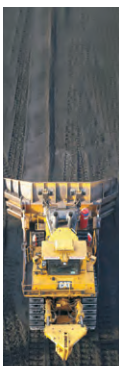
STRATFORDCOAL
Part of the Yancoal Australia Group

Stratford Extension Project
Environmental Impact Statement





APPENDIX H

EPBC ACT CONTROLLING PROVISIONS

STRATFORD EXTENSION PROJECT

EPBC ACT CONTROLLING PROVISIONS

STRATFORDCOAL
Part of the Yancoal Australia Group

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1 INTRODUCTION

The purpose of this document is to demonstrate how the Stratford Extension Project (the Project) Environmental Impact Statement (EIS) addresses the requirements of the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act) as a result of the decision by the Commonwealth Minister for Sustainability, Environment, Water, Population and Communities (the Commonwealth Minister) to declare the Project a controlled action under the EPBC Act.

The EPBC Act provides for the protection of the environment in Australia, especially matters of national environmental significance (Commonwealth Department of Sustainability, Environment, Population and Communities [SEWPaC], 2012a). Matters of national environmental significance include:

- World Heritage properties;
- National Heritage places;
- wetlands of international importance (Ramsar wetlands);
- threatened species and ecological communities;
- migratory species, marine and other species;
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park; and
- nuclear actions.

Stratford Coal Pty Ltd (SCPL) lodged a referral for the Project on the 3 November 2011 to determine whether the proposed action[1] needed formal assessment and approval under the EPBC Act. Under the EPBC Act, an action requires approval by the Commonwealth Minister if the action is likely to have a significant impact on a matter of national and environmental significance.

On 5 December 2011, a delegate of the Commonwealth Minister declared the Project to be a 'controlled action' for the purposes of the EPBC Act due to potential impacts on the following controlling provisions under Part 3 of the EPBC Act:

- listed threatened species and communities (sections 18 and 18A); and
- listed migratory species (sections 20 and 20A).

The delegate of the Commonwealth Minister also determined that the proposed action is to be assessed by accredited assessment under the New South Wales (NSW) *Environmental Planning Act,* 1979 (EP&A Act) pursuant to section 87(4) of the EPBC Act. A copy of the controlled action decision is provided in Attachment A of this document.

The Commonwealth of Australia and the NSW State Government have signed a bilateral agreement (Bilateral Agreement) which accredits the NSW assessment regime under Part 3A and Part 4 of the EP&A Act for assessment purposes under the EPBC Act. The Bilateral Agreement was signed in January 2007 and applies to actions that the Commonwealth Minister has determined are controlled actions under the EPBC Act.

[1] An action consists of a project, development, undertaking, activity, or a sequence of activities or an alteration of any of these things (SEWPaC, 2011a).

Guideline 1 of Schedule 1, Part A of the Bilateral Agreement states:

1. *In addition to standard guidelines and directions, the New South Wales Minister, the Director-General or the consent authority must issue guidelines*[1] *to proponents of controlled actions to ensure that material prepared by the proponent as part of the assessment:*

   (a) *contains an assessment of all relevant impacts that the controlled action has, will have or is likely to have;*

   (b) *contains enough information about the controlled action and its relevant impacts to allow the Commonwealth Environment Minister to make an informed decision whether or not to approve the controlled action under the* Commonwealth Environment Protection and Biodiversity Conservation Act 1999*; and*

   (c) *addresses the matters outlined in Schedule 4 of the* Commonwealth Environment Protection and Biodiversity Conservation Regulations 2000*.*

[1] *The New South Wales Minister, the Director-General or the consent authority may issue a generic set of guidelines or may issue guidelines on a case-by-case basis.*

The Project will be assessed in accordance with the Bilateral Agreement and would require approval under both the EP&A Act and the EPBC Act.

The Director-General's Requirements (DGRs) (Attachment 1 of the EIS) requires information about the controlled action and its relevant impacts and matters outlined in Schedule 4 of the EPBC Regulations to be addressed in this EIS. This report provides a reference list of the Commonwealth requirements listed in the DGRs (Attachment B) and the corresponding section of the EIS where the requirements are addressed.

This document is structured as follows:

Section 1 Introduction.

Section 2 Describes general information on other actions in the region and the current status of the action.

Section 3 Provides a description of the Project.

Section 4 Describes the relevant impacts of the controlled action on threatened species, ecological communities and migratory species.

Section 5 Outlines the proposed safeguards and mitigation measures.

Section 6 Describes the proposed offset area and environmental offset requirements.

Section 7 Details other approval conditions.

Section 8 Outlines economic and social matters.

Section 9 Describes the environmental record of the person proposing to take the action.

Section 10 Lists the matters regarding the EIS information sources.

Section 11 Outlines consultation.

Section 12 Lists the references cited in this document.

2 GENERAL INFORMATION

Table 1 provides a list of the matters regarding general information about the Project and the corresponding section of the Main Report of the EIS where the matters are addressed.

Table 1
Reconciliation of EIS against SEWPaC Requirements – General Information

Assessment Requirement	Main Report of the EIS Reference
General information	
1. The background of the action, including:	
a. the title of the action;	Section 1
b. the full name and postal address of the designated proponent;	Section 1.1.6
c. a clear outline of the objective of the action;	Section 1.1.3
d. the location of the action;	Section 1 and Figure 1-1
e. the background to the development of the action;	Section 1.1.2
f. how the action relates to any other actions (of which the proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;	Section 2.1 of this document
g. the current status of the action; and	Section 2.2 of this document
h. the consequences of not proceeding with the action.	Section 6.9

2.1 OTHER ACTIONS IN THE REGION

Existing and proposed coal mining and processing operations as well as coal seam gas development, exploration activities and public infrastructure projects in the vicinity of the Stratford Mining Complex that may potentially interact with the Project include:

- AGL Gloucester LE Pty Ltd's (AGL) Gloucester Gas Project;
- exploration activities undertaken by AGL, Gloucester Resources Limited (GRL) and Yancoal Australia Limited (Yancoal);
- GRL's proposed Rocky Hill Coal Project;
- the existing Duralie Coal Mine (DCM) (owned by Yancoal); and
- Stroud to Lansdowne 330kV Powerline Project.

Stage 1 of the Gloucester Gas Project was granted Project Approval (08_0154) under Part 3A of the EP&A Act by the Planning Assessment Commission in February 2011. AGL is the proponent of the Gloucester Gas Project. The Gloucester Gas Project includes works for the extraction of coal seam gas from the Gloucester Basin within Petroleum Exploration Licence 285. The Gloucester Gas Project was determined to be a 'controlled action' under the EPBC Act. The EPBC Act Part 3, Division 1 controlling provisions are Sections 16 and 17B (Wetlands of international importance) and Sections 18 and 18A (Listed threatened species and communities).

GRL is undertaking exploration activities within Exploration Licence (EL) 6523, EL 6524 and EL6563, north and west of the Stratford Mining Complex. The Gloucester Coal Seam Methane Gas Project EPBC Act referral (2008/4432) was submitted 29 August 2008. On 25 September 2008 it was deemed a 'controlled action' and would require assessment and approval under the EPBC Act. Yancoal is approved to undertake exploration activities within surrounding authorisations (AUTH 311 and AUTH 315), and EL 6904 to the south-east of the Stratford Mining Complex.

It is considered unlikely that any significant or sustained cumulative impacts would arise from the exploration activities being undertaken by Yancoal in the region as exploration activities are generally short-term, of a limited extent, and would be closely regulated by the NSW Division of Resources and Energy.

In February 2012, GRL also submitted *Documentation Supporting an Application for Director-General's Requirements for the Rocky Hill Coal Project* (R.W. Corkery and Co. Pty Limited, 2012) to the NSW Department of Planning and Infrastructure. The proposed Rocky Hill Coal Project is located largely within EL 6523 to the north of the Stratford Mining Complex and its interactions with the Project are considered further in Section 2.5.5 of the Main Report of the EIS. An EPBC Act Referral (EPBC 2012/6344) was submitted on 12 April 2012. The referral is currently receiving public comment.

The coal handling and preparation plant at the Stratford Mining Complex currently receives sized run-of-mine coal from the DCM for processing. Duralie Coal Pty Ltd (a wholly owned subsidiary of Yancoal) is the owner and operator of the DCM. The Duralie Extension Project at the DCM was approved on 26 November 2010. The Duralie Extension Project EPBC Act Referral (EPBC 2010/5396) was submitted 10 March 2010. The EPBC Act Referral was approved with conditions on 22 December 2010. Following subsequent litigation in the NSW Land and Environment Court (appeal upheld) a modified approval was ordered by the Court on 11 November 2011 (Project Approval 08_0203).

The Stroud to Lansdowne Transmission Line Project would involve construction of a single-circuit 330 kilovolt transmission line between Essential Energy's Stroud Substation and a new substation near Lansdowne (north of Taree). TransGrid is the proponent of the Stroud to Lansdowne Project. An EPBC Act Referral has not currently been submitted.

2.2 CURRENT STATUS OF THE ACTION

This action has not yet commenced. It is anticipated that the Project construction and operation activities would commence after all necessary approvals for the Project have been obtained. The Project construction/development activities would be progressively developed in parallel with ongoing mining operations at the Stratford Mining Complex.

3 DESCRIPTION OF THE PROJECT

Table 2 provides a list of the matters regarding the description of the controlled action and the corresponding section of the Main Report of the EIS where the matters are addressed.

Table 2
Reconciliation of EIS against Commonwealth Requirements –
Description of the Controlled Action

Assessment Requirement	Main Report of the EIS Reference
Description of the controlled action	
2. A description of the action, including:	
a. all the components of the action;	Sections 2.6 to 2.17
b. the precise location of any works to be undertaken, structures to be built or elements of the action that may have relevant impacts;	Sections 2.6 to 2.17 and Figure 2-1
c. how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;	Sections 2.6 to 2.17
d. the timing and duration of works to be undertaken; and	Sections 2.6 to 2.17
e. to the extent reasonably practicable, a description of any feasible alternatives to the controlled action that have been identified through the assessment and their likely impact, including:	
i. if relevant, the alternative of taking no action;	Section 6.9
ii. a comparative description of the impacts of each alternative on the matters protected by the controlling provisions for the action;	Section 6.9
iii. sufficient detail to clarify why any alternative is preferred to another.	Section 6.9

4 DESCRIPTION OF THE RELEVANT IMPACTS OF THE CONTROLLED ACTION

Table 3 provides a list of the matters regarding the description of the relevant impacts of the controlled action and the corresponding section of the EIS where the matters are addressed.

Table 3
Reconciliation of EIS against Commonwealth Requirements –
Description of the Relevant Impacts of the Controlled Action

Assessment Requirement	EIS Reference
A description of the relevant impacts of the controlled action	
4. An assessment of all relevant impacts[1] with reference to the EPBC Act Policy Statement 1.1 Significant Guidelines Matters of National Environmental Significance (2009) that the controlled action has, will have or is likely to have on: relevant threatened species and/or threatened ecological communities listed under sections 18 and 18A of the EPBC Act, including but not limited to the New Holland Mouse. Information must include:	
(a) a description of the relevant impacts of the action on matters of national environmental significance;	Appendices E and F of the EIS and Section 4 of this document
(b) a detailed assessment of the nature and extent of the likely short term and long term relevant impacts;	
(c) a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;	
(d) analysis of the significance of the relevant impacts;	
(e) any technical data and other information used or needed to make a detailed assessment of the relevant impacts.	
5. Where there is a potential habitat for EPBC Act listed species (Appendix A), surveys must be undertaken. These surveys must be timed appropriately and undertaken for a suitable period of time by a qualified person[2]. A subsequent description of the relevant impacts on such EPBC Act listed species should include, inter alia, direct, indirect, cumulative and facilitative impacts on the: *a. a description of the relevant impacts of the action on matters of national environmental significance;* *b. a detailed assessment of the nature and extent of the likely short term and long term relevant impacts;* *c. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;* *d. analysis of the significance of other relevant impacts;* *e. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.*	Appendix F of the EIS and Sections 4.1 and 4.2 of this document
If an endangered ecological community or threatened species listed at Appendix A is not believed to be present on the proposed site, detailed information must be included in the Environmental Assessment Report to provide certainty that this community will not be impacted.	Appendices E and F of the EIS and Sections 4.1 and 4.2 of this document

[1] The term 'relevant impact' is defined in section 82 of the EPBC Act.

[2] Where available, species-specific survey guidelines can be obtained on the department's *Species Profile and Threats Database*: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl

4.1 THREATENED SPECIES AND ECOLOGICAL COMMUNITIES

Table 4 outlines those species and communities suggested by SEWPaC as having potential to be affected by the Project, and how they were addressed.

Table 4
SEWPaC – Species and Communities to be Assessed

Suggested Species/Community for Surveys	Relevance	Reference
Threatened Ecological Community		
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Not present	Appendix E of the EIS
Threatened Flora		
Dwarf Heath Casuarina (*Allocasuarina defungens*)	Not present	Appendix E of the EIS
Leafless Tongue-orchid (*Cryptostylis hunteriana*)	Not present	Appendix E of the EIS
White-flowered Wax Plant (*Cynanchum elegans*)	Not present	Appendix E of the EIS
Slaty Red Gum (*Eucalyptus glaucina*)	Not present	Appendix E of the EIS
Euphrasia arguta	Not present	Appendix E of the EIS
Threatened Fauna		
New Holland Mouse (*Pseudomys novaehollandiae*)	Recorded in the Project area and surrounds.	Appendix F of the EIS
Swift Parrot (*Lathamus discolour*)	Not present. Potential habitat has been mapped.	Appendix F of the EIS
Long-nosed Potoroo (SE mainland) (*Potorous tridactylus tridactylus*)	Recorded in offset areas 3 and 4. Potential habitat has been mapped.	Appendix F of the EIS
Grey-headed Flying-fox (*Pteropus poliocephalus*)	Recorded outside of the Project area (in offset area 3). Potential habitat has been mapped.	Appendix F of the EIS
Regent Honeyeater (*Anthochaera phyrgia*), also Migratory	Not present. Potential habitat has been mapped.	Appendix F of the EIS
Green and Golden Bell Frog (*Litoria aurea*)	Not present. No potential habitat.	Appendix F of the EIS
Booroolong Frog (*Litoria booroolongensis*)	Not present. No potential habitat.	Appendix F of the EIS
Stuttering Frog (*Mixophyes balbus*)	Not present. No potential habitat.	Appendix F of the EIS
Giant Barred Frog (*Mixophyes iteratus*)	Not present. No potential habitat.	Appendix F of the EIS
Broad-headed Snake (*Hoplocephalus bengaroides*)	Not present. No potential habitat.	Appendix F of the EIS
Large-eared Pied Bat (*Chalinolobus dwyeri*)	Recorded outside of the Project area (in offset area 3). Potential habitat has been mapped.	Appendix F of the EIS
Spotted-tail Quoll (south-east mainland population) (*Dasyurus maculatus maculates*)	Not present. Potential habitat has been mapped.	Appendix F of the EIS
Brush-tailed Rock-wallaby (*Petrogale penicillata*)	Not present. No potential habitat.	Appendix F of the EIS
Hastings River Mouse (*Pseudomys oralis*)	Not present. No potential habitat.	Appendix F of the EIS
Australasian Bittern (*Botaurus poiciloptilus*)	Not present.	Appendix F of the EIS
Australian Painted Snipe *(Rostratula australis*), also Migratory	Not present.	Appendix F of the EIS

Table 4 (Continued)
SEWPaC – Requirements for Environmental Assessment

Suggested Species/Community for Surveys	Relevance	Reference
Migratory Species		
Fork-tailed Swift (*Apus pacificus*)	Some migratory species have been recorded (Section 4.2).	Appendix F of the EIS
Great Egret, White Egret (*Ardea alba*)		Appendix F of the EIS
Cattle Egret (*Ardea ibis*)		Appendix F of the EIS
Rainbow Bee-eater (*Merops ornatus*)		Appendix F of the EIS
Black-faced Monarch (*Monarcha melanopsis*)		Appendix F of the EIS
Rufous Fantail (*Rhipidura rufifrons*)		Appendix F of the EIS
Clamorous Reed-Warbler (*Acrocephalus stentoreus*)		Appendix F of the EIS
Double-banded Plover (*Charadrius bicinctus*)		Appendix F of the EIS
White-bellied Sea-eagle (*Haliaeetus leucogaster*)		Appendix F of the EIS
White-throated Needletail (*Hirunda caudacutus*)		Appendix F of the EIS
Spectacled Monarch (*Monarcha trivirgatus*)		Appendix F of the EIS
Satin Flycatcher (*Myiagra cyanoleuca*)		Appendix F of the EIS
Latham's Snipe, Japanese Snipe (*Gallinago hardwickii*)		Appendix F of the EIS
Painted Snipe (*Rostratula benghalensis*)		Appendix F of the EIS
Australian Painted Snipe (*Rostratula australis*), also Vulnerable		Appendix F of the EIS

Threatened Flora Species and Threatened Ecological Communities

No threatened flora species or Threatened Ecological Communities listed in the schedules of the EPBC Act were identified during the flora surveys.

Recent flora surveys have been undertaken for the Project using standard survey techniques (quadrats, spot samples and random meanders) in accordance with the NSW Office of Environment and Heritage (OEH) guidelines. Ecobiological (2011a) (Attachment A of Appendix E of the EIS) gathered flora data over three years (2007, 2008 and 2010) and FloraSearch (2012) (Appendix E of the EIS) gathered additional survey data in 2010 and 2011. The survey encompassed all native vegetation within the Project area in order to sample and identify all species present. All habitat types were surveyed to maximise the chance of finding populations of any threatened species.

Australian Museum Business Services (AMBS) (2011a) conducted surveys surrounding the Project for the Project environmental offset areas (Appendix F of the EIS). Further discussion of the Project environmental offset strategy is provided in Section 6.

