5 References

Learmonth, R., Whitehead, R., Boyd, B., & Fletcher, S. (2007), Living and Working in Rural Areas. A handbook for managing land use conflict issues on the NSW Northwest slopes, Agricultural Landscapes.

NSW Department of Planning, Industry and Environment (2011), Land Use Conflict Risk Assessment Guide 2011 (LUCRA Guide, 2011), Fact sheet

Interim Construction Noise Guidelines (2009). Department of Environment & Climate Change NSW.



Appendix E: Matters of National Environmental Significance



EPBC Protected Matters Assessment

1 Development Background

ATJs Earthworks - SPH Quarry, Gum Flat is an existing gravel quarry located approximately 10 km west of Inverell. Approval is sought to extract up to 90,000 tonnes of gravel per annum. The proposed development covers an existing cleared area of approximately 10 ha and does not propose to alter the existing footprint of the quarry.

The quarry has been in operation since the 1970s. The existing quarry lies within a 38.5 ha rural property described as Lot 106 in Deposited Plan 656030. The property is primarily used for grazing, includes a residence and is bordered by rural farmland and stands of native woodland. Figure 1 shows the existing site footprint and layout.



1.1 Development Footprint Delineation

The following definitions are used throughout this report to refer to locations in the proposal area:

- The 'subject site' describes all areas that would be directly impacted by the works. This includes the footprint of the quarry;
- The 'study area' includes the site and the adjacent areas that may be indirectly impacted by the proposed works. This includes the property described as Lot 2 in DP 1201396 ;
- The 'search area' refers to a 5-kilometre area surrounding the proposal for database searches.



ATJs Earthworks - SPH Gum Flat Quarry currently employs a suite of environmental protection measures, including controlled drainage measures to divert clean runoff away from the quarry site, and internal drainage and sediment capture measures within the quarry site to prevent erosion from the site and ensure runoff does not contaminate offsite areas or waterways.

Management undertakes weed control measures to control biosecurity risks and ensures that the site does not function as a source of invasive species for the wider area.

Significant revegetation is currently underway and further planned under the quarry's Rehabilitation Plan.

Dust from quarry operations is controlled via wetting of dust generated area where required.

The footprint of the quarry has been established over the past 50-years of operations. This application does not include any expansion of the quarry footprint. The existing woodland surrounding the quarry is to be retained and enhanced through ongoing site rehabilitation.

2 Matters of National Significance

The EPBC Act requires consideration of the effect of an action on the following 7 Matters of National Environmental Significance (MNES):

- World Heritage Properties;
- National Heritage Places;
- Ramsar wetlands of international importance;
- Nationally threatened species and communities;
- Migratory species protected under international agreements;
- Nuclear actions, including uranium mining, and
- The Commonwealth marine environment.

The impact of an action on these matters is assessed under the criteria specified in: Matters of National Environmental Significance – Significant Impact Guidelines 1.1 (DoE 2013).

2.1 Consideration of EPBC Matters

A search was undertaken using the EPBC Protected Matters Search Tool (PMST) (DoEE 2017) to generate a list of World Heritage Properties, National Heritage Places, Ramsar wetlands and nationally threatened species, communities and migratory species protected under international agreements that may occur on or within the region surrounding the proposed development (Figure 2).





Figure 1: 5km buffer around the site searched for MNES using the EPBC PMST.

2.1.1 Results of Database Search

The EPBC PMST did not list any World Heritage Properties or National Heritage Places on or within the search area. The quarry site is located 150-220 km upstream from the closest Ramsar listed (Gwydir Wetlands). Given the distance involved and the relatively small-scale nature of the project's impact upon surface waters, these wetlands are not considered to be at risk from the proposed development.

The proposal does not involve nuclear actions or impact on the marine environment; consequently, these matters are also not relevant to this assessment.

The PMST identified 4 threatened ecological communities in the region. Of these, *White box-Yellow box- Blakely's red gum grassy woodland and derived native grassland* is mapped as occurring within study area and is listed as a critically endangered ecological community.

