Maroochy Shire to Noosa Shire
Northern Pipeline Interconnector
Stage Two

PRELIMINARY TERRESTRIAL VERTEBRATE FAUNA HABITAT ASSESSMENT

Report prepared
For
Southern Regional Water Pipeline Alliance

Biodiversity Assessment
AND MANAGEMENT PTY LTD

FAUNA AND HABITAT SPECIALISTS

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Project Summary: This project involved an assessment of significant habitat areas and listed terrestrial vertebrate fauna species that occur or have the potential to occur along Stage Two of the proposed alignment of the Northern Pipeline Interconnector (NPI) including the NPI corridor and the connection to the Image Flat Water Treatment Plant. The proposed NPI corridor runs from Nobels Road in Maroochy Shire to the Noosa Water Treatment Plant in Noosa Shire. The proposed connection to the Image Flat Water Treatment Plant runs west from the NPI corridor 81 km marker to Image Flat Water Treatment Plant north-west of Nambour.

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Signed on behalf of
Biodiversity Assessment and Management Pty Ltd

Date: 13/12/2007

Managing Director

EXECUTIVE SUMMARY

INTRODUCTION

Biodiversity Assessment and Management (BAAM) Pty Ltd have prepared this Preliminary Terrestrial Vertebrate Fauna Habitat Assessment (PTVFHA) for the Southern Regional Water Pipeline Alliance (SRWPA) for the sole purpose of assessing terrestrial vertebrate fauna, habitat and corridor values along the proposed alignment for Stage Two of the Northern Pipeline Interconnector including the NPI corridor and the connection to the Image Flat Water Treatment Plant. The proposed NPI corridor runs from Nobels Road in Maroochy Shire to the Noosa Water Treatment Plant in Noosa Shire. The proposed connection to the Image Flat Water Treatment Plant runs west from the NPI corridor 81 km marker to Image Flat north-west of Nambour.

The aims of this report are to:

- Identify 'Ecological Constraints' for the proposed NPI alignment; and
- Identify significant habitat areas that will require further detailed fauna survey work.

METHODOLOGY

The habitat assessments involved site investigations conducted over 6 days and 2 nights in October and November 2007 in order to assess the extent and quality of wildlife habitat and to determine the presence or likely presence of any species of special conservation significance (at-risk species) known from, or predicted to occur, within the local area. This was undertaken in accordance with the EPA's Queensland Parks and Wildlife Service's Scientific Purposes Permit No. WISP02791605. There was no trapping conducted over the study period.

SIGNIFICANT HABITAT AREAS

The proposed pipeline traverses several waterways and vegetated areas which provide habitat and/or vegetated linkages for a variety of fauna moving between or within significant habitat areas.

These areas support habitat for one or more significant species listed under the EPBC and/or the NCA. Significant habitat areas along the proposed NPI alignment include:

NPI Corridor:

- Vegetation north of Nobels Road (**Figure 4.6**: SRWPA Map B1);
- Vegetation south of Chevallum Road (**Figure 4.7**: SRWPA Map B2a);
- Vegetation west of Winston Road South (**Figure 4.8**: SRWPA Map B2b);
- Eudlo Creek crossing west of Bruce Highway (**Figure 4.8**: SRWPA Map B2b);
- Eudlo Creek and large dam between Bruce Highway and the Maroochydore Road (**Figure 4.9**: SRWPA Map B3a) (*N.B.* no access to vegetated areas between Bruce Highway and 72km mark) This area is mapped as Urban Koala Area under the Koala Plan;
- Alternative route following Eudlo Flats Road (**Figure 4.9:** SRWPA Map B3a and **Figure 4.10**: SRWPA Map B3b);
- Vegetation south of Diddillibah Road (**Figure 4.11**: SRWPA Map B4);
- Vegetated areas north of Francis Road (**Figure 4.12**: SRWPA Map B5d);
- Maroochy River crossing (**Figure 4.19**: SRWPA B10);
- Vegetation and waterway associated with Strong Lane (**Figure 4.19**: SRWPA Map B10); and
- Vegetation west of Racehorse Lane (HA36, **Figure 4.21**: SRWPA Map B12).

Image Flat Connection:

- Significant vegetation and ephemeral waterway located east of the Bruce Highway (HA42, **Figure 4.22**: SRWPA B5c);
- Vegetation east of the Bruce Highway represents the southern extent of significant vegetation containing protected habitats (i.e. Flying-fox camp). Waterway

on the east of Cooney Road known to have Tusked Frog (HA43, **Figure 4.22**: SRPWA Map B5c); and

- Significant habitat area between the Nambour Connection Road and the Bruce Highway (HA44, **Figure 4.22**: SRWPA Map B5c); and
- Significant habitat area in around Tuckers Creek (HA45; **Figure 4.22**: SRWPA Map B5c).

Specific recommendations for treatment in these areas will be addressed in **Section 6.0**.

CORRIDOR VALUES

Several State and Regional Corridors have been identified using BAMM mapping for areas along the proposed alignment.

Areas mapped as having BAMM State Significant Corridors include:

NPI Corridor:

- Vegetated areas north of Nobels Road (**Figure 4.6**: SRWPA Map B1);
- Vegetation encroaching in the east side of the proposed alignment east of Robinson Road (**Figure 4.6**: SRWPA Map B1) and
- Vegetation along Balsam Road (**Figure 4.18**: SRWPA Map B9).

Areas mapped as having BAMM Regionally Significant Corridors include:

- Vegetated areas north of Francis Road (**Figure 4.12**: SRWPA Map B5d);
- Areas where the proposed alignment crosses creeks/rivers and large patches of vegetation (**Figure 4.20**: SRWPA Map B11);
- Areas where the proposed alignment crosses creeks/rivers and large patches of vegetation (**Figure 4.21**: SRWPA Map B12); and

Image Flat Connection:

- Vegetated areas both east and west of the Bruce Highway in the vicinity of Nambour (**Figure 4.23**: SRWPA Map B5b, **Figure 4.22**: SRWPA Map B5c, **Figure 4.12**: SRWPA Map B5d).

Following on-site investigations, several other areas along the proposed NPI alignment have been identified as having Regional connectivity as fauna movement corridors including:

NPI Corridor:

- Vegetation in the vicinity of Chevallum Road and Winston Road South (**Figure 4.7**: SRWPA Map B2a);
- Eudlo Creek crossings west of Bruce Highway (**Figure 4.8**: SRWPA Map B2b);
- Vegetation and dam to the East of Bruce Highway (**Figure 4.9**: SRWPA Map B3a); and
- Vegetated areas to the east and west of 105km marker (**Figure 4.19**: SRWPA Map B10).

Image Flat Connection:

- Vegetation and dam located at the end of Vincent Drive (HA47, **Figure 4.23**: SRWPA Map B5b); and

In addition river, creek, tributary and drainage line crossings associated with vegetation represent local movement corridors.

SIGNIFICANT SPECIES KNOWN OR LIKELY TO OCCUR ALONG THE PROPOSED NPI ALIGNMENT

The following species of State and/or National significance identified through database searches, have either been detected along the proposed NPI alignment or are considered likely to occur in suitable habitat identified in the preliminary habitat assessment.

- *Adelotus brevis* Tusked Frog (NCA: Vulnerable);
- *Mixophyes iteratus* Giant Barred Frog (EPBC: E, NCA: Endangered);
- *Calyptorhynchus lathami* Glossy Black-Cockatoo (NCA: Vulnerable);
- *Ornithorhynchus anatinus* Platypus (NCA: Culturally Significant);
- *Phascolarctos cinereus* (SEQ Bioregion) Koala (SEQ Bioregion) (NCA: Vulnerable);

- *Pteropus poliocephalus* Grey-headed Flying-fox (EPBC: Vulnerable)
- *Tachyglossus aculeatus* Short-beaked Echidna (NCA:Culturally Significant); and
- *Eroticoscincus graciloides* Elf Skink (NCA: Rare); and
- *Ophioscincus truncatus* (NCA – Rare).

These species may need specific management actions and are discussed in detail in this report.

PREFERRED ALIGNMENT

The following recommendations as to the specific alignment and/or treatment of river/creek crossings are designed to minimise disturbance and impact to native vegetation and habitat:

NPI Corridor:

- Chevallum Road (HA 4, 69km marker, **Figure 4.7**: SRWPA Map B2a). Constrain disturbance in this area as there is significant vegetation either side of the road (i.e.particular attention to south of Chevallum Road);
- Minimise disturbance to significant native vegetation in this area with particular attention to vegetation located west of Winston Road South (HA 5, west of 70 km marker, **Figure 4.8**: SRWPA Map B2b);
- The alignment would be better suited located in the road reserve to the south of Eudlo Creek at crossings west of the Bruce Highway (HA6, in the vicinity of the 71km marker **Figure 4.8**: SRWPA Map B2b);
- Alignment should stay clear of vegetation and dam in areas between the Bruce Highway and Maroochydore Road where possible. Micro-tunnelling recommended for the Eudlo Creek crossing and associated habitats (HA 7, 71.5 – 73 km marker, **Figure 4.9**: SRWPA Map 3a);
- Eudlo Flats Road Alternative. (HA 8, **Figure 4.9 – 4.10**: SRWPA Map B3a-b). Alignment should be located in cleared areas, well away from mature habitat trees along Eudlo Flats Road and TI Tree Road. The recommended alignment would follow the SRWPA alternative route but would continue further to the east to rejoin the proposed alignment to avoid riparian and old growth habitat areas to the north. (HA 8, **Figure 4.10**: SRWPA Map B3b) ;
- Where the NPI is proposed to cross Eudlo Creek south of 75km mark (HA 9, **Figure 4.10**: SRWPA B3b), it may be appropriate to go over the creek in this location to minimise disturbance to narrow riparian corridor of native vegetation;
- In vegetated areas south of Diddillibah Road (HA 10, **Figure 4.11**: SRWPA Map B4), the alignment should be relocated to more disturbed areas approximately 250m to the east of the current alignment if possible;
- In vegetated areas north of Francis Road (HA 13, **Figure 4.12**: SRWPA Map B5d) direct alignment away from large habitat trees to more disturbed areas (i.e. easement to the east);
- Where the NPI is proposed to cross Caboolture Creek near the 87km mark (HA 15, **Figure 4.14**:SRWPA Map B6b), the alignment should be located in already cleared areas on the southern side of the existing track/creek crossing;
- Recommend micro-tunnelling at the South Maroochy River and tributary crossings at the 89.5 and 90km markers (HA 16 and 17, **Figure 4.15**: SRWPA B6**a**);
- The proposed alignment should stay clear of large habitat trees and native vegetation along Balsam Road in the vicinity of the 99km marker (HA 26, **Figure 4.18**: SRWPA Map B9);
- The alignment should be located in where there is minimal disturbance to native vegetation and habitat where it crosses the Maroochy River in the vicinity of the 102.5 km marker Micro-tunnelling is recommended in this area (HA 30, **Figure 4.19**: SRWPA Map B10); and
- The proposed NPI alignment should stay clear of native vegetation and natural waterways where it is located the west of Strong Lane (HA 32, **Figure 4.19**: SRWPA Map B10);

- Realign NPI corridor to cleared areas if possible (HA36, **Figure 4.21**: SRWPA Map B12).

Image Flat Connection:

- Alignment should cross the creek in a previously cleared area located just south of Bli Bli Yandina Road (HA40, **Figure 4.12**: SRWPA B5d);
- The recommended option for the alignment is to avoid HA41-45 and follow the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B). A variation of this alignment is shown on **Figure 4.22**: SRWPA Map B5c (version: 19 September, 2007 (Prior to revision C)).

FURTHER WORK

Specific areas will require more detailed survey work prior to the determination of a final NPI alignment and prior to the removal of significant native vegetation and/or habitat loss or disturbance to important riparian ecosystems. These areas are:

NPI Corridor:

- Eudlo Creek, large dam and significant vegetation situated between 71.5 and 73 km (HA 7, **Figure 4.10**: SRWPA Map B3b);
- Vegetated areas to the north of Frances Road should be surveyed for the presence of fauna within the alignment prior to the removal of vegetation for the construction phase of the NPI (HA 13: **Figure 4.12:** SRWPA Map B5d);
- A detailed fauna survey should be conducted in this area (HA 26, **Figure 4.18**: SRWPA B9) if the alignment is to disturb significant habitat trees to establish the extent of occupation by native fauna and to ensure an appropriate management response prior to construction stage;
- Although Sandy Creek and Maroochy River are disturbed (i.e. where the Bruce Highway crosses the waterways), there are significant species and habitats present. The finalised alignment and corridor should be subject to detailed design in this location to minimise ecological impacts (Ha 29, 30, **Figure 4.19**: SRWPA Map B10);
- The construction phase for HA 36 (**Figure 4.21**: SRWPA Map B12) should be designed to: ensure minimal corridor width, to minimise the construction time, and maximise restoration actions; and
- Given the proximity to known Mary River Cod populations, further detailed assessment of the aquatic fauna is required to determine appropriate management of the crossing at this site (HA38, **Figure 4.21**: SRWPA B12).

Image Flat Connection:

- Keep alignment and associated construction works away from the line at the extent of the canopy for habitat trees located the paddock across Bli Bli Yandina Road from the proposed location of the pumpstation (HA39, **Figure 4.12**: SRWPA B5d);
- A referral to the DEWR is required for approval under the EPBC prior to conducting any works in areas that may disturb the Flying-fox camp (HA43, **Figure 4.22**: SRWPA Map B5c);
- Further detailed fauna survey work is required for the area encompassing HA41-45 should the plans progress past this point (**Figure 4.22**: SRWPA Map B5c); and
- Tuckers Creek and surrounds should be checked for the presence of significant frog species in suitable weather conditions.

POTENTIAL IMPACTS

The main impacts from the proposed works on fauna and habitat values will be through the loss of native vegetation and the temporary disruption to local, regional and state corridors. In addition, there is the potential for impacts from the construction of the pipeline including sedimentation and erosion control, disruption to stream banks, and increased potential for weed invasion.

Weeds were present in most locations throughout the proposed NPI alignment. Of particular note is the presence of Camphor laurel *Cinnamomum camphora*, which dominated most of the waterways along the alignment, and is listed as a class 3 weed

species under the *Lands Protection (Pest and Stock Route Management) Act 2002* (LPA).

There is potential to rehabilitate these areas following the operational works stage resulting in a 'better than before' outcome.

RECOMMENDED MITIGATION

Where possible, the alignment should be located in already cleared areas and should stay away from large habitat trees. Particular attention is required where the alignment breaches any waterway/dams.

Fauna spotters are required for all vegetation removal works and where there is any breach, damage or draining of waterways/dams.

Habitat restoration should be carried out using locally native species and provenance to rehabilitate and/or enhance the area of concern. Weeds declared under the LPA should be removed prior to the commencement of works.

Where the alignment breaches any waterway/ dams particular attention is required to ensure the minimal amount of disturbance to the receiving environment and to maximise restoration efforts. Restoration should aim to restore waterway banks. Detailed design for the project within these areas is recommended.

In addition, all construction works should be in compliance with the Hygiene Protocol for the Control of Disease in Frogs (NPWS 2001).

Appropriate sediment and erosion control is essential in all phases of the proposed works.

Once the final alignment has been decided, it is recommended that the following issues be addressed in detail with regard to the impacts to fauna and habitat:

- Fauna Management Plan;
- Weed management;
- Native Vegetation Restoration Plan;
- Erosion and Sedimentation Control Plan;
- Waterway crossings; and
- Further detailed survey work.

CONCLUSIONS

The requirement of a 40 m corridor along the alignment will result in the loss of native vegetation and associated habitats in specific locations (see **Section 5.0**). Overall, the proposed works will result in the loss of some vegetation and habitat values and/or a temporary disturbance to habitats and fauna movement opportunities along the NPI alignment

The proposed NPI alignment triggers referral to the DEWR and assessment under the EPBC if the proposed works intend to encroach on the Flying-fox camp located east of the Bruce Highway in the vicinity of Nambour along the proposed Image Flat Connection (HA43: **Figure 4.22**: SRWPA Map B5c).

Where vegetation clearing is proposed in areas identified as Essential Habitat, compliance with the 'Regional Vegetation Management Code: Southeast Queensland Bioregion: Part S: Requirements for clearing for significant projects' is necessary. In addition, several listed species must be addressed with regard to the NCA.

The final alignment should stay clear of BAMM mapped state and regional corridors where possible and ensure the immediate remediation of any disturbances within these areas.

Overall, provided the vegetation management codes are addressed and the recommended management actions are adopted throughout all phases of the project, the potential ecological impacts of the project can be successfully mitigated.

PRELIMINARY TERRESTRIAL VERTEBRATE FAUNA HABITAT ASSESSMENT

Northern Pipeline Interconnector Stage Two Maroochy Shire to Noosa Shire

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List of Abbreviations

BAAM	-	Biodiversity Assessment and Management Pty Ltd
BAMM		Biodiversity Assessment Mapping Methodology
DEWR	-	Department of Environment and Water Resources (Commonwealth)
DOI		Department of Infrastructure (Queensland)
EIS		Environmental Impact Statement
EMP		Environmental Management Plan
EPA	-	Environmental Protection Agency (Queensland)
EPBC Act	-	*Environment Protection and Biodiversity Conservation Act 1999*
EVR	-	Endangered, Vulnerable or Rare
HA		Habitat Assessment
LPA	-	*Lands Protection (Pest and Stock Route Management) Act 2002*
MSC	-	Maroochy Shire Council
NCA	-	*Nature Conservation Act 1992*
NPI		Northern Pipeline Interconnector
NSC		Noosa Shire Council
NRW	-	Department of Natural Resources and Water (Queensland)
PTVFHA		Preliminary Terrestrial Vertebrate Fauna Habitat Assessment
RE	-	Regional Ecosystem
SEQ	-	South-east Queensland
SRWPA		Southern Regional Water Pipeline Alliance
VMA	-	*Vegetation Management Act 1999*
WTP		Water Treatment Plant

1.0 INTRODUCTION

Biodiversity Assessment and Management Pty Ltd (BAAM) have prepared this Preliminary Terrestrial Vertebrate Fauna Habitat Assessment (PTVFHA) for the Southern Regional Water Pipeline Alliance (SRWPA) for the sole purpose of assessing terrestrial vertebrate fauna, habitat and corridor values along the proposed alignment for Stage Two of the Northern Pipeline Interconnector (NPI) including the NPI corridor and the connection to the Image Flat Water Treatment Plant (WTP).

The NPI is a drought contingency project that will provide a bulk fresh water supply of up to 65M/day between the Sunshine Coast and Brisbane. Completed in two stages, the project will link existing and potential future water sources. The first stage is from the Landers Shute WTP to the Morayfield Reservoir, where it will link with the Caboolture and Brisbane networks. In order to meet both the statutory and regional demands, a second stage will be constructed to include a section of pipe north from Landers Shute WTP to the Noosa WTP. The proposed connection to the Image Flat Water Treatment Plant runs west from the NPI 81 km marker to Image Flat north-west of Nambour.

The second stage of the network will traverse the local government areas of Maroochy Shire Council (MSC) and Noosa Shire Council (NSC) through a 50 km, 1290 mm ø pipeline.

The general aims of this PTVFHA for the proposed NPI alignment: Stage Two include:

- Identification of 'Ecological Constraints' for the proposed NPI Alignment; and
- Identification of significant habitat areas that will require further detailed fauna survey work.

The specific aims of the PVFHA are to provide:

- An assessment and comment on terrestrial vertebrate fauna species of conservation significance as listed under the *Commonwealth Environmental Protection and Biodiversity Act 1999* (EPBC) and Queensland's *Nature Conservation Act 1992* (NCA) that are known and/or are likely to occur along the alignment;
- An assessment of known habitat and corridor values for targeted habitat areas along the proposed NPI alignment;
- Identification of potential impacts on the identified habitat areas and associated values, connectivity and species of conservation significance that are known and/or are likely to occur along the proposed NPI alignment; and
- Recommendations for impact mitigation and areas requiring further detailed field survey work to address the requirements of an Environmental Impact Statement (EIS) and an Environmental Management Plan (EMP).

All following observations and recommendations are based on a review of available literature and site investigations undertaken by Adrian Caneris, Paula Boosamra, Terry Reis and Adam Abbott on October 17, 18, 29, 30, November 6 and 23 2007 (inclusive).

2.0 STUDY AREA DESCRIPTION

2.1 LOCATION AND LAND USE

The proposed NPI Stage Two alignment will traverse areas between north of Nobel's Road in Maroochy Shire to the Noosa WTP in Noosa Shire for the NPI corridor and west of the NPI corridor (i.e. at the 81km marker) to north-west of Nambour at Image Flat. The NPI corridor is approximately 50km in length passing through the local government areas of Maroochy Shire and Noosa Shire. The connection to the Image Flat WTP is approximately 10km in length and is located in Maroochy Shire.

The proposed NPI alignment is generally restricted to highly modified and mostly cleared urbanised environments including existing electrical easements, road networks and through some residential areas and privately owned properties. However, in some sections, the proposed NPI alignment will traverse areas supporting significant habitats and/or vertebrate fauna species. These areas are discussed in detail in **Section 4.**

2.2 ENVIRONMENTAL PLANNING FRAMEWORK

The environmental planning framework for the Commonwealth and Queensland State includes several legislative requirements that must be addressed with regard to conservation on the subject site.

At the Commonwealth level, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) identifies that species of conservation significance that may be present on the subject site.

In Queensland, the *Integrated Planning Act 1997* (IPA) identifies several conservation issues, relevant to this development proposal that must comply with Queensland legislation including but not exclusive to the *Nature Conservation Act 1992*, (NCA) (i.e. significant species) and the *Vegetation Management Act 1999* (VMA) (i.e. Remnant Vegetation and Essential Habitat).

In addition the final alignment should have regard for the intent of regional planning instruments (I.e. Biodiversity Assessment and Mapping Methodology).

3.0 STUDY METHODOLOGY

The following methodologies were employed for the terrestrial fauna habitat assessment.

3.1 DESK TOP

Prior to the field investigation, public databases were searched in order to provide background information regarding terrestrial vertebrate species known from the region and local area. This included searches of the Commonwealth's EPBC Online Protected Matters Search Tool, the EPA's WildNet database and the Queensland Museum's fauna database for the study area and surrounds. BAMM significant species, Maroochy and Noosa Shire's significant species lists were also consulted for the study area and surrounds.

It is important to note that the EPBC search is a predictive tool only and does not represent actual records of species in the study area. The results of the EPBC Protected Matters Search Tool is located in **Appendix 1** while WildNet and Queensland Museum database searches are located in **Appendix 2**.

The review of this information was used to target the field investigations for frogs, Elf Skink *Eroticoscincus graciloides*, Glossy Black-Cockatoo *Calyptorhynchus lathami* and Koala *Phascolarctos cinereus* in suitable habitat areas along the proposed NPI alignment.

3.2 FIELD INVESTIGATIONS

The habitat assessments involved site investigations conducted over 6 days and 2 nights in order to assess the extent and quality of wildlife habitat and to determine the presence or likely presence of any species of special conservation significance (at-risk species) known from, or predicted to occur, within the local area. This was undertaken in accordance with the EPA's Queensland Parks and Wildlife Service's Scientific Purposes Permit No. WISP02791605.

3.2.1 Site Selection

The SRWPA supplied aerial photography (Map Versions include: July 19 Rev B: B3b; 23 July 27, 2007 Rev B: B1, B2a, B2b, B3a, B4, B6d, B6c, B6b, B6a, B7-B12; and September 19 (Prior to Rev C): B5d, B5c, B5b, B5a) and land tenure maps identifying the location and associated land tenure of the properties affected by the proposed infrastructure. This information was reviewed prior to field investigations and locations shown as having potential habitat values were identified as Habitat Assessment (HA) Sites (i.e. vegetated areas, creek/river crossings). Initial site visits were then conducted for ground-truthing purposes and to identify target areas along the proposed alignment that would require more detailed assessment.

In total, 50 Habitat Assessment (HA) sites were targeted throughout the site assessment period (**Table 3.1**). Habitat Assessment Site locations from north of Nobels Road at the southern extent of Stage Two of the NPI to the Noosa Water Treatment Plant at Lake McDonald, Noosa in the north are shown on **Figures 4.6-4.21** in **Section 4.0**. Site photos are provided in **Appendix 3.** HA sites are shown highlighted in yellow were identified as requiring a visit however, permission for access was not granted at these locations.

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Table 3.1: Identified Habitat Assessment Sites along the Proposed NPI Alignment Stage Two

HA Site	SRWPA Map #	Km Marker	Photo # (Appendix 6)	Short Description
NPI Corridor				
1	B1	up to 64	site not visited	North of Nobels Road to south of chicken sheds
2	B1	65.5	site not visited	Drainage line south of Slaughter Yard Road
3	B1	N of 66	site not visited	Eudlo Creek where it crosses pipeline east of McGilchrist Road
4	B2a	(67-69) 69	1 and 2	Chevallum Road to Winston Road South
5	B2b	west of 70	3	Winston Road South
6	B2b	W of 71 - 71.5	4, 5, 6, 7	Eudlo Creek crossings west of Bruce Highway
7	B3a	71.5-73	8	East of Bruce Highway to Maroochydore Road *N.B.* areas east of Bruce Highway up to 72 km were not accessible.
8	B3a B3b	73-75.5/GPS003	9, 10	Alternative route following Eudlo Flats Road
9	B3b	S of 75	11	Eudlo Creek crosses pipeline. Line of vegetation looks like drain
10	B4	N of 76	12, 13	South of Diddillibah Road
11	B4	77.5 - 78	14	Paynter Creek crossing and north of Paynter Creek Road
12	B4	S of 79	no photos	Petrie Creek Crossing
13	B5d	S of 82 - 83.5	15	Vegetated areas to the north of Frances Road to Atkinson Road. Small waterway at 83.5 km mark
14	B6c	84.5/ GPS002	16	Drainage line crossing south of Yandina Bli Bli Road
15	B6b	87	17	Caboolture Creek crossing
16	B6a	89.5	18, 19	West of Nambour North Connection Road
17	B6a	90	20	South Maroochy River Crossing
18	B6a	90.3	no photos	Creek crossing north of 90 km mark
19	B7	91.3	no photos	Vegetation located south of Stegalls Road
20	B7	91.5	21	Creeks/drainage line crossings between Stegalls Road and Brandons Road
21	B7	93.5	22	Browns Creek crossing at Lee Road
22	B7	94	no photos	Tributary of North Maroochy River crossing east of Burtons Road
23	B8	94.5	no photos	Creek crossing south of Running Creek Road
24	B8	96	23	Bunya Creek Crossing at Dellitt Street.
25	B8	96.5 - 97.5	site not visited	Creek/drainage line crossing and dams to the north

HA Site	SRWPA Map #	Km Marker	Photo # (Appendix 6)	Short Description
NPI Corridor				
26	B9	99/GPA001	24	Vegetation along Balsam Road
27	B9	99.7	No photos	Dam located to the east of Balsam Road
28	B9	100.5	no photos	Vegetation running along the western edge of Balsam Road.
29	B9	101	25	Sandy Creek Crossing
30	B10	102.2 and 102.5	26,27	Maroochy River crossing
31	B10	103	28,29	Vegetation located to the west of Strong Lane
32	B10	103.5 - north of 104	30	Tributary of the North Maroochy River and vegetation located to the west of Strong Lane.
33	B10	105	31	Vegetated areas to the east and west of 105km marker.
34	B11	N of 107	32	Creek/drainage line crossings north of Cooroy Mountain Road.
35	B11	108	33	Vegetation south of Tewantin Road and dam.
36	B12	110	34	Vegetation west of Racehorse Lane.
37	B12	111.2	35-36	Six Mile Creek crossing (left branch) south of road.
38	B12	112	37	Six Mile Creek crossing (right branch).
Connection to Image Flat WTP				
39	B5d	n/a	38	Across Bli Bli Yandina Road from the proposed pumpstation.
40	B5d	n/a	39	Tributary of Petrie Creek crossing west of NPI corridor.
41	B5c	n/a	No photos	Small tributary/creek behind BP station.
42	B5c	n/a	40	Vegetation on east and waterway to the west of Cooney Road.
43	B5c	n/a	41, 42	Vegetated areas near Flying Fox camp to the east of the Bruce Highway and waterway beside road.
44	B5c	n/a	43, 44	Vegetation west of the Bruce Highway and east of the Nambour Connection Road.
45	B5c	n/a	45	Tuckers Creek crossing at cemetery.
46	B5c-b	n/a	46	Road reserve.
47	B5b	n/a	47	Water body at the end of Vincent Drive.
48	B5a	n/a	48	Creek crossing south-east of Perry Road.
49	B5a	n/a	49	Drainage line and dam crossing west of Perry Road.
50	B5a	n/a	50	Crossing between properties on Image Flat Road.

3.2.2 Site Access

Information regarding site access and specific conditions of entry were supplied by SRWPA prior to conducting field investigations. It is important to note that we were unable to gain access to all of the identified HA sites that may be impacted through the pipeline works.

In total, 5 HA sites (i.e. 1, 2, 3, 7 (i.e. up to 72 km marker) and 25) were unable to be assessed due to landholder access restrictions. These sites are shaded in yellow in **Table 3.1**. In these locations, desktop analysis of relevant databases, planning constraints and aerial photography were reviewed to draw general conclusions regarding the corridor and habitat values of these and surrounding areas.

Due to the recent outbreak of horse influenza in Queensland, every precaution was taken to disinfect both the vehicle used for on-site inspections as well as the field team before and after field investigations. The wheels and wheel arches of the vehicle and the boots and clothing of the field team were sprayed with hospital grade disinfectant before entering and upon leaving a site where horses were present. A record of Washdown Property Register is shown in **Appendix 4**.

3.2.3 Habitat Assessment

Field assessment techniques included on-site observations of habitat values, targeted surveys and incidental sightings of fauna species at specific locations identified from SRWPA mapping (see **Section 3.2.1**). Observations were made mainly through diurnal habitat assessment and nocturnal targeted searches along the proposed NPI alignment. Diurnal habitat assessment was conducted at 33 HA sites. Nocturnal habitat assessment was conducted at creeks, rivers and drainage lines following selected on-site assessment.

No trapping was undertaken during this field assessment period as the initial assessment suggested that the EVR species likely to be of concern for the proposed NPI alignment were species that are simple to detect without trapping, including the Giant Barred-Frog *Mixophyes iteratus*, the Tusked Frog *Adelotus brevis*, Koala, Glossy Black-Cockatoo and Elf Skink.

The general survey approach was to visit and sample representative faunal habitats over the study area by recording the fauna species through observations of actual animals, recognition of characteristic vocalisations, and/or identification of animal signs.

Fauna records were collected continuously during the observation period and opportunistically during random searches of faunal habitats that were considered suitable for cryptic or rare species.

Climatic conditions during the site investigations conducted on October 17, 18 and 30 were mostly sunny and warm however conditions were wet with severe storms on October 29 and November 6 (i.e. storms on the afternoon of October 29 only). Conditions for frog detection on October 29 and November 5 were good with consistent rainfall.

In addition, in locations along the proposed alignment where more than one option for the pipeline was identified by the SRWPA, all options were considered in terms of the potential impacts to significant species and/or associated habitat values and preferred options were identified (see **Section 6.1**).

Diurnal Observations consisted of recording GPS points (GDA94) and digital photos, and identifying habitat and corridor values, potential impacts from the proposed alignment and preferred options. The general health and/or level of disturbance to an area were noted and incidental sightings of fauna species and/or habitats of significance were recorded. Birds were identified from either direct observation or their calls.

Observations included whether there was a wetland or waterway, habitat values and linkages, weeds and/or hollows, stag trees, fallen logs and timber present, opportunistic species observations and the location of the proposed NPI alignment.

Nocturnal searches involved scanning vegetation using a high-powered spotlight to identify nocturnal mammals (flying, arboreal and terrestrial), birds (owls and nightjars), reptiles and frogs.

4.0 HABITAT ASSESSMENT RESULTS

4.1 ESSENTIAL HABITAT UNDER THE VMA

Essential Habitat mapping overlayed with the proposed NPI supplied by the SRWPA identified several areas along the alignment that are currently considered Essential Habitat under the provisions of the *Vegetation Management Act 1999* (VMA) (**Figures 4.1-4.4**). Remnant vegetation subject to the provisions of the *Vegetation Management Act 1999* (VMA) is being addressed in a separate report (LAMR 2007).

Clearing native vegetation in areas mapped as Remnant and Essential Habitat that occur within the proposed NPI alignment are subject to compliance with the Regional Vegetation Management Code: Southeast Queensland Bioregion: Part S: Requirements for clearing for significant projects. Essential Habitat occurs within the alignment at the following km markers (i.e. approximate locations): 68.3, 69.5, 71, 72, 73, 76.2, 89.5, 99, 99.8, 100.4, 102 and 104. The proposed alignment passes through Essential Habitat along the Image Flat WTP corridor at HA sites 42, 43, 44 and 45: Revegetation in these areas should take into account the habitat requirements of relevant species where appropriate. The location and species specific information for Essential Habitat mapping are summarised in **Table 3.1** and in **Section 4.0.**

A list of endangered, vulnerable or rare (EVR) records occurring within 1 km either side of the alignment is shown in **Table 4.1.** Records of EVR species in the vicinity of Habitat Assessment sites may be relevant to impact mitigation of a particular site. The final alignment should have regard to Essential Habitat for EVR species listed in **Table 4.1**.

Table 4.1: Essential Habitat for EVR Terrestrial Fauna Species along and in the vicinity of the Proposed Alignment

Species Name	Common Name	Status NCA
Adelotus Brevis	Tusked Frog	V
Crinia tinnula	Wallum Froglet	V
Litoria freycineti	Wallum Rocketfrog	V
Accipter novaehollandiae	Grey Goshawk	R
Pezoporus wallicus wallicus	Ground Parrot	V
Rallus pectoralis	Lewins Rail	R
Phascolarctos cinereus	Koala (SEQ)	V
Eroticoscincus graciloides	Elf Skink	R
Ophioscincus truncatus		R

4.2 KOALA PLAN

The Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (EPA 2006) identifies key Koala habitats. Portions of the study area are identified as supporting key Koala habitats and are located in Area A under the Plan and therefore works associated with the NPI in these areas are subject to the relevant policy intents.

Specifically, areas of the proposed NPI located east of the Bruce Highway and north of Mons Road through to where the alignment crosses Maroochydore Road at Parsons Road are included in the Urban Koala Area designation under the Koala Plan.

Urban Koala Areas support significant Koala populations and may also support important habitat linkages. They are mapped within the urban footprint or rural areas of the *South East Queensland Regional Plan 2005-2026*.

4.3 BIODIVERSITY ASSESSMENT AND MAPPING METHODOLOGY: SEQ CORRIDORS

The Biodiversity Assessment and Mapping Methodology (BAMM) is used to determine the biodiversity significance of habitats and landscapes for the various bioregions in Queensland. The Biodiversity Planning Assessment: SEQ Corridors for the Southeast Queensland area has been reviewed to provide an overview of the corridor values ascribed to the site through this State government planning process. BAMM (EPA, 2005) identifies state corridors in the vicinity of Nobels Road, Robinson Road and Balsam Road and regionally significant corridors around Francis Road, in the vicinity of Cooroy and around Six Mile Creek along the proposed NPI alignment (**Figure 4.5**).

