans) habitat in the existing Ripstone
 Creek channel to be impacted by the Ripstone Creek Diversion;
 - the outcome to ensure Greater Glider (Petauroides volans) habitat connectivity is maintained along Ripstone Creek for the duration of this approval;
 - f. Ripstone Creek completion criteria to demonstrate that Greater Glider (Petauroides volans) habitat connectivity is maintained along Ripstone Creek;
 - Ripstone Creek interim milestones to track progress against ensuring the Ripstone Creek completion criteria are achieved;
 - proposed timing of Ripstone Creek interim milestones to track progress against achieving the Ripstone Creek completion criteria;
 - details of the actions, and timeframes for implementation, to be carried out to achieve the Ripstone Creek completion criteria;



- j. details of the nature, timing and frequency of monitoring to inform progress against achieving the Ripstone Creek interim milestones (the frequency of monitoring must be sufficient to track progress towards each set of milestones, and sufficient to determine whether the area of the Ripstone Creek Diversion is likely to achieve those milestones in adequate time to implement all necessary corrective actions);
- proposed timing for the submission of internal monitoring reports which provide evidence demonstrating whether the Ripstone Creek interim milestones have been achieved;
- proposed mitigation strategy, including corrective action/s and their timing, if monitoring activities indicate the Ripstone Creek interim milestones will not or have not been achieved; and
- m. a risk analysis and a risk management and mitigation strategy for all risks to the timely achievement of the Ripstone Creek completion criteria, including a rating of all initial and post-mitigation residual risks in accordance with the risk assessment matrix.

Note: The **Minister** may, throughout the RCDP approval process, seek advice from experts on the draft and/or revised RCDP proposed by the approval holder. As a consequence, specific matters identified through such advice may need to be addressed in a revised RCDP. Where such advice is sought, the approval holder will be provided with the opportunity to submit information and respond to the specific matters identified, in order to ensure the approved RCDP is based on the best available information.

- 43. The approval holder must not commence mining activities in the Ripstone Creek Pit (ODS9) until the RCDP has been approved by the Minister in writing. The approved RCDP must be implemented.
- 44. The approval holder must not commence the Ripstone Creek Diversion until it demonstrates, to the Minister's written satisfaction, that the Ripstone Creek completion criteria have been achieved.

Matters of National Environmental Significance (MNES) Management Plan

- 45. To avoid, mitigate and manage impacts of the action on the listed threatened species and community and their habitat, the approval holder must submit a MNES Management Plan for the written approval of the Minister. The MNES Management Plan must be prepared by a suitably qualified ecologist and in accordance with the Department's Environmental Management Plan Guidelines.
- 46. The MNES Management Plan must include:
 - a. details of specific environmental outcomes to be achieved for the listed threatened species and community and their habitat;
 - interim milestones that set targets at 5-yearly intervals to track progress against achieving the environmental outcomes;
 - c. details of the measures, and timeframes for implementation, that will be taken in the project area to avoid, mitigate and manage impacts on the listed threatened species and community and their habitat during clearance, construction, operation and decommissioning of the action, including but not limited to:



Department of Agriculture, Water and the Environment

- clearance of one corridor, of a maximum 45 metres in width, in the riparian zone of the Isaac River;
- ii. clearance of two corridors, of a maximum 60 metres in width, in the riparian zone of the Isaac River;
- clearance of two corridors, of a maximum 30 metres in width, in the riparian zone of Ripstone Creek;
- iv. no clearance in the riparian zones of the Isaac River and Ripstone Creek other than that specified in this approval;
- v. removal and exclusion of grazing from all riparian zones in the project area;
- vi. installation of rope ladder crossings of the cleared corridors in the riparian zones of the Isaac River and Ripstone Creek to maintain Greater Glider (Petauroides volans) habitat connectivity;
- vii. enforced vehicle speed limits of 60 kilometres/hour or less;
- viii. installation of Koala-proof fences, without barb-wire, in Koala (Phascolarctos cinereus) (combined populations of Qld, NSW and the ACT) habitat and Greater Glider (Petauroides volans) habitat;
- installation of Koala poles at Koala-proof fences, with proposed spacing, in Koala (Phascolarctos cinereus) (combined populations of Qld, NSW and the ACT) habitat;
- d. details on the specific timing, frequency and duration of the measures to be implemented;
- evidence of how the measures are based on best available practices, appropriate standards, and supported by scientific evidence;
- f. details on how the measures have been developed with consideration of the S.M.A.R.T principle;
- g. details of the nature, timing and frequency of monitoring to inform progress against achieving the 5-yearly interim milestones (the frequency of monitoring must be sufficient to track progress towards each set of milestones, and sufficient to determine whether the milestones are likely to be achieved in adequate time to implement all necessary corrective actions);
- timing for the submission of internal monitoring reports which provide evidence demonstrating whether the interim milestones have been achieved;
- timing for the implementation of corrective actions if monitoring indicates the interim milestones will not or have not been achieved;
- j. a risk analysis and a risk management and mitigation strategy for all risks to the successful implementation of the MNES Management Plan and timely achievement of the environmental outcomes, including a rating of all initial and post-mitigation residual risks in accordance with the risk assessment matrix; and



- evidence of how the measures and corrective actions take into account relevant approved conservation advices and are consistent with relevant recovery plans and threat abatement plans.
- 47. The approval holder must not commence the action until the MNES Management Plan has been approved by the Minister. The approved MNES Management Plan must be implemented.

Groundwater Dependent Ecosystem (GDE) Management Plan (GDEMP)

- 48. The approval holder must ensure there is no adverse effect on the ecological values of GDEs in, or within 2 kilometres of, the project area from water-related impacts as a result of mining activities of the action.
- 49. The approval holder must submit a GDEMP for the written approval of the Minister. The GDEMP must be prepared by a suitably qualified water resources expert and in accordance with the Department's Environmental Management Plan Guidelines. The GDEMP must include the following details, with detailed justification, of:
 - a. the location (including maps and shapefiles), extent (in hectares) and description of the ecological values of all GDEs derived from both desktop and site-specific field information;
 - a risk-based assessment approach method to determine all low risk GDEs, moderate risk
 GDEs, high risk GDEs and very high risk GDEs;
 - hydrogeological conceptual modelling and surface water modelling, including an
 ecohydrological model incorporating the stressor-response relationships for all GDEs, localscale numerical modelling and consideration of cumulative impacts;
 - d. how the modelling is fit-for-purpose to inform the site-specific assessment and the riskbased assessment approach;
 - a site-specific assessment to verify the results of modelling for predicted moderate risk
 GDEs, high risk GDEs and/or very high risk GDEs, including consideration of past monitoring data;
 - f. performance criteria, trigger values and limits for moderate risk GDEs, high risk GDEs and/or very high risk GDEs to demonstrate there will be no adverse effect on the ecological values of GDEs from water-related impacts as a result of mining activities of the action;
 - an ongoing monitoring program to ensure no adverse effect on the ecological values of GDEs is occurring, including a 12 monthly timeframe for updating all modelling;
 - a mitigation strategy, including separate corrective actions, for where trigger values have been reached and/or exceeded for moderate risk GDEs, high risk GDEs and/or very high risk GDEs to ensure limits are not reached and/or exceeded, and consideration of cumulative impacts;
 - timing for the submission of internal monitoring reports which provide evidence demonstrating performance against the trigger values and limits, including analysis of trends that indicate that reaching and/or exceeding a trigger value and/or limit is likely during or before the next reporting period;



Department of Agriculture, Water and the Environment

- j. a 3-year timeframe for updating all risk ratings derived from the risk-based assessment approach and undertaking, with proposed implementation timeframes, any outstanding site-specific assessments for new predicted moderate risk GDEs, high risk GDEs and/or very high risk GDEs;
- timing for the regular review of the GDEMP to assess the effectiveness of measures and/or corrective actions in ensuring no adverse effect on the ecological values of GDEs is occurring, including details of the effectiveness of updated model predictions;
- a process for updating the GDEMP to take into account any changes to the existing
 regulatory arrangements in place to avoid adverse effect on the ecological values of GDEs,
 not limited to legislation, standards or codes of practice, governance arrangements and
 existing controls; and
- m. timing for notifying the **Department** of whether an environmental offset in accordance with the principles of the **Environmental Offsets Policy** may be required to be implemented by the approval holder.
- 50. The approval holder must not commence mining activities of Stage 1 until the GDEMP has been approved by the Minister in writing. The approved GDEMP must be implemented.
- 51. The approval holder must, during the implementation of the GDEMP or a revised GDEMP under condition 78, undertake one or more of the provisions of conditions 52 to 64 if the **Minister** determines and notifies the approval holder in writing that the action has, or is likely to, reach and/or exceed an approved **trigger value**.