Nationally threatened species and migratory species protected under international agreements have been initially defined within the search area presented in the EPBC Act Protected Matters Report (Attachment A).



3 Assessment of Significance

3.1 Vulnerable Species

An action has, or will have, or is likely to have a significant impact on a vulnerable species if it does, will or is likely to:

• Lead to a long-term decrease in the size of an important population of species

The subject Lot has historically been subject to clearing and it is currently utilised as an active quarry site and farming enterprise. The existing quarry has an area of approximately 10 ha, and the majority of this quarry site has been subject to extractive activities and associated development, such as internal road construction and the formation of stockpiles. The active quarry area does not support any native vegetation.

The southern and western boundaries of the quarry adjoin stands of native vegetation, much of which is mapped as *White box- yellow box- Blakely's red gum grassy woodland and derived native grassland*, listed as a critically endangered ecological community (CEEC).

These stands of vegetation consist mainly of Roughed Barked Apple and Blakely's Red Gum, with an understorey dominated by Coolatai Grass, with a variety of native shrubs and herbs also present. No White Box is present. These areas remain essentially undisturbed by the quarry, except for the impacts of noise and dust generated by quarry operations.

The quarry is to be excavated vertically and not laterally for ongoing operations. The quarry will not extend into these adjoining woodland remnants.

To this extent there is a low risk of a long term decrease in the size of an important population of species, mainly in associated with the listed CEEC. Conversely the existing and ongoing rehabilitation of the site, including establishing of endemic native plant species, means there is likely to be increased habitat available to important species. The rehabilitation will also provide additional buffers between the quarry operation and the existing woodland remnants.

The quarry has been in operation since the mid-1970's. The remnant woodland has been impacted by operations for a period of 50-years. This may have impacted various fauna species that may migrate through the area. However, the majority of fauna species would be younger than the quarry. For example, Koala that is a noted population in the local area would have been through between 3 and 5 generations since the quarry operation commenced. Such animals become adapted to the intrusion of such activities adjacent to their habitat.

Extensive areas of similar and higher-quality remnant vegetation are present in the search area around the quarry site. It is likely that any vulnerable species has the opportunity to utilise these relatively undisturbed and high-quality habitat areas. It is therefore considered that, given that no clearing will take place and that good quality habitat is widely available in the area, the proposal will not impact vulnerable species or lead to a decrease in the size of an important species population.

• Reduce the area of occupancy of an important population

The proposed development does not seek to change the existing quarry operation. Therefore, the disturbance associated with the development is not expected to pose a threat to the long-term survival of any endangered species or ecological community.

• Fragment an existing important population into two or more populations

The proposed development does not include any clearing of vegetation, and will not isolate or fragment any areas of existing habitat. The Rehabilitation Plan for the site includes landscaping and revegetation which is likely to increase available habitat and provide improved connection of existing habitat areas.

• Adversely affect habitat critical to the survival of a species

The quarry is an existing operation and no clearing or habitat removal is included in the proposed development. Offsite habitat impacts are limited to dust and noise generation associated with quarrying activities, both of which already exist under current quarry operations. No material increase is proposed in quarry operations. The quarry operation includes a range of mitigation and monitoring measures that will control the potential impacts on adjoining remnant woodland areas.

Consequently, there is little to no risk of direct adverse impacts to habitat critical to the survival of a species. The quarry operation currently implements noise and dust mitigation measures to minimise offsite impacts. These will continue and be enhanced as part of the proposed development.

• Disrupt the breeding cycle of an important population

There are no key habitat features which would support the breeding cycles of vulnerable species within the subject site. Therefore, the proposed development is not considered to pose a risk to breeding cycles of vulnerable species populations within the locality.

Habitat features within the study area which are considered to support the breeding cycles of vulnerable species include riparian areas and tree hollows provided by mature trees. The proposed development will not significantly impact these habitats.

• Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline

No clearing is proposed. No habitat removal is proposed. The proposed development is therefore not predicted to result in a decline of vulnerable species populations within the region.

• Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat

Weed seeds may be carried onto and distributed by vehicles entering and exiting the Quarry. Quarry machinery may also transport weed seeds within the quarry site. These risks are no higher than similar vectors for the potential spread of invasive species that currently exist on surrounding land used for agricultural production.

Weed management strategies are implemented as part of current operations. These are to be defined in more details as part of an Operational Environmental Management Plan (OEMP) which is to be formalised as part of approval conditions.

Examples of weed management strategies include herbicide application for areas that cannot be mown or controlled as lawn or landscaped. All trucks and equipment are regularly washed down to remove mud and vegetation that may be brought to site from offsite deliveries of gravel.

• Introduce disease that may cause the species to decline, or

The operation of a quarry is not considered a disease risk.

• Interfere substantially with the recovery of the species

Ensuring the recovery of a species generally involves the protection and enhancement of existing populations and habitat, by preventing further clearing and modification of native vegetation communities and protecting water quality values.

The proposal does not propose a significant impact upon any existing habitat, species or ecological community and is therefore not considered a risk to the recovery of fauna or flora species within the locality.

The site Rehabilitation Plan includes significant revegetation across the site with native endemic species. This is likely to enhance the recovery of any species impacted by the loss of habitat.

3.2 Critically Endangered and Endangered Species

An action is likely to have a significant impact on a critically endangered or endangered species if there is a real chance or possibility that it will:

- Lead to a long-term decrease in the size of a population;
- Reduce the area of occupancy of the species;
- Fragment an existing population into two or more populations;
- Adversely affect habitat critical to the survival of a species;
- Disrupt the breeding cycle of a population;
- Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline;
- Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the critically endangered or endangered species' habitat;
- Introduce disease that may cause the species to decline; or
- Interfere substantially with the recovery of the species.

The proposal does not include any clearing or habitat removal. All land within the quarry footprint has been previously cleared and is incorporated into the quarry operation. The proposed development will not result in habitat fragmentation, and measures will be implemented to minimise the risk of spreading of invasive species.

Overall, the proposed development is not considered to pose a risk to critically endangered or endangered species.

3.3 Critically Endangered and Endangered Ecological Communities

An action is likely to have a significant impact on a critically endangered or endangered ecological community if there is a real chance or possibility that it will:

- *Reduce the extent of an ecological community;*
- Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines;



- Adversely affect habitat critical to the survival of an ecological community;
- Modify or destroy abiotic (non-living) factors (such as water, nutrients or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns;
- Cause substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting;
- Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to:
 - Assisting invasive species, that are harmful to the listed ecological community, to become established, or
 - Causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community, or
- Interfere with the recovery of an ecological community.

The potential impact of the proposed development upon critically endangered ecological communities is limited to the areas on the boundary of the subject site. This includes areas mapped and identified as White box- Yellow box- Blakely's red gum grassy woodland and derived native grassland. Inspection of woodland within the property indicates that no White Box is present but species identified within the community are present. The proposed development includes preservation of this woodland within the subject land.

An Operational Environmental Management Plan will be implemented throughout the lifetime of the proposal that will minimise any off-site and indirect impacts of the quarry operation. Therefore, the proposed development is not considered to propose an impact upon critically endangered or endangered ecological community which may be present within the region.

3.4 Listed Migratory Species

An action is likely to have a significant impact on a migratory species if there is a real chance or possibility that it will:

• Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for migratory species;

Important habitat for a migratory species is defined as habitat which is:

- Utilised by migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species; and/or
- Of critical importance to the species at particular life cycle stages; and/or
- Utilised by a migratory species which is at the limit of the species range; and/or
- Within an area where the species is declining.



It is possible that migratory species may use trees in the study area for foraging or resting during their migration. The vegetation surrounding the quarry footprint is mature and may be used by migratory species for foraging and roosting.

The quarry operation proposal involves preservation of this surrounding woodland remnant. If migratory species utilise the area, they will continue to do so.

• 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

The proposed development is unlikely to impact upon any important habitat for migratory species, provided appropriate mitigation measures are implemented to minimise the spread and/or establishment of weed species. Weed control within the site is a current management tool to prevent invasive species and this will continue for the life of the quarry.

• Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species

The proposal is not considered a risk to the lifecycle of the listed migratory species.

4 Conclusion

The activities associated with the proposal would be the same or similar to the current ongoing extractive activities at the quarry. After the completion of quarrying activities, the site will be rehabilitated to a condition that is suitable for agricultural use.

This assessment concludes that there will be no significant long-term impacts on any listed ecological community, threatened or migratory species of national environmental significance as a consequence of the proposed development, providing:

- The existing footprint of the site is not altered or extended;
- The design and management of the quarry are in accordance with best management practices and relevant guidelines; and
- Appropriate mitigation measures are implemented throughout the operation of the quarry.

As the proposed development seeks approval for the existing operation of the ATJs Gum Flat quarry and does not propose an increase in existing production or a change in land use, the likely impacts upon the environment of the operation are known and established. These impacts are limited to potential noise and dust impacts on the surrounding remnant habitat.

With adoption of mitigation measures outlined in the EIS submissions as part of an OEMP, the potential impacts upon the surrounding environment are predicted to be low to negligible.

5 References

DoE (2013) Matters of National Environmental – Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999. Department of the Environment

DoEE Protected Matters Search Tool (accessed 2017). Department of the Environment and Energy Website: <u>http://www.environment.gov.au/epbc/protected-matters-search-tool</u>



Attachment A: EPBC Act Protected Matters Report



Australian Government

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 03-Dec-2024

Summary Details Matters of NES Other Matters Protected by the EPBC Act Extra Information Caveat Acknowledgements



Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	4
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	46
Listed Migratory Species:	8

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	18
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	1
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None



Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands)		[Resource Information]
Ramsar Site Name	Proximity	Buffer Status
Banrock station wetland complex	1100 - 1200km upstream from Ramsar site	In feature area
Gwydir wetlands: gingham and lower gwydir (big leather) watercourses	150 - 200km upstream from Ramsar site	In feature area
Riverland	1000 - 1100km upstream from Ramsar site	In feature area
The coorong, and lakes alexandrina and albert wetland	1200 - 1300km upstream from Ramsar site	In feature area

Listed Threatened Ecological Comm	nunities	[Re	source Information]
For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps. Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.			
Community Name	Threatened Category	Presence Text	Buffer Status
Natural grasslands on basalt and fine-	Critically Endangered	Community likely to	In feature area

textured alluvial plains of northern New South Wales and southern Queensland		occur within area
New England Peppermint (Eucalyptus nova-anglica) Grassy Woodlands	Critically Endangered	Community may occurIn feature area within area
Weeping Myall Woodlands	Endangered	Community likely to In feature area occur within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community likely to In feature area occur within area

Listed Threatened Specie	S		[Resource Information]
Status of Conservation Deper Number is the current name I	ndent and Extinct are not MNES und D.	er the EPBC Act.	
Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			

ATJs Earthworks - SPH Quarry, Gum Flat

Matters of National Significance Assessment

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat may occur within area	In buffer area only
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area	In feature area
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area

ATJs Earthworks - SPH Quarry, Gum Flat

Matters of National Significance Assessment

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area	In feature area
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area	In feature area
Polytelis swainsonii Superb Parrot [738]	Vulnerable	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat likely to occur within area	In feature area
CIQU			
Maccullochella neelii			
Murray Cod [66633]	Vulnerable	Species or species habitat may occur within area	In buffer area only
MAMMAL			
Chalinolobus dwveri			
Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat may occur within area	In feature area
Dasyurus maculatus maculatus (SE main Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	land population) Endangered	Species or species habitat likely to occur within area	In feature area
Nyctophilus corbeni Corben's Long-eared Bat, South-eastern Long-eared Bat [83395]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Petaurus australis australis			
Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat may occur within area	In feature area
Petrogale penicillata			
Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Phascolarctos cinereus (combined popula	tions of Qld, NSW and th	e ACT)	
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
Pteropus poliocephalus			
Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
PLANT			
Acacia pubifolia			
Velvet Wattle [19799]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arthraxon hispidus			
Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Boronia granitica			
Granite Boronia [18598]	Endangered	Species or species habitat may occur within area	In buffer area only
Cadellia pentastvlis			
Ooline [9828]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Callistemon pungens			
[55581]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Dichanthium setosum			
bluegrass [14159]	Vulnerable	Species or species habitat known to occur within area	In feature area
Eucalyptus caleyi subsp. ovendenii			
Ovenden's Ironbark [56193]	Vulnerable	Species or species habitat may occur within area	In feature area