Since the Stratford Mining Complex is an operating mine site there has been a number of flora surveys in the area for past environmental assessments. SCPL (1994a) and Dowling (2001) conducted flora surveys within and surrounding the Project area prior to the development of the existing Stratford Mining Complex. A review of these studies is provided in Appendix E of the EIS.

Targeted searches for threatened flora species and ecological communities were conducted as part of the above studies. A habitat assessment was undertaken for all potential threatened flora species which may occur in the Project area, as well as a vegetation condition assessment (Appendix E of the EIS). Potential habitat for threatened flora species was evaluated based on the habitat requirements of threatened species which could possibility occur in the Project area (Appendix E of the EIS).

Threatened Fauna Species

Recent fauna surveys have been undertaken for the Project (Ecobiological, 2011b, 2011c, 2011d; AMBS, 2011b, 2012a, 2012b; Kerle, 2011; Biosphere Environmental Consultants, 2011). All of these reports are provided in Appendix F of the EIS.

Ecobiological (2011b) undertook systematic surveys in the Project area and surrounds between 2007 and 2010. The terrestrial vertebrate fauna surveys were conducted over multiple seasons considering the relevant State and Commonwealth survey guidelines. The survey techniques included: Elliot trapping, cage trapping, bat call recording, harp traps, hair tubes, spotlighting, herpetological searches, bird census, call playback and searches for tracks and traces (Appendix F of the EIS).

Past surveys in the area include frog surveys (SCPL, 1994b; Murray, 1994; Mount King Ecological Surveys, 2001), general fauna surveys (Mount King Ecological Surveys, 2001), reptile surveys (SCPL, 1994b; Mount King Ecological Surveys, 2001), bird surveys (AGC Woodward-Clyde, 1994; Mount King Ecological Surveys, 2001) and bat surveys (Hoye and Finney, 1994; Hoye, 1998; Richards, 2001).

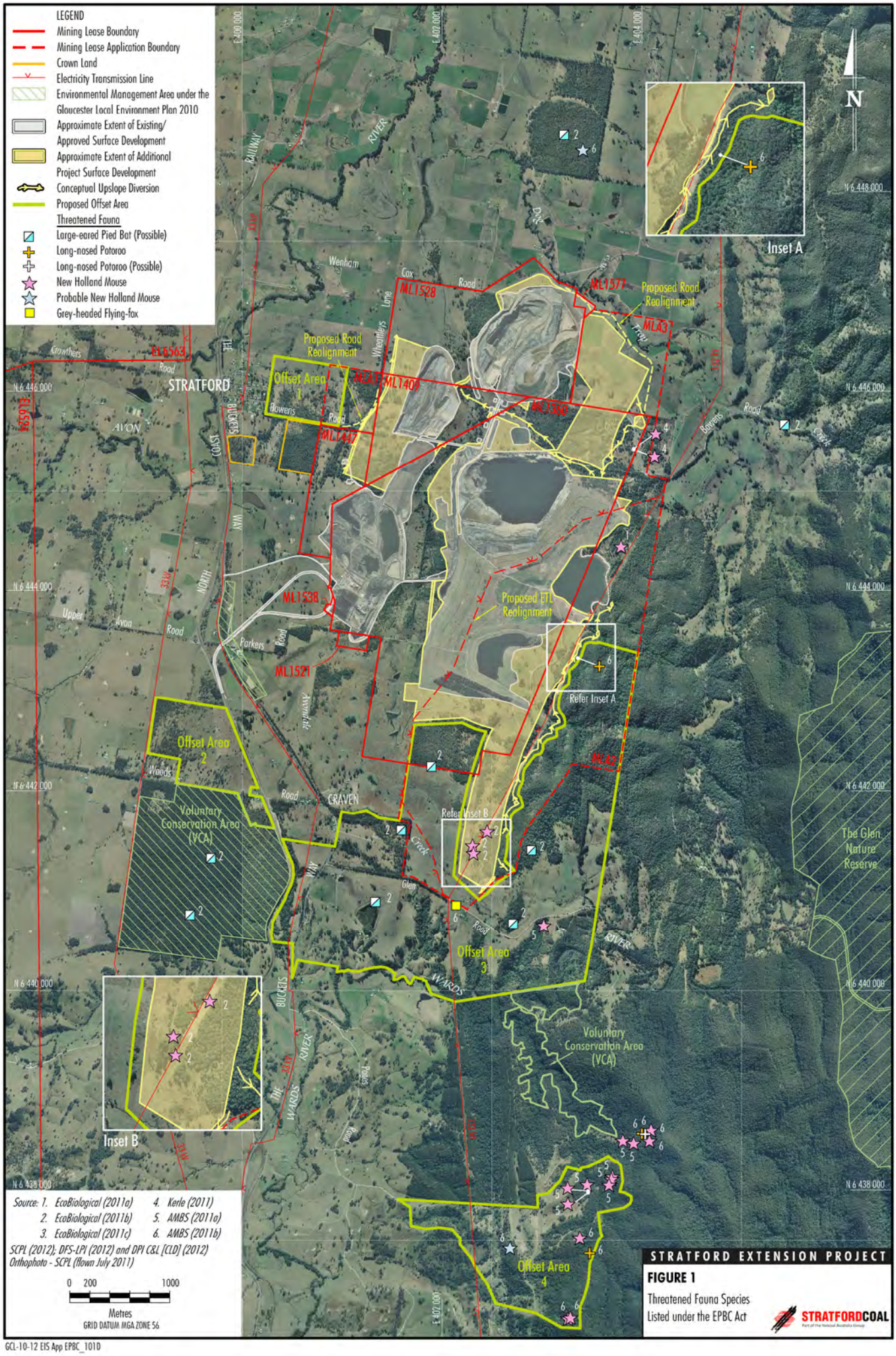
Targeted searches for threatened fauna species were conducted as part of the above studies. Targeted surveys for the New Holland Mouse were undertaken by Ecobiological (2011c), AMBS (2011b) and Dr Anne Kerle (Kerle, 2011). Biosphere Environmental Consultants (2011) undertook surveys in February 2011 along Dog Trap Creek that consisted of nocturnal surveys, call playback, tadpole surveys and habitat assessments.

Survey techniques followed EPBC Act guidelines such as those for threatened mammals, bats, birds and frogs (SEWPaC, 2011a, 2011b; Commonwealth Department of the Environment, Water, Heritage and the Arts [DEWHA], 2010a, 2010b, 2010c). Potential habitat for threatened flora species was evaluated based on the habitat requirements of threatened species which could possibility occur in the Project area (Appendix F of the EIS).

Three threatened fauna species listed under the EPBC Act were recorded during the surveys (Figure 1) *viz*. the Long-nosed Potoroo (SE mainland), New Holland Mouse and Grey-headed Flying-fox. There are potential habitat resources in the Project area for a further four threatened fauna species listed under the EPBC Act *viz*. Swift Parrot, Regent Honeyeater, Spotted-tailed Quoll (south-east mainland population) and Large-eared Pied Bat (Attachment C).

A habitat assessment was undertaken for all potential threatened fauna species which may occur in the Project area (Appendix F of the EIS).

In order to determine whether the Project is likely to have a significant impact on Matters of National Environmental Significance, such as threatened species and communities and migratory species, they were assessed under the Significant Impact Guidelines (DEWHA, 2009a). The likelihood of significant impacts from the Project on these species is assessed in Tables 5 to 11.



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4.1.1 Swift Parrot (*Lathamus discolour*)

AMBS (2012b) (Appendix F of the EIS) assessed the likelihood of significant impacts from the Project on the Swift Parrot (Table 5).

Table 5
Likelihood of Significant Impacts on the Swift Parrot – EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Lead to a long-term decrease in the size of a population?	No	The Project would involve the clearing of approximately 105 hectares (ha) of potential foraging habitat (Figure 2), and no breeding habitat would be disturbed. Considering the extensive foraging habitat that exists adjacent to the study area, it is unlikely that the Project would have an adverse effect on any populations of this species.
Reduce the area of occupancy of the species?	No	The area of occupancy for this species is unlikely to be affected given that extensive foraging habitat exists outside the study area and that potential habitat would be conserved and improved in the proposed offset areas.
Fragment an existing population into two or more populations?	No	The highly mobile nature of this species means that the Project would not be a barrier to migration and that no populations would be fragmented.
Adversely affect habitat critical to the survival of a species?	No	No critical habitat has been identified for this species. The Project would not involve the removal of any breeding habitat and extensive foraging habitat is present outside the study area, as such, it is unlikely that any critical habitat would be adversely affected.
Disrupt the breeding cycle of a population?	No	The Swift Parrot breeds in Tasmania during spring and summer before migration to the Australian mainland in winter (OEH, 2012). The removal of a small area of possible foraging habitat is unlikely to disrupt the breeding cycle of this species, especially considering the large areas of foraging habitat which exist adjacent to the study area, and the potential habitat that would be conserved and improved in the proposed offset areas.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	No	The clearing of a relatively small area of potential habitat as part of the Project would be unlikely to modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, especially considering the large areas of potential habitat which exist adjacent to the study area and that potential foraging habitat would be conserved and enhanced in the proposed offset areas. Further, additional areas of potential foraging would be created through the revegetation programme.
Result in invasive species that are harmful to critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat?	No	Predation by feral animals is not recognised as a threat within the recovery plan for this species (Swift Parrot Recovery Team, 2001). It is unlikely that there would be an increase in invasive species as a result of the Project at a scale that would affect the foraging habitat for this species. Further, a feral management programme would be implemented as part of the Project.
Introduce disease that may cause the species to decline?	No	Disease is not recognised as a current threat to this species and it is unlikely that the Project would introduce disease to this species.
Interfere with the recovery of the species?	No	A recovery plan has been prepared for the Swift parrot, which identifies the following six recovery actions: • Action 1. Identify the extent and quality of foraging habitat.. • Action 2. Manage Swift Parrot habitat at a landscape scale.. • Action 3. Reduce the incidence of collisions. • Action 4. Population and habitat monitoring. • Action 5. Community education and information. • Action 6. Manage the recovery process through a recovery team. The level of land clearing that would occur as a result of the Project (105 ha of native vegetation and 28 ha of cleared land) is unlikely to interfere with the recovery actions set for the Swift Parrot given that there are extensive tracts of bushland present immediately adjacent to the study area, and that potential foraging habitat would be conserved and improved in the proposed offset areas (490 ha of native vegetation and 40 ha of cleared land). Additional areas of habitat would also be created through the revegetation of cleared land (up to 435 ha) in the offset areas.

Source: AMBS (2012b) (Appendix F of the EIS).

[1] As defined by the *Matters of National Environmental Significance Significant Impact Guidelines 1.1* (DEWHA, 2009).

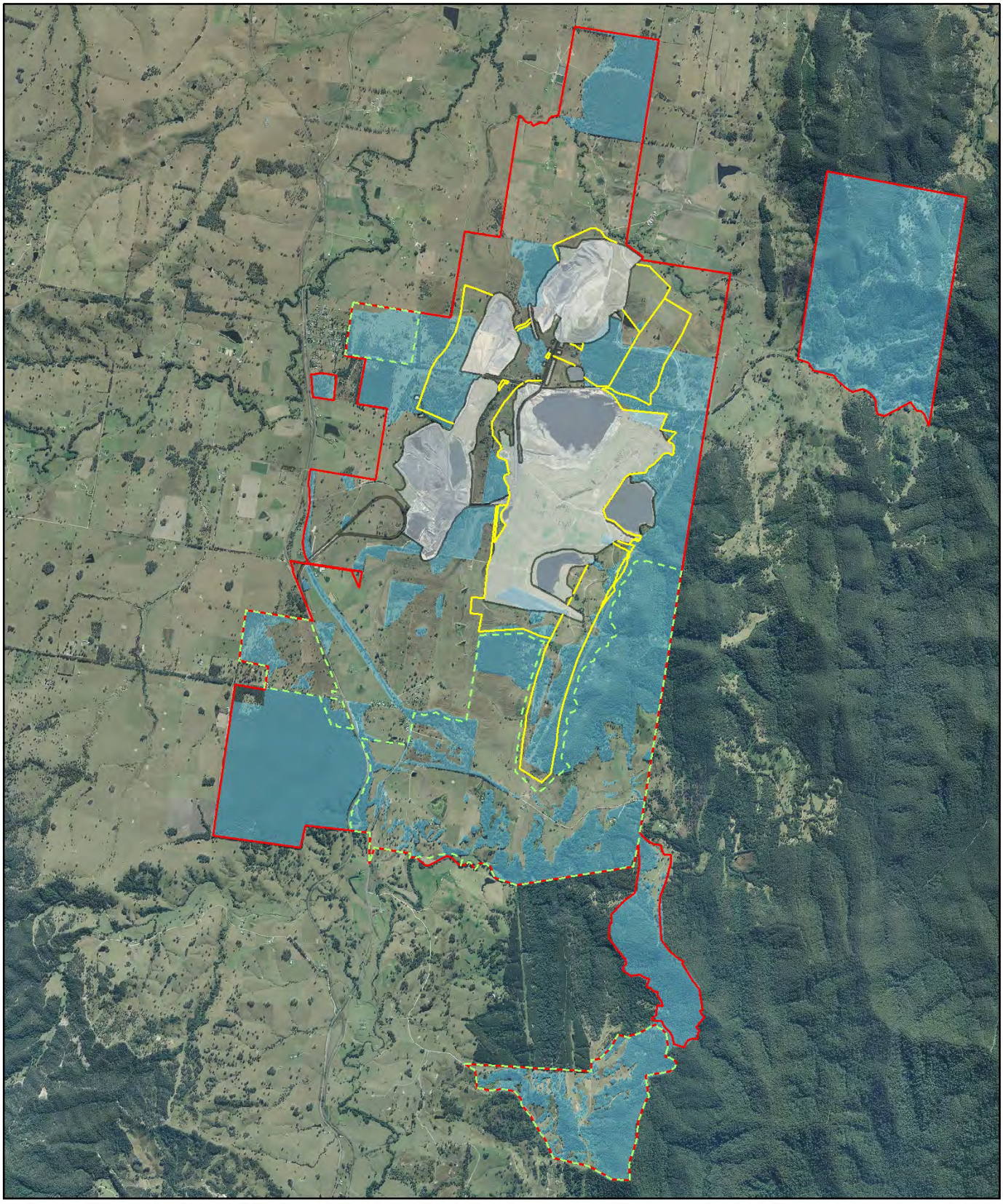


Figure 2: Swift Parrot - Potential Habitat

0 0.5 1 2 Kilometres

Notes: areas unmapped inside the study area are considered unlikely habitat where there is a low probability that the species would occur.

N

Legend

- Swift Parrot potential habitat
- Study Area
- Approximate Extent of Additional Project Surface Development
- Approximate Extent of Existing/Approved Surface Development
- Proposed Stratford Extension Project Offset Area

AMBS

AMBS (2012b) (Appendix F of the EIS) concluded that the Project would be unlikely to significantly impact upon the Swift Parrot given that:

- *from a regional perspective the Project would involve a small area of habitat loss relative to the extensive tracts of bushland which occur immediately adjacent to the study area;*
- *no breeding habitat would be disturbed;*
- *the proposed Offset areas will result in potential habitat for this species being conserved and improved in perpetuity; and*
- *cleared land within the Offset areas would be revegetated (up to 435 ha).*

4.1.2 Regent Honeyeater (*Anthochaera phrygia*)

The Regent Honeyeater feeds on a number of species of eucalypt within the Project area, although the three species of eucalypt that are the predominant nectar sources: Red Ironbark (*Eucalyptus sideroxylon)*, White Box (*Eucalyptus albens*) and Yellow box (*Eucalyptus melliodora*) (Webster and Menkhorst, 1992) were not recorded in the Project area. There is potential foraging habitat for the species (Figure 3), but there are no records for the species in the locality. It is only likely to occur as a very rare vagrant.

AMBS (2012b) (Appendix F of the EIS) assessed the likelihood of significant impacts from the Project on the Regent Honeyeater (Table 6).

Table 6
Likelihood of Significant Impacts on the Regent Honeyeater – EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Lead to a long-term decrease in the size of a population?	No	The Project involves the clearing of 105 ha of possible foraging habitat. In relation to the extensive foraging habitat that exists adjacent to the study area, and the potential habitat that would be conserved and improved in the proposed offset areas (490 ha), it is unlikely to affect any populations of this species.
Reduce the area of occupancy of the species?	No	The area of occupancy for this species is unlikely to be affected given that the species was not recorded during the current survey and that extensive foraging habitat exists outside the study area.
Fragment an existing important population into two or more populations?	No	The highly mobile nature of this species means that the Project would not be a barrier to migration and that no populations would be fragmented.
Adversely affect habitat critical to the survival of a species?	No	No critical habitat has been identified for this species. Three key breeding areas are known, and none are close to the Project area. As the Project would not involve the removal or disturbance of any key breeding habitat and extensive foraging habitat is present outside the study area, it would be unlikely that any important habitat would be adversely affected.
Disrupt the breeding cycle of a population?	No	In NSW, the distribution of the Regent Honeyeater is mainly confined to two breeding areas, and surrounding fragmented woodlands, in the Capertee Valley and the Bundarra-Barraba region (OEH, 2012). In some years, non-breeding flocks converge on flowering coastal woodlands and forests (OEH, 2012). The removal of a small area of possible forging habitat as a result of the Project is unlikely to disrupt the breeding cycle, especially considering the large areas of foraging habitat which exist adjacent to the study area and the potential habitat that would be conserved and improved in the proposed offset areas. Further, additional habitat would be created through revegetation of cleared land (up to 435 ha) in the offset areas.