GDEMP Implementation and Offsets - Stage 1, Stage 2 and Stage 3

- 52. If the approval holder detects that a trigger value for moderate risk GDEs, high risk GDEs and/or very high risk GDEs has been reached and/or exceeded for Stage 1, Stage 2 or Stage 3, the approval holder must report this to the Minister within 5 business days of the detection.
- 53. For high risk GDEs and/or very high risk GDEs, and where a limit is predicted to be reached and/or exceeded after the next 12 months, the approval holder must submit a GDE Offset Strategy prepared by a suitably qualified water resources expert and suitably qualified person and in accordance with the principles of the Environmental Offsets Policy, for the written approval of the Minister. The GDE Offset Strategy must be submitted to the Department within 3 months of the detection as specified in condition 52.
- 54. For high risk GDEs and/or very high risk GDEs, and where a limit is predicted to be reached and/or exceeded within 12 months, the approval holder must submit a GDE Offset Management Plan, prepared by a suitably qualified water resources expert and suitably qualified person in accordance with the principles of the Environmental Offsets Policy, for the written approval of the Minister. The GDE Offset Management Plan must specify a timeframe for implementation and be submitted to the Department within 3 months of the detection as specified in condition 52.
- 55. The approval holder must not commence the next stage of the action until the GDE Offset Strategy and/or GDE Offset Management Plan has been approved by the **Minister** in writing. The GDE Offset Strategy must be implemented.



56. If the approval holder detects that a limit has been reached and/or exceeded for Stage 1, Stage 2 and/or Stage 3, the approval holder must report the detection to the Minister within 1 business day of the detection.

57. The approval holder must:

- a. within 5 business days of notifying the Minister of the detection as specified in condition 56, implement a GDE Offset Management Plan that has been approved by the Minister as required condition 55; and/or
- b. within 3 months of notifying the Minister of the detection as specified in condition 56, submit a GDE Offset Management Plan for the written approval of the Minister. The GDE Offset Management Plan must be prepared by suitably qualified water resources expert and suitably qualified person, and in accordance with the principles of the Environmental Offsets Policy.
- 58. The approved GDE Offset Management Plan/s required at condition 57 must be implemented for the remaining duration of this approval or a timeframe otherwise agreed to in writing by the Minister.
- 59. The approval holder must not commence the next stage of the action until the approved GDE Offset Management Plan is demonstrated, to the **Minister's** written satisfaction, to be achieving the approved offset completion criteria, or a timeframe otherwise agreed to in writing by the **Minister**.

GDE Implementation and Offsets - Stage 4

- 60. At least 3 years prior to the commencement of Stage 4, the approval holder must submit a Stage 4 GDE Offset Management Plan in the event that there is an adverse effect on the ecological values of GDEs as a result of Stage 4 for the written approval of the Minister. The Stage 4 GDE Offset Management Plan must be prepared by suitably qualified water resources expert and suitably qualified person in accordance with the principles of the Environmental Offsets Policy.
- 61. The approval holder must not commence Stage 4 until the Stage 4 GDE Offset Management Plan is approved by the Minister in writing.
- 62. If the approval holder detects that a **trigger value** has been reached and/or exceeded for **Stage 4**, the approval holder must, within 5 **business days** of the detection:
 - a. report this to the Minister; and
 - b. notify the Minister that the approved Stage 4 GDE Offset Management Plan may be implemented, with timing for implementation, where an adverse effect on the ecological values of GDEs is predicted or known to occur in less than 12 months.
- 63. If the approval holder detects that a limit has been reached and/or exceeded for Stage 4, the approval holder must:
 - a. report this to the Minister within 1 business day of the detection; and
 - implement the approved Stage 4 GDE Offset Management Plan required at condition 61 within 5 business days of the detection.



Department of Agriculture, Water and the Environment

64. The approved GDE Stage 4 Offset Management Plan must be implemented for the remaining duration of this approval or a timeframe otherwise agreed to in writing by the **Minister**.

Part B - Standard administrative conditions

Notification of date of commencement of the action and subsequent stages

- 65. The approval holder must notify the **Department** in writing of the date of the **commencement of the action** within 5 **business days** after the date of the **commencement of the action**.
- 66. If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the written agreement of the Minister.
- 67. The approval holder must notify the **Department** in writing of the date of the commencement of **Stage 2**, **Stage 3** and **Stage 4** respectively within 5 **business days** after the date of the commencement of **Stage 2**, **Stage 3** and **Stage 4** respectively.

Compliance Records

- 68. The approval holder must maintain accurate and complete compliance records.
- 69. If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request.

Note: Compliance records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the **Department's** website or through the general media.

Preparation and publication of plans

- 70. The approval holder must:
 - a. submit plans electronically to the Department;
 - b. unless otherwise agreed to in writing by the Minister, publish each plan on its website within 20 business days of the date of:
 - i. this approval; or
 - ii. the date a plan is submitted to the Department; or
 - iii. the date a plan has been approved by the Minister in writing;
 - exclude or redact sensitive ecological data from plans published on its website or provided to a member of the public; and
 - keep plans published on its website for the duration of this approval.
- 71. The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under conditions 5, 13, 21, 28, 43, 47, 50, 55, 58 and 61 is prepared in accordance with the **Department's** *Guidelines for biological survey* and mapped data (2018) and submitted electronically to the **Department** in accordance with the requirements of the **plans** within 2 months of each survey event.



Annual Compliance Reporting

- 72. The approval holder must prepare a **compliance report** for each 12 month period following the date of the **commencement of the action**, or otherwise in accordance with an annual date that has been agreed to in writing by the **Minister**. The approval holder must:
 - a. publish each compliance report on its website within 60 business days following the relevant 12 month period;
 - notify the Department by email that a compliance report has been published on its website within 5 business days of the date of publication;
 - keep all compliance reports publicly available on its website for the duration of this approval;
 - d. exclude or redact sensitive ecological data from compliance reports published on its website; and
 - e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.

Note: Compliance reports may be published on the Department's website.

Reporting Non-compliance

- 73. The approval holder must notify the **Department** in writing of any: **incident**; non-compliance with the conditions; or non-compliance with the commitments made in **plans**. The notification must be given as soon as practicable but no later than 2 **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:
 - a. the condition which is or may be in breach; and
 - b. a short description of the incident and/or non-compliance.
- 74. The approval holder must provide to the **Department** the details of any **incident** or noncompliance with the conditions or commitments made in the **plans** as soon as practicable but no later than 10 **business days** after becoming aware of the **incident** or non-compliance, specifying:
 - a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;
 - b. the potential impacts of the incident or non-compliance; and
 - the method and timing of any remedial action that will be undertaken by the approval holder.

Independent Audit

- 75. The approval holder must ensure that **independent audits** of compliance with the conditions of this approval are conducted when requested in writing by the **Minister**.
- 76. For each independent audit, the approval holder must:
 - a. provide the name and qualifications of the independent auditor and the draft audit criteria to the **Department**;



Department of Agriculture, Water and the Environment

- only commence the independent audit once the audit criteria have been approved in writing by the Department; and
- submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.
- 77. The approval holder must publish the audit report on its website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on its website for the duration of this approval.