ATJs Earthworks - SPH Quarry, Gum Flat

Matters of National Significance Assessment

Scientific Name	Threatened Category	Presence Text	Buffer Status
Eucalyptus mckieana McKie's Stringybark [20199]	Vulnerable	Species or species habitat may occur within area	In feature area
Eucalyptus nicholii Narrow-leaved Peppermint, Narrow- leaved Black Peppermint [20992]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Eucalyptus rubida subsp. barbigerorum Blackbutt Candlebark [64618]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<u>Homoranthus prolixus</u> [55198]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Picris evae Hawkweed [10839]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Prasophyllum sp. Wybong (C.Phelps OR) a leek-orchid [81964]	G 5269) Critically Endangered	Species or species habitat may occur within area	In feature area
Swainsona murrayana Slender Darling-pea, Slender Swainson, Murray Swainson-pea [6765]	Vulnerable	Species or species habitat may occur within area	In feature area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat known to occur within area	In feature area
Vincetoxicum forsteri listed as Tylophora [92384]	linearis Endangered	Species or species habitat likely to occur within area	In feature area
REPTILE			
Anomalopus mackayi Five-clawed Worm-skink, Long-legged Worm-skink [25934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Aprasia parapulchella Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat may occur within area	In feature area

ATJs Earthworks - SPH Quarry, Gum Flat		Matters of National Significance Assessmen	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Myuchelys belli			
Western Sawshelled Turtle [86075]	Endangered	Species or species habitat may occur within area	In feature area
<u>Uvidicolus sphyrurus</u> Border Thick-tailed Gecko, Granite Belt Thick-tailed Gecko [84578]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Listed Migratory Species		[<u>Re</u>	source Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Hirundapus caudacutus			
White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Motacilla flava			
Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos			
Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii			
Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands	L	Resource Information]
The Commonwealth area listed below may indicate the presence of Con the unreliability of the data source, all proposals should be checked as a Commonwealth area, before making a definitive decision. Contact the S department for further information.	mmonwealth la to whether it im State or Territor	nd in this vicinity. Due to ipacts on a ry government land
Commonwealth Land Name	State	Buffer Status
Communications, Information Technology and the Arts - Telstra Corport	ation Limited	
Commonwealth Land - Australian Telecommunications Commission [13	39521NSW	In buffer area only

Listed Marine Species	[Res	[Resource Information		
Scientific Name	Threatened Category	Presence Text	Buffer Status	
Bird				
Actitis hypoleucos		Comp. 400 400	6855500 BH	
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area	
Apus pacificus				
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area	
Bubulcus ibis as Ardea ibis				
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area	
Calidris acuminata				
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area	
Calidris ferruginea				
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area	
Calidris melanotos				
Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area	
Chalaitas asquians as Chryssessory	ocoulone			
Black-eared Cuckoo [83425]	Vacuidita	Species or species habitat likely to occur within area overfly marine area	In feature area	



Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Hallaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
<u>Motacilla flava</u> Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
<u>Rhipidura rufifrons</u> Rufous Fantail [592]		Species or species habitat likely to occur within area overfly marine area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
Rostratula australis as Rostratula beng	phalensis (sensu lato)		
Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

EPBC Act Referrals			[Resou	rce Information
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area



Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- · other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereor. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- · threatened species listed as extinct or considered vagrants;
- · some recently listed species and ecological communities;
- · some listed migratory and listed marine species, which are not listed as threatened species; and
- · migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- · listed migratory and/or listed marine seabirds, which are not listed as threatened,
- have only been mapped for recorded breeding sites; and
- · seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

