APPENDIX D-5 BAAM TERRESTRIAL VERTEBRATE ASSESSMENT GAP ANALYSIS REPORT

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Project Summary: Review and summarise existing terrestrial vertebrate data and other information for the study area and surrounds. Provide an analysis of the usefulness of existing data and identify any need to collect additional data to meet the requirements of the Preliminary Terms of Reference for an EIS for the Connors River Dam project.

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Managing Director

TERRESTRIAL VERTEBRATE ASSESSMENT
GAP ANALYSIS REPORT
CONNORS RIVER DAM PROJECT

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1.0 INTRODUCTION

1.1 BACKGROUND

The Connors River Dam and Pipelines project involves the construction of a new water supply dam on Connors River in Central Queensland and water transport pipelines to distribute the water to a number of locations. The greatest demand for water from the Connors River Dam is in the Northern Bowen Basin, west of the dam location, toward Moranbah.

A number of Full Supply Levels (FSLs) are currently being considered, from 163.9 m (150,000 ML storage) to 173.6 m (336,000 ML storage). The area inundated at 173.6 m AHD is 5400 hectares.

In February 2008, Biodiversity Assessment and Management Pty Ltd (BAAM) was engaged by SunWater to undertake a baseline survey of the terrestrial fauna and associated habitats of the proposed inundation area, its surrounds, habitats upstream and downstream of the impoundment, and the water transport pipeline locations.

The baseline data is a key input into the Environmental Impact Statement (EIS) process. The broad aim of the baseline data is to provide information needed to describe the existing terrestrial ecological values of the subject areas, which in turn can be used to interpret impacts and develop mitigation strategies.

The EIS will be prepared using existing technical information and the results of the baseline studies. It is recognised that the level of technical rigour and predictive capability of methods used in the EIS will largely depend on the quality and quantity of existing information/data on which assessments will be based. Consequently, a key aspect of the project is to undertake a Gap Analysis to identify any potential deficiencies in the existing information; and to identify studies required to address these gaps.

This report is an analysis of key information gaps with respect to the terrestrial fauna of the Connors River Dam project area. This has been based on an understanding of the project as derived from the study brief.

1.2 AIMS AND OBJECTIVES

The overall aim of this study is to: review and identify the quantity and quality of existing data relating to the terrestrial fauna on which future baseline data collection and relevant sections of the EIS will be based; and identify key information gaps as well as any further investigation that will be required to fill these gaps. Thus the specific objectives of this study are to:

- Determine the extent to which previous terrestrial fauna work can be used for the baseline data and EIS; and
- Identify whether more detailed terrestrial fauna assessments are required to refine existing work or to provide additional assessments of key issues which have not yet been addressed.

This Gap Analysis considers whether there is adequate existing information/data to meet the EIS requirements as outlined in the Preliminary Terms of Reference provided in the Study Brief. It should be noted that at the stage of report preparation, Final Terms of Reference has not been prepared; hence there is some potential for changes to the required scope of works.

This Gap Analysis is concerned only with the terrestrial fauna; that is animals which are not confined to the edges of or within streams, stream banks or aquatic in habitat. The aquatic fauna will be considered in a separate report. A number of animals frequent both the riparian zone and wetlands (e.g. various birds, reptile and frog species) and the adjacent terrestrial zone and may move through the landscape along riparian corridors and/or between riparian remnants; while for others the riparian and aquatic zones provide a refuge in times of drought. Thus this analysis is concerned with the terrestrial fauna found between the aquatic/riparian zone and the proposed dam's upper water level and adjacent land. It includes terrestrial fauna species which from time to time utilise or reside in riparian vegetation and/or wetlands.

1.3 SCOPE

At present, our understanding of the project is based on details provided in the Study Brief and Initial Advice Statement.

The scope of the baseline studies will be to address the components set out in **Table 1.1** as defined by the Preliminary Terms of Reference for the terrestrial fauna existing environment component of the EIS. The TOR refers to all components of the project, including the inundation area and pipeline.

The scope of this Gap Analysis is to assess the existing information for each of these components and determine where additional information is required to provide sufficient detail to provide a solid basis for impact assessment.

The requirements of the Preliminary Terms of Reference for impact assessment are provided **Table 1.2**.

TABLE 1.1. Terrestrial Fauna 'Existing Environment' EIS Components as defined by the Preliminary Terms of Reference

Terrestrial Fauna Requirements – Existing Environment
Describe the terrestrial and riparian fauna occurring or likely to occur in the areas affected by the project, noting the broad distribution patterns in relation to the habitat types present.
Wildlife corridors, formal or otherwise, critical habitat and refugia should be identified and mapped.
The description of the fauna present should include: • Species diversity (i.e. a species list) of amphibians, birds, reptiles, mammals and any invertebrates of recognised significance. • Existence (actual or likely) of any rare, threatened or otherwise noteworthy species/communities in the study area, including discussion of range, habitat, breeding, recruitment, feeding and movement requirements, current level of protection (e.g. any requirements of Protected Area Management Plans or Threatened Species Recovery Plans) and sensitivity to change. • Any species that are poorly known but suspected of being rare or threatened. • The existence of feral or exotic species, including invertebrates of economic or conservation significance. • An estimate of commonness or rarity for the listed or otherwise significant species. • Use of the area by migratory birds.
The EIS should indicate how well any affected communities or species are represented and protected elsewhere in the region where the Project occurs or in the State.
Methodology used for fauna surveys should be specified in the appendices to the report. Relevant site data should be provided to the EPA in a format compatible with EPA WildNet database.

TABLE 1.2. Terrestrial Fauna 'Potential Impacts and Mitigation Measures' EIS Components as defined by the Preliminary Terms of Reference

Terrestrial Fauna Requirements– Potential Impacts and Mitigation Measures
The assessment of potential impact should consider: • Impacts the Project may have on terrestrial fauna, relevant wildlife habitat and other fauna conservation values, including: – Impacts due to loss of range/habitat, food supply, nest sites, breeding/recruiting potential or movement corridors; – Impacts on rare and threatened or otherwise noteworthy animal species; – Cumulative effects of direct and indirect impacts; and – Threatening processes leading to progressive loss.
With respect to mitigation strategies the following should be provided: • Measures to mitigate the identified impacts should be described. Any provision for buffer zones and movement corridors, nature reserves or special provisions for migratory or nomadic animals should be discussed and coordinated with the outputs of the flora assessment. • Details of the methodologies that would be used to avoid injuries to livestock and native fauna as a result of the Project's construction and operational works, and if accidental injuries should occur the methodologies to assess and handle injuries. • Methods for minimizing introduction of feral animals, and other exotic fauna such as declared pest species.

2.0 METHODOLOGY

The Initial Advice Statement (SunWater 2008) includes a broad assessment of environmental values and issues in the study area, based on an examination of database records, existing mapping and a broad overview of existing relevant reports. The current assessment provides a more detailed examination of these and other data sources of relevance to the study.

Existing environmental literature and data relevant to the study area were collated and reviewed. Relevant existing information was sourced from the following:

- Published scientific papers;
- Database records (EPBC, Queensland Museum, etc); and
- Grey literature.

Each article of information has been collated to a cursory level sufficient to determine its relevance to the study. The collected information has then been reviewed to prioritise and identify information of direct relevance to the study.

A classification key for the quality and/or value of the available information has been established, as listed in **Table 2.1**.

A further assessment of the quality and/or quantity of each information source has been undertaken using the definitions described in **Table 2.2**. Key information gaps in the data available to adequately define the existing terrestrial flora and fauna and to determine the impacts of the proposed dam construction and operation have been identified on the basis of these assessments, and recommendations are provided to fill these gaps.

TABLE 2.1: Data Quality/Value Categories

Category	Description
1. Raw data (no interpretation)	1a. Data in basic original instrument format with no validation. 1b. Data extracted and archived in usable form following basic validation.
2. Primary data source (field-based observation study, non-experimental approach)	2a. Collection of field data undertaken to specifically describe on-site conditions (current-day). 2b. Collection of field data undertaken to specifically describe on-site conditions (historical). 2c. Collection of field data undertaken to describe conditions/values at broad spatial scales (e.g. whole of catchment), but also considers on-site conditions/values. 2d. Collection of field data undertaken elsewhere outside the study area, but findings relevant to study area.
3. Primary data source (empirical, experimental approach used for impact definition)	3a. Direct measurements of impact under investigation undertaken at dam site. 3b. Direct measurements of impact under investigation undertaken elsewhere, but relevant to study area.
4. Primary data (numerical modelling)	4a. Soundly established, but with limited or no validation. 4b. Validated as regionally sound. 4c. Validated against local dam site data.
5. Secondary data source (review/synthesis of primary data sources)	5a. Considers study area. 5b. Considers case studies undertaken elsewhere, but relevant to study area.

TABLE 2.2. Data Quality/Quantity Review Definitions

Code	Description
1	Limited sampling effort in time (e.g. does not consider inter-annual or seasonal variations).
2	Limited sampling effort in space (e.g. inadequate replication at different spatial scales, or mismatch in spatial scale with issue under investigation).
3	Potential/likely inaccuracies in collected data (e.g. due to methods of data collection, reporting etc.).
4	Data not- current (e.g. major changes in environmental conditions since survey undertaken).
5	Data current, robust sampling design (adequate replication in time and space), data likely to be accurate.

The available data sources are listed and classified in **Table 2.3.** The quality of the data to contribute to adequate definition of the existing environment is considered in **Section 3.0**.

TABLE 2.3. Quality/Value and Quality/Quantity of Terrestrial Fauna Data– Existing Environment

Terrestrial Fauna Data Sources – Existing Environment	Quality/value (Table 2.1)	Quality/ Quantity (Table 2.2)
Aerial Photography: Connors Range QAP6119 Run 1 and 2 (1:40,000) 2004 and QAP5793 Carmila Run 11 and 12(1:25,000) 1999.	1b	4
Birds Australia (2008). Birds Australia Database (http://www.birdsaustralia.com.au/).	1b	1
Broadsound Shire Council (2005). Pest Management Plan - Effective: 2005 to 2009.	5b	1
Cogger *et al*. (1993). *The Action Plan for Australian Reptiles*. ANCA, Canberra.	5b	2
DEWHA (2008c). Commonwealth EPBC online protected matters search tool'. Department of Environment Water, Heritage and the Arts, 06/03/08.	1b	2
DEWHA (2007a). Australian Natural Resources Atlas "Biodiversity Assessment – Brigalow Belt North". Australian Government, Canberra. (http://www.anra.gov.au/topics/vegetaiton/assessment/qld).	2d	3
DNRW (2006b). Pest animal distribution. (http://www.nrm.qld.gov.au/pests/maps/pest_distribution/search.php).	1b	1
DNR (1997). Threatened Flora and Fauna Information Species Management Manual. Department of Natural Resources.	5b	2
DNRM (1999). Report on Connors River Damsite at AMTD 95.7km PMF.	2c	1
DNRM (2003). Report on Connors River Damsite at AMTD 95.7km Flood Hydrology.	2c	1
DNRW (2006a). Central Queensland Water Supply Strategy.	2c	1
EPA (2007a). Conservation Management Profile – Semi-evergreen vine thicket regional ecosystems in the Brigalow Belt bioregion – an overview. Ecosystem Conservation Branch, August 2007.	5b	1
EPA (2008a). 'Regional Ecosystem mapping. On line 06/03/08.	2d	3
EPA (2008b). 'WildNet Database.' Queensland Environmental Protection Agency, Brisbane. On line 06/03/2008.	1a/1b	1
Garnett, T and Crowley GM (2000). *The Action Plan for Australian Birds*. Environment Australia, Canberra.	1b	2
Hyder Consulting (1999). Initial Environmental Evaluation – Mt. Bridget Dam, Connors River. July 1999.	1a	1
Ingram, GJ and Raven RJ (eds) (1991). *An Atlas of Queensland's Frogs, Reptiles, Birds and Mammals*. Queensland Museum, Brisbane.	1a	5
Maxwell, S, Burbidge, AA and Morris, K (1996). *Action Plan for Australian Marsupials and Monotremes*. ANCA, Canberra.	5b	2
Parsons Brinckerhoff (2007). Connors River Dam (AMTD 95.7km) Stage 1: pre-feasibility study.	2c	1
Queensland Museum (2008). Database.	1a	5
SunWater (2005). Supplementary report – feasibility study – Preliminary design for a dam at the Mount Bridget Site Connors River AMTD 95.7km.	2b	1
SunWater (2008). Connors River Dam and Pipelines Initial Advice Statement. Report prepared for Department of Infrastructure and Planning. Brisbane, February 2008.	2b	1
Whitsunday Hinterland and Mackay Regional Planning Project (2001) Water infrastructure assessment.	2c	1
Young, PAR, Wilson, BA, McCosker, RJ, Fensham, RJ, Morgan, G and Taylor, PM (1999). 'Brigalow Belt' in *The Conservation Status of Queensland's Bioregional Ecosystems*. (eds. PS Sattler and RD Williams) EPA, Brisbane.	5a	1

3.0 GAP ANALYSIS

3.1 EXISTING INFORMATION

3.1.1 Terrestrial Vertebrates

Comprehensive data searches have found no evidence of previous terrestrial fauna studies undertaken within the inundation area and pipeline route other than a preliminary fauna assessment carried out by Hyder (1999) for the Mt Bridget Dam project.

The most relevant existing information is that derived from database sources (Queensland Museum, WildNet, Protected Matters Online and Birds Australia databases) for the study area and surrounding habitats, although there is a lack of records specifically from the study area.

Database records listed in the appendices are provided using the nomenclature of the source. There is a lack of uniformity in nomenclature across the organisations that maintain the databases. In an effort to simplify nomenclature this report follows the CSIRO List of Australian Vertebrates (Clayton *et al*. 2006) as it provides a single point of reference for all terrestrial vertebrate groups. Any notable variations in common and/or scientific names of conservation significant species will be identified in the text, and where taxonomic revision affects the conservation status of a species the possible consequences will be addressed within the species profiles provided hereunder.

Inundation Area

Based on existing information, the inundation area may support up to twenty-eight (28) vertebrate species of conservation significance, including 12 species listed as Endangered, Vulnerable or Rare (NCA and/or EPBC), two species listed as being of special Cultural Significance (NCA); eight Migratory bird (terrestrial) species (EPBC); seven Migratory (wetland) bird species and one Migratory reptile (EPBC) (N.B. these categories are not mutually exclusive).

A search of three databases (i.e. Queensland Museum, Birds Australia and the EPA's Wildlife Online **Appendices 1**, **2**, and **3** respectively) found records for six of these species - four birds and two mammals (**Table 3.1**) within, or in the locality of, the study area. The remaining species are derived from the EPBC Protected Matters Online search (**Appendix 4**) and are listed in **Table 3.2**.