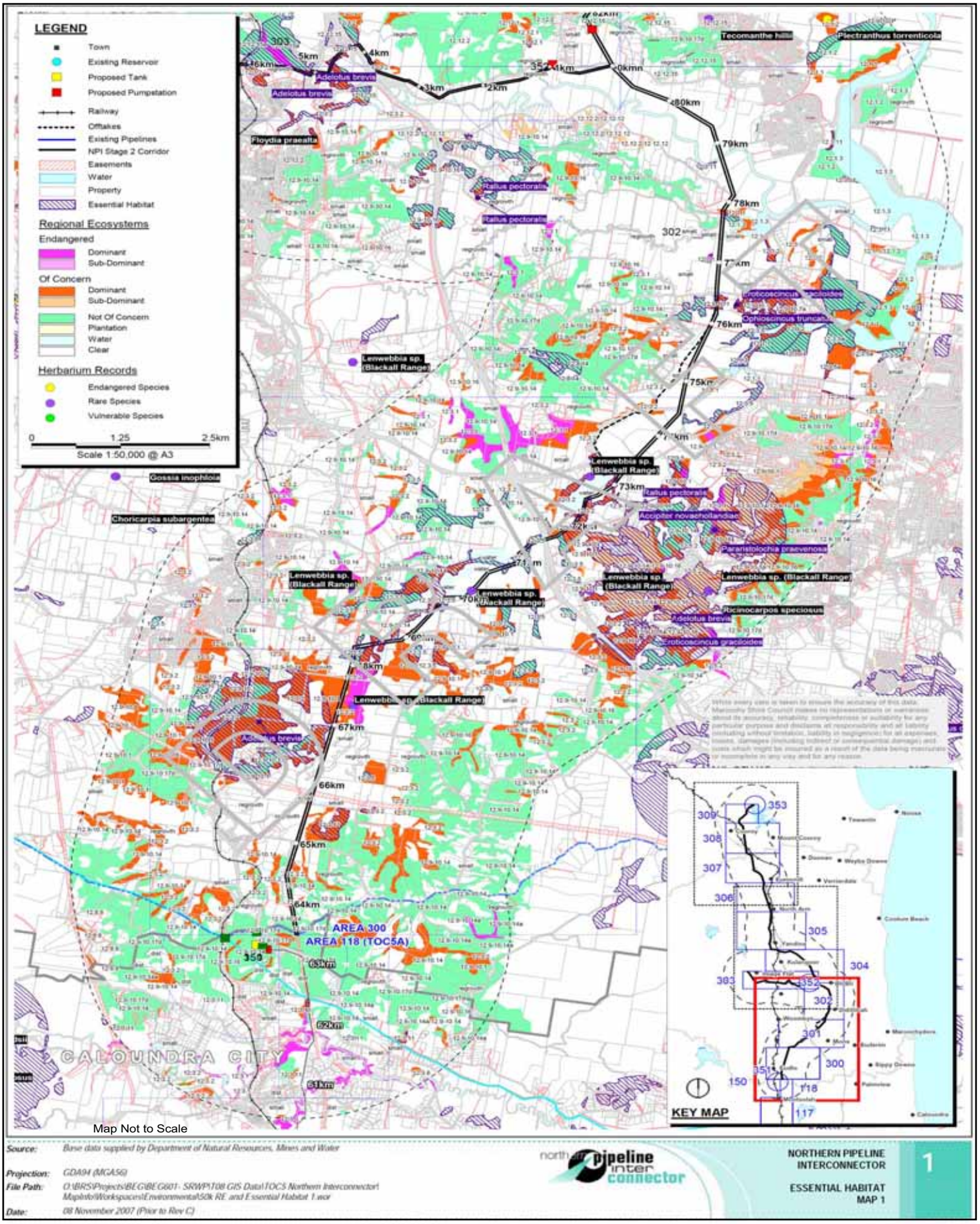


FIGURE 4.1

Essential Habitat Mapping (VMA) and the Proposed NPI Alignment Sheet 1

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

Biodiversity Assessment AND MANAGEMENT PTY LTD

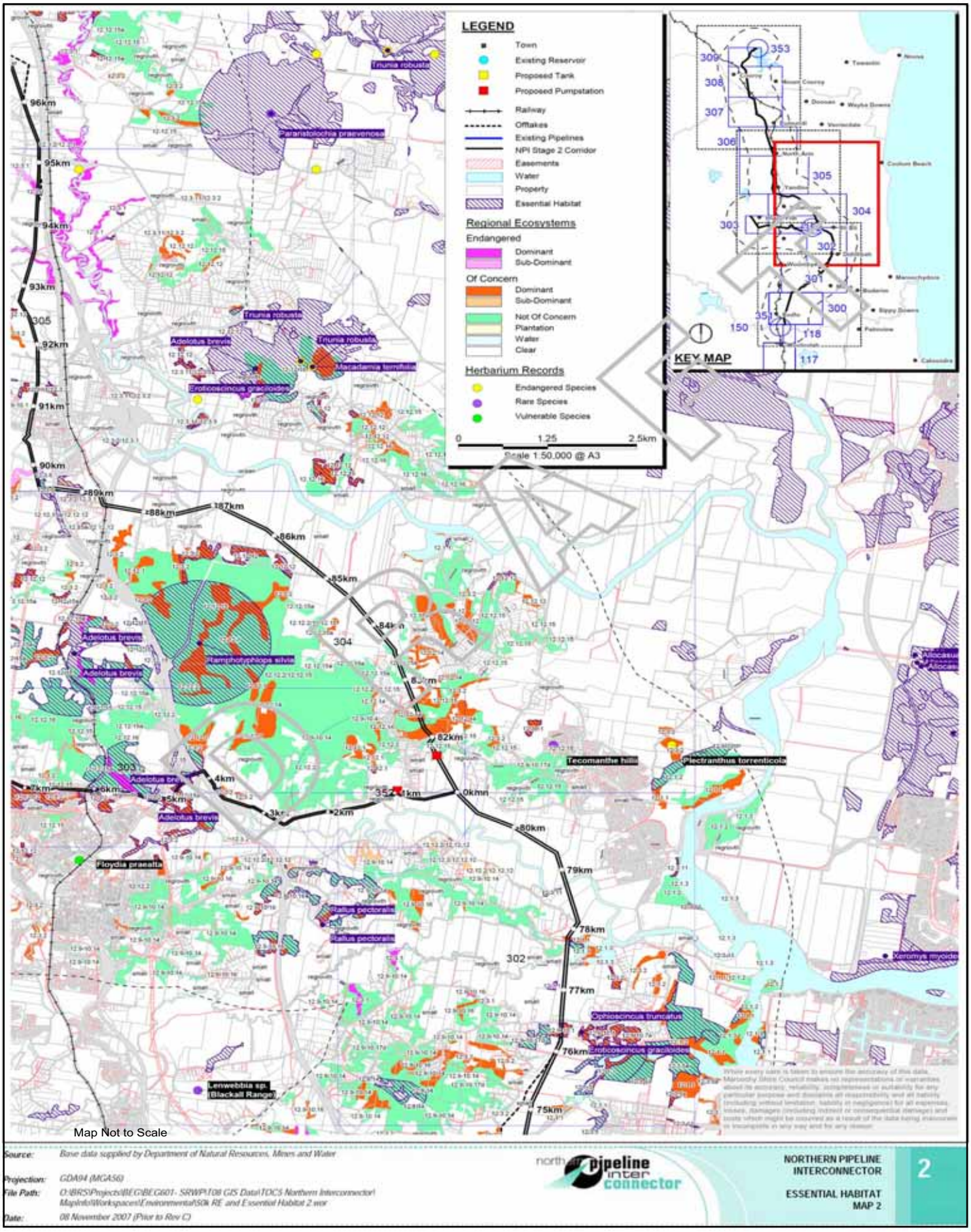


FIGURE 4.2

Essential Habitat Mapping (VMA) and the Proposed NPI Alignment Sheet 2

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

Biodiversity Assessment AND MANAGEMENT PTY LTD

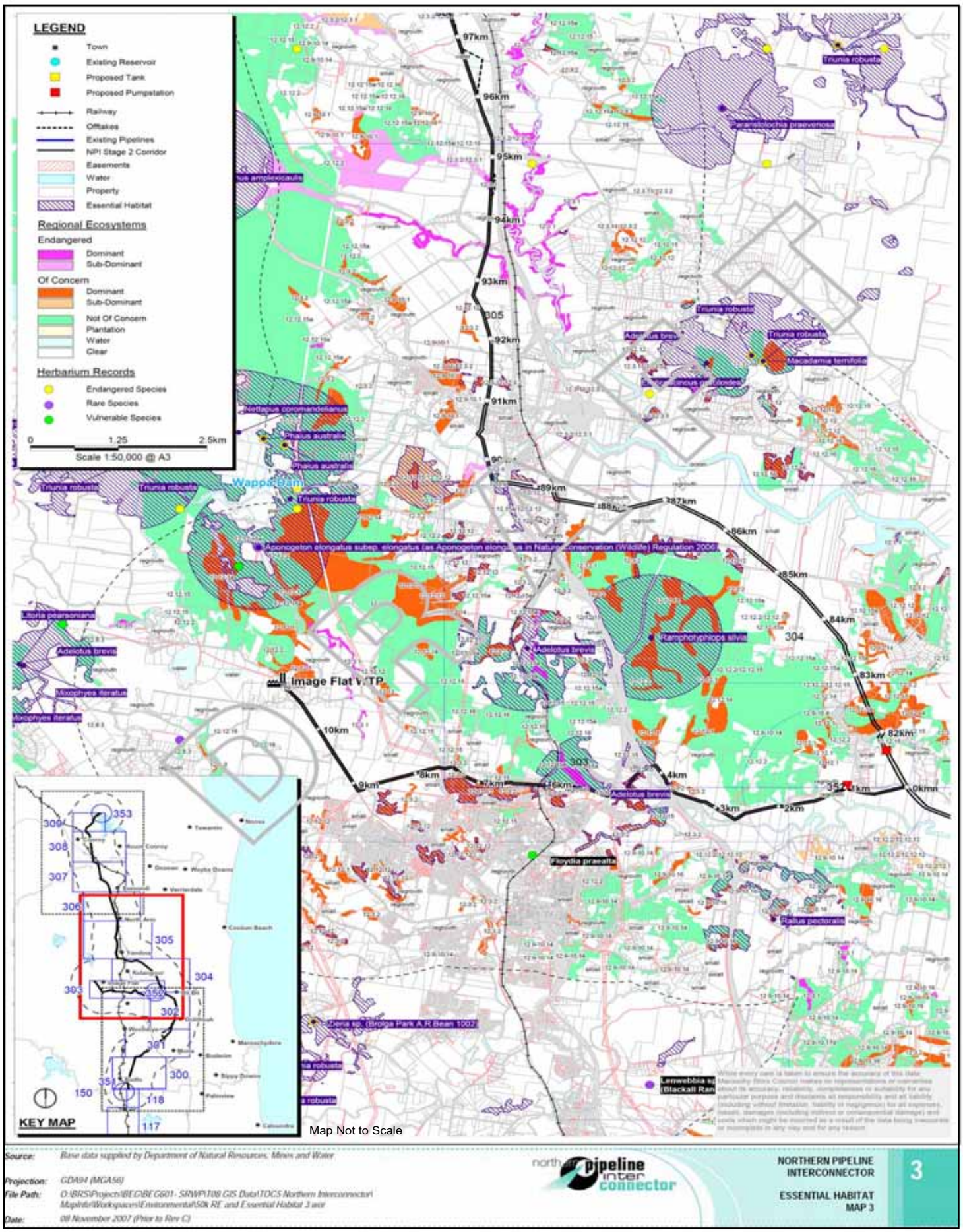


FIGURE 4.3

Essential Habitat Mapping (VMA) and the Proposed NPI Alignment Sheet 3

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

Biodiversity Assessment and Management Pty Ltd

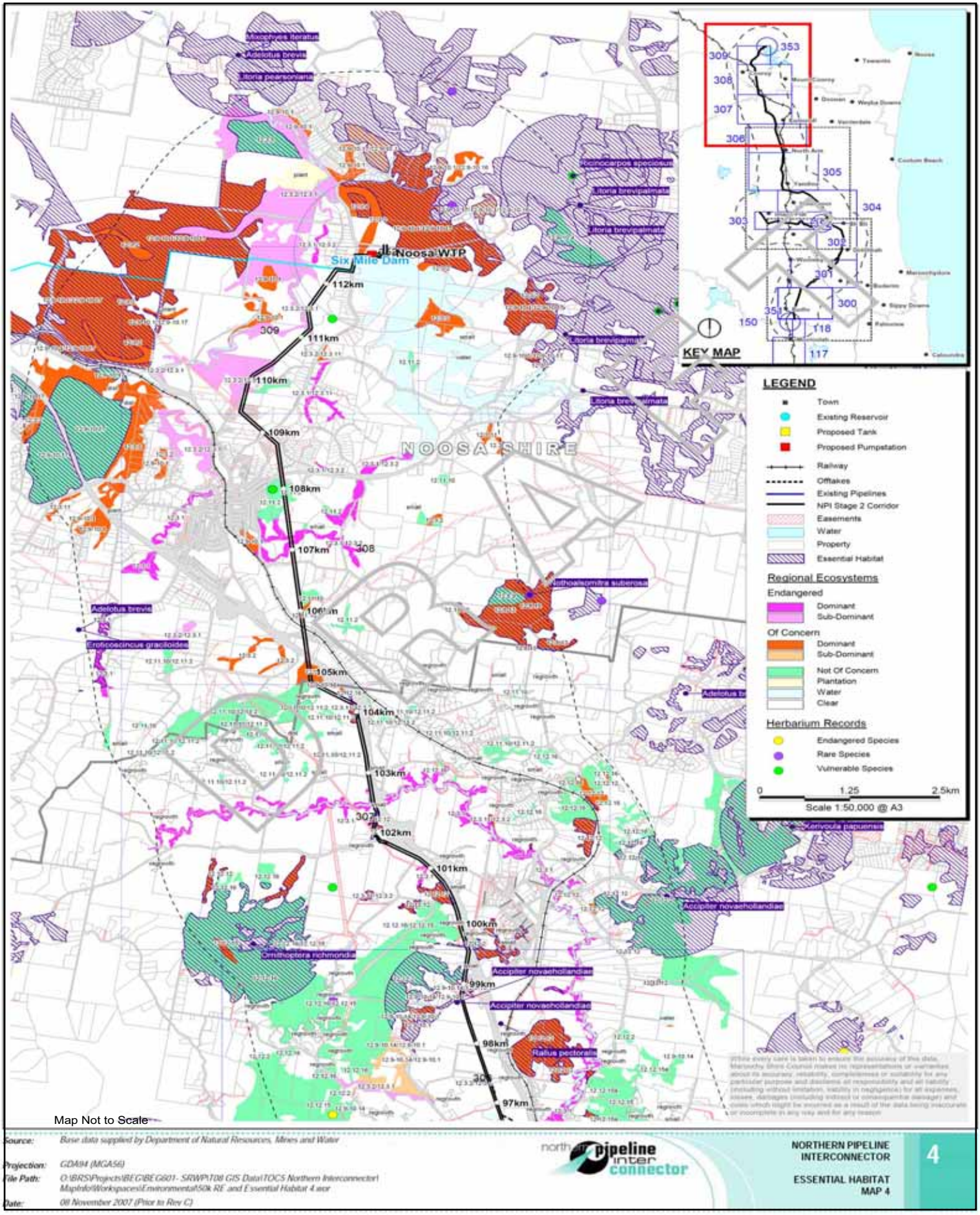


FIGURE 4.4

Essential Habitat Mapping (VMA) and the Proposed NPI Alignment Sheet 4

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

Biodiversity Assessment AND MANAGEMENT PTY LTD

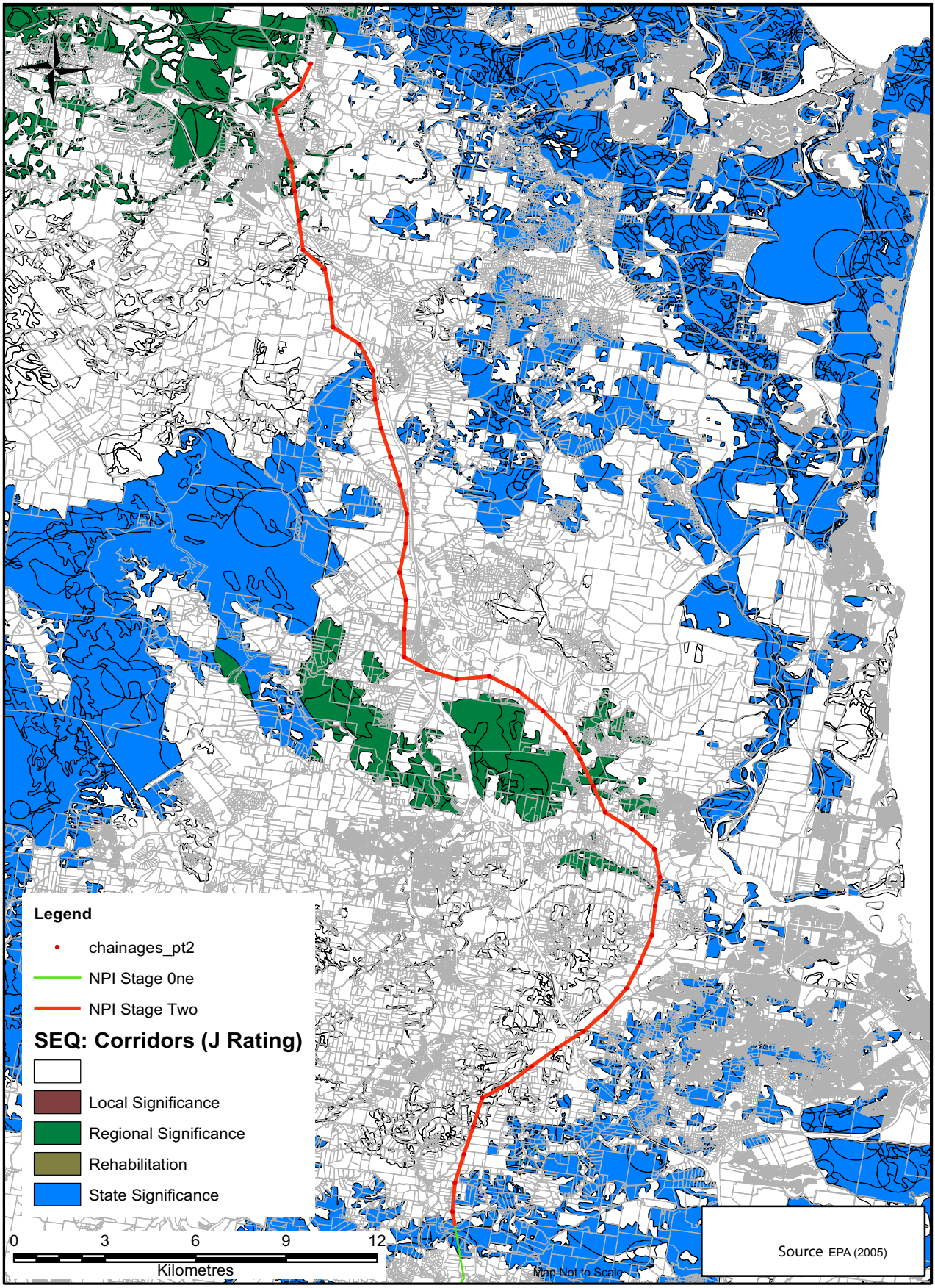


FIGURE 4.5
BAAM Mapping SEQ Corridors

SRWPA Northern Pipeline Interconnector - Stage Two
PTVFHA

Biodiversity Assessment AND MANAGEMENT PTY LTD

4.4 DATABASE SEARCH RESULTS

The majority of the terrestrial vertebrate fauna from database searches and/or recorded during the field investigations are currently listed in Queensland's NCA as 'Least Concern' wildlife (i.e. native animals that are not currently listed as 'Presumed Extinct, Endangered, Vulnerable or Rare', although are still prescribed as protected wildlife).

However, 108 terrestrial vertebrate fauna species of significance (including migratory species) listed under the EPBC Act and NCA are or may be present, as listed in **Table 4.2**. This includes 10 frogs; 79 birds; 10 mammals; and 9 reptiles. These species are either known to occur or have been identified in databases for the local area and surrounds.

A terrestrial vertebrate fauna species list for the study area is provided in **Appendix 5** which includes the status of each species' listing under the NCA, the EPBC Act and also BAMM species and Maroochy Shire Council and Noosa Shire Council significant species

Those species identified or considered likely to occur along the proposed NPI alignment are discussed further in **Section 4.5**.

Nomenclature follows Ingram, McDonald and Nattrass (2002) for frogs, Pizzey and Knight (2003) for birds, Menkhorst and Knight (2004) for mammals and Wilson (2005) for reptiles.

4.4.1 Other Non-EVR Priority Taxa Known or Likely to Occur along the Proposed NPI Alignment

Several species are recognised by BAMM mapping, Maroochy Shire Council and Noosa Shire Council as having regional and/or local significance including 76 BAMM species, 29 Maroochy Shire species and 156 Noosa Shire Species (i.e. Nationally Significant: 44, Regionally Significant: 98, Locally Significant: 14). These species are listed in **Appendix 5** along with their conservation status under the relevant state and Commonwealth legislation.

4.5 SIGNIFICANT SPECIES LISTED UNDER THE EPBC AND THE NCA KNOWN OR LIKELY TO OCCUR ALONG THE PROPOSED NPI ALIGNMENT STAGE TWO

The following species of State and/or National significance identified through database searches, have either been detected along the proposed NPI alignment or are considered likely to occur in suitable habitat identified in the preliminary habitat assessment and may require specific management (**Figure 4.2**). For specific information regarding the location of occurrences see **Table 3.1** and **Figures 4.6-4.21**at the end of this section.

4.5.1 *Adelotus brevis* Tusked Frog

Status: NCA Vulnerable; EPBC not listed

Occurrence in the Study Area: This species was recorded at the Sandy Creek Crossing. In addition, suitable habitat for this species was recorded at HA sites: 4, 5, 6, 16, 17, 29, 30, 31 32, 34, 38, 40, 43 and 48. Essential Habitat mapping shows records of this species in several locations along the proposed alignment and in the near vicinity of the alignment including HA sites 2, 4, 7, 42, 43, 44, 45, 46 and 47. The final alignment should have regard for the habitat requirements of this species where appropriate.

Ecology and Habitat: This species occurs in a variety of habitats including rainforest, wet sclerophyll, dry sclerophyll, woodland, vine forest and can even be found in low numbers in open grazing country (Eyre *et al*. 1997). They can be found in slow moving streams and dams, particularly around accumulated leaves and small woody debris. On land, they can be found under logs and in hollows/rock crevices next to streams and ponds (Meyer *et al*. 2001).

Other possible impacts include domestic stock, which affect bank stability (which are important for oviposition) and weed invasion. The influences of these pressures are unknown.

Potential Impacts on the Population: The proposed alignment will pass through and disturb both known and potential habitats. Overall, the proposed action will result in disturbance to known habitats and may have short term impacts on individual animals and could result in the temporary or permanent loss of suitable breeding areas. Where the alignment traverses suitable habitats it is important that all restoration work focuses on maintaining their habitat. Prompt restoration and revegetation with appropriate species is important.

Table 4.2: Species of Conservation Significance Known or Predicted to Occur in the Study Area and Immediate Surrounds from Database Searches. Note: those species highlighted are those that field investigations have found to be present or likely to be present within the corridor

Scientific Name	Common Name	NCA	EPBC	Comments
Fish				
Maccullochella peelii mariensis	Mary River Cod		E	Expected. Not a terrestrial vertebrate species. May be subject to more detailed studies.
Neoceratodus forsteri	Queensland Lungfish		V	Not expected to occur within the waterways in the proposed alignment. No impacts expected. Not a terrestrial vertebrate species.
Amphibians				
Adelotus brevis	Tusked Frog	V		This species inhabits a variety of habitats including rainforest, wet sclerophyll, dry sclerophyll, woodland, vine forest and can even be found in low numbers in open grazing country (Eyre *et al.* 1997). The Tusked Frog was recorded within the proposed alignment and is discussed further along with details of Essential Habitat Mapping in **Section 4.5**.
Assa darlingtoni	Pouched Frog	R		This frog lives in Antarctic Beech forests and surrounding rainforests, particularly those dominated by palms. There is no habitat within the proposed alignment and no impacts are expected on this species.
Crinia tinnula	Wallum Froglet	V		The Wallum Froglet is one of the 'acid frogs' (Ingram and Corben 1975), which breed in low pH freshwater swamps on low nutrient soils, usually deep sands. In Queensland, the frogs are restricted to the coastal lowlands (or "wallum" of Coaldrake 1961) of the southeast. The species remains threatened by loss of habitat through clearing predominantly for infrastructure, housing, canal developments and drainage projects (Hines *et al*. 1999). This species is not considered to be present within the proposed alignment. Essential habitat is mapped in the vicinity of several HA sites including: 2, 4, 5, 7, 8, 10, 11, 12, 16, 17, 18, 19 and 20.
Litoria brevipalmata	Green Thighed Frog	R		The Green-thighed Frog is cryptic and poorly known, particularly during non-breeding periods (Cogger 2000; Lemckert 2004). Radio tracking by Lemckert (2004) found that adults stay in thicker forested areas around breeding sites, hiding under leaf litter. The species is typically recorded from ephemeral or semi-permanent pools, or even inundation areas within, or adjacent to, dry forests. Populations have also been located in flooded paddocks. There is little likelihood of this species occurring directly within the proposed alignment and providing restoration works are conducted to ensure any potential impacts are minimised and are only short term, no specific management actions are required.
Litoria freycineti	Wallum Rocketfrog	V		The Wallum Rocketfrog is an 'acid' frog. This species inhabits wetlands with low pH water on low nutrient soils (usually sands) of coastal lowlands. Vegetation within inhabited areas varies and can include heathland, *Melaleuca*, sedgeland, and *Banksia* woodland. Little suitable habitat is within the proposed alignment and no significant impacts are expected. . Essential habitat for this species is mapped in the vicinity of several HA sites including: 2, 4, 5, 7, 8, 10, 11, 12, 16, 17, 18, 19 and 20.

Scientific Name	Common Name	NCA	EPBC	Comments
Litoria olongburensis	Wallum Sedgefrog	V	V	The Wallum Sedgefrog is an 'acid frog' that inhabits ephemeral and semipermanent swamps with emergent reeds, ferns and/or sedges in undisturbed coastal Wallum (Ingram and Corben 1975). Habitat loss and degradation are cited as the major threats to this species (Hines *et al*. 2004). Pollution of breeding habitats is also likely to impact populations. This species is not expected to occur within the proposed alignment.
Litoria pearsoniana	Cascade Treefrog	V		This small, largely arboreal species is found in rainforest and thickly forested wet gullies in association with flowing rocky streams (Eyre *et al*. 1997). There is no suitable habitat within the proposed alignment and the species is not expected to occur. No detrimental impacts are expected.
Mixophyes iteratus	Giant Barred Frog	E	E	This species prefers the edges of deep, slow-flowing creeks with overhanging banks in riverine rainforest or wet sclerophyll forests (Gilmore and Parnaby 1994; Mahony *et al*. 1996; Meyer *et al*. 2001). While they can be found along streams that have had some disturbance, Lemckert (1999) found that they were most common in areas that were relatively undisturbed. This species is expected in several locations along the proposed alignment and requires specific management. This species is discussed further in **Section 4.5**.
Rheobatrachus silus	Southern Gastric Brooding Frog	E	X	This species hasn't been recorded since 1980 and is presumed extinct (Czechura 2007). This species should not be viewed as relevant to the proposed actions.
Taudactylus diurnus	Southern Dayfrog	E	X	This species hasn't been recorded since 1978 and is presumed extinct (Czechura 2007). This species should not be viewed as relevant to the proposed actions.
Birds				
Accipiter novaehollandiae	Grey Goshawk	R		A wide-ranging and highly mobile species that is expected to be present in the surrounding area. However, although the proposed alignment contains habitats within which the species may occur, the likelihood of occurrence is considered low. The proposed actions are not expected to result in any significant impact on its presence in the area. No specific management actions are required. Specific Essential Habitat for this species is mapped in the vicinity of HA sites: 7, 8, 26 and 27. This species was recorded at HA 7.
Acrocephalus stentoreus	Clamorous Reed-Warbler	C	M	A common species which may be present in the waterway or wetland areas. Only temporary disturbance to some potential habitats will occur and no significant impacts are expected. Given the short term nature of the works, restoration actions and the limited potential for impact, no specific management actions are required.
Actitis hypoleucos	Common Sandpiper	C	M	A wader which occurs on both coastal and freshwater waterbodies. Freshwater habitats are usually rocky streams and man-made channels. The species is unlikely to occur within the proposed alignment.
Anous stolidus	Common Noddy	S	M	This species typically occurs on marine islands and in offshore coastal waters. The project has no relevance for the species.
Apus pacificus	Fork-tailed Swift	C	M	A non-breeding aerial species which will not be impacted by the proposed actions.

Scientific Name	Common Name	NCA	EPBC	Comments
Ardea alba	Great Egret	C	M	A common water bird which is known to occur in a wide variety of habitats in the study area, including paddocks and other disturbed areas. Only minor and temporary disturbance to some suitable habitats is expected.
Ardea ibis	Cattle Egret	C	M	A common bird which frequents paddocks and grasslands throughout the study area. Only minor and temporary disturbance to some suitable habitats is expected.
Arenaria interpres	Ruddy Turnstone	S	M	A coastal wader whose occurrence within the proposed alignment is very unlikely. The project has no relevance for the species.
Cacatua leadbeateri	Major Mitchell's Cockatoo	V		This species occurs in arid and semi-arid areas. It is not expected to occur in the study area. Database records almost certainly refer to aviary escapees.
Calidris acuminata	Sharp-tailed Sandpiper	C	M	A wader which occurs on both coastal and freshwater waterbodies. Freshwater habitats are usually swamps, marshes and flooded paddocks. It requires shallow water. The species is unlikely to occur within the proposed alignment.
Calidris ferruginea	Curlew Sandpiper	S	M	A wader which occurs on both coastal and freshwater waterbodies. Freshwater habitats are usually swamps, marshes and flooded paddocks. It requires shallow water. The species is unlikely to occur within the proposed alignment.
Calidris ruficollis	Red-necked Stint	S	M	A wader which occurs on both coastal and freshwater waterbodies. Freshwater habitats are usually swamps, marshes and flooded paddocks. It requires shallow water. The species is unlikely to occur within the proposed alignment.
Calidris tenuirostris	Great Knot	S	M	This wader is almost entirely restricted to coastal habitats. The project has no relevance for the species.
Calonectris leucomelas	Streaked Shearwater	S	M	This species typically occurs on marine islands and in offshore coastal waters. The project has no relevance for the species.
Calyptorhynchus lathami	Glossy Black-Cockatoo	V		A wide ranging species which is known from the area. The proposed actions may remove actual or potential food trees but this loss will be minor at worst. No loss of breeding habitats is expected. Providing rehabilitation is conducted using suitable food tree species any potential detrimental impacts will be negated. No other specific management is required. This species is discussed further in Section 4.5.
Charadrius bicinctus	Double-banded Plover	S	M	This wader is almost entirely restricted to coastal habitats. The project has no relevance for the species.
Charadrius leschenaultii	Greater Sand Plover	C	M	This wader is almost entirely restricted to coastal habitats. The project has no relevance for the species.
Charadrius mongolus	Lesser Sand Plover	S	M	This wader is almost entirely restricted to coastal habitats. The project has no relevance for the species.
Chlidonias leucopterus	White-winged Black Tern	C	M	A marine and estuarine species which will not be impacted by the proposed actions.

Scientific Name	Common Name	NCA	EPBC	Comments
Climacteris erythrops	Red-browed Treecreeper	R		This species occurs in tall eucalypt forests, mainly in hilly country and mountains where dry forests merge into wetter rainforest or wet sclerophyll gullies (Pizzey and Knight 1997). This species is threatened by loss and fragmentation of habitat. They are absent from small isolated patches of forest, requiring large tracts of forest (Higgins *et al*. 2001). The species is probably not present within the study area due to insufficient suitable habitat. Little or no impacts are expected.
Cuculus saturatus	Oriental Cuckoo	C	M	An occasional summer visitor for which the proposed actions are unlikely to remove any habitat or potential for its occurrence. No impacts are expected.
Cyclopsitta diophthalma coxeni	Coxen's Fig Parrot	E	E,M	The Coxen's Fig Parrot is extremely rare or extinct in the area. The proposed alignment will not result in any significant loss of habitat. Overall, this species should not be viewed as relevant to the project.
Diomedea chlororhynchos	Yellow-nosed Albatross	S	M	Not expected. A marine species which will not be impacted by the proposed actions.
Diomedea dabbenena	Tristan Albatross	S	E,M	Not expected. A marine species which will not be impacted by the proposed actions.
Egretta sacra	Eastern Reef Egret	S	M	A coastal species which would not occur in the study area. The project has no relevance to this species.
Ephippiorhynchus asiaticus	Black-necked Stork	R		A species which may sporadically use the larger wetland areas in the study area. Overall the proposed alignment will not remove any habitat and no detrimental impacts are expected. Given the short term nature of the proposed works, restoration actions and the limited potential for impact, no specific management actions are required.
Erythrotriorchis radiatus	Red Goshawk	E	V	A wide-ranging and highly mobile species that may be present in the surrounding area. The alignment contains habitats that hold some potential for the species to use the area when foraging. However, this species has only a low potential for occurrence and the proposed actions will not cause any significant impact on its presence in the local area. Given the short term nature of the works, restoration actions and the limited potential for impact, no specific management actions are required.
Esacus neglectus	Beach Stone-Curlew	V		A coastal species which would not occur in the study area. The project has no relevance to this species.
Fregata ariel	Lesser Frigatebird	S	M	This species typically occurs on marine islands and in offshore coastal waters. The project has no relevance for the species.
Gallinago hardwickii	Latham's Snipe	C	M	This species inhabits freshwater and brackish swamps, marshes and flooded paddocks. There is little habitat within the proposed alignment and where present the wetlands/dam areas will be retained. Their habitat values for the species would be improved with the proposed restoration works. No significant impacts.
Haematopus fuliginosus	Sooty Oystercatcher	R		A coastal species which would not occur in the study area. The project has no relevance to this species.

Scientific Name	Common Name	NCA	EPBC	Comments
Haliaeetus leucogaster	White-bellied Sea-Eagle	C	M	This species is associated with marine and estuarine habitats and larger wetland areas. The proposed actions are not expected to result in any loss of habitat or significant impact on the species or its presence in the area. This species was seen along the proposed alignment.
Heteroscelus brevipes	Grey-tailed Tattler	S	M	This wader is restricted to coastal habitats. The project has no relevance for the species.
Hirundapus caudacutus	White-throated Needletail	C	M	A non-breeding aerial species for which the proposed action has little or no relevance. No impacts are expected. This species was recorded in the study area but does not require specific management.
Hirundo rustica	Barn Swallow	S	M	A very rare vagrant to the region. Not expected to occur.
Lathamus discolor	Swift Parrot	E	E	The Swift Parrot is a lorikeet-like species that is typically gregarious. It is often noisy and conspicuous and often associates with lorikeets and honeyeaters at food resources. It feeds mainly on nectar, mostly from eucalypts. Swift Parrots occur in woodlands, riparian vegetation and remnant patches of mature eucalypts in agricultural areas, though they prefer dry sclerophyll forest (Higgins 1999). This species breeds in Tasmania during spring and summer, dispersing widely across south-eastern Australia during winter. Movements on the mainland are little understood and the species is considered nomadic and irruptive, moving in response to food resources. It is infrequently, though possibly annually, recorded in south-eastern Queensland. Overall, the proposed alignment will not remove any significant habitat and no direct impacts are expected. Given the short term nature of the works, restoration actions and the limited potential for impact, no specific management actions are required.
Limosa lapponica	Bar-tailed Godwit	S	M	This wader is almost entirely restricted to coastal habitats. The project has no relevance for the species.
Lophoictinia isura	Square-tailed Kite	R		The species occurs in a variety of habitat types including heathlands, woodlands, forests, tropical and subtropical rainforests, timbered watercourses, hills and gorges (Pizzey and Knight 1997). Most records are from woodlands and forests, particularly those on fertile soils with abundant small birds (Marchant and Higgins 1993). Although this species occurs in inland regions it is most frequently found in coastal and sub-coastal eastern Australia and south-western Western Australia. It is a wide ranging species for which the proposed actions will not result in any significant loss of habitat or disturbance. No impacts are expected. Given the short term nature of the works, restoration actions and the limited potential for impact, no specific management actions are required.
Macronectes giganteus	Southern Giant Petrel	E	E, M	Not expected. A marine species which will not be impacted by the proposed actions.
Macronectes halli	Northern Giant Petrel	V	V, M	Not expected. A marine species which will not be impacted by the proposed actions.
Melithreptus gularis	Black-chinned Honeyeater	R		This species occupies dry eucalypt woodland and forests, particularly those containing ironbark and box species (Higgins *et al*. 2001). It is considered very unlikely to occur.

Scientific Name	Common Name	NCA	EPBC	Comments
Menura alberti	Albert's Lyrebird	R		Records of this species from the study area are considered to be erroneous (Higgins *et al*. 2001). It is not expected to occur within the proposed alignment. This species should not be viewed as relevant to the project.
Merops ornatus	Rainbow Bee-Eater	C	M	This species was recorded throughout the study area. A common species which will be present within much of the alignment. It is primarily an aerial species and known to occur within numerous habitats including disturbed areas. The proposed actions will have little or no impact.
Monarcha melanopsis	Black-faced Monarch	C	M	This species prefers wetter forested habitats and within the study area will occur primarily within the taller forest and riparian vegetation. The proposed action will not result in any significant disturbance and the relatively narrow corridor will not constitute a barrier to its movement in the local area. No significant impacts are expected.
Monarcha trivirgatus	Spectacled Monarch	C	M	This species prefers wetter forested habitats and within the study area will occur primarily within the taller forest and riparian vegetation. The proposed action will not result in any significant disturbance and the relatively narrow corridor will not constitute a barrier to its movement in the local area. No significant impacts are expected.
Myiagra cyanoleuca	Satin Flycatcher	C	M	This species prefers wetter forested habitats and within the study area will occur primarily within the taller forest and riparian vegetation. The proposed action will not result in any significant disturbance and the relatively narrow corridor will not constitute a barrier to its movement in the local area. No significant impacts are expected.
Neophema pulchella	Turquoise Parrot	R		Not expected, database records for the study area are almost certainly aviary escapees.
Nettapus coromandelianus albipennis	Cotton Pygmy-Goose	R	M	This species requires freshwater swamps with aquatic vegetation. It has no potential to occur within the alignment. No habitat loss or disturbance is expected. No impacts expected.
Ninox strenua	Powerful Owl	V		Pairs of Powerful Owls occupy large, probably permanent, home ranges of about 1,000ha (Higgins 1999; Garnett and Crowley 2000). They camp in a variety of tree species, including exotics. Commonly, the camp tree has thick vegetation in which the owl can escape from the mobbing activities of smaller avian species. During breeding, adults usually camp in close proximity to the nest tree (Webster *et al*. 1999). The species occurs in mountain rainforests, gullies and forest margins, sparser hilly woodlands, coastal forests, woodlands, scrubs, exotic pine plantations and large trees in private/public gardens (Pizzey and Knight 2003). Powerful Owls are most likely observed at sites with mature dry forest that have many live hollow-bearing trees and are within 2 km of a diverse range of habitats (Loyn *et al*. 2001). The species may occur at times within the proposed alignment but any possible deleterious impacts of the project will minor and short term. No specific management actions are required.
Numenius madagascariensis	Eastern Curlew	R	M	This wader is restricted to coastal habitats. The project has no relevance for the species.
Numenius minutus	Little Curlew	S	M	This wader occurs in both coastal and freshwater habitats. Away from the coast it is most likely to be seen in grasslands, often in the vicinity of large waterbodies. It also occurs on cleared areas such as airfields. The project has no relevance to the species.

Scientific Name	Common Name	NCA	EPBC	Comments
Numenius phaeopus	Whimbrel	S	M	Not expected. A marine species which will not be impacted by the proposed actions.
Pandion haliaetus	Osprey	C	M	A wide ranging raptor which is primarily associated with marine, estuarine and larger riverine habitats. The proposed actions will not remove or reduce potential habitats and no direct impacts are expected.
Pezoporus wallicus wallicus	Ground Parrot	V		This species is generally found in dry heathland in Queensland. No suitable habitats present within the proposed alignment. Not expected to occur and there will be no impacts from proposed actions. It is worth noting that there is an EPA record of a Ground Parrot in close proximity to the alignment located north-west of Winston Road South and Chevallum Road (SRWPA Map B2a – north of dam). Specific Essential Habitat mapping is in the vicinity of HA sites: 4, 5 and 7.
Phaethon rubricauda	Red-tailed Tropicbird	V		This species typically occurs on marine islands and in offshore coastal waters. The project has no relevance for the species.
Plegadis falcinellus	Glossy Ibis	S	M	This species inhabits freshwater and brackish swamps and marshes and the shallow edges of some artificial waterbodies. There is little habitat within the proposed alignment and where present the wetlands/dam areas will be retained. No significant impacts are expected.
Pluvialis fulva	Pacific Golden Plover	S	M	This wader occurs in both coastal and freshwater habitats. Away from the coast it is most likely to be seen in the vicinity of large waterbodies with shallow edges. The project has no relevance to the species.
Podargus ocellatus plumiferus	Marbled Frogmouth	V		The Marbled Frogmouth inhabits pockets of closed subtropical rainforests up to around 700 m ASL, particularly those with an understorey of palms or ferns (Higgins 1999). It is a nocturnal and cryptic species, but is relatively easily detected by its distinctive call. Pairs occupy and defend territories all year round. Nests are located within rainforest, mostly on horizontal branches or in epiphytic plants. Camping locations appear to be within thick vegetation, particularly vines, not far from creeklines. Foraging generally occurs along creeklines and avoids nearby dry forest areas (Smith *et al*. 1994). The species is not expected to occur within the proposed alignment and no direct or detrimental impacts are expected.
Pterodroma neglecta neglecta	Kermadec Petrel (Western)	C	V	Not expected. A marine species which will not be impacted by the proposed actions.
Rallus pectoralis	Lewin's Rail	R		This highly cryptic species inhabits wetland areas, particularly those dominated by thick grasses, sedges, rushes and reeds. It does not necessarily occur in extensive wetlands, but can occur along minor creeklines or even paddocks (Pizzey and Knight 2003). It is likely to occur along the proposed alignment but only temporary disturbance to some potential habitats will occur and no significant impacts are expected. Given the short term nature of the works, restoration actions and the limited potential for impact, no specific management actions are required. Essential Habitat for this species is mapped in the vicinity of HA sites 7 and 8.

Scientific Name	Common Name	NCA	EPBC	Comments
Rhipidura rufifrons	Rufous Fantail	C	M	This common species was recorded at Ti Tree Rd in Eudlo and within forested habitats in proximity to the proposed alignment. This species is a seasonal migrant that may be present in the more forested portions. The proposed alignment will not result in the loss of any significant habitat or movement options. Little or no impact expected.
Rostratula benghalensis australis	Australian Painted Snipe	V	V, M	The Australian Painted Snipe is a secretive, cryptic, crepuscular species that occurs in terrestrial shallow wetlands, both ephemeral and permanent, usually freshwater but occasionally brackish. They also use inundated grasslands, saltmarsh, dams, rice crops, sewage farms and bore drains. The species is patchily distributed throughout Australia, with most records being in the south-east. Records are erratic, the species being absent from areas in some years and common in others (Marchant and Higgins 1993). The Australian Painted Snipe is threatened by drainage of wetlands, diversion of water from rivers, clearance of wetland vegetation, and overgrazing (Garnett and Crowley 2000). This species has only a low potential to occur within the proposed alignment and little or no significant impacts are expected. Minimisation of disturbance within wetlands is important in maintaining habitat values.
Sterna albifrons	Little Tern	E	M	A primarily marine species for which the project will have no relevance.
Sterna anaethetus	Bridled Tern	S	M	A primarily marine species for which the project will have no relevance.
Sterna bengalensis	Lesser Crested Tern	S	M	This species is almost entirely restricted to coastal habitats. The project has no relevance for the species.
Sterna bergii	Crested Tern	C	M	This species is almost entirely restricted to coastal habitats. The project has no relevance for the species.
Sterna caspia	Caspian Tern	C	M	This species occurs on both coastal and freshwater waterbodies. Away from the coast it occurs on swamps, dams and large rivers. It is very unlikely to occur within the proposed alignment and the project has no relevance for the species.
Stictonetta naevosa	Freckled Duck	R		The species occurs in small groups to large, loose flocks on terrestrial wetlands, with a preference for large, well-vegetated swamps and creeks, but moving to open water after breeding or in dry periods (Marchant and Higgins 1990). It is not expected to occur within the proposed alignment. No impacts are expected.
Stipiturus malachurus	Southern Emu-Wren	V		The species occurs in wet and dry heathlands and non-heath vegetation on the swampy margins of wetlands. In south-east Queensland it is mostly recorded from Cooloola National Park. It is not expected to occur in the proposed alignment. No impacts are expected.
Sula dactylatra	Masked Booby	S	M	Not expected. A marine species for which the project will have no relevance.
Thalassarche impavida	Campbell Albatross	S	V,M	Not expected. A marine species for which the project will have no relevance.
Tringa nebularia	Common Greenshank	C	M	A wader which occurs on both coastal and freshwater waterbodies. Freshwater habitats are usually swamps and marshes. It requires shallow water. The species is unlikely to occur within the proposed alignment.