Revision of management plans, program or strategy

78. The approval holder may, at any time, apply to the Minister for a variation to a management plan, program or strategy approved by the Minister under conditions 5, 13, 21, 28, 43, 50, 55, 58 and 61, or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves a revised management plan, program or strategy then, from the date specified by the Minister, the approval holder must implement the revised management plan, program or strategy in place of the previously approved management plan.

Completion of the action

79. Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data.

Part C - Definitions

In these conditions, except where contrary intention is expressed, the following definitions are used:

Adverse effect means a detection of reaching and/or an exceedance of a limit from water-related impacts as a result of mining activities of the action.

Aquatic GDEs means ecosystems dependent on the surface expression of groundwater, including:

- a. river baseflow systems, aquatic and riparian ecosystems that exist in or adjacent to streams (including the hyporheic zone) which are fed by groundwater; and
- wetlands (aquatic communities and fringing vegetation dependent on groundwater-fed lakes and wetlands), including palustrine and lacustrine wetlands that receive groundwater discharge, and spring and swamp ecosystems.

Approved conservation advice/s mean a conservation advice approved by the Minister under section 266B(2) of the EPBC Act.

Australian Painted Snipe (Rostratula australis) breeding habitat means all lacustrine and palustrine wetlands, including wetlands on Queensland Regional Ecosystems 11.3.27, 11.3.3 and 11.5.17. In the project area, it is shown by the solid purple areas in Attachment B.

Brigalow TEC means the Brigalow (*Acacia harpophylla* dominant and co-dominant) threatened ecological community as defined by the key diagnostic characteristics and condition thresholds in the *Approved Conservation Advice for the Brigalow* (Acacia harpophylla *dominant and co-dominant*)



ecological community (2013), or subsequent published revision. In the **project area**, it is shown outlined in yellow in <u>Attachment E</u>.

Business day/s means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.

Clear/ing/ance means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of vegetation (but not including weeds – see the Australian weeds strategy 2017 to 2027 for further guidance).

Commence mining activities means the first instance of mining activities.

Commencement of the action/commence the action means the first instance of any specified activity associated with the action including clearance and construction of any infrastructure. Commencement does not include minor physical disturbance necessary to:

- a. undertake pre-clearance surveys or monitoring programs;
- install temporary signage and/or fencing to prevent unapproved use of the project area;
 and
- protect environmental and property assets from fire, weeds and pests, including erection or construction of temporary fencing and signage, and maintenance or use of existing surface access tracks.

Completion data means an environmental report and spatial data information clearly detailing how the conditions of this approval have been achieved. The **Department's** preferred spatial data format is **shapefile**. This includes, but is not limited to the:

- a. area of each listed threatened species and community habitat cleared; and
- b. quality of each listed threatened species and community habitat in the environmental
 offset at the end date of this approval.

Completion of the action means the time at which all conditions except condition 79 have been fully met.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession or that are within the approval holder's power to obtain lawfully.

Compliance report/s means written report/s:

- a. providing accurate and complete details of compliance, incidents, and non-compliance with the conditions and plans;
- consistent with the Department's Annual Compliance Report Guidelines (2014) (or subsequent published revision);
- include a shapefile of any impact on any habitat for listed threatened species and community undertaken within the relevant 12 month period; and
- d. identifying the version/s of the **plans** prepared and in existence in relation to the conditions of this approval during the relevant 12 month period.



Department of Agriculture, Water and the Environment

Connectivity means no more than 2 cleared breaks of less than 10 metres in width in the **riparian zone** of Ripstone Creek.

CPI means the Consumer Price Index, sourced from the Australian Bureau of Statistics, based on the change for All Groups CPI over the June to June period (released at the end of June each year).

Defining bank means the bank which confines the seasonal flows of the particular watercourse or wetland but which may be inundated by flooding from time to time. This can be either:

- · the bank or terrace that confines the water before the point of flooding; or
- where there is no bank, the seasonal high water line which represents the point of flooding.

Note: The seasonal high water line means the zenith of the zone which represents the usual peak seasonal flow level and can be identified by the deposition of soil or debris or by characteristic vegetation zonation. If these characteristics are not present, the height of an evident seasonal high water line on the opposite bank must be used to record the same height on the near bank as the seasonal high water line.

Department means the Australian Government agency responsible for administering the EPBC Act.

Ecological values means the groundwater, surface water and ecosystem components (including organisms), processes and benefits/services that characterise and support the occurrence of **GDEs**, including support for biological diversity or species composition.

Environmental Offsets Policy means the EPBC Act Environmental Offsets Policy (2012), or subsequent published revisions, including the Offset Assessment Guide.

Environmental Management Plan Guidelines means the *Environmental Management Plan Guidelines* (2014), or subsequent published revisions.

EPBC Act means the Environment Protection and Biodiversity Conservation Act 1999 (Cth).

Greater Glider (*Petauroides volans***)** habitat means all areas of Eucalypt forests or woodlands that contain hollow-bearing trees. In the **project area**, it is shown by the light green areas under 'Species Habitat' in Attachment C.

Groundwater-dependent ecosystem/s (GDE/s) means aquatic GDEs, subterranean GDEs and terrestrial GDEs.

Impact/s/ed (verb) means to cause any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the action. Impact (noun) means any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the action.

Incident/s means any event which has the potential to, or does, impact on any protected matter.

Independent audit/s means an audit conducted by an independent and suitably qualified person as detailed in the EPBC Act Independent Audit and Audit Report Guidelines (2015), or subsequent published revision.

Independent suitably qualified expert means a person(s):

 that does not have individually, or by employment or family affiliation, any conflicting or competing interests with the approval holder and/or suitably qualified ecologist;



- with at least a postgraduate degree (or equivalent) in Greater Glider ecology and/or Koala ecology; and
- with a minimum 10 years of relevant experience in Greater Glider ecology and/or Koala ecology research, including at least 1 year experience in Australia.

Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) habitat means any forest or woodland (including remnant, regrowth and modified vegetation communities) containing species that are Koala food trees or any shrubland with emergent Koala food trees. In the **project area**, it is designated by 'Species Habitat' and 'Species Habitat – Koala' in <u>Attachment D</u>.

Legally secure/ing means to secure a legal agreement under relevant Queensland legislation, in relation to a site, to provide enduring protection for the site against development incompatible with conservation.

Limit/s means a threshold greater than a **trigger value** which, should it be reached and/or exceeded, means compensatory measures in accordance with the principles of the **Environmental Offsets Policy** are required.

Listed threatened species and community means the threatened fauna species and ecological community listed under the EPBC Act for which this approval has effect, including the:

- a. Koala (Phascolarctos cinereus) (combined populations of Qld, NSW and the ACT);
- b. Greater Glider (Petauroides volans);
- c. Squatter Pigeon (Southern) (Geophaps scripta scripta);
- d. Ornamental Snake (Denisonia maculata);
- e. Australian Painted Snipe (Rostratula australis); and
- f. Brigalow TEC.

Low risk/Moderate risk/High risk/Very high risk means as determined in accordance with the riskbased assessment approach method.

Mining activities means mining coal from the coal measures, including the removal of overburden and dependent water-related activities from the mining of coal.

Minister means the Australian Government Minister administering the EPBC Act including any delegate thereof.

Monitoring data means the data required to be recorded under the conditions of this approval.

Offset Assessment Guide means the guidance document titled *How to use the Offsets assessment guide*, which includes the requirements for **site habitat quality**, provided by the **Department** to assist users of the **Environmental Offsets Policy**.