TABLE 3.1. List of Fauna of Conservation Significance Recorded from the Inundation Area and its Immediate Surrounds

Scientific Name	Common Name	Conservation Status	
		NCA	EPBC
Ardea alba [1]	Great Egret	S	M
Geophaps scripta scripta	Squatter Pigeon (southern subspecies)	V	V
Merops ornatus	Rainbow Bee-eater	S	M
Monarcha trivirgatus [2]	Spectacled Monarch	S	M
Ornithorhynchus anatinus	Platypus	CS	
Phascolarctos cinereus	Koala	CS	

Abbreviations
Status: Queensland's Nature Conservation Act 1992 (NCA): V = Vulnerable, S = Special Least Concern (Migratory) wildlife, CS = Culturally Significant Least Concern wildlife.
Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC): V = Vulnerable, M = Migratory Species.
Nomenclature: Unless otherwise noted, this table follows the CSIRO List of Australian Vertebrates (Clayton *et al*. 2006). Any notable variations in common and/or scientific names of conservation significant species are identified hereunder.
[1] also known as Eastern Great Egret *Ardea modesta* and as *Casmerodius albus*
[2] also known as *Symposiarchus trivirgatus*

TABLE 3.2. List of Fauna of Conservation Significance which may occur within the Inundation Area and its Immediate Surrounds

Scientific Name	Common Name	Conservation Status	
		NCA	EPBC
Crocodylus porosus	Saltwater Crocodile	V	M
Rheodytes leukops	Fitzroy Turtle	V	V
Egernia rugosa	Yakka Skink	V	V
Denisonia maculata	Ornamental Snake	V	V
Nettapus coromandelianus albipennis	(Australian) Cotton Pygmy-goose	R	M
Bubulcus ibis [1]	Cattle Egret	S	M
Haliaeetus leucogaster	White-bellied Sea-Eagle	S	M
Erythrotriorchis radiatus	Red Goshawk	E	V
Rostratula australis	Australian Painted Snipe	V	V
Rostratula benghalensis s. lat. [2]	Painted Snipe	V	M
Gallinago hardwickii	Latham's Snipe	S	M
Numenius minutus	Little Curlew	S	M
Hirundapus caudacutus	White-throated Needletail	S	M
Apus pacificus	Fork-tailed Swift	S	M
Rhipidura rufifrons	Rufous Fantail	S	M
Monarcha melanopsis	Black-faced Monarch	S	M
Myiagra cyanoleuca	Satin Flycatcher	S	M
Hirundo rustica	Barn Swallow	S	M
Neochmia ruficauda ruficauda	Star Finch (eastern and southern subspecies)	E	E
Dasyurus hallucatus	Northern Quoll	LC	E
Pteropus conspicillatus	Spectacled Flying-fox	LC	V
Nyctophilus timoriensis [3]	Greater Long-eared Bat	V	V

Abbreviations
Status: Queensland's Nature Conservation Act 1992 (NCA): E = Endangered, V = Vulnerable, R = Rare, S = Special Least Concern (Migratory) wildlife.
Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC): E = Endangered, V = Vulnerable, M = Migratory Species.
Nomenclature: Unless otherwise noted, this table follows the CSIRO List of Australian Vertebrates (Clayton *et al*. 2006). Any notable variations in common and/or scientific names of conservation significant species are identified hereunder.
[1] also known as *Ardea ibis*
[2] Australian Painted Snipes have been considered a subspecies of *Rostratula benghalensis*, a species found in sub-Saharan Africa and Asia (Marchant and Higgins 1993). The Australian birds are now considered to be an endemic species, in which case *R. benghalensis* does not occur in Australia (Garnett and Crowley 2000; Geering *et al*. 2007).
[3] Also known as Eastern Long-eared Bat, *Nyctophilus timoriensis* is currently undergoing taxonomic revision and will be redescribed as four separate species. The South-eastern Long-eared Bat is the 'form' which may occur in the study area (Turbill *et al*. 2008).

Eleven species listed as Endangered or Vulnerable (EPBC and/or NCA) may be, or are known to be, present in the study area. Brief species profiles are provided hereunder.

- Saltwater Crocodile – this species prefers coastal rivers and swamps but may range inland along major rivers. It is also considered Migratory (EPBC).

- Fitzroy Turtle – the sole member of its genus and able to absorb oxygen from water through unique cloacal pouches. It is known only from the Fitzroy River and tributaries and has a distribution

centred on riffle zones (Cogger 2000; Tucker *et al*. 2001; Hamann *et al*. 2007), the use of which is facilitated by its aquatic respiration (Gordos *et al*. 2004).

- Yakka Skink – found in dry open sclerophyll woodlands from southern Cape York Peninsula south to the St. George and Bollon regions where it lives communally in fallen logs, rock crevices and burrows excavated under logs and rocks (Wilson and Swan 2008).
- Ornamental Snake – a nocturnal species which prefers low lying areas close to fresh water and feeds exclusively on frogs and is confined to central eastern Queensland (Wilson and Swan 2008).
- Red Goshawk –found mainly along or near watercourses, in swamp forest and woodlands on the coastal plain. Favours patches of dense forest interspersed with open woodland or cleared land.
- Australian Painted Snipe – prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, low scrub or open woodland forests.
- Squatter Pigeon (southern subspecies) – found on grassy woodlands and plains, prefers sandy areas usually close to water. This species has been reported to occur in the area in the past.
- Star Finch (eastern and southern subspecies) – occurs mainly in dense, damp grasslands bordering wetlands and watercourses, but also in open grassy woodlands near permanent water or that are subject to regular inundation. Its range has contracted seriously and the species is now found in scattered populations across northern Queensland. The more recent southerly records (to Rockhampton) are considered to be aviary escapees (Higgins *et al.* 2006) and the species is probably locally extinct.
- Northern Quoll – once found across northern Australia but now restricted to several disjunct populations including the central east coast and ranges of Queensland. It can be found in a range of habitats but is most common in rocky eucalypt woodlands where it establishes dens in tree hollows and rock crevices (Strahan 1998).
- Greater Long-eared Bat (south-eastern form) – a medium sized insectivorous bat that roosts in tree hollows or under bark. It can be found in arid and semi-arid habitats including mallee and dry woodlands. This species occurs across southern Australia but avoids coastal regions.
- Spectacled Flying-fox – the only flying-fox restricted to rainforests and rarely seen far from this habitat where it feeds on a variety of forest fruits. This species roosts communally in rainforests, gallery forests and mangroves. They are found along coastal Queensland from the tip of Cape York to Hinchinbrook Island. The species is not known from the study area.

One species listed as Rare under the NCA, Cotton Pygmy-goose, is considered likely to occur in the study area. It is also listed as Migratory under the EPBC and will be discussed hereunder.

A number of Migratory bird species have been identified as likely to be found in the study area, either on passage or for longer periods of time. Three species have been reported from the area in the past (see Table 3.1).

- (Australian) Cotton Pygmy-goose – prefers lagoons, swamps and dams, particularly with aquatic vegetation.
- Great Egret – occurs in coastal habitats and a wide variety of freshwater wetlands but also occurs in pasture.
- Cattle Egret – favours pasture and other highly modified grasslands, typically in association with livestock. It requires freshwater wetlands for breeding.

- White-bellied Sea-Eagle – occurs on both coastal and terrestrial wetlands, including large rivers and artificial impoundments.
- Painted Snipe – prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, low scrub or open woodland forests.
- Latham's Snipe – occurs in short grass and sedgelands fringing freshwater wetlands.
- Little Curlew – occurs mainly on dry grasslands, floodplains and the edges of swamps, mostly in northern Australia.
- White-throated Needletail – an aerial species which forages over almost any habitat including highly modified land and infrastructure. Does not breed in Australia.
- Fork-tailed Swift – an aerial species which forages over almost any habitat including highly modified land and infrastructure. Does not breed in Australia. Occurs mainly inland.
- Rainbow Bee-eater – found in open country with most vegetation types, may forage over forests, nests in sandy substrates. Likely to be present year-round.
- Rufous Fantail – prefers wetter forests and riparian vegetation. Breeding may occur in the study area.
- Black-faced Monarch – typically found in dense coastal forests, but may be in more open country on passage. Breeding may occur in the study area.
- Spectacled Monarch – found in a variety of habitats from rainforests to drier woodlands. Breeding is considered likely to occur in the study area.
- Satin Flycatcher – found in eucalypt forests, favouring watercourses and moist gullies.
- Barn Swallow – an open country species, often occurring near water and around towns. It is a vagrant south of Townsville.

Two species regarded as being of Special Cultural Significance (NCA) have been reported to occur in the area in the past:

- Platypus – inhabits freshwater streams, rivers, lakes and dams and tolerant of a wide range of conditions, but prefer steep well-vegetated banks (Low 1995; Menkhorst and Knight 2004).
- Koala – feeding almost exclusively on eucalypt leaves, the Koala in northern Australia is most common in forests dominated by *Eucalyptus tereticornis* or *E. camaldulensis*, often riverine forest (Lee and Martin 1988; Martin *et al*. 2008).

Four Class 2 pest species are reported to be common in the region (DNR&W 2006a). These are the: feral Cat *Felis catus*; Red Fox *Vulpes vulpes*; feral Pig *Sus scrofa*; and wild Dog *Canis lupus familiaris/dingo*. There have been no specific studies of pest animals within the study area.

Pipeline Route

Based on existing information, the pipeline route may support up to forty-six (46) vertebrate species of conservation significance, including 24 species listed as Endangered, Vulnerable or Rare (NCA and/or EPBC), three species listed as being of special Cultural Significance (NCA); eight Migratory bird (terrestrial) species (EPBC); 11 Migratory (wetland) bird species and one Migratory reptile (EPBC) (N.B. these categories are not mutually exclusive).

A search of three databases (i.e. Queensland Museum, Birds Australia and the EPA's Wildlife Online **Appendices 5**, **6**, and **7** respectively) found records for 31 of these species – three reptiles, 22 birds and six mammals (**Table 3.3**) within, or in the locality of, the pipeline route. The remaining species are derived from the EPBC Protected Matters Online search (**Appendix 8**) are listed in **Table 3.4**.

TABLE 3.3. List of Fauna of Conservation Significance Recorded from the Pipeline Route and its Immediate Surrounds

Scientific Name	Common Name	Conservation Status	
		NCA	EPBC
Paradelma orientalis	Brigalow Scaly-foot	V	V
Anomalopus brevicollis	Short-necked Worm-skink	R	
Denisonia maculata	Ornamental Snake	V	V
Nettapus coromandelianus	Cotton Pygmy-goose	R	M
Ephippiorhynchus asiaticus	Black-necked Stork	R	
Ardea alba [1]	Great Egret	S	M
Pandion haliaetus [2]	Osprey	S	M
Lophoictinia isura	Square-tailed Kite	R	
Haliaeetus leucogaster	White-bellied Sea-Eagle	S	M
Accipiter novaehollandiae	Grey Goshawk	R	
Erythrotriorchis radiatus	Red Goshawk	E	V
Tringa stagnatilis	Marsh Sandpiper	S	M
Tringa nebularia	Common Greenshank	S	M
Calidris acuminata	Sharp-tailed Sandpiper	S	M
Geophaps scripta scripta	Squatter Pigeon (southern subspecies)	V	V
Calyptorhynchus lathami	Glossy Black-Cockatoo	V	
Ninox rufa queenslandica	Rufous Owl (southern subspecies)	V	
Merops ornatus	Rainbow Bee-eater	S	M
Melithreptus gularis	Black-chinned Honeyeater	R	
Rhipidura rufifrons	Rufous Fantail	S	M
Monarcha trivirgatus [3]	Spectacled Monarch	S	M
Monarcha melanopsis	Black-faced Monarch	S	M
Acrocephalus australis	Australian Reed-Warbler [4]	S	M
Neochmia phaeton	Crimson Finch	V	
Neochmia ruficauda ruficauda	Star Finch (eastern and southern subspecies)	E	E
Ornithorhynchus anatinus	Platypus	CS	
Tachyglossus aculeatus	Short-beaked Echidna	CS	
Dasyurus hallucatus	Northern Quoll	LC	E
Phascolarctos cinereus	Koala	CS	
Taphozous troughtoni	Troughton's Sheathtail-bat	E	
Chalinolobus picatus	Little Pied Bat	R	

Abbreviations
Status: Queensland's Nature Conservation Act 1992 (NCA): E = Endangered, V = Vulnerable, R = Rare, S = Special Least Concern (Migratory) wildlife, CS = Culturally Significant Least Concern wildlife.
Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC): E = Endangered, V = Vulnerable, M = Migratory Species.
Nomenclature: Unless otherwise noted, this table follows the CSIRO List of Australian Vertebrates (Clayton *et al*. 2006). Any notable variations in common and/or scientific names of conservation significant species are identified hereunder.
[1] also known as *Ardea modesta* Eastern Great Egret and as *Casmerodius albus*
[2] also known as *Pandion cristatus* Eastern Osprey
[3] also known as *Symposiarchus trivirgatus*
[4] also known as Clamorous Reed-Warbler *Acrocephalus stentoreus*.

TABLE 3.4. List of Fauna of Conservation Significance which may occur within the Pipeline Route and its Immediate Surrounds

Scientific Name	Common Name	Conservation Status	
		NCA	EPBC
Taudactylus eungellensis	Eungella Torrent Frog [1]	E	E
Crocodylus porosus	Saltwater Crocodile	V	M
Egernia rugosa	Yakka Skink	V	V
Lerista allanae	Greater Robust Fine-lined Slider [2]	E	E
Furina dunmalli	Dunmall's Snake	V	V
Bubulcus ibis [3]	Cattle Egret	S	M
Rostratula australis	Australian Painted Snipe	V	V
Gallinago hardwickii	Latham's Snipe	S	M
Numenius minutus	Little Curlew	S	M
Hirundapus caudacutus	White-throated Needletail	S	M
Apus pacificus	Fork-tailed Swift	S	M
Myiagra cyanoleuca	Satin Flycatcher	S	M
Hirundo rustica	Barn Swallow	S	M
Pteropus conspicillatus	Spectacled Flying-fox	LC	V
Nyctophilus timoriensis [4]	Greater Long-eared Bat	V	V

Abbreviations
Status: Queensland's Nature Conservation Act 1992 (NCA): E = Endangered, V = Vulnerable, S = Special Least Concern (Migratory) wildlife.
Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC): E = Endangered, V = Vulnerable, M = Migratory Species.
Nomenclature: Unless otherwise noted, this table follows the CSIRO List of Australian Vertebrates (Clayton *et al*. 2006). Any notable variations in common and/or scientific names of conservation significant species are identified hereunder.
[1] Also known as Eungella Day Frog
[2] Also known as Allan's Lerista and Retro Slider
[3] Also known as *Ardea ibis*
[4] Also known as Eastern Long-eared Bat. *Nyctophilus timoriensis* is currently undergoing taxonomic revision and will be re-described as four separate species. The South-eastern Long-eared Bat is the 'form' which may occur in the study area (Turbill *et al*. 2008).

Eighteen species listed as Endangered or Vulnerable (EPBC and/or NCA) may be, or are known to be, present in the study area. Brief species profiles for Saltwater Crocodile, Yakka Skink, Ornamental Snake, Red Goshawk, Australian Painted Snipe, Squatter Pigeon (southern subspecies), Star Finch (eastern and southern subspecies), Northern Quoll, Spectacled Flying-fox and Greater Long-eared Bat are provided above in regards to the inundation area and are relevant to the pipeline route. Species profiles of the additional EVR species are provided hereunder.

- Eungella Torrent Frog – This species is restricted to rainforest in the Clarke Range and Finch Hatton Gorge, inhabiting rocky creeks (Barker *et al*. 1995).
- Brigalow Scaly-foot – once thought to be confined to remnant Brigalow (*Acacia harpophyla*) or sparse tussock grass vegetation on grey cracking soils (Shea 1987) the species is also found in a variety of other woodlands and forests including those dominated by other *Acacia* species and eucalypts (Schulz and Eyre 1997; Kutt *et al.* 2003). The species needs litter on the ground and seldom occurs in disturbed habitats (EPA 2003).
- Greater Robust Fine-lined Slider – known from only three localities in central Queensland, this species has not been seen since the 1960s, despite targeted searches, and is considered to be extinct (Couper and Ingram 1992; Covacevich *et al*. 1996b; Wilson and

Swan 2008). It was known from black soil under tussock grass in a variety of habitat types (Covacevich *et al*. 1996a).