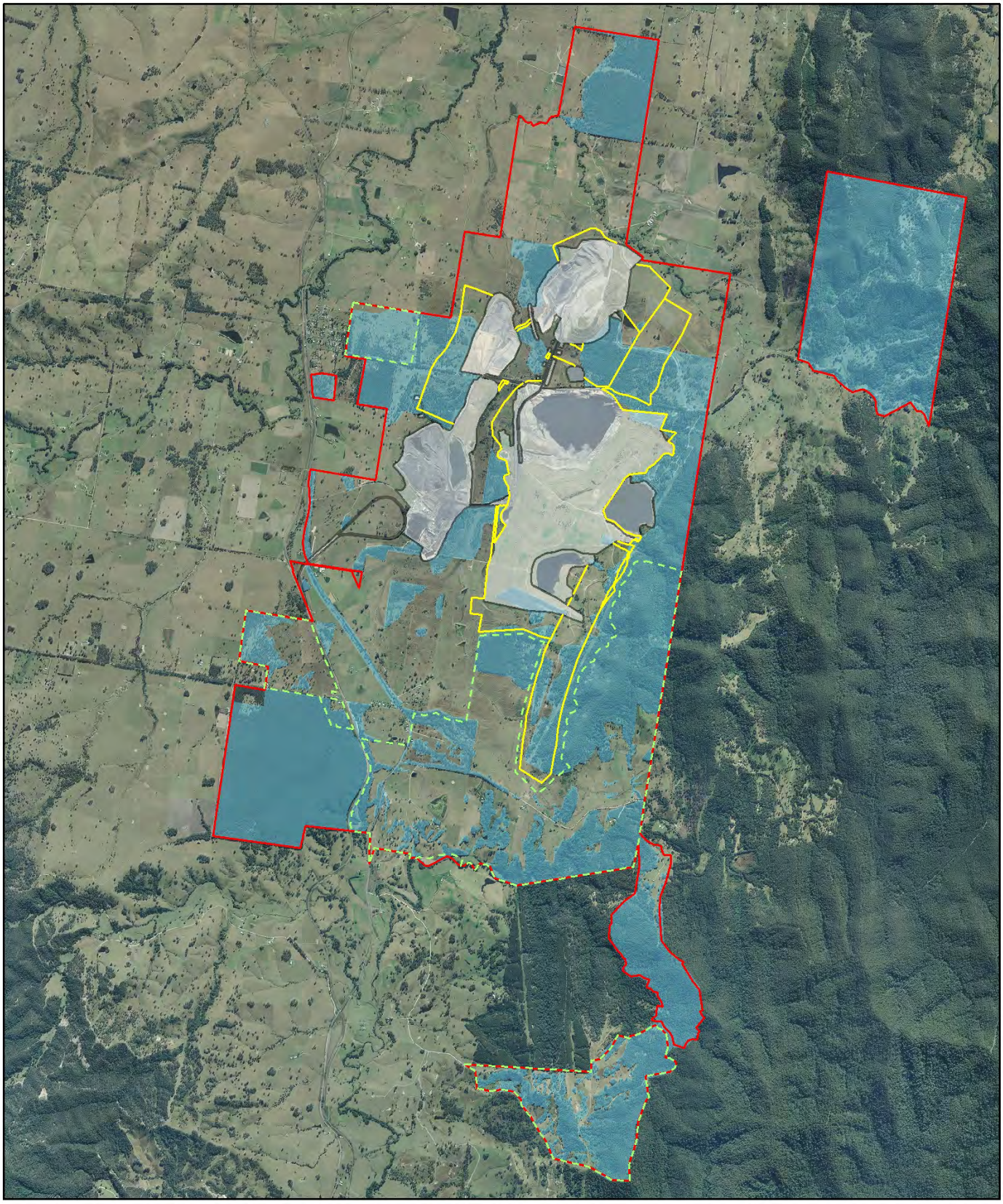


Figure 3: Regent Honeyeater - Potential Habitat

Notes: areas unmapped inside the study area are considered unlikely habitat where there is a low probability that the species would occur.

Table 6 (Continued)
Likelihood of Significant Impacts on the Regent Honeyeater – EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	No	The clearing of a relatively small area of potential foraging habitat would be unlikely to modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, especially considering the large areas of potential habitat which exist adjacent to the study area and the potential habitat that would be conserved and improved as a result of the proposed offset area. Further, additional habitat would be created through revegetation of cleared land (up to 435 ha) in the offset areas, which may benefit the species in the future.
Result in invasive species that are harmful to critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat?	No	Predation by feral animals is not recognised as a threat to the Regent Honeyeater and it is unlikely that there would be an increase in invasive species as a result of the Project at a scale that would affect the foraging habitat for this species. Nonetheless, the Project would include a feral animal control programme.
Introduce disease that may cause the species to decline?	No	Disease is not recognised as a current threat to this species and it is unlikely that the Project would introduce disease to this species.
Interfere substantially with the recovery of the species?	No	No recovery plan has been prepared for the Regent Honeyeater, but there are a number of suggested recovery actions outlined in the OEH species profile for this species (OEH, 2012). Of these recovery actions three are relevant to the Project: • No loss of mature key nectar tree species and minimise the removal of mistletoes at key sites. • Protect and enhance key breeding and foraging habitats. • Encourage natural regeneration and increase the remnant size of known and potential Regent Honeyeater habitats. The small clearing proposed as part of the development is unlikely to interfere with the recovery actions set for the Regent Honeyeater, given that no key nectar tree species were observed in the study area, and the clearing would not impact on any known key breeding or foraging areas. In addition, potential habitat for this species would be conserved and improved in the offset areas, and additional habitat would be created through the revegetation of cleared lands.

Source: AMBS (2012b) (Appendix F of the EIS).

[1] As defined by the *Matters of National Environmental Significance Significant Impact Guidelines 1.1* (DEWHA, 2009).

AMBS (2012b) (Appendix F of the EIS) concluded that the Project would be unlikely to significantly impact upon the Regent Honeyeater given that:

- *the Project would not impact on any known key breeding areas;*
- *no key nectar feed trees would be removed;*
- *from a regional perspective, the area of vegetation proposed to be removed is considered minimal in comparison to the large areas of available habitat in the surrounding area;*
- *the proposed Offset areas would conserve and improve potential habitat for the species in perpetuity; and*
- *cleared land within the Offset areas would be revegetated (up to 435 ha).*

4.1.3 Spotted-tailed Quoll (south-east mainland population) (*Dasyurus maculatus maculatus*)

AMBS (2012b) (Appendix F of the EIS) assessed the likelihood of significant impacts from the Project on the Spotted-tailed Quoll (south-east mainland population) (Table 7). The Assessment of Significance is in accordance with the SEWPaC significance impact guidelines, EPBC Act Policy Statement 3.4 (DEWHA, 2009b).

Table 7
Likelihood of Significant Impacts on the Spotted-tailed Quoll – EPBC Act Assessment

Assessment Criteria Is the Project likely to:	**Assessment**	
Lead to a long-term decrease in the size of an important population of a species?	No	The Project would result in the removal of a relatively small amount (105 ha) of potential foraging habitat (Figure 4), and a number of hollow bearing trees, which could potentially provide den sites for this species. However, the areas of potential habitat that would be impact are unlikely to be preferred habitat, given the existing levels of fragmentation and the low abundance of old growth features. More suitable habitat is likely to occur east of the Project area. Given the large home ranges of this species and that extensive habitat exists adjacent to the study area, including in the proposed offset areas (457 ha), the clearing of a relatively small area of potential habitat is unlikely to lead to a long-term decrease in the size of a population.
Reduce the area of occupancy of an important population?	No	The area of occupancy for this species is unlikely to be affected given that the species was not recorded during the current survey and that extensive less fragmented habitat exists outside the study area, including in the proposed offset areas.
Fragment an existing important population into two or more populations?	No	The Project would be unlikely to create any additional barriers to migration for any local populations. Two areas of potential habitat would be further fragmented as a result of the proposed Avon North Open Cut and the Stratford East Open Cut. However, this species has not been recorded in those areas despite recent surveys, and are unlikely to constitute preferred habitat for the species. Therefore, the Project is not likely to fragment existing populations of this species.
Adversely affect habitat critical to the survival of a species?	No	No critical habitat has been identified for this species. The relatively small area (105 ha) of potential habitat that would be cleared as a result of the Project is unlikely to be critical to the survival of the species given the large areas of less fragmented potential habitat that occur outside the study area, including in the proposed offset areas (457 ha).
Disrupt the breeding cycle of an important population?	No	The removal of a relatively small area of potential habitat, which does not include any known den sites, would be unlikely to disrupt the breeding cycle of this species, especially considering the large areas of potential foraging habitat which exist adjacent to the study area. Old growth features of a size suitable for the species are uncommon within the Project area. In addition, potential den habitat (e.g. large logs) would be relocated to suitable areas as part of the impact mitigation measures.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	No	The clearing of a relatively small area of potential habitat as a result of the Project is unlikely to modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, especially considering the large areas of less fragmented potential habitat which exist adjacent to the study area, including better quality habitat in the proposed offset areas (457 ha).
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat?	No	Competition for food and predation by foxes and cats are recognised as harmful to this species (Edgar and Belcher, 1995; Dickman and Read, 1992). It is unlikely that there would be an increase in cats or foxes as a result of the project. Nonetheless, a pest management strategy is part of the management measures for the Project.
Introduce disease that may cause the species to decline?	No	Cats may spread parasitic protozoan epidemics to Quolls (Edgar and Belcher, 1995; Dickman and Read, 1992). It is unlikely that the Project would result in an increased number of cats within the study area considering a pest management strategy is proposed as part of the management strategy for the Project.

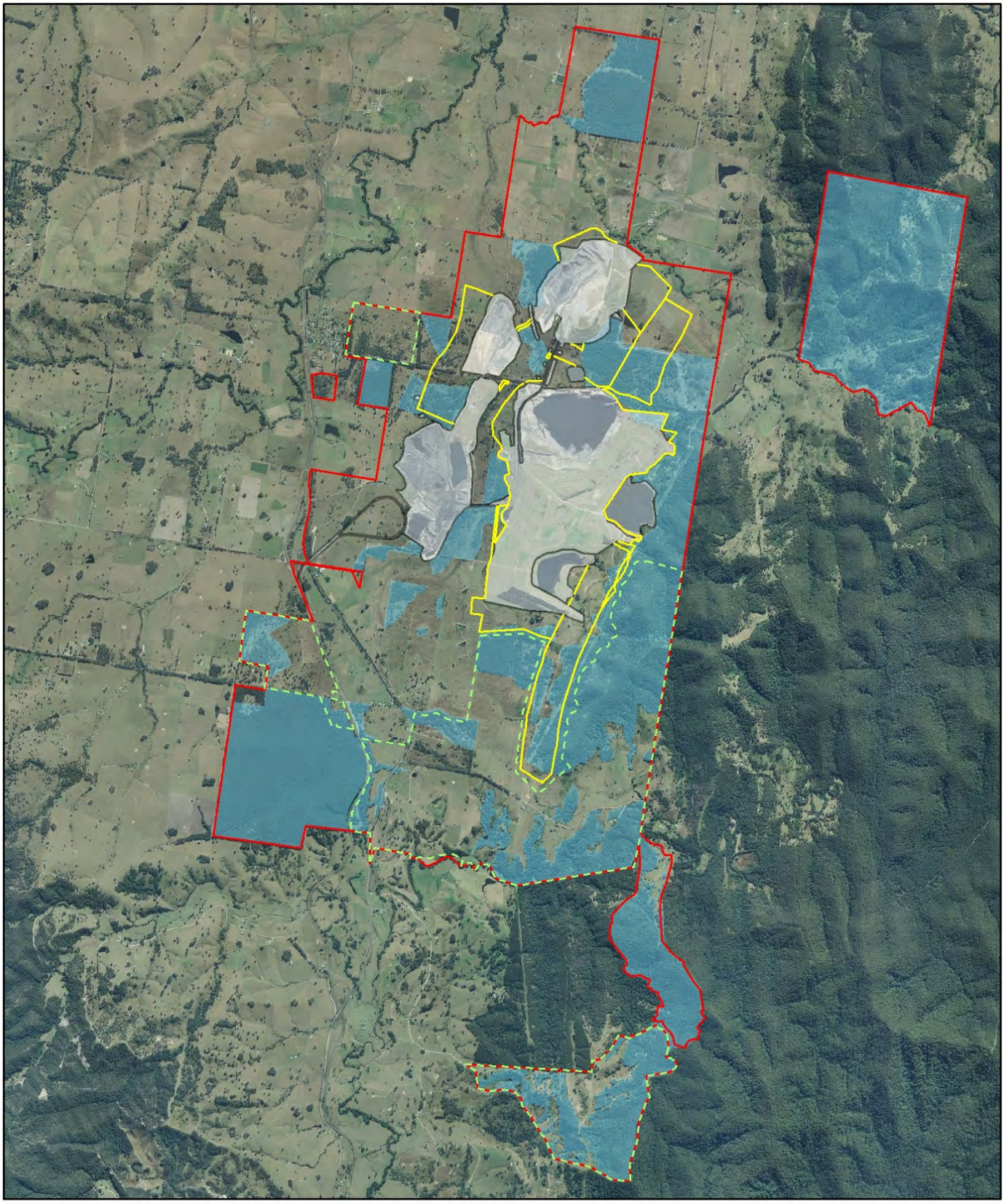


Figure 4: Spotted-tailed Quoll - Potential Habitat

0 0.5 1 2 Kilometres

Notes: areas unmapped inside the study area are considered unlikely habitat where there is a low probability that the species would occur.

N

Legend

- Spotted-tailed Quoll potential habitat
- Study Area
- Approximate Extent of Additional Project Surface Development
- Approximate Extent of Existing/Approved Surface Development
- Proposed Stratford Extension Project Offset Area

AMBS

Table 7 (Continued)
Likelihood of Significant Impacts on the Spotted-tailed Quoll – EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Interfere substantially with the recovery of the species?	No	No recovery plan has been prepared for the Spotted-tailed Quoll (south-east mainland population). It is unlikely that the removal of the small area of potential habitat would substantially interfere with the recovery of this species given the large areas of potential habitat which exists outside the study area, and the potential habitat that would be conserved and enhanced in perpetuity proposed offset areas. Further, additional habitat would be created through revegetation of cleared land (up to 435 ha) in the offset areas, which may benefit the species in the future.

Source: AMBS (2012b) (Appendix F of the EIS).

[1] As defined by the *Matters of National Environmental Significance Significant Impact Guidelines 1.1* (DEWHA, 2009).

AMBS (2012b) (Appendix F of the EIS) concluded that the Project would be unlikely to significantly impact upon the Spotted-tailed Quoll (south-east mainland population) given that:

- *the species has not been recorded in the Project area;*
- *from a regional perspective, only a relatively small area of potential habitat will be removed in comparison to the less fragmented potential habitat that exists adjacent to the Project area;*
- *potential habitat would be conserved and improved in the Offset areas in perpetuity; and*
- *cleared land within the Offset areas would be revegetated (up to 435 ha), which may benefit the species in the future.*

4.1.4 Long-nosed Potoroo (SE mainland) (*Potorous tridactylus tridactylus*)

Three records of the Long-nosed Potoroo (SE mainland) were collected during recent surveys. The species was detected several times from an infra-red camera (Figure 5); including one record to the east of the proposed Stratford East Open Cut. A second record occurs within offset area 4 and a third record occurs close to offset area 4 (Figure 5). A fourth possible record based on hair analysis was recorded (Figure 5). The main impacts to the species would be a small loss in foraging habitat due to the Stratford East Open Cut and short-term disturbance and possible habitat loss due to the drainage diversions on the eastern slope (total approximately 37 ha).

AMBS (2012b) (Appendix F of the EIS) assessed the likelihood of significant impacts from the Project on the Long-nosed Potoroo (SE mainland) (Table 8).