Offset attributes means an '.xls' file capturing relevant attributes of the environmental offset, including:

- a. EPBC Act reference number;
- b. physical address of the environmental offset;



Department of Agriculture, Water and the Environment

- c. coordinates of the boundary points in decimal degrees;
- d. protected matters that the offset compensates for;
- e. any additional protected matters that are benefiting from the offset; and
 - f. size of the offset in hectares.

Offset information means the information requirements specified in Attachment A.

Ornamental Snake (*Denisonia maculata*) important habitat means gilgai mounds and depressions with cracking-clay soils, microhabitat features (i.e. logs, woody debris and leaf litter), and/or the known presence of prey [frogs], all lacustrine and palustrine wetlands (including wetlands on Queensland Regional Ecosystems 11.3.27, 11.3.3 and 11.5.17), and **Brigalow TEC**. In the **project area**, it shown by the light brown areas in <u>Attachment E</u>.

Peer-review means reviewed by at least 1 recognised subject matter expert independent to the suitably qualified ecologist and independent suitably qualified expert.

Performance indicator/s means specific evidence-based parameters, measured at a specific time and place, associated with and relevant to the **ecological values** of **GDEs** that will be monitored to demonstrate that there are no **adverse effect** on the **ecological values** of **GDEs**.

Plan/s means any of the documents required to be submitted to the **Department**, implemented by the approval holder and/or published on its **website** in accordance with these conditions.

Project area means the area (outlined in pink) defined as 'Olive Downs Project Mine Site and Access Road (EPBC 2017/7867)' in <u>Attachment H</u> to <u>Attachment K</u> of this approval.

Protected matter/s means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

Recovery plans means a recovery plan made or adopted by the Minister under the EPBC Act.

Riparian zone/s means the entire area within 100 metres from the defining bank of any watercourses and/or wetlands.

Ripstone Creek completion criteria means specific evidence-based parameters, measured at specific times and places, associated with and relevant to the connectivity of Greater Glider (Petauroides volans) habitat along Ripstone Creek that will be monitored to demonstrate that the approved outcome in the RCDP is achieved.

Ripstone Creek Diversion means the **clearance** and construction associated with the section of existing Ripstone Creek channel to be diverted as designated 'Section of Ripstone Creek to be Diverted' in Attachment L.

Ripstone Creek interim milestone/s means a threshold for the Ripstone Creek completion criteria that, should it not be or is unlikely to be reached (as demonstrated through monitoring), will require the approval holder to implement an appropriate response such that the Ripstone Creek completion criteria are achieved.

Ripstone Creek Pit (ODS9) means the area designated 'ODS9/Ripstone Creek Pit' in Attachment L.

Risk assessment matrix means the risk assessment matrix at Attachment G.



Sensitive ecological data means data as defined in the Australian Government Department of the Environment *Sensitive Ecological Data – Access and Management Policy V1.0* (2016), or subsequent published revision.

Shapefiles means a mapping file or files showing polygons outlining all site boundaries and delineating all relevant sub-zones on site. The shapefiles must use the GDA94 coordinate system, and be in either of the following formats:

- a KML file (file extension either '.KML' or '.KMZ'); or
- a zip folder using the '.zip' file extension (other formats such as '.7z' are not acceptable), and containing a single unique occurrence of each of '.shp', '.prj', '.dbf' and '.shx' file types.

If a '.zip' format is used, the shapefile may also contain unique occurrences of any or all of the following file types: '.qix', '.fix', '.sld', '.sbx', '.lyr', '.avl', '.xml' or '.cpg'. Each polygon must be provided as a separate '.zip' or KML file.

Site habitat quality is the score on a scale of 0 to 10 representing a site's utility for each listed threatened species and community, where zero ('0') represents a site of no value to the species, and '10' represents ideal habitat. Unless agreed otherwise by the Department, site quality must be comprised of 3 points for site condition, 3 points for site context, and 4 points for species stocking rate. These scores must be derived in accordance with the Queensland Guide to determining terrestrial habitat quality: A toolkit for assessing land based offsets under the Queensland Environmental Offsets Policy (Version 1.2, April 2017), or subsequent published revision.

Site-specific assessment/s means a baseline investigation which explains the scientific basis on which the description and location of impact/s and associated users, performance indicators, trigger values and limits have been derived, or not derived, to ensure that condition 48 will be achieved.

S.M.A.R.T principle means ensuring that every commitment is specific, measurable, achievable, relevant and time-bound.

Squatter Pigeon (Southern) (Geophaps scripta scripta) breeding habitat means any remnant or regrowth open-forest to sparse, open-woodland or scrub dominated by Eucalyptus, Corymbia, Acacia or Callitris species, on sandy or gravelly soils (including but not limited to areas mapped as Queensland land zones 3, 5 or 7) and where groundcover vegetation is less than 33% of the ground area, within 1 kilometre of a suitable, permanent or seasonal waterbody. In the project area, it is shown by the solid green areas under 'Species Habitat' in Attachment F.

Squatter Pigeon (Southern) (Geophaps scripta scripta) foraging habitat means any remnant or regrowth open-forest to sparse, open-woodland or scrub dominated by Eucalyptus, Corymbia, Acacia or Callitris species, on sandy or gravelly soils (including but not limited to areas mapped as Queensland land zones 3, 5 or 7) and where the groundcover vegetation is less than 33% of the ground area, within 3 kilometres of a suitable, permanent or seasonal waterbody. In the project area, it is shown by the solid light green areas under 'Species Habitat' in Attachment F.

Stage of the action means one of the following specified sequential parts of the action:

 Stage 1 means the components of the action associated with accessing, mining and rehabilitating in the light blue area designated 'Stage 1' in <u>Attachment H</u>.



Department of Agriculture, Water and the Environment

- Stage 2 means the components of the action associated with accessing, mining and rehabilitating in the light green area designated 'Stage 2' in Attachment I.
- Stage 3 means the components of the action associated with accessing, mining and rehabilitating in the purple area designated 'Stage 3' in Attachment J.
- Stage 4 means the components of the action associated with accessing, mining and rehabilitating the in dark brown area designated 'Stage 4' in <u>Attachment K</u>.

Subterranean GDEs means aquifer ecosystems, including stygofauna.

Suitably qualified ecologist means a person who has professional qualifications and at least 3 years of work experience designing and implementing surveys for the listed threatened species and community and their habitat, and can give an authoritative assessment and advice on the presence and habitat requirements of the listed threatened species and community using relevant protocols, standards, methods and/or literature.

Suitably qualified person means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

Suitably qualified water resources expert means a person with at least a postgraduate degree (or equivalent) in a suitable area (such as hydrology or hydrogeology) and a minimum 10 years relevant experience in water resources assessment, including at least 1 year experience in Australia.

Terrestrial GDEs means ecosystems partially or wholly dependent on the subsurface presence of groundwater.

Threat abatement plans means a threat abatement plan made or adopted by the Minister under the EPBC Act.

Trigger value/s means a threshold for the performance indicators that, should it be reached and/or exceeded (either through modelling and/or monitoring), will require the approval holder to implement an appropriate response such that a limit is not reached and/or exceeded and the threshold is no longer exceeded.

Water-related impacts mean the potential impacts on groundwater and surface water quantity and quality as a result of mining activities of the action, including but not limited to groundwater drawdown and the reduction in surface water catchments. This does not include clearance impacts.

Website means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.