- Dunmall's Snake – a highly cryptic, extremely secretive species, the biology of which is almost unknown. Habitat preferences are not properly understood. Most records are from open forests and woodlands, particularly Brigalow on cracking black clay and clay loams (Cogger *et al*. 1993).
- Glossy Black-Cockatoo – occurs in variety of wooded habitats but feeds almost exclusively on the seeds of she-oaks (Casuarinaceae) and is dependent on food trees being present (Crowley and Garnett 2001).
- Rufous Owl – most often observed roosting in thick vegetation including gallery and monsoon forests, *Melaleuca* thickets, rainforests, vine thickets and mangroves (Estbergs and Braithwaite 1985; Higgins 1999).
- Crimson Finch – occurs in eucalypt/*Pandanus* woodlands near water and in damp grasslands, canefields and wetlands. Recorded from Connors River as recently as 1994 (Higgins *et al*. 2006b).
- Troughton's Sheathtail-bat – previously considered to be restricted to three locations near Mount Isa but more recently suspected to occur throughout much of south-eastern and central Queensland (DEWHA 2007b). Recent genetic studies indicate that the classification of *T. australis*, *T. georgianus* and *T. troughtoni* needs revision (Hall 2008).

Seven species listed as Rare under the NCA are considered likely to occur in the study area. One of these, Cotton Pygmy-goose, is also listed as Migratory under the EPBC. A species profile was provided above in regards to the inundation area. Species profiles of the other Rare species are provided hereunder.

- Short-necked Worm-skink – burrows in loose soil under leaf litter, logs and rocks and found along edges of a range of habitats from dry sclerophyll forest to vine thickets and rainforest (Ehmann 1992).
- Black-necked Stork – occurs in terrestrial wetlands, estuaries, littoral habitats and, occasionally, grasslands. Use both fresh and saline waters but are most frequently recorded in open fresh waters such as shallow swamps, billabongs and pools on floodplains.
- Square-tailed Kite – occurs in a variety of habitat types including heathlands, woodlands, forests, tropical and subtropical rainforests, timbered watercourses, hills and gorges.
- Grey Goshawk – occurs in temperate, sub-tropical and tropical rainforest, tall open forests, woodlands, and wooded gorges and rivers, usually in the 760+ mm rainfall zone.
- Black-chinned Honeyeater – occupies dry eucalypt woodland and forests, particularly those containing ironbark and box species (Higgins *et al* 2001).
- Little Pied Bat – found in dry habitats including open forests, woodland, mulga woodlands, chenopod scrublands, *Callitris* forest and mallee (Churchill 1998).

A number of Migratory bird species have been identified as likely to be found in the study area, either on passage or for longer periods of time. Twelve species have been reported from the area in the past (see **Table 3.3**) and another seven species are predicted (**Table 3.4**). Most of these species are profiled above in regards to the inundation area. Species profiles of the other Migratory species are provided hereunder.

- Osprey – mostly coastal but also occurs on inland waterbodies, especially large lakes and impoundments but also large rivers.
- Marsh Sandpiper – found mainly in freshwater wetlands, including lakes, rivers, ponds and swamps, and occurs as far inland as central Australia.
- Common Greenshank – occurs in a wide variety of habitats, both saline and freshwater, including estuaries,

mangroves, beaches, marshes, lagoons, flooded pasture and sewage ponds.

- Sharp-tailed Sandpiper – occurs in a wide variety of habitats, both saline and freshwater, including reefs, estuaries, mangroves, beaches, marshes, lagoons, flooded pasture and sewage ponds.

- Australian Reed-Warbler – until recently, this species was considered conspecific with Clamorous Reed-Warbler *A. stentoreus.* Now regarded as a separate species, the Australian Reed-Warbler is most likely restricted to Australia (Higgins *et al*. 2006b). It occurs in dense, low, aquatic or riparian vegetation including reeds, rushes and sedges. It occurs on artificial waterbodies.

Three species regarded as being of Special Cultural Significance (NCA) have been reported to occur in the area in the past. Two of these, Platypus and Koala, are profiled above in regards to the inundation area. The third species, Short-beaked Echidna, is profiled hereunder.

- Short-beaked Echidna – occurs in almost all terrestrial habitats except for intensively managed farms. The species shelters in logs, crevices, burrows and leaf litter (Menkhorst and Knight 2004; Augee 2008).

Four Class 2 pest species are reported to be common in the region (DNR&W 2006a). These are the: feral Cat; European Rabbit *Oryctolagus cuniculus*, feral Pig; and wild Dog. There have been no specific studies of pest animals within the study area. Some of the pipeline route falls within the Nebo Shire Pest Management Plan 2005-2009 (Nebo Shire Council 2006).

3.1.2 Habitat Values

In the absence of site-specific data, the results of broadscale habitat assessment methods must be relied upon to characterise the habitats present and their values.

The EPA has prepared Biodiversity Planning Assessments (BPAs) for a number of Queensland Bioregions in order to provide broadscale ecological data to advise a range of planning and decision-making processes.

The BPAs are based on the Biodiversity Assessment and Mapping Methodology (BAMM) (EPA 2002) using vegetation mapping data generated by the Queensland Herbarium. The methodology identifies areas with various levels of significance for biodiversity reasons, such as threatened ecosystems or taxa, large tracts of habitat in good condition, ecosystem diversity, landscape context and connection, and buffers to wetland or other types of habitat important for the maintenance of biodiversity or ecological processes.

The BAMM assigns three levels of Biodiversity Significance:

- State Significance – areas assessed as being significant for biodiversity at the bioregional or state scales. They also include areas assessed by other studies/processes as being significant at national or international scales.
- Regional Significance – areas assessed as being significant for biodiversity at the sub-bioregional scale. These areas have lower significance for biodiversity than areas assessed as being of State significance.
- Local Significance and Other Values – areas assessed as not being significant for biodiversity at State or Regional scales. Local values are of significance at the local government scale.

The methodology uses seven diagnostic criteria: Habitat for EVR taxa; Ecosystem value; Tract size; Relative Size of Regional Ecosystem; Condition; Ecosystem Diversity; and Context and Connection, utilizing Queensland Herbarium RE mapping and buffered EVR flora and fauna records. Three supplementary criteria refine the mapped information by incorporating local knowledge and expert opinion. These are: Essential and General Habitat for Priority Taxa; Special Biodiversity Values; and Corridors.

The study areas fall within the northern section of the Brigalow Belt Bioregion, for which a BPA was initially prepared in 2003, and updated in 2005. For those criteria relevant to the study areas, mapping results are provided in **Appendix 9** - **Figures 1A** to **1L** for the inundation area and **Appendix 10** – **Figures 2A** to **2L** for the pipeline route.

The results and relevant information from the Brigalow Belt North Landscape Expert Panel Report (EPA 2002) applicable to the study area are provided in **Table 3.5** for the inundation area and **Table 3.6** for the pipeline route.

It must be noted that the Biodiversity Planning Assessment relies heavily on the accuracy of Regional Ecosystem mapping. As the mapping is likely to have been developed remotely, through aerial photograph interpretation, it is possible the spatial distribution and community composition of REs will change when mapped in detail based on ground truthing, potentially affecting the accuracy of the results of the Biodiversity Planning Assessment.

TABLE 3.5. BPA Results and Expert Panel Information for the Inundation Area (EPA 2006)

Criteria	Description	Study Area (Mapping and Expert Panel)
A_Rating Habitat for EVR Taxa	No EVR taxa previously recorded from the study area	The study area has been mapped as having predominantly **Low** value as habitat for EVR Taxa, although the narrow strip of riparian vegetation associated with the Connors River and adjoining creeks are mapped has having **Medium** value as Habitat for EVR Taxa.
B1_Rating State Ecosystem Value	Regional Ecosystems	All Of Concern REs are afforded **High** State Ecosystem Value. Within the study area these REs are located primarily in association with riparian vegetation, and remnant vegetation in the north of the study area. REs that are of "No Concern at Present" with 30-50% of the original extent remaining, REs that are poorly conserved within the bioregion and remnant vegetation with <30% subdominant Endangered or Of Concern REs are mapped as being of **Medium** State Ecosystem Value. The remainder of the study area is afforded **Low** State Ecosystem Value.
B2_Rating Regional Ecosystem Value	Regional Ecosystems	Those areas mapped as Moderate (or **Medium**) Conservation Value are REs for which 30-50% of the pre-clearing extent remains in the subregion, are poorly conserved within the subregion, or contain subdominant "High" or "Very High" Conservation Value REs. REs where >50% of the pre-clearing extent remains in the subregion are mapped as Limited (or **Low**) Conservation Value.
C_Rating Tract Size	All REs within the study area	The size of any tract is a major indicator of ecological significance, and is also strongly correlated with the long-term viability of biodiversity values. Larger tracts are less susceptible to ecological edge effects and are more likely to sustain viable populations of native flora and fauna than smaller tracts. Within the study area **High** value tracts are predominantly associated with riparian vegetation of the Connors River, Collaroy Creek and Murray Creek. In the north of the study area, riparian vegetation has significant links with **High** value, larger tracts of woodland and forest vegetation. All other vegetation is mapped as **Low** value with regards to Tract Size.
E_Rating Condition	All REs within the study area	The quality of remnant units is judged by the extent to which each resembles its natural condition, as indicated by the degree of anthropogenic disturbance. In the absence of a consistent assessment of vegetation condition across a bioregion, the remnant vegetation mapping by the Queensland Herbarium is taken to represent areas of vegetation in their natural state. All mapped REs within the study area are afforded a **Very High** condition rating.
F_Rating Ecosystem Diversity	All REs within the study area	Rated using Simpson's Diversity Index – a measure that incorporates both richness (number) and evenness (relative abundance). Areas of **Very High** Ecosystem Diversity are mapped in association with Connors River, Collaroy Creek and Murray Creek within the study area. REs adjoining riparian vegetation and with links to surrounding larger remnant tracts outside of the study area are mapped as having **High** Ecosystem Diversity The majority of remaining REs is mapped as having **Medium** Ecosystem Diversity rating.

Criteria	Description	Study Area (Mapping and Expert Panel)
I_Rating Special Biodiversity Values	Semi-evergreen vine thicket	All remnants of semi-evergreen vine thicket are mapped as state significant because of the distinct variation in taxa composition associated with these ecosystems.
	Any woody non-remnant along major rivers	Disturbed areas retain important landscape connectivity values (regional significance).
	Freshwater wetlands	All natural wetlands that are mapped on 1:100 000 topographic maps should be identified. The wetlands should be given a significance rating consistent with the mapped remnant. Any natural wetland that is greater than 5 ha should be of regional significance. Any other natural wetlands not contiguous with a remnant regional ecosystem should be of local significance.
J_Rating Corridors	Wildlife Corridors	The general basis for corridor selection was through reserves, mountain ranges and large remnant tracts that provide for major east-west, north-south or altitudinal movement of wildlife across the bioregion. In fragmented subregions (<30% remnant vegetation) remnant riparian vegetation was given a higher significance for landscape connectivity. Riparian vegetation associated with Connors River, Collaroy Creek and Murray Creek are mapped as having **Very High** Corridor value, and an area of remnant vegetation near the proposed dam wall is mapped as having **High** Corridor value. The remainder of habitat within the study area, being predominantly fragmented, is not mapped as having corridor values.
Bio_Sig Biodiversity Significance	All REs within the Study Area	The Biodiversity Significance rating of REs as to their State, Regional or Local significance is based on a combination of results from the diagnostic criteria. The majority of REs mapped for the study area are rated as having **Regional** significance, with narrow bands of **State** significant areas associated with the riparian vegetation of Connors River, Collaroy Creek and Murray Creek.

TABLE 3.6. BPA Results and Expert Panel Information for the Pipeline Route (EPA 2006)

Criteria	Description	Study Area (Mapping and Expert Panel)
A Rating Habitat for EVR Taxa	Pipeline route	Seventeen (17) endangered, vulnerable or rare species were found along the pipeline route. No recommendations are available from the expert panel reports for these species at this time.
B1 Rating State Ecosystem Value	All REs within the study area	Endangered REs afforded **Very High** State Ecosystem Value are located along various points of the pipeline route. These are primarily (RE11.3.25) *Eucalyptus camaldulensis* and *E. tereticornis* associated with creeklines and edges of state forests such as Tierawoomba. All Of Concern REs are afforded **High** State Ecosystem Value. Within the study area these REs are located along various points of the pipeline route. Along the Powerlink easement (RE 11.8.11) grassland dominated by *Dichanthium sericeum*, *Aristida* spp., *Astrebla* spp., and *Panicum decompositum*. Along the railway corridor (RE 11.3.2) *Eucalyptus populnea* to open woodland, (RE 11.3.1) open forest dominated by *Acacia harpophylla* &/or *Casuarina cristata* and (RE 11.3.36) *E. crebra*, *E. populnea*, *E. melanophloia* with grassy ground layer associated with creeklines. REs of "No Concern At Present" are afforded **Medium** State Ecosystem Value. Within the study area these REs are located at the western end of the Dawson River.
B2 Rating Regional	All REs within the study area	The pipeline route intersects a Regional Ecosystem mapped as having **Very High** State Ecosystem Value, this RE is situated toward the end of the

Criteria	Description	Study Area (Mapping and Expert Panel)
Ecosystem Value		Powerlink easement and is indicated as **Very High** for the following reason: "Very High Conservation Value" RE (with a pre-clearing extent <300ha or <10% of the extent remains in the subregion) Areas mapped as having **High** Conservation Value have been identified along the railway corridor, **High** Conservation Value areas are those REs of which 10-30% of the pre-clearing extent remains in the subregion. Areas of **Moderate** Conservation Value RE (30-50% of the pre-clearing extent remains in the subregion). These REs are located consistently along the pipeline route.
C Rating Tract Size	All REs within the study area	The quality of remnant units is judged by the extent to which each resembles its natural condition, as indicated by the degree of anthropogenic disturbance. In the absence of a consistent assessment of vegetation condition across a bioregion, the remnant vegetation mapping by the Queensland Herbarium is taken to represent areas of vegetation in their natural state. Mapped REs along the pipeline route are afforded predominantly a **High** condition rating, however some small REs located along the pipeline route have been given a **Low** condition rating.
D1 Rating State Relative Ecosystem Size	All REs within the study area	REs of **Very High** State Relative Ecosystem Size are an RE within the Remnant Unit that is >75% the size of the largest example of that RE in the bioregion. These RE types can be found at the beginning of the Powerlink easement and along the railway corridor. Areas provided with a **High** rating means the RE within the Remnant Unit is 50% to 75% the size of the largest example of that RE in the bioregion. These RE types are infrequently found along both the Powerlink easement and railway corridor. For REs with a **Medium** rating the RE within the Remnant Unit is 25% to 50% the size of the largest example of that RE in the bioregion, or; The Remnant Unit contains a subdominant (<30%) RE that is >50% the size of the largest example of that RE in the bioregion, or; The Remnant Unit is heterogeneous in which no RE is >30%. To obtain a **Low** rating the RE within the Remnant Unit is <25% the size of the largest example of that RE in the Bioregion.
D2 Rating Regional Relative Ecosystem Size	All REs within the study area	**Very High** D2 Rating applies where the RE within the Remnant Unit is >75% the size of the largest example of that RE in the subregion. These areas are located at the beginning of the Powerlink easement and at various locations along the railway corridor. A **High** D2 Rating applies where the RE within the Remnant Unit is 50% to 75% the size of the largest example of that RE in the bioregion. These RE types are infrequently dispersed along both the Powerlink easement and railway corridor. A **Medium** D2 Rating applies where the RE within the Remnant Unit is 25% to 50% the size of the largest example of that RE in the bioregion, or; The Remnant Unit contains a subdominant (<30%) RE that is >50% the size of the largest example of that RE in the bioregion, or; The Remnant Unit is heterogeneous in which no RE is >30%. A **Medium** Rated Remnant Unit is located in the Coppabella/North Creek area along the railway corridor.
E Rating Condition	All REs within the study area	The quality of Remnant Units is judged by the extent to which each resembles its natural condition, as indicated by the degree of anthropogenic disturbance. Remnant vegetation mapping by the Queensland Herbarium is taken to represent areas of vegetation in their natural state. Vegetation is mapped as remnant where the predominant canopy represents more than 50% of the undisturbed cover, averaging more than 70% of the undisturbed height and composed of species characteristic of the vegetation's