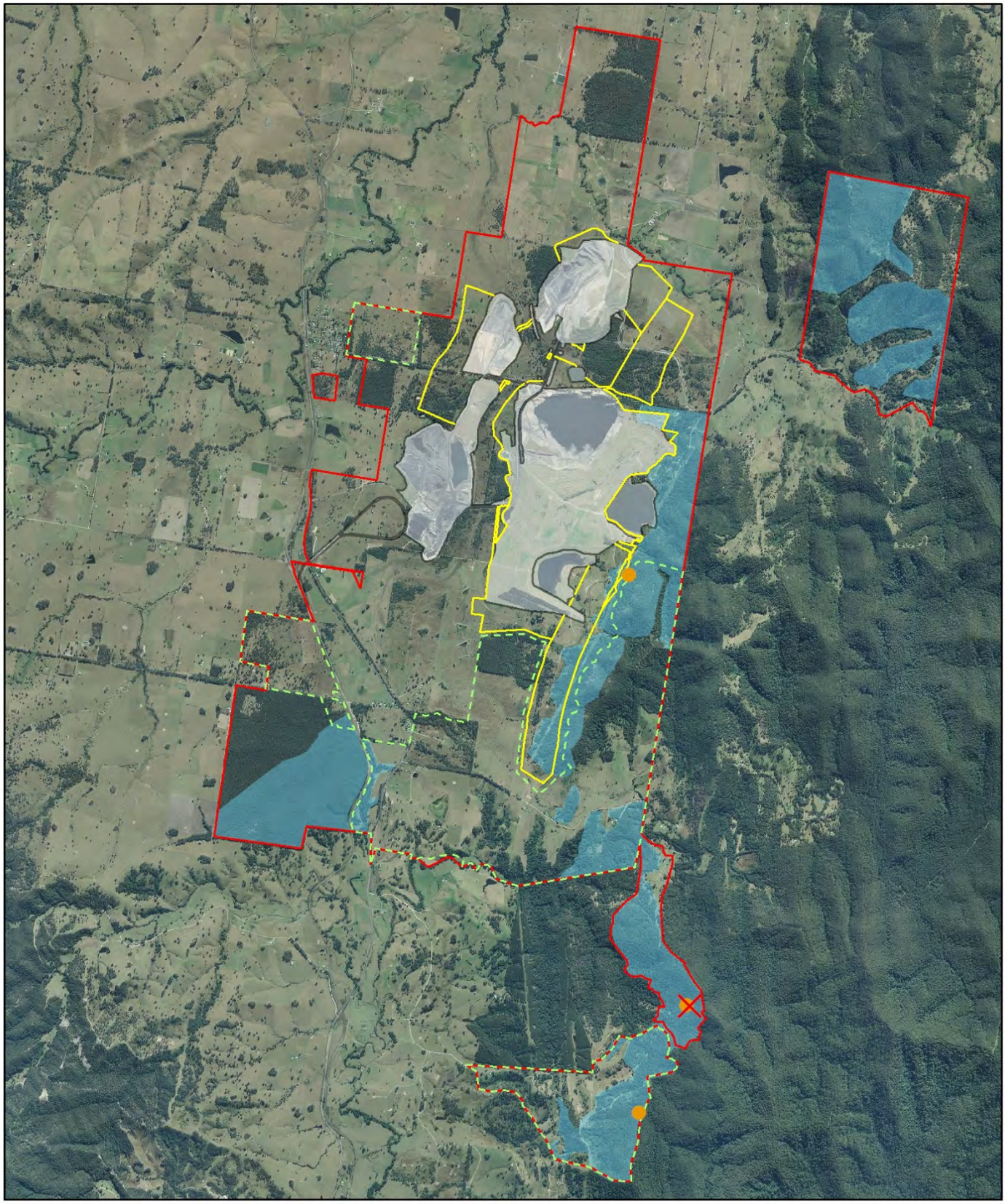


Figure 5: Long-nosed Potoroo - Potential Habitat

0 0.5 1 2 Kilometres

Notes: areas unmapped inside the study area are considered unlikely habitat where there is a low probability that the species would occur.

Legend

- Potential Habitat
- Long-nosed Potoroo
- Long-nosed Potoroo (probable)
- Study Area
- Approximate Extent of Additional Project Surface Development
- Approximate Extent of Existing/Approved Surface Development
- Proposed Stratford Extension Project Offset Area

N

AMBS

Table 8
Likelihood of Significant Impacts on the Long-nosed Potoroo (SE mainland) – EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Lead to a long-term decrease in the size of an important population of a species?	No	The Long-nosed Potoroo (SE mainland) can tolerate foraging habitat that may be open and patchy but relies on dense patches of vegetation for shelter. Such habitat exists on slopes of the hills to the east of the Project area where the species was recorded (Figure 5). The Project would remove a relatively small proportion of potential foraging habitat for the species, along the eastern and southern edge of the proposed Stratford East Open Cut. The drainage diversion lines that would be established on the slope east of the mine area to prevent water from flowing into the mine pit are likely to traverse known Long-nosed Potoroo (SE mainland) habitat. Home ranges of the Long-nosed Potoroo (SE mainland) have been reported as 2 to 5 ha and the disturbance to habitat created by the construction of the surface water diversion could affect an individual or individuals if it traverses their home range. The extent of the effect on individuals and in turn on the population depends on the size of the impact area and the persistence of the disturbance. The construction of the drainage diversion would be short-term, and once off. If the diversion line revegetates quickly and then represents a comparably suitable habitat as before the disturbance then the effect is likely to be minimal. In the worst case scenario the disturbance of the habitat through the proposed diversion lines may lead to the loss of individuals from the local population. The Project would therefore remove a relatively small area of potential habitat along the edge of the area of known habitat for this species to the east of the Project area and would create a temporary disturbance and possibly some minor loss of habitat through that area for the construction of the surface water drainage line. These impacts are expected to be relatively minor, although there is some potential that individuals would be affected. The majority of the habitat in this area would be retained. Given this, and the fact that the species has been recorded in other locations well outside the Project area, including one in the offset areas, it is considered that the Project is not likely to lead to a long-term decrease in the size of an important population. The offset areas would conserve habitat for this species in perpetuity, and the Project would include measures to control of foxes and cats. The revegetation of cleared land (up to 435 ha) may also increase the available habitat for the species in the future.
Reduce the area of occupancy of an important population?	No	The area of occupancy for this species is unlikely to be affected in the long-term. Short-term reduction in occupancy may result from the short-term disturbance through the construction of the drainage diversion lines on the slopes east of the proposed Stratford East Open Cut. As these areas revegetate the area of occupancy is likely to return to previous levels. Suitable habitat exists outside the Project area and known habitat for the species would be conserved and enhanced within the other offset areas (especially offset area 4). The revegetation of cleared land (up to 435 ha) may also increase the available habitat for the species in the future.
Fragment an existing important population into two or more populations?	No	The Project would only remove habitat from the edge of areas of potential habitat, so would be unlikely to fragment a population. The drainage diversions would dissect known habitat, but this impact is only of a small scale and short-term in duration. It would not be to the extent that it would create any barriers to movement. The Project is therefore unlikely to fragment any populations into two or more populations.
Adversely affect habitat critical to the survival of a species?	No	No critical habitat has been identified for this species. The small area of habitat that would be cleared, and the area that would be disturbed as part of the installation of water diversion lines is unlikely to be critical to the survival of the species given the areas of known and potential habitat in the greater locality, including the offset areas.
Disrupt the breeding cycle of an important population?	No	The removal and disturbance of a relatively small area of habitat is unlikely to disrupt the breeding cycle of this species, given the disturbance from the establishment of the drainage diversions would be short-term and once off. Overall, the breeding cycle of population would be unlikely to be disrupted.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	No	The removal of a relatively small area (37 ha) of potential habitat is unlikely to modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, considering the areas of known and potential habitat which exist in the greater locality and in the offset areas (234 ha).
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat?	No	Predation by introduced predators, including the Red Fox (*Vulpes vulpes*), Cat (*Felis catus*) and Dog (*Canis familiaris*) is a threat to the Long-nosed Potoroo (SE mainland) (OEH, 2012). It is unlikely that there would be an increase in cats, foxes or dogs as a result of the Project. The control of cats, foxes and dogs as part of the management of the proposed offset areas is likely to benefit the species.

Table 8 (Continued)
Likelihood of Significant Impacts on the Long-nosed Potoroo (SE mainland)
– EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Introduce disease that may cause the species to decline?	No	A disease affecting the Long-nosed Potoroo (SE mainland) is not listed as a threat to this species. The Project is the extension of an existing mine and is not expected to introduce new pathogens to the population.
Interfere substantially with the recovery of the species?	No	No recovery plan has been prepared for the Long-nosed Potoroo (SE mainland). It is unlikely that the removal of the small area of potential habitat would substantially interfere with the recovery of this species given the availability of known and potential suitable habitat in the greater locality and the establishment of offset areas which are likely to benefit the conservation and recovery of the species.

Source: AMBS (2012b) (Appendix F of the EIS).

[1] As defined by the *Matters of National Environmental Significance Significant Impact Guidelines 1.1* (DEWHA, 2009).

AMBS (2012b) (Appendix F of the EIS) concluded that the Project would be unlikely to significantly impact upon the Long-nosed Potoroo (SE mainland) given that:

- *from a regional perspective, only a small area of habitat would be removed or disturbed (37 ha);*
- *the area of habitat that would be removed is along the edge of the habitat for the species;*
- *the area that would be disturbed for the surface water diversions is relatively small and the disturbance is likely to be relatively minor and of short duration;*
- *the species occurs in at least two other locations to the south-east of the Project area, including one location within the Offset areas;*
- *known and potential habitat would be conserved and improved in the Offset areas in perpetuity; and*
- *cleared land within the Offset areas would be revegetated (up to 435 ha), which may benefit the species in the future.*

4.1.5 Grey-headed Flying Fox (*Pteropus poliocephalus*)

The Grey-headed Flying Fox is listed nationally under the EPBC Act. The Grey-headed Flying-fox is Australia's only endemic flying fox.

This species requires foraging habitat and roosting sites. It feeds in the canopy on fruit, blossoms and nectar in rainforests, open forests, woodlands, Melaleuca swamps and Banksia woodlands. They congregate in large numbers at roosting sites (camps) that may be found in rainforest patches, Melaleuca stands, mangroves, riparian woodland or modified vegetation in urban areas.

Potential foraging habitat for the Grey-headed Flying Fox occurs within the study area and approximately 105 ha of this vegetation would be cleared (Figure 6). This species was recorded in the study area in a recent survey (Figure 6) and in the wider region on several occasions in the past.

AMBS (2012b) (Appendix F of the EIS) assessed the likelihood of significant impacts from the Project on the Grey-headed Flying Fox (Table 9). The assessment of significance was performed in consideration of the EPBC Act Administrative Guidelines on Significance (DEH, 2003).

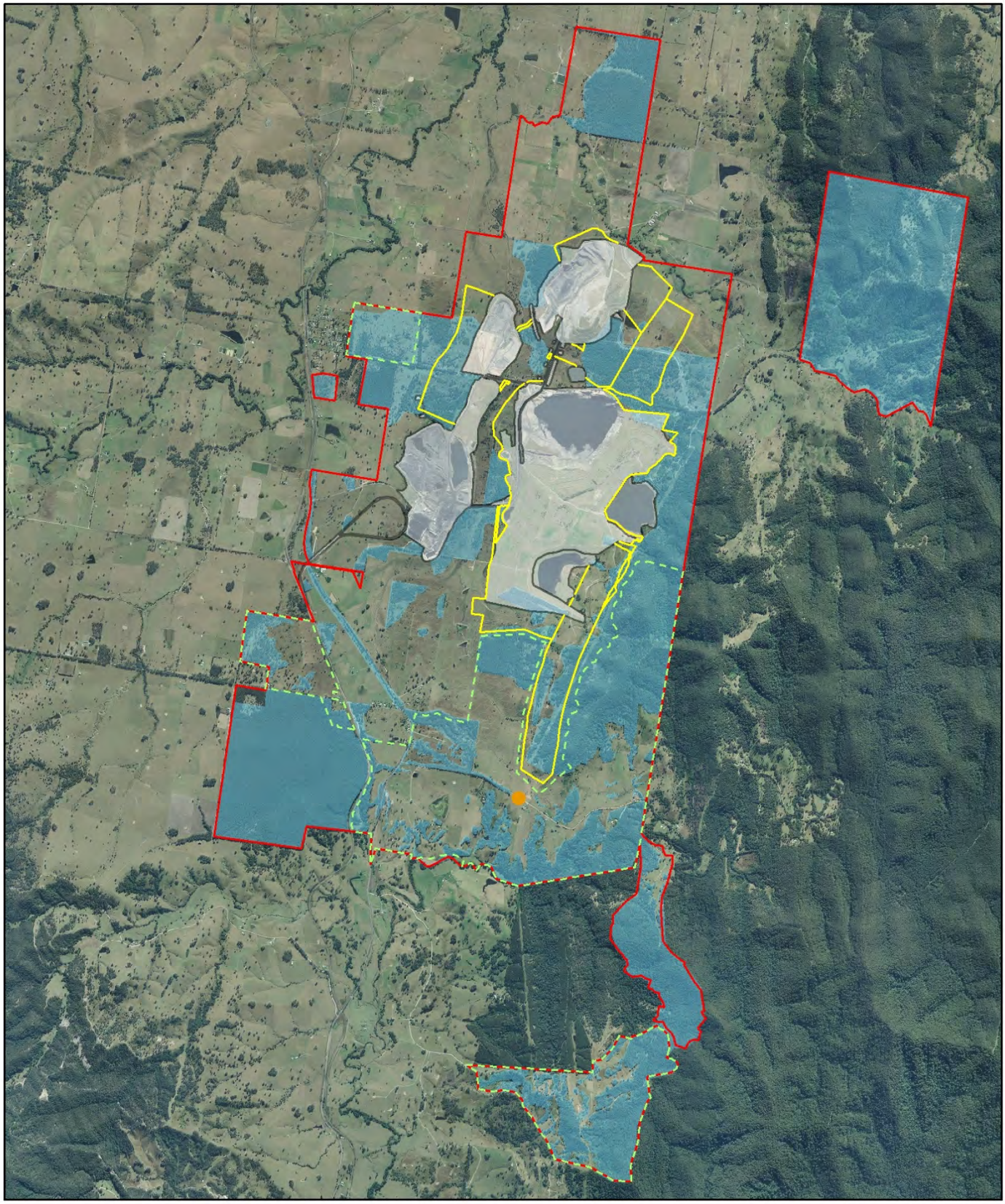


Figure 6: Grey-headed Flying-fox - Potential Habitat

0 0.5 1 2 Kilometres

Notes: areas unmapped inside the study area are considered unlikely habitat where there is a low probability that the species would occur.

Legend

- Potential Habitat
- Grey-headed Flying-fox
- Study Area
- Approximate Extent of Additional Project Surface Development
- Approximate Extent of Existing/Approved Surface Development
- Proposed Stratford Extension Project Offset Area

N

AMBS

Table 9
Likelihood of Significant Impacts on the Grey-headed Flying Fox – EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Lead to a long-term decrease in the size of an important population of a species?	No	No campsites for this species were recorded in the study area and this species is likely to only use the area for occasional foraging. Given that extensive foraging habitat exists adjacent to the study area, and habitat would be conserved and improved in the proposed offsets (490 ha), the Project is unlikely to affect any populations of this species.
Reduce the area of occupancy of an important population?	No	The area of occupancy is unlikely to be affected for any populations given that no campsites have been recorded within the study area and that extensive foraging habitat exists outside the study area.
Fragment an existing important population into two or more populations?	No	The highly mobile nature of this species means that the Project would not be a barrier to migration and that no populations would be fragmented.
Adversely affect habitat critical to the survival of a species?	No	As the Project would not involve the removal or disturbance of any campsites and would be unlikely to create a barrier to migration, it is unlikely that habitat critical to the survival of this species would be adversely affected.
Disrupt the breeding cycle of an important population?	No	No current or known historical campsites would be removed or disturbed. The Project would not disrupt the breeding cycle of any population.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	No	As no campsites would be removed or disturbed, and extensive foraging habitat exists outside the study area, the Project would be unlikely to modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline. Extensive areas of potential habitat occur adjacent to the Project area, and potential habitat would be conserved and improved as a result of the proposed offset area. Further, additional habitat would be created through revegetation of cleared land (up to 435 ha) in the offset areas, which may benefit the species in the future.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat?	No	Predation by feral animals is not recognised as a key threatening process for this species, and it is unlikely that the Project would result in any invasive species becoming established in the study area. Nonetheless, a feral animal control programme would be implemented as part of the Project.
Introduce disease that may cause the species to decline?	No	Disease is not listed as a threat to this species. The Project would be unlikely to introduce a disease that may cause this species to decline.
Interfere substantially with the recovery of the species?	No	No detailed recovery plan has been prepared for this species. As no campsites would be removed or disturbed, and extensive foraging habitat exists outside the study area, the Project would be unlikely to interfere with the recovery of this species.

Source: AMBX (2012b) (Appendix F of the EIS).

[1] As defined by the *Matters of National Environmental Significance Significant Impact Guidelines 1.1* (DEWHA, 2009a).

AMBS (2012b) (Appendix F of the EIS) concluded that the Project would be unlikely to have a significant impact upon the Grey-headed Flying Fox considering that:

- *no campsites would be removed or disturbed;*
- *from a regional perspective, only a small amount of foraging habitat would be removed;*
- *large areas of foraging habitat exists adjacent to the study area;*
- *potential habitat will be conserved and improved in the offset area in perpetuity; and*
- *cleared land within the Offset areas would be revegetated (up to 435 ha).*

4.1.6 Large-eared Pied Bat (*Chalinolobus dwyeri*)

Suitable foraging habitat is present throughout the study area (Figure 7) and possible records of bats based on call identification have been made throughout the study area during surveys (Figure 1). Database records also exist for the greater locality.

AMBS (2012b) (Appendix F of the EIS) assessed the likelihood of significant impacts from the Project on the Large-eared Pied Bat (Table 10).

Table 10
Likelihood of Significant Impacts on the Large-eared Pied Bat – EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Lead to a long-term decrease in the size of an important population of a species?	No	Potential impacts to the species are likely to be limited to a small loss in potential foraging habitat (approximately 105 ha). The Project would not impact on habitat or areas close to maternity caves, and is unlikely to impact on the accessibility of this species to any caves that may be undetected in the study area as the species is mobile. Extensive foraging habitat exists adjacent to the study area and potential habitat would be conserved and improved in the proposed offset areas (530 ha [comprising 490 ha of native vegetation and 40 ha of cleared land]). It is unlikely, therefore that the Project would lead to a long-term decrease in the size of any populations of this species.
Reduce the area of occupancy of an important population?	No	Considering that a large amount of area would be conserved in the proposed offset areas and the relatively small amount of potential habitat that would be cleared, the area of occupancy for this species is unlikely to be affected. Further, additional areas of foraging habitat would be created through revegetation of areas of cleared land (up to 435 ha).
Fragment an existing important population into two or more populations?	No	While the species was possibly recorded in the area that would become further fragmented as a result of the Stratford East Open Cut, the mobility of this species should ensure that no populations become fragmented as a result of the Project.
Adversely affect habitat critical to the survival of a species?	No	No critical habitat has been identified for this species. As the Project would not involve the removal of any key breeding habitat, and extensive foraging habitat is present outside the study area, it would be unlikely that any important habitat would be adversely affected.
Disrupt the breeding cycle of an important population?	No	The Project would not result in the destruction of or disturbance to any primary roosting habitat and would not impact on habitat or areas close to maternity roosts. The Project is also unlikely to affect this species' ability to access any additional caves that may occur but were not detected during the study. Therefore, it is unlikely that the breeding cycle of any population would be disrupted.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	No	The clearing of a relatively small area of potential foraging habitat (105 ha) would be unlikely to modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, especially considering the large areas of potential habitat which exist adjacent to the study area and the potential habitat that would be conserved and improved as a result of the proposed offset area (530 ha). Moreover, no roosting habitat or maternity sites would be disturbed as a result of the Project. Further, additional habitat would be created through revegetation of cleared land (up to 435 ha) in the offset areas, which may benefit the species in the future.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat?	No	It is unlikely that there would be an increase in invasive species as a result of the Project at a scale that would affect the foraging habitat for this species. The occurrence of feral animals may in fact be reduced as a result of pest control in the offset areas.
Introduce disease that may cause the species to decline?	No	Disease is not recognised as a current threat to this species and it is unlikely that the Project would introduce disease to this species.