Attachment A: Offset information requirements for the OAMP

Requirement	Information required				
Description	A description of the environmental offset, including location, size, condition, environmental values present and surrounding land uses.				
Baseline data	Baseline data, including results from field validation surveys, and quantifiable ecological data on habitat quality and other supporting evidence that documents the presence of each listed threatened species and community and the quality of habitat for each listed threatened species and community within the environmental offset.				
Site habitat quality	An assessment of site habitat quality using a method agreed to in writing by the Department .				
Connectivity and/or strategic offsets	Details of how the environmental offset will provide connectivity with other habitats and biodiversity corridors and/or will contribute to a larger strategic offset for each listed threatened species and community.				
Maps	Maps and shapefiles to clearly define the location and boundaries of the environmental offset, accompanied by offset attributes.				
Offset completion criteria	Specific offset completion criteria derived from the site habitat quality to demonstrate the improvement in the quality of habitat for each listed threatened species and community in the environmental offset over the period of effect of this approval.				
Management actions	Details of the management actions, and timeframes for implementation, to be undertaken to meet the offset completion criteria, including but not limited to: removal and exclusion of stock in the riparian zones; planting of a diversity of tree species native to the Bowen Basin region, in particular Eucalyptus species in riparian zones, and elsewhere in the environmental offset; and weed and feral animal management.				
Interim milestones	InterIm milestones that set targets at 5-yearly intervals for progress towards achieving the offset completion criteria.				
Monitoring program	Details of the nature, timing and frequency of monitoring to inform progress against achieving the 5-yearly interim milestones and maintaining improvements of habitat quality (the frequency of monitoring must be sufficient to track progress towards each set of milestones, and sufficient to determine whether the environmental offset is likely to achieve those milestones in adequate time to implement all necessary corrective actions).				
Monitoring reporting	Timing for the submission of internal monitoring reports which provide evidence demonstrating whether the interim milestones and offset completion criteria are likely to and/or have been achieved.				

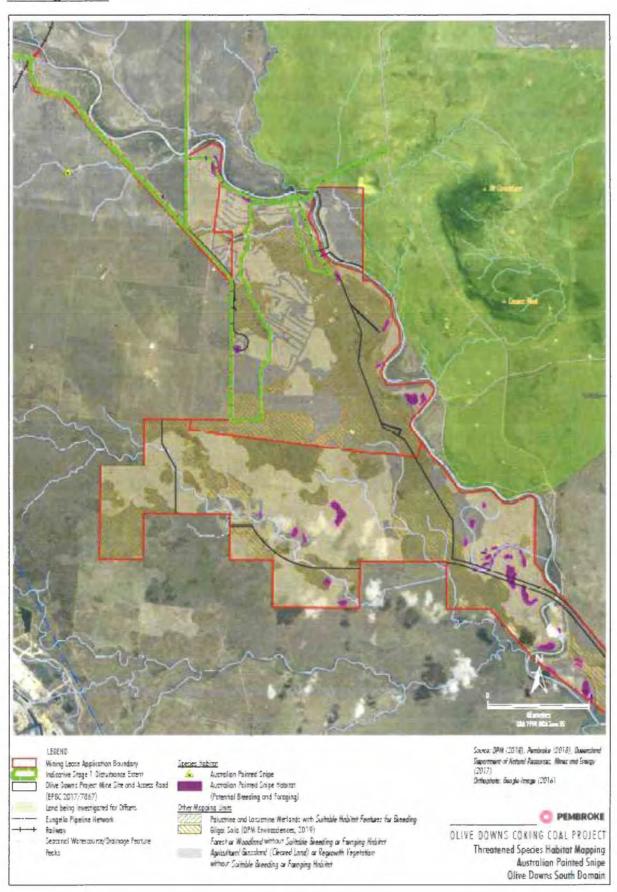


Department of Agriculture, Water and the Environment

Corrective actions	Timing for the implementation of corrective actions if monitoring activities indicate the interim milestones will not or have not been achieved.
Risk analysis	A risk analysis and a risk management and mitigation strategy for all risks to the successful implementation of the OAMP and timely achievement of the offset completion criteria, including a rating of all initial and post-mitigation residual risks in accordance with the risk assessment matrix .
EPBC Act documents	Evidence of how the management actions and corrective actions take into account relevant approved conservation advices and are consistent with relevant recovery plans and threat abatement plans.
Legal securing mechanism	Details of the legal mechanism for legally securing the environmental offset, such that legal security remains in force over the environmental offset for at least the period of effect of this approval.

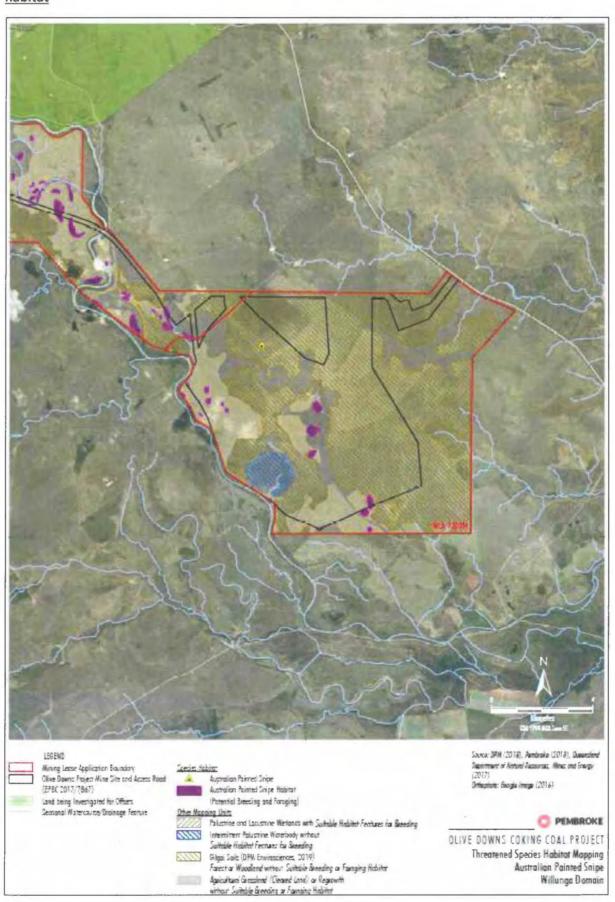


Attachment B (Part 1 – Olive Downs South Domain): Australian Painted Snipe (Rostratula australis) breeding habitat



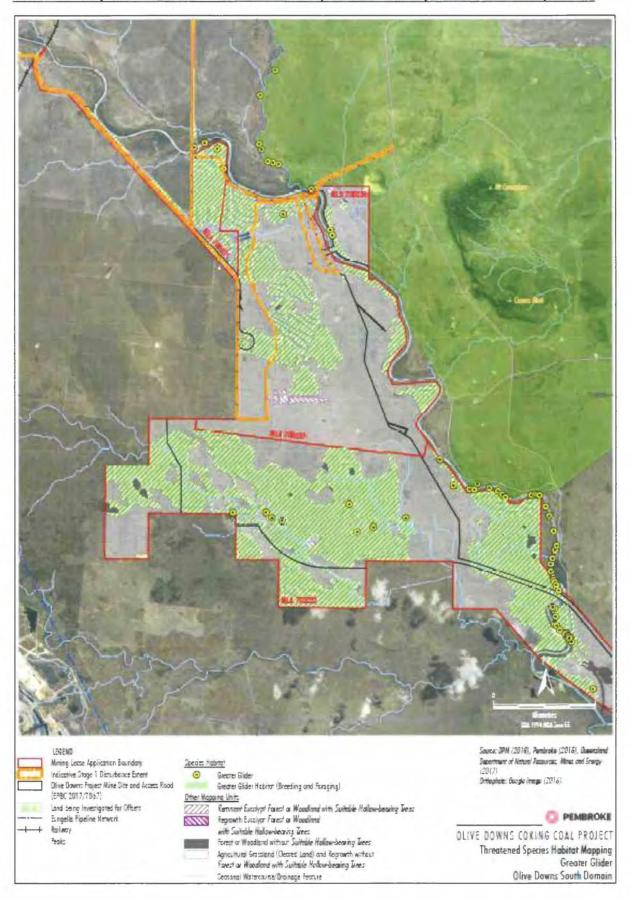


Attachment B (Part 2 – Willunga Domain): Australian Painted Snipe (Rostratula australis) breeding habitat