Scientific Name	Common Name	NCA	EPBC	Comments
Tringa stagnatilis	Marsh Sandpiper	C	M	A wader which occurs on both coastal and freshwater waterbodies. Freshwater habitats are usually swamps and marshes. It requires shallow water. The species is unlikely to occur within the proposed alignment.
Turnix melanogaster	Black-breasted Button-Quail	V	V	Black-breasted Button-quails are difficult to observe due to their affiliation with thick, dense vegetation and their habit of running quietly along the ground rather than taking to the wing to avoid danger. The easiest way to detect the presence of this bird is to look for characteristic scrapings in the leaf litter made while they forage. No evidence of the birds was found during the study and the birds are not expected to occur within the proposed alignment. No impacts are expected.
Tyto tenebricosa	Sooty Owl	R		Sooty Owls occur in wet eucalypt forests and rainforests that grow on fertile soils where tall emergent trees are present. Most records of this species are in old growth forest with a dense understorey, but they may occur in younger forests providing hollow-bearing trees are nearby (Higgins 1999). Optimal habitat seems to coincide with gullies and valleys with large hollows providing camping and nesting opportunities. There is little or no suitable habitat within the proposed alignment and the proposed actions are unlikely to have any impact on the species or its presence in the local landscape. No impacts are expected.
Xanthomyza phrygia	Regent Honeyeater	E	E, M	This species occurs mostly on the inland slopes of the Great Dividing Range. Although occasionally found in agricultural land with only partial tree cover or in city parks and gardens, it occurs mainly in dry box-ironbark eucalypt woodland and dry sclerophyll forest (Higgins *et al*. 2001). Within the box-ironbark eucalypt associations they prefer the wettest, most fertile sites (Garnett and Crowley 2000). Numbers fluctuate greatly, both spatially and temporally, and movements outside of the breeding season are little known (Garnett and Crowley 2000). The proposed alignment and associated actions will have little or no impact on the species, its habitats or potential occurrence in the area.
Xenus cinereus	Terek Sandpiper	S	M	This wader is restricted to coastal habitats. The project has no relevance for the species.
Mammals				
Chalinolobus dwyeri	Large-eared Pied Bat	R	V	The Large-eared Pied Bat is rarely captured and consequently poorly known. Little is known of its camping requirements, although it has been recorded camping in disused mine tunnels, rock overhangs, caves and abundant Fairy Martin nests. The habitat requirements for the species are poorly understood. In south-eastern Queensland the species seems to be associated with higher altitude moist forests and adjacent rainforest (Eyre *et al.* 1997). The proposed alignment will not remove any significant habitat values and is not expected to result in any detrimental impacts on the species or its potential to occur in the area. Given the short term nature of the works, restoration actions and the limited potential for impact, no specific management actions are required.

Scientific Name	Common Name	NCA	EPBC	Comments
Dasyurus hallucatus	Northern Quoll	C	E	The Northern Quoll formerly occurred across northern Australia, south to south-east Queensland. Its range has now contracted to six core areas, none of which are in the south-east. Where it does occur it is most common in rocky country and open eucalypt forest (Braithwaite and Begg 1995). It is not expected to occur in the proposed alignment.
Dasyurus maculatus maculatus	Spotted-tailed Quoll	V	E	Spotted-tailed Quolls occur in a wide variety of habitats including rainforests, wet and dry sclerophyll forests, coastal heath, scrub and sometimes Red Gum forests along inland rivers. They are found from sea-level to sub-alpine regions (Menkhorst and Knight 2001). The species is not expected within the proposed alignment. However, should it occur, any impacts would be minor and short term. No specific management actions are required.
Kerivoula papuensis	Golden-tipped Bat	R		The Golden-tipped Bat occurs in moist closed lowland forest in areas of high summer rainfall and equable thermal conditions. It is usually captured in dense vegetation, often near creeklines (Woodside 1995; Menkhorst and Knight 2004). It is not expected to occur in the proposed alignment. Should it occur, any disturbance will be minor and short-term. No specific management actions are required.
Ornithorhynchus anatinus	Platypus	CS		The study area has several waterways that are known or hold potential for this species occurrence. This species is further discussed in **Section 4.5**.
Phascolarctos cinereus	Koala (SEQ Bioregion)	V (SEQ)		The Koala is expected to occur within suitable habitats. Details of Essential Habitat mapping for this species and further detailed information is found in **Section 4.5**.
Potorous tridactylus tridactylus	Long-nosed Potoroo	V	V	The Long-nosed Potoroo has been recorded in a variety of habitat types including disturbed subtropical and warm-temperature rainforests, tall open forests with a moist understorey, woodland with tussock grass, open forest with shrubby understorey, and heathlands. Although the vegetation type used by this species varies, they are generally captured in areas where there is a dense ground cover and are reluctant to move from dense undergrowth (Heinsohn 1968; Bennett 1993). The species is threatened by habitat loss, habitat alteration by grazing, replacement of native ground cover with introduced pasture grasses, inappropriate fire regimes and predation by foxes, cats and dogs. The primarily open nature of the easement is unlikely to hold any value for this species and it is not expected to occur within the alignment. The proposed alignment and associated works are not expected to have any direct impact on this species or its habitats.
Pseudomys oralis	Hastings River Mouse	V	E	All recent records of this species are from near creek banks with a dense ground cover of sedges, grasses and ferns within tall open eucalypt forest. In Queensland it is known from around Lamington National Park and the Warwick region (Kirkpatrick 1995). The species is not expected to occur within the proposed alignment. No impacts are expected.
Pteropus poliocephalus	Grey-headed Flying-fox	C	V	This species is known from the area and is discussed further in **Section 4.5**
Tachyglossus aculeatus	Short-beaked Echidna	CS		This species is known from the area and is discussed further in **Section 4.5**.

Scientific Name	Common Name	NCA	EPBC	Comments
Xeromys myoides	Water Mouse or False Water Rat	V	V	The Water Mouse occurs in mangroves, adjacent sedgeland communities and freshwater lagoons close to foredunes (Van Dyck 1996). No suitable habitat occurs within the alignment and the species will not occur. The species should not be viewed as relevant to the project.
Reptiles				
Acanthophis antarcticus	Common Death Adder	R		This species occurs in a wide variety of habitats from rainforest to shrublands and heathlands. Specific threats are poorly known, though alteration to microhabitats may adversely affect this species. Ambush snakes, such as Death Adders, require specific ground cover, usually thick leaf litter from which they can launch their attacks. Grazing, agriculture and urbanisation modify this ground layer considerably, which reduces potential ambush sites. The species is not expected within the alignment and no significant impacts are expected.
Coeranoscincus reticulatus	Three-toed Snake-tooth Skink	R	V	This species is a large worm-like skink with greatly reduced limbs. Little is known of the ecology of the species. They are fossorial species, burrowing in moist soil, under leaf litter and in rotten logs where they feed on invertebrates. Subtropical rainforest and nearby wet sclerophyll forests are their preferred habitat. Most records occur in montane rainforest on dark soils, but animals on Fraser Island and nearby Cooloola coast occur in rainforests on pale sands. There is little or no suitable habitat within the proposed corridor and no impacts are expected on this species.
Delma torquata	Collared Delma	V	V	The Collared Delma has a patchy distribution and occurs mainly in open rocky areas. It is also known from two locations without significant rock. It is found under rocks, logs and other ground cover (Cogger 2000; Wilson 2005). It is not expected to occur within the alignment.
Elusor macrurus	Mary River Turtle	E	E	The Mary River Turtle is restricted to the Mary River drainage. It occurs in slow-flowing stretches of river with a variable amount of woody debris (Cann 1998). It is not expected to occur in the proposed alignment.
Eroticoscincus graciloides	Elf Skink	R		Known from within the alignment and within the proposed corridor. Details of Essential Habitat mapping for this species and further information is provided in **Section 4.5**.
Hoplocephalus stephensii	Stephens' Banded Snake	R		Stephen's Banded Snake occurs in a variety of habitats including rainforest, wet and dry sclerophyll forests (Fitzgerald *et al*. 2002b). It is nocturnal and typically arboreal, though individuals also live and shelter among exfoliating rock. The species uses very large, old, hollow-bearing trees for shelter/ambush sites. Cleared areas are generally avoided, the species usually remaining within dense vegetation (Fitzgerald *et al*. 2002a, b). It is not expected to occur within the proposed alignment.
Ophioscincus truncatus		R		This species is known from the alignment and within the proposed corridor. Details of Essential Habitat mapping for this species and further information is provided in **Section 4.5**.
Ramphotyphlops silvia	Cooloola Blind Snake	R		The Cooloola Blind Snake is restricted to rainforest, woodlands and heathlands on a narrow band of white coastal sands between Fraser island and Noosa (Wilson 2005). It is not expected to occur within the proposed alignment. Essential Habitat for this species is mapped in the vicinity of the 86 km marker along the NPI Corridor and at HA42 and 43 for along the Image Flat Connection.

Distribution and Breeding: Tusked Frogs occur on the coast and ranges from the Clarke Range in central Queensland to Moss Vale in New South Wales and as far inland as the Blackdown Tableland and Carnarvon Gorge, Queensland. Historically, the species was common on the western slopes of the range. However, it has declined in many areas including the New England Tableland, western flowing streams of the Main Range, elevated sites in the Clarke Range and from the Lockyer Valley in south-east Queensland (Ingram and McDonald 1993; Eyre *et al*. 1997; Gillespie and Hines 1999).

Males construct nests in concealed sites under leaf litter, vegetation or logs in shallow water at the edge of ponds or stream pools with breeding usually occurring between September and April (Anstis 2002).

Threats: The Tusked Frog is threatened by destruction and disturbance of habitat, reductions in water quality, Chytrid fungal disease, predation of eggs and tadpoles by exotic fish species such as mosquito fish *Gambusia holbrooki*, and increased ultraviolet radiation (Gillespie and Hero 1999; NPWS 2003). Chytrid fungal disease is spread by direct contact with fluid containing spores. This may include the transportation of moist sediments, water, contaminated surfaces (i.e. boots, hands, livestock, machinery) and the movement of frogs from one area to another.

Potential Impacts on the Population: The proposed actions will involve disturbance within known and potential habitats. However, disturbance along the relatively narrow corridor is not expected to have a significant impact on the local population. Protection of waterways and downstream habitats is important in the project's mitigation strategies.

Management Required:

- Minimise disturbances in riparian areas;
- Water quality controls;
- Where the alignment crosses significant waterways pre-start checks should be conducted for the presence of this species; and
- Compliance with the Hygiene Protocol for the Control of Disease in Frogs (NPWS, 2001).

***Mixophyes iteratus* Giant Barred Frog**

Status: NCA Endangered, EPBC Endangered

Occurrence in the Study Area: Suitable habitat for this species was identified at HA sites 16, 29, 30 and 32. No Essential Habitat is mapped for this species along the current proposed alignment.

Ecology and Habitat: The preferred habitat of this species is along deep, slow-flowing creeks with overhanging banks in riverine rainforest or wet sclerophyll forests (Gilmore and Parnaby 1994; Mahony *et al*. 1996; Meyer *et al*. 2001). While they can be found along streams that have had some disturbance, Lemckert (1999) found that they were most common in areas that were relatively undisturbed.

Sometimes individuals, particularly females, can be found considerable distance (up to 150 m) from water (Meyer *et al*. 2001). However most movements are restricted to within 20 m of the stream and individuals usually move less than 10 m each night.

Distribution and Breeding: Historically, this species was found as far south as the mountains west of Sydney north to the Conondale ranges (Lemckert and Brassil 2000). However it is now extremely scarce in parts of its range south of the Nambucca River. Its stronghold now lies between this area and the Mary River catchment area (Hines *et al*. 1999), particularly around Dorrigo and ranges west of Coffs Harbour (Tyler 1997). It has also undergone population declines in the northern portion of its range, disappearing from known locations within the Conondale Ranges, Bunya Mountains and Cunningham's Gap (Hines *et al*. 1999).

Breeding occurs during spring and summer, when males call from the ground, often on leaf litter near streams or ponds.

Threats: The reasons for this species' decline are poorly known, however several possibilities exist. Many sites where Giant Barred Frog occurs are on the lower reaches of streams, the head waters of which have often been significantly altered by activities such as clearing, timber harvesting or urban development. Lemckert (1999) found that the species was less common on recently logged areas or where forest was little disturbed.

Potential Impacts on the Population: The proposed alignment will pass through and disturb potential habitat for this species. Overall, the proposed action will result in disturbance to habitats which may have short term impact on individual animals and could result in the temporary or permanent loss of suitable breeding areas. Where the alignment traverses through suitable habitats it is important that all restoration work focuses on maintaining their habitat. Prompt restoration and revegetation with appropriate species is important.

Where possible, potential habitats along the alignment should not be disturbed. Detailed weed management and restoration planning is required to ensure no detrimental impacts result for the proposed actions. As well, all access in these areas should be minimised.

Management Required:

- Minimise disturbances in known and potential habitats;
- Revegetation should extend to include restoration in adjoining habitats;
- Where the alignment crosses significant waterways pre-start checks should be conducted for the presence of this species; and
- Avoid disturbance during peak breeding season where possible.

4.5.2 *Calyptorhynchus lathami* Glossy Black-Cockatoo

Status: NCA Vulnerable; EPBC not listed.

Occurrence in the Study Area: Although this species was not detected during the current survey, suitable potential food trees were observed at HA site13. In addition, Glossy Black-Cockatoo is known to occur in bushland to the west of HA site 36. There is no Essential Habitat mapping for this species in the proposed current alignment.

Ecology and Habitat: The Glossy Black-Cockatoo is the rarest and most endangered of Australia's cockatoos and is found within a range of forests and woodlands. The species is an extremely specialist feeder, feeding almost exclusively on the seeds of the cones of She-oaks (Casuarinaceae). This dependence means that it prefers habitats dominated by these tree species either in the canopy or middle stratum (Higgins 1999). In addition, this bird is reliant on suitable hollows in dead or senescent trees in which they can nest.

In south-eastern Queensland, it is known to feed on the seeds of Black She-oak (*Allocasuarina littoralis*), Forest She-oak (*A. torulosa*), and, less commonly, River She-oak (*Casuarina cunninghamiana*) and Beach She-oak (*C. equisetifolia*).

Most importantly, although She-oaks are common across the landscape, the birds select and use only a small portion of this resource (Clout, 1989; Crowley and Garnett 2000). This small portion is called the "feed trees", to which the birds have fidelity. The reason for such selection and fidelity is still being researched, although Crowley and Garnet (2001) argued that seed fill (percentage of seeds containing kernels) and kernel ratio (weight of kernels/cone weight) contribute to the cockatoo's selection process.

The feed tree as a resource is also dynamic, with old, sick or dead trees becoming unused while new trees grow and become available. Furthermore, fire can eliminate whole groves of feed trees. The protection and renewal of feed trees is therefore vital to the long term security of the species.

Distribution and Breeding: It has a patchy distribution and is uncommon and declining, especially in the south-western parts of its range and is now extinct in mainland South Australia (Garnett and Crowley 2000). Its range includes eastern Australia south from Eungella to Gippsland and inland to south-central Queensland and the Riverina area of New South Wales.

They are winter breeders and breed mainly from March to August, although breeding has been recorded later in Queensland. The female incubates and cares for the young alone within a large hollow tree cavity, but is regularly fed by the male. Once the single egg is hatched the chick fledges in around 60 days, but remains with its parents and is fed for another three months (Garnett *et al*. 1999).

Threats: Clearance of habitat has reduced the species range in the south and west of the Great Divide (Garnett and Crowley 2000). This

remains a serious threat to the species throughout its range. In addition, fire can reduce or remove suitable feed trees from large areas for several years. Once this has occurred, *Allocasuarina* regeneration can be impeded by grazing.

Fragmentation of habitats may result in an increase in predation of nestlings and eggs or alternatively result in higher competition for hollows (Downs *et al*. 1997). This threat may be particularly severe where species adapted to altered or open habitats are abundant. These 'edge' species may include species such as Common Brushtail Possum (*Trichosurus vulpecula*), Little Corella (*Cacatua sanguinea*) and Galah (*Eolophus roseicapilla*). Without the protection of nest hollows these predators and/or competitors can significantly reduce recruitment (Garnett *et al*. 1999).

Potential Impacts on the Population: The proposed alignment will pass through and disturb potential habitat areas supporting food trees including *A. littoralis* and *A. torulosa*. Overall, the proposed action will result in the loss of some food trees and may have a short term impact on individual animals. The proposed alignment should avoid traversing suitable habitats areas. It is important that all restoration work focuses on maintaining their habitat. Prompt restoration and revegetation with appropriate species (i.e. *Allocasuarina* spp.) is recommended.

Management Required:

- Minimise disturbances to areas supporting suitable food trees; and
- Revegetation in habitat areas should include the use of suitable species (i.e. *Allocasuarina* spp.) and be subject to strict maintenance and monitoring.

4.5.3 *Ornithorhynchus anatinus* Platypus

Status: NCA Special Least Concern wildlife; EPBC Not listed.

Occurrence in the Study Area: This species was not detected during the current survey. However, suitable habitat was present at HA sites 9, 17, 38 and 48. It is expected that this species will utilise sites within the study area.

Ecology and Habitat: This species is often difficult to observe and is considered to be solitary, although a number of individuals may use the same body of water. Platypuses prefer slow moving water and are also reported to move overland between dams and to search for worms in waterlogged paddocks. When not in the water, Platypuses are generally found in their stream bank burrows (up to 33 m in length) and it is here eggs are incubated and young suckled. Platypus feed on a wide variety of aquatic invertebrates, as well small fish and amphibians.

Distribution and Breeding: The Platypus is found from Tasmania to northern Queensland, but its western limits are poorly known. Mating occurs around August in Queensland. Usually two eggs are laid. Eggs hatch within 1-2 weeks and young are weaned at about 4 – 5 months.

Threats: Habitat loss and degradation are the main threats to the continued persistence of local populations. Accidental mortality caused by fisheries (netting) was a major threat in the past.

Potential Impacts on the Local Population: It is important that any works within the larger permanent waterways do not unduly disturb the banks and other potential refuge areas. The maintenance of water quality is also important. Overall, there are little or no significant impacts expected from the proposed actions.

Management Required:

- Ensure sediment is not permitted to flow into waterbodies; and
- Where works or other disturbance is to be conducted within areas of potential habitat, these locations should be thoroughly checked for the presence of this species prior to commencement.

4.5.4 *Phascolarctos cinereus* Koala

Status: NCA Regionally Vulnerable (SEQ); EPBC Not listed

Occurrence in the Study Area: No Koalas were detected during the site investigations and the potential for their occurrence within the alignment is low. However, the species is known to occur in the region. Suitable habitat for this species was identified at HA site HA 7

(i.e. east of the Bruce Highway up to the 72 km marker) 10, 17 19 and 34, along the proposed NPI alignment In addition, Essential Habitat is mapped for this species in the vicinity of several locations along the proposed NPI alignment including HA sites: 2, 4, 7, 8, 10, 11, 12, 16, 17, 18, 19, 20, 26, 27, 28, 30 32, 42, 43, 44, 45, 46 and 47.

Ecology and Habitat: Throughout south-east Queensland, Koalas have a distinct association with eucalypt woodland and certain forest habitat types. They are known to exist at a variety of densities, even within similar habitat areas, ranging from 0 to 1.5 Koalas per hectare.

The species is also not necessarily restricted to bushland and remnant areas and is known to exist and breed within the urban environment. Movement is not confined to just vegetated corridors, as they also move across cleared rural land and through suburbs. However, their recent listing as a threatened species within the southeast Queensland bioregion reflects their vulnerability within settled areas, within which their ongoing survival is dependant on the presence of suitable feed trees and a low level of detrimental impacts (particularly dog attacks and traffic accidents).

Koalas, being arboreal folivores, use a variety of trees, including many non-eucalypts, for feeding, shelter and breeding purposes. They can, however, have distinct, localised preferences throughout their range, selecting some species in preference to others. Preferred species are referred to as ‘primary browse’ species.

Although some tree species are known to be particularly favoured by Koalas, Koalas have also been found to have favourite individual trees and may return repeatedly to these trees while neglecting nearby trees of the same species. The mechanisms for individual tree selection are unknown. Tree selection may be influenced by factors such as:

- High leaf moisture content (Pahl and Hume 1990; Hume and Esson 1993), although moisture thresholds are unlikely to explain individual tree selection during seasons when water preservation is not a high priority or when leaf dew provides abundant water (Moore and Foley 2000);
- High leaf nitrogen content which is often related to low fibre content making leaves more palatable (Pahl and Hume 1990; Hume and Esson 1993). Although other studies have found that fibre thresholds are not of primary importance (1990); Cork and Sanson 1990; Cork and Catling 1996); and
- Low formylated phloroglucinol compounds, (FPC) which are a compound produced by eucalypts to resist herbivory (Pass *et al*. 1998; Lawler *et al*. 1998, 2000).

Individual animals, although solitary, coexist within overlapping home ranges, which contain a finite number of feed trees that are visited repeatedly and often shared with other individuals.

Habitat Preferences: The species is found in areas with suitable food trees, from tall open forest to open woodland. Koalas occur in areas modified by humans such as residential developments and farmland.

Threats: Current threats include habitat destruction and fragmentation, bushfire and disease. Populations around urban areas are at increased risk of mortality due to dog attack and road strike (Maxwell *et al*. 1996).

Potential Impacts on the Local Population: The proposed alignment will only require the removal of a relatively small amount of potential food trees and some minor temporary disturbance within movement corridors.

Habitat restoration actions will, in time, improve feeding resources and movement opportunities for the species within the corridor. Overall, the project is not expected to result in a significant threat to the species and will not impact on their long term security.

Management Required:

- Clearly mark any food trees that are being retained and avoid disturbance to these;
- Limit works to day time hours only; and
- Fauna spotters are required to be present for any tree clearing activities within Koala habitats.

4.5.5 *Tachyglossus aculeatus* Short-beaked Echidna

Status: NCA Special Least Concern wildlife; EPBC not listed

Occurrence in Study Area: The Short-beaked Echidna is known from across the study area and may be found anywhere along the proposed corridor. The NCA lists the Short-beaked Echidna as a 'Special Cultural' species. This listing recommends, "…Governments have regard to the special cultural significance of the wildlife and the management requirements needed to conserve existing populations of the wildlife". Specifically, suitable habitat for this species was identified at HA site 30.

Ecology and Habitat: The Short-beaked Echidna is specialised for feeding on ants, termites and beetle larvae. It occurs in almost all terrestrial habitats except for intensively managed farms. The species is active both by day and night and shelters in logs, crevices, burrows and leaf litter (Augee 1995; Menkhorst and Knight 2001).

Distribution and Breeding: This species occurs throughout Australia. Mating takes place in July and August with juveniles seen from September (Augee 1995).

Threats: Short-beaked Echidnas are killed by dingoes and motor vehicles and accidentally during vegetation clearing activities.

Potential Impacts on the Population: Short-beaked Echidnas are common in the local landscape. There would be some very minor short term loss of habitat which is seen as insignificant to the long term security of the population. Habitat restoration actions will, in time, improve movement opportunities for the species within the corridor and surrounding lands.

Management Required:

- Minimise disturbance to species habitat; and
- A fauna spotter is required to be present for the clearing of any Echidna habitat.

4.5.6 *Pteropus poliocephalus* Grey-headed Flying-fox

Status: NCA Least Concern; EPBC Vulnerable.

Occurrence in the Study Area: The Grey-headed Flying-fox is known to occur in a large Flying-fox camp next to the Bruce Highway in the vicinity of Cooney Road, Nambour, Queensland. This location coincides with HA43.

Ecology and Habitat: Two habitat characteristics are important for Grey-headed Flying-foxes - foraging resources and camping sites. As the species is a canopy-feeding frugivore and nectarivore, they utilise a range of vegetation types including rainforests, open eucalypt forests, woodlands, Melaleuca swamps and Banksia woodlands.

Camps are commonly within dense vegetation close to water, primarily rainforest patches, stands of Melaleuca, mangroves or riparian vegetation (Nelson 1965), but colonies may use exotic vegetation in urban areas (Birt et al 1998). The species congregates in large camps of up to 200,000 individuals from early until late summer, with the number of bats within a camp being influenced by the availability of blossom in the surrounding area. Adults normally disperse during the winter and can migrate up to 750km as individuals or small groups, with the young forming winter camps (Churchill 1998).

Distribution and Breeding: Regular or frequently used camps have been located between Rockhampton in Queensland south to around Mallacoota in East Gippsland, Victoria. Less consistent records extend the south range of the species to Warrnambool, Victoria (Duncan et al 1999). They are generally recorded between the coast and the western slopes of the Great Dividing Range and. Recent surveys have failed to locate camps or regular records of this species from the Rockhampton Area or north of Hervey Bay, Queensland. Furthermore, despite one regular camp in Melbourne (Menkhorst 1995), the southern range of the species has also appeared to have considerably retracted (Duncan et al 1999). Historical records suggest they have also declined in Brisbane, although they remain abundant and widespread, and are regularly recorded from gardens and parks and from known camps

across the city, particularly during Eucalypt flowering (Low 1995).

Breeding occurs during the spring months when food resources are at their most plentiful.

Threats: Grey-headed Flying-foxes are subject to several threatening processes, the most severe being the loss of habitat. It has been suggested that this resulted in a 50% decline in the population by the 1930s (Duncan et al 1999). The loss of habitat, particularly important habitat such as reliable winter resources along the east coast, has continued to lead to population decline. The species will also forage within commercial fruit farms, sometimes significantly reducing their yield. This has resulted in direct culling or the destruction of camps by harassment. Other threatening processes include accumulation of lethal levels of lead in urban areas (Hariono et al 1993), electrocution on overhead powerlines, which kills disproportionately high numbers of lactating females (Duncan et al 1999), and habitat degradation.

Any disturbance to vegetation associated with the Flying-fox camp requires referral to the Department of Environment and Water Resources (DEWR) for assessment under the EPBC Act. Should the proposed works receive an approval, the timing of construction works should avoid birthing seasons.

Potential Impacts from Proposed Activities: The proposed alignment has the potential to result in disturbance to the existing Flying-fox camp located east of the Bruce Highway in the vicinity of Nambour (**Figure 4.22:** SRWPA Map B5c). There may be a short-term loss of feeding resources in the local area resulting the proposed vegetation clearing associated with the Image Flat Connection.

4.5.7 Eroticoscincus graciloides Elf Skink

Status: NCA Rare; EPBC Not listed.

Occurrence in the Study Area: Suitable habitat for the Elf Skink was identified in several locations along the proposed alignment including HA sites: 5, 6, 10, 17, 30 and 33. Essential Habitat is mapped for this species in the vicinity of several HA sites including: 8, 10 and 11.

Ecology and Habitat: The Elf Skink is a small, secretive shade-loving skink. They are associated with vine thickets, wet sclerophyll forests and rainforests. This species shelters beneath damp leaf litter, logs and stones and forages in shaded, moist environments (Ehmann 1992).

Distribution and Breeding: This species has a very limited distribution, being confined to the extreme southeast corner of Queensland, from Fraser Island to Mount Nebo (Wilson 2005). Elf Skinks are well known in the Sunshine Coast region and isolated populations are commonly recorded from suitable habitat in the local area. The female generally lays two eggs per clutch in spring to midsummer (Ehmann 1992).

Potential Impacts on the Population: Elf Skinks are very often locally common in an area. There would be some minor short term loss of habitat which is seen as insignificant to the long term security of the population. Habitat restoration actions will return this lost habitat.

Management Required:

- Retain and replace the leaf litter layer and logs from proposed disturbance areas to provide refuge sites for this species.

4.5.8 Ophioscincus truncatus

Status: NCA Rare; EPBC not listed.

Occurrence in the Study Area: This species is known to occur in the vicinity of HA10: South of Diddillibah Road. It is expected that this species would occur within suitable habitats within the local area. Essential Habitat for this species is mapped in the vicinity of HA sites 10 and 11.

Ecology and Habitat: Ophioscincus truncatus is a small fossorial skink for which two subspecies are currently recognised: *O. t. monswilsonensis*, which is restricted to moist forests of the McPherson and Blackall Ranges, and *O. t. truncatus*, which occurs on the islands of Moreton Bay and associated coastal sand masses (Eyre *et al.* 1997). Mainland populations occur in rainforests and wet sclerophyll forests, while island populations inhabit woodlands and heaths on pale sandy soils. This species is cryptic and difficult to detect. Very little is known about the biology, habitat requirements or threats to the species.

Distribution and Breeding: The species occurs south from the Conondale Ranges in south-east Queensland to about Macksville in north-east New South Wales (Wilson and Swan 2003).

Threats: Threats are unknown, although, given its fossorial habits, it is likely to be adversely affected by activities that affect the upper layers of leaf litter and soil. Such activities may include clearing of land for urban development or agriculture and disturbance due to cattle grazing or logging.

Potential Impacts from Proposed Activities: The proposed alignment is not expected to result in a significant impact on the species or its habitats. There would be some minor short term loss of habitat which is seen as insignificant to the long term security of the population. Habitat restoration actions will return this lost habitat.

Management Required:

- Retain and replace the leaf litter layer and logs from proposed disturbance areas to provide refuge sites for this species.

4.6 HABITAT ASSESSMENT RESULTS

The following sections summarise the results of the on-site Habitat Assessments. Habitat Assessment sites, significant habitat areas, corridors and relevant species are shown in **Figures 4.6 – 4.21**. The full results of onsite Habitat Assessment for the proposed NPI alignment Stage Two are located in **Appendix 6**.

4.6.1 River Creek Crossings

The proposed NPI Stage Two alignment crosses several rivers, creeks, and tributaries including:

- Eudlo Creek (six (6) crossings);
- Paynter Creek;
- Petrie Creek (and two (2) tributaries);
- Caboolture Creek;
- South Maroochy River (and two (2) tributaries);
- North Maroochy River (and four (4) tributaries);
- Browns Creek;
- Bunya Creek;
- Sandy Creek;
- Maroochy River;
- Six Mile Creek (left branch);
- Six Mile Creek (right branch); and
- Tuckers Creek.

In addition, the proposed alignment crosses several other waterways/drainage lines and dams. All the rivers, creeks, tributaries and drainage lines had vegetated corridors associated with them supporting both native and exotic species.

4.6.2 Significant Habitat Areas

The proposed pipeline traverses several waterways and vegetated areas which provide habitat and/or vegetated linkages for a variety of fauna moving between or within significant habitat areas.

These areas support habitat for one or more significant species listed under the EPBC and/or the NCA. Significant habitat areas along the proposed alignment include:

NPI Corridor:

- Vegetation north of Nobels Road (**Figure 4.6**: SRWPA Map B1);
- Vegetation south of Chevallum Road (**Figure 4.7**: SRWPA Map B2a);
- Vegetation west of Winston Road South (**Figure 4.8**: SRWPA Map B2b);
- Eudlo Creek crossing west of Bruce Highway (**Figure 4.8**: SRWPA Map B2b);
- Eudlo Creek and large dam between Bruce Highway and the Maroochydore Road (**Figure 4.9**: SRWPA Map B3a) (*N.B.* no access to vegetated areas between Bruce Highway and 72km mark) This area is mapped as Urban Koala Area under the Koala Plan;
- Alternative route following Eudlo Flats Road (**Figure 4.9:** SRWPA Map B3a and **Figure 4.10**: SRWPA Map B3b);
- Vegetation south of Diddillibah Road (**Figure 4.11**: SRWPA Map B4);
- Vegetated areas north of Francis Road (**Figure 4.12**: SRWPA Map B5d);
- Maroochy River crossing (**Figure 4.19**: SRWPA B10);

- Vegetation and waterway associated with Strong Lane (**Figure 4.19**: SRWPA Map B10); and
- Vegetation west of Racehorse Lane (HA36, **Figure 4.21**: SRWPA Map B12).

Image Flat Connection:

- Significant vegetation and ephemeral waterway located east of the Bruce Highway (HA42, **Figure 4.22**: SRWPA B5c);
- Vegetation east of the Bruce Highway represents the southern extent of significant vegetation containing protected habitats (i.e. Flying-fox camp). Waterway on the east of Cooney Road known to have Tusked Frog (HA43, **Figure 4.22**: SRPWA Map B5c); and
- Significant habitat area between the Nambour Connection Road and the Bruce Highway (HA44, **Figure 4.22**: SRWPA Map B5c); and
- Significant habitat area in around Tuckers Creek (HA45; **Figure 4.22**: SRWPA Map B5c).

Specific recommendations for treatment in these areas are addressed in **Section 6.0**.

4.6.3 Significant Corridors

Several State and Regional Corridors have been identified using BAMM mapping for areas along the proposed alignment.

Areas mapped as having BAMM State Significant Corridors include:

NPI Corridor:

- Vegetated areas north of Nobels Road (**Figure 4.6**: SRWPA Map B1);
- Vegetation encroaching in the east side of the proposed alignment east of Robinson Road (**Figure 4.6**: SRWPA Map B1) and
- Vegetation along Balsam Road (**Figure 4.18**: SRWPA Map B9).

Areas mapped as having BAMM Regionally Significant Corridors include:

- Vegetated areas north of Francis Road (**Figure 4.12**: SRWPA Map B5d);
- Areas where the proposed alignment crosses creeks/rivers and large patches of vegetation (**Figure 4.20**: SRWPA Map B11); and
- Areas where the proposed alignment crosses creeks/rivers and large patches of vegetation (**Figure 4.21**: SRWPA Map B12).

Image Flat Connection:

- Vegetated areas both east and west of the Bruce Highway in the vicinity of Nambour (**Figure 4.23**: SRWPA Map B5b, **Figure 4.22**: SRWPA Map B5c, **Figure 4.12**: SRWPA Map B5d).

Following on-site investigations, several other areas along the proposed NPI alignment have been identified as having Regional connectivity as fauna movement corridors including:

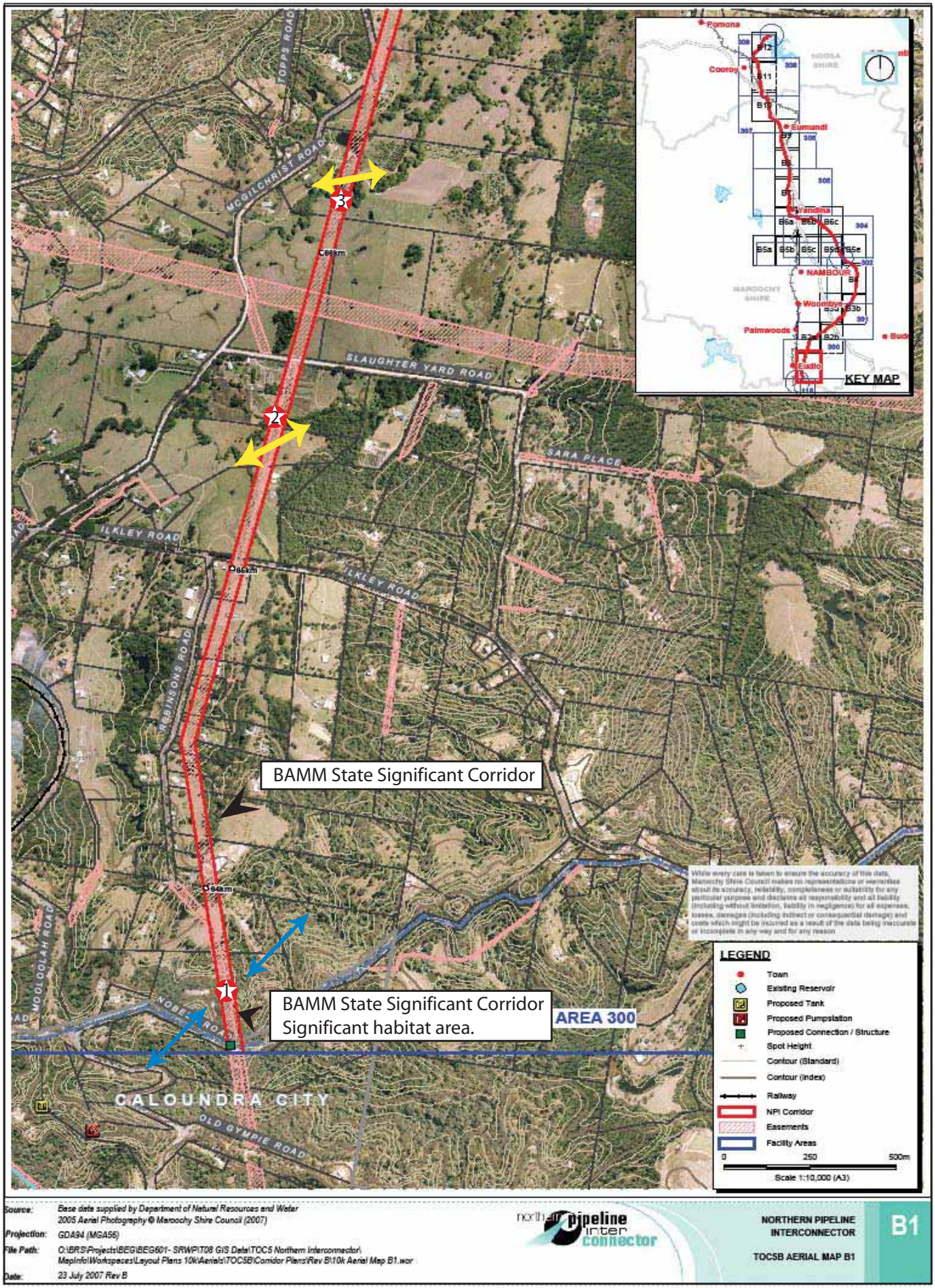
NPI Corridor:

- Vegetation in the vicinity of Chevallum Road and Winston Road South (**Figure 4.7**: SRWPA Map B2a);
- Eudlo Creek crossings west of Bruce Highway (**Figure 4.8**: SRWPA Map B2b);
- Vegetation and dam to the East of Bruce Highway (**Figure 4.9**: SRWPA Map B3a); and
- Vegetated areas to the east and west of 105km marker (**Figure 4.19**: SRWPA Map B10); and

Image Flat Connection:

- Vegetation and dam located at the end of Vincent Drive (HA47, **Figure 4.23**: SRWPA Map B5b).

In addition river, creek, tributary and drainage line crossings associated with vegetation represent local movement corridors.