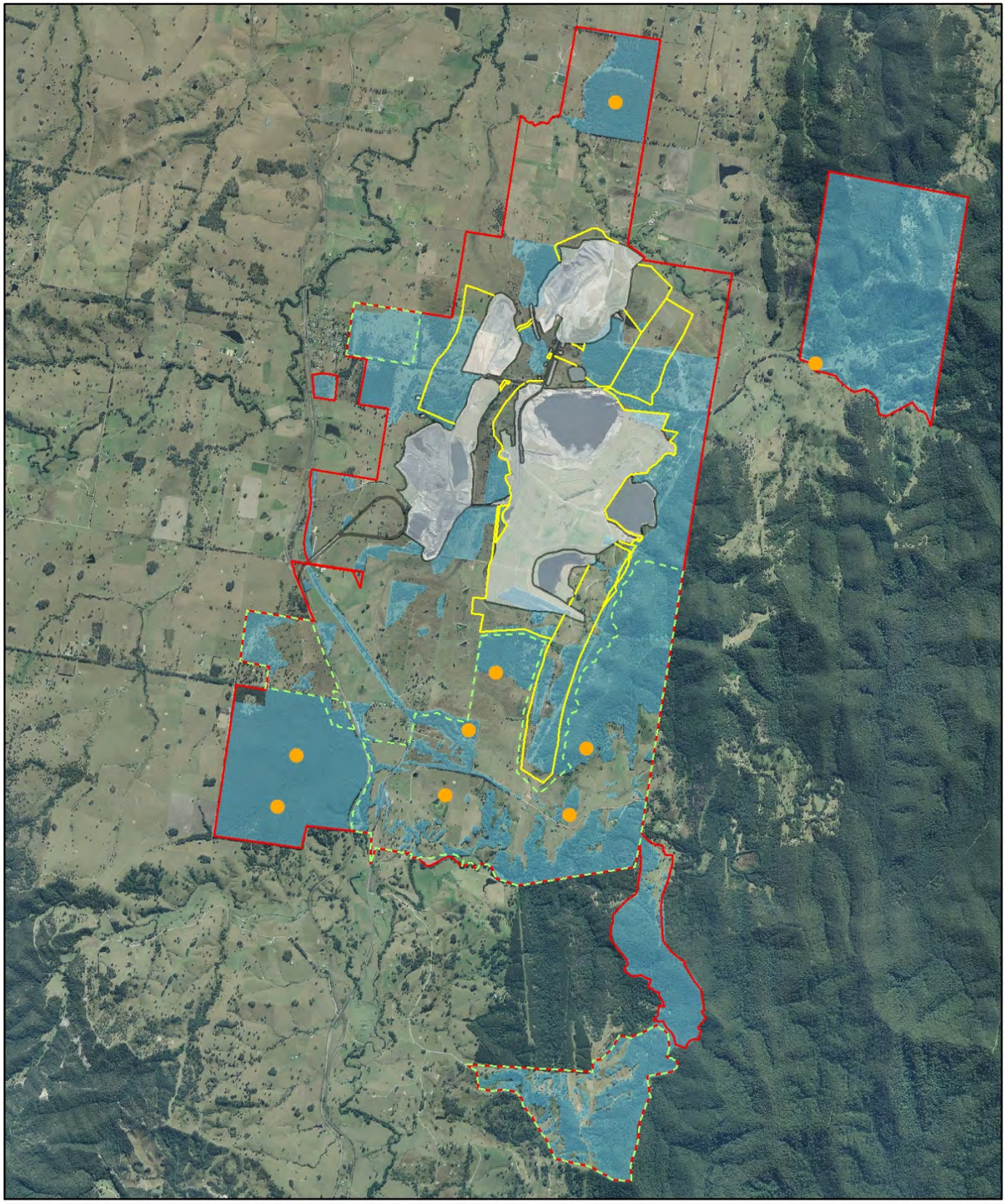


Figure 7: Large-eared Pied Bat - Potential Habitat

Table 10 (Continued)
Likelihood of Significant Impacts on the Large-eared Pied Bat – EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Interfere substantially with the recovery of the species?	No	There is currently no recovery plan or threat abatement plan for the Large-eared Pied Bat. OEH (2012) recommends steps that should be undertaken to facilitate the conservation and recovery of the species. These include retaining native vegetation and protecting potential roost and maternity sites and immediate surrounds (OEH, 2012). The project does not impact on any known roost or maternity sites or the immediate vegetation around those sites. The Project would remove a small area (approximately 105 ha) of potential foraging habitat for the species and would contribute to habitat fragmentation. However, the proposed offset would conserve and improve potential habitat for the species in the region in the long-term, and additional areas of habitat would be created through revegetation of cleared land (up to 435 ha).

Source: AMBS (2012b) (Appendix F of the EIS).

[1] As defined by the *Matters of National Environmental Significance Significant Impact Guidelines 1.1* (DEWHA, 2009a).

AMBS (2012b) (Appendix F of the EIS) concluded that the Project would be unlikely to have a significant impact on the Large-eared Pied Bat given that:

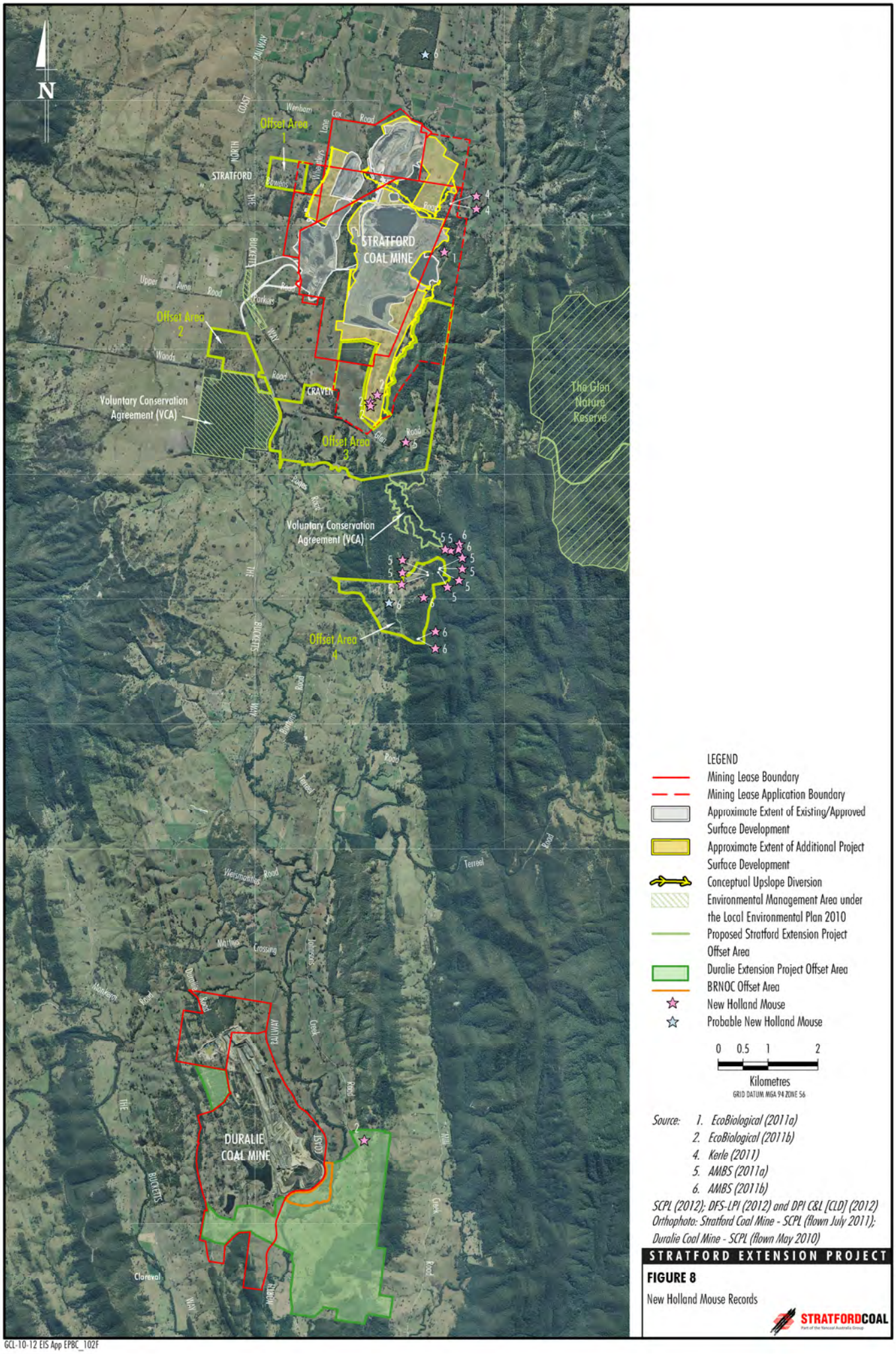
- *no known roosting sites (e.g. caves) would be impacted;*
- *from a regional perspective, only a relatively small area of foraging habitat for the species would be removed (105 ha);*
- *no barriers to movement for this highly mobile species would be created;*
- *substantial potential habitat for this species will be conserved and enhanced in the Offset areas (490 ha); and*
- *cleared land within the Offset areas would be revegetated (up to 435 ha), which may benefit the species in the future.*

4.1.7 New Holland Mouse (*Pseudomys novaehollandiae*)

Recent surveys recorded the New Holland Mouse at a number of locations within the Project area and surrounds (Figure 8). On a regional scale, this suggests quite extensive distribution with records ranging from the Stratford Mining Complex, and the proposed offset area, to the Duralie Extension Project offset area approximately 15 km to the south of the Stratford Mining Complex (Figures 8 and 9).

The results of a study carried out by the AMBS (2011b) suggests habitat for the New Holland Mouse in the study area consists of areas with a high proportion of native plants, low weed density, groundcover density between 50 to 60% and greater grass cover. Sites where the species was recorded were subject to nil or only slight grazing pressure, had a high percentage cover of Blady Grass (*Imperata cylindrica var. major*), and a northerly or westerly aspect.

These results are similar to the habitat types described by EcoBiological (2011c) and Kerle (2011) in the study area. Their results suggested the species prefers areas with low grazing pressure, few exotic species and dense groundcover. However, Kerle (2011) reported a very low trapping rate in areas containing Blady Grass, whereas AMBS (2011b) results suggest Blady Grass is an important habitat feature for the New Holland Mouse. EcoBiological (2011c) reported high plant diversity at sites containing the species; however, AMBS (2011b) results did not find any difference between present and absent sites with regard to native plant diversity.



Source: 1. *EcoBiological (2011a)*
2. *EcoBiological (2011b)*
4. *Kerle (2011)*
5. *AMBS (2011a)*
6. *AMBS (2011b)*

SCPL (2012); DFS-LPI (2012) and DPI C&L [CLD] (2012)
Orthophoto: Stratford Coal Mine - SCPL (flown July 2011); Duralie Coal Mine - SCPL (flown May 2010)

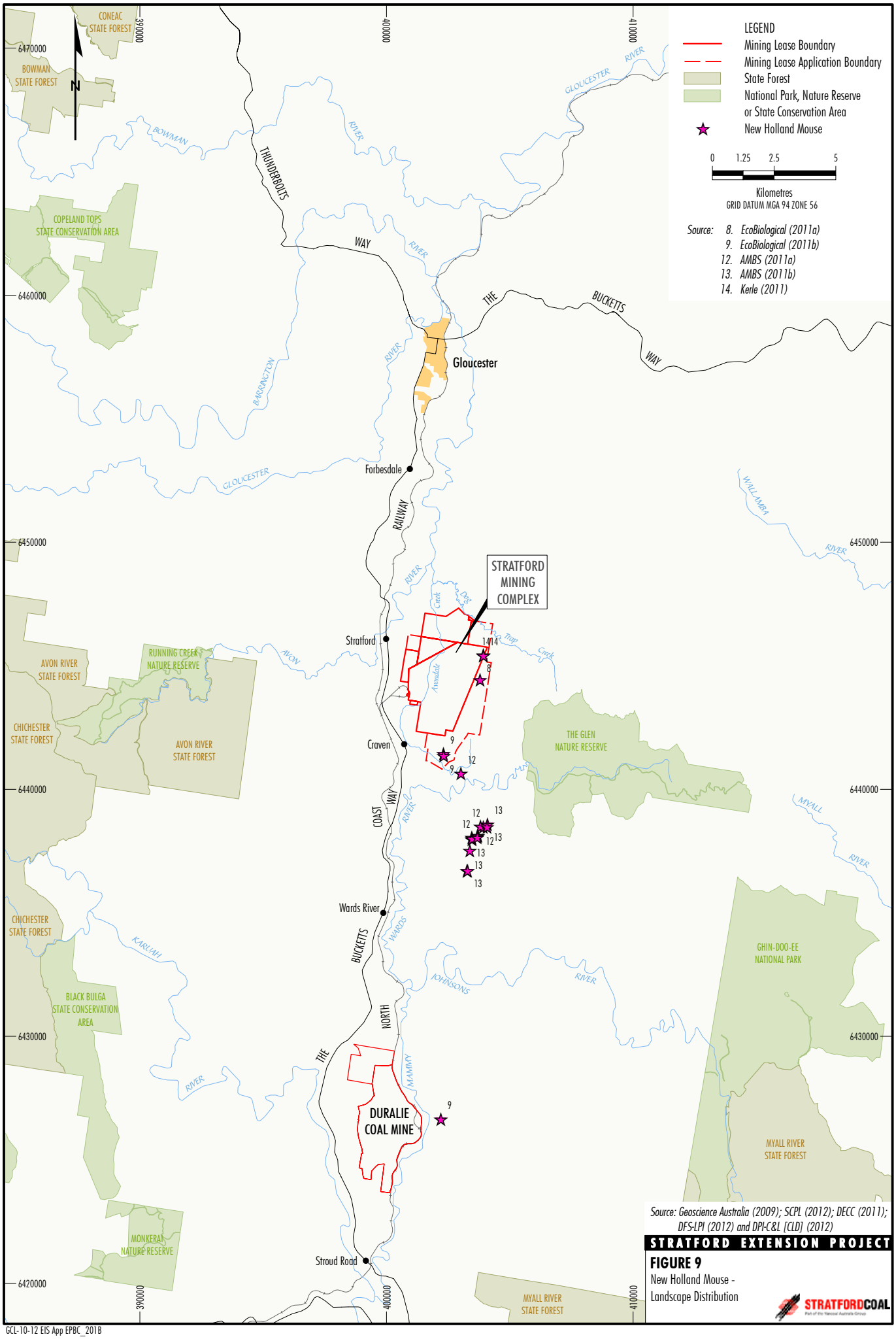
STRATFORD EXTENSION PROJECT

FIGURE 8

New Holland Mouse Records

STRATFORDCOAL
Part of the Yancoal Australia Group

GCL-10-12 EIS App EPBC_102F



Source: Geoscience Australia (2009); SCPL (2012); DECC (2011); DFS-LPI (2012) and DPI-C&L [CLD] (2012)

STRATFORD EXTENSION PROJECT

FIGURE 9
New Holland Mouse - Landscape Distribution

STRATFORDCOAL

GCL-10-12 EIS App EPBC_201B

Based on the previous surveys, known habitat for the species exists in areas south of Glen Road (Figure 10). Potential habitat for this species within and surrounding the Stratford Mining Complex is shown on Figure 10. Based on the results from Kerle (2011) and EcoBiological (2011c), habitat for the species is also likely to exist in areas to the north-east and south-east of the Stratford Coal Mine (SCM), and to the south-east of the DCM. However, there were also many locations throughout the Gloucester Valley where targeted trapping was undertaken but the New Holland Mouse was not recorded. Kerle (2011) recorded the species at one out of five sites, EcoBiological (2011c) recorded the species at two out of six sites, and AMBS (2011b) recorded the species at four out of 18 sites. It is likely the New Holland Mouse has a patchy distribution throughout the Gloucester Valley.

AMBS (2012b) (Appendix F of the EIS) assessed the likelihood of significant impacts from the Project on the New Holland Mouse (Table 11).