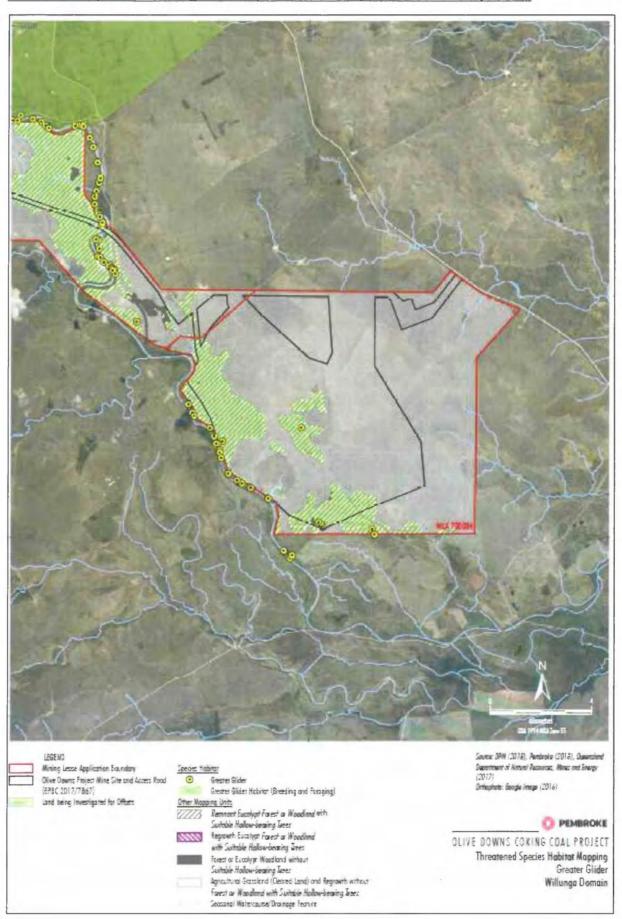
Attachment C (Part 1 - Olive Downs South Domain): Greater Glider (Petauroides volans) habitat





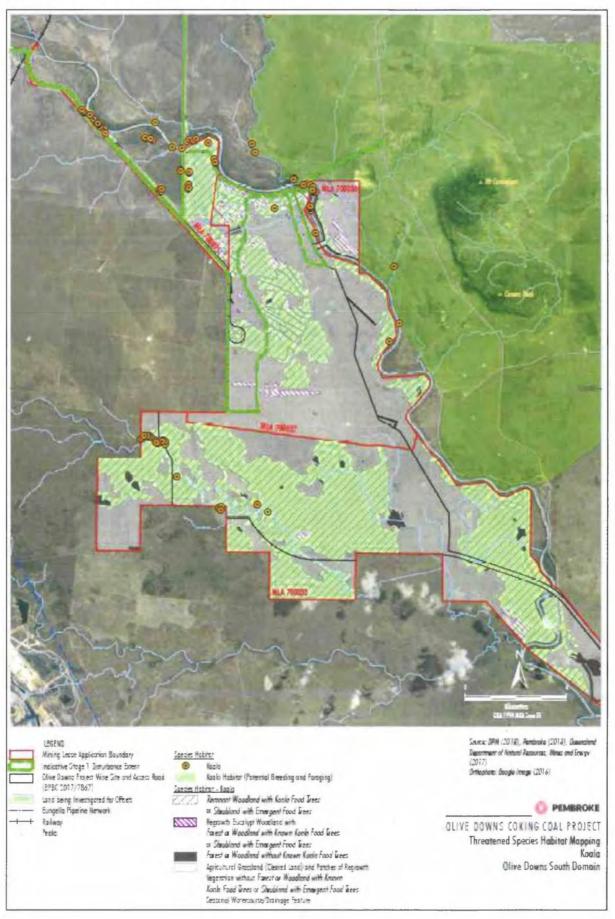
Department of Agriculture, Water and the Environment

Attachment C (Part 2 - Willunga Domain): Greater Glider (Petauroides volans) habitat





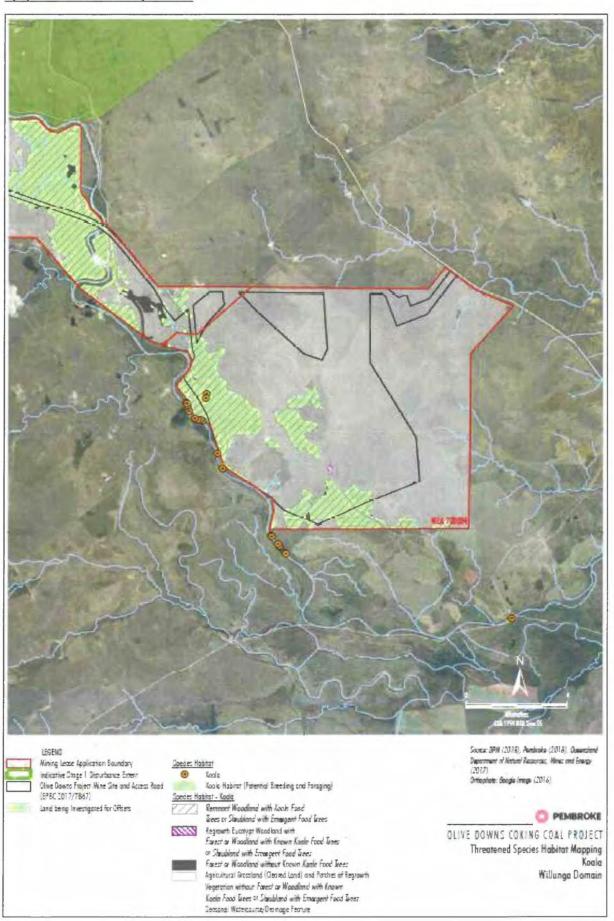
Attachment D (Part 1 – Olive Downs South Domain): Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) habitat





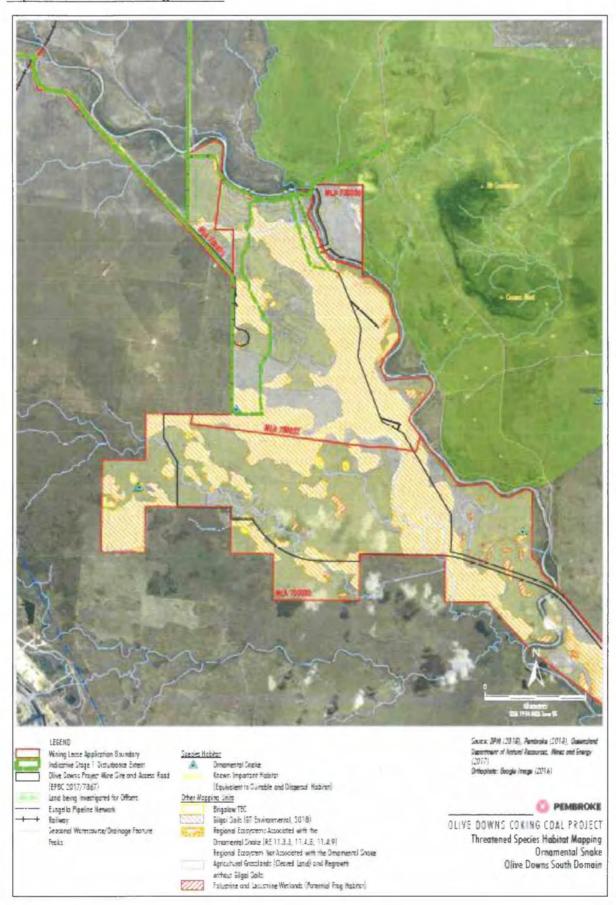
Department of Agriculture, Water and the Environment

Attachment D (Part 2 – Willunga Domain): Koala (Phascolarctos cinereus) (combined populations of Qld, NSW and the ACT) habitat