Legend

- Habitat Assessment Site
- State Corridor
- Local Corridor

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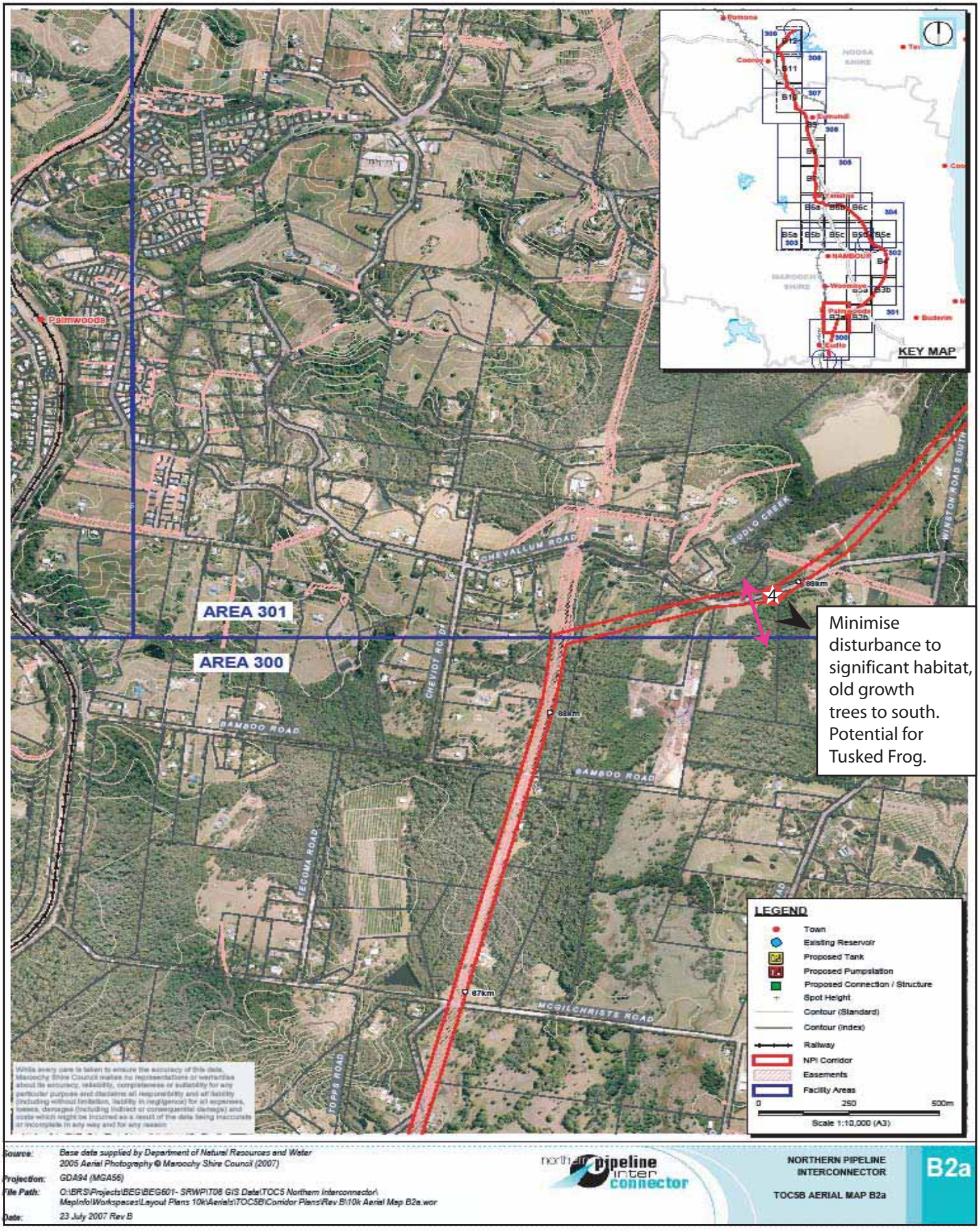
FIGURE 4.6

SRWPA Map B1

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

- Habitat Assessment Site
- Regional Corridor

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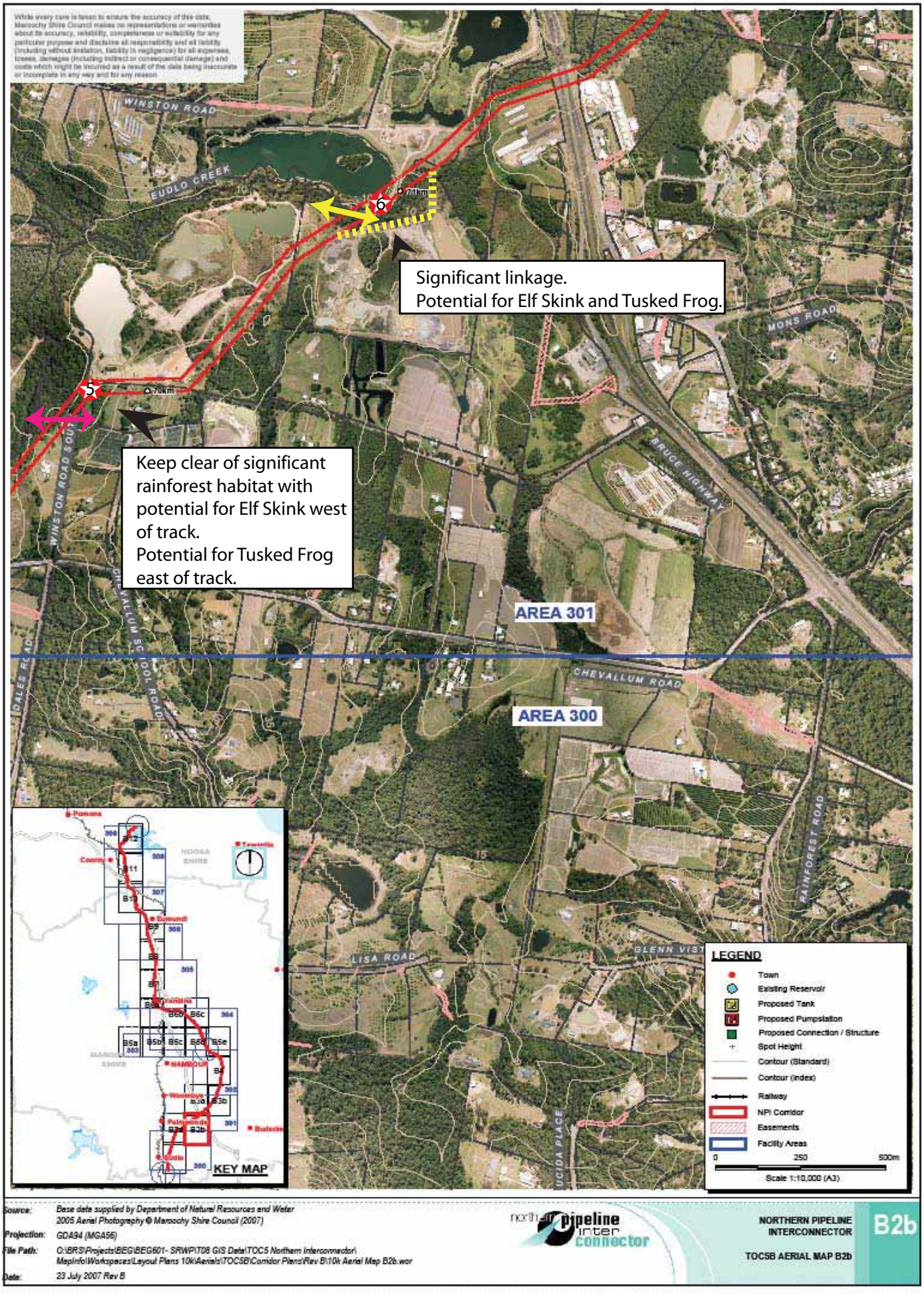
FIGURE 4.7
SRWPA Map B2a

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

- Habitat Assessment Site
- BAAM Recommended Route
- Regional Corridor
- Local Corridor

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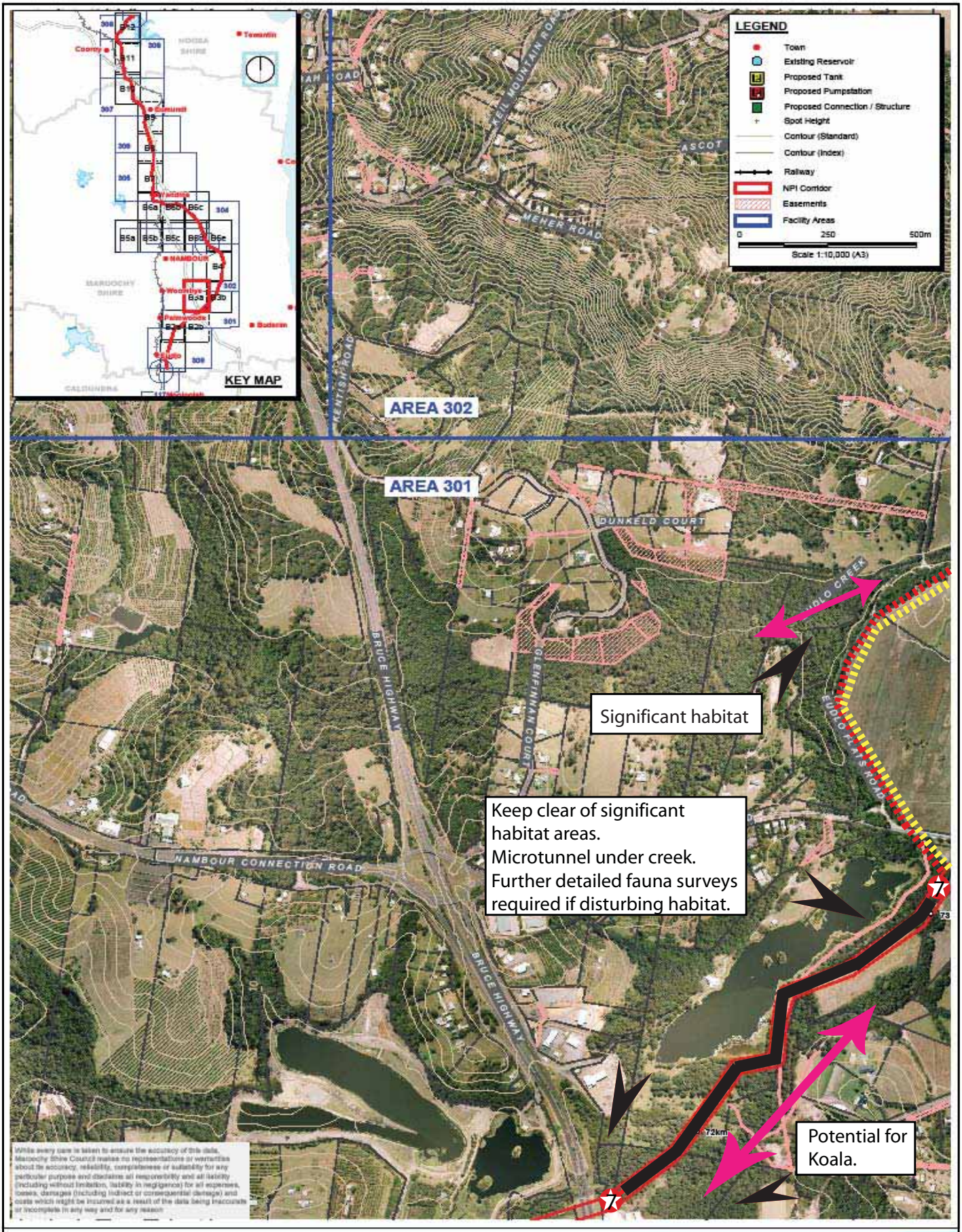
FIGURE 4.8
SRWPA Map B2b

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

- Habitat Assessment Site
- SRWPA Alternative Route
- Regional Corridor
- BAAM Recommended Route
- Extent of Site

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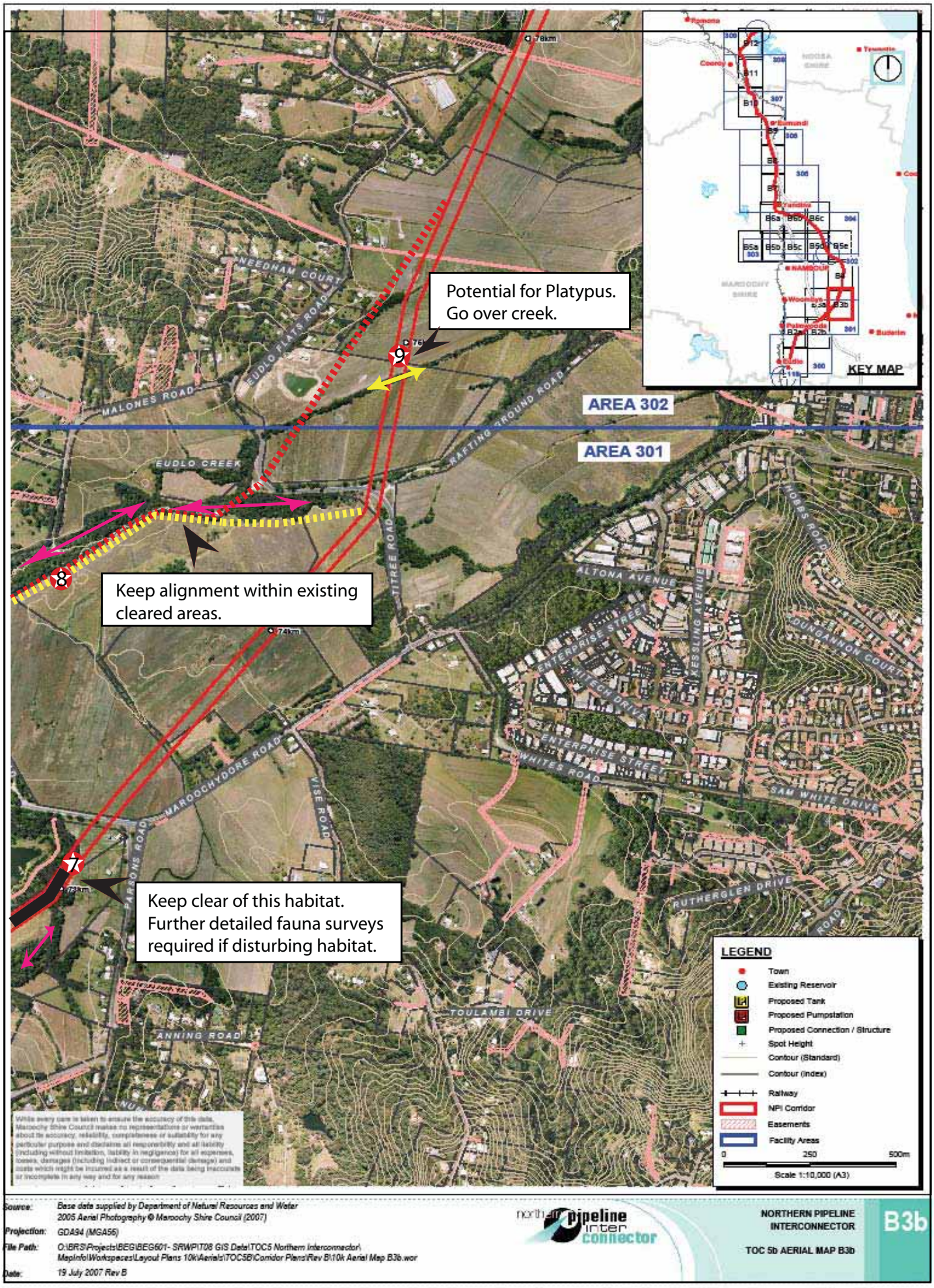
FIGURE 4.9
SRWPA Map B3a

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Source: Base data supplied by Department of Natural Resources and Water
2005 Aerial Photography © Maroochy Shire Council (2007)

Projection: GDA94 (MGA56)

File Path: O:\BRS\Projects\BEG\BEG601- SRWP\T08 GIS Data\TOC5 Northern Interconnector\MapInfo\Workspaces\Layout Plans 10k\Aerials\TOC5B\Corridor Plans\Rev B\10k Aerial Map B3b.wor

Date: 19 July 2007 Rev B

north pipeline inter connector

NORTHERN PIPELINE INTERCONNECTOR

TOC 5b AERIAL MAP B3b

B3b

Legend

- Habitat Assessment Site
- Local Corridor
- Regional Corridor
- SRWPA Alternative Route
- BAAM Recommended Route
- Extent of Site

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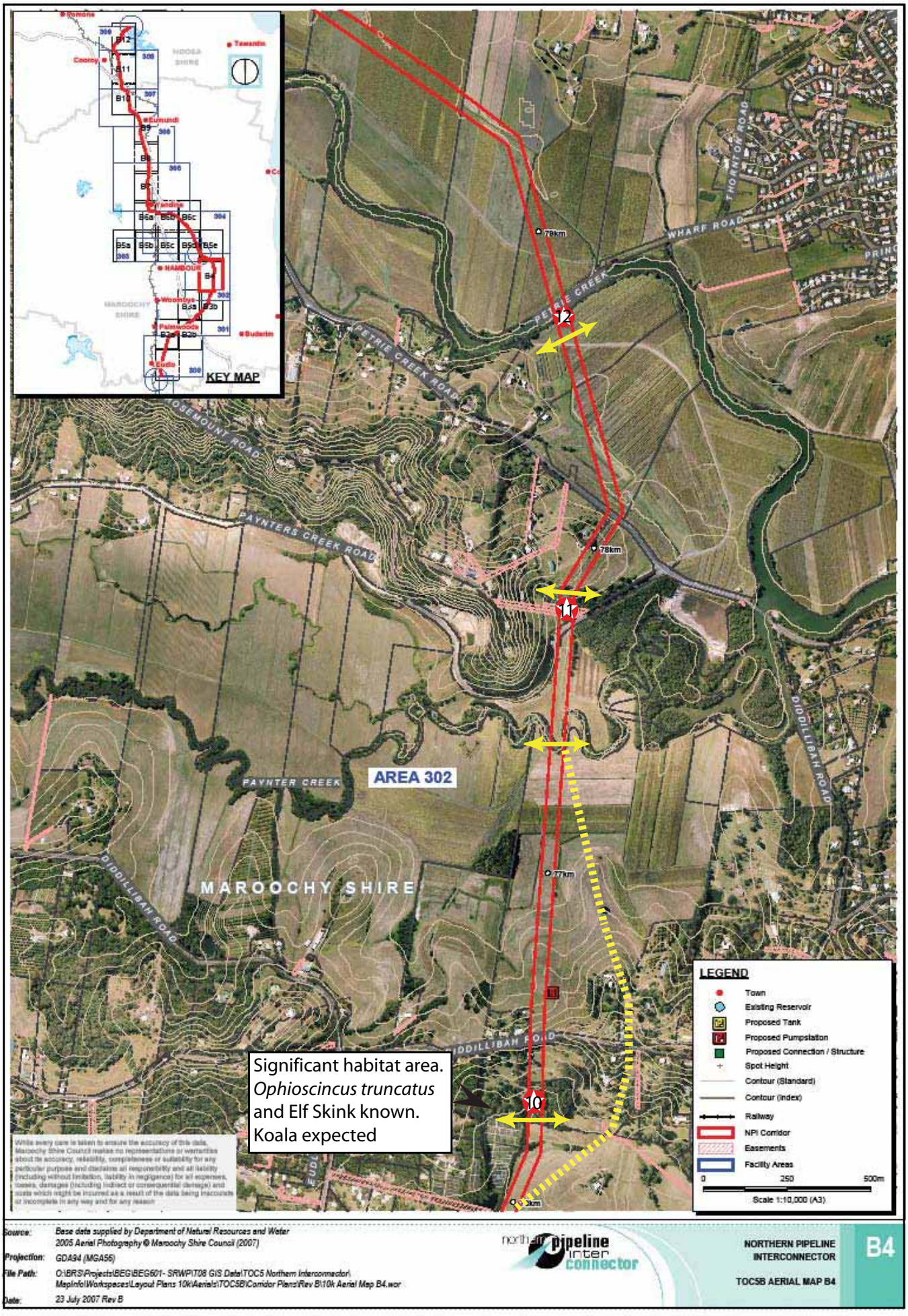
FIGURE 4.10
SRWPA Map B3b

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

- Habitat Assessment Site
- Local Corridor
- BAAM Recommended Route

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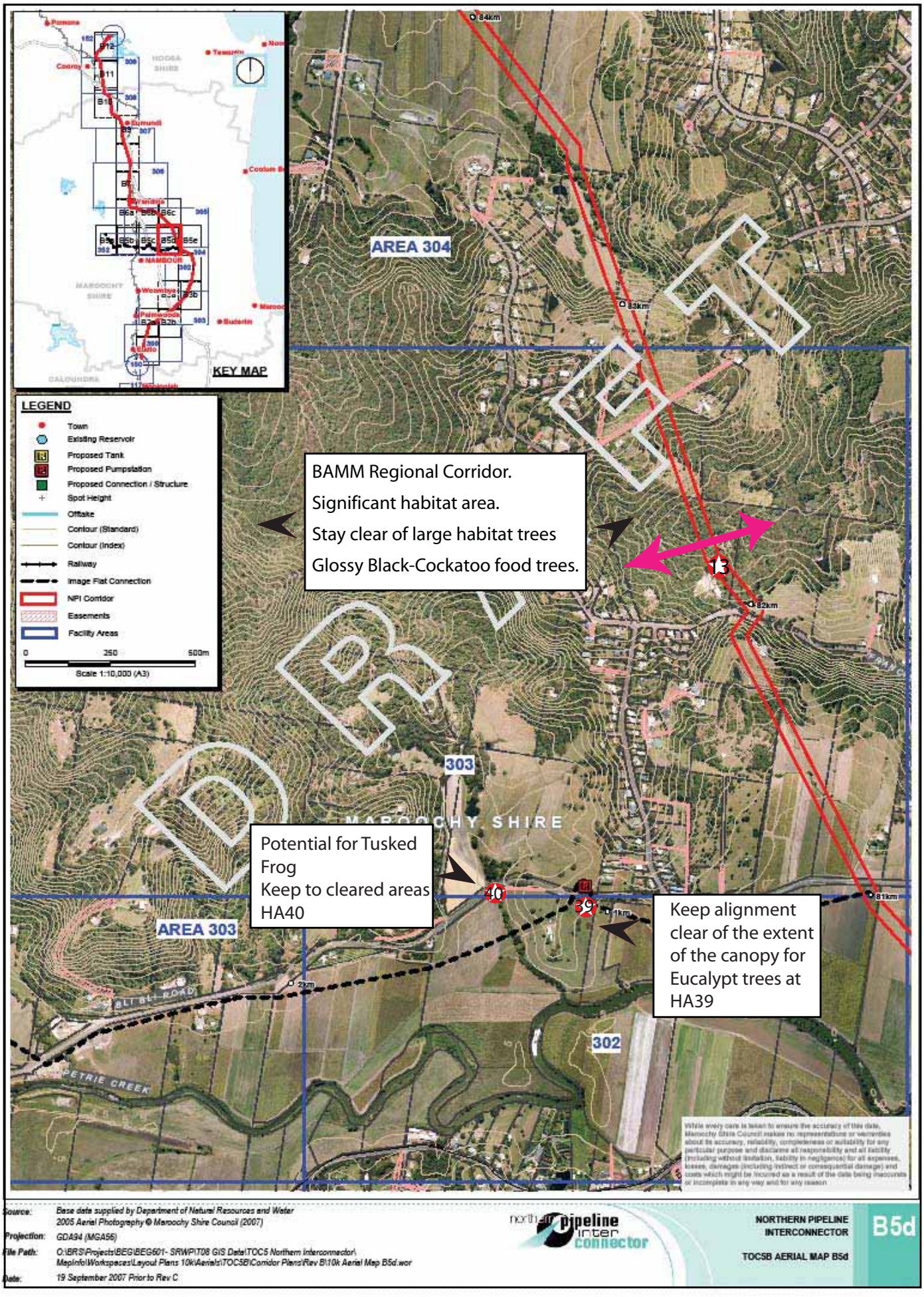
FIGURE 4.11
SRWPA Map B4

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

Habitat Assessment Site

Regional Corridor

FIGURE 4.12

SRWPA Map B5d

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

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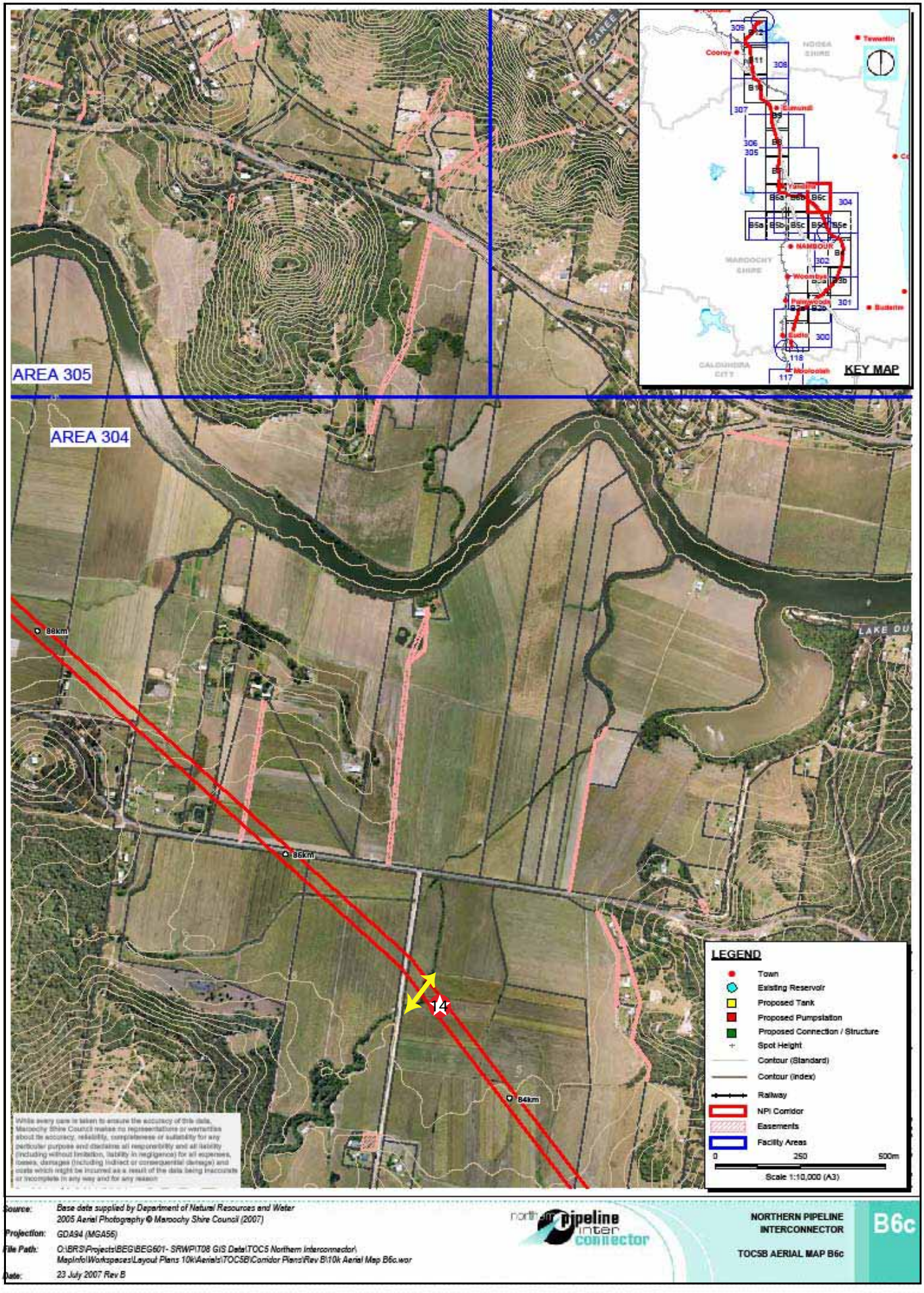

Legend

- Habitat Assessment Site
- Local Corridor

FIGURE 4.13
SRWPA Map B6c
SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

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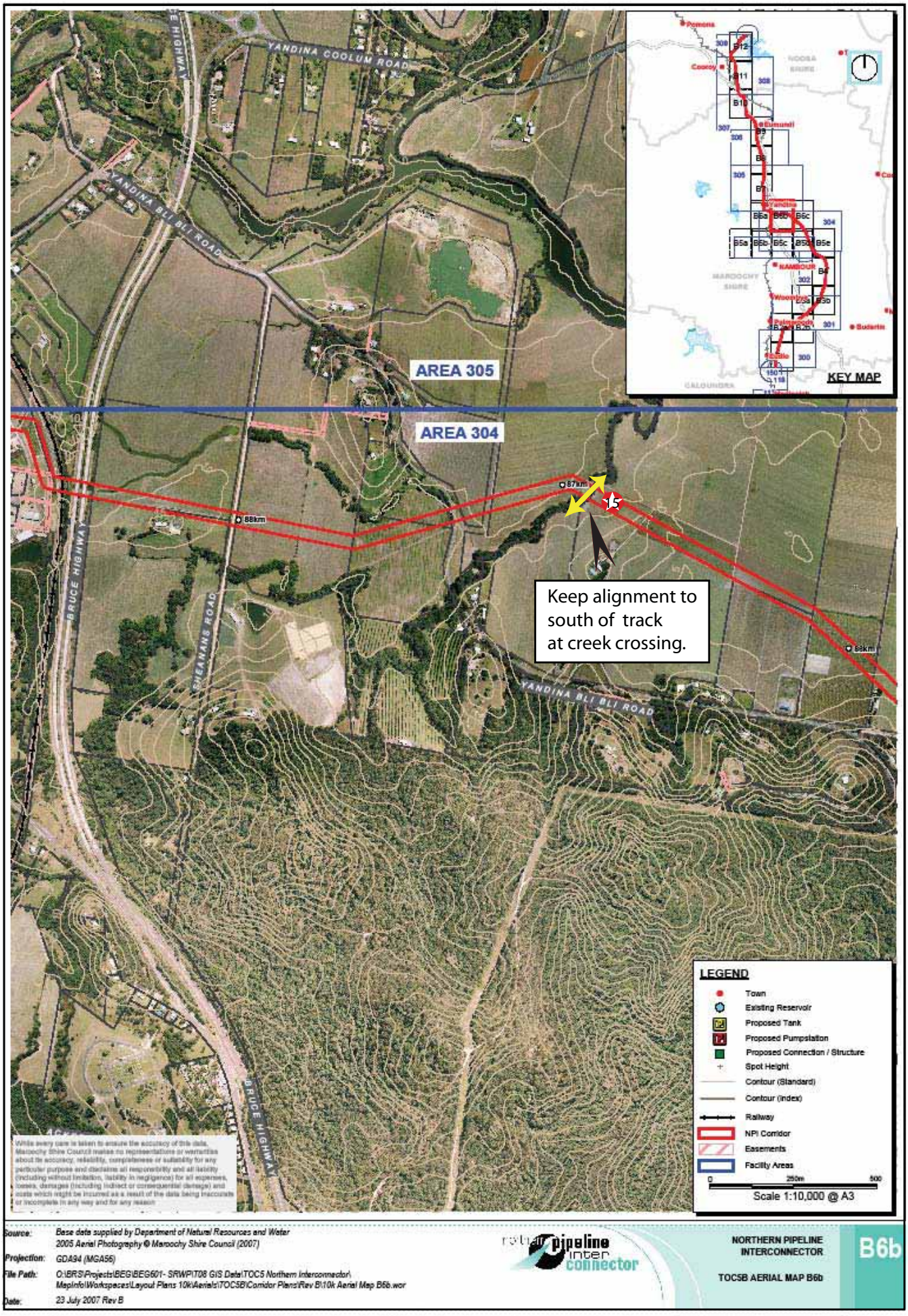

Legend

Habitat Assessment Site

Local Corridor

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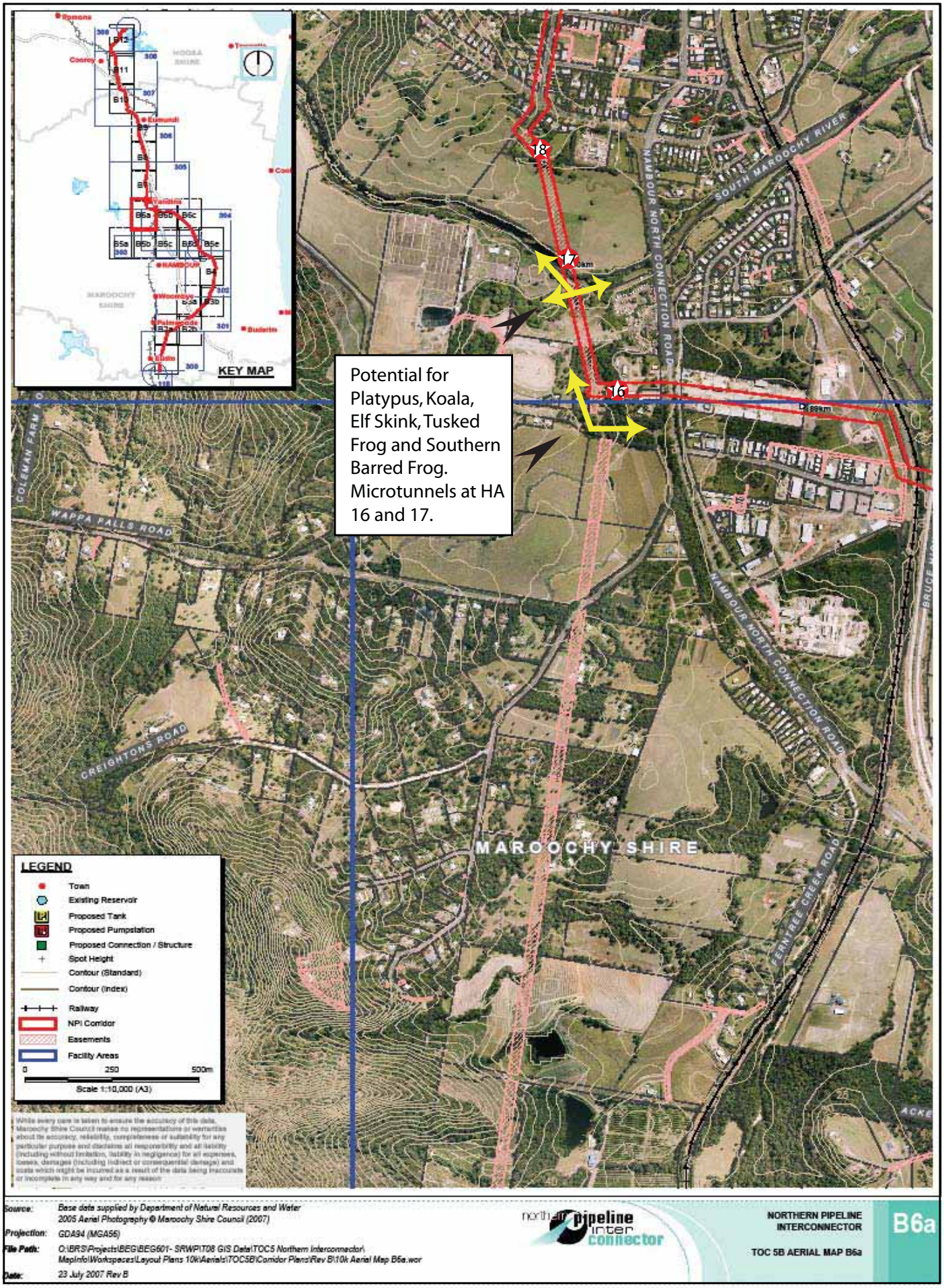
FIGURE 4.14
SRWPA Map B6b

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

Habitat Assessment Site

Local Corridor

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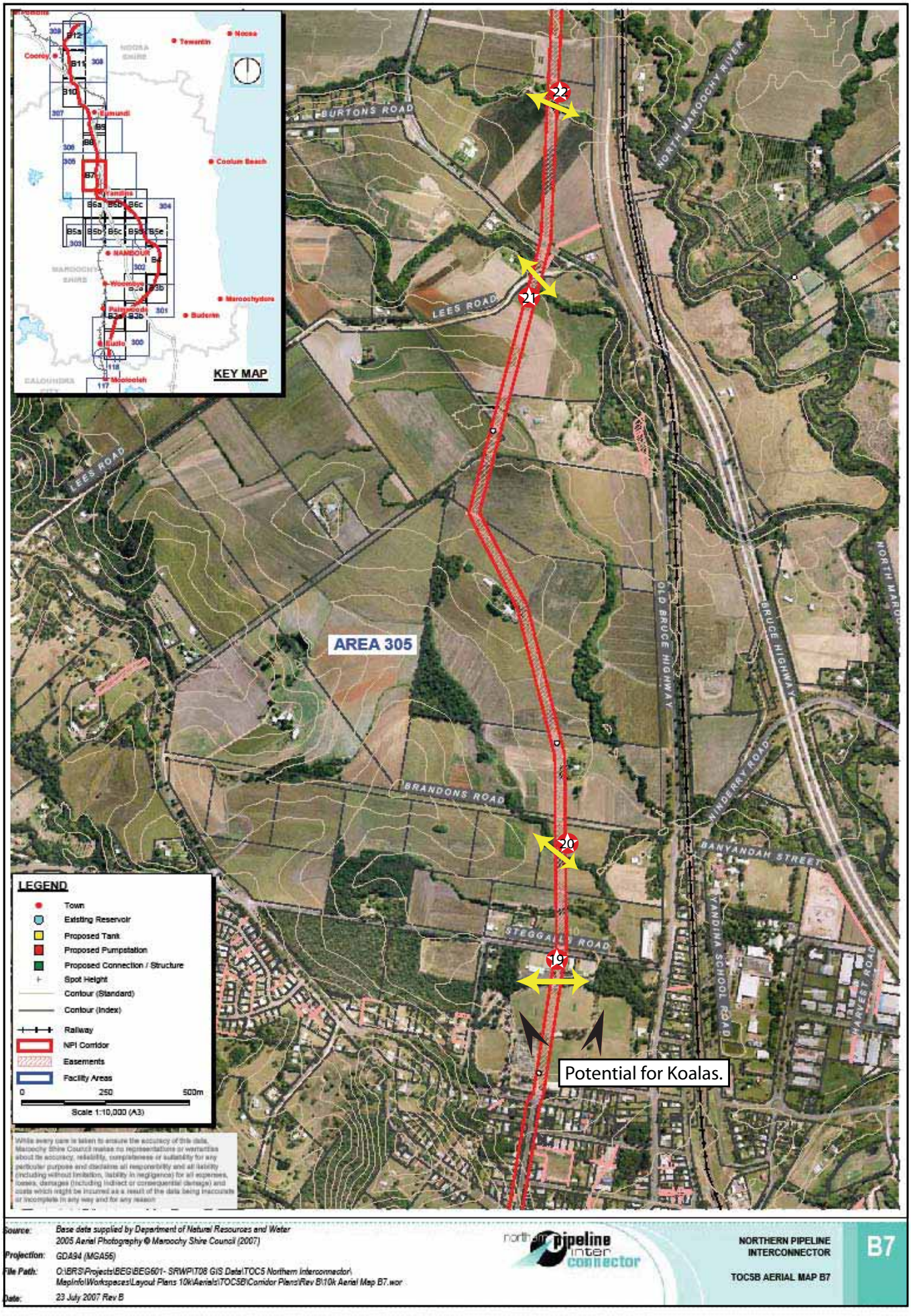
FIGURE 4.15
SRWPA Map B6a