Table 11
Likelihood of Significant Impacts on the New Holland Mouse - EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Lead to a long-term decrease in the size of a population?	No	The Project is likely to result in the loss of individuals currently occupying known habitat at the southern end of the Project area. However, the species has been recorded in a number of locations outside of the Project area that would not be affected by the Project. There are a number of records of the species to the south-east of the Project area, including some in offset area 4. In the long-term, the Project would include the conservation of current known habitat for this species in the offset areas in perpetuity, the revegetation of cleared lands within other parts of the offset areas, the progressive rehabilitation of post-mine landforms, the development of a Biodiversity Management Plan and impact mitigation and management measures targeted specifically at the conservation of this species. On the basis of the above it is concluded that the Project is likely to result in the short-term loss of some of the individuals within the study area, but is not likely to result in a long-term decrease in the overall size of an important population.
Reduce the area of occupancy of an important population?	No	The Project would result in the removal of a small area (17 ha) of core habitat and another 102 ha of patchy/marginal habitat. The area of occupancy for this species would therefore be affected to some degree, at least in the short-term. However, larger areas of suitable habitat occur outside of the Project area, including within the proposed offset areas (85 ha of core habitat and 227 ha of patchy habitat). In the long-term, the Project would include the conservation of current known habitat for this species in the offset areas in perpetuity, the revegetation of cleared lands within other parts of the offset areas, the progressive rehabilitation of post-mine landforms, the development of a Biodiversity Management Plan and impact mitigation and management measures targeted specifically at the conservation of this species.
Fragment an existing important population into two or more populations?	No	The Project is unlikely to create any additional barriers to migration for any local populations, as it removes habitat at the edge of an existing area of suitable habitat. The New Holland Mouse seems to occur patchily and may consist of many small populations throughout the Gloucester Valley. The Project is unlikely to fragment any populations into two or more populations.
Adversely affect habitat critical to the survival of a species?	No	No critical habitat has been identified for this species. The small area of potential habitat that would be cleared as part of the Project is unlikely to be critical to the survival of the species given the areas where most individuals were recorded would remain largely unaffected by the Project (i.e. east of the Avon North Open Cut and within offset area 4). The offset areas are likely to conserve habitat for the species.
Disrupt the breeding cycle of an important population?	No	The removal of a relatively small area of potential habitat from the edge of known habitat is unlikely to disrupt the breeding cycle of the population, given that the species occurs in a number of locations outside of the Project area that would not be affected by the Project.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	No	The removal of a relatively small area of potential habitat is unlikely to modify, destroy, remove, or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, especially considering the areas of known and potential habitat which exist in the proposed offset areas. The species has been known to utilise areas of regeneration and it is possible that the revegetation programmes may be of benefit to this species in the future (up to 435 ha of cleared land would be revegetated).

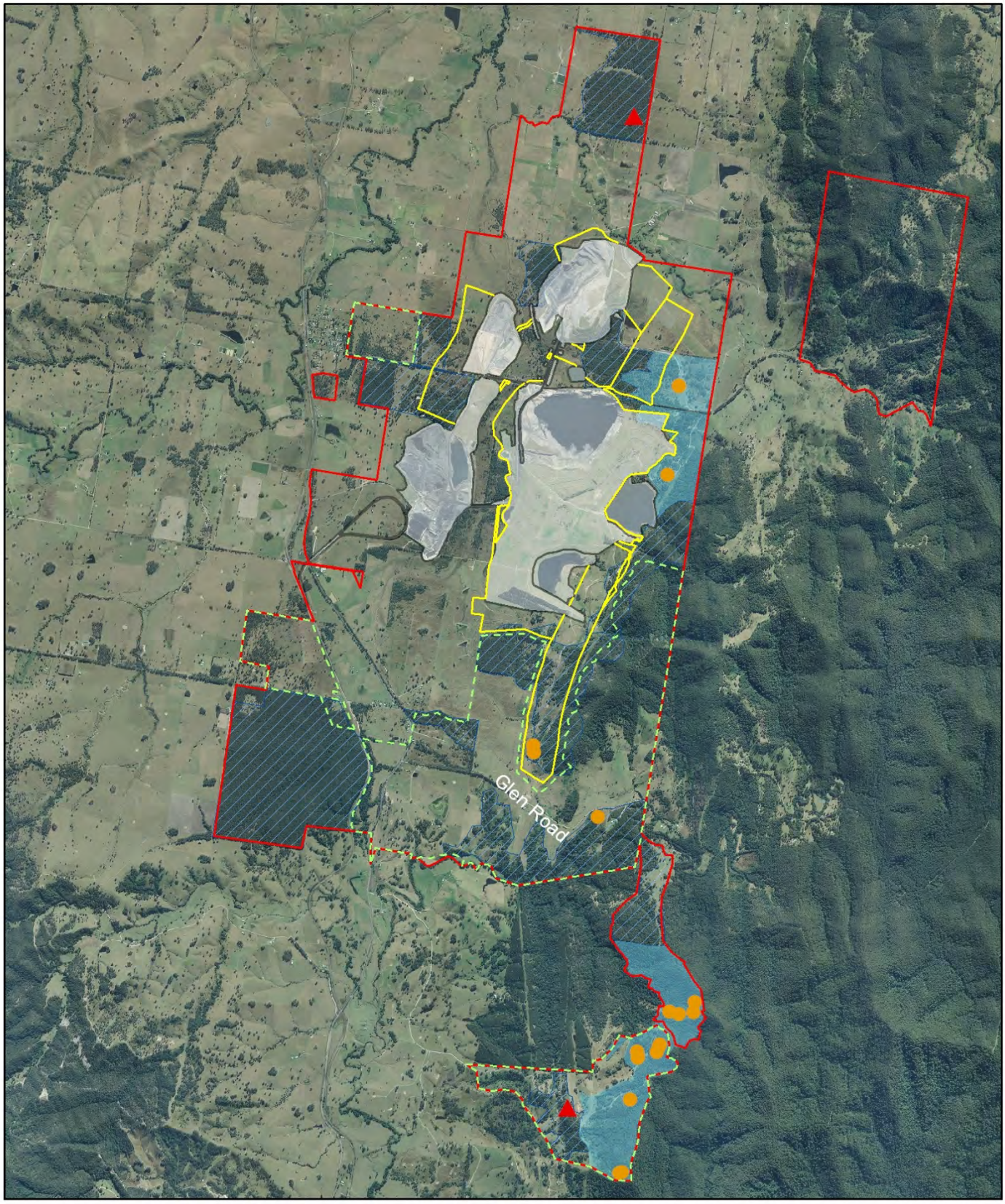


Figure 10: New Holland Mouse - Potential Habitat

0 0.5 1 2 Kilometres

Notes: areas unmapped inside the study area are considered unlikely habitat where there is a low probability that the species would occur.

Legend

- Potential Habitat
- Potential Habitat (patchy/marginal)
- New Holland Mouse
- New Holland Mouse (probable)
- Study Area
- Approximate Extent of Additional Project Surface Development
- Approximate Extent of Existing/Approved Surface Development
- Proposed Stratford Extension Project Offset Area

N

AMBS

Table 11 (Continued)
Likelihood of Significant Impacts on the New Holland Mouse - EPBC Act Assessment

Assessment Criteria[1] Is the Project likely to:	**Assessment**	
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat?	No	Predation by introduced predators, including the Red Fox (*Vulpes vulpes*), Cat (*Felis catus*) and Dog (*Canis familiaris*) is a threat to the New Holland Mouse (Smith and Quin, 1996) and competition from introduced rodents, such as the house mouse is a potential threat (Fox and Gullick, 1989). It is unlikely that there would be an increase in cats, foxes or house mice as a result of the Project. Nonetheless, a feral animal control programme would be implemented as part of the Project. The occurrence of the New Holland Mouse appears to be related to a high proportion of native plants and low weed density. A weed management strategy would be included as part of the proposed management of the offset areas.
Introduce disease that may cause the species to decline?	No	A disease affecting the mice themselves is not listed as a threat to this species. However, the indirect effect of dieback caused by *Phytophtora cinnamomi* is listed as a threat. The Project is not a new development and hence the introduction of the disease to the area is unlikely. Revegetation works and management would include the implementation of guidelines for *Phytophtora cinnamomi*. The Project is therefore considered unlikely to introduce a disease that may cause this species to decline.
Interfere substantially with the recovery of the species?	No	No recovery plan has been prepared for the New Holland Mouse. It is unlikely that the removal of the small area of potential habitat and loss of individuals would substantially interfere with the recovery of this species given the availability of known and potential suitable habitat outside the Project area and the establishment of offset areas which are likely to benefit the conservation and recovery of the species. Further, revegetation of cleared land within the offset areas (up to 435 ha) may benefit the species, given that the species is known to utilise regenerating habitats. Mitigation would be implemented including pre-clearance trapping surveys.

Source: AMBS (23012b) (Appendix F of the EIS).

[1] As defined by the *Matters of National Environmental Significance Significant Impact Guidelines 1.1* (DEWHA, 2009a).

AMBS (2012b) (Appendix F of the EIS) concluded that the Project would be unlikely to significantly impact the New Holland Mouse given that:

- *the Project would remove only a small area of potential habitat (17 ha of core habitat and 102 ha of patchy/marginal habitat), relative to the availability of known or potential suitable habitat in the Offset areas (85 ha of core habitat and 227 ha of patchy/marginal habitat);*
- *the locations in which most records for the species were obtained are outside the Project area, including several within the Offset area; and*
- *the Project will include the conservation of current known habitat for this species in the Offset areas in perpetuity, the revegetation of cleared lands within other parts of the Offset areas, the progressive rehabilitation of post-mine landforms, the development of a Biodiversity Management Plan and impact mitigation and management measures targeted specifically at the conservation of this species.*

4.2 MIGRATORY SPECIES

Relevant migratory species listed under sections 20 and 20A of the EPBC Act, as suggested by SEWPaC's input to the DGRs include:

- Cattle Egret (*Ardea ibis*);
- Great Egret (*Ardea alba*);
- Satin Flycatcher (*Myiagra cyanoleuca*);
- Rufous Fantail (*Rhipidura rufifrons*);
- Black-faced Monarch (*Monarcha melanopsis*):
- Spectacled Monarch (*Monarcha trivirgatus*);
- Double-banded Plover (*Charadrius bicinctus*);

- Latham's Snipe (*Gallinago hardwickii*);
- White-bellied Sea-Eagle (*Haliaeetus leucogaster*);
- Painted Snipe (Australian subspecies) (*Rostratula benghalensis australis*);
- White-throated Needletail (*Hirundapus caudacutus*);
- Fork-tailed Swift (*Apus pacificus*);
- Clamorous Reed-Warbler (*Acrocephalus stentoreus*);
- Rainbow Bee-eater (*Merops ornatus*); and
- Regent Honeyeater (*Anthochaera phrygia*) (refer to Section 4.1.4 of this assessment).

Potential habitat on-site for migratory species includes treed areas, the existing mine water dams and the artificial wetland area. The artificial wetland area is not proposed to be disturbed as part of the Project.

Eleven migratory species listed under the EPBC Act were recorded within the Project area or surrounds including:

- Black-faced Monarch (*Monarcha melanopsis*);
- Cattle Egret (*Ardea ibis*);
- Double-banded Plover (*Charadrius bicinctus*);
- Fork-tailed Swift (*Apus pacificus*);
- Great Egret (*Ardea alba*);
- Latham's Snipe (*Gallinago hardwickii*);
- Rainbow Bee-eater (*Merops ornatus*);
- Rufous Fantail (*Rhipidura rufifrons*);
- Satin Flycatcher (*Myiagra cyanoleuca*);
- Spectacled Monarch (*Symposiachrus trivirgatus*); and
- White-bellied Sea-eagle (*Haliaeetus leucogaster*).

AMBS (2012b) (Appendix F of the EIS) assessed the likelihood of significant impacts from the Project on migratory species. AMBS (2012b) (Appendix F of the EIS) concluded that the Project would be unlikely to have a significant impact on migratory species listed under the EPBC Act as it is unlikely that the Project would:

- *substantially modify, destroy or isolate an area of important habitat for a migratory species;*
- *result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species; or*
- *seriously disrupt the lifecycle of an ecologically significant proportion of the population of a migratory species.*

5 PROPOSED SAFEGUARDS AND MITIGATION MEASURES

Table 12 provides a list of the matters regarding the proposed safeguards and mitigation measures and the corresponding section of the Main Report of the EIS where the matters are addressed.

Table 12
Reconciliation of EIS against Commonwealth Requirements –
Proposed Safeguards and Mitigation Measures

Assessment Requirement	Main Report of the EIS Reference
Proposed safeguards and mitigation measures	
6. A description of feasible mitigation measures, changes to the controlled action or procedures, which have been proposed by the proponent or suggested in public submissions, and which are intended to prevent or minimise relevant impacts. Information must include:	
a. a description of the mitigation measures that will be undertaken to prevent or minimise the relevant impacts of the action. These mitigation measures should be substantiated and based on best available practices;	Sections 4.9, 4.10 and 4.11
b. an assessment of the expected or predicted effectiveness of the mitigation measures including the effect on abundance and condition of species, suitable habitat and ecological communities;	Appendices E and F
c. any statutory or policy basis for the mitigation measures;	Section 6.7
d. the cost of the mitigation measures;	Appendix P
e. an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs (including any relevant thresholds for corrective actions) for the relevant impacts of the action. Include the person or agency responsible for implementing these programs and the effectiveness of all mitigation measures, including any provisions for independent environmental auditing;	Sections 4.9, 4.10 and 4.11
f. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program;	Sections 4.9, 4.10 and 4.11
g. identification of mitigation measures proposed to be undertaken by State governments, local governments or the proponent;	Sections 4.9, 4.10 and 4.11
h. any changes to the controlled action which prevent or minimise relevant impacts on listed threatened species and communities.	Sections 4.9, 4.10 and 4.11

5.1 MITIGATION MEASURES

Mitigation measures are described in Sections 4.9.3 and 4.10.3 of the Main Report of the EIS and in the Terrestrial Fauna Assessment by AMBS (2012b) (Appendix F of the EIS). A summary is provided in Table 13 in relation to matters of national environmental significance.

Table 13
Mitigation Measures for Threatened and Migratory Fauna Species Known or Considered Likely to Occur in the Project Area and Offset Area

Species	Conservation Status[1]	Mitigation
Swift Parrot and Regent Honeyeater	E	• Vegetation clearing would occur whenever practicable during late summer or early autumn. • Continuation of the Vegetation Clearance Procedure to restrict clearing to the minimum area necessary. • Measures to control exotic animals would be undertaken as part of the Project. • Bushfire prevention measures would be implemented in consultation with the Rural Fire Service as part of the Project. • An on-site speed limit of 60 kilometres per hour (km/hr) would continue. • Disturbance associated with the Project would be progressively rehabilitated and revegetated as part of the proposed Rehabilitation Management Plan.
Spotted-tailed Quoll (south-east mainland population)	E	• Habitat features would be salvaged during vegetation clearance activities and stockpiled for relocation to nearby areas and/or rehabilitated areas. • Measures to control exotic animals would be undertaken as part of the Project. • Bushfire prevention measures would be implemented in consultation with the Rural Fire Service as part of the Project.
Long-nosed Potoroo (SE mainland)	V	• Continuation of the Vegetation Clearance Procedure to restrict clearing to the minimum area necessary. • Habitat features would be salvaged during vegetation clearance activities and stockpiled for relocation to nearby areas and/or rehabilitated areas. • Measures to control exotic animals would be undertaken as part of the Project. • Bushfire prevention measures would be implemented in consultation with the Rural Fire Service as part of the Project. • An on-site speed limit of 60 km/hr would continue. • Disturbance associated with the Project would be progressively rehabilitated and revegetated as part of the proposed Rehabilitation Management Plan.
Grey-headed Flying Fox	V	• Continuation of the Vegetation Clearance Procedure to restrict clearing to the minimum area necessary. • Measures to control exotic animals would be undertaken as part of the Project. • Bushfire prevention measures would be implemented in consultation with the Rural Fire Service as part of the Project. • Disturbance associated with the Project would be progressively rehabilitated and revegetated as part of the proposed Rehabilitation Management Plan.
Large-eared Pied Bat	V	• Vegetation clearing would occur whenever practicable during late summer or early autumn to minimise impacts to a large range of fauna breeding during spring and summer, and fauna which would hibernate during winter. • Continuation of the Vegetation Clearance Procedure to restrict clearing to the minimum area necessary. • Bushfire prevention measures would be implemented in consultation with the Rural Fire Service as part of the Project. • Disturbance associated with the Project would be progressively rehabilitated and revegetated as part of the proposed Rehabilitation Management Plan.

Table 13 (Continued)
Mitigation Measures for Threatened and Migratory Fauna Species Known or Considered Likely to Occur in the Project Area and Offset Area

Species	Conservation Status[1]	Mitigation
New Holland Mouse	V	• An intensive trapping programme prior to clearing to remove any individuals from within the Project area and relocate them to suitable habitat in adjoining areas. • Discouraging re-entry of individuals into the Project area through habitat disturbance immediately following the trapping and clearing of individuals (e.g. low intensity fires). • Installation of low fencing eg silt fencing, adjacent to the Project area suitable to prevent movement of individuals to the disturbance area. • Disturbance associated with the Project would be progressively rehabilitated and revegetated as part of the proposed Rehabilitation Management Plan. • Ecological burns in the offset areas, implemented at appropriate time intervals, to enhance flora species diversity and condition of the vegetation understorey within revegetation areas and in particular offset area 4. • Bush regeneration in the offset area including planting of appropriate native species, seed dispersal and weed control.
Migratory Birds	M	• Continuation of the Vegetation Clearance Procedure to restrict clearing to the minimum area necessary. • Measures to control exotic animals would be undertaken as part of the Project. • An on-site speed limit of 60 km/hr would continue. • Disturbance associated with the Project would be progressively rehabilitated and revegetated as part of the proposed Rehabilitation Management Plan.

[1] Threatened species status under the EPBC Act (current as at 16 February 2012).

V = Vulnerable E = Endangered M = Migratory

6 OFFSETS

Table 14 provides a list of matters regarding proposed offsets and identifies the corresponding section of the EIS where these matters are addressed.