Criteria	Description	Study Area (Mapping and Expert Panel)
		undisturbed predominant canopy (VMA 1999). The quality of the Remnant Units has been judged to be **Very High** for the pipeline route as indicated in mapping by the Queensland Herbarium.
F Rating Ecosystem Diversity	All REs within the study area	Rated using Simpson's Diversity Index – a measure that incorporates both richness (number) and evenness (relative abundance). Areas of **Very High** Ecosystem Diversity are mapped as remnants with a Simpson's Diversity Index that is >75% of the maximum value for the bioregion. These REs occur primarily in the Coppabella – Tootoolah area of the pipeline route. REs with **High** Ecosystem Diversity status are located toward the end of the Powerlink easement and beginning of the railway corridor. **Medium** Ecosystem Diversity REs are located throughout the pipeline route.
G Rating Context and Connection	All REs within the study area	REs of **Very High** Context and Connection are provided with this rating where a Remnant Unit adjoining another Remnant Unit along >75% of its perimeter, or; Borders/includes another Remnant Unit with an Endangered RE (a buffer is extended 200m into the Remnant Unit and attributed as **Very High**), or; Borders/includes another Remnant Unit with a Waterway or Important Wetland. Along the pipeline route, areas of Very High value are found toward the end of the Powerlink easement between Dipperu National Park and Tierawoomba State Forest. The area west of Dipperu National Park and the Kerlong Range along the railway corridor also has **Very High** Context and Connection value. REs are afforded **High** status where the Remnant Unit adjoins another Remnant Unit along 50% to 75% of its perimeter. These REs are located sporadically along the pipeline route. For REs to be assigned a **Medium** rating the Remnant Unit adjoins another Remnant Unit along <50% of its perimeter, or; Is adjacent to an Endangered RE (only the part of the remnant unit outside the 200m buffer is attributed as Medium). Areas of **Medium** value are located consistently along the pipeline route.
I Rating Special Biodiversity Values	All REs within the study area	The Expert Panel rated all remnants of semi-evergreen vine thicket in the BBN as state significant due to the distinct variation in taxa composition associated with these ecosystems. Within the pipeline route areas attributed with Special Biodiversity Values are located at the beginning of the Powerlink easement at the southern end of Tierawoomba State Forest and at the beginning of the railway corridor.
J Rating Corridors	Corridor Linkages	Areas identified under this criterion qualify either because they are existing vegetated corridors important for contiguity, including regrowth, or cleared areas that could serve this purpose if revegetated. Some examples of corridors include riparian habitats, transport corridors and "stepping stones". Physical connection between contiguous Remnant Units is addressed in Criterion G (Context and Connection). **High** Corridor status occurs predominantly along the pipeline route and **Very High** status occurs in limited locations along the Powerlink easement and at the eastern end of the railway corridor.
Bio_Sig Biodiversity Significance	Criteria A – J	The Biodiversity Significance rating of REs as to their State, Regional or Local significance is based on a combination of results from the diagnostic Criteria (A -J). Predominately the REs mapped for the pipeline route are rated as either being "State Significant" or "Regional Significant". State Significant areas are those which are assessed as being significant for

Criteria	Description	Study Area (Mapping and Expert Panel)
		biodiversity at the bioregional or state scales and are located at; • The southern end of Tierawoomba State Forest • Between Dipperu National Park and Boothill Creek • Eastern end of rail corridor • Coppabella to Tootoolah • North Creek Regional Significant areas are those that have been assessed as being significant for biodiversity at the sub-bioregional scale. These areas have lower significance for biodiversity than areas assessed as being of State Significance and are associated primarily with; • Beginning of the Powerlink easement at Connors River • Eastern edge of Tierawoomba State Forest • Creek lines along Powerlink easement • Tootoolah to Mindi • North of Moranbah

3.2 INFORMATION GAP IDENTIFICATION

Table 3.7 (inundation area) and **Table 3.8** (pipeline route) list the information currently available to address each of the terrestrial fauna requirements of the Preliminary Terms of Reference for the project, and, where information gaps are identified, includes recommendations for further work to adequately meet the requirements of Terms of Reference.

4.0 RECOMMENDATIONS

Appendices 11 and **12** provide the BAAM Pty Ltd recommended methodology to supplement existing terrestrial fauna information by providing detailed baseline data to meet the requirements of the Preliminary Terms of Reference.

TABLE 3.7. Existing and Required Information to Address Terrestrial Vertebrate Component of the Preliminary Terms of Reference in regards to the Inundation Area

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
Describe the terrestrial and riparian vertebrate fauna occurring or likely to occur in the areas affected by the project, noting the broad distribution patterns in relation to the habitat types present.	WildNet Database EPA (2008). Birds Australia database (2008). Queensland Museum database (2008).	Species lists only – no indication of habitat use.	Inadequate. Limited field based observations.	Requires additional systematic sampling combined with habitat assessment within the study area.
Wildlife Corridors, formal or otherwise, should be identified and mapped.	Brigalow Belt North BPA (EPA 2005). J_Rating & G_Rating	Very high corridor rating applied to riparian zones.	Inadequate.	Requires systematic habitat and landscape assessment within the study area and assessment of faunal use of corridors.
Critical habitat and refugia should be identified and mapped.	Brigalow Belt North BPA (EPA 2005). A_Rating	Under VMA no critical habitat mapped in study area.	Inadequate.	Requires systematic habitat assessment within the study area.
Species diversity (i.e. a species list) of amphibians, birds, reptiles, mammals and any invertebrates of recognised significance.	WildNet Database EPA (2008). Birds Australia database (2008). Queensland Museum database (2008).	Current records from study area indicate: 89 bird species; 14 reptile species; 9 frog species; and 8 mammal species may be present. No conservation significant invertebrate species is identified from current records.	Inadequate. Limited field based observations.	Requires additional systematic vertebrate sampling within the study area.
Existence (actual or likely) of any rare, threatened or otherwise noteworthy species/ communities in the study area, including discussion of range, habitat, breeding, recruitment, feeding and movement requirements, current level of protection (e.g. any requirements of Protected Area Management Plans or Threatened Species Recovery Plans) and sensitivity to change.	WildNet Database EPA (2008). Birds Australia database (2008). Queensland Museum database (2008). Commonwealth EPBC protected matters search tool DEWHA (2008c). SEVT Conservation Management Profile EPA (2007a). Life History and Conservation References **Saltwater Crocodile**: Cogger (2000), Ehmann (1992), EPA (2007b, c). **Fitzroy Turtle**: Cann (1998), Cogger (2000),	Current records from area indicate 4 listed bird species including one vulnerable species Squatter Pigeon (southern subspecies) – EPBC) and 2 mammal species considered culturally significant (NCA). A 22 conservation significant species may occur (DEWHA 2008c).	Limited field based observations. Regional Ecosystems unlikely to have been ground truthed – and have been derived from aerial mapping.	Requires additional systematic vertebrate sampling within the study area. Requires field-based mapping of regional ecosystems within study area.

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
	DEWHA (2008b), Gordos *et al*. (2004), McFarland *et al*. (1999b), Tucker *et al*. (2001). **Yakka Skink**: Cogger (2000), Ehmann (1992), McFarland *et al*. (1999b), Wilson (2003). **Ornamental Snake**: Cogger (2000), Cogger *et al*. (1993), McFarland *et al*. (1999b). **Cotton Pygmy-goose**: Beruldsen (2006), Garnett and Crowley (2000), Marchant and Higgins (1990), McFarland *et al*. (1999b). **Great Egret**: Marchant and Higgins (1990), McKilligan (2005). **Cattle Egret**: Marchant and Higgins (1990), McKilligan (2005). **White-bellied Sea-Eagle**: Debus (1998), Marchant and Higgins (1993), Olsen (1995). **Red Goshawk**: Debus (1998), Debus and Czechura (1988), Garnett and Crowley (2000), Marchant and Higgins (1993), McFarland *et al*. (1999b), NSW NPWS (2002), Olsen (1995). **Australian Painted Snipe**: Garnett and Crowley (2000), Geering *et al*. (2007), Lane (1987), Marchant and Higgins (1993), McFarland *et al*. (1999b), Pringle (1987). **Latham's Snipe**: Garnett and Crowley (2000), Geering *et al*. (2007), Higgins and Davies (1996), Lane (1987), Pringle (1987). **Little Curlew**: Bellio *et al*. (2006), Geering *et al*. (2007), Higgins and Davies (1996), Lane (1987), Pringle (1987). **Squatter Pigeon** (southern subspecies): DEWHA (2008a), Frith (1982), Garnett and Crowley (2000), Higgins and Davies (1996), McFarland *et al*. (1999b)	Semi-Evergreen Vine Thicket Regional Ecosystems in the study area listed as endangered. Brigalow Regional Ecosystems in the study area listed as endangered.		

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
	White-throated Needletail: del Hoyo *et al*. (1999), Higgins (1999). **Fork-tailed Swift**: del Hoyo *et al*. (1999), Higgins (1999). **Rainbow Bee-eater**: del Hoyo *et al*. (2001), Fry *et al*. (1992), Higgins (1999). **Rufous Fantail**: Boles (1988), Higgins *et al*. (2006a). **Black-faced Monarch**: Boles (1988), Higgins *et al*. (2006a). **Spectacled Monarch**: Boles (1988), Higgins *et al*. (2006a). **Satin Flycatcher**: Boles (1988), Higgins *et al*. (2006a). **Barn Swallow**: Higgins *et al*. (2006b). **Star Finch** (southern and eastern subspecies): Garnett and Crowley (2000), Higgins *et al*. (2006b), McFarland *et al*. (1999b), Strahan (1996). **Platypus**: Burrell (1927), Carrick *et al*. (2008), Grant (1995), Grant and Temple-Smith (2003). **Northern Quoll**: DEWHA (2005), Maxwell *et al*. (1996), Oakwood (2000, 2002, 2008). **Koala**: Lee and Martin (1988), Martin *et al*. (2008), McFarland *et al*. (1999b). **Spectacled Flying-fox**: Churchill (1998), Duncan *et al*. (1999), Hall and Richards (2000), Richards *et al*. (2008). **Greater Long-eared Bat**: Churchill (1998), Duncan *et al*. (1999), McFarland *et al*. (1999b), Turbill *et al*. (2008). <u>Sensitivity to Change (additional references)</u> Barrett *et al*. (2003), Beaumont *et al*. (2006),			

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
	Brown (2001), Burnett (1997), Cogger *et al*. (2003), Covacevich *et al*. (1998), Dique *et al*. (2004), Drury (2001), Ford *et al*. (2001), Garnett (1993), Kingsford (2000), Leach and Recher (1993), Lunney *et al*. (1997), MacNally and Brown (2001), Martin and McIntyre (2007), McAlpine *et al*. (2006), McFarland *et al*. (1999a), McKilligan (2001), Olsen (1998), Reid (2000), Smyth (1997), Taylor (2003), Woinarski and Catterall (2004).			
Any species that are poorly known but suspected of being rare or threatened.	Brigalow Belt North Biodiversity Planning Assessment (EPA 2005).	There is only one non-EVR priority species for the bioregion, Spectacled Hare-wallaby *Lagorchestes conspicillatus*.	Inadequate. There are no database records for the inundation area.	Species specific searches.
The existence of feral or exotic species, including invertebrates of economic or conservation significance.	Pest Distribution Map DNRW (2006b). Nebo Shire Pest Management Plan 2005-2009 Nebo Shire Council (2006).	Four species listed as Class 2 pest species considered to be common in study area. One invertebrate pest, Australian Plague Locust *Chortoicetes terminifera* possibly present.	Inadequate – no site-specific data.	Requires systematic habitat assessment within the study area.
An estimate of commonness or rarity for the listed or otherwise significant species.	No site-specific information available for commonness. Statewide and national rarity is reflected in the listing status of species under the NCA and EPBC Act.	No site-specific information available for commonness. Woinarski and Catterall (2004) provides localised information on birds for an area to the south of the inundation area.	Inadequate.	Site-specific details for commonness of significant species requires systematic vertebrate sampling within the study area.
Use of the area by migratory birds.	WildNet Database EPA (2008) Birds Australia database (2008) Queensland Museum database (2008) Commonwealth EPBC protected matters search tool DEWHA (2008c)	Current records indicate three migratory listed species found in the study area.	Limited field based observations. Inadequate.	Requires additional systematic bird observations within the study area throughout year.

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
Identify measures to mitigate the identified impacts including details of the methodologies that would be used to avoid injuries to livestock and native fauna as a result of the Project's construction and operational works.	Fauna Sensitive Road Design DMR (2000) Nature Conservation (Koala) Conservation Plan and Management Program 2006-2016 EPA (2006) Bennett *et al*. (2000). Hazell *et al*. (2001). Kanowski *et al*. (2004). Kingsford (2000). Longcore and Rich (2004). Nilsson *et al*. (1997). Trombulak and Frissell (2000). Zwahlen (2003).	Provide some guidance for mitigation measures primarily in broad terms, with some sources targeting project types or species.	Limited in terms of the project and species present.	Follow-up monitoring of the impacts of dam projects on fauna need to be published.
How well any affected communities or species are represented and protected elsewhere in the region where the Project occurs or in the State.	Regional Ecosystem Mapping, Queensland Herbarium EPA (2008)	Provides assessment of inclusion of regional ecosystems in protected areas.	Adequate.	Determination of regional ecosystems in which significant fauna species are most likely to occur.

TABLE 3.8. Existing and Required Information to Address Terrestrial Vertebrate Component of the Preliminary Terms of Reference in regards to the Pipeline Route

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
Describe the terrestrial and riparian vertebrate fauna occurring or likely to occur in the areas affected by the project, noting the broad distribution patterns in relation to the habitat types present.	WildNet Database EPA (2008). Birds Australia database (2008). Queensland Museum database (2008).	Species lists only – no indication of habitat use.	Inadequate. Limited field based observations.	Requires additional systematic sampling combined with habitat assessment within the study area.
Wildlife Corridors, formal or otherwise, should be identified and mapped.	Brigalow Belt North BPA (EPA 2005). J_Rating & G_Rating	Very high corridor rating applied to riparian zones.	Inadequate.	Requires systematic habitat and landscape assessment within the study area and assessment of faunal use of corridors.
Critical habitat and refugia should be identified and mapped.	Brigalow Belt North BPA (EPA 2005). A_Rating	Under VMA no critical habitat mapped in study area.	Inadequate.	Requires systematic habitat assessment within the study area.

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
Species diversity (i.e. a species list) of amphibians, birds, reptiles, mammals and any invertebrates of recognised significance.	WildNet Database EPA (2008). Birds Australia database (2008). Queensland Museum database (2008).	Current records from study area indicate: 89 bird species; 14 reptile species; 9 frog species; and 8 mammal species may be present. One conservation significant invertebrate known from a database record.	Inadequate. Limited field based observations.	Requires additional systematic vertebrate sampling within the study area.
Existence (actual or likely) of any rare, threatened or otherwise noteworthy species/ communities in the study area, including discussion of range, habitat, breeding, recruitment, feeding and movement requirements, current level of protection (e.g. any requirements of Protected Area Management Plans or Threatened Species Recovery Plans) and sensitivity to change.	WildNet Database EPA (2008). Birds Australia database (2008). Queensland Museum database (2008). Commonwealth EPBC protected matters search tool DEWHA (2008c). SEVT Conservation Management Profile EPA (2007a). <u>Life History and Conservation References</u> **Imperial Hairstreak** (northern subspecies) *Jalmenus evagoras eubulus*: Braby (2000), Dunn *et al*. (1994), Sands and New (2002). **Saltwater Crocodile**: Cogger (2000), Ehmann (1992), EPA (2007b, c). **Short-necked Worm-skink**: Ehmann (1992), McFarland *et al*. (1999b). **Yakka Skink**: Cogger (2000), Ehmann (1992), McFarland *et al.* (1999b), Wilson (2003). **Greater Robust Fine-lined Slider**: Cogger et al. (1993), Couper and Ingram (1992), Covacevich *et al*. (1996a, b), Wilson and Swan (2008). **Ornamental Snake**: Cogger (2000), Cogger *et al*. (1993), McFarland *et al*. (1999b). **Dunmall's Snake**: Cogger *et al*. (1993), Ehmann (1992), Wilson and Swan (2008)	Current records from the area indicate 17 EVR species, 13 Migratory species and 3 mammal species considered culturally significant under the NCA. An additional 14 conservation significant species may occur (DEWHA 2008c). Semi-Evergreen Vine Thicket Regional Ecosystems in the study area listed as endangered. Brigalow Regional Ecosystems in the study area listed as endangered. *Dichanthium sericeum* and/or Astrebla spp. grassland on alluvial plains is listed as an endangered Regional Ecosystems.	Limited field based observations. Regional Ecosystems unlikely to have been ground truthed – and have been derived from aerial mapping.	Requires additional systematic vertebrate sampling within the study area. Requires field-based mapping of regional ecosystems within study area.