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



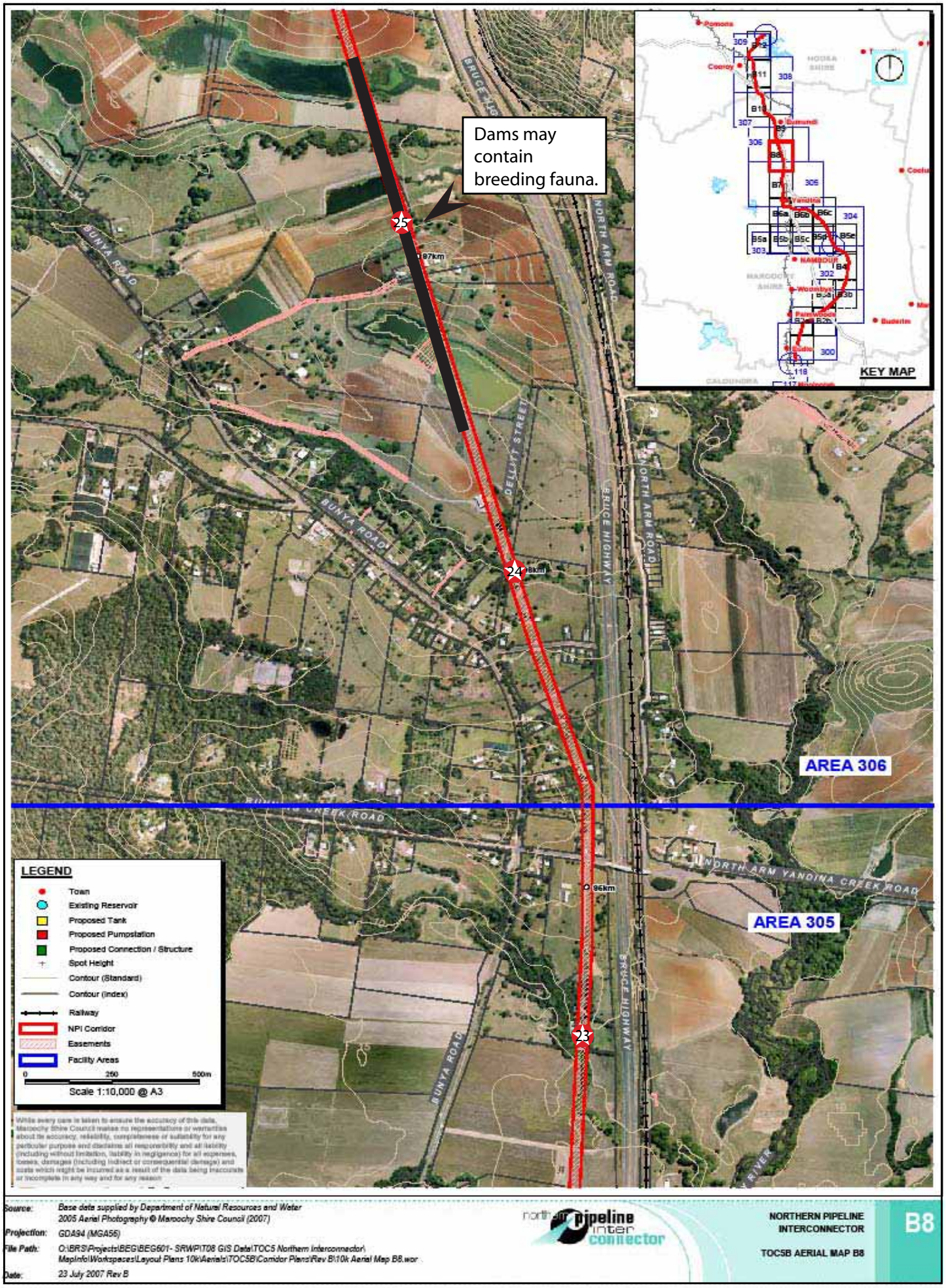
Legend

Habitat Assessment Site

Local Corridor

Biodiversity Assessment and Management Pty Ltd

FIGURE 4.16
SRWPA Map B7
SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

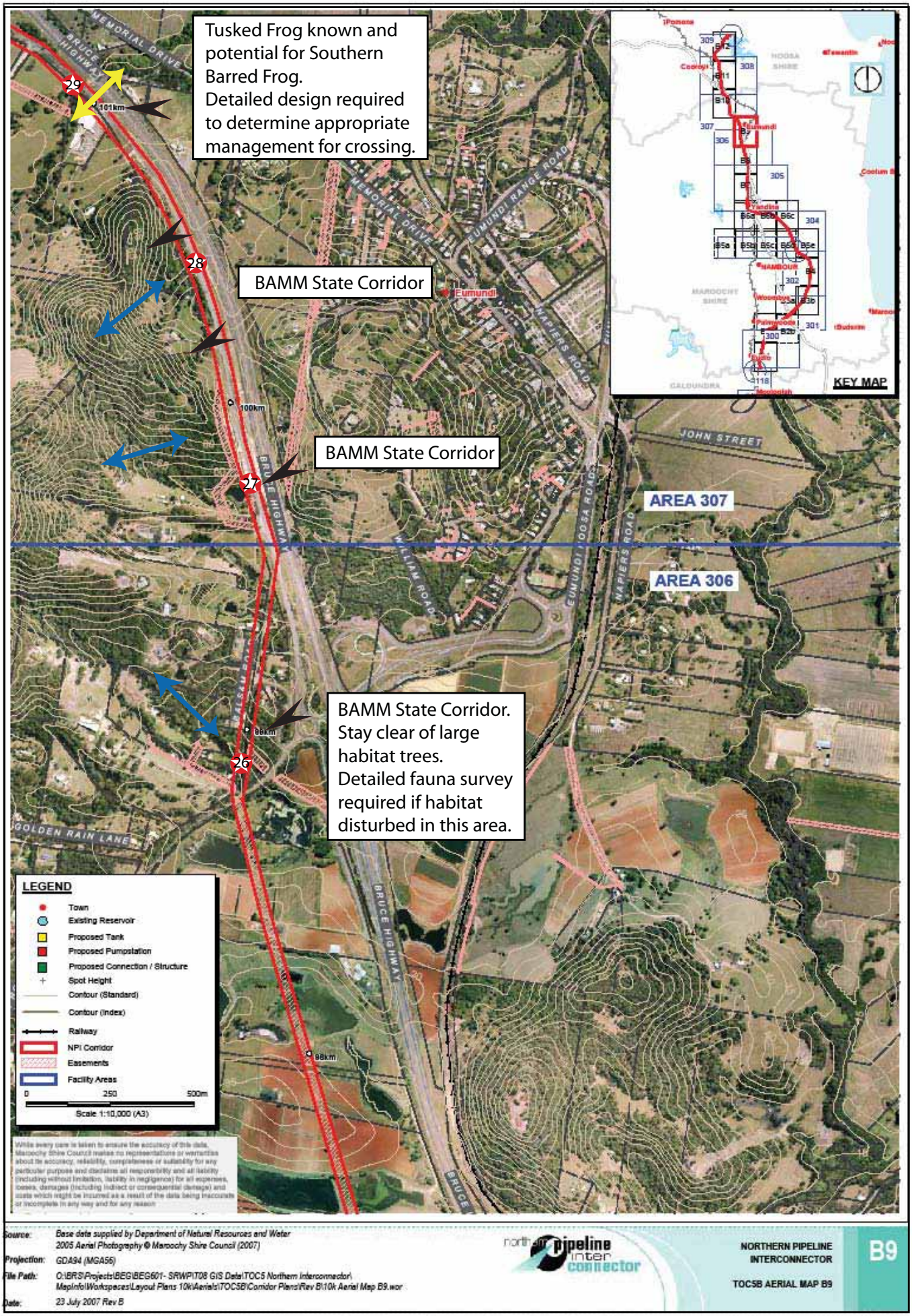
- Habitat Assessment Site
- Extent of Site

Biodiversity Assessment AND MANAGEMENT PTY LTD

FIGURE 4.17

SRWPA Map B8

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



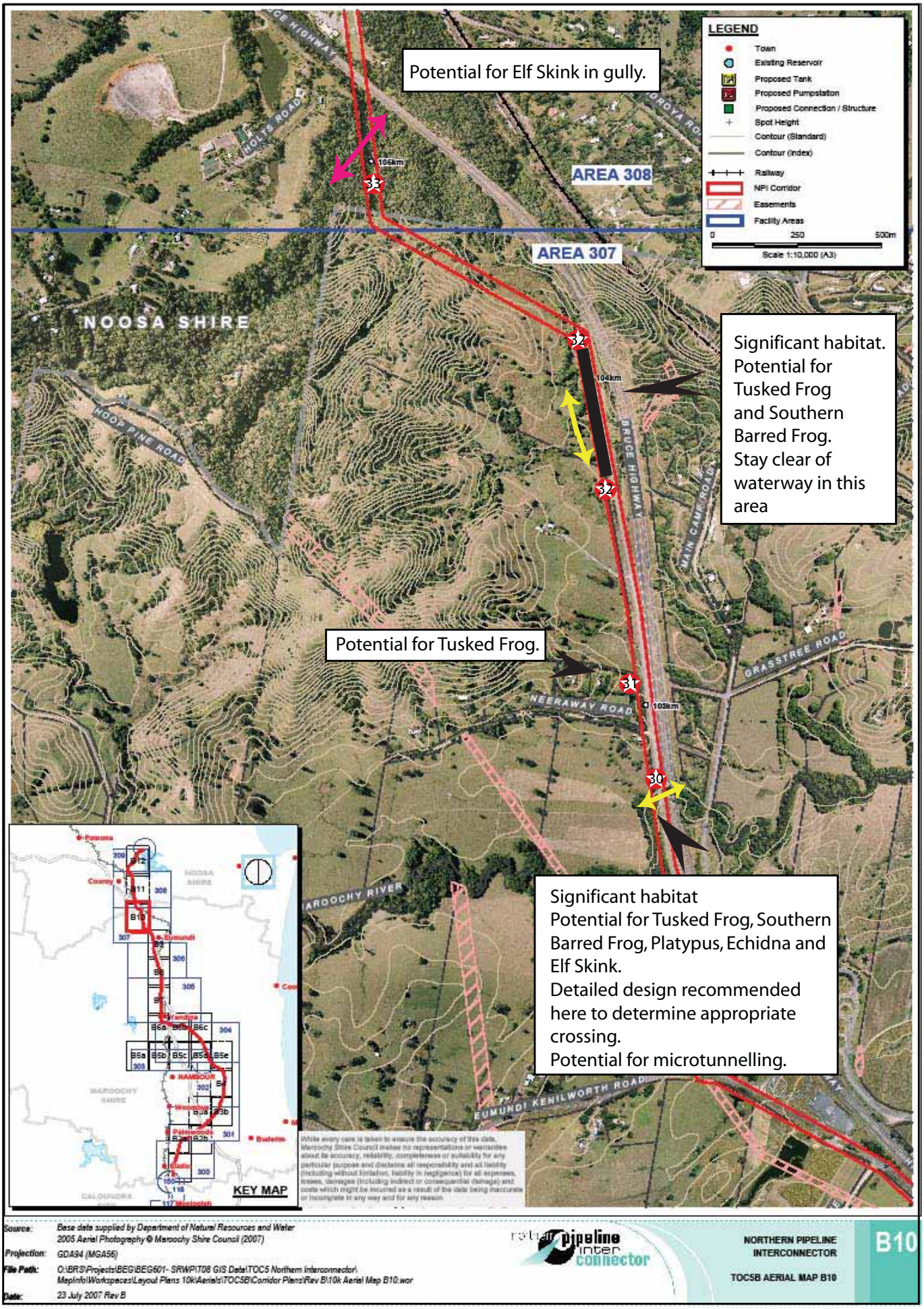
Legend

- Habitat Assessment Site
- State Corridor
- Local Corridor

FIGURE 4.18
SRWPA Map B9

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

Biodiversity Assessment AND MANAGEMENT PTY LTD



Legend

- Habitat Assessment Site
- Extent of Site
- Regional Corridor
- Local Corridor

FIGURE 4.19
SRWPA Map B10

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

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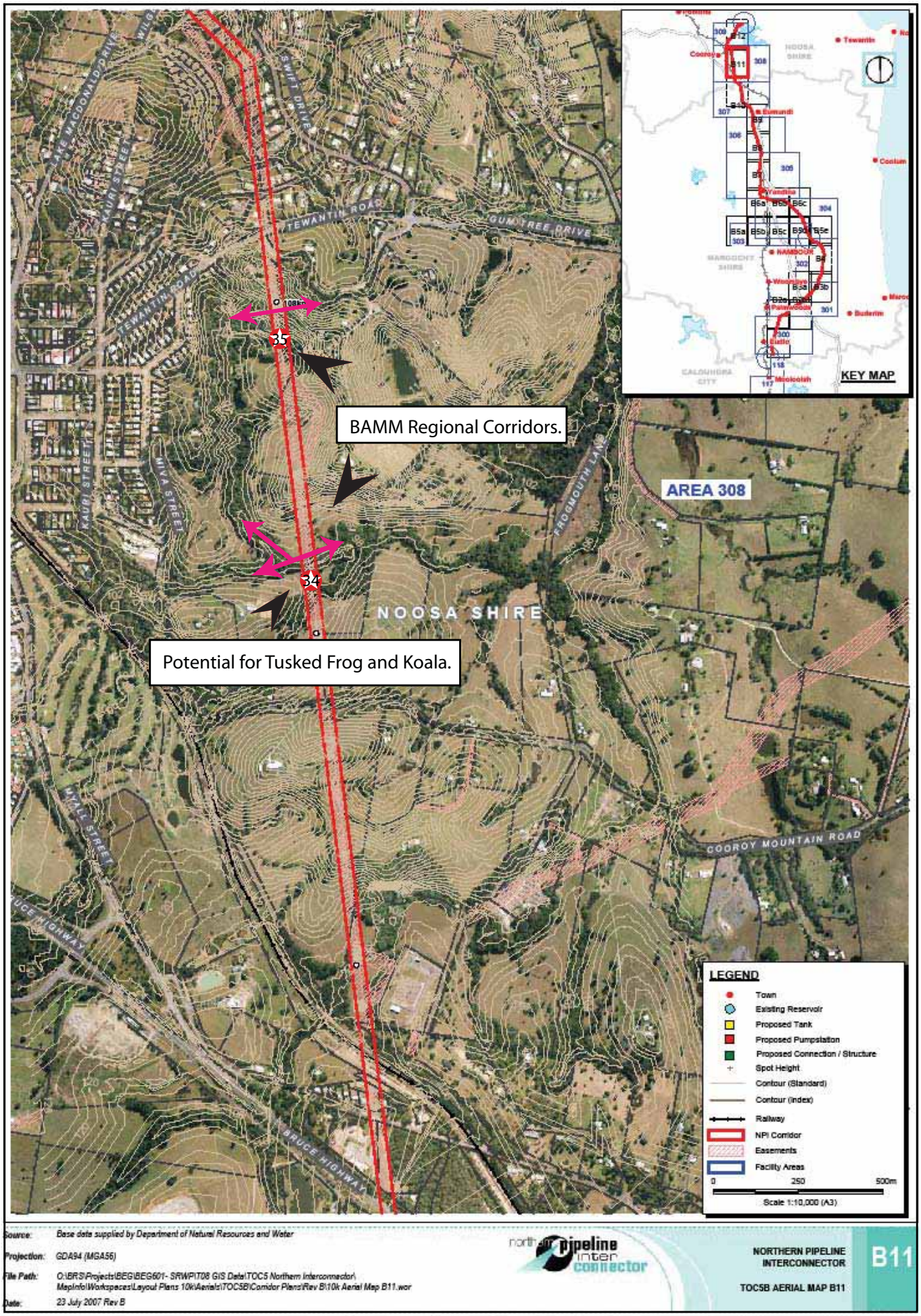


Legend

Habitat Assessment Site

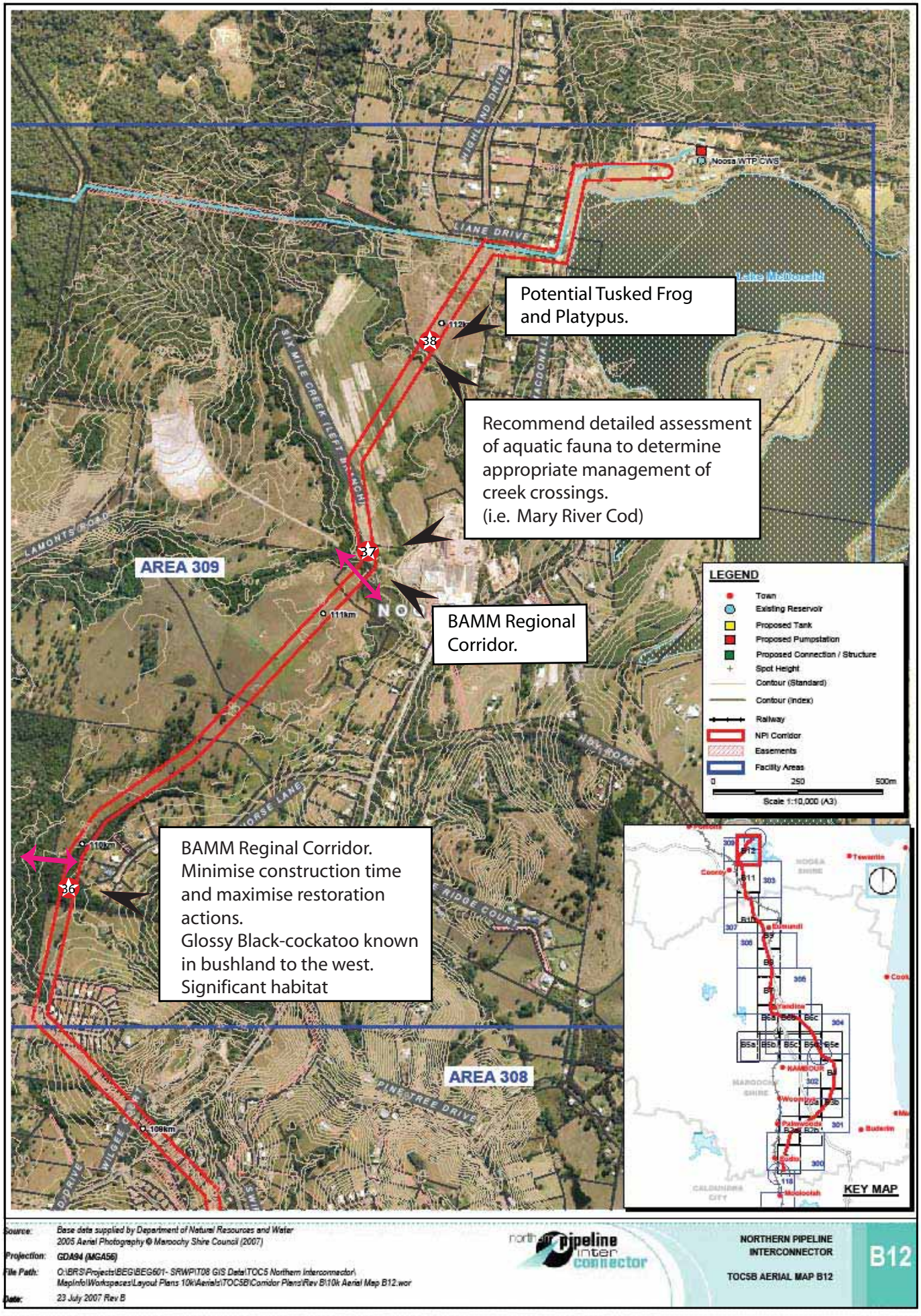
Regional Corridor

Biodiversity Assessment and Management Pty Ltd

FIGURE 4.20

SRWPA Map B11

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

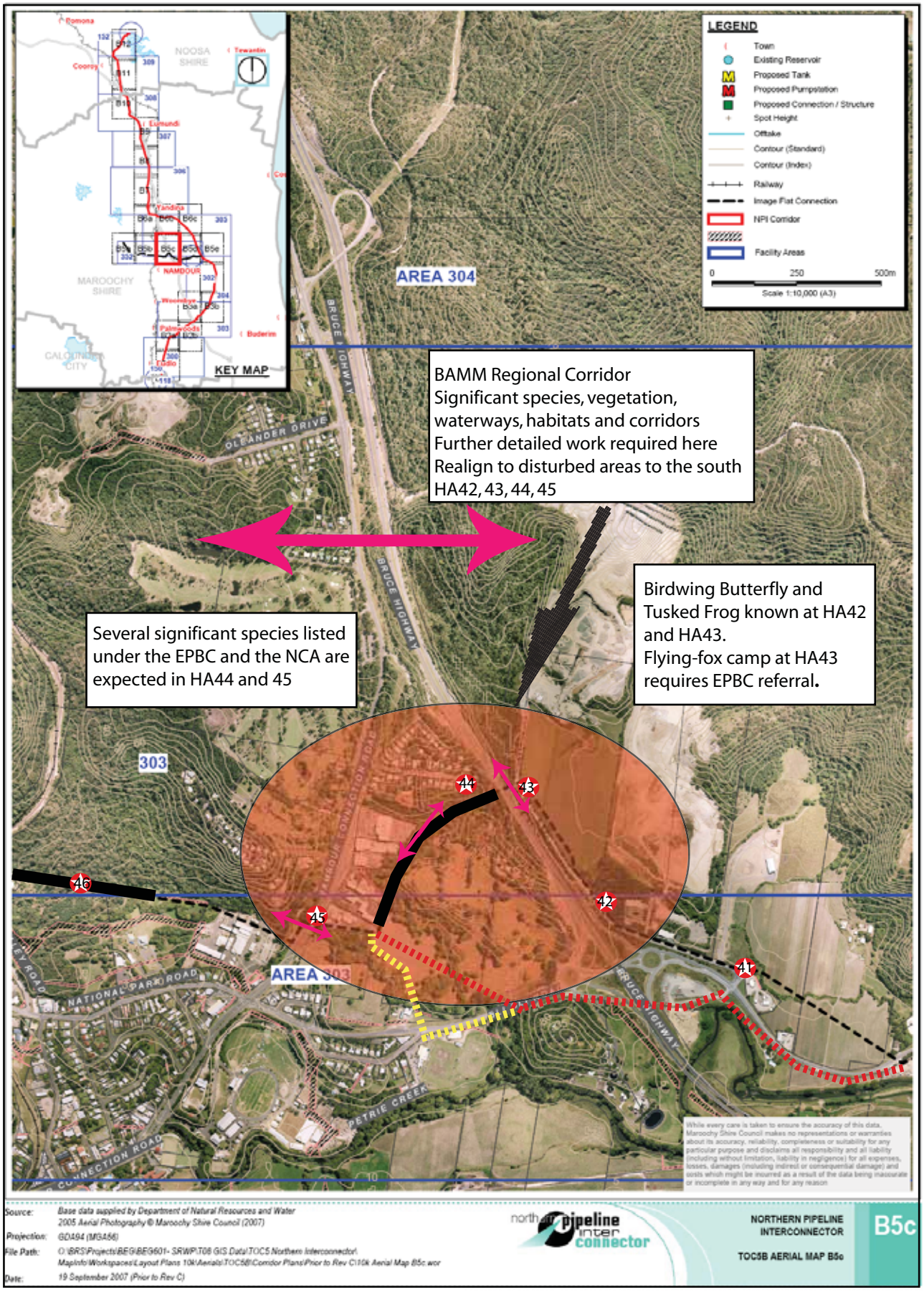
- Habitat Assessment Site
- Regional Corridor

Biodiversity Assessment and Management Pty Ltd

FIGURE 4.21

SRWPA Map B12

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



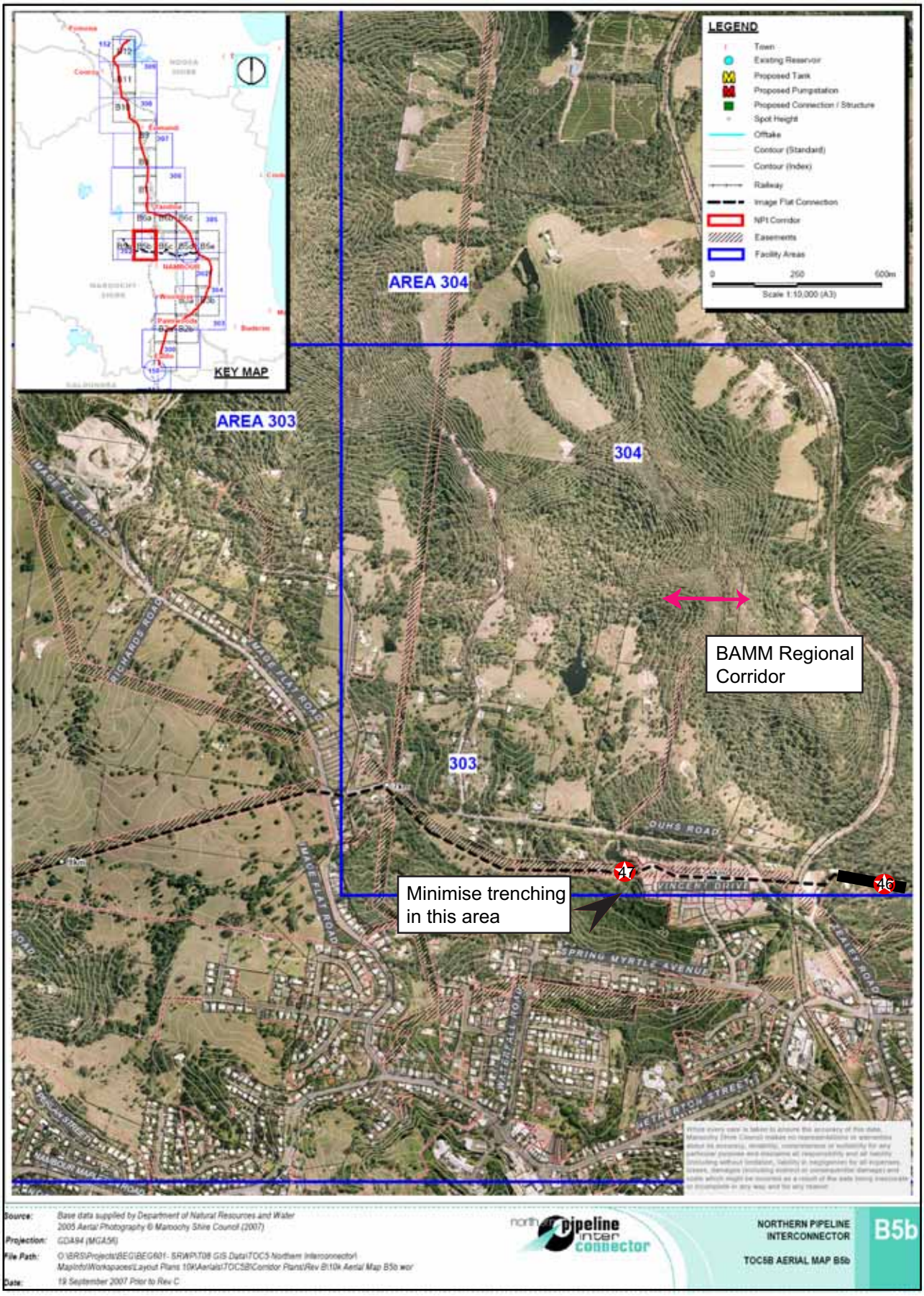
Legend

- Habitat Assessment Site
- Regional Corridor
- Extent of Site
- SRWPA Alternative Route
- BAAM Recommended Route
- Significant habitats within this area. Recommend realignment

Biodiversity Assessment and Management Pty Ltd

FIGURE 4.22
SRWPA Map B5c

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA



Legend

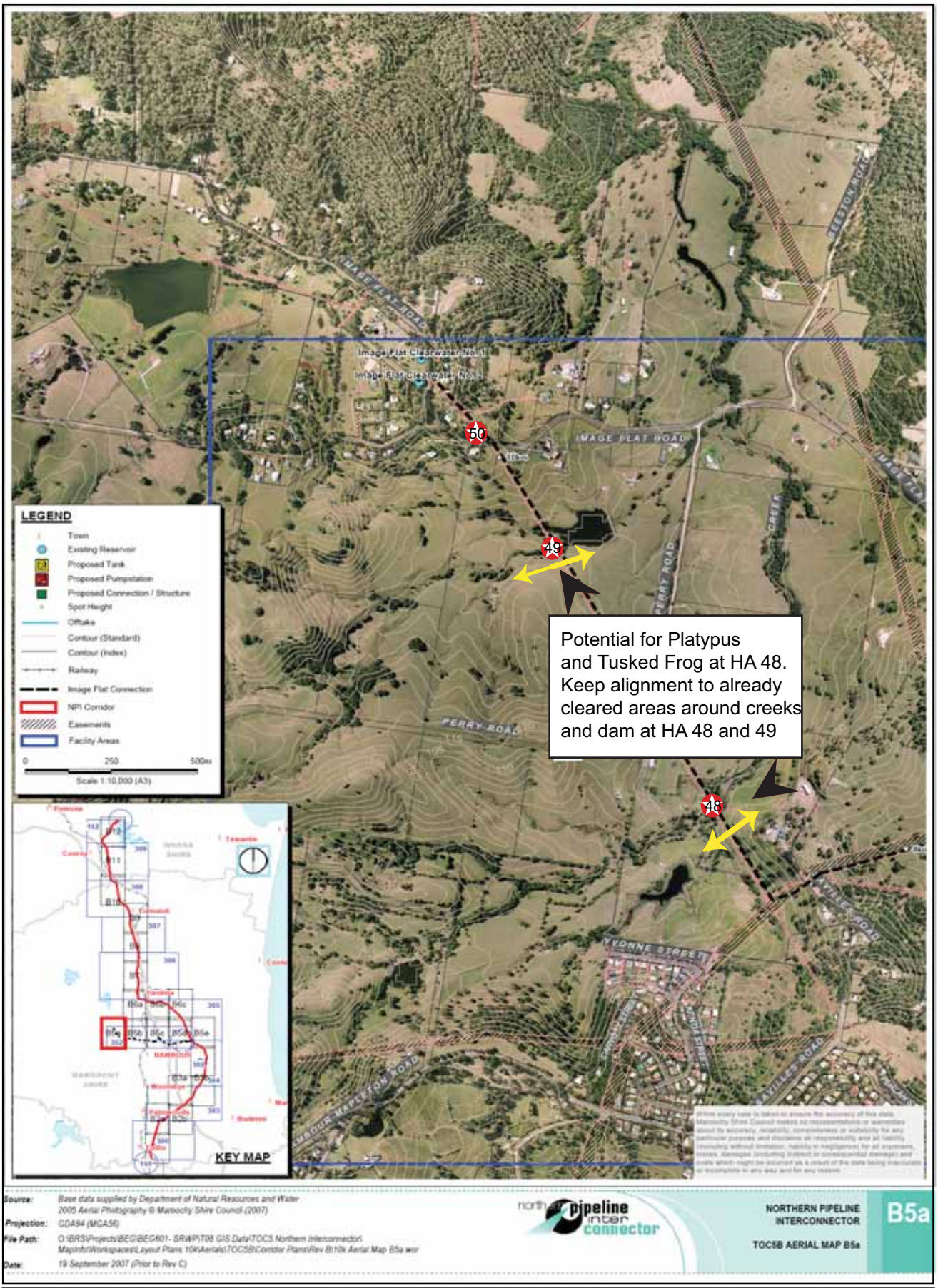
- Habitat Assessment Site
- Regional Corridor
- Extent of Site

FIGURE 4.23

SRWPA Map B5d

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

Biodiversity Assessment AND MANAGEMENT PTY LTD



Legend

- Habitat Assessment Site
- Local Corridor
- Extent of Site

Biodiversity Assessment AND MANAGEMENT PTY LTD

FIGURE 4.24
SRWPA Map B3a

SRWPA Northern Pipeline Interconnector - Stage Two PTVFHA

5.0 IMPACTS AND MITIGATION

5.1 POTENTIAL IMPACTS

If extant vegetation and habitat values of the surrounding lands are maintained, there will be opportunity for most fauna species to maintain their presence and to recolonise disturbed areas following the pipeline construction phase, providing there is appropriate rehabilitation of fauna habitat values.

The SRWPA (2006:11-12) identified potential impacts to fauna and associated habitats during the construction phase in their Fauna management Plan. These are listed below along with a number of other potential impacts to fauna that can result from the proposed NPI alignment including:

- Loss of native vegetation and associated fauna habitat;
- Temporary disruption to state, regional and local corridors;
- Trenching work and other excavations may trap small to medium sized terrestrial fauna that are unable to exit the trench unassisted. Trapped and/or injured fauna contained in the trench are more susceptible to predation, dehydration and physical impact;
- Fauna mortality from increased construction traffic on public roads and the construction right of way;
- Temporary displacement of fauna from within the construction corridor;
- Freshly exposed soils and stockpiling may attract foraging species such as birds, rodents and reptiles. These species may be exposed to an increased risk of physical harm because of heavy vehicle movements;
- There is potential for refuge and breeding ground destruction as rocks and fallen timbers are relocated for ground dwelling animals, and shelters such as underground hollows and burrows are excavated displacing fauna such as snakes and lizards;
- There may be temporary or permanent loss of food source and protection resources associated with clearing of vegetation. Clearing may limit food foraging habitat, especially for nectivores, and decrease linkages between intact habitats;
- Replacement of weed species with native and other changes to the understorey and floristics during rehabilitation may encourage new fauna species to an area where they were previously absent. Alternatively improper management of weed species post construction may provide a resource to fauna species not previously occurring within the corridor. It is important to note that some heavy woody weed infestations provide important structural habitat for small bird and mammal species;
- Wastes at the work site during construction such as food scraps, may encourage undesirable pest fauna species to the area by providing a food source;
- Direct loss of terrestrial and aquatic habitats because of trenching activities;
- Temporary reductions in grazing habitat for macropods in open grasslands;
- Interruption of movement for arboreal fauna through decreased connectivity of canopy. (Note: glider distances generally less than 30 m);
- Change in fire regime - temporary fire break until revegetation matures;
- Disruption to stream banks;
- Reduction in water quality resulting from untreated runoff (i.e. Increasing turbidity in aquatic fauna habitat;;
- Alterations to natural flow regimes in waterways;
- Changes to light and wind and water temperatures at waterway crossings resulting from loss of canopy cover;
- Erosion and sedimentation on surrounding environments resulting from earthworks associated with the construction phase; and
- Temporary increase in dust and noise pollution.

Specific terrestrial vertebrate fauna groups that may be impacted from the proposed NPI alignment are nesting birds, Koalas and other arboreal mammals, reptiles, and amphibians inhabiting the wetlands as well as introduced species such as the Cane Toad and the Black Rat.

Weeds were present in most locations throughout the proposed NPI alignment. Of

particular note is the presence of Camphor laurel *Cinnamomum camphora,* which dominates riparian vegetation along many of the waterways, and is listed as a class 3 weed species under the Lands Protection (*Pest and Stock Route Management) Act 2002* (LPA).

There is a requirement to rehabilitate disturbed areas following the operational works stage resulting in a 'better than before' outcome using locally native species and provenance and having regard for the habitat requirements of particular species where appropriate.

The extent of potential impacts of the proposed NPI alignment and its effect on fauna species long-term ability to inhabit the subject land is dependent on:

- Whether the species is present within, dependant on, or restricted to the vegetation and/or microhabitat that is to be disturbed or removed;
- The extent and type of vegetation and/or habitat retained;
- Ongoing management and protection of future habitat values following the rehabilitation phase including management of weed and feral animal invasion;
- The control of domestic animals on the site; and
- Infrastructure design, location and type of fencing used in the construction phase.

5.2 MITIGATION STRATEGIES

This section details the specific measures to be implemented to minimise the impacts on significant species and habitat values and to specify appropriate management responses. These strategies are designed to ensure the project is conducted accordance with the SRWPA fauna management plan as detailed in SRWPA (2006).

The following actions are recommended to minimise localised and downstream impacts to vertebrate faunal assemblages and associated habitat values in the habitat areas identified along the proposed NPI alignment:

- Wherever possible, disturbance to native vegetation, particularly habitat trees and aquatic habitat should be avoided;
- Preserve water quality and retain as much riparian vegetation as possible. A Sedimentation Control Plan should include detailed design and monitoring to ensure works do not degrade waterways or water-bodies where possible;
- An experienced fauna spotter/catcher must be on site prior to the commencement of any vegetation clearing or habitat disturbances to identify fauna in and around areas to be disturbed. The fauna spotter will check and clear vegetation prior to its felling. If necessary, the fauna spotter will relocate native wildlife into nearby habitat areas which are to be retained;
- The fauna spotter must check dam walls, ledges, overhangs for dens and/or animals prior to any works disrupting stream banks, dam walls or the like. Aquatic fauna species should be relocated upstream of the proposed works whenever possible;
- In the case of any injuries to animals caught in trenches, or during any phase of construction, veterinary advice should always be sought;
- Ensure the project and its associated vehicular movements do not allow or provide for the spreading of environmental or agricultural weeds listed under the LPA. Weed management should be conducted in compliance with a specific Weed Management Plan;
- Ensure appropriate fencing, as per section 5.1 of the SRWPA Fauna Management Plan (SRWPA, 2006) is erected surrounding any excavated areas to exclude fauna from becoming trapped in trenches;
- Ensure that monitoring of restoration and revegetation works also includes monitoring of feral animals to ensure works have not provided an advantage for feral species, particularly foxes;
- The final alignment should have regard for mapped Regional Ecosystems and Essential Habitat for EVR species listed in Table 4.1 as well as the BAMM State and Regionally significant corridors;
- Where the alignment breaches any waterway/dams particular attention is required to ensure the minimal amount of disturbance to the receiving environment and to maximise restoration efforts. Restoration should aim to restore waterway banks. Detailed design for the project within these areas is recommended;

- Where native habitat is disturbed, habitat restoration should be carried out using local provenance species;
- All construction works should be in compliance with the Hygiene Protocol for the Control of Disease in Frogs (NPWS 2001); and
- A review of the overall habitat loss and disturbance and subsequent rehabilitation/ restoration actions should be undertaken to determine the overall success of the recommended mitigation strategies and to identify further works if required.
- Appropriate sediment and erosion control is essential in all phases of the proposed works.

Once the final alignment has been decided, it is recommended that the following issues be addressed in detail with regard to the impacts to fauna and habitat:

- Fauna Management Plan;
- Weed management Plan;
- Native Vegetation Rehabilitation Plan;
- Erosion and Sedimentation Control Plan;
- Waterway crossings; and
- Further detailed survey work.

6.0 RECOMMENDED MITIGATION

6.1 PREFERRED ALIGNMENT OPTIONS

The following recommendations as to the specific alignment and/or treatment of river/creek crossings are designed to minimise disturbance and impact to native vegetation and habitat:

NPI Corridor:

- Chevallum Road (HA 4, 69km marker, **Figure 4.7**: SRWPA Map B2a). Constrain disturbance in this area as there is significant vegetation either side of the road (i.e.particular attention to south of Chevallum Road);
- Minimise disturbance to significant native vegetation in this area with particular attention to vegetation located west of Winston Road South (HA 5, west of 70 km marker, **Figure 4.8**: SRWPA Map B2b);
- The alignment would be better suited located in the road reserve to the south of Eudlo Creek at crossings west of the Bruce Highway (HA6, in the vicinity of the 71km marker **Figure 4.8**: SRWPA Map B2b);
- Alignment should stay clear of vegetation and dam in areas between the Bruce Highway and Maroochydore Road where possible. Micro-tunnelling recommended for the Eudlo Creek crossing and associated habitats (HA 7, 71.5 – 73 km marker, **Figure 4.9**: SRWPA Map 3a);
- Eudlo Flats Road Alternative. (HA 8, **Figure 4.9 – 4.10**: SRWPA Map B3a-b). Alignment should be located in cleared areas, well away from mature habitat trees along Eudlo Flats Road and TI Tree Road. The recommended alignment would follow the SRWPA alternative route but would continue further to the east to rejoin the proposed alignment to avoid riparian and old growth habitat areas to the north. (HA 8, **Figure 4.10**: SRWPA Map B3b) ;
- Where the NPI is proposed to cross Eudlo Creek south of 75km mark (HA 9, **Figure 4.10**: SRWPA B3b), it may be appropriate to go over the creek in this location to minimise disturbance to narrow riparian corridor of native vegetation;
- In vegetated areas south of Diddillibah Road (HA 10, **Figure 4.11**: SRWPA Map B4), the alignment should be relocated to more disturbed areas approximately 250m to the east of the current alignment if possible;
- In vegetated areas north of Francis Road (HA 13, **Figure 4.12**: SRWPA Map B5d) direct alignment away from large habitat trees to more disturbed areas (i.e. easement to the east);
- Where the NPI is proposed to cross Caboolture Creek near the 87km mark (HA 15, **Figure 4.14**:SRWPA Map B6b), the alignment should be located in already cleared areas on the southern side of the existing track/creek crossing;
- Recommend micro-tunnelling at the South Maroochy River and tributary crossings at the 89.5 and 90km markers (HA 16 and 17, **Figure 4.15**: SRWPA B6**a**);
- The proposed alignment should stay clear of large habitat trees and native vegetation along Balsam Road in the vicinity of the 99km marker (HA 26, **Figure 4.18**: SRWPA Map B9);

- The alignment should be located in where there is minimal disturbance to native vegetation and habitat where it crosses the Maroochy River in the vicinity of the 102.5 km marker Micro-tunnelling is recommended in this area (HA 30, **Figure 4.19**: SRWPA Map B10); and
- The proposed NPI alignment should stay clear of native vegetation and natural waterways where it is located the west of Strong Lane (HA 32, **Figure 4.19**: SRWPA Map B10);
- Realign NPI corridor to cleared areas if possible (HA36, **Figure 4.21**: SRWPA Map B12).