Table 14
Reconciliation of EIS against Commonwealth Requirements – Offsets

Assessment Requirement	EIS Reference
Offsets	
7. Should any residual impact exist that cannot be mitigated it may be necessary for offset measures to be considered in order to ensure the protection of matters of national environmental significance in perpetuity. If required, the department may negotiate offsets with you during the assessment phase. Reference should be made to the Department's draft policy statement, including any revisions to this statement, at: http://www.environment.gove.au/epbc/publications/draft-environmental-offsets.html *a. the description of any offset package should include how the offset compensates for the residual impacts, when the offset with be delivered and how the offset will be managed;* *b. an assessment of the impact of the offsets on other matters of environmental, economic, or social significance; and* *c. analysis of cost, both financial and other, related to offsets.*	Section 6 of Appendix E, Section 7 of Appendix F and Section 6.1 of this document.

6.1 OFFSET AREAS

A full description of the offset for the Project is provided in Sections 4.9.4 and 4.10.4 of the Main Report of the EIS. The proposed offset areas are located on tenure (lot and DP) shown in Table 15.

Table 15
Tenure of Offset Areas

Lot	DP	Lot	DP
1	997092	5	722748
1	1082739	7	722748
1	998562	45	979859
1	997290	64	979859
1	116325	66	1008585
1	778861	70	979859
1	815045	110	874013
1	855240	392	876813
2	1082739	506	1014670
2	737421	508	1014670
2	778861	1221	806209
2	815045	A	116326

These parcels of land are owned and managed by Yancoal. Proposed offset areas fall within Mining Lease Application Areas 1 and 2 and within Mining Lease 1360.

Table 16 provides the area of known or potential habitat within the Project area and the offset area.

Table 16
Habitat for Threatened Fauna Species Known or Considered Likely to Occur in the Project Area and Offset Area

Species	Conservation Status[1]	Area Impacted (ha)	Area Conserved in Offset Area (ha)	Area Conserved in Voluntary Conservation Area (ha)	Recorded in Project Area	Recorded in Offset Area
Swift Parrot	E	105 ha of native vegetation and 28 ha of cleared land	490 ha of native vegetation and 40 ha of cleared land	220 ha of native vegetation	No	No.
Regent Honeyeater	E	105 ha of native vegetation and 28 ha of cleared land	490 ha of native vegetation and 40 ha of cleared land	220 ha of native vegetation	No	No.
Spotted-tailed Quoll (south-east mainland population)	E	105 ha of native vegetation and 90 ha of cleared land	447 ha of native vegetation and 10 ha of cleared land	220 ha of native vegetation	No	No.
Long-nosed Potoroo (SE mainland)	V	37 ha of native vegetation	224 ha of native vegetation and 10 ha of cleared land	135 ha of native vegetation	No	The Long-nosed Potoroo (SE mainland) was recorded from two locations (Figures 1 and 5) using remote monitoring cameras.
Grey-headed Flying Fox	V	105 ha of native vegetation and 28 ha of cleared land	490 ha of native vegetation and 40 ha of cleared land	220 ha of native vegetation	No	Three individuals of the species were observed foraging in a flowering eucalypt within offset area 3 (Figures 1 and 6).
Large-eared Pied Bat	V	105 ha of native vegetation and 28 ha of cleared land	490 ha of native vegetation and 40 ha of cleared land	220 ha of native vegetation	No	This species was possibly recorded in numerous locations throughout the offset areas from Anabat recordings (Figures 1 and 7).
New Holland Mouse (core*)	V	17 ha of native vegetation	85 ha of native vegetation	-	No	The New Holland Mouse was recorded in five locations in the offset areas (Figures 1, 8 and 10), There is also a possible record from a sixth location from a hair sample. In each location, habitat for the species was classified as wet or dry eucalypt forest with a sparse shrub layer and grassy understorey.
New Holland Mouse (patchy*)	V	102 ha of native vegetation	217 ha of native vegetation and 10 ha of cleared land	220 ha of native vegetation	Yes	

Source: AMBS (2012b) (Appendix F of the EIS).

[1] Threatened species status under the EPBC Act (current as at 23 April 2012).

V = Vulnerable E = Endangered

* Denotes quality of habitat

6.2 ENVIRONMENTAL OFFSET REQUIREMENTS

The EPBC Act and supporting guidelines (refer to *Consultation Draft: EPBC Act Environmental Offsets Policy, 2011* [SEWPaC, 2012b]) contain a number of requirements for environmental offsets. The Project includes a comprehensive offset proposal as described in Section 6 of the Flora Assessment (Appendix E of the EIS) and Section 7 of the Fauna Assessment (Appendix F of the EIS). Section 5 of the Main Report of the EIS describes the rehabilitation and landscape management for the Project.

A reconciliation of the proposed offset areas against the Commonwealth Requirements is provided in Table 17.

Table 17
Reconciliation of the Proposed Offset Strategy against SEWPaC Offset Principles

Offset Requirements	Elements of the Project Offset that address these Requirements
Deliver an overall conservation outcome that improves or maintains the viability of the aspect of the environment that is protected by national environmental law and affected by the proposed development.	As noted in Section 1 of this document, the relevant EPBC Act protected matters are threatened species and threatened ecological communities listed under sections 18 and 18A of the EPBC Act and migratory species listed under sections 20 and 20A (Appendices E and F of the EIS). A net improvement in flora and fauna abundance and diversity is likely because: • 435 ha of cleared land would be revegetated and 10 ha of existing planted trees would be retained, linking many disjunct smaller patches of vegetation; • each vegetation type to be impacted is represented in the offset area; • additional vegetation types would be conserved to those that would be impacted; • the offset areas (totalling 935 ha) would be conserved in perpetuity; • all broad fauna habitat types that occur within the Project area also occur in the proposed offset areas, and the amount of each habitat type in the offset is greater than the amount that would be lost due to the Project. The habitat in the offset areas is considered to be in similar condition to the habitat that would be lost; and • measures to monitor and independently audit the biodiversity offset are provided.
Be efficient, effective, transparent, proportionate, scientifically robust and reasonable.	Flora and fauna surveys have been undertaken in the proposed offset area to determine its suitability as an offset for the Project. The flora surveys identified 12 native vegetation communities in the proposed offset area. The fauna surveys identified potential habitat resources for a number of EPBC listed threatened fauna species including the Long-nosed Potoroo (SE mainland), Grey-headed Flying Fox, Large-eared Pied Bat and New Holland Mouse. The fauna in both the proposed disturbance area and the offset areas has been extensively surveyed by AMBS and EcoBiological. This report provides an assessment of both including: • area of the offset and area of impact; • fauna species present and their conservation status; • connectivity and condition of habitat; and • management actions and security for the offset site.
Be built around direct offsets but may include indirect offsets.	The proposed offset is a direct offset and would secure 935 ha of land in perpetuity for wildlife conservation. The biodiversity offsets contains habitat with a high conservation status, as demonstrated by the presence of numerous threatened fauna species in the offset areas. They have been chosen to directly offset impacts on the basis of a like-for-like or better conservation outcome. The proposed offset area would be actively managed to enhance its values for native flora and fauna through revegetation, weed control and animal pest management.
Be of a size and scale proportionate to the impacts being offset.	The Project would disturb approximately 105 ha of native vegetation and 195 ha of cleared land. The offset areas would conserve and improve in perpetuity approximately 490 ha of native vegetation (composed of equivalent and/or additional fauna habitat types) and approximately 435 ha of cleared, some of which would be revegetated and 10 ha of existing planted trees would be retained.

Table 17 (Continued)
Reconciliation of the Proposed Offset Strategy against SEWPaC Offset Principles

Offset Requirements	Elements of the Project Offset that address these Requirements
Be in proportion to the level of statutory protection that applies to the affected species or community.	No flora species listed in the schedules of the EPBC Act were found in the targeted searches conducted over the Project area and surrounds. Nationally threatened fauna species which are considered to have potential to be impacted by the Project, are all likely to benefit in the medium to long-term from the offset proposal. All fauna species that have been recorded in the study area that are listed as vulnerable under the EPBC Act would have known or potential habitat greater than the area which would be impacted, conserved and improved in the offset area. The Swift Parrot and the Regent Honeyeater (listed as endangered and critically endangered, respectively) are considered very unlikely to occur in the study area, and are likely to be only occasional vagrants. Nonetheless, potential foraging habitat for these species greater than the area which would be impacted would be conserved and improved in the offset area. Further, in relation to all species, the revegetation program is likely to create additional areas of potential habitat.
Effectively manage the risks of the offset not succeeding.	Measures to monitor and independently audit the biodiversity offset are provided, which would provide for ongoing adaptive management in the event unlikely event that the offset is not succeeding. The implementation of the biodiversity offset is likely to be a condition of Project Approval.
Have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced.	An arrangement would be made to ensure long-term protection and management of the offset areas within 12 months of Project approval (e.g. a voluntary conservation agreement pursuant to Section 69B of the NPW Act, as described in contemporary Project approval conditions pertaining to offsets). Measures to monitor and independently audit the biodiversity offset are provided. The implementation of the biodiversity offset is likely to be a condition of Project Approval.

Source: AMBS (2012b) (Appendix F of the EIS).

In addition, Table 18 evaluates the proposed offset areas against key SEWPaC Environmental Offset Guide factors within the Impact Calculator, and 'point-generating' actions within the Offsets Calculator.

Table 18
Environmental Offset Assessment against Key Factors

Key Factors		Elements in relation to Key Factors
Project Area	Conservation Status of the Protected Matter	Threatened species listed under the EPBC Act that have been recorded in or near the Project area are all listed as 'Vulnerable' (Appendix F of the EIS). Some migratory species are also known to use habitat in the Project area.
	Duration of Impact (*not of action*)	The duration of impact is predicted to occur in the short to medium term, due to the proposed revegetation in the Biodiversity Enhancement Area, Offset Areas and rehabilitation of the post mine landforms.
	Condition of Habitat in the Project Area	The Fauna Assessment (Appendix F of the EIS) states: *The condition of the habitat to be removed varies… The majority of the Project area will comprise the broad habitat type Cleared Land, which is in poor condition and provides few resources for native fauna. Areas of native vegetation will also be removed, in particular Dry Sclerophyll Forest. In brief, the Grassy Woodland/Dry Sclerophyll forest on the valley floor is highly fragmented, primarily due to historic agricultural practices and the existing mine. However, these are some of the few remaining large areas of this habitat type remaining in the study area and surrounds. Furthermore, most habitats within the Project area are in moderate to good condition.*
	Type of Habitat in the Project Area	The type of habitat impacted is considered marginal for the Swift Parrot, Regent Honeyeater, Spotted-tailed Quoll, Long-nosed Potoroo, Grey-headed Flying Fox, Large-eared Pied Bat and migratory birds. Potential habitat for the New Holland Mouse is mapped on Figure 10.
Offset Area: Land Tenure Change and Maintenance Concerns	Secured Land Tenure and Maintenance Actions to Maintain Current Condition	An arrangement would be made to ensure long-term protection and management of the offset areas within 12 months of Project approval. A voluntary conservation agreement pursuant to Section 69B of the NSW *National Parks and Wildlife Act, 1974*, (or alternative) would be sought, consistent with contemporary Project approval conditions pertaining to offsets. Due to its conservation in perpetuity, there would be no mining or exploration activities in the offset areas. The management of the proposed offset areas would be described within the *Stratford Mining Complex Biodiversity Management Plan.* Proposed maintenance actions include: • revegetation of cleared land to substantially increase the amount of vegetation in the area; • management of livestock grazing; • control of weeds to enable natural regeneration of native vegetation; • exotic animal management to benefit native wildlife; • bushfire management; and • controlling vehicular access. These are further outlined in Section 4 and Appendix E and F.

Table 18 (Continued)
Environmental Offset Assessment against Key Factors

Key Factors		Elements in relation to Key Factors
Offset Area: Site Characteristics	Location of the Offset Areas in Relation to the Project area	The proposed offset areas are located adjacent to disturbance areas (Figures 1 to 10).
	Contribution to a Wildlife Corridor or Other Connectivity for the Protected Matter	The proposed offset areas provides for a combination of protection and enhancement of existing remnant vegetation as well as active revegetation to increase the overall biodiversity of the area by restoring the internal connectivity of woodland/forest habitats within the proposed offset area. The increase in connectivity complies with a number of guiding principles for wildlife corridor design and implementation as outlines in the Draft *National Wildlife Corridors Plan* (SEWPaC, 2012c). The offset is bordered to the east and south-east by a very large block of largely undisturbed natural vegetation. Consequently, the offset is not isolated in the landscape and its high connectivity helps to ensure its long-term viability. In the long-term offset areas would ensure connectivity between valley floor habitats, the SMC Biodiversity Enhancement Area and the elevated land to the east – this link is poor at present (Appendix E of the EIS). As such, the offset areas, and revegetation efforts, would contribute to connectivity in the locality (Appendix E of the EIS). The linkage is also in a recognised DECC (2007) climate change corridor. The Flora Assessment (Appendix E of the EIS) and Fauna Assessment (Appendix F of the EIS) provide a discussion on the existing infrastructure near or within the offset areas.
	Ecologically Significant Revegetation	The offset areas comprise of a mix of existing remnant habitat and cleared areas that would be revegetated (435 ha), including corridors that link significant isolated natural remnants on the study area to the offset areas in the elevated range to the east of the Project area (Appendix E of the EIS). Also noting that the disturbance areas associated with the Project would be progressively rehabilitated and revegetated with species characteristic of native woodland/open forest (350 ha) and pasture with scattered trees (300 ha). An objective of the rehabilitation programme is to restore ecosystem function to land affected by the mine development including maintaining or establishing self-sustaining ecosystems (SCPL, 2011).
	Time between the Action and the Offset Delivering Ecological Benefit	The disturbance associated with the Project would occur progressively over the life of the mine. Commencement of revegetation efforts would take place within 12 months of Project approval. The ecological benefit of the offset areas would increase over time due to the proposed management.

7 OTHER APPROVAL CONDITONS

Table 19 provides a list of matters regarding the approval conditions for the proposed Project and the corresponding section of the Main Report of the EIS where the matters are addressed.

Table 19
Reconciliation of EIS against Commonwealth Requirements – Other Approvals and Conditions

Assessment Requirement	Main Report of the EIS Reference
Other approvals and conditions	
8. Any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. Information must include:	
a. details of any local or State government planning scheme, or plan or policy under any local or State government planning system that deals with the proposed action, including:	Sections 6.2 to 6.6
i. what environmental assessment of the proposed action has been, or is being, carried out under the scheme, plan or policy; and	Sections 6.2 to 6.6
ii. how the scheme provides for the prevention, minimisation and management of any relevant impacts;	Section 6.7
b. a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the Act), including any conditions that apply to the action;	Sections 6.1 to 6.4
c. a statement identifying any additional approval that is required;	Section 6.4
d. a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.	Section 6.8

8 ECONOMIC AND SOCIAL MATTERS

Table 20 provides a list of economic and social matters and the corresponding section of the EIS where the matters are addressed.

Table 20
Reconciliation of EIS against Commonwealth Requirements – Economic and Social Matters

Assessment Requirement	EIS Reference
Economic and social matters	
9. A description of the short-term and long-term social and economic implications and/or impacts of the project.	Appendix P

9 ENVIRONMENTAL RECORD OF THE PERSON PROPOSING TO TAKE THE ACTION

Table 21 provides a list of the matters regarding the environmental record of the person proposing to take the action and the corresponding section of the EIS where the matters are addressed.

Table 21
Reconciliation of EIS against Commonwealth Requirements – Environmental Record of the Person Proposing to Take the Action

Assessment Requirement	EIS Reference
Environmental record of person proposing to take the action	
10. Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:	
a. the proponent; and	Section 9.1 of this document
b. for an action for which a person has applied for a permit, the person making the application.	Not Applicable
11. Details of the proponent's environmental policy and planning framework.	Attachment D of this document

9.1 ENVIRONMENTAL RECORD OF STRATFORD COAL PTY LTD

SCPL is a wholly owned subsidiary of Yancoal. Yancoal is currently involved in a number of mining operations in the Gloucester Basin region of NSW and surrounds. These mines have been operating in the region for many years without significant incident. Yancoal has never been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or conservation and sustainable use of natural resources.

Periodic audits of compliance against environmental criteria are conducted for all Yancoal-owned mines. In each case, the results of the audits have determined general compliance with the conditions of approval for each operation.

10 INFORMATION SOURCES

Table 22 provides a list of the matters regarding the EIS information sources and the corresponding section of the Project EIS where the matters are addressed.

Table 22
Reconciliation of EIS against Commonwealth Requirements – Information Sources

Assessment Requirement	EIS Reference
Information sources	
12. For information given in an environmental assessment, the draft must state:	
a. the source of the information;	Appendices A to R
b. how recent the information is;	Appendices A to R
c. how the reliability of the information was tested; and	Appendices A to R
d. what uncertainties (if any) are in the information.	Appendices A to R

11 CONSULTATION

Table 23 provides a list of the matters regarding consultation undertaken about the Project and the corresponding section of the Main Report of the EIS where the matters are addressed.

Table 23
Reconciliation of EIS against Commonwealth Requirements - Consultation

Assessment Requirement	Main Report of the EIS Reference
Consultation	
13. Any consultation about the action, including:	
a. any consultation that has already taken place;	Section 3.1
b. proposed consultation about relevant impacts of the action;	Section 3.1
c. if there has been consultation about the proposed action — any documented response to, or result of, the consultation.	Section 3.1
14. identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.	Section 3.1

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ATTACHMENT A

CONTROLLED ACTION AND ASSESSMENT APPROACH DECISION

Australian Government
Department of Sustainability, Environment, Water, Population and Communities

Mr Tony Dwyer
Manager – Environment and Approvals
Stratford Coal Pty Ltd
Level 7, 167 Macquarie Street
SYDNEY NSW 2000

Date: 5 December 2011
EPBC Ref: 2011/6176
EPBC contact: Lachlan Wilkinson
(02) 6274 2470
lachlan.wilkinson@environment.gov.au

Dear Mr Dwyer

Decision on referral
Stratford Extension Project, NSW (EPBC 2011/6176)

This proposed action, to extend the open cut coal mining and processing activities at the Stratford Mining Complex, has now been considered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

As a delegate of the Minister for Sustainability, Environment, Water, Population and Communities, I have decided that the proposed action is a controlled action and, as such, requires assessment and a decision on approval under the EPBC Act before it can proceed.