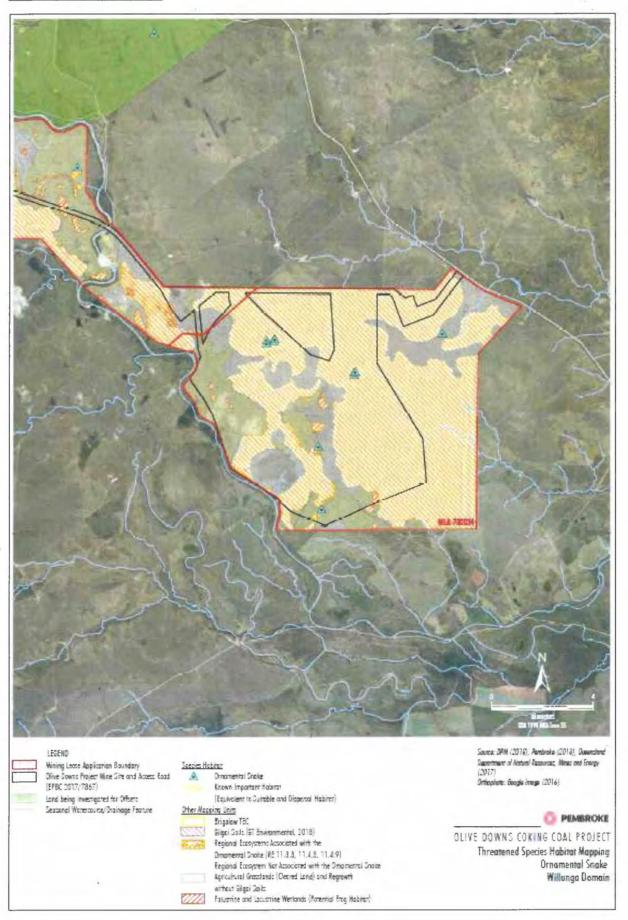
Attachment E (Part 1 – Olive Downs South Domain): Ornamental Snake (Denisonia maculata) important habitat and Brigalow TEC





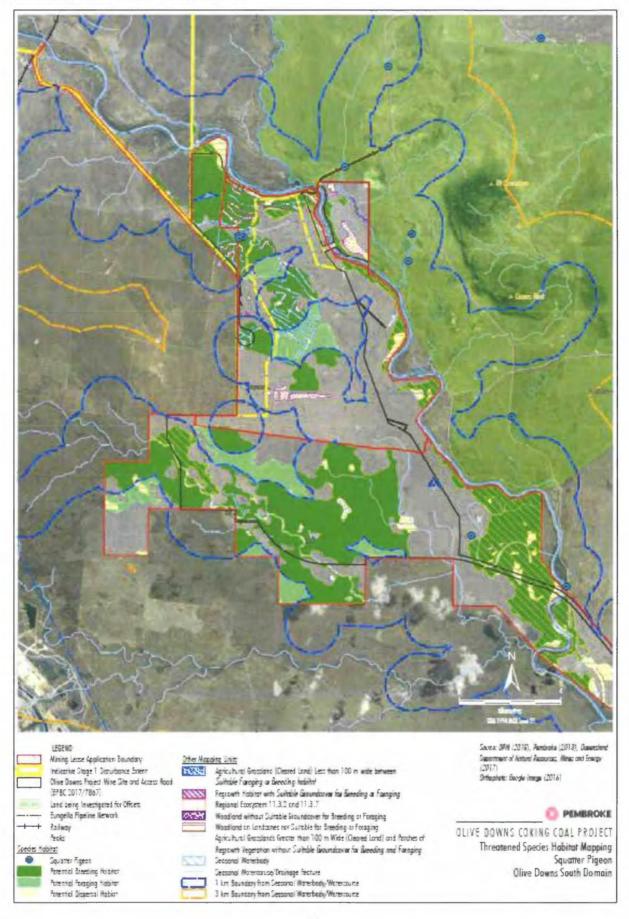
Department of Agriculture, Water and the Environment

Attachment E (Part 2 – Willunga Domain): Ornamental Snake (Denisonia maculata) important habitat and Brigalow TEC





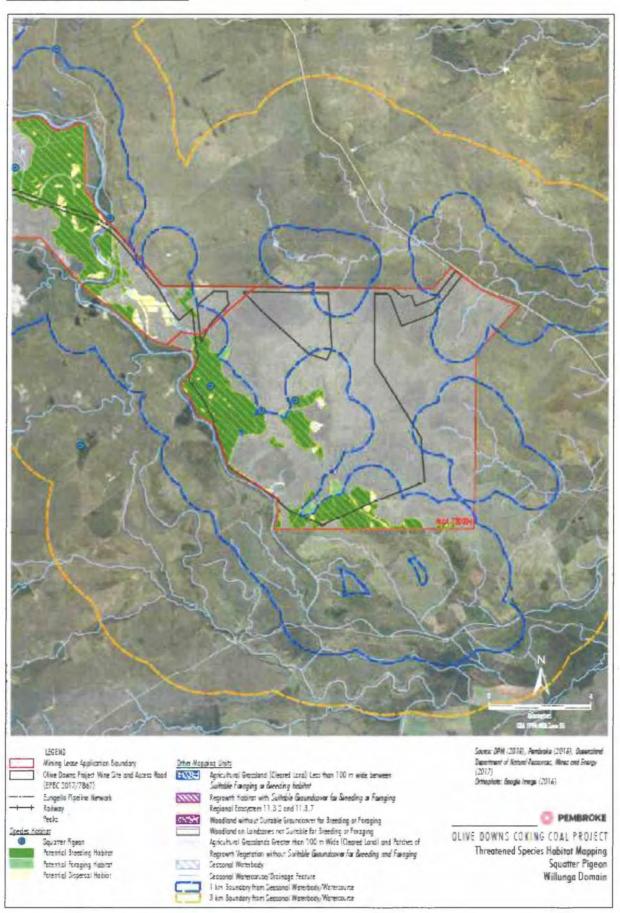
Attachment F (Part 1 – Olive Downs South Domain): Squatter Pigeon (Southern) (Geophaps scripta scripta) breeding and foraging habitat





Department of Agriculture, Water and the Environment

Attachment F (Part 2 – Willunga Domain): Squatter Pigeon (Southern) (Geophaps scripta scripta) breeding and foraging habitat