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
	Cotton Pygmy-goose: Beruldsen (2006), Garnett and Crowley (2000), Marchant and Higgins (1990), McFarland *et al*. (1999b). **Black-necked Stork**: Dorfman *et al*. (2001), Garnett and Crowley (2000), Marchant and Higgins (1990). **Great Egret**: Marchant and Higgins (1990), McKilligan (2005). **Cattle Egret**: Marchant and Higgins (1990), McKilligan (2005). **Osprey**: Debus (1998), Marchant and Higgins (1993), Olsen (1995). **Square-tailed Kite**: Debus (1998), Debus and Czechura (1989), Marchant and Higgins (1993), McFarland *et al*. (1999b), Olsen (1995). **White-bellied Sea-Eagle**: Debus (1998), Marchant and Higgins (1993), Olsen (1995). **Grey Goshawk**: Debus (1998), Marchant and Higgins (1993), McFarland *et al*. (1999b), Olsen (1995). **Red Goshawk**: Debus (1998), Debus and Czechura (1988), Garnett and Crowley (2000), Marchant and Higgins (1993), McFarland *et al*. (1999b), NSW NPWS (2002), Olsen (1995). **Australian Painted Snipe**: Garnett and Crowley (2000), Geering *et al*. (2007), Lane (1987), Marchant and Higgins (1993), McFarland *et al*. (1999b), Pringle (1987). **Latham's Snipe**: Garnett and Crowley (2000), Geering *et al*. (2007), Higgins and Davies (1996), Lane (1987), Pringle (1987). **Marsh Sandpiper**: Geering *et al*. (2007), Higgins and Davies (1996), Lane (1987), Pringle (1987).			

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
	Common Greenshank: Geering *et al*. (2007), Higgins and Davies (1996), Lane (1987), Pringle (1987). **Sharp-tailed Sandpiper**: Geering *et al*. (2007), Higgins and Davies (1996), Lane (1987), Pringle (1987). **Little Curlew**: Bellio *et al*. (2006), Geering *et al*. (2007), Higgins and Davies (1996), Lane (1987), Pringle (1987). **Squatter Pigeon** (southern subspecies): DEWHA (2008a), Frith (1982), Garnett and Crowley (2000), Higgins and Davies (1996), McFarland *et al*. (1999b). **Glossy Black-Cockatoo**: Crowley and Garnett (2001), Garnett and Crowley (2000), Higgins (1999), McFarland *et al*. (1999b). **Rufous Owl** (southern subspecies): Estbergs and Braithwaite (1985), Fleay (1979), Garnett and Crowley (2000), Higgins (1999), Hollands (1991). **White-throated Needletail**: del Hoyo *et al*. (1999), Higgins (1999). **Fork-tailed Swift**: del Hoyo *et al*. (1999), Higgins (1999). **Rainbow Bee-eater**: del Hoyo *et al*. (2001), Fry *et al*. (1992), Higgins (1999). **Black-chinned Honeyeater**: Garnett and Crowley (2000), Higgins *et al*. (2001), McFarland *et al*. (1999b). **Rufous Fantail**: Boles (1988), Higgins *et al*. (2006a). **Black-faced Monarch**: Boles (1988), Higgins *et al*. (2006a). **Spectacled Monarch**: Boles (1988), Higgins *et al*. (2006a). **Satin Flycatcher**: Boles (1988), Higgins *et*			

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
	al. (2006a). **Barn Swallow**: Barrett *et al*. (2003), Higgins *et al*. (2006b). **Australian Reed-Warbler**: Higgins *et al*. (2006b). **Crimson Finch**: Higgins *et al*. (2006b), Strahan (1996). **Star Finch** (southern and eastern subspecies): Garnett and Crowley (2000), Higgins *et al*. (2006b), McFarland *et al*. (1999b), Strahan (1996). **Platypus**: Burrell (1927), Carrick *et al*. (2008), Grant (1995), Grant and Temple-Smith (2003), McFarland *et al*. (1999b). **Short-beaked Echidna**: Augee (2008). **Northern Quoll**: DEWHA (2005), Maxwell *et al*. (1996), Oakwood (2000, 2002, 2008). **Koala**: Lee and Martin (1988), Martin *et al*. (2008), McFarland *et al*. (1999b). **Spectacled Flying-fox**: Churchill (1998), Duncan *et al*. (1999), Hall and Richards (2000), Richards *et al*. (2008). **Troughton's Sheathtail-bat**: DEWHA (2007b), Hall (2008), Thomson *et al*. (2002). **Little Pied Bat**: Churchill (1998), Duncan *et al*. (1999), Ford *et al*. (2008), McFarland *et al*. (1999b). **Greater Long-eared Bat**: Churchill (1998), Duncan *et al*. (1999), McFarland *et al*. (1999b), Turbill *et al*. (2008). <u>Sensitivity to Change (additional references)</u> Barrett *et al*. (2003), Beaumont *et al*. (2006), Brown (2001), Burnett (1997), Cogger *et al*. (2003), Covacevich *et al*. (1998), Dique *et al*. (2004), Drury (2001), Ford *et al*. (2001),			

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
	Garnett (1993), Leach and Recher (1993), Lunney *et al*. (1997), MacNally and Brown (2001), Martin and McIntyre (2007), McAlpine *et al*. (2006), McFarland *et al*. (1999a), McKilligan (2001), Olsen (1998), Reid (2000), Smyth (1997), Taylor (2003), Woinarski and Catterall (2004).			
Any species that are poorly known but suspected of being rare or threatened.	Brigalow Belt North Biodiversity Planning Assessment (EPA 2005).	There is only one non-EVR priority species for the bioregion, Spectacled Hare-wallaby *Lagorchestes conspicillatus*.	Inadequate. There are WildNet database records for the inundation area but local status is unknown.	Species specific searches.
The existence of feral or exotic species, including invertebrates of economic or conservation significance.	Pest Distribution Map DNRW (2006b). Nebo Shire Pest Management Plan 2005-2009 Nebo Shire Council (2006).	4 species listed as Class 2 pest species considered to be common in study area. One invertebrate pest, Australian Plague Locust *Chortoicetes terminifera* possibly present.	Inadequate – no site-specific data.	Requires systematic habitat assessment within the study area.
An estimate of commonness or rarity for the listed or otherwise significant species.	No site-specific information available for commonness. Statewide and national rarity is reflected in the listing status of species under the NCA and EPBC Act.	No site-specific information available for commonness.	Inadequate.	Site-specific details for commonness of significant species requires systematic vertebrate sampling within the study area.
Use of the area by migratory birds.	WildNet Database EPA (2008). Birds Australia database (2008). Queensland Museum database (2008) Commonwealth EPBC protected matters search tool DEWHA (2008c).	Current records indicate three migratory listed species found in the study area.	Limited field based observations. Inadequate.	Requires additional systematic bird observations within the study area throughout year.
Identify measures to mitigate the identified impacts including details of the methodologies that would be used to avoid injuries to	Fauna Sensitive Road Design DMR (2000) Nature Conservation (Koala) Conservation Plan and Management Program 2006-2016 EPA (2006)	Provide some guidance for mitigation measures primarily in broad terms, with some sources	Limited in terms of the project and species present.	Follow-up monitoring of the impacts of pipeline projects on fauna need to be published.

TOR Requirement	Sources/ Type	Current Information	Overall Information Status	Further Investigation Needs
livestock and native fauna as a result of the Project's construction and operational works.	Bennett *et al*. (2000). Kanowski *et al*. (2004). Longcore and Rich (2004). Trombulak and Frissell (2000).	targeting project types or species.		
How well any affected communities or species are represented and protected elsewhere in the region where the Project occurs or in the State.	Regional Ecosystem Mapping, Queensland Herbarium EPA (2008)	Provides assessment of inclusion of regional ecosystems in protected areas.	Adequate.	Determination of regional ecosystems in which significant fauna species are most likely to occur.

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Appendix 1:
Queensland Museum Database Search Results – Inundation Area and Surrounds

Taxa	**Family**	**Genus**	**Species**
Frogs	Myobatrachidae	*Limnodynastes*	*ornatus*
Frogs	Myobatrachidae	*Limnodynastes*	*peronii*
Frogs	Hylidae	*Litoria*	*inermis*
Frogs	Hylidae	*Litoria*	*nasuta*
Frogs	Hylidae	*Litoria*	*wilcoxii*
Reptiles	Scincidae	*Carlia*	*foliorum*
Reptiles	Scincidae	*Eremiascincus*	*fasciolatus*
Reptiles	Scincidae	*Eulamprus*	*tenuis*
Reptiles	Scincidae	*Lampropholis*	*delicata*

Appendix 2:
Birds Australia Database Search Results – Inundation Area and Surrounds

Genus	Species	Common Name
Acanthiza	*pusilla*	Brown Thornbill
Alectura	*lathami*	Australian Brush Turkey
Anas	*superciliosa*	Pacific Black Duck
Anhinga	*melanogaster*	Darter
Ardea	*alba*	Great Egret
Ardeotis	*australis*	Australian Bustard
Aythya	*australis*	Hardhead
Cacatua	*galerita*	Sulphur-crested Cockatoo
Cacomantis	*flabelliformis*	Fan-tailed Cuckoo
Calyptorhynchus	*banksii*	Red-tailed Black Cockatoo
Chenonetta	*jubata*	Australian Wood Duck
Chlamydera	*nuchalis*	Great Bowerbird
Colluricincla	*megarhyncha*	Little Shrike-thrush
Coracina	*novaehollandiae*	Black-faced Cuckoo-Shrike
Coracina	*papuensis*	White-bellied Cuckoo-Shrike
Corcorax	*melanorhamphos*	White-winged Chough
Corvus	*orru*	Torresian Crow
Dacelo	*leachii*	Blue-winged Kookaburra
Dacelo	*novaeguineae*	Laughing Kookaburra
Daphoenositta	*chrysoptera*	Varied Sittella
Dicrurus	*hottentottus*	Spangled Drongo
Entomyzon	*cyanotis*	Blue-faced Honeyeater
Ephippiorhynchus	*asiaticus*	Black-necked Stork
Falco	*cenchroides*	Nankeen Kestrel
Fulica	*atra*	Eurasian Coot
Gallinula	*tenebrosa*	Dusky Moorhen
Geopelia	*striata*	Peaceful Dove
Gerygone	*olivacea*	White-throated Gerygone
Grallina	*cyanoleuca*	Magpie-lark
Haliastur	*indus*	Brahminy Kite
Haliastur	*sphenurus*	Whistling Kite
Hirundo	*nigrescens*	Tree Martin
Lalage	*leucomela*	Varied Triller
Lichenostomus	*flavus*	Yellow Honeyeater
Lichenostomus	*fuscus*	Fuscous Honeyeater
Macropygia	*amboinensis*	Brown Cuckoo-Dove
Malurus	*melanocephalus*	Red-backed Fairy-wren
Manorina	*melanocephalus*	Noisy Miner
Meliphaga	*lewinii*	Lewin's honeyeater
Melithreptus	*albogularis*	White-throated Honeyeater
Merops	*ornatus*	Rainbow Bee-eater
Monarcha	*trivirgatus*	Spectacled Monarch
Myiagra	*rubecula*	Leaden Flycatcher
Myzomela	*sanguinolenta*	Scarlet Honeyeater
Neochmia	*temporalis*	Red-browed Finch
Pachycephala	*rufiventris*	Rufous Whistler
Pandion	*haliaetus*	Osprey
Pardalotus	*striatus*	Striated Pardalote
Phalacrocorax	*melanoleucos*	Little Pied Cormorant

Genus	***Species***	**Common Name**
Pitta	*versicolor*	Noisy Pitta
Platycercus	*adscitus*	Pale-headed Rosella
Pomatostomus	*temporalis*	Grey-crowned Babbler
Psophodes	*olivaceus*	Eastern Whipbird
Rhipidura	*fuliginosa*	Grey fantail
Rhipidura	*leucophrys*	Willie Wagtail
Smicrornis	*brevirostris*	Weebill
Sphecotheres	*viridis*	Figbird
Strepera	*graculina*	Pied Currawong
Tachybaptus	*novaehollandiae*	Australasian Grebe
Trichoglossus	*chlorolepidotus*	Scaly-breasted Lorikeet
Trichoglossus	*haematodus*	Rainbow Lorikeet

Appendix 3

EPA WildNet Fauna Database Search Results – Inundation Area and Surrounds

Class	Family	Scientific Name	Common Name	NCA
Amphibians	Bufonidae	*Bufo marinus*	Cane Toad	I
Amphibians	Myobatrachidae	*Limnodynastes peronii*	Striped Marsh Frog	C
Amphibians	Hylidae	*Litoria caerulea*	Common Green Treefrog	C
Amphibians	Hylidae	*Litoria fallax*	Eastern Sedgefrog	C
Amphibians	Hylidae	*Litoria nasuta*	Striped Rocketfrog	C
Amphibians	Hylidae	*Litoria rubella*	Ruddy Treefrog	C
Birds	Anatidae	*Anas superciliosa*	Pacific Black Duck	C
Birds	Motacillidae	*Anthus novaeseelandiae*	Richard's Pipit	C
Birds	Accipitridae	*Aquila audax*	Wedge-tailed Eagle	C
Birds	Otididae	*Ardeotis australis*	Australian Bustard	C
Birds	Artamidae	*Artamus leucorynchus*	White-breasted Woodswallow	C
Birds	Cacatuidae	*Cacatua galerita*	Sulphur-crested Cockatoo	C
Birds	Cacatuidae	*Cacatua roseicapilla*	Galah	C
Birds	Centropodidae	*Centropus phasianinus*	Pheasant Coucal	C
Birds	Anatidae	*Chenonetta jubata*	Australian Wood Duck	C
Birds	Ptilorynchidae	*Chlamydera nuchalis*	Great Bowerbird	C
Birds	Campephagidae	*Coracina novaehollandiae*	Black-faced Cuckoo-shrike	C
Birds	Campephagidae	*Coracina tenuirostris*	Cicadabird	C
Birds	Corvidae	*Corvus orru*	Torresian Crow	C
Birds	Artamidae	*Cracticus nigrogularis*	Pied butcherbird	C
Birds	Artamidae	*Cracticus torquatus*	Grey butcherbird	C
Birds	Halcyonidae	*Dacelo leachii*	Blue-winged Kookaburra	C
Birds	Halcyonidae	*Dacelo novaehollandiae*	Laughing Kookaburra	C
Birds	Dicaeidae	*Dicaeum hirundinaceum*	Mistletoebird	C
Birds	Dicruridae	*Dicrurus bracteatus*	Spangled Drongo	C
Birds	Casuariidae	*Dromaius novaehollandiae*	Emu	C
Birds	Ardeidae	*Egretta novaehollandiae*	White-faced Heron	C
Birds	Meliphagidae	*Entomyzon cyanotis*	Blue-faced Honeyeater	C
Birds	Cuculidae	*Eudynamys scolopacea*	Common Koel	C
Birds	Coraciidae	*Eurystomus orientalis*	Dollarbird	C
Birds	Falconidae	*Falco berigora*	Brown Falcon	C
Birds	Falconidae	*Falco cenchroides*	Nankeen Kestrel	C
Birds	Rallidae	*Gallinula tenebrosa*	Dusky Moorhen	C
Birds	Columbidae	*Geopelia striata*	Peaceful Dove	C
Birds	Columbidae	*Geophaps scripta*	Squatter Pigeon	C
Birds	Pardalotidae	*Gerygone olivacea*	White-throated Gerygone	C
Birds	Pardalotidae	*Gerygone palpebrosa*	Fairy Gerygone	C
Birds	Dicruridae	*Grallina cyanoleuca*	Magpie-lark	C
Birds	Gruidae	*Grus rubicunda*	Brolga	C
Birds	Artamidae	*Gymnorhina tibicen*	Australian magpie	C
Birds	Accipitridae	*Haliastur indus*	Brahminy Kite	C
Birds	Accipitridae	*Haliastur sphenurus*	Whistling Kite	C
Birds	Hirundinidae	*Hirundo neoxena*	Welcome Swallow	C
Birds	Hirundinidae	*Hirundo nigricans*	Tree martin	C
Birds	Campephagidae	*Lalage leucomela*	Varied triller	C
Birds	Meliphagidae	*Meliphaga lewinii*	Lewin's Honeyeater	C
Birds	Meliphagidae	*Melithreptus albogularis*	White-throated Honeyeater	C
Birds	Meropidae	*Merops ornatus*	Rainbow Bee-eater	C
Birds	Petroicidae	*Microeca fascinans*	Jacky Winter	C
Birds	Accipitridae	*Milvus migrans*	Black Kite	C
Birds	Alaudidae	*Mirafra javanica*	Singing Bushlark	C
Birds	Dicruridae	*Myiagra rubecula*	Leaden Flycatcher	C