Image Flat Connection:

- Keep alignment and associated construction works away from the line at the extent of the canopy for habitat trees located the paddock across Bli Bli Yandina Road from the proposed location of the pump station (HA39, **Figure 4.12**: SRWPA B5d);
- Alignment should cross the creek in a previously cleared area located just south of Bli Bli Road (HA40, **Figure 4.12**: SRWPA B5d);
- The recommended option for the alignment is to avoid HA41-45 and follow the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B). A variation of this alignment is shown on **Figure 4.22**: SRWPA Map B5c (version: 19 September, 2007 (Prior to revision C)).

6.2 FURTHER WORK

Specific areas will require more detailed fauna survey work prior to the determination of a final NPI alignment and prior to the removal of significant native vegetation and/or habitat loss or disturbance to important riparian ecosystems. In addition the proponent is required to address the performance requirement and provide acceptable solutions as per the 'Regional Vegetation Management Code: Southeast Queensland Bioregion: Part S: Requirements for clearing for significant projects'.

Further work is required in the following areas:

NPI Corridor:

- Eudlo Creek, large dam and significant vegetation situated between 71.5 and 73 km (HA 7, **Figure 4.10**: SRWPA Map B3b);
- Vegetated areas to the north of Frances Road should be surveyed for the presence of fauna within the alignment prior to the removal of vegetation for the construction phase of the NPI (HA 13: **Figure 4.12:** SRWPA Map B5d);
- A detailed fauna survey should be conducted in vegetated areas along Balsam Road (HA 26, **Figure 4.18**: SRWPA B9) if the alignment is to disturb significant habitat trees to establish the extent of occupation by native fauna and to ensure an appropriate management response prior to construction stage;
- Although Sandy Creek and Maroochy River are disturbed (i.e. where the Bruce Highway crosses the waterways), there are significant species and habitats present. The finalised alignment and corridor should be subject to detailed design in this location to minimise ecological impacts (Ha 29, 30, **Figure 4.19**: SRWPA Map B10);
- The construction phase for HA 36 (**Figure 4.21**: SRWPA Map B12) should be designed to: ensure minimal corridor width, to minimise the construction time, and maximise restoration actions; and
- Given the proximity to known Mary River Cod populations, further detailed assessment of the aquatic fauna is required to determine appropriate management of the crossing at this site (HA38, **Figure 4.21**: SRWPA B12).

Image Flat Connection:

- A referral to the DEWR is required for approval under the EPBC prior to conducting any works in areas that may disturb the Flying-fox camp (HA43, **Figure 4.22**: SRWPA Map B5c);
- Further detailed fauna survey work is required for the area encompassing HA41-45 should the plans progress past this point (**Figure 4.22**: SRWPA Map B5c); and
- Tuckers Creek and surrounds should be checked for the presence of significant frog species in suitable weather conditions.

7.0 CONCLUSIONS

The requirement of a 40 m corridor along the alignment will result in the loss of native vegetation and associated habitats in specific locations (see **Section 5.0**). Overall, the proposed works will result in the loss of some vegetation and habitat values and/or a temporary disturbance to habitats and fauna movement opportunities along the NPI alignment

The proposed NPI alignment triggers referral to the DEWR and assessment under the EPBC if the proposed works intend to encroach on the Flying-fox camp located east of the Bruce Highway in the vicinity of Nambour along the proposed Image Flat Connection (HA43: **Figure 4.22**: SRWPA Map B5c).

Where vegetation clearing is proposed in areas identified as Essential Habitat, compliance with the 'Regional Vegetation Management Code: Southeast Queensland Bioregion: Part S: Requirements for clearing for significant projects' is necessary. In addition, several listed species must be addressed with regard to the NCA.

The final alignment should stay clear of BAMM mapped state and regional corridors where possible and ensure the immediate remediation of any disturbances within these areas.

Overall, provided the vegetation management codes are addressed and the recommended management actions are adopted throughout all phases of the project, the potential ecological impacts of the project can be successfully mitigated.

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Appendix 1
Commonwealth EPBC Online Protected Matters Search Tool Results

NPI CORRIDOR

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: -26.5350, 152.8472, -26.7700, 152.8472, -26.7700, 153.0805

World Heritage Properties
None

National Heritage Places
None

Ramsar Sites
2

Commonwealth Marine Areas
Relevant

Threatened Ecological Communities
None

Threatened Species
55

Migratory Species
39

Threatened Flora Species

Scientific Name	Common Name	Type of Presence	Status
Acacia attenuata		Species or species habitat likely to occur within area	Vulnerable
Allocasuarina emuina	Emu Mountain Sheoak	Species or species habitat likely to occur within area	Endangered
Allocasuarina thalassoscopic	Endangered	Species or species habitat likely to occur within area	Endangered
Baloghia marmorata	Marbled Balogia, Jointed Baloghia	Species or species habitat likely to occur within area	Vulnerable
Bulbophyllum globuliforme	Miniature Moss-orchid	Species or species habitat likely to occur within area	Vulnerable
Cryptocarya foetida	Stinking Cryptocarya, Stinking Laurel	Species or species habitat likely to occur within area	Vulnerable
Eucalyptus conglomerata	Swamp Stringybark	Species or species habitat likely to occur within area	Endangered
Floydia praealta	Ball Nut, Possum Nut, Big Nut, Beefwood	Species or species habitat likely to occur within area	Vulnerable

Graptophyllum reticulatum	Veiny Graptophyllum	Species or species habitat likely to occur within area	Endangered
Macadamia ternifolia	Small-fruited Queensland Nut	Species or species habitat likely to occur within area	Vulnerable
Macadamia tetraphylla	Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough-leaved Queensland Nut	Species or species habitat likely to occur within area	Vulnerable
Phaius australis	Lesser Swamp-orchid	Species or species habitat likely to occur within area	Endangered
Plectranthus torrenticola		Species or species habitat likely to occur within area	Endangered
Pouteria eerwah	Shiny-leaved Condoo, Black Plum, Wild Apple	Species or species habitat likely to occur within area	Endangered
Prasophyllum wallum		Species or species habitat likely to occur within area	Vulnerable
Prostanthera sp. Bundjalong Nat. Pk. (B.J.Conn 3471)		Species or species habitat likely to occur within area	Vulnerable
Prostanthera sp. Mt Tinbeerwah (C.Sandercoe C1256)		Species or species habitat likely to occur within area	Vulnerable
Romnalda strobilacea		Species or species habitat likely to occur within area	Vulnerable
Sarcochilus fitzgeraldii	Ravine Orchid	Species or species habitat likely to occur within area	Vulnerable
Syzygium hodgkinsoniae	Smooth-bark Rose Apple, Red Lilly Pilly	Species or species habitat likely to occur within area	Vulnerable
Triunia robusta		Species or species habitat likely to occur within area	Endangered
Xanthostemon oppositifolius	Penda, Southern Penda, Luya's Hardwood	Species or species habitat likely to occur within area	Vulnerable
Zieria sp. Brolga Park (A.R.Bean 1002)		Species or species habitat likely to occur within area	Endangered

Threatened Terrestrial and Aquatic Fauna Species

Class	Scientific Name	Common Name	Type of Presence	Status
Insects	*Phyllodes imperialis (southern subsp. - ANIC 3333)*	a moth	Species or species habitat likely to occur within area	Endangered
Fish	*Neoceratodus forsteri*	Australian Lungfish, Queensland Lungfish	Species or species habitat likely to occur within area	Vulnerable
Fish	*Maccullochella peelii mariensis*	Mary River Cod	Species or species habitat likely to occur	Endangered

Class	Scientific Name	Common Name	Type of Presence	Status
			within area	
Amphibians	*Litoria olongburensis*	Wallum Sedge Frog	Species or species habitat likely to occur within area	Vulnerable
Amphibians	*Mixophyes iteratus*	Southern Barred Frog, Giant Barred Frog	Species or species habitat likely to occur within area	Endangered
Reptiles	*Coeranoscincus reticulatus*	Three-toed Snake-tooth Skink	Species or species habitat likely to occur within area	Vulnerable
Reptiles	*Elusor macrurus*	Mary River Turtle, Mary River Tortoise	Species or species habitat likely to occur within area	Endangered
Birds	*Cyclopsitta diophthalma coxeni*	Coxen's Fig-Parrot	Species or species habitat likely to occur within area	Endangered
Birds	*Diomedea dabbenena*	Tristan Albatross	Species or species habitat likely to occur within area	Endangered
Birds	*Erythrotriorchis radiatus*	Red Goshawk	Species or species habitat likely to occur within area	Vulnerable
Birds	*Lathamus discolor*	Swift Parrot	Species or species habitat likely to occur within area	Endangered
Birds	*Macronectes giganteus*	Southern Giant-Petrel	Species or species habitat likely to occur within area	Endangered
Birds	*Macronectes halli*	Northern Giant-Petrel	Species or species habitat likely to occur within area	Vulnerable
Birds	*Pterodroma neglecta neglecta*	Kermadec Petrel (western)	Species or species habitat likely to occur within area	Vulnerable
Birds	*Rostratula australis*	Australian Painted Snipe	Species or species habitat likely to occur within area	Vulnerable
Birds	*Thalassarche impavida*	Campbell Albatross	Species or species habitat likely to occur within area	Vulnerable
Birds	*Turnix melanogaster*	Black-breasted Button-quail	Species or species habitat likely to occur within area	Vulnerable
Birds	*Xanthomyza phrygia*	Regent Honeyeater	Species or species habitat likely to occur within area	Endangered
Birds	*Anseranas semipalmata*	Magpie Goose	Species or species habitat may occur within area	Listed -overfly Marine area
Birds	*Catharacta skua*	Great Skua	Species or species habitat may occur within area	Listed
Birds	*Haliaeetus leucogaster*	White-bellied Sea-Eagle	Species or species habitat may occur within	Listed

Class	Scientific Name	Common Name	Type of Presence	Status
			area	
Birds	*Hirundapus caudacutus*	White-throated Needletail	Species or species habitat may occur within area	Listed -overfly marine area
Mammals	*Chalinolobus dwyeri*	Large-eared Pied Bat, Large Pied Bat	Species or species habitat may occur within area	Vulnerable
Mammals	*Dasyurus maculatus maculatus (SE mainland population)*	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll	Species or species habitat may occur within area	Endangered
Mammals	*Potorous tridactylus tridactylus*	Long-nosed Potoroo (SE mainland)	Species or species habitat may occur within area	Vulnerable
Mammals	*Pteropus poliocephalus*	Grey-headed Flying-fox	Species or species habitat may occur within area	Vulnerable
Mammals	*Xeromys myoides*	Water Mouse, False Water Rat	Species or species habitat may occur within area	Vulnerable

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

Class	Scientific Name	Common Name	Type of Presence
Birds	*Ardea alba*	Great Egret, White Egret	Species or species habitat may occur within area
Birds	*Ardea ibis*	Cattle Egret	Breeding likely to occur within area
Birds	*Gallinago hardwickii*	Latham's Snipe, Japanese Snipe	Species or species habitat may occur within area
Birds	*Merops ornatus*	Rainbow Bee-eater	Species or species habitat may occur within area
	Monarcha melanopsis	Black-faced Monarch	Breeding likely to occur within area
Birds	*Nettapus coromandelianus albipennis*	Australian Cotton Pygmy-goose	Species or species habitat may occur within area
Birds	*Apus pacificus*	Fork-tailed Swift	Species or species habitat may occur within area
Birds	*Calonectris leucomelas*	Streaked Shearwater	Species or species habitat may occur within area
Birds	*Sterna albifrons*	Little Tern	Species or species habitat may occur within area
Birds	*Thalassarche chlororhynchos*	Yellow-nosed Albatross, Atlantic Yellow-nosed Albatross	Species or species habitat may occur within area
Birds	*Myiagra cyanoleuca*	Satin Flycatcher	Breeding likely to occur within area
Birds	*Rhipidura rufifrons*	Rufous Fantail	Breeding likely to occur within area
Birds	*Xanthomyza phrygia*	Regent Honeyeater	Species or species habitat may occur within area

IMAGE FLAT CONNECTION

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: Point

Buffer: 5 km

Coordinates used: -26.6128,152.9614

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance: (Ramsar Sites)	1
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	22
Migratory Species:	16

Threatened Flora Species

Scientific Name	Common Name	Type of Presence	Status
Bosistoa selwynii	Heart-leaved Bosistoa	Species or species habitat likely to occur within area	Vulnerable
Bosistoa transversa	Three-leaved Bosistoa	Species or species habitat likely to occur within area	Vulnerable
Bulbophyllum globuliforme	Miniature Moss-orchid	Species or species habitat likely to occur within area	Vulnerable
Cryptocarya foetida	Stinking Cryptocarya, Stinking Laurel	Species or species habitat likely to occur within area	Vulnerable
Floydia praealta	Ball Nut, Possum Nut, Big Nut, Beefwood	Species or species habitat likely to occur within area	Vulnerable
Graptophyllum reticulatum	Graptophyllum reticulatum	Species or species habitat likely to occur within area	Endangered
Macadamia ternifolia	Small-fruited Queensland Nut	Species or species habitat likely to occur within area	Vulnerable
Plectranthus torrenticola		Species or species habitat likely to occur within area	Endangered

Scientific Name	Common Name	Type of Presence	Status
Pouteria eerwah	Shiny-leaved Condoo, Black Plum, Wild Apple	Species or species habitat likely to occur within area	Endangered
Romnalda strobilacea		Species or species habitat likely to occur within area	Endangered
Triunia robusta		Species or species habitat likely to occur within area	Endangered

Threatened Terrestrial Fauna Species

Class	Scientific Name	Common Name	Type of Presence	Status
Amphibians	*Mixophyes iteratus*	Southern Barred Frog, Giant Barred Frog	Species or species habitat likely to occur within area	Endangered
Insects	*Phyllodes imperialis*	a moth	Species or species habitat likely to occur within area	Endangered
Mammals	*Chalinolobus dwyeri*	Large-eared Pied Bat, Large Pied Bat	Species or species habitat likely to occur within area	Vulnerable
Mammals	*Dasyurus maculatus maculatus*	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll	Species or species habitat likely to occur within area	Endangered
Mammals	*Potorous tridactylus tridactylus*	Long-nosed Potoroo (SE mainland)	Species or species habitat likely to occur within area	Vulnerable
Mammals	*Pteropus poliocephalus*	Grey-headed Flying-fox	Species or species habitat likely to occur within area	Vulnerable
Reptiles	*Coeranoscincus reticulatus*	Three-toed Snake-tooth Skink	Species or species habitat likely to occur within area	Vulnerable
Birds	*Cyclopsitta diophthalma coxeni*	Coxen's Fig-Parrot	Species or species habitat likely to occur within area	Endangered
Birds	*Erythrotriorchis radiatus*	Red Goshawk	Species or species habitat likely to occur within area	Vulnerable
Birds	*Rostratula australis*	Australian Painted Snipe	Species or species habitat likely to occur within area	Vulnerable
Birds	*Turnix melanogaster*	Black-breasted Button-quail	Species or species habitat likely to occur within area	Vulnerable

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

Class	Scientific Name	Common Name	Type of Presence
Birds	*Cyclopsitta diophthalma coxeni*	Coxen's Fig-Parrot	Species or species habitat likely to occur within area
Birds	*Haliaeetus leucogaster*	White-bellied Sea-Eagle	Species or species habitat likely to occur within area
Birds	*Hirundapus caudacutus*	White-throated Needletail	Species or species habitat likely to occur within area
Birds	*Merops ornatus*	Rainbow Bee-eater	Species or species habitat likely to occur within area
Birds	*Monarcha melanopsis*	Black-faced Monarch	Breeding may occur within area
Birds	*Monarcha trivirgatus*	Spectacled Monarch	Breeding may occur within area
Birds	*Myiagra cyanoleuca*	Satin Flycatcher	Breeding may occur within area
Birds	*Rhipidura rufifrons*	Rufous Fantail	Breeding may occur within area
Birds	*Ardea alba*	Great Egret, White Egret	Species or species habitat likely to occur within area
Birds	*Ardea ibis*	Cattle Egret	Species or species habitat likely to occur within area
Birds	*Gallinago hardwickii*	Latham's Snipe, Japanese Snipe	Species or species habitat likely to occur within area
Birds	*Nettapus coromandelianus albipennis*	Australian Cotton Pygmy-goose	Species or species habitat likely to occur within area
Birds	*Rostratula benghalensis s. lat.*	Painted Snipe	Species or species habitat likely to occur within area
Birds	*Apus pacificus*	Fork-tailed Swift	Species or species habitat likely to occur within area

Appendix 2:
Queensland Museum and EPA WildNet Database Search Results

NPI CORRIDOR

Queensland Museum results of a search for the area of coordinates 26º21' S - 26º47' S and 152º50' E -153º05' E.

Collection	Family	*Genus*	*Species*
Frogs	Myobatrachidae	*Adelotus*	*brevis*
Frogs	Myobatrachidae	*Assa*	*darlingtoni*
Frogs	Myobatrachidae	*Crinia*	*signifera*
Frogs	Myobatrachidae	*Crinia*	*tinnula*
Frogs	Hylidae	*Cyclorana*	*alboguttata*
Frogs	Myobatrachidae	*Limnodynastes*	*peronii*
Frogs	Myobatrachidae	*Limnodynastes*	*terraereginae*
Frogs	Hylidae	*Litoria*	*caerulea*
Frogs	Hylidae	*Litoria*	*dentata*
Frogs	Hylidae	*Litoria*	*fallax*
Frogs	Hylidae	*Litoria*	*freycineti*
Frogs	Hylidae	*Litoria*	*gracilenta*
Frogs	Hylidae	*Litoria*	*latopalmata*
Frogs	Hylidae	*Litoria*	*nasuta*
Frogs	Hylidae	*Litoria*	*olongburensis*
Frogs	Hylidae	*Litoria*	*pearsoniana*
Frogs	Hylidae	*Litoria*	*peronii*
Frogs	Hylidae	*Litoria*	*rubella*
Frogs	Hylidae	*Litoria*	*tyleri*
Frogs	Hylidae	*Litoria*	*verreauxii*
Frogs	Hylidae	*Litoria*	*wilcoxii*
Frogs	Myobatrachidae	*Mixophyes*	*fasciolatus*
Frogs	Myobatrachidae	*Pseudophryne*	*major*
Frogs	Myobatrachidae	*Pseudophryne*	*raveni*
Frogs	Myobatrachidae	*Rheobatrachus*	*silus*
Frogs	Myobatrachidae	*Taudactylus*	*diurnus*
Frogs	Myobatrachidae	*Uperoleia*	*fusca*
Frogs	Myobatrachidae	*Uperoleia*	*laevigata*
Birds	Accipitridae	*Accipiter*	*cirrhocephalus*
Birds	Ptilonorhynchidae	*Ailuroedus*	*crassirostris*
Birds	Alcedinidae	*Alcedo*	*azurea*
Birds	Psittacidae	*Alisteris*	*scapularis*
Birds	Rallidae	*Amaurornis*	*olivacea*
Birds	Motacillidae	*Anthus*	*novaeseelandiae*
Birds	Psittacidae	*Aprosmictus*	*erythropterus*
Birds	Artamidae	*Artamus*	*leucorynchus*
Birds	Accipitridae	*Aviceda*	*subcristata*
Birds	Burhinidae	*Burhinus*	*grallarius*
Birds	Cuculidae	*Cacomantis*	*flabelliformis*
Birds	Cuculidae	*Cacomantis*	*variolosus*
Birds	Cacatuidae	*Calyptorhynchus*	*funereus*
Birds	Centropodidae	*Centropus*	*phasianinus*
Birds	Columbidae	*Chalcophaps*	*indica*

Collection	Family	*Genus*	*Species*
Birds	Cuculidae	*Chrysococcyx*	*lucidus*
Birds	Pachycephalidae	*Colluricincla*	*harmonica*
Birds	Pachycephalidae	*Colluricincla*	*megarhyncha*
Birds	Campephagidae	*Coracina*	*lineata*
Birds	Campephagidae	*Coracina*	*novaehollandiae*
Birds	Campephagidae	*Coracina*	*tenuirostris*
Birds	Climacteridae	*Cormobates*	*leucophaeus*
Birds	Corvidae	*Corvus*	*orru*
Birds	Phasianidae	*Coturnix*	*ypsilophora*
Birds	Cuculidae	*Cuculus*	*saturatus*
Birds	Anatidae	*Cygnus*	*atratus*
Birds	Dicaeidae	*Dicaeum*	*hirundinaceum*
Birds	Dicruridae	*Dicrurus*	*bracteatus*
Birds	Petroicidae	*Eopsaltria*	*australis*
Birds	Caprimulgidae	*Eurostopodus*	*mystacalis*
Birds	Coraciidae	*Eurystomus*	*orientalis*
Birds	Pachycephalidae	*Falcunculus*	*frontatus*
Birds	Rallidae	*Gallirallus*	*philippensis*
Birds	Columbidae	*Geopelia*	*humeralis*
Birds	Acanthizidae	*Gerygone*	*levigaster*
Birds	Cracticidae	*Gymnorhina*	*tibicen*
Birds	Accipitridae	*Haliastur*	*indus*
Birds	Apodidae	*Hirundapus*	*caudacuta*
Birds	Ardeidae	*Ixobrychus*	*minutus*
Birds	Meliphagidae	*Lichmera*	*indistincta*
Birds	Columbidae	*Lopholaimus*	*antarcticus*
Birds	Columbidae	*Macropygia*	*amboinensis*
Birds	Columbidae	*Macropygia*	*phasianella*
Birds	Maluridae	*Malurus*	*lamberti*
Birds	Maluridae	*Malurus*	*melanocephalus*
Birds	Meliphagidae	*Meliphaga*	*lewinii*
Birds	Meropidae	*Merops*	*ornatus*
Birds	Alaudidae	*Mirafra*	*javanica*
Birds	Monarchidae	*Monarcha*	*melanopsis*
Birds	Sulidae	*Morus*	*serrator*
Birds	Estrildidae	*Neochmia*	*temporalis*
Birds	Strigidae	*Ninox*	*novaeseelandiae*
Birds	Columbidae	*Ocyphaps*	*lophotes*
Birds	Pachycephalidae	*Pachycephala*	*pectoralis*
Birds	Pardalotidae	*Pardalotus*	*striatus*
Birds	Psittacidae	*Pezoporus*	*wallicus*
Birds	Meliphagidae	*Phylidonyris*	*nigra*
Birds	Pittidae	*Pitta*	*versicolor*
Birds	Psittacidae	*Platycercus*	*elegans*
Birds	Charadriidae	*Pluvialis*	*fulva*
Birds	Podargidae	*Podargus*	*plumiferus*
Birds	Podargidae	*Podargus*	*strigoides*
Birds	Podicipedidae	*Podiceps*	*cristatus*

Collection	Family	*Genus*	*Species*
Birds	Rallidae	*Porphyrio*	*porphyrio*
Birds	Rallidae	*Porzana*	*tabuensis*
Birds	Pachycephalidae	*Psophodes*	*olivaceus*
Birds	Columbidae	*Ptilinopus*	*magnificus*
Birds	Columbidae	*Ptilinopus*	*regina*
Birds	Columbidae	*Ptilinopus*	*superbus*
Birds	Paradisaeidae	*Ptiloris*	*paradiseus*
Birds	Rallidae	*Rallus*	*pectoralis*
Birds	Monarchidae	*Rhipidura*	*fuliginosa*
Birds	Monarchidae	*Rhipidura*	*rufifrons*
Birds	Ptilonorhynchidae	*Sericulus*	*chrysocephalus*
Birds	Laridae	*Sterna*	*bergii*
Birds	Laridae	*Sterna*	*hirundo*
Birds	Podicipedidae	*Tachybaptus*	*novaehollandiae*
Birds	Estrildidae	*Taeniopygia*	*bichenovii*
Birds	Alcedinidae	*Todiramphus*	*macleayii*
Birds	Loriidae	*Trichoglossus*	*chlorolepidotis*
Birds	Loriidae	*Trichoglossus*	*haematodus*
Birds	Turnicidae	*Turnix*	*melanogaster*
Birds	Turnicidae	*Turnix*	*pyrrhothorax*
Birds	Turnicidae	*Turnix*	*varia*
Birds	Tytonidae	*Tyto*	*alba*
Birds	Tytonidae	*Tyto*	*capensis*
Birds	Tytonidae	*Tyto*	*novaehollandiae*
Birds	Tytonidae	*Tyto*	*tenebricosa*
Birds	Turdidae	*Zoothera*	*heinei*
Birds	Zosteropidae	*Zosterops*	*lateralis*
Mammals	Acrobatidae	*Acrobates*	*pygmaeus*
Mammals	Dasyuridae	*Antechinus*	*flavipes*
Mammals	Dasyuridae	*Antechinus*	*subtropicus*
Mammals	Canidae	*Canis*	*lupus*
Mammals	Vespertilionidae	*Chalinolobus*	*gouldii*
Mammals	Dasyuridae	*Dasyurus*	*hallucatus*
Mammals	Equidae	*Equus*	*caballus*
Mammals	Globicephalidae	*Globicephala*	*melaena*
Mammals	Muridae	*Hydromys*	*chrysogaster*
Mammals	Peramelidae	*Isoodon*	*macrourus*
Mammals	Physeteridae	*Kogia*	*breviceps*
Mammals	Leporidae	*Lepus*	*capensis*
Mammals	Muridae	*Melomys*	*burtoni*
Mammals	Muridae	*Melomys*	*cervinipes*
Mammals	Vespertilionidae	*Miniopterus*	*australis*
Mammals	Vespertilionidae	*Miniopterus*	*schreibersii*
Mammals	Muridae	*Mus*	*musculus*
Mammals	Vespertilionidae	*Myotis*	*macropus*
Mammals	Pteropodidae	*Nyctimene*	*robinsoni*
Mammals	Vespertilionidae	*Nyctophilus*	*bifax*
Mammals	Vespertilionidae	*Nyctophilus*	*gouldi*

Collection	Family	*Genus*	*Species*
Mammals	Ornithorhynchidae	*Ornithorhynchus*	*anatinus*
Mammals	Peramelidae	*Perameles*	*nasuta*
Mammals	Pseudocheiridae	*Petauroides*	*volans*
Mammals	Petauridae	*Petaurus*	*breviceps*
Mammals	Petauridae	*Petaurus*	*norfolcensis*
Mammals	Dasyuridae	*Phascogale*	*tapoatafa*
Mammals	Phascolarctidae	*Phascolarctos*	*cinereus*
Mammals	Dasyuridae	*Planigale*	*maculata*
Mammals	Potoroidae	*Potorous*	*tridactylus*
Mammals	Muridae	*Pseudomys*	*gracilicaudatus*
Mammals	Muridae	*Pseudomys*	*gracilicaudatus*
Mammals	Muridae	*Pseudomys*	*johnsoni*
Mammals	Muridae	*Pseudomys*	*oralis*
Mammals	Pteropodidae	*Pteropus*	*alecto*
Mammals	Muridae	*Rattus*	*fuscipes*
Mammals	Muridae	*Rattus*	*lutreolus*
Mammals	Muridae	*Rattus*	*norvegicus*
Mammals	Muridae	*Rattus*	*rattus*
Mammals	Muridae	*Rattus*	*tunneyi*
Mammals	Vespertilionidae	*Scotorepens*	*greyii*
Mammals	Dasyuridae	*Sminthopsis*	*murina*
Mammals	Tachyglossidae	*Tachyglossus*	*aculeatus*
Mammals	Macropodidae	*Thylogale*	*stigmatica*
Mammals	Macropodidae	*Thylogale*	*thetis*
Mammals	Phalangeridae	*Trichosurus*	*caninus*
Mammals	Phalangeridae	*Trichosurus*	*vulpecula*
Mammals	Vespertilionidae	*Vespadelus*	*pumilus*
Mammals	Vespertilionidae	*Vespadelus*	*troughtoni*
Mammals	Canidae	*Vulpes*	*vulpes*
Reptiles	Elapidae	*Acanthophis*	*antarcticus*
Reptiles	Hydrophiidae	*Aipysurus*	*laevis*
Reptiles	Scincidae	*Anomalopus*	*verreauxii*
Reptiles	Pythonidae	*Antaresia*	*maculosa*
Reptiles	Colubridae	*Boiga*	*irregularis*
Reptiles	Elapidae	*Cacophis*	*harriettae*
Reptiles	Elapidae	*Cacophis*	*krefftii*
Reptiles	Elapidae	*Cacophis*	*squamulosus*
Reptiles	Scincidae	*Calyptotis*	*lepidorostrum*
Reptiles	Scincidae	*Carlia*	*vivax*
Reptiles	Agamidae	*Chlamydosaurus*	*kingii*
Reptiles	Scincidae	*Cryptoblepharus*	*virgatus*
Reptiles	Elapidae	*Cryptophis*	*nigrescens*
Reptiles	Scincidae	*Ctenotus*	*arcanus*
Reptiles	Scincidae	*Cyclodomorphus*	*gerrardii*
Reptiles	Pygopodidae	*Delma*	*torquata*
Reptiles	Elapidae	*Demansia*	*psammophis*
Reptiles	Elapidae	*Demansia*	*vestigiata*
Reptiles	Colubridae	*Dendrelaphis*	*punctulata*

Collection	Family	*Genus*	*Species*
Reptiles	Cheluidae	*Elseya*	*latisternum*
Reptiles	Hydrophiidae	*Emydocephalus*	*annulatus*
Reptiles	Scincidae	*Eroticoscincus*	*graciloides*
Reptiles	Scincidae	*Eulamprus*	*martini*
Reptiles	Scincidae	*Eulamprus*	*murrayi*
Reptiles	Scincidae	*Eulamprus*	*quoyii*
Reptiles	Scincidae	*Eulamprus*	*tenuis*
Reptiles	Elapidae	*Hemiaspis*	*signata*
Reptiles	Elapidae	*Hoplocephalus*	*stephensii*
Reptiles	Hydrophiidae	*Hydrophis*	*elegans*
Reptiles	Hydrophiidae	*Hydrophis*	*major*
Reptiles	Agamidae	*Hypsilurus*	*spinipes*
Reptiles	Scincidae	*Lampropholis*	*adonis*
Reptiles	Scincidae	*Lampropholis*	*amicula*
Reptiles	Scincidae	*Lampropholis*	*couperi*
Reptiles	Scincidae	*Lampropholis*	*delicata*
Reptiles	Scincidae	*Lampropholis*	*guichenoti*
Reptiles	Pygopodidae	*Lialis*	*burtonis*
Reptiles	Pythonidae	*Morelia*	*spilota*
Reptiles	Cheloniidae	*Natator*	*depressus*
Reptiles	Elapidae	*Notechis*	*scutatus*
Reptiles	Gekkonidae	*Oedura*	*robusta*
Reptiles	Gekkonidae	*Oedura*	*tryoni*
Reptiles	Scincidae	*Ophioscincus*	*ophioscincus*
Reptiles	Scincidae	*Ophioscincus*	*truncatus*
Reptiles	Hydrophiidae	*Pelamis*	*platurus*
Reptiles	Agamidae	*Physignathus*	*lesueurii*
Reptiles	Elapidae	*Pseudechis*	*porphyriacus*
Reptiles	Elapidae	*Pseudonaja*	*textilis*
Reptiles	Pygopodidae	*Pygopus*	*lepidopodus*
Reptiles	Typhlopidae	*Ramphotyphlops*	*nigrescens*
Reptiles	Typhlopidae	*Ramphotyphlops*	*silvia*
Reptiles	Scincidae	*Saproscincus*	*rosei*
Reptiles	Elapidae	*Tropidechis*	*carinatus*
Reptiles	Colubridae	*Tropidonophis*	*mairii*
Reptiles	Varanidae	*Varanus*	*gouldii*
Reptiles	Varanidae	*Varanus*	*varius*
Reptiles	Elapidae	*Vermicella*	*annulata*

IMAGE FLAT CONNECTION

COLLECTION	FAMILY	GENUS	SPECIES
Frogs	Myobatrachidae	*Adelotus*	*brevis*
Frogs	Myobatrachidae	*Limnodynastes*	*peronii*
Frogs	Myobatrachidae	*Pseudophryne*	*raveni*
Frogs	Hylidae	*Litoria*	*fallax*
Frogs	Hylidae	*Litoria*	*gracilenta*

COLLECTION	FAMILY	GENUS	SPECIES
Frogs	Hylidae	*Litoria*	*nasuta*
Frogs	Hylidae	*Litoria*	*pearsoniana*
Frogs	Hylidae	*Litoria*	*wilcoxii*
Reptiles	Cheluidae	*Elseya*	*latisternum*
Reptiles	Gekkonidae	*Oedura*	*tryoni*
Reptiles	Pygopodidae	*Lialis*	*burtonis*
Reptiles	Scincidae	*Cryptoblepharus*	*virgatus*
Reptiles	Scincidae	*Cyclodomorphus*	*gerrardii*
Reptiles	Scincidae	*Eroticoscincus*	*graciloides*
Reptiles	Scincidae	*Eulamprus*	*martini*
Reptiles	Scincidae	*Eulamprus*	*murrayi*
Reptiles	Scincidae	*Eulamprus*	*quoyii*
Reptiles	Scincidae	*Lampropholis*	*adonis*
Reptiles	Scincidae	*Lampropholis*	*delicata*
Reptiles	Agamidae	*Chlamydosaurus*	*kingii*
Reptiles	Agamidae	*Physignathus*	*lesueurii*
Reptiles	Varanidae	*Varanus*	*sp*
Reptiles	Varanidae	*Varanus*	*varius*
Reptiles	Typhlopidae	*Ramphotyphlops*	*nigrescens*
Reptiles	Typhlopidae	*Ramphotyphlops*	*silvia*
Reptiles	Pythonidae	*Morelia*	*spilota*
Reptiles	Colubridae	*Boiga*	*irregularis*
Reptiles	Colubridae	*Tropidonophis*	*mairii*
Reptiles	Elapidae	*Cacophis*	*harriettae*
Reptiles	Elapidae	*Cacophis*	*krefftii*
Reptiles	Elapidae	*Cacophis*	*squamulosus*
Reptiles	Elapidae	*Cryptophis*	*nigrescens*
Reptiles	Elapidae	*Demansia*	*psammophis*
Reptiles	Elapidae	*Hemiaspis*	*signata*
Reptiles	Elapidae	*Pseudonaja*	*textilis*
Reptiles	Elapidae	*Tropidechis*	*carinatus*
Birds	Podicipedidae	*Podiceps*	*cristatus*
Birds	Accipitridae	*Accipiter*	*cirrhocephalus*
Birds	Accipitridae	*Aviceda*	*subcristata*
Birds	Phasianidae	*Coturnix*	*ypsilophora*
Birds	Rallidae	*Porzana*	*tabuensis*
Birds	Burhinidae	*Burhinus*	*grallarius*
Birds	Laridae	*Sterna*	*bergii*
Birds	Columbidae	*Chalcophaps*	*indica*
Birds	Columbidae	*Ptilinopus*	*magnificus*
Birds	Columbidae	*Ptilinopus*	*regina*
Birds	Columbidae	*Ptilinopus*	*superbus*
Birds	Centropodidae	*Centropus*	*phasianinus*
Birds	Tytonidae	*Tyto*	*alba*
Birds	Podargidae	*Podargus*	*plumiferus*
Birds	Podargidae	*Podargus*	*strigoides*

COLLECTION	FAMILY	GENUS	SPECIES
Birds	Alcedinidae	*Alcedo*	*azurea*
Birds	Meropidae	*Merops*	*ornatus*
Birds	Pittidae	*Pitta*	*versicolor*
Birds	Alaudidae	*Mirafra*	*javanica*
Birds	Motacillidae	*Anthus*	*novaeseelandiae*
Birds	Maluridae	*Malurus*	*lamberti*
Birds	Monarchidae	*Rhipidura*	*rufifrons*
Birds	Pachycephalidae	*Psophodes*	*olivaceus*
Birds	Dicaeidae	*Dicaeum*	*hirundinaceum*
Birds	Zosteropidae	*Zosterops*	*lateralis*
Birds	Estrildidae	*Neochmia*	*temporalis*
Mammals	Ornithorhynchidae	*Ornithorhynchus*	*anatinus*
Mammals	Dasyuridae	*Antechinus*	*flavipes*
Mammals	Dasyuridae	*Dasyurus*	*hallucatus*
Mammals	Dasyuridae	*Phascogale*	*tapoatafa*
Mammals	Peramelidae	*Isoodon*	*macrourus*
Mammals	Petauridae	*Petaurus*	*breviceps*
Mammals	Petauridae	*Petaurus*	*norfolcensis*
Mammals	Pseudocheiridae	*Petauroides*	*volans*
Mammals	Acrobatidae	*Acrobates*	*pygmaeus*
Mammals	Potoroidae	*Potorous*	*tridactylus*
Mammals	Macropodidae	*Thylogale*	*thetis*
Mammals	Vespertilionidae	*Miniopterus*	*schreibersii*
Mammals	Vespertilionidae	*Vespadelus*	*troughtoni*
Mammals	Canidae	*Canis*	*lupus*
Mammals	Equidae	*Equus*	*caballus*
Mammals	Muridae	*Melomys*	*burtoni*
Mammals	Muridae	*Melomys*	*cervinipes*
Mammals	Muridae	*Rattus*	*fuscipes*
Mammals	Muridae	*Rattus*	*rattus*
Mammals	Leporidae	*Lepus*	*capensis*

NPI CORRIDOR

WildNet Database Search Results

Latitude between: -26.355 and -26.777
Longitude between: 152.8472 and 153.0805
Distance: 50km
Location: between Landsborough and Pomona

NCA - The conservation status of each taxon under the Nature Conservation Act 1992. The codes are Extinct in the wild (PE), Endangered (E), Vulnerable (V), Rare (R), Near threatened (NT); Least concern (C) or Not Protected ( ).

EPBC - The conservation status of each taxon under the Environment Protection and Biodiversity Conservation Act 1999. The codes are Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Extinct in the Wild (XW), Vulnerable (V) and Threatened (includes taxa listed as CD, CE, E, EX, V and XW).

Endemism - Native taxa (Queensland Endemic - Q, Intranational - QA, Regional Endemic - QI or Not Endemic to Australia - QAI), Vagrant taxa - (Vagrant (International) - VI, Vagrant (Intranational) - VA or Vagrant (Unknown) - VU), Introduced or naturalised in the wild taxa (Introduced (International) - II, Introduced (Intranational) - IA or Introduced (Unknown) - IU) or Exotic taxa not known to be naturalised - (Exotic (International) - XI, Exotic (Intranational) - XA or Exotic (Unknown) - XU) or Unknown endemicity (U).