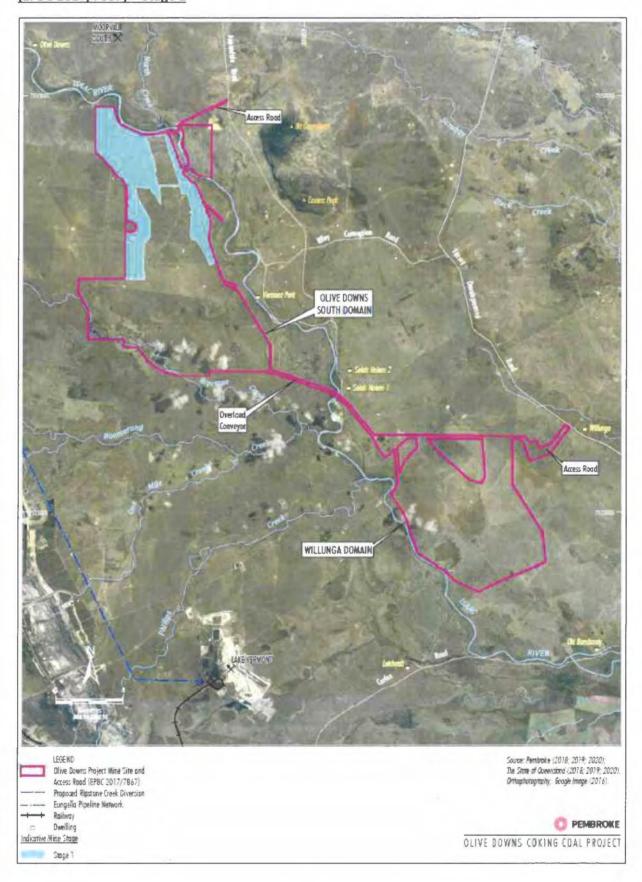


Attachment G: Risk Assessment Matrix

			RISK MATRIX	(
	ive measure of like s are implemented		s it that this event,	circumstances w	vill occur after ma	nagement	
Highiy likely	Is expected to	Is expected to occur in most circumstances					
Likely	Will probably o	ably occur during the life of the project					
Possible	Might occur du	Might occur during the life of the project					
Unlikely	Could occur bu	it considered unlik	ely or doubtful				
Hare	May occur in e	May occur in exceptional circumstances					
Qualitat	ive measure of con	sequences (what v	vill be the consequ	ence/result if the	e issue does occu	r)	
Minor	(e.g. short-tern	or incident of environmental damage that can be reversed . short-term delays to achieving plan objectives, implementing low-cost, well-characterised rective actions)					
Modera	efforts	hort term delays to achieving plan objectives, implementing well-characterised, high-cost/effort					
High		stances of environmental damage that could be reversed with intensive efforts ong term delays to achieving objectives, implementing uncertain, high-cost/effort ons)					
Major	(e.g. plan obje	nvironmental amenity and real danger of continuing tives are unlikely to be achieved, with significant legislative, technical, ecological strative barriers to attainment that have no evidenced mitigation strategies)					
Couest		read loss of enviro					
				Consequence			
		Minor	Moderate	High	Major	Critical	
2. Likelihood	Highly Likely	Medium	High	High	Severe	Severe	
	Likely	Low	Medium	High	High	Seven	
	Possible	Lów	Medium	Medium	High	Severe	
	Unlikely	Low	Low	Medium	High	High	
	Rare	Low	Low	Low	Medium	High	

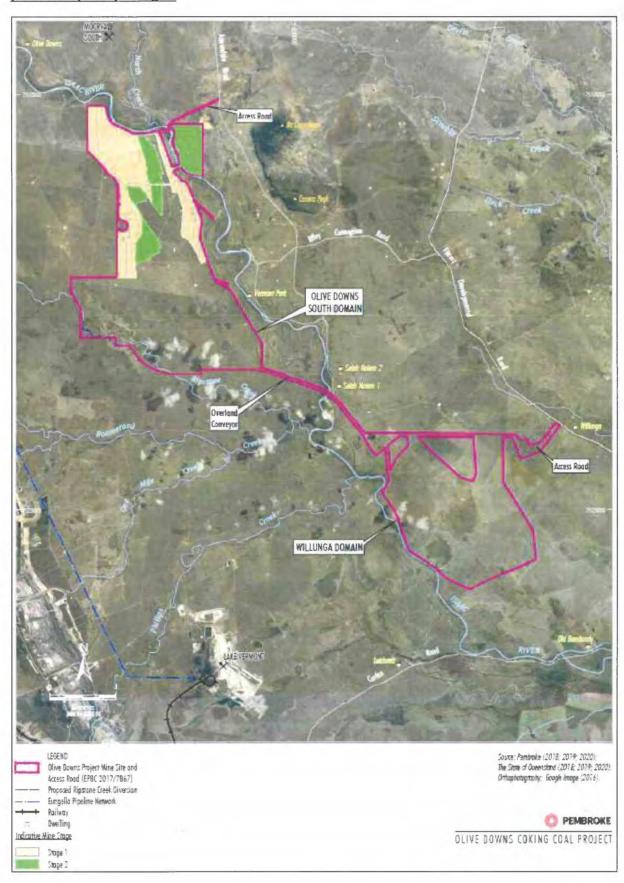


Attachment H: Proposed staging of the Olive Downs Project Mine Site and Access Road (EPBC 2017/7867) – Stage 1





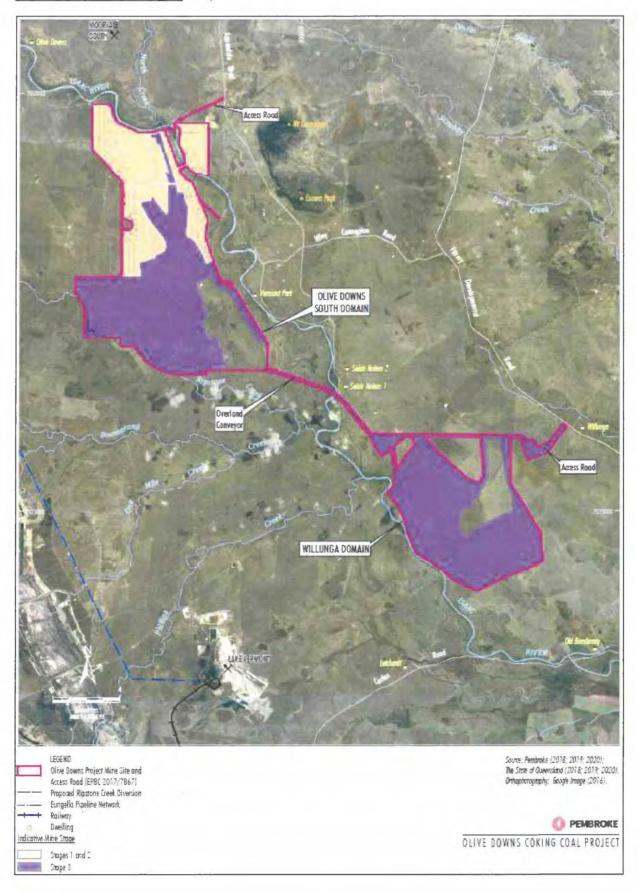
Attachment I: Proposed staging of the Olive Downs Project Mine Site and Access Road (EPBC 2017/7867) – Stage 2





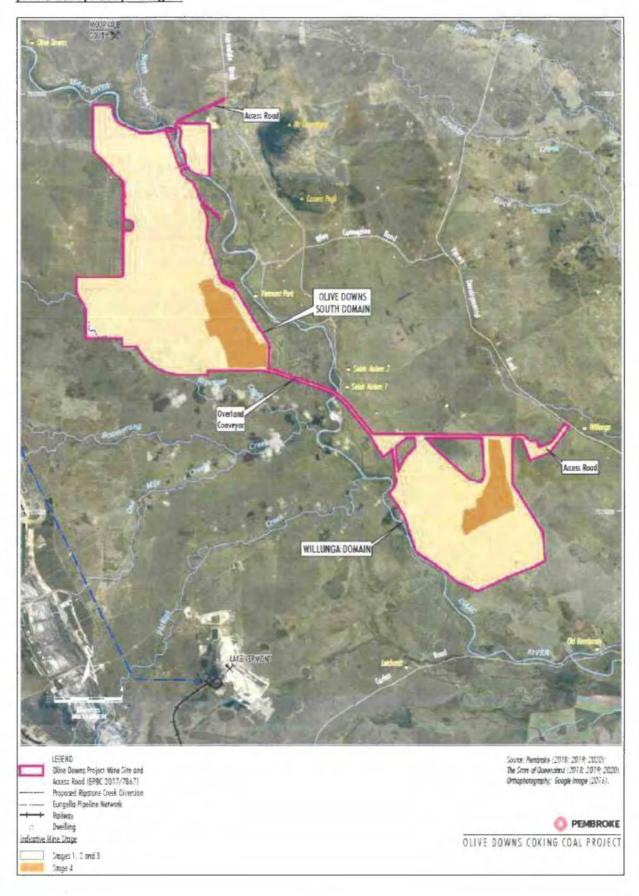
Department of Agriculture, Water and the Environment

Attachment J: Proposed staging of the Olive Downs Project Mine Site and Access Road (EPBC 2017/7867) – Stage 3





Attachment K: Proposed staging of the Olive Downs Project Mine Site and Access Road (EPBC 2017/7867) – Stage 4





Attachment L: Ripstone Creek Pit (ODS9) and Ripstone Creek Diversion