Class	Family	Scientific Name	Common Name	NCA
Birds	Strigidae	*Ninox novaeseelandiae*	Southern Boobook	C
Birds	Oriolidae	*Oriolus sagittatus*	Olive-backed Oriole	C
Birds	Accipitridae	*Pandion haliaetus*	Osprey	C
Birds	Meliphagidae	*Philemon citreogularis*	Little Friarbird	C
Birds	Meliphagidae	*Philemon corniculatus*	Noisy Friarbird	C
Birds	Psittacidae	*Platycercus adscitus*	Pale-headed Rosella	C
Birds	Podargidae	*Podargus strigoides*	Tawny Frogmouth	C
Birds	Dicruridae	*Rhipidura leucophrys*	Willie Wagtail	C
Birds	Cuculidae	*Scythrops novaehollandiae*	Channel-billed Cuckoo	C
Birds	Pardalotidae	*Sericornis frontalis*	White-browed Scrubwren	C
Birds	Pardalotidae	*Smicrornis brevirostris*	Weebill	C
Birds	Oriolidae	*Sphecotheres viridis*	Figbird	C
Birds	Artamidae	*Strepera graculina*	Pied Currawong	C
Birds	Psittacidae	*Trichoglossus chlorolepidotus*	Scaly-breasted Lorikeet	C
Birds	Psittacidae	*Trichoglossus haematodus*	Rainbow Lorikeet	C
Birds	Charadriidae	*Vanellus miles novaehollandiae*	Masked Lapwing (southern subspecies)	C
Birds	Zosteropidae	*Zosterops lateralis*	Silvereye	C
Mammals	Acrobatidae	*Acrobates pygmaeus*	Feathertail Glider	C
Mammals	Felidae	*Felis catus*	Cat	I
Mammals	Macropodidae	*Macropus giganteus*	Eastern Grey Kangaroo	C
Mammals	Muridae	*Mus musculus*	House Mouse	I
Mammals	Ornithorhynchidae	*Ornithorhynchus anatinus*	Platypus	C
Mammals	Phascolarctidae	*Phascolarctos cinereus*	Koala	C
Mammals	Dasyuridae	*Planigale maculata*	Common Planigale	C
Mammals	Suidae	*Sus scrofa*	Pig	I
Reptiles	Scincidae	*Carlia foliorum*		C
Reptiles	Scincidae	*Carlia munda*		C
Reptiles	Scincidae	*Egernia striolata*	Tree Skink	C
Reptiles	Scincidae	*Eulamprus tenuis*		C
Reptiles	Gekkonidae	*Gehyra catenata*		C
Reptiles	Gekkonidae	*Gehyra dubia*		C
Reptiles	Gekkonidae	*Heteronotia binoei*	Bynoe's Gecko	C
Reptiles	Scincidae	*Lampropholis adonis*		C
Reptiles	Scincidae	*Morethia taeniopleura*	Fire-tailed Skink	C
Reptiles	Gekkonidae	*Oedura monilis*		C
Reptiles	Agamidae	*Physignathus lesueurii*	Eastern Water Dragon	C

Notes: I = Introduced Species, C = Least Concern (Common) NCA 1992.

Appendix 4:
Commonwealth EPBC Online Protected Matters Search Tool Results – Inundation Area and Surrounds

Report on: World Heritage Properties, National Heritage Places, Wetlands of International Significance (Ramsar Sites), Commonwealth Marine Areas, Threatened Ecological Communities, Threatened Species and Migratory Species.

Search type: Area

Coordinates used: -21.8427, 148.9471, -22.2115, 148.9471, -22.2115, 149.3952, -21.842, 149.3952

World Heritage Properties
0

National Heritage Places
0

Ramsar Sites
1

Commonwealth Marine Areas
0

Threatened Ecological Communities
2

Threatened Species
14

Migratory Species
17

Threatened Terrestrial and Aquatic Fauna Species

Class	Scientific Name	Common Name	Type of Presence	Status
Reptiles	*Denisonia maculata*	Ornamental Snake	Species or species habitat likely to occur	V
Reptiles	*Egernia rugosa*	Yakka Skink	Species or species habitat likely to occur	V
Reptiles	*Rheodytes leukops*	Fitzroy Tortoise	Species or species habitat may occur	V
Birds	*Erythrotriorchis radiatus*	Red Goshawk	Species or species habitat likely to occur	V
Birds	*Geophaps scripta scripta*	Squatter Pigeon (southern)	Species or species habitat likely to occur	V
Birds	*Neochmia ruficauda ruficauda*	Star Finch (eastern), Star Finch (southern)	Species or species habitat likely to occur	E
Birds	*Rostratula australis*	Australian Painted Snipe	Species or species habitat may occur	V
Mammals	*Dasyurus hallucatus*	Northern Quoll	Species or species habitat may occur	E
Mammals	*Nyctophilus timoriensis (south-eastern form)*	Eastern Long-eared Bat	Species or species habitat may occur	V
Mammals	*Pteropus conspicillatus*	Spectacled Flying Fox	Species or species habitat may occur	V

Terrestrial Fauna Species Covered by Migratory Provisions of the EPBC Act, 1999

Class	Scientific Name	Common Name	Type of Presence
Birds	*Haliaeetus leucogaster*	White-bellied Sea-Eagle	Species or species habitat likely to occur

Birds	*Hirundapus caudacutus*	White-throated Needletail	Species or species habitat may occur
Birds	*Hirundo rustica*	Barn Swallow	Species or species habitat may occur
Birds	*Merops ornatus*	Rainbow Bee-eater	Species or species habitat may occur
Birds	*Monarcha melanopsis*	Black-faced Monarch	Species or species habitat may occur
Birds	*Monarcha trivirgatus*	Spectacled Monarch	Breeding likely to occur
Birds	*Myiagra cyanoleuca*	Satin Flycatcher	Species or species habitat likely to occur

Wetland Fauna Species Covered by Migratory Provisions of the EPBC Act, 1999

Class	Scientific Name	Common Name	Type of Presence
Birds	*Ardea alba*	Great Egret	Species or species habitat may occur
Birds	*Ardea ibis*	Cattle Egret	Species or species habitat may occur
Birds	*Gallinago hardwickii*	Latham's Snipe	Species or species habitat may occur
Birds	*Nettapus coromandelianus albipennis*	Australian Cotton Pygmy-goose	Species or species habitat may occur
Birds	*Numenius minutus*	Little Curlew	Species or species habitat may occur
Birds	*Rostratula benghalensis s. lat.*	Painted Snipe	Species or species habitat may occur

Marine Fauna Species Covered by Migratory Provisions of the EPBC Act, 1999

Class	Scientific Name	Common Name	Type of Presence
Birds	*Apus pacificus*	Fork-tailed Swift	Species or species habitat may occur
Birds	*Ardea alba*	Great Egret	Species or species habitat may occur
Birds	*Ardea ibis*	Cattle Egret	Species or species habitat may occur
Reptiles	*Crocodylus porosus*	Estuarine Crocodile	Species or species habitat likely to occur

Other matters (listed overfly marine areas) protected by the EPBC Act, 1999

Class	Scientific Name	Common Name	Type of Presence
Birds	*Anseranas semipalmata*	Magpie Goose	Species or species habitat may occur
Birds	*Apus pacificus*	Fork-tailed Swift	Species or species habitat may occur
Birds	*Ardea alba*	Great Egret	Species or species habitat may occur
Birds	*Ardea ibis*	Cattle Egret	Species or species habitat may occur
Birds	*Gallinago hardwickii*	Latham's Snipe	Species or species habitat may occur
Birds	*Hirundapus caudacutus*	White-throated Needletail	Species or species habitat may occur
Birds	*Hirundo rustica*	Barn Swallow	Species or species habitat may occur
Birds	*Merops ornatus*	Rainbow Bee-eater	Species or species habitat may occur
Birds	*Monarcha melanopsis*	Black-faced Monarch	Species or species habitat may occur
Birds	*Monarcha trivirgatus*	Spectacled Flycatcher	Breeding likely to occur in the area
Birds	*Myiagra cyanoleuca*	Satin Flycatcher	Species or species habitat likely to occur
Birds	*Nettapus coromandelianus albipennis*	Australian Cotton Pygmy-goose	Species or species habitat may occur
Birds	*Numenius minutus*	Little Curlew	Species or species habitat may occur
Birds	*Rostratula benghalensis s. lat.*	Painted Snipe	Species or species habitat may occur

Other matters (listed marine species) protected by the EPBC Act, 1999

Class	Scientific Name	Common Name	Type of Presence
Birds	*Haliaeetus leucogaster*	White-bellied Sea-Eagle	Species or species habitat likely to occur
Reptiles	*Crocodylus porosus*	Estuarine Crocodile	Species or species habitat likely to occur

Appendix 5:
Queensland Museum Database Search Results – Pipeline Route and Surrounds

Appendix 6:
Birds Australia Database Search Results – Pipeline Route and Surrounds

Genus	Species	Common Name
Acanthagenys	*rufogularis*	Spiny-cheeked Honeyeater
Accipiter	*cirrhocephalus*	Collared Sparrowhawk
Acrocephalus	*stentoreus*	Clamorous Reed-Warbler
Aegotheles	*cristatus*	Australian Owlet-nightjar
Alectura	*lathami*	Australian Brush-turkey
Anas	*gracilis*	Grey Teal
Anas	*platyrhynchos*	Mallard
Anas	*superciliosa*	Pacific Black Duck
Anhinga	*melanogaster*	Darter
Anthus	*novaeseelandiae*	Richard's Pipit
Aprosmictus	*erythropterus*	Red-winged Parrot
Aquila	*audax*	Wedge-tailed Eagle
Ardea	*alba*	Great Egret
Ardea	*intermedia*	Intermediate Egret
Ardea	*pacifica*	White-necked Heron
Ardeotis	*australis*	Australian Bustard
Artamus	*cinereus*	Black-faced Woodswallow
Artamus	*leucorynchus*	White-breasted Woodswallow
Aviceda	*subcristata*	Pacific Baza
Aythya	*australis*	Hardhead
Burhinus	*magnirostris*	Bush Stone-curlew
Cacatua	*galerita*	Sulphur-crested Cockatoo
Cacatua	*roseicapilla*	Galah
Cacomantis	*flabelliformis*	Fan-tailed Cuckoo
Calidris	*acuminata*	Sharp-tailed Sandpiper
Calyptorhynchus	*banksii*	Red-tailed Black-Cockatoo
Centropus	*phasianinus*	Pheasant Coucal
Chenonetta	*jubata*	Australian Wood Duck
Chlamydera	*maculata*	Spotted Bowerbird
Chlamydera	*nuchalis*	Great Bowerbird
Chlidonias	*hybridus*	Whiskered Tern
Chrysococcyx	*lucidus*	Shining Bronze-Cuckoo
Cisticola	*exilis*	Golden-headed Cisticola
Colluricincla	*harmonica*	Grey Shrike-thrush
Coracina	*maxima*	Ground Cuckoo-Shrike
Coracina	*novaehollandiae*	Black-faced Cuckoo-Shrike
Coracina	*papuensis*	White-bellied Cuckoo-Shrike
Coracina	*tenuirostris*	Cicadabird
Corcorax	*melanorhamphos*	White-winged Chough
Corvus	*bennetti*	Little Crow
Corvus	*coronoides*	Australian Raven
Corvus	*orru*	Torresian Crow
Coturnix	*ypsilophora*	Brown Quail
Cracticus	*nigrogularis*	Pied Butcherbird
Cracticus	*torquatus*	Grey Butcherbird
Cuculus	*pallidus*	Pallid Cuckoo
Cygnus	*atratus*	Black Swan
Dacelo	*leachii*	Blue-winged Kookaburra
Dacelo	*novaeguineae*	Laughing Kookaburra
Daphoenositta	*chrysoptera*	Varied Sittella

Genus	Species	Common Name
Dendrocygna	*arcuata*	Wandering Whistling-Duck
Dendrocygna	*eytoni*	Plumed Whistling-Duck
Dicaeum	*hirundinaceum*	Mistletoebird
Dicrurus	*hottentottus*	Spangled Drongo
Dromaius	*novaehollandiae*	Emu
Egretta	*garzetta*	Little Egret
Egretta	*novaehollandiae*	White-faced Heron
Elanus	*notatus*	Black-shouldered Kite
Elseyornis	*melanops*	Black-fronted Dotterel
Entomyzon	*cyanotis*	Blue-faced Honeyeater
Ephippiorhynchus	*asiaticus*	Black-necked Stork
Eudynamys	*scolopacea*	Common Koel
Eurystomus	*orientalis*	Dollarbird
Falco	*berigora*	Brown Falcon
Falco	*cenchroides*	Nankeen Kestrel
Falco	*longipennis*	Australian Hobby
Fulica	*atra*	Eurasian Coot
Gallinula	*tenebrosa*	Dusky Moorhen
Geopelia	*cuneata*	Diamond Dove
Geopelia	*humeralis*	Bar-shouldered Dove
Geopelia	*striata*	Peaceful Dove
Geophaps	*scripta*	Squatter Pigeon
Gerygone	*olivacea*	White-throated Gerygone
Grallina	*cyanoleuca*	Magpie-Lark
Grus	*rubicunda*	Brolga
Gymnorhina	*tibicen*	Australian Magpie
Haliaeetus	*leucogaster*	White-bellied Sea-Eagle
Haliastur	*indus*	Brahminy Kite
Haliastur	*sphenurus*	Whistling Kite
Himantopus	*himantopus*	Black-winged Stilt
Hirundo	*ariel*	Fairy Martin
Hirundo	*neoxena*	Welcome Swallow
Hirundo	*nigricans*	Tree Martin
Lalage	*sueurii*	White-winged Triller
Larus	*novaehollandiae*	Silver Gull
Lichenostomus	*flavus*	Yellow Honeyeater
Lichenostomus	*fuscus*	Fuscous Honeyeater
Lichenostomus	*virescens*	Singing Honeyeater
Lichmera	*indistincta*	Brown Honeyeater
Lonchura	*castaneothorax*	Chestnut-breasted Mannikin
Malurus	*lamberti*	Variegated Fairy-wren
Malurus	*melanocephalus*	Red-backed Fairy-wren
Manorina	*flavigula*	Yellow-throated Miner
Manorina	*melanocephala*	Noisy Miner
Meliphaga	*lewinii*	Lewin's Honeyeater
Melithreptus	*albogularis*	White-throated Honeyeater
Melithreptus	*gularis*	Black-chinned Honeyeater
Merops	*ornatus*	Rainbow Bee-eater
Microeca	*leucophaea*	Jacky Winter
Milvus	*migrans*	Black Kite