Class	Family	Scientific Name	Common Name	NCA	EPBC	END
Amphibians	Myobatrachidae	*Adelotus brevis*	Tusked frog	V		QA
Amphibians	Myobatrachidae	*Assa darlingtoni*	Pouched frog	R		QA
Amphibians	Bufonidae	*Bufo marinus*	Cane toad			II
Amphibians	Myobatrachidae	*Crinia parinsignifera*	Beeping froglet	C		QA
Amphibians	Myobatrachidae	*Crinia signifera*	Clicking froglet	C		QA
Amphibians	Myobatrachidae	*Crinia tinnula*	Wallum froglet	V		QA
Amphibians	Myobatrachidae	*Limnodynastes ornatus*	Ornate burrowing frog	C		QA
Amphibians	Myobatrachidae	*Limnodynastes peronii*	Striped marshfrog	C		QA
Amphibians	Myobatrachidae	*Limnodynastes tasmaniensis*	Spotted grassfrog	C		QA
Amphibians	Myobatrachidae	*Limnodynastes terraereginae*	Scarlet sided pobblebonk	C		QA
Amphibians	Hylidae	*Litoria brevipalmata*	Green thighed frog	R		QA
Amphibians	Hylidae	*Litoria caerulea*	Common green treefrog	C		QAI
Amphibians	Hylidae	*Litoria chloris*	Orange eyed treefrog	C		QA
Amphibians	Hylidae	*Litoria dentata*	Bleating treefrog	C		QA
Amphibians	Hylidae	*Litoria fallax*	Eastern sedgefrog	C		QA
Amphibians	Hylidae	*Litoria freycineti*	Wallum rocketfrog	V		QA
Amphibians	Hylidae	*Litoria gracilenta*	Graceful treefrog	C		QA
Amphibians	Hylidae	*Litoria latopalmata*	Broad palmed rocketfrog	C		QA
Amphibians	Hylidae	*Litoria lesueuri sensu lato*	Stony creek frog	C		QA
Amphibians	Hylidae	*Litoria nasuta*	Striped rocketfrog	C		QAI

Amphibians	Hylidae	*Litoria olongburensis*	Wallum sedgefrog	V	V	QA
Amphibians	Hylidae	*Litoria pearsoniana*	Cascade treefrog	V		QA
Amphibians	Hylidae	*Litoria peronii*	Emerald spotted treefrog	C		QA
Amphibians	Hylidae	*Litoria rubella*	Ruddy treefrog	C		QAI
Amphibians	Hylidae	*Litoria tyleri*	Southern laughing treefrog	C		QA
Amphibians	Hylidae	*Litoria verreauxii*	Whistling treefrog	C		QA
Amphibians	Hylidae	*Litoria wilcoxii*		C		QA
Amphibians	Myobatrachidae	*Mixophyes fasciolatus*	Great barred frog	C		QA
Amphibians	Myobatrachidae	*Mixophyes iteratus*	Giant barred frog	E	E	QA
Amphibians	Myobatrachidae	*Pseudophryne major*	Great brown broodfrog	C		QA
Amphibians	Myobatrachidae	*Pseudophryne raveni*	Copper backed broodfrog	C		Q
Amphibians	Myobatrachidae	*Rheobatrachus silus*	Southern gastric brooding frog	E	EX	Q
Amphibians	Myobatrachidae	*Taudactylus diurnus*	Southern dayfrog	E	EX	Q
Amphibians	Myobatrachidae	*Uperoleia fusca*	Dusky gungan	C		QA
Amphibians	Myobatrachidae	*Uperoleia laevigata*	Eastern gungan	C		QA
Birds	Pardalotidae	*Acanthiza chrysorrhoa*	Yellow-rumped thornbill	C		QA
Birds	Pardalotidae	*Acanthiza lineata*	Striated thornbill	C		QA
Birds	Pardalotidae	*Acanthiza nana*	Yellow thornbill	C		QA
Birds	Pardalotidae	*Acanthiza pusilla*	Brown thornbill	C		QA
Birds	Pardalotidae	*Acanthiza reguloides*	Buff-rumped thornbill	C		QA
Birds	Meliphagidae	*Acanthorhynchus tenuirostris*	Eastern spinebill	C		QA
Birds	Accipitridae	*Accipiter cirrhocephalus*	Collared sparrowhawk	C		QAI
Birds	Accipitridae	*Accipiter fasciatus*	Brown goshawk	C		QAI
Birds	Accipitridae	*Accipiter novaehollandiae*	Grey goshawk	R		QAI
Birds	Sturnidae	*Acridotheres tristis*	Common myna			II
Birds	Sylviidae	*Acrocephalus stentoreus*	Clamorous reed-warbler	C		QAI
Birds	Scolopacidae	*Actitis hypoleucos*	Common sandpiper	C		QAI
Birds	Aegothelidae	*Aegotheles cristatus*	Australian owlet-nightjar	C		QAI
Birds	Ptilonorhynchidae	*Ailuroedus crassirostris*	Green catbird	C		QA
Birds	Alcedinidae	*Alcedo azurea*	Azure kingfisher	C		QAI
Birds	Megapodiidae	*Alectura lathami*	Australian brush-turkey	C		QA
Birds	Psittacidae	*Alisterus scapularis*	Australian king-parrot	C		QA
Birds	Rallidae	*Amaurornis olivaceus*	Bush-hen	C		QAI
Birds	Anatidae	*Anas castanea*	Chestnut teal	C		QA
Birds	Anatidae	*Anas gracilis*	Grey teal	C		QAI
Birds	Anatidae	*Anas platyrhynchos*	Mallard			II
Birds	Anatidae	*Anas rhynchotis*	Australasian shoveler	C		QAI
Birds	Anatidae	*Anas superciliosa*	Pacific black duck	C		QAI

Birds	Anhingidae	*Anhinga melanogaster*	Darter	C		QAI
Birds	Laridae	*Anous stolidus*	Common noddy	C		QA
Birds	Anseranatidae	*Anseranas semipalmata*	Magpie goose	C		QAI
Birds	Meliphagidae	*Anthochaera chrysoptera*	Little wattlebird	C		QA
Birds	Motacillidae	*Anthus novaeseelandiae*	Richard's pipit	C		QAI
Birds	Psittacidae	*Aprosmictus erythropterus*	Red-winged parrot	C		QAI
Birds	Apodidae	*Apus pacificus*	Fork-tailed swift	C		QAI
Birds	Accipitridae	*Aquila audax*	Wedge-tailed eagle	C		QAI
Birds	Ardeidae	*Ardea alba*	Great egret	C		QAI
Birds	Ardeidae	*Ardea ibis*	Cattle egret	C		QAI
Birds	Ardeidae	*Ardea intermedia*	Intermediate egret	C		QAI
Birds	Ardeidae	*Ardea pacifica*	White-necked heron	C		QA
Birds	Ardeidae	*Ardea sumatrana*	Great-billed heron	C		QAI
Birds	Scolopacidae	*Arenaria interpres*	Ruddy turnstone	C		QAI
Birds	Artamidae	*Artamus cinereus*	Black-faced woodswallow	C		QA
Birds	Artamidae	*Artamus cyanopterus*	Dusky woodswallow	C		QA
Birds	Artamidae	*Artamus leucorynchus*	White-breasted woodswallow	C		QA
Birds	Artamidae	*Artamus personatus*	Masked woodswallow	C		QA
Birds	Artamidae	*Artamus superciliosus*	White-browed woodswallow	C		QA
Birds	Accipitridae	*Aviceda subcristata*	Pacific baza	C		QAI
Birds	Anatidae	*Aythya australis*	Hardhead	C		QAI
Birds	Anatidae	*Biziura lobata*	Musk duck	C		QA
Birds	Ardeidae	*Botaurus poiciloptilus*	Australasian bittern	C		QAI
Birds	Burhinidae	*Burhinus grallarius*	Bush stone-curlew	C		QAI
Birds	Ardeidae	*Butorides striatus*	Striated heron	C		QAI
Birds	Cacatuidae	*Cacatua galerita*	Sulphur-crested cockatoo	C		QAI
Birds	Cacatuidae	*Cacatua leadbeateri*	Major Mitchell's cockatoo	V		QA
Birds	Cacatuidae	*Cacatua roseicapilla*	Galah	C		QA
Birds	Cacatuidae	*Cacatua sanguinea*	Little corella	C		QAI
Birds	Cacatuidae	*Cacatua tenuirostris*	Long-billed corella	C		IA
Birds	Cuculidae	*Cacomantis flabelliformis*	Fan-tailed cuckoo	C		QAI
Birds	Cuculidae	*Cacomantis variolosus*	Brush cuckoo	C		QAI
Birds	Scolopacidae	*Calidris acuminata*	Sharp-tailed sandpiper	C		QAI
Birds	Scolopacidae	*Calidris ferruginea*	Curlew sandpiper	C		QAI
Birds	Scolopacidae	*Calidris ruficollis*	Red-necked stint	C		QAI
Birds	Scolopacidae	*Calidris tenuirostris*	Great knot	C		QAI
Birds	Cacatuidae	*Calyptorhynchus banksii*	Red-tailed black-cockatoo	C		QA
Birds	Cacatuidae	*Calyptorhynchus funereus*	Yellow-tailed black-cockatoo	C		QA
Birds	Cacatuidae	*Calyptorhynchus lathami*	Glossy black-cockatoo	V		QA
Birds	Centropodidae	*Centropus phasianinus*	Pheasant coucal	C		QA
Birds	Columbidae	*Chalcophaps indica*	Emerald dove	C		QA

Birds	Charadriidae	*Charadrius bicinctus*	Double-banded plover	C		QAI
Birds	Charadriidae	*Charadrius leschenaultii*	Greater sand plover	C		QAI
Birds	Charadriidae	*Charadrius mongolus*	Lesser sand plover	C		QAI
Birds	Charadriidae	*Charadrius ruficapillus*	Red-capped plover	C		QAI
Birds	Anatidae	*Chenonetta jubata*	Australian wood duck	C		QA
Birds	Hirundinidae	*Cheramoeca leucosternus*	White-backed swallow	C		QA
Birds	Laridae	*Chlidonias hybridus*	Whiskered tern	C		QAI
Birds	Laridae	*Chlidonias leucopterus*	White-winged black tern	C		QAI
Birds	Cuculidae	*Chrysococcyx basalis*	Horsfield's bronze-cuckoo	C		QAI
Birds	Cuculidae	*Chrysococcyx lucidus*	Shining bronze-cuckoo	C		QAI
Birds	Cuculidae	*Chrysococcyx minutillus*	Little bronze-cuckoo	C		QAI
Birds	Pardalotidae	*Chthonicola sagittata*	Speckled warbler	C		QA
Birds	Sylviidae	*Cincloramphus cruralis*	Brown songlark	C		QA
Birds	Sylviidae	*Cincloramphus mathewsi*	Rufous songlark	C		QA
Birds	Cinclosomatidae	*Cinclosoma punctatum*	Spotted quail-thrush	C		QA
Birds	Accipitridae	*Circus approximans*	Swamp harrier	C		QAI
Birds	Accipitridae	*Circus assimilis*	Spotted harrier	C		QA
Birds	Sylviidae	*Cisticola exilis*	Golden-headed cisticola	C		QAI
Birds	Climacteridae	*Climacteris erythrops*	Red-browed treecreeper	R		QA
Birds	Climacteridae	*Climacteris picumnus*	Brown treecreeper	C		QA
Birds	Pachycephalidae	*Colluricincla harmonica*	Grey shrike-thrush	C		QAI
Birds	Pachycephalidae	*Colluricincla megarhyncha*	Little shrike-thrush	C		QAI
Birds	Columbidae	*Columba leucomela*	White-headed pigeon	C		QA
Birds	Columbidae	*Columba livia*	Rock dove			II
Birds	Campephagidae	*Coracina lineata*	Barred cuckoo-shrike	C		QA
Birds	Campephagidae	*Coracina maxima*	Ground cuckoo-shrike	C		QA
Birds	Campephagidae	*Coracina novaehollandiae*	Black-faced cuckoo-shrike	C		QAI
Birds	Campephagidae	*Coracina papuensis*	White-bellied cuckoo-shrike	C		QAI
Birds	Campephagidae	*Coracina tenuirostris*	Cicadabird	C		QAI
Birds	Climacteridae	*Cormobates leucophaeus*	White-throated treecreeper	C		QA
Birds	Corvidae	*Corvus bennetti*	Little crow	C		QA
Birds	Corvidae	*Corvus coronoides*	Australian raven	C		QA
Birds	Corvidae	*Corvus orru*	Torresian crow	C		QAI
Birds	Phasianidae	*Coturnix chinensis*	King quail	C		QAI
Birds	Phasianidae	*Coturnix pectoralis*	Stubble quail	C		QA
Birds	Phasianidae	*Coturnix ypsilophora*	Brown quail	C		QAI
Birds	Artamidae	*Cracticus nigrogularis*	Pied butcherbird	C		QA
Birds	Artamidae	*Cracticus torquatus*	Grey butcherbird	C		QA

Birds	Cuculidae	*Cuculus pallidus*	Pallid cuckoo	C		QAI
Birds	Cuculidae	*Cuculus saturatus*	Oriental cuckoo	C		QAI
Birds	Psittacidae	*Cyclopsitta diophthalma coxeni*	Coxen's fig-parrot	E	E	QA
Birds	Anatidae	*Cygnus atratus*	Black swan	C		QA
Birds	Halcyonidae	*Dacelo leachii*	Blue-winged kookaburra	C		QAI
Birds	Halcyonidae	*Dacelo novaeguineae*	Laughing kookaburra	C		QA
Birds	Neosittidae	*Daphoenositta chrysoptera*	Varied sittella	C		QAI
Birds	Anatidae	*Dendrocygna arcuata*	Wandering whistling-duck	C		QAI
Birds	Anatidae	*Dendrocygna eytoni*	Plumed whistling-duck	C		QA
Birds	Dicaeidae	*Dicaeum hirundinaceum*	Mistletoebird	C		QAI
Birds	Dicruridae	*Dicrurus bracteatus*	Spangled drongo	C		QAI
Birds	Casuariidae	*Dromaius novaehollandiae*	Emu	C		QA
Birds	Ardeidae	*Egretta garzetta*	Little egret	C		QAI
Birds	Ardeidae	*Egretta novaehollandiae*	White-faced heron	C		QAI
Birds	Ardeidae	*Egretta sacra*	Eastern reef egret	C		QAI
Birds	Accipitridae	*Elanus axillaris*	Black-shouldered kite	C		QAI
Birds	Charadriidae	*Elseyornis melanops*	Black-fronted dotterel	C		QAI
Birds	Meliphagidae	*Entomyzon cyanotis*	Blue-faced honeyeater	C		QAI
Birds	Petroicidae	*Eopsaltria australis*	Eastern yellow robin	C		QA
Birds	Ciconiidae	*Ephippiorhynchus asiaticus*	Black-necked stork	R		QAI
Birds	Charadriidae	*Erythrogonys cinctus*	Red-kneed dotterel	C		QA
Birds	Accipitridae	*Erythrotriorchis radiatus*	Red goshawk	E	V	QA
Birds	Burhinidae	*Esacus neglectus*	Beach stone-curlew	V		QAI
Birds	Cuculidae	*Eudynamys scolopacea*	Common koel	C		QAI
Birds	Caprimulgidae	*Eurostopodus mystacalis*	White-throated nightjar	C		QAI
Birds	Coraciidae	*Eurystomus orientalis*	Dollarbird	C		QAI
Birds	Falconidae	*Falco berigora*	Brown falcon	C		QAI
Birds	Falconidae	*Falco cenchroides*	Nankeen kestrel	C		QAI
Birds	Falconidae	*Falco longipennis*	Australian hobby	C		QAI
Birds	Falconidae	*Falco peregrinus*	Peregrine falcon	C		QAI
Birds	Falconidae	*Falco subniger*	Black falcon	C		QA
Birds	Pachycephalidae	*Falcunculus frontatus*	Crested shrike-tit	C		QA
Birds	Fregatidae	*Fregata ariel*	Lesser frigatebird	C		QAI
Birds	Rallidae	*Fulica atra*	Eurasian coot	C		QAI
Birds	Scolopacidae	*Gallinago hardwickii*	Latham's snipe	C		QAI
Birds	Rallidae	*Gallinula tenebrosa*	Dusky moorhen	C		QAI
Birds	Rallidae	*Gallirallus philippensis*	Buff-banded rail	C		QAI
Birds	Columbidae	*Geopelia cuneata*	Diamond dove	C		QA
Birds	Columbidae	*Geopelia humeralis*	Bar-shouldered dove	C		QAI
Birds	Columbidae	*Geopelia striata*	Peaceful dove	C		QAI
Birds	Pardalotidae	*Gerygone levigaster*	Mangrove gerygone	C		QAI

Birds	Pardalotidae	*Gerygone mouki*	Brown gerygone	C		QA
Birds	Pardalotidae	*Gerygone olivacea*	White-throated gerygone	C		QAI
Birds	Pardalotidae	*Gerygone palpebrosa*	Fairy gerygone	C		QAI
Birds	Psittacidae	*Glossopsitta concinna*	Musk lorikeet	C		QA
Birds	Psittacidae	*Glossopsitta pusilla*	Little lorikeet	C		QA
Birds	Dicruridae	*Grallina cyanoleuca*	Magpie-lark	C		QAI
Birds	Gruidae	*Grus rubicunda*	Brolga	C		QAI
Birds	Artamidae	*Gymnorhina tibicen*	Australian magpie	C		QAI
Birds	Haematopodidae	*Haematopus fuliginosus*	Sooty oystercatcher	R		QA
Birds	Haematopodidae	*Haematopus longirostris*	Pied oystercatcher	C		QAI
Birds	Accipitridae	*Haliaeetus leucogaster*	White-bellied sea-eagle	C		QAI
Birds	Accipitridae	*Haliastur indus*	Brahminy kite	C		QAI
Birds	Accipitridae	*Haliastur sphenurus*	Whistling kite	C		QAI
Birds	Scolopacidae	*Heteroscelus brevipes*	Grey-tailed tattler	C		QAI
Birds	Accipitridae	*Hieraaetus morphnoides*	Little eagle	C		QAI
Birds	Recurvirostridae	*Himantopus himantopus*	Black-winged stilt	C		QAI
Birds	Apodidae	*Hirundapus caudacutus*	White-throated needletail	C		QAI
Birds	Hirundinidae	*Hirundo ariel*	Fairy martin	C		QA
Birds	Hirundinidae	*Hirundo neoxena*	Welcome swallow	C		QAI
Birds	Hirundinidae	*Hirundo nigricans*	Tree martin	C		QAI
Birds	Hirundinidae	*Hirundo rustica*	Barn swallow	C		QAI
Birds	Jacanidae	*Irediparra gallinacea*	Comb-crested jacana	C		QAI
Birds	Ardeidae	*Ixobrychus flavicollis*	Black bittern	C		QAI
Birds	Ardeidae	*Ixobrychus minutus*	Little bittern	C		QAI
Birds	Campephagidae	*Lalage leucomela*	Varied triller	C		QAI
Birds	Campephagidae	*Lalage sueurii*	White-winged triller	C		QAI
Birds	Laridae	*Larus novaehollandiae*	Silver gull	C		QAI
Birds	Laridae	*Larus pacificus*	Pacific gull	C		VU
Birds	Columbidae	*Leucosarcia melanoleuca*	Wonga pigeon	C		QA
Birds	Meliphagidae	*Lichenostomus chrysops*	Yellow-faced honeyeater	C		QA
Birds	Meliphagidae	*Lichenostomus fasciogularis*	Mangrove honeyeater	C		QA
Birds	Meliphagidae	*Lichenostomus fuscus*	Fuscous honeyeater	C		QA
Birds	Meliphagidae	*Lichenostomus leucotis*	White-eared honeyeater	C		QA
Birds	Meliphagidae	*Lichenostomus melanops*	Yellow-tufted honeyeater	C		QA
Birds	Meliphagidae	*Lichmera indistincta*	Brown honeyeater	C		QA
Birds	Scolopacidae	*Limosa lapponica*	Bar-tailed godwit	C		QAI
Birds	Passeridae	*Lonchura castaneothorax*	Chestnut-breasted mannikin	C		QAI
Birds	Passeridae	*Lonchura punctulata*	Nutmeg mannikin			II
Birds	Accipitridae	*Lophoictinia isura*	Square-tailed kite	R		QA
Birds	Columbidae	*Lopholaimus antarcticus*	Topknot pigeon	C		QA
Birds	Columbidae	*Macropygia amboinensis*	Brown cuckoo-dove	C		QAI
Birds	Anatidae	*Malacorhynchus*	Pink-eared duck	C		QA

		membranaceus				
Birds	Maluridae	*Malurus cyaneus*	Superb fairy-wren	C		QA
Birds	Maluridae	*Malurus lamberti*	Variegated fairy-wren	C		QA
Birds	Maluridae	*Malurus leucopterus*	White-winged fairy-wren	C		QA
Birds	Maluridae	*Malurus melanocephalus*	Red-backed fairy-wren	C		QA
Birds	Meliphagidae	*Manorina melanocephala*	Noisy miner	C		QA
Birds	Meliphagidae	*Manorina melanophrys*	Bell miner	C		QA
Birds	Sylviidae	*Megalurus gramineus*	Little grassbird	C		QAI
Birds	Sylviidae	*Megalurus timoriensis*	Tawny grassbird	C		QAI
Birds	Meliphagidae	*Meliphaga lewinii*	Lewin's honeyeater	C		QA
Birds	Meliphagidae	*Melithreptus albogularis*	White-throated honeyeater	C		QAI
Birds	Meliphagidae	*Melithreptus brevirostris*	Brown-headed honeyeater	C		QA
Birds	Meliphagidae	*Melithreptus gularis*	Black-chinned honeyeater	R		QA
Birds	Meliphagidae	*Melithreptus lunatus*	White-naped honeyeater	C		QA
Birds	Menuridae	*Menura alberti*	Albert's lyrebird	R		QA
Birds	Meropidae	*Merops ornatus*	Rainbow bee-eater	C		QAI
Birds	Petroicidae	*Microeca fascinans*	Jacky winter	C		QAI
Birds	Accipitridae	*Milvus migrans*	Black kite	C		QAI
Birds	Alaudidae	*Mirafra javanica*	Singing bushlark	C		QAI
Birds	Dicruridae	*Monarcha leucotis*	White-eared monarch	C		QA
Birds	Dicruridae	*Monarcha melanopsis*	Black-faced monarch	C		QAI
Birds	Dicruridae	*Monarcha trivirgatus*	Spectacled monarch	C		QAI
Birds	Sulidae	*Morus serrator*	Australasian gannet	C		QAI
Birds	Dicruridae	*Myiagra alecto*	Shining flycatcher	C		QAI
Birds	Dicruridae	*Myiagra cyanoleuca*	Satin flycatcher	C		QAI
Birds	Dicruridae	*Myiagra inquieta*	Restless flycatcher	C		QA
Birds	Dicruridae	*Myiagra rubecula*	Leaden flycatcher	C		QAI
Birds	Meliphagidae	*Myzomela obscura*	Dusky honeyeater	C		QAI
Birds	Meliphagidae	*Myzomela sanguinolenta*	Scarlet honeyeater	C		QA
Birds	Passeridae	*Neochmia temporalis*	Red-browed finch	C		QA
Birds	Psittacidae	*Neophema pulchella*	Turquoise parrot	R		QA
Birds	Anatidae	*Nettapus coromandelianus*	Cotton pygmy-goose	R		QAI
Birds	Strigidae	*Ninox connivens*	Barking owl	C		QAI
Birds	Strigidae	*Ninox novaeseelandiae*	Southern boobook	C		QAI
Birds	Strigidae	*Ninox strenua*	Powerful owl	V		QA
Birds	Scolopacidae	*Numenius madagascariensis*	Eastern curlew	R		QAI
Birds	Scolopacidae	*Numenius minutus*	Little curlew	C		QAI
Birds	Scolopacidae	*Numenius phaeopus*	Whimbrel	C		QAI
Birds	Ardeidae	*Nycticorax caledonicus*	Nankeen night heron	C		QAI

Birds	Cacatuidae	*Nymphicus hollandicus*	Cockatiel	C		QA
Birds	Columbidae	*Ocyphaps lophotes*	Crested pigeon	C		QA
Birds	Pachycephalidae	*Oreoica gutturalis*	Crested bellbird	C		QA
Birds	Oriolidae	*Oriolus sagittatus*	Olive-backed oriole	C		QAI
Birds	Orthonychidae	*Orthonyx temminckii*	Logrunner	C		QAI
Birds	Anatidae	*Oxyura australis*	Blue-billed duck	C		QA
Birds	Pachycephalidae	*Pachycephala pectoralis*	Golden whistler	C		QAI
Birds	Pachycephalidae	*Pachycephala rufiventris*	Rufous whistler	C		QAI
Birds	Accipitridae	*Pandion haliaetus*	Osprey	C		QAI
Birds	Pardalotidae	*Pardalotus punctatus*	Spotted pardalote	C		QA
Birds	Pardalotidae	*Pardalotus striatus*	Striated pardalote	C		QA
Birds	Passeridae	*Passer domesticus*	House sparrow			II
Birds	Phasianidae	*Pavo cristatus*	Indian peafowl			II
Birds	Pelecanidae	*Pelecanus conspicillatus*	Australian pelican	C		QAI
Birds	Petroicidae	*Petroica goodenovii*	Red-capped robin	C		QA
Birds	Petroicidae	*Petroica multicolor*	Scarlet robin	C		QA
Birds	Petroicidae	*Petroica phoenicea*	Flame robin	C		QA
Birds	Petroicidae	*Petroica rosea*	Rose robin	C		QA
Birds	Psittacidae	*Pezoporus wallicus wallicus*	Ground parrot	V		QA
Birds	Phaethontidae	*Phaethon rubricauda*	Red-tailed tropicbird	V		QAI
Birds	Phalacrocoracidae	*Phalacrocorax carbo*	Great cormorant	C		QAI
Birds	Phalacrocoracidae	*Phalacrocorax melanoleucos*	Little pied cormorant	C		QAI
Birds	Phalacrocoracidae	*Phalacrocorax sulcirostris*	Little black cormorant	C		QA
Birds	Phalacrocoracidae	*Phalacrocorax varius*	Pied cormorant	C		QAI
Birds	Columbidae	*Phaps chalcoptera*	Common bronzewing	C		QA
Birds	Meliphagidae	*Philemon citreogularis*	Little friarbird	C		QAI
Birds	Meliphagidae	*Philemon corniculatus*	Noisy friarbird	C		QAI
Birds	Meliphagidae	*Phylidonyris nigra*	White-cheeked honeyeater	C		QA
Birds	Meliphagidae	*Phylidonyris novaehollandiae*	New Holland honeyeater	C		QA
Birds	Pittidae	*Pitta versicolor*	Noisy pitta	C		QAI
Birds	Threskiornithidae	*Platalea flavipes*	Yellow-billed spoonbill	C		QA
Birds	Threskiornithidae	*Platalea regia*	Royal spoonbill	C		QAI
Birds	Psittacidae	*Platycercus adscitus*	Pale-headed rosella	C		QA
Birds	Psittacidae	*Platycercus elegans*	Crimson rosella	C		QA
Birds	Psittacidae	*Platycercus eximius*	Eastern rosella	C		QA
Birds	Meliphagidae	*Plectorhyncha lanceolata*	Striped honeyeater	C		QA
Birds	Threskiornithidae	*Plegadis falcinellus*	Glossy ibis	C		QAI
Birds	Charadriidae	*Pluvialis fulva*	Pacific golden plover	C		QAI
Birds	Podargidae	*Podargus ocellatus plumiferus*	Plumed frogmouth	V		QA
Birds	Podargidae	*Podargus strigoides*	Tawny frogmouth	C		QA
Birds	Podicipedidae	*Podiceps cristatus*	Great crested grebe	C		QAI
Birds	Podicipedidae	*Poliocephalus poliocephalus*	Hoary-headed grebe	C		QA

Birds	Pomatostomidae	*Pomatostomus temporalis*	Grey-crowned babbler	C		QAI
Birds	Rallidae	*Porphyrio porphyrio*	Purple swamphen	C		QAI
Birds	Rallidae	*Porzana pusilla*	Baillon's crake	C		QAI
Birds	Rallidae	*Porzana tabuensis*	Spotless crake	C		QAI
Birds	Cinclosomatidae	*Psophodes olivaceus*	Eastern whipbird	C		QA
Birds	Columbidae	*Ptilinopus magnificus*	Wompoo fruit-dove	C		QAI
Birds	Columbidae	*Ptilinopus regina*	Rose-crowned fruit-dove	C		QAI
Birds	Columbidae	*Ptilinopus superbus*	Superb fruit-dove	C		QAI
Birds	Ptilonorhynchidae	*Ptilonorhynchus violaceus*	Satin bowerbird	C		QA
Birds	Paradisaeidae	*Ptiloris paradiseus*	Paradise riflebird	C		QA
Birds	Rallidae	*Rallus pectoralis*	Lewin's rail	R		QAI
Birds	Recurvirostridae	*Recurvirostra novaehollandiae*	Red-necked avocet	C		QA
Birds	Dicruridae	*Rhipidura fuliginosa*	Grey fantail	C		QAI
Birds	Dicruridae	*Rhipidura leucophrys*	Willie wagtail	C		QAI
Birds	Dicruridae	*Rhipidura rufifrons*	Rufous fantail	C		QAI
Birds	Cuculidae	*Scythrops novaehollandiae*	Channel-billed cuckoo	C		QAI
Birds	Pardalotidae	*Sericornis citreogularis*	Yellow-throated scrubwren	C		QA
Birds	Pardalotidae	*Sericornis frontalis*	White-browed scrubwren	C		QA
Birds	Pardalotidae	*Sericornis magnirostris*	Large-billed scrubwren	C		QA
Birds	Ptilonorhynchidae	*Sericulus chrysocephalus*	Regent bowerbird	C		QA
Birds	Pardalotidae	*Smicrornis brevirostris*	Weebill	C		QA
Birds	Oriolidae	*Sphecotheres viridis*	Figbird	C		QAI
Birds	Passeridae	*Stagonopleura guttata*	Diamond firetail	C		QA
Birds	Laridae	*Sterna albifrons*	Little tern	E		QAI
Birds	Laridae	*Sterna anaethetus*	Bridled tern	C		QAI
Birds	Laridae	*Sterna bengalensis*	Lesser crested tern	C		QAI
Birds	Laridae	*Sterna bergii*	Crested tern	C		QAI
Birds	Laridae	*Sterna caspia*	Caspian tern	C		QAI
Birds	Laridae	*Sterna hirundo*	Common tern	C		QAI
Birds	Laridae	*Sterna nilotica*	Gull-billed tern	C		QAI
Birds	Anatidae	*Stictonetta naevosa*	Freckled duck	R		QA
Birds	Maluridae	*Stipiturus malachurus*	Southern emu-wren	V		QA
Birds	Artamidae	*Strepera graculina*	Pied currawong	C		QA
Birds	Columbidae	*Streptopelia chinensis*	Spotted turtle-dove			II
Birds	Sturnidae	*Sturnus vulgaris*	Common starling			II
Birds	Sulidae	*Sula dactylatra*	Masked booby	C		QAI
Birds	Podicipedidae	*Tachybaptus novaehollandiae*	Australasian grebe	C		QAI
Birds	Passeridae	*Taeniopygia bichenovii*	Double-barred finch	C		QA
Birds	Passeridae	*Taeniopygia guttata*	Zebra finch	C		QA
Birds	Threskiornithidae	*Threskiornis molucca*	Australian white ibis	C		QAI
Birds	Threskiornithidae	*Threskiornis spinicollis*	Straw-necked ibis	C		QAI
Birds	Halcyonidae	*Todiramphus chloris*	Collared kingfisher	C		QAI
Birds	Halcyonidae	*Todiramphus macleayii*	Forest kingfisher	C		QAI

Birds	Halcyonidae	*Todiramphus sanctus*	Sacred kingfisher	C		QAI
Birds	Petroicidae	*Tregellasia capito*	Pale-yellow robin	C		QA
Birds	Psittacidae	*Trichoglossus chlorolepidotus*	Scaly-breasted lorikeet	C		QA
Birds	Psittacidae	*Trichoglossus haematodus moluccanus*	Rainbow lorikeet	C		QA
Birds	Scolopacidae	*Tringa nebularia*	Common greenshank	C		QAI
Birds	Scolopacidae	*Tringa stagnatilis*	Marsh sandpiper	C		QAI
Birds	Turnicidae	*Turnix maculosa*	Red-backed button-quail	C		QAI
Birds	Turnicidae	*Turnix melanogaster*	Black-breasted button-quail	V	V	QA
Birds	Turnicidae	*Turnix varia*	Painted button-quail	C		QA
Birds	Turnicidae	*Turnix velox*	Little button-quail	C		QA
Birds	Tytonidae	*Tyto alba*	Barn owl	C		QAI
Birds	Tytonidae	*Tyto capensis*	Grass owl	C		QAI
Birds	Tytonidae	*Tyto tenebricosa*	Sooty owl	R		QA
Birds	Charadriidae	*Vanellus miles novaehollandiae*	Masked lapwing (southern subspecies)	C		QA
Birds	Charadriidae	*Vanellus tricolor*	Banded lapwing	C		QA
Birds	Scolopacidae	*Xenus cinereus*	Terek sandpiper	C		QAI
Birds	Muscicapidae	*Zoothera heinei*	Russet-tailed thrush	C		QA
Birds	Muscicapidae	*Zoothera lunulata*	Bassian thrush	C		QA
Birds	Zosteropidae	*Zosterops lateralis*	Silvereye	C		QAI
Bony fish	Anguillidae	*Anguilla reinhardtii*	Longfin eel			QAI
Bony fish	Atherinidae	*Craterocephalus stercusmuscarum*	Flyspecked hardyhead			QA
Bony fish	Poeciliidae	*Gambusia holbrooki*	Mosquitofish			II
Bony fish	Eleotridae	*Hypseleotris compressa*	Empire gudgeon			QAI
Bony fish	Eleotridae	*Hypseleotris galii*	Firetail gudgeon			QA
Bony fish	Kuhliidae	*Kuhlia rupestris*	Jungle perch			QI
Bony fish	Percichthyidae	*Maccullochella peelii mariensis*	Mary River cod		E	Q
Bony fish	Percichthyidae	*Macquaria novemaculeata*	Australian bass			QA
Bony fish	Melanotaeniidae	*Melanotaenia duboulayi*	Crimsonspotted rainbowfish			QA
Bony fish	Eleotrididae	*Mogurnda adspersa*	Southern purplespotted gudgeon			QA
Bony fish	Mugilidae	*Mugil cephalus*	Sea mullet			QAI
Bony fish	Mugilidae	*Myxus petardi*	Pinkeye mullet			QA
Bony fish	Clupeidae	*Nematalosa erebi*	Bony bream			QA
Bony fish	Pseudomugilidae	*Pseudomugil signifer*	Pacific blue eye			QA
Bony fish	Retropinnidae	*Retropinna semoni*	Australian smelt			QA
Bony fish	Melanotaeniidae	*Rhadinocentrus ornatus*	Ornate rainbowfish			QA
Insects	Nymphalidae	*Acraea andromacha andromacha*	Glasswing			QAI
Insects	Pieridae	*Appias paulina ego*	Yellow albatross			QA
Insects	Nymphalidae	*Argyreus hyperbius inconstans*	Australian fritillary	E		QA

Insects	Pieridae	*Belenois java teutonia*	Caper white			QAI
Insects	Lycaenidae	*Candalides absimilis*	Common pencilled-blue			QA
Insects	Lycaenidae	*Candalides consimilis consimilis*	Dark pencilled-blue (eastern subspecies)			QA
Insects	Lycaenidae	*Candalides erinus erinus*	Small dusky-blue			QA
Insects	Lycaenidae	*Candalides heathi heathi*	Rayed blue			QA
Insects	Lycaenidae	*Catochrysops panormus platissa*	Pale pea-blue			QA
Insects	Pieridae	*Catopsilia pomona pomona*	Lemon migrant			QAI
Insects	Pieridae	*Catopsilia pyranthe crokera*	White migrant			QA
Insects	Lycaenidae	*Catopyrops florinda halys*	Speckled line-blue (southern subspecies)			QA
Insects	Hesperiidae	*Cephrenes augiades sperthias*	Orange palm-dart			QA
Insects	Pieridae	*Cepora perimale scyllara*	Caper gull (Australian subspecies)			QA
Insects	Papilionidae	*Cressida cressida cressida*	Greasy swallowtail			QA
Insects	Nymphalidae	*Cupha prosope prosope*	Bordered rustic (Australian subspecies)			QA
Insects	Nymphalidae	*Danaus affinis affinis*	Marsh tiger			QAI
Insects	Nymphalidae	*Danaus chrysippus petilia*	Lesser wanderer			QAI
Insects	Nymphalidae	*Danaus plexippus plexippus*	Monarch			QAI
Insects	Pieridae	*Delias aganippe*	Red-spotted jezebel			QA
Insects	Pieridae	*Delias argenthona argenthona*	Scarlet jezebel			QA
Insects	Pieridae	*Delias nigrina*	Black jezebel			QA
Insects	Pieridae	*Delias nysa nysa*	Yellow-spotted jezebel (Australian subspecies)			QA
Insects	Nymphalidae	*Doleschallia bisaltide australis*	Leafwing			QAI
Insects	Pieridae	*Elodina angulipennis*	Southern pearl-white			QA
Insects	Pieridae	*Elodina parthia*	Striated pearl-white			QA
Insects	Lycaenidae	*Erysichton lineata lineata*	Hairy line-blue			QA
Insects	Nymphalidae	*Euploea core corinna*	Common crow			QA
Insects	Nymphalidae	*Euploea tulliolus tulliolus*	Purple crow			QA
Insects	Pieridae	*Eurema brigitta australis*	No-brand grass-yellow			QA
Insects	Pieridae	*Eurema hecabe phoebus*	Large grass-yellow			QA
Insects	Pieridae	*Eurema herla*	Pink grass-yellow			QA
Insects	Pieridae	*Eurema smilax*	Small grass-yellow			QA
Insects	Hesperiidae	*Euschemon rafflesia rafflesia*	Regent skipper (southern subspecies)			QA
Insects	Papilionidae	*Graphium eurypylus lycaon*	Pale-blue triangle (eastern subspecies)			QA