It appears that the proposed action is likely to have a significant impact on the following matters protected by the EPBC Act:

- Listed threatened species and communities (sections 18 & 18A)
- Listed migratory species (s20 & s20A)

For example, based on the information available in the referral, the proposed action is likely to have a significant impact because it involves the clearing and disturbance of approximately 117 hectares of potential habitat for the vulnerable New Holland Mouse (*Pseudomys novaehollandiae*). The proposed action may also involve impacts to the migratory (and endangered) Regent Honeyeater (*Anthochaera phyrgia*), through the removal of foraging habitat for this species.

Please note that this decision only relates to the potential for significant impact on the specific matters protected by the Australian Government under Chapter 2 of the EPBC Act.

I have also decided that the project will need to be assessed though accredited assessment under the *Environmental Planning and Assessment Act 1979* (NSW).

Each assessment approach requires different levels of information and involves different steps. All levels of assessment will include a public consultation phase, *in which any third parties can comment on the proposed action.*

Details on the assessment process for the project and the responsibilities of the proponent are set out in the enclosed fact sheet. Further information is available from the department's website at http://www.environment.gov.au/epbc.

A copy of the document recording these decisions is enclosed.

The assessment officer will contact you shortly to discuss the assessment process.

I have also written to the following parties to advise them of this decision:

State/territory authority	New South Wales Department of Planning and Infrastructure
Other relevant authority/authorities	Department of Climate Change and Energy Efficiency Department of Resources, Energy and Tourism

If you have any questions about the referral process or this decision, please contact the EPBC project manager and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

David Calvert
A/g Assistant Secretary
Environment Assessment Branch

ATTACHMENT B

DEPARTMENT OF THE SUSTAINABILITY, ENVIRONMENT, WATER, POPULATIONS AND COMMUNITIES – REQUIREMENTS FOR ENVIRONMENTAL ASSESSMENT

Department of the Sustainability, Environment, Water, Populations and Communities – requirements for environmental assessment

Section 75F(3) of the NSW *Environmental Planning and Assessment Act 1979*

The Commonwealth Minister for Sustainability, Environment, Water, Populations and Communities has determined the Stratford Extension Project (EPBC 2011/6176), involving the extension of open cut coal mining and processing activities at the Stratford Mining Complex approximately 11 km south of the town of Gloucester, New South Wales, to be a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The controlled action is likely to have a significant impact on the EPBC Act listed vulnerable New Holland Mouse (*Pseudomys novaehollandiae*). Significant impacts are also considered possible for a number of other threatened and migratory species and one threatened ecological community protected by the EPBC Act including, but not limited to, those listed in Appendix A.

In accordance with the one-off accredited assessment process for this project, the environmental assessment of the impacts of the controlled action must be assessed under the *Environmental Planning and Assessment Act 1979* (EP&A Act). Pursuant to section 75F(3) of part 3A of the EP&A Act the Director-General is required to notify the proponent of these requirements.

The assessment should include enough information about the controlled action and its relevant impacts to allow the Commonwealth Minister for Sustainability, Environment, Water, Populations and Communities to make an informed decision whether or not to approve the controlled action under the EPBC Act.

The following assessment requirements are to be integrated into the assessment requirements of the EP&A Act. The following matters in the EPBC Act and schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* should be considered.

General information

1. The background of the action, including:
    a. the title of the action;
    b. the full name and postal address of the designated proponent;
    c. a clear outline of the objective of the action;
    d. the location of the action;
    e. the background to the development of the action;
    f. how the action relates to any other actions (of which the proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;
    g. the current status of the action; and
    h. the consequences of not proceeding with the action.

Description of the controlled action

2. A description of the action, including:
    a. all the components of the action;
    b. the precise location of any works to be undertaken, structures to be built or elements of the action that may have relevant impacts;
    c. how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;
    d. the timing and duration of the works to be undertaken; and
    e. to the extent reasonably practicable, a description of any feasible alternatives to the controlled action that have been identified through the assessment, and their likely impact, including:
        i. if relevant, the alternative of taking no action;
        ii. a comparative description of the impacts of each alternative on the matters protected by the controlling provisions for the action;
        iii. sufficient detail to clarify why any alternative is preferred to another.

Description of the existing environment

3. A description of the existing environment of the proposal location and the surrounding areas that may be affected by the action, including:
    a. surveys using accepted methodology for targeting listed threatened species, ecological communities and their respective habitat, including but not limited to OEH's *Survey and assessment guidelines* (2009), available at: http://www.environment.nsw.gov.au/threatenedspecies/surveymethodsfauna.htm and the Department of Sustainability, Environment, Water, Populations and Communities (DSEWPaC) species-specific survey guidelines for nationally threatened species, available at: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl

    In addition to the requirements outlined in OEH's *Survey and assessment guidelines* (2009) and DSEWPaC survey guidelines for relevant species, the following must also be included:

    b. a description of the distribution and abundance of threatened species and ecological communities, as well as suitable habitat (including breeding, foraging, roosting habitat, habitat critical to the survival of threatened species) within the site and in surrounding areas that may be impacted by the proposal; and
    c. the regional distribution and abundance of suitable and potential habitat surrounding the site.

Description of the relevant impacts of the controlled action

4. An assessment of all relevant impacts[3] with reference to the *EPBC Act Policy Statement 1.1 Significant Impact Guidelines Matters of National Environmental Significance (2009)* that the controlled action has, will have or is likely to have on: relevant threatened species and/or threatened ecological communities listed under sections 18 and 18A of the EPBC Act, including but not limited to the New Holland Mouse. Information must include:

[3] The term "relevant impact" is defined in section 82 of the EPBC Act.

a. a description of the relevant impacts of the action on matters of national environmental significance;

b. a detailed assessment of the nature and extent of the likely short term and long term relevant impacts;

c. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;

d. analysis of the significance of the relevant impacts;

e. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.

5. Where there is a potential habitat for EPBC Act listed species (Appendix A), surveys must be undertaken. These surveys must be timed appropriately and undertaken for a suitable period of time by a qualified person[4]. A subsequent description of the relevant impacts on such EPBC Act listed species should include, inter alia, direct, indirect, cumulative and facilitative impacts on the:

    a. population of the species at the site;

    b. area of occupancy of the species;

    c. habitat critical to the survival of the species;

    d. breeding cycle of the population; and

    e. availability or quality of habitat for the species.

    If an endangered ecological community or threatened species listed at Appendix A is not believed to be present on the proposed site, detailed information must be included in the Environmental Assessment Report to provide certainty that this community will not be impacted.

Proposed safeguards and mitigation measures

6. A description of feasible mitigation measures, changes to the controlled action or procedures, which have been proposed by the proponent or suggested in public submissions, and which are intended to prevent or minimise relevant impacts. Information must include:

    a. a description of the mitigation measures that will be undertaken to prevent or minimise the relevant impacts of the action. These mitigation measures should be substantiated and based on best available practices;

    b. an assessment of the expected or predicted effectiveness of the mitigation measures including the effect on abundance and condition of species, suitable habitat and ecological communities;

    c. any statutory or policy basis for the mitigation measures;

    d. the cost of the mitigation measures;

    e. an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs (including any relevant thresholds for corrective actions) for the relevant impacts of the action. Include the person or agency responsible for implementing these programs and the effectiveness of all mitigation measures, including any provisions for independent environmental auditing;

[4] Where available, species-specific survey guidelines can be obtained on the department's *Species Profile and Threats Database*: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl

f. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program;

g. identification of mitigation measures proposed to be undertaken by State governments, local governments or the proponent;

h. any changes to the controlled action which prevent or minimise relevant impacts on listed threatened species and communities.

Offsets

7. Should any residual impact exist that cannot be mitigated it may be necessary for offset measures to be considered in order to ensure the protection of matters of national environmental significance in perpetuity. If required, the department may negotiate offsets with you during the assessment phase. Reference should be made to the Department's draft policy statement, including any revisions to this statement, at : http://www.environment.gov.au/epbc/publications/draft-environmental-offsets.html

    a. the description of any offset package should include how the offset compensates for the residual impacts, when the offset will be delivered and how the offset will be managed;

    b. an assessment of the impact of the offsets on other matters of environmental, economic, or social significance; and

    c. analysis of cost, both financial and other, related to offsets.

Other approvals and conditions

8. Any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. Information must include:

    a. details of any local or State government planning scheme, or plan or policy under any local or State government planning system that deals with the proposed action, including:

        i. what environmental assessment of the proposed action has been, or is being, carried out under the scheme, plan or policy; and

        ii. how the scheme provides for the prevention, minimisation and management of any relevant impacts;

    b. a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the Act), including any conditions that apply to the action;

    c. a statement identifying any additional approval that is required;

    d. a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.

Economic and social matters

9. A description of the short-term and long-term social and economic implications and/or impacts of the project.

Environmental record of person proposing to take the action

10. Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:

    a. the proponent; and

b. for an action for which a person has applied for a permit, the person making the application.

11. Details of the proponent's environmental policy and planning framework.

Information sources

12. For information given in an environment assessment, the draft must state:

a. the source of the information;

b. how recent the information is;

c. how the reliability of the information was tested; and

d. what uncertainties (if any) are in the information.

Consultation

13. Any consultation about the action, including:

a. any consultation that has already taken place;

b. proposed consultation about relevant impacts of the action;

c. if there has been consultation about the proposed action — any documented response to, or result of, the consultation.

14. identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.

Appendix A

Threatened Ecological Communities

- *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* (Box-Gum Woodland)

Threatened Flora

- *Allocasuarina defungens* (Dwarf Heath Casuarina)
- *Cryptostylis hunteriana* (Leafless Tongue-orchid)
- *Cynanchum elegans* (White-flowered Wax Plant)
- *Eucalyptus glaucina* (Slaty Red Gum)
- *Euphrasia arguta*

Threatened Fauna

- *Pseudomys novaehollandiae* (New Holland Mouse)
- *Lathamus discolour* (Swift Parrot)
- *Potorous tridactylus* (Long-nosed Potoroo)
- *Pteropus poliocephalus* (Grey-headed Flying-fox)
- *Anthochaera phyrgia* (Regent Honeyeater), also Migratory
- *Litoria aurea* (Green and Golden Bell Frog)
- *Litoria booroolongensis* (Booroolong Frog)
- *Mixophyes balbus* (Stuttering Frog, Southern Barred Frog (in Victoria))
- *Mixophyes iteratus* (Giant Barred Frog)
- *Hoplocephalus bengaroides* (Broad-headed Snake)
- *Chalinolobus dwyeri* (Large-eared Pied Bat)
- *Dasyurus maculatus maculatus* (Spot-tailed Quoll, Spotted-tail Quoll) [South-east Mainland population]
- *Petrogale penicillata* (Brush-tailed Rock-wallaby)
- *Pseudomys oralis* (Hastings River Mouse)
- *Botaurus poiciloptilus* (Australasian Bittern)
- *Rostratula australis* (Australian Painted Snipe), also Migratory

Migratory Species

- *Anthochaera phyrigia* (Regent Honeyeater), also Endangered
- *Apus pacificus* (Fork-tailed Swift)
- *Ardea alba* (Great Egret, White Egret)
- *Ardea ibis* (Cattle Egret)
- *Merops ornatus* (Rainbow Bee-eater)
- *Monarcha melanopsis* (Black-faced Monarch)
- *Rhipidura rufifrons* (Rufous Fantail)
- *Acrocephalus stentoreus* (Clamorous Reed-Warbler)
- *Charadrius bicinctus* (Double-banded Plover)
- *Haliaeetus leucogaster* (White-bellied Sea-eagle)
- *Hirunda caudacutus* (White-throated Needletail)
- *Monarcha trivirgatus* (Spectacled Monarch)
- *Myiagra cyanoleuca* (Satin Flycatcher)
- *Gallinago hardwickii* (Latham's Snipe, Japanese Snipe)
- *Rostratula benghalensis* (Painted Snipe)
- *Rostratula Australia* (Australian Painted Snipe), also Vulnerable

ATTACHMENT C

FAUNA DATABASE SEARCH RESULTS

(SOURCE AMBS 2012 – APPENDIX F OF THE EIS)

Scientific Name	Common Name	Conservation Status[1]	Database records from locality?	Survey records from Project area or surrounds?	Potential to occur in the study area	Potential impact from the Project?
Amphibians						
MYOBATRACHIDAE						
Mixophyes balbus	Stuttering Frog	V	Yes	No	Marginal potential habitat occurs. No potential habitat within the Project area, and has not been recorded despite previous searches, unlikely to occur. The area of marginal habitat unlikely to be impacted by the Project.	Very unlikely.
Mixophyes iteratus	Giant Barred Frog	E	Yes	No	Marginal potential habitat occurs. No potential habitat within the Project area, and has not been recorded despite previous searches, unlikely to occur. The area of marginal habitat unlikely to be impacted by the Project.	Very unlikely.
HYLIDAE						
Litoria aurea	Green and Golden Bell Frog	V	No	No	Potential habitat marginal and would not be impacted by the Project. Not recorded during any previous surveys and no records exist from the locality. Considered unlikely to occur in the Project area.	Very unlikely.
Litoria booroolongensis	Booroolong Frog	E	Yes	No	No potential habitat observed in the Project area or surrounds and has not been recorded. Unlikely to occur.	Very unlikely.
Reptiles						
ELAPIDAE						
Hoplocephalus bungaroides	Broad-headed Snake	V	No	No	No potential habitat occurs in the study area, and no records exist from the locality. Unlikely to occur.	Very unlikely.
Birds						
ROSTRATULIDAE						
Rostratula australis	Australian Painted Snipe	V	No	No	Potential habitat is limited and considered unlikely to occur in the Project area. There are no records of the species from the locality, and no waterbodies are likely to be impacted by the Project.	Very unlikely.
COLUMBIDAE						
Lathamus discolor	Swift Parrot	E	Yes	No	Potential winter foraging habitat exists throughout the Project area. There are very few records of the species from the locality and none from the Project area despite previous surveys. Could occur on occasion.	Some habitat loss. A significance test was carried out for this species.
MELIPHAGIDAE						
Anthochaera phrygia	Regent Honeyeater	E	No	No	Potential foraging habitat occurs, but there are no records of the species in the Project area or the locality. The habitat that would be impacted is unlikely to be essential for the species in the locality.	Unlikely; however, a significance test was carried out due to its Critically Endangered status under the TSC Act.

Scientific Name	Common Name	Conservation Status[1]	Database records from locality?	Survey records from Project area or surrounds?	Potential to occur in the study area	Potential impact from the Project?
Mammals						
DASYURIDAE						
Dasyurus maculatus maculatus	Spotted-tailed Quoll (SE mainland population)	E	Yes	No	Marginal potential habitat occurs throughout most of the Project area. There are records from the locality but none from the Project area or surrounds despite previous surveys. The habitat that would be impacted is unlikely to be essential for the species in the locality.	Some habitat loss. A significance test was carried out for this species.
POTOROIDAE						
Potorous tridactylus tridactylus	Long-nosed Potoroo (SE mainland)	V	Yes	Yes	Potential habitat is patchy throughout the Project area and surrounds and there are recent records for the species. Known habitat for the species has potential to be impacted by the Project.	Likely. A significance test was carried out for this species.
MACROPODIDAE						
Petrogale penicillata	Brush-tailed Rock-wallaby	V	Yes	No	No potential habitat for this species was observed in the Project area and there are no records despite previous surveys. Very unlikely to occur.	Very unlikely.
PTEROPODIDAE						
Pteropus poliocephalus	Grey-headed Flying-fox	V	Yes	Yes	Potential foraging habitat occurs throughout most of the Project area and the species was recorded during recent surveys. Some potential habitat is likely to be impacted by the Project.	Some habitat loss. A significance test was carried out for this species.
EMBALLONURIDAE						
VESPERTILIONIDAE						
Chalinolobus dwyeri	Large-eared Pied Bat	V	Yes	Yes*	Potential foraging habitat occurs throughout most of the Project area. There are records for the species in the locality and possible records from previous surveys. Some potential habitat is likely to be impacted by the Project.	Some habitat loss. A significance test was carried out for this species.
MURIDAE						
Pseudomys novaehollandiae	New Holland Mouse	V	Yes	Yes	Potential habitat is patchy throughout the Project area. The species has been recorded during recent surveys and it is likely some habitat would be impacted by the Project.	Likely. A significance test was carried out for this species.
Pseudomys oralis	Hastings River Mouse	E	No	No	No potential habitat was observed in the Project area. There are no records for the species in the study area or the locality. It is considered very unlikely to occur.	Very unlikely.

[1] Threatened species status under the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999* (current at 19 April 2012).

V = Vulnerable E = Endangered

* Possible identification.

ATTACHMENT D

YANCOAL AUSTRALIA LIMITED ENVIRONMENTAL POLICY

Yancoal Australia Limited's (Yancoal) corporate environment and community relations policy states:

Yancoal accepts its responsibility to conduct its operation in a lawful and environmentally sound manner and to work in consultation with the community and other stakeholders.

We will:

- *Identify, assess and manage potential environmental aspects, impacts and community risks.*
- *Implement and validate an effective documented environment and community relations management system.*
- *Strive for continual improvement in environmental performance.*
- *Provide the resources and training necessary to achieve our goal.*
- *Deliver outcomes that meet or exceed our licenses and approvals.*
- *Comply with applicable legislation and regulations.*
- *Foster positive relationships with regulatory agencies and community representatives.*
- *Be accountable for our actions.*

We will strive for excellence in environmental management and in the establishment of effective and sustainable community relationships.