Genus	Species	Common Name
Mirafra	*javanica*	Singing Bushlark
Monarcha	*melanopsis*	Black-faced Monarch
Myiagra	*inquieta*	Restless Flycatcher
Myiagra	*rubecula*	Leaden Flycatcher
Myzomela	*obscura*	Dusky Honeyeater
Nettapus	*coromandelianus*	Cotton Pygmy-goose
Nettapus	*pulchellus*	Green Pygmy-goose
Ninox	*connivens*	Barking Owl
Ninox	*novaeseelandiae*	Southern Boobook
Nycticorax	*caledonicus*	Nankeen Night Heron
Ocyphaps	*hollandicus*	Cockatiel
Oriolus	*lophotes*	Crested Pigeon
Pachycephala	*sagittatus*	Olive-backed Oriole
Pandion	*rufiventris*	Rufous Whistler
Pardalotus	*haliaetus*	Osprey
Passer	*striatus*	Striated Pardalote
Pelecanus	*domesticus*	House Sparrow
Phalacrocorax	*conspicillatus*	Australian Pelican
Phalacrocorax	*carbo*	Great Cormorant
Phalacrocorax	*melanoleucos*	Little Pied Cormorant
Phalacrocorax	*sulcirostris*	Little Black Cormorant
Phaps	*varius*	Pied Cormorant
Philemon	*chalcoptera*	Common Bronzewing
Philemon	*citreogularis*	Little Friarbird
Platalea	*corniculatus*	Noisy Friarbird
Platalea	*flavipes*	Yellow-billed Spoonbill
Platycercus	*regia*	Royal Spoonbill
Plectorhyncha	*adscitus*	Pale-headed Rosella
Podargus	*lanceolata*	Striped Honeyeater
Podiceps	*strigoides*	Tawny Frogmouth
Pomatostomus	*cristatus*	Great Crested Grebe
Porphyrio	*temporalis*	Grey-crowned Babbler
Rhipidura	*porphyrio*	Purple Swamphen
Rhipidura	*fuliginosa*	Grey Fantail
Rhipidura	*leucophrys*	Willie Wagtail
Scythrops	*novaehollandiae*	Channel-billed Cuckoo
Sericornis	*frontalis*	White-browed Scrubwren
Smicrornis	*brevirostris*	Weebill
Sphecotheres	*viridis*	Figbird
Sterna	*nilotica*	Gull-billed Tern
Strepera	*graculina*	Pied Currawong
Struthidea	*cinerea*	Apostlebird
Tachybaptus	*novaehollandiae*	Australasian Grebe
Taeniopygia	*bichenovii*	Double-barred Finch
Threskiornis	*molucca*	Australian White Ibis
Threskiornis	*spinicollis*	Straw-necked Ibis
Todiramphus	*macleayii*	Forest Kingfisher
Todiramphus	*pyrrhopygia*	Red-backed Kingfisher
Todiramphus	*sanctus*	Sacred Kingfisher
Trichoglossus	*chlorolepidotus*	Scaly-breasted Lorikeet

Genus	Species	Common Name
Trichoglossus	*haematodus*	Rainbow Lorikeet
Tringa	*nebularia*	Common Greenshank
Tringa	*stagnatilis*	Marsh Sandpiper
Vanellus	*miles*	Masked Lapwing

Appendix 7

EPA WildNet Fauna Database Search Results – Pipeline Route and Surrounds

Class	Family	Scientific Name	Common Name	NCA	EPBC
amphibians	Hylidae	*Cyclorana alboguttata*	greenstripe frog	C	
amphibians	Hylidae	*Cyclorana cultripes*	grassland collared frog	C	
amphibians	Hylidae	*Cyclorana novaehollandiae*	eastern snapping frog	C	
amphibians	Limnodynastidae	*Limnodynastes peronii*	striped marshfrog	C	
amphibians	Limnodynastidae	*Limnodynastes tasmaniensis*	spotted grassfrog	C	
amphibians	Hylidae	*Litoria caerulea*	common green treefrog	C	
amphibians	Hylidae	*Litoria fallax*	eastern sedgefrog	C	
amphibians	Hylidae	*Litoria inermis*	bumpy rocketfrog	C	
amphibians	Hylidae	*Litoria latopalmata*	broad palmed rocketfrog	C	
amphibians	Hylidae	*Litoria nasuta*	striped rocketfrog	C	
amphibians	Hylidae	*Litoria rothii*	northern laughing treefrog	C	
amphibians	Hylidae	*Litoria rubella*	ruddy treefrog	C	
amphibians	Limnodynastidae	*Opisthodon ornatus*	ornate burrowing frog	C	
amphibians	Bufonidae	*Rhinella marina*	cane toad	Y	
reptiles	Agamidae	*Amphibolurus burnsi*		C	
reptiles	Boidae	*Antaresia maculosa*		C	
reptiles	Boidae	*Aspidites melanocephalus*	black-headed python	C	
reptiles	Colubridae	*Boiga irregularis*	brown tree snake	C	
reptiles	Scincidae	*Carlia foliorum*		C	
reptiles	Scincidae	*Carlia munda*		C	
reptiles	Scincidae	*Carlia pectoralis*		C	
reptiles	Agamidae	*Chlamydosaurus kingii*	frilled lizard	C	
reptiles	Scincidae	*Cryptoblepharus metallicus*	metallic snake-eyed skink	C	
reptiles	Scincidae	*Cryptoblepharus pannosus*	ragged snake-eyed skink	C	
reptiles	Scincidae	*Cryptoblepharus virgatus sensu lato*		C	
reptiles	Scincidae	*Ctenotus robustus*		C	
reptiles	Scincidae	*Ctenotus strauchii*		C	
reptiles	Scincidae	*Ctenotus taeniolatus*	copper-tailed skink	C	
reptiles	Elapidae	*Demansia psammophis*	yellow-faced whip snake	C	
reptiles	Colubridae	*Dendrelaphis punctulata*	common tree snake	C	
reptiles	Elapidae	*Denisonia maculata*	ornamental snake	V	V
reptiles	Gekkonidae	*Diplodactylus conspicillatus*	fat-tailed diplodactylus	C	
reptiles	Gekkonidae	*Diplodactylus vittatus*	wood gecko	C	
reptiles	Agamidae	*Diporiphora australis*		C	
reptiles	Scincidae	*Egernia striolata*	tree skink	C	
reptiles	Chelidae	*Elseya albagula*	southern snapping turtle	C	
reptiles	Chelidae	*Emydura macquarii krefftii*	Krefft's river turtle	C	
reptiles	Scincidae	*Eremiascincus fasciolatus*	narrow-banded sand swimmer	C	
reptiles	Scincidae	*Eulamprus brachysoma*		C	
reptiles	Scincidae	*Eulamprus martini*		C	
reptiles	Scincidae	*Eulamprus tenuis*		C	
reptiles	Gekkonidae	*Gehyra catenata*		C	
reptiles	Gekkonidae	*Gehyra dubia*		C	
reptiles	Scincidae	*Glaphyromorphus punctulatus*		C	
reptiles	Gekkonidae	*Heteronotia binoei*	Bynoe's gecko	C	
reptiles	Elapidae	*Hoplocephalus bitorquatus*	pale-headed snake	C	
reptiles	Scincidae	*Lampropholis adonis*		C	
reptiles	Scincidae	*Lerista fragilis*		C	
reptiles	Scincidae	*Lerista punctatovittata*		C	
reptiles	Pygopodidae	*Lialis burtonis*	Burton's legless lizard	C	
reptiles	Gekkonidae	*Lucasium steindachneri*	Steindachner's gecko	C	
reptiles	Scincidae	*Menetia greyii*		C	

Class	Family	Scientific Name	Common Name	NCA	EPBC
reptiles	Scincidae	*Menetia timlowi*		C	
reptiles	Boidae	*Morelia spilota*	carpet python	C	
reptiles	Scincidae	*Morethia boulengeri*		C	
reptiles	Scincidae	*Morethia taeniopleura*	fire-tailed skink	C	
reptiles	Gekkonidae	*Nephrurus asper*	spiny knob-tailed gecko	C	
reptiles	Gekkonidae	*Oedura monilis*		C	
reptiles	Elapidae	*Oxyuranus scutellatus*	coastal taipan	C	
reptiles	Pygopodidae	*Paradelma orientalis*	brigalow scaly-foot	V	V
reptiles	Agamidae	*Physignathus lesueurii*	eastern water dragon	C	
reptiles	Agamidae	*Pogona barbata*	bearded dragon	C	
reptiles	Elapidae	*Pseudonaja textilis*	eastern brown snake	C	
reptiles	Typhlopidae	*Ramphotyphlops affinis*		C	
reptiles	Typhlopidae	*Ramphotyphlops ligatus*		C	
reptiles	Typhlopidae	*Ramphotyphlops unguirostris*		C	
reptiles	Chelidae	*Rheodytes leukops*	Fitzroy River turtle	V	V
reptiles	Elapidae	*Rhinoplocephalus boschmai*	Carpentaria whip snake	C	
reptiles	Elapidae	*Rhinoplocephalus nigrescens*	eastern small-eyed snake	C	
reptiles	Elapidae	*Rhinoplocephalus nigrostriatus*	black-striped snake	C	
reptiles	Elapidae	*Simoselaps australis*	coral snake	C	
reptiles	Gekkonidae	*Strophurus williamsi*	soft-spined gecko	C	
reptiles	Elapidae	*Suta suta*	myall snake	C	
reptiles	Colubridae	*Tropidonophis mairii*	freshwater snake	C	
reptiles	Varanidae	*Varanus tristis*	black-tailed monitor	C	
reptiles	Varanidae	*Varanus varius*	lace monitor	C	
reptiles	Elapidae	*Vermicella annulata*	bandy-bandy	C	
birds	Meliphagidae	*Acanthagenys rufogularis*	spiny-cheeked honeyeater	C	
birds	Acanthizidae	*Acanthiza apicalis*	inland thornbill	C	
birds	Acanthizidae	*Acanthiza nana*	yellow thornbill	C	
birds	Acanthizidae	*Acanthiza reguloides*	buff-rumped thornbill	C	
birds	Accipitridae	*Accipiter cirrocephalus*	collared sparrowhawk	C	
birds	Accipitridae	*Accipiter fasciatus*	brown goshawk	C	
birds	Accipitridae	*Accipiter novaehollandiae*	grey goshawk	R	
birds	Acrocephalidae	*Acrocephalus australis*	clamorous reed-warbler	C	M
birds	Aegothelidae	*Aegotheles cristatus*	Australian owlet-nightjar	C	
birds	Megapodiidae	*Alectura lathami*	Australian brush-turkey	C	
birds	Anatidae	*Anas gracilis*	grey teal	C	
birds	Anatidae	*Anas platyrhynchos*	mallard	I	
birds	Anatidae	*Anas superciliosa*	Pacific black duck	C	
birds	Anhingidae	*Anhinga novaehollandiae*	darter	C	
birds	Motacillidae	*Anthus novaeseelandiae*	Richard's pipit	C	
birds	Psittacidae	*Aprosmictus erythropterus*	red-winged parrot	C	
birds	Accipitridae	*Aquila audax*	wedge-tailed eagle	C	
birds	Ardeidae	*Ardea intermedia*	intermediate egret	C	
birds	Ardeidae	*Ardea modesta*	great egret	C	M
birds	Ardeidae	*Ardea pacifica*	white-necked heron	C	
birds	Otididae	*Ardeotis australis*	Australian bustard	C	
birds	Artamidae	*Artamus cinereus*	black-faced woodswallow	C	
birds	Artamidae	*Artamus leucorynchus*	white-breasted woodswallow	C	
birds	Artamidae	*Artamus personatus*	masked woodswallow	C	
birds	Artamidae	*Artamus superciliosus*	white-browed woodswallow	C	
birds	Accipitridae	*Aviceda subcristata*	Pacific baza	C	
birds	Anatidae	*Aythya australis*	hardhead	C	

Class	Family	Scientific Name	Common Name	NCA	EPBC
birds	Burhinidae	*Burhinus grallarius*	bush stone-curlew	C	
birds	Cacatuidae	*Cacatua galerita*	sulphur-crested cockatoo	C	
birds	Cuculidae	*Cacomantis flabelliformis*	fan-tailed cuckoo	C	
birds	Cuculidae	*Cacomantis pallidus*	pallid cuckoo	C	
birds	Scolopacidae	*Calidris acuminata*	sharp-tailed sandpiper	C	M
birds	Cacatuidae	*Calyptorhynchus banksii*	red-tailed black-cockatoo	C	
birds	Cacatuidae	*Calyptorhynchus funereus*	yellow-tailed black-cockatoo	C	
birds	Cacatuidae	*Calyptorhynchus lathami*	glossy black-cockatoo	V	
birds	Cuculidae	*Centropus phasianinus*	pheasant coucal	C	
birds	Alcedinidae	*Ceyx azureus*	azure kingfisher	C	
birds	Cuculidae	*Chalcites basalis*	Horsfield's bronze-cuckoo	C	
birds	Cuculidae	*Chalcites lucidus*	shining bronze-cuckoo	C	
birds	Cuculidae	*Chalcites minutillus minutillus*	little bronze-cuckoo	C	
birds	Anatidae	*Chenonetta jubata*	Australian wood duck	C	
birds	Laridae	*Chlidonias hybrida*	whiskered tern	C	
birds	Laridae	*Chroicocephalus novaehollandiae*	silver gull	C	
birds	Acanthizidae	*Chthonicola sagittata*	speckled warbler	C	
birds	Megaluridae	*Cincloramphus mathewsi*	rufous songlark	C	
birds	Cisticolidae	*Cisticola exilis*	golden-headed cisticola	C	
birds	Pachycephalidae	*Colluricincla harmonica*	grey shrike-thrush	C	
birds	Campephagidae	*Coracina maxima*	ground cuckoo-shrike	C	
birds	Campephagidae	*Coracina novaehollandiae*	black-faced cuckoo-shrike	C	
birds	Campephagidae	*Coracina papuensis*	white-bellied cuckoo-shrike	C	
birds	Campephagidae	*Coracina tenuirostris*	cicadabird	C	
birds	Corcoracidae	*Corcorax melanorhamphos*	white-winged chough	C	
birds	Corvidae	*Corvus bennetti*	little crow	C	
birds	Corvidae	*Corvus coronoides*	Australian raven	C	
birds	Corvidae	*Corvus orru*	Torresian crow	C	
birds	Phasianidae	*Coturnix pectoralis*	stubble quail	C	
birds	Phasianidae	*Coturnix ypsilophora*	brown quail	C	
birds	Artamidae	*Cracticus nigrogularis*	pied butcherbird	C	
birds	Artamidae	*Cracticus tibicen*	Australian magpie	C	
birds	Artamidae	*Cracticus torquatus*	grey butcherbird	C	
birds	Anatidae	*Cygnus atratus*	black swan	C	
birds	Halcyonidae	*Dacelo leachii*	blue-winged kookaburra	C	
birds	Halcyonidae	*Dacelo novaeguineae*	laughing kookaburra	C	
birds	Neosittidae	*Daphoenositta chrysoptera*	varied sittella	C	
birds	Anatidae	*Dendrocygna arcuata*	wandering whistling-duck	C	
birds	Anatidae	*Dendrocygna eytoni*	plumed whistling-duck	C	
birds	Nectariniidae	*Dicaeum hirundinaceum*	mistletoebird	C	
birds	Dicruridae	*Dicrurus bracteatus*	spangled drongo	C	
birds	Casuariidae	*Dromaius novaehollandiae*	emu	C	
birds	Ardeidae	*Egretta garzetta*	little egret	C	
birds	Ardeidae	*Egretta novaehollandiae*	white-faced heron	C	
birds	Accipitridae	*Elanus axillaris*	black-shouldered kite	C	
birds	Charadriidae	*Elseyornis melanops*	black-fronted dotterel	C	
birds	Meliphagidae	*Entomyzon cyanotis*	blue-faced honeyeater	C	
birds	Cacatuidae	*Eolophus roseicapillus*	galah	C	
birds	Petroicidae	*Eopsaltria australis*	eastern yellow robin	C	
birds	Ciconiidae	*Ephippiorhynchus asiaticus*	black-necked stork	R	
birds	Accipitridae	*Erythrotriorchis radiatus*	red goshawk	E	V
birds	Cuculidae	*Eudynamys orientalis*	common koel	C	

Class	Family	Scientific Name	Common Name	NCA	EPBC
birds	Eurostopodidae	*Eurostopodus mystacalis*	white-throated nightjar	C	
birds	Coraciidae	*Eurystomus orientalis*	dollarbird	C	
birds	Falconidae	*Falco berigora*	brown falcon	C	
birds	Falconidae	*Falco cenchroides*	nankeen kestrel	C	
birds	Falconidae	*Falco longipennis*	Australian hobby	C	
birds	Rallidae	*Fulica atra*	Eurasian coot	C	
birds	Rallidae	*Gallinula tenebrosa*	dusky moorhen	C	
birds	Laridae	*Gelochelidon nilotica*	gull-billed tern	C	
birds	Columbidae	*Geopelia cuneata*	diamond dove	C	
birds	Columbidae	*Geopelia humeralis*	bar-shouldered dove	C	
birds	Columbidae	*Geopelia striata*	peaceful dove	C	
birds	Columbidae	*Geophaps scripta scripta*	squatter pigeon (southern subspecies)	V	V
birds	Acanthizidae	*Gerygone albogularis*	white-throated gerygone	C	
birds	Acanthizidae	*Gerygone palpebrosa*	fairy gerygone		
birds	Monarchidae	*Grallina cyanoleuca*	magpie-lark	C	
birds	Gruidae	*Grus rubicunda*	brolga	C	
birds	Accipitridae	*Haliaeetus leucogaster*	white-bellied sea-eagle	C	M
birds	Accipitridae	*Haliastur indus*	brahminy kite	C	
birds	Accipitridae	*Haliastur sphenurus*	whistling kite	C	
birds	Accipitridae	*Hieraaetus morphnoides*	little eagle	C	
birds	Recurvirostridae	*Himantopus himantopus*	black-winged stilt	C	
birds	Hirundinidae	*Hirundo neoxena*	welcome swallow	C	
birds	Ardeidae	*Ixobrychus flavicollis*	black bittern	C	
birds	Campephagidae	*Lalage leucomela*	varied triller	C	
birds	Campephagidae	*Lalage sueurii*	white-winged triller	C	
birds	Meliphagidae	*Lichenostomus flavus*	yellow honeyeater	C	
birds	Meliphagidae	*Lichenostomus fuscus*	fuscous honeyeater	C	
birds	Meliphagidae	*Lichenostomus penicillatus*	white-plumed honeyeater	C	
birds	Meliphagidae	*Lichenostomus virescens*	singing honeyeater	C	
birds	Meliphagidae	*Lichmera indistincta*	brown honeyeater	C	
birds	Estrildidae	*Lonchura castaneothorax*	chestnut-breasted mannikin	C	
birds	Accipitridae	*Lophoictinia isura*	square-tailed kite	C	
birds	Maluridae	*Malurus cyaneus*	superb fairy-wren	C	
birds	Maluridae	*Malurus lamberti*	variegated fairy-wren	C	
birds	Maluridae	*Malurus melanocephalus*	red-backed fairy-wren	C	
birds	Meliphagidae	*Manorina flavigula*	yellow-throated miner	C	
birds	Meliphagidae	*Manorina melanocephala*	noisy miner	C	
birds	Meliphagidae	*Meliphaga lewinii*	Lewin's honeyeater	C	
birds	Meliphagidae	*Melithreptus albogularis*	white-throated honeyeater	C	
birds	Meliphagidae	*Melithreptus gularis*	black-chinned honeyeater	R	
birds	Psittacidae	*Melopsittacus undulatus*	budgerigar	C	
birds	Meropidae	*Merops ornatus*	rainbow bee-eater	C	M
birds	Phalacrocoracidae	*Microcarbo melanoleucos*	little pied cormorant	C	
birds	Petroicidae	*Microeca fascinans*	jacky winter	C	
birds	Accipitridae	*Milvus migrans*	black kite	C	
birds	Alaudidae	*Mirafra javanica*	singing bushlark	C	
birds	Monarchidae	*Monarcha melanopsis*	black-faced monarch	C	M
birds	Monarchidae	*Myiagra inquieta*	restless flycatcher	C	
birds	Monarchidae	*Myiagra rubecula*	leaden flycatcher	C	
birds	Meliphagidae	*Myzomela obscura*	dusky honeyeater	C	
birds	Meliphagidae	*Myzomela sanguinolenta*	scarlet honeyeater	C	
birds	Estrildidae	*Neochmia modesta*	plum-headed finch	C	

Class	Family	Scientific Name	Common Name	NCA	EPBC
birds	Estrildidae	*Neochmia phaeton*	crimson finch	V	
birds	Estrildidae	*Neochmia ruficauda ruficauda*	star finch (eastern subspecies)	E	E
birds	Estrildidae	*Neochmia temporalis*	red-browed finch	C	
birds	Anatidae	*Nettapus coromandelianus*	cotton pygmy-goose	R	M
birds	Anatidae	*Nettapus pulchellus*	green pygmy-goose	C	
birds	Strigidae	*Ninox connivens*	barking owl	C	
birds	Strigidae	*Ninox novaeseelandiae*	southern boobook	C	
birds	Strigidae	*Ninox rufa queenslandica*	rufous owl (southern subspecies)	V	
birds	Ardeidae	*Nycticorax caledonicus*	nankeen night heron	C	
birds	Cacatuidae	*Nymphicus hollandicus*	cockatiel	C	
birds	Columbidae	*Ocyphaps lophotes*	crested pigeon	C	
birds	Oriolidae	*Oriolus sagittatus*	olive-backed oriole	C	
birds	Pachycephalidae	*Pachycephala pectoralis*	golden whistler	C	
birds	Pachycephalidae	*Pachycephala rufiventris*	rufous whistler	C	
birds	Accipitridae	*Pandion cristatus*	osprey	C	M
birds	Pardalotidae	*Pardalotus striatus*	striated pardalote	C	
birds	Passeridae	*Passer domesticus*	house sparrow	Y	
birds	Pelecanidae	*Pelecanus conspicillatus*	Australian pelican	C	
birds	Hirundinidae	*Petrochelidon ariel*	fairy martin	C	
birds	Hirundinidae	*Petrochelidon nigricans*	tree martin	C	
birds	Phalacrocoracidae	*Phalacrocorax carbo*	great cormorant	C	
birds	Phalacrocoracidae	*Phalacrocorax sulcirostris*	little black cormorant	C	
birds	Phalacrocoracidae	*Phalacrocorax varius*	pied cormorant	C	
birds	Columbidae	*Phaps chalcoptera*	common bronzewing	C	
birds	Meliphagidae	*Philemon citreogularis*	little friarbird	C	
birds	Meliphagidae	*Philemon corniculatus*	noisy friarbird	C	
birds	Threskiornithidae	*Platalea flavipes*	yellow-billed spoonbill	C	
birds	Threskiornithidae	*Platalea regia*	royal spoonbill	C	
birds	Psittacidae	*Platycercus adscitus*	pale-headed rosella	C	
birds	Psittacidae	*Platycercus adscitus palliceps*	pale-headed rosella (southern form)	C	
birds	Meliphagidae	*Plectorhyncha lanceolata*	striped honeyeater	C	
birds	Podargidae	*Podargus strigoides*	tawny frogmouth	C	
birds	Podicipedidae	*Podiceps cristatus*	great crested grebe	C	
birds	Pomatostomidae	*Pomatostomus temporalis*	grey-crowned babbler	C	
birds	Rallidae	*Porphyrio porphyrio*	purple swamphen	C	
birds	Ptilonorhynchidae	*Ptilonorhynchus maculatus*	spotted bowerbird	C	
birds	Ptilonorhynchidae	*Ptilonorhynchus nuchalis*	great bowerbird	C	
birds	Rhipiduridae	*Rhipidura albiscapa*	grey fantail	C	
birds	Rhipiduridae	*Rhipidura leucophrys*	willie wagtail	C	
birds	Rhipiduridae	*Rhipidura rufifrons*	rufous fantail	C	M
birds	Cuculidae	*Scythrops novaehollandiae*	channel-billed cuckoo	C	
birds	Acanthizidae	*Sericornis frontalis*	white-browed scrubwren	C	
birds	Ptilonorhynchidae	*Sericulus chrysocephalus*	regent bowerbird	C	
birds	Acanthizidae	*Smicrornis brevirostris*	weebill	C	
birds	Oriolidae	*Sphecotheres vieilloti*	figbird	C	
birds	Artamidae	*Strepera graculina*	pied currawong	C	
birds	Corcoracidae	*Struthidea cinerea*	apostlebird	C	
birds	Monarchidae	*Symposiarchus trivirgatus*	spectacled monarch	C	M
birds	Podicipedidae	*Tachybaptus novaehollandiae*	Australasian grebe	C	
birds	Estrildidae	*Taeniopygia bichenovii*	double-barred finch	C	
birds	Estrildidae	*Taeniopygia guttata*	zebra finch	C	

Class	Family	Scientific Name	Common Name	NCA	EPBC
birds	Threskiornithidae	*Threskiornis molucca*	Australian white ibis	C	
birds	Threskiornithidae	*Threskiornis spinicollis*	straw-necked ibis	C	
birds	Halcyonidae	*Todiramphus macleayii*	forest kingfisher	C	
birds	Halcyonidae	*Todiramphus pyrrhopygius*	red-backed kingfisher	C	
birds	Halcyonidae	*Todiramphus sanctus*	sacred kingfisher	C	
birds	Psittacidae	*Trichoglossus chlorolepidotus*	scaly-breasted lorikeet	C	
birds	Psittacidae	*Trichoglossus haematodus moluccanus*	rainbow lorikeet	C	
birds	Scolopacidae	*Tringa nebularia*	common greenshank	C	M
birds	Scolopacidae	*Tringa stagnatilis*	marsh sandpiper	C	M
birds	Turnicidae	*Turnix varius*	painted button-quail	C	
birds	Tytonidae	*Tyto javanica*	barn owl	C	
birds	Charadriidae	*Vanellus miles*	masked lapwing	C	
birds	Charadriidae	*Vanellus miles miles*	masked lapwing (northern subspecies)	C	
birds	Charadriidae	*Vanellus tricolor*	banded lapwing	C	
birds	Timaliidae	*Zosterops lateralis*	silvereye	C	
mammals	Potoroidae	*Aepyprymnus rufescens*	rufous bettong	C	
mammals	Canidae	*Canis lupus dingo*	dingo		
mammals	Molossidae	*Chaerephon jobensis*	northern freetail bat	C	
mammals	Vespertilionidae	*Chalinolobus gouldii*	Gould's wattled bat	C	
mammals	Vespertilionidae	*Chalinolobus morio*	chocolate wattled bat	C	
mammals	Vespertilionidae	*Chalinolobus nigrogriseus*	hoary wattled bat	C	
mammals	Vespertilionidae	*Chalinolobus picatus*	little pied bat	R	
mammals	Dasyuridae	*Dasyurus hallucatus*	northern quoll	C	E
mammals	Equidae	*Equus caballus*	horse	I	
mammals	Felidae	*Felis catus*	cat	I	
mammals	Muridae	*Hydromys chrysogaster*	water rat	C	
mammals	Macropodidae	*Lagorchestes conspicillatus*	spectacled hare-wallaby	C	
mammals	Macropodidae	*Macropus dorsalis*	black-striped wallaby	C	
mammals	Macropodidae	*Macropus giganteus*	eastern grey kangaroo	C	
mammals	Macropodidae	*Macropus robustus*	common wallaroo	C	
mammals	Macropodidae	*Macropus rufus*	red kangaroo	C	
mammals	Vespertilionidae	*Miniopterus australis*	little bent-wing bat	C	
mammals	Molossidae	*Mormopterus beccarii*	Beccari's freetail bat	C	
mammals	Molossidae	*Mormopterus sp. 2*	eastern freetail bat	C	
mammals	Muridae	*Mus musculus*	house mouse	Y	
mammals	Vespertilionidae	*Nyctophilus gouldi*	Gould's long-eared bat	C	
mammals	Ornithorhynchidae	*Ornithorhynchus anatinus*	platypus	C	
mammals	Leporidae	*Oryctolagus cuniculus*	rabbit	I	
mammals	Pseudocheiridae	*Petauroides volans*	greater glider	C	
mammals	Petauridae	*Petaurus breviceps*	sugar glider	C	
mammals	Petauridae	*Petaurus norfolcensis*	squirrel glider	C	
mammals	Phascolarctidae	*Phascolarctos cinereus*	koala	C	
mammals	Dasyuridae	*Planigale ingrami*	long-tailed planigale	C	
mammals	Dasyuridae	*Planigale maculata*	common planigale	C	
mammals	Muridae	*Pseudomys delicatulus*	delicate mouse	C	
mammals	Pteropodidae	*Pteropus scapulatus*	little red flying-fox	C	
mammals	Emballonuridae	*Saccolaimus flaviventris*	yellow-bellied sheathtail bat	C	
mammals	Vespertilionidae	*Scotorepens balstoni*	inland broad-nosed bat	C	
mammals	Vespertilionidae	*Scotorepens greyii*	little broad-nosed bat	C	
mammals	Dasyuridae	*Sminthopsis crassicaudata*	fat-tailed dunnart	C	
mammals	Dasyuridae	*Sminthopsis macroura*	stripe-faced dunnart	C	

Class	Family	Scientific Name	Common Name	NCA	EPBC
mammals	Suidae	*Sus scrofa*	pig	I	
mammals	Tachyglossidae	*Tachyglossus aculeatus*	short-beaked echidna	C	
mammals	Emballonuridae	*Taphozous troughtoni*	Troughton's sheathtail bat	E	
mammals	Phalangeridae	*Trichosurus vulpecula*	common brushtail possum	C	
mammals	Vespertilionidae	*Vespadelus baverstocki*	inland forest bat	C	
mammals	Vespertilionidae	*Vespadelus troughtoni*	eastern cave bat	C	
mammals	Macropodidae	*Wallabia bicolor*	swamp wallaby	C	

Status: Queensland's Nature Conservation Act 1992 (NCA): E = Endangered, V = Vulnerable, R = Rare, C = Least Concern (Common) wildlife, I = Introduced.
Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC): E = Endangered, V = Vulnerable, M = Migratory Species.

Appendix 8:
Commonwealth EPBC Online Protected Matters Search Tool Results – Pipeline Route and Surrounds

Appendix 9:
Brigalow Belt North Biodiversity Planning Assessment Results – Inundation Area

Appendix 10:
Brigalow Belt North
Biodiversity Planning Assessment Results
– Pipeline Route

Appendix 11:
BAAM Pty Ltd proposed terrestrial vertebrate study methodology to supplement existing data and meet the Preliminary Terms of Reference for the EIS

– Inundation Area

Appendix 12:
BAAM Pty Ltd proposed terrestrial vertebrate study methodology to supplement existing data and meet the Preliminary Terms of Reference for the EIS – Pipeline Route