Insects	Papilionidae	*Graphium sarpedon choredon*	Blue triangle			QAI
Insects	Hesperiidae	*Hasora khoda haslia*	Narrow-banded awl			QA
Insects	Lycaenidae	*Hypochrysops apelles apelles*	Copper jewel			QAI
Insects	Lycaenidae	*Hypochrysops cyane*	Cyane jewel			QA
Insects	Lycaenidae	*Hypochrysops delicia delicia*	Moonlight jewel (eastern subspecies)			QA
Insects	Lycaenidae	*Hypochrysops digglesii*	Silky jewel			QAI
Insects	Nymphalidae	*Hypocysta adiante adiante*	Orange ringlet			QA
Insects	Nymphalidae	*Hypocysta irius*	Orange-streaked ringlet			QA
Insects	Nymphalidae	*Hypocysta metirius*	Brown ringlet			QA
Insects	Nymphalidae	*Hypolimnas bolina nerina*	Varied eggfly			QAI
Insects	Nymphalidae	*Hypolimnas misippus*	Danaid eggfly			QAI
Insects	Lycaenidae	*Jalmenus evagoras evagoras*	Imperial hairstreak (southern subspecies)			QA
Insects	Nymphalidae	*Junonia orithya albicincta*	Blue argus			QA
Insects	Nymphalidae	*Junonia villida calybe*	Meadow argus			QAI
Insects	Lycaenidae	*Lampides boeticus*	Long-tailed pea-blue			QAI
Insects	Lycaenidae	*Lucia limbaria*	Grassland copper			QA
Insects	Nymphalidae	*Melanitis leda bankia*	Common evening-brown			QA
Insects	Nymphalidae	*Mynes geoffroyi guerini*	Jezebel nymph			QA
Insects	Lycaenidae	*Nacaduba biocellata biocellata*	Two-spotted line-blue			QA
Insects	Papilionidae	*Ornithoptera richmondia*	Richmond birdwing	V		QA
Insects	Papilionidae	*Papilio aegeus aegeus*	Orchard swallowtail (Australian subspecies)			QA
Insects	Papilionidae	*Papilio anactus*	Dingy swallowtail			QA
Insects	Papilionidae	*Papilio demoleus sthenelus*	Chequered swallowtail			QAI
Insects	Papilionidae	*Papilio fuscus capaneus*	Fuscous swallowtail (Australian subspecies)			QA
Insects	Lycaenidae	*Paralucia pyrodiscus pyrodiscus*	Dull copper			QA
Insects	Nymphalidae	*Phaedyma shepherdi shepherdi*	White-banded plane (southern subspecies)			QA
Insects	Pieridae	*Pieris rapae*	Cabbage white			QAI
Insects	Nymphalidae	*Polyura sempronius sempronius*	Tailed emperor			QA
Insects	Hesperiidae	*Taractrocera dolon dolon*	Sandy grass-dart			QAI
Insects	Hesperiidae	*Taractrocera ina*	No-brand grass-dart			QA
Insects	Hesperiidae	*Taractrocera papyria papyria*	White-banded grass-dart			QA
Insects	Nymphalidae	*Tirumala hamata hamata*	Blue tiger			QAI
Insects	Nymphalidae	*Tisiphone abeona rawnsleyi*	Varied sword-grass			Q

			brown (Queensland subspecies)			
Insects	Hesperiidae	*Trapezites eliena*	Orange ochre			QA
Insects	Nymphalidae	*Vanessa itea*	Yellow admiral			QAI
Insects	Nymphalidae	*Vanessa kershawi*	Australian painted lady			QAI
Insects	Nymphalidae	*Ypthima arctous arctous*	Dusky knight			QA
Insects	Lycaenidae	*Zizina labradus labradus*	Common grass-blue (Australian subspecies)			QAI
Insects	Lycaenidae	*Zizula hylax attenuata*	Little grass-blue			QA
Mammals	Acrobatidae	*Acrobates pygmaeus*	Feathertail glider	C		QA
Mammals	Potoroidae	*Aepyprymnus rufescens*	Rufous bettong	C		QA
Mammals	Dasyuridae	*Antechinus flavipes*	Yellow-footed antechinus	C		QA
Mammals	Dasyuridae	*Antechinus subtropicus*		C		QA
Mammals	Canidae	*Canis familiaris*	Dog			II
Mammals	Canidae	*Canis lupus dingo*	Dingo			QA
Mammals	Vespertilionidae	*Chalinolobus gouldii*	Gould's wattled bat	C		QA
Mammals	Vespertilionidae	*Chalinolobus morio*	Chocolate wattled bat	C		QA
Mammals	Vespertilionidae	*Chalinolobus nigrogriseus*	Hoary wattled bat	C		QAI
Mammals	Dasyuridae	*Dasyurus hallucatus*	Northern quoll	C	E	QA
Mammals	Dasyuridae	*Dasyurus maculatus maculatus*	Spotted-tailed quoll (southern subspecies)	V	E	QA
Mammals	Felidae	*Felis catus*	Cat			II
Mammals	Muridae	*Hydromys chrysogaster*	Water rat	C		QAI
Mammals	Peramelidae	*Isoodon macrourus*	Northern brown bandicoot	C		QAI
Mammals	Vespertilionidae	*Kerivoula papuensis*	Golden-tipped bat	R		QAI
Mammals	Leporidae	*Lepus capensis*	Brown hare			II
Mammals	Macropodidae	*Macropus dorsalis*	Black-striped wallaby	C		QA
Mammals	Macropodidae	*Macropus giganteus*	Eastern grey kangaroo	C		QA
Mammals	Macropodidae	*Macropus parryi*	Whiptail wallaby	C		QA
Mammals	Macropodidae	*Macropus rufogriseus*	Red-necked wallaby	C		QA
Mammals	Muridae	*Melomys burtoni*	Grassland melomys	C		QA
Mammals	Muridae	*Melomys cervinipes*	Fawn-footed melomys	C		QA
Mammals	Vespertilionidae	*Miniopterus australis*	Little bent-wing bat	C		QAI
Mammals	Vespertilionidae	*Miniopterus schreibersii oceanensis*	Eastern bent-wing bat	C		QAI
Mammals	Molossidae	*Mormopterus beccarii*	Beccari's freetail bat	C		QAI
Mammals	Molossidae	*Mormopterus norfolkensis*	East coast freetail bat	C		QA
Mammals	Molossidae	*Mormopterus sp. 2*	Eastern freetail bat	C		QA
Mammals	Muridae	*Mus musculus*	House mouse			II
Mammals	Vespertilionidae	*Myotis macropus*	Large-footed myotis	C		QA
Mammals	Pteropodidae	*Nyctimene robinsoni*	Eastern tube-nosed bat	C		QA

Mammals	Vespertilionidae	*Nyctophilus bifax bifax*	Northern long-eared bat	C		QAI
Mammals	Vespertilionidae	*Nyctophilus gouldi*	Gould's long-eared bat	C		QA
Mammals	Ornithorhynchidae	*Ornithorhynchus anatinus*	Platypus	C		QA
Mammals	Peramelidae	*Perameles nasuta*	Long-nosed bandicoot	C		QA
Mammals	Pseudocheiridae	*Petauroides volans*	Greater glider	C		QA
Mammals	Petauridae	*Petaurus australis australis*	Yellow-bellied glider (southern subspecies)	C		QA
Mammals	Petauridae	*Petaurus breviceps*	Sugar glider	C		QAI
Mammals	Petauridae	*Petaurus norfolcensis*	Squirrel glider	C		QA
Mammals	Dasyuridae	*Phascogale tapoatafa*	Brush-tailed phascogale	C		QA
Mammals	Phascolarctidae	*Phascolarctos cinereus (southeast Queensland bioregion)*	Koala (southeast Queensland bioregion)	V		Q
Mammals	Dasyuridae	*Planigale maculata*	Common planigale	C		QA
Mammals	Potoroidae	*Potorous tridactylus tridactylus*	Long-nosed potoroo	V	V	QA
Mammals	Pseudocheiridae	*Pseudocheirus peregrinus*	Common ringtail possum	C		QA
Mammals	Muridae	*Pseudomys delicatulus*	Delicate mouse	C		QAI
Mammals	Muridae	*Pseudomys gracilicaudatus*	Eastern chestnut mouse	C		QA
Mammals	Pteropodidae	*Pteropus alecto*	Black flying-fox	C		QAI
Mammals	Pteropodidae	*Pteropus poliocephalus*	Grey-headed flying-fox	C	V	QA
Mammals	Pteropodidae	*Pteropus scapulatus*	Little red flying-fox	C		QAI
Mammals	Muridae	*Rattus fuscipes*	Bush rat	C		QA
Mammals	Muridae	*Rattus lutreolus*	Swamp rat	C		QA
Mammals	Muridae	*Rattus rattus*	Black rat			II
Mammals	Muridae	*Rattus tunneyi*	Pale field-rat	C		QA
Mammals	Rhinolophidae	*Rhinolophus megaphyllus*	Eastern horseshoe-bat	C		QAI
Mammals	Emballonuridae	*Saccolaimus flaviventris*	Yellow-bellied sheathtail bat	C		QAI
Mammals	Vespertilionidae	*Scoteanax rueppellii*	Greater broad-nosed bat	C		QA
Mammals	Vespertilionidae	*Scotorepens greyii*	Little broad-nosed bat	C		QA
Mammals	Vespertilionidae	*Scotorepens orion*	South-eastern broad-nosed bat	C		QA
Mammals	Dasyuridae	*Sminthopsis murina*	Common dunnart	C		QA
Mammals	Suidae	*Sus scrofa*	Pig			II
Mammals	Pteropodidae	*Syconycteris australis*	Eastern blossom bat	C		QAI
Mammals	Tachyglossidae	*Tachyglossus aculeatus*	Short-beaked echidna	C		QAI
Mammals	Molossidae	*Tadarida australis*	White-striped freetail bat	C		QA
Mammals	Macropodidae	*Thylogale stigmatica*	Red-legged pademelon	C		QAI

Mammals	Macropodidae	*Thylogale thetis*	Red-necked pademelon	C		QA
Mammals	Phalangeridae	*Trichosurus caninus*	Short-eared possum	C		QA
Mammals	Phalangeridae	*Trichosurus vulpecula*	Common brushtail possum	C		QA
Mammals	Vespertilionidae	*Vespadelus darlingtoni*	Large forest bat	C		QA
Mammals	Vespertilionidae	*Vespadelus pumilus*	Eastern forest bat	C		QA
Mammals	Canidae	*Vulpes vulpes*	Red fox			II
Mammals	Macropodidae	*Wallabia bicolor*	Swamp wallaby	C		QA
Mammals	Muridae	*Xeromys myoides*	False water-rat	V	V	QAI
Reptiles	Elapidae	*Acanthophis antarcticus*	Common death adder	R		QA
Reptiles	Scincidae	*Anomalopus verreauxii*		C		QA
Reptiles	Boidae	*Antaresia maculosa*		C		QA
Reptiles	Colubridae	*Boiga irregularis*	Brown tree snake	C		QA
Reptiles	Elapidae	*Cacophis harriettae*	White-crowned snake	C		QA
Reptiles	Elapidae	*Cacophis krefftii*	Dwarf crowned snake	C		QA
Reptiles	Elapidae	*Cacophis squamulosus*	Golden crowned snake	C		QA
Reptiles	Scincidae	*Calyptotis lepidorostrum*		C		Q
Reptiles	Scincidae	*Calyptotis scutirostrum*		C		QA
Reptiles	Cheloniidae	*Caretta caretta*	Loggerhead turtle	E	E	QAI
Reptiles	Scincidae	*Carlia foliorum*		C		QA
Reptiles	Scincidae	*Carlia vivax*		C		QA
Reptiles	Chelidae	*Chelodina longicollis*	Eastern snake-necked turtle	C		QA
Reptiles	Agamidae	*Chlamydosaurus kingii*	Frilled lizard	C		QA
Reptiles	Scincidae	*Coeranoscincus reticulatus*	Three-toed snake-tooth skink	R	V	QA
Reptiles	Scincidae	*Cryptoblepharus virgatus*		C		QA
Reptiles	Scincidae	*Ctenotus arcanus*		C		QA
Reptiles	Scincidae	*Ctenotus robustus*		C		QA
Reptiles	Scincidae	*Ctenotus taeniolatus*	Copper-tailed skink	C		QA
Reptiles	Scincidae	*Cyclodomorphus gerrardii*	Pink-tongued lizard	C		QA
Reptiles	Pygopodidae	*Delma tincta*		C		QA
Reptiles	Pygopodidae	*Delma torquata*	Collared delma	V	V	Q
Reptiles	Elapidae	*Demansia psammophis*	Yellow-faced whip snake	C		QA
Reptiles	Elapidae	*Demansia vestigiata*	Black whip snake	C		QA
Reptiles	Colubridae	*Dendrelaphis punctulata*	Common tree snake	C		QA
Reptiles	Agamidae	*Diporiphora australis*		C		Q
Reptiles	Scincidae	*Egernia frerei*	Major skink	C		QA
Reptiles	Scincidae	*Egernia major*	Land mullet	C		QA
Reptiles	Chelidae	*Elseya latisternum*	Saw-shelled turtle	C		QA
Reptiles	Chelidae	*Emydura macquarii krefftii*	Krefft's river turtle	C		QA
Reptiles	Scincidae	*Eroticoscincus graciloides*		R		Q
Reptiles	Scincidae	*Eulamprus brachysoma*		C		Q
Reptiles	Scincidae	*Eulamprus martini*		C		QA
Reptiles	Scincidae	*Eulamprus murrayi*		C		QA

Reptiles	Scincidae	*Eulamprus quoyii*	Eastern water skink	C		QA
Reptiles	Scincidae	*Eulamprus tenuis*		C		QA
Reptiles	Gekkonidae	*Gehyra dubia*		C		QA
Reptiles	Elapidae	*Hemiaspis signata*	Black-bellied swamp snake	C		QA
Reptiles	Gekkonidae	*Hemidactylus frenatus*	House gecko			II
Reptiles	Elapidae	*Hoplocephalus bitorquatus*	Pale-headed snake	C		QA
Reptiles	Agamidae	*Hypsilurus spinipes*	Southern angle-headed dragon	C		QA
Reptiles	Scincidae	*Lampropholis adonis*		C		Q
Reptiles	Scincidae	*Lampropholis amicula*		C		QA
Reptiles	Scincidae	*Lampropholis couperi*		C		Q
Reptiles	Scincidae	*Lampropholis delicata*		C		QA
Reptiles	Scincidae	*Lampropholis guichenoti*		C		QA
Reptiles	Pygopodidae	*Lialis burtonis*	Burton's legless lizard	C		QAI
Reptiles	Boidae	*Morelia spilota*	Carpet python	C		QA
Reptiles	Scincidae	*Morethia taeniopleura*	Fire-tailed skink	C		QA
Reptiles	Elapidae	*Notechis scutatus*	Eastern tiger snake	C		QA
Reptiles	Gekkonidae	*Oedura lesueurii*	Lesueur's velvet gecko	C		QA
Reptiles	Gekkonidae	*Oedura robusta*	Robust velvet gecko	C		QA
Reptiles	Gekkonidae	*Oedura tryoni*	Southern spotted velvet gecko	C		QA
Reptiles	Scincidae	*Ophioscincus truncatus*		R		QA
Reptiles	Agamidae	*Physignathus lesueurii*	Eastern water dragon	C		QA
Reptiles	Agamidae	*Pogona barbata*	Bearded dragon	C		QA
Reptiles	Elapidae	*Pseudechis porphyriacus*	Red-bellied black snake	C		QA
Reptiles	Elapidae	*Pseudonaja textilis*	Eastern brown snake	C		QA
Reptiles	Pygopodidae	*Pygopus lepidopodus*	Common scaly-foot	C		QA
Reptiles	Typhlopidae	*Ramphotyphlops ligatus*		C		QA
Reptiles	Typhlopidae	*Ramphotyphlops nigrescens*		C		QA
Reptiles	Typhlopidae	*Ramphotyphlops silvia*		R		Q
Reptiles	Elapidae	*Rhinoplocephalus nigrescens*	Eastern small-eyed snake	C		QA
Reptiles	Scincidae	*Saproscincus challengeri*		C		QA
Reptiles	Scincidae	*Saproscincus rosei*		R		QA
Reptiles	Scincidae	*Tiliqua scincoides*	Eastern blue-tongued lizard	C		QA
Reptiles	Elapidae	*Tropidechis carinatus*	Rough-scaled snake	C		QA
Reptiles	Colubridae	*Tropidonophis mairii*	Freshwater snake	C		QA
Reptiles	Varanidae	*Varanus gouldii*	Sand monitor	C		QA
Reptiles	Varanidae	*Varanus varius*	Lace monitor	C		QA
Reptiles	Elapidae	*Vermicella annulata*	Bandy-bandy	C		QA

IMAGE FLAT CONNECTION

Class	Family	Scientific Name	Common Name	Q	A
Amphibians	*Bufonidae*	*Bufo marinus*	Cane toad	**I**	
Amphibians	*Myobatrachidae*	*Limnodynastes peronii*	Striped marshfrog	**C**	
Birds	*Accipitridae*	*Aviceda subcristata*	Pacific baza	**C**	
Birds	*Anatidae*	*Anas superciliosa*	Pacific black duck	**C**	
Birds	*Anatidae*	*Chenonetta jubata*	Australian wood duck	**C**	
Birds	*Ardeidae*	*Ardea ibis*	Cattle egret	**C**	
Birds	*Ardeidae*	*Egretta novaehollandiae*	White-faced heron	**C**	
Birds	*Artamidae*	*Gymnorhina tibicen*	Australian magpie	**C**	
Birds	*Artamidae*	*Strepera graculina*	Pied currawong	**C**	
Birds	*Artamidae*	*Cracticus torquatus*	Grey butcherbird	**C**	
Birds	*Artamidae*	*Cracticus nigrogularis*	Pied butcherbird	**C**	
Birds	*Campephagidae*	*Coracina novaehollandiae*	Black-faced cuckoo-shrike	**C**	
Birds	*Centropodidae*	*Centropus phasianinus*	Pheasant coucal	**C**	
Birds	*Charadriidae*	*Vanellus miles novaehollandiae*	Masked lapwing (southern subspecies)	**C**	
Birds	*Cinclosomatidae*	*Psophodes olivaceus*	Eastern whipbird	**C**	
Birds	*Climacteridae*	*Cormobates leucophaeus metastasis*	White-throated treecreeper (southern)	**C**	
Birds	*Columbidae*	*Columba leucomela*	White-headed pigeon	**C**	
Birds	*Columbidae*	*Macropygia amboinensis*	Brown cuckoo-dove	**C**	
Birds	*Columbidae*	*Streptopelia chinensis*	Spotted turtle-dove		
Birds	*Columbidae*	*Chalcophaps indica*	Emerald dove	**C**	
Birds	*Columbidae*	*Ocyphaps lophotes*	Crested pigeon	**C**	
Birds	*Corvidae*	*Corvus orru*	Torresian crow	**C**	
Birds	*Cuculidae*	*Cacomantis flabelliformis*	Fan-tailed cuckoo	**C**	
Birds	*Cuculidae*	*Scythrops novaehollandiae*	Channel-billed cuckoo	**C**	
Birds	*Dicruridae*	*Dicrurus bracteatus*	Spangled drongo	**C**	
Birds	*Dicruridae*	*Rhipidura leucophrys*	Willie wagtail	**C**	
Birds	*Dicruridae*	*Rhipidura fuliginosa*	Grey fantail	**C**	

Birds	*Dicruridae*	*Grallina cyanoleuca*	Magpie-lark	**C**	
Birds	*Halcyonidae*	*Dacelo novaeguineae*	Laughing kookaburra	**C**	
Birds	*Hirundinidae*	*Hirundo neoxena*	Welcome swallow	**C**	
Birds	*Maluridae*	*Malurus melanocephalus*	Red-backed fairy-wren	**C**	
Birds	*Megapodiidae*	*Alectura lathami*	Australian brush-turkey	**C**	
Birds	*Meliphagidae*	*Meliphaga lewinii*	Lewin's honeyeater	**C**	
Birds	*Meliphagidae*	*Manorina melanocephala*	Noisy miner	**C**	
Birds	*Meliphagidae*	*Plectorhyncha lanceolata*	Striped honeyeater	**C**	
Birds	*Meliphagidae*	*Myzomela sanguinolenta*	Scarlet honeyeater	**C**	
Birds	*Meliphagidae*	*Lichenostomus chrysops*	Yellow-faced honeyeater	**C**	
Birds	*Meliphagidae*	*Lichmera indistincta*	Brown honeyeater	**C**	
Birds	*Meliphagidae*	*Manorina melanophrys*	Bell miner	**C**	
Birds	*Meropidae*	*Merops ornatus*	Rainbow bee-eater	**C**	
Birds	*Oriolidae*	*Sphecotheres viridis*	Figbird	**C**	
Birds	*Pachycephalidae*	*Colluricincla harmonica*	Grey shrike-thrush	**C**	
Birds	*Pachycephalidae*	*Pachycephala rufiventris*	Rufous whistler	**C**	
Birds	*Pardalotidae*	*Acanthiza pusilla*	Brown thornbill	**C**	
Birds	*Pardalotidae*	*Pardalotus punctatus*	Spotted pardalote	**C**	
Birds	*Pardalotidae*	*Pardalotus striatus*	Striated pardalote	**C**	
Birds	*Pardalotidae*	*Sericornis frontalis*	White-browed scrubwren	**C**	
Birds	*Passeridae*	*Neochmia temporalis*	Red-browed finch	**C**	
Birds	*Petroicidae*	*Petroica rosea*	Rose robin	**C**	
Birds	*Podargidae*	*Podargus strigoides*	Tawny frogmouth	**C**	
Birds	*Psittacidae*	*Alisterus scapularis*	Australian king-parrot	**C**	
Birds	*Psittacidae*	*Platycercus adscitus*	Pale-headed rosella	**C**	
Birds	*Psittacidae*	*Trichoglossus haematodus moluccanus*	Rainbow lorikeet	**C**	
Birds	*Psittacidae*	*Trichoglossus chlorolepidotus*	Scaly-breasted lorikeet	**C**	
Birds	*Rallidae*	*Gallinula tenebrosa*	Dusky moorhen	**C**	
Birds	*Strigidae*	*Ninox novaeseelandiae*	Southern boobook	**C**	
Birds	*Threskiornithidae*	*Threskiornis molucca*	Australian white ibis	**C**	

Birds	*Threskiornithidae*	*Threskiornis spinicollis*	Straw-necked ibis	**C**	
Birds	*Zosteropidae*	*Zosterops lateralis*	Silvereye	**C**	
Mammals	*Canidae*	*Vulpes vulpes*	Red fox		
Mammals	*Dasyuridae*	*Antechinus flavipes*	Yellow-footed antechinus	**C**	
Mammals	*Molossidae*	*Tadarida australis*	White-striped freetail bat	**C**	
Mammals	*Muridae*	*Mus musculus*	House mouse		
Mammals	*Peramelidae*	*Isoodon macrourus*	Northern brown bandicoot	**C**	
Mammals	*Petauridae*	*Petaurus norfolcensis*	Squirrel glider	**C**	
Mammals	*Phalangeridae*	*Trichosurus vulpecula*	Common brushtail possum	**C**	
Mammals	*Phascolarctidae*	*Phascolarctos cinereus (southeast Queensland bioregion)*	Koala (southeast Queensland bioregion)	**V**	
Mammals	*Pteropodidae*	*Pteropus poliocephalus*	Grey-headed flying-fox	**C**	**V**
Mammals	*Tachyglossidae*	*Tachyglossus aculeatus*	Short-beaked echidna	**C**	
Reptiles	*Boidae*	*Morelia spilota*	Carpet python	**C**	
Reptiles	*Elapidae*	*Rhinoplocephalus nigrescens*	Eastern small-eyed snake	**C**	
Reptiles	*Scincidae*	*Cryptoblepharus virgatus*		**C**	
Club mosses	*Lycopodiaceae*	*Lycopodium cernuum*		**C**	
Conifers	*Araucariaceae*	*Araucaria cunninghamii*	Hoop pine	**C**	
Conifers	*Podocarpaceae*	*Podocarpus elatus*	She pine	**C**	
Cycads	*Zamiaceae*	*Macrozamia lucida*	Pineapple zamia	**C**	
Ferns	*Adiantaceae*	*Adiantum diaphanum*		**C**	
Ferns	*Adiantaceae*	*Cheilanthes sieberi*		**C**	
Ferns	*Adiantaceae*	*Adiantum hispidulum*		**C**	
Ferns	*Aspleniaceae*	*Asplenium australasicum*		**C**	
Ferns	*Blechnaceae*	*Doodia media*		**C**	
Ferns	*Blechnaceae*	*Doodia caudata*		**C**	
Ferns	*Blechnaceae*	*Blechnum cartilagineum*	Gristle fern	**C**	
Ferns	*Blechnaceae*	*Doodia aspera*	Prickly rasp fern	**C**	
Ferns	*Cyatheaceae*	*Cyathea cooperi*		**C**	
Ferns	*Cyatheaceae*	*Cyathea leichhardtiana*	Prickly tree fern	**C**	

Ferns	*Dennstaedtiaceae*	*Hypolepis muelleri*	Swamp bracken	**C**	
Ferns	*Dennstaedtiaceae*	*Pteridium esculentum*	Common bracken	**C**	
Ferns	*Dicksoniaceae*	*Calochlaena dubia*		**C**	
Ferns	*Dryopteridaceae*	*Lastreopsis microsora*		**C**	
Ferns	*Gleicheniaceae*	*Gleichenia dicarpa*	Pouched coral fern	**C**	
Ferns	*Gleicheniaceae*	*Sticherus flabellatus*		**C**	
Ferns	*Hymenophyllaceae*	*Crepidomanes walleri*		**C**	
Ferns	*Nephrolepidaceae*	*Arthropteris beckleri*		**C**	
Ferns	*Nephrolepidaceae*	*Nephrolepis cordifolia*	Fishbone fern	**C**	
Ferns	*Polypodiaceae*	*Drynaria rigidula*		**C**	
Ferns	*Thelypteridaceae*	*Christella dentata*	Creek fern	**C**	
Ferns	*Thelypteridaceae*	*Cyclosorus interruptus*		**C**	
Higher dicots	*Acanthaceae*	*Rostellularia adscendens*		**C**	
Higher dicots	*Acanthaceae*	*Pseuderanthemum variabile*	Pastel flower	**C**	
Higher dicots	*Anacardiaceae*	*Euroschinus falcatus*		**C**	
Higher dicots	*Apiaceae*	*Centella asiatica*		**C**	
Higher dicots	*Apocynaceae*	*Parsonsia tenuis*	Slender silkpod	**R**	
Higher dicots	*Apocynaceae*	*Alyxia ilicifolia*		**C**	
Higher dicots	*Apocynaceae*	*Parsonsia straminea*	Monkey rope	**C**	
Higher dicots	*Apocynaceae*	*Alyxia ruscifolia*		**C**	
Higher dicots	*Araliaceae*	*Polyscias elegans*	Celery wood	**C**	
Higher dicots	*Araliaceae*	*Schefflera actinophylla*	Umbrella tree	**C**	
Higher dicots	*Araliaceae*	*Cephalaralia cephalobotrys*	Climbing panax	**C**	
Higher dicots	*Asclepiadaceae*	*Hoya australis*		**C**	
Higher dicots	*Asclepiadaceae*	*Gomphocarpus physocarpus*	Balloon cottonbush		
Higher dicots	*Asteraceae*	*Senecio amygdalifolius*		**C**	
Higher dicots	*Asteraceae*	*Chrysocephalum apiculatum*	Yellow buttons	**C**	
Higher dicots	*Asteraceae*	*Crassocephalum crepidioides*	Thickhead		
Higher	*Asteraceae*	*Hypochaeris*		**C**	

dicots		*microcephala*			
Higher dicots	*Asteraceae*	*Cyanthillium cinereum*		**C**	
Higher dicots	*Asteraceae*	*Cassinia quinquefaria*		**C**	
Higher dicots	*Asteraceae*	*Baccharis halimifolia*	Groundsel bush		
Higher dicots	*Asteraceae*	*Ageratum houstonianum*	Blue billygoat weed		
Higher dicots	*Asteraceae*	*Hypochaeris radicata*	Catsear		
Higher dicots	*Asteraceae*	*Conyza bonariensis*			
Higher dicots	*Asteraceae*	*Ageratina riparia*	Mistflower		
Higher dicots	*Asteraceae*	*Bidens pilosa*			
Higher dicots	*Asteraceae*	*Ozothamnus diosmifolius*	White dogwood	**C**	
Higher dicots	*Burseraceae*	*Canarium australasicum*	Mango bark	**C**	
Higher dicots	*Campanulaceae*	*Lobelia trigonocaulis*	Forest lobelia	**C**	
Higher dicots	*Casuarinaceae*	*Allocasuarina torulosa*		**C**	
Higher dicots	*Casuarinaceae*	*Allocasuarina littoralis*		**C**	
Higher dicots	*Celastraceae*	*Hippocratea barbata*	Knotvine	**C**	
Higher dicots	*Celastraceae*	*Denhamia celastroides*	Broad-leaved boxwood	**C**	
Higher dicots	*Convolvulaceae*	*Dichondra repens*	Kidney weed	**C**	
Higher dicots	*Cunoniaceae*	*Schizomeria ovata*	White cherry	**C**	
Higher dicots	*Ebenaceae*	*Diospyros pentamera*	Myrtle ebony	**C**	
Higher dicots	*Elaeocarpaceae*	*Sloanea woollsii*	Yellow carrabeen	**C**	
Higher dicots	*Elaeocarpaceae*	*Elaeocarpus eumundi*	Eumundi quandong	**C**	
Higher dicots	*Elaeocarpaceae*	*Sloanea australis*		**C**	
Higher dicots	*Epacridaceae*	*Trochocarpa laurina*	Tree heath	**C**	
Higher dicots	*Epacridaceae*	*Leucopogon lanceolatus*		**C**	
Higher dicots	*Euphorbiaceae*	*Bridelia exaltata*		**C**	
Higher dicots	*Euphorbiaceae*	*Breynia oblongifolia*		**C**	
Higher dicots	*Euphorbiaceae*	*Glochidion sumatranum*	Umbrella cheese tree	**C**	
Higher dicots	*Euphorbiaceae*	*Euphorbia heterophylla*			

Higher dicots	*Euphorbiaceae*	*Glochidion ferdinandi*		**C**	
Higher dicots	*Euphorbiaceae*	*Macaranga tanarius*	Macaranga	**C**	
Higher dicots	*Euphorbiaceae*	*Baloghia inophylla*	Scrub bloodwood	**C**	
Higher dicots	*Euphorbiaceae*	*Homalanthus nutans*		**C**	
Higher dicots	*Fabaceae*	*Desmodium gunnii*		**C**	
Higher dicots	*Fabaceae*	*Hardenbergia violacea*		**C**	
Higher dicots	*Fabaceae*	*Desmodium rhytidophyllum*		**C**	
Higher dicots	*Fabaceae*	*Glycine clandestina*		**C**	
Higher dicots	*Fabaceae*	*Glycine tabacina*	Glycine pea	**C**	
Higher dicots	*Fabaceae*	*Hovea acutifolia*		**C**	
Higher dicots	*Fabaceae*	*Callerya megasperma*	Native wisteria	**C**	
Higher dicots	*Fabaceae*	*Jacksonia scoparia*		**C**	
Higher dicots	*Flacourtiaceae*	*Scolopia braunii*	Flintwood	**C**	
Higher dicots	*Goodeniaceae*	*Goodenia rotundifolia*		**C**	
Higher dicots	*Grossulariaceae*	*Cuttsia viburnea*	Silver-leaf cuttsia	**C**	
Higher dicots	*Grossulariaceae*	*Quintinia verdonii*	Grey possumwood	**C**	
Higher dicots	*Haloragaceae*	*Gonocarpus micranthus*		**C**	
Higher dicots	*Icacinaceae*	*Citronella moorei*	Churnwood	**C**	
Higher dicots	*Lamiaceae*	*Callicarpa pedunculata*	Velvet leaf	**C**	
Higher dicots	*Lamiaceae*	*Plectranthus graveolens*	Flea bush	**C**	
Higher dicots	*Lamiaceae*	*Clerodendrum floribundum*		**C**	
Higher dicots	*Lamiaceae*	*Plectranthus parviflorus*		**C**	
Higher dicots	*Loranthaceae*	*Amyema quandang*		**C**	
Higher dicots	*Loranthaceae*	*Dendrophthoe glabrescens*		**C**	
Higher dicots	*Malvaceae*	*Hibiscus heterophyllus*		**C**	
Higher dicots	*Melastomataceae*	*Melastoma affine*	Black-mouth bush	**C**	
Higher dicots	*Meliaceae*	*Synoum glandulosum*		**C**	
Higher	*Mimosaceae*	*Acacia bakeri*	Marblewood	**C**	

dicots					
Higher dicots	*Mimosaceae*	*Acacia falcata*	Sickle wattle	**C**	
Higher dicots	*Mimosaceae*	*Acacia irrorata*		**C**	
Higher dicots	*Mimosaceae*	*Acacia maidenii*	Maiden's wattle	**C**	
Higher dicots	*Mimosaceae*	*Acacia oshanesii*		**C**	
Higher dicots	*Mimosaceae*	*Acacia concurrens*		**C**	
Higher dicots	*Mimosaceae*	*Acacia melanoxylon*	Blackwood	**C**	
Higher dicots	*Mimosaceae*	*Acacia penninervis*		**C**	
Higher dicots	*Mimosaceae*	*Acacia podalyriifolia*	Queensland silver wattle	**C**	
Higher dicots	*Mimosaceae*	*Archidendron grandiflorum*	Lace flower tree	**C**	
Higher dicots	*Mimosaceae*	*Pararchidendron pruinosum*		**C**	
Higher dicots	*Moraceae*	*Ficus fraseri*	White sandpaper fig	**C**	
Higher dicots	*Moraceae*	*Trophis scandens*		**C**	
Higher dicots	*Moraceae*	*Ficus coronata*	Creek sandpaper fig	**C**	
Higher dicots	*Myrsinaceae*	*Rapanea porosa*	Northern muttonwood	**C**	
Higher dicots	*Myrsinaceae*	*Rapanea variabilis*	Muttonwood	**C**	
Higher dicots	*Myrtaceae*	*Acmena smithii*	Lillypilly satinash	**C**	
Higher dicots	*Myrtaceae*	*Eucalyptus grandis*	Flooded gum	**C**	
Higher dicots	*Myrtaceae*	*Syncarpia verecunda*		**C**	
Higher dicots	*Myrtaceae*	*Rhodamnia rubescens*		**C**	
Higher dicots	*Myrtaceae*	*Corymbia intermedia*	Pink bloodwood	**C**	
Higher dicots	*Myrtaceae*	*Syzygium oleosum*	Blue cherry	**C**	
Higher dicots	*Myrtaceae*	*Callistemon salignus*		**C**	
Higher dicots	*Myrtaceae*	*Pilidiostigma rhytispermum*		**C**	
Higher dicots	*Myrtaceae*	*Melaleuca quinquenervia*	Swamp paperbark	**C**	
Higher dicots	*Myrtaceae*	*Eucalyptus siderophloia*		**C**	
Higher dicots	*Myrtaceae*	*Lophostemon suaveolens*	Swamp box	**C**	
Higher dicots	*Myrtaceae*	*Syncarpia glomulifera*		**C**	

Higher dicots	*Myrtaceae*	*Lophostemon confertus*	Brush box	**C**	
Higher dicots	*Myrtaceae*	*Eucalyptus microcorys*		**C**	
Higher dicots	*Myrtaceae*	*Eucalyptus acmenoides*		**C**	
Higher dicots	*Myrtaceae*	*Backhousia myrtifolia*	Carrol	**C**	
Higher dicots	*Myrtaceae*	*Eucalyptus tindaliae*	Queensland white stringybark	**C**	
Higher dicots	*Myrtaceae*	*Eucalyptus propinqua*	Small-fruited grey gum	**C**	
Higher dicots	*Myrtaceae*	*Eucalyptus pilularis*	Blackbutt	**C**	
Higher dicots	*Oleaceae*	*Notelaea longifolia*		**C**	
Higher dicots	*Passifloraceae*	*Passiflora suberosa*	Corky passion flower		
Higher dicots	*Pittosporaceae*	*Bursaria spinosa*		**C**	
Higher dicots	*Pittosporaceae*	*Pittosporum revolutum*	Yellow pittosporum	**C**	
Higher dicots	*Pittosporaceae*	*Billardiera scandens*		**C**	
Higher dicots	*Pittosporaceae*	*Hymenosporum flavum*	Native frangipani	**C**	
Higher dicots	*Polygonaceae*	*Persicaria strigosa*		**C**	
Higher dicots	*Proteaceae*	*Hakea florulenta*	Three-nerved willow hakea	**C**	
Higher dicots	*Proteaceae*	*Grevillea banksii*		**C**	
Higher dicots	*Proteaceae*	*Persoonia virgata*	Small-leaved geebung	**C**	
Higher dicots	*Proteaceae*	*Stenocarpus sinuatus*	Wheel of fire	**C**	
Higher dicots	*Proteaceae*	*Persoonia stradbrokensis*		**C**	
Higher dicots	*Rhamnaceae*	*Alphitonia excelsa*	Soap tree	**C**	
Higher dicots	*Rhamnaceae*	*Alphitonia petriei*	Pink ash	**C**	
Higher dicots	*Rosaceae*	*Rubus bellobatus*	Kittatinny blackberry	**C**	
Higher dicots	*Rosaceae*	*Rubus rosifolius*		**C**	
Higher dicots	*Rosaceae*	*Rubus parvifolius*	Pink-flowered native raspberry	**C**	
Higher dicots	*Rosaceae*	*Rubus ellipticus*	Yellow raspberry		
Higher dicots	*Rubiaceae*	*Canthium odoratum*		**C**	
Higher dicots	*Rubiaceae*	*Morinda jasminoides*	Morinda	**C**	
Higher	*Rubiaceae*	*Canthium*		**C**	

dicots		*coprosmoides*			
Higher dicots	*Rubiaceae*	*Psychotria loniceroides*	Hairy psychotria	**C**	
Higher dicots	*Rutaceae*	*Zieria smithii*		**C**	
Higher dicots	*Rutaceae*	*Zieria minutiflora*		**C**	
Higher dicots	*Rutaceae*	*Halfordia kendack*	Saffron heart	**C**	
Higher dicots	*Rutaceae*	*Melicope elleryana*		**C**	
Higher dicots	*Rutaceae*	*Acronychia pubescens*	Hairy acronychia	**C**	
Higher dicots	*Rutaceae*	*Flindersia schottiana*	Bumpy ash	**C**	
Higher dicots	*Rutaceae*	*Medicosma cunninghamii*	Pinkheart	**C**	
Higher dicots	*Rutaceae*	*Flindersia australis*	Crow's ash	**C**	
Higher dicots	*Sapindaceae*	*Jagera pseudorhus*		**C**	
Higher dicots	*Sapindaceae*	*Dodonaea triquetra*	Large-leaved hop bush	**C**	
Higher dicots	*Sapindaceae*	*Mischocarpus pyriformis*		**C**	
Higher dicots	*Sapindaceae*	*Mischarytera lautereriana*	Corduroy tamarind	**C**	
Higher dicots	*Sapindaceae*	*Sarcopteryx stipata*	Steelwood	**C**	
Higher dicots	*Sapotaceae*	*Pouteria australis*	Black apple	**C**	
Higher dicots	*Sapotaceae*	*Pouteria chartacea*	Thin-leaved coondoo	**C**	
Higher dicots	*Solanaceae*	*Physalis minima*	Wild gooseberry		
Higher dicots	*Solanaceae*	*Duboisia myoporoides*		**C**	
Higher dicots	*Sterculiaceae*	*Brachychiton bidwillii*	Little kurrajong	**C**	
Higher dicots	*Symplocaceae*	*Symplocos thwaitesii*	Buff hazelwood	**C**	
Higher dicots	*Ulmaceae*	*Trema tomentosa*		**C**	
Higher dicots	*Urticaceae*	*Dendrocnide excelsa*	Giant stinging tree	**C**	
Higher dicots	*Verbenaceae*	*Lantana camara*			
Higher dicots	*Violaceae*	*Viola hederacea*		**C**	
Higher dicots	*Violaceae*	*Viola betonicifolia*		**C**	
Higher dicots	*Vitaceae*	*Cissus antarctica*		**C**	
Higher dicots	*Vitaceae*	*Cissus hypoglauca*		**C**	

Lower dicots	*Annonaceae*	*Melodorum leichhardtii*		**C**	
Lower dicots	*Eupomatiaceae*	*Eupomatia laurina*	Bolwarra	**C**	
Lower dicots	*Eupomatiaceae*	*Eupomatia bennettii*	Small bolwarra	**C**	
Lower dicots	*Lauraceae*	*Cryptocarya glaucescens*		**C**	
Lower dicots	*Lauraceae*	*Cryptocarya macdonaldii*	Mcdonald's laurel	**C**	
Lower dicots	*Lauraceae*	*Cryptocarya sclerophylla*	Totempole	**C**	
Lower dicots	*Lauraceae*	*Cassytha glabella*		**C**	
Lower dicots	*Lauraceae*	*Cassytha pubescens*	Downy devil's twine	**C**	
Lower dicots	*Lauraceae*	*Cinnamomum camphora*	Camphor laurel		
Lower dicots	*Lauraceae*	*Beilschmiedia elliptica*	Grey walnut	**C**	
Lower dicots	*Lauraceae*	*Endiandra compressa*		**C**	
Lower dicots	*Lauraceae*	*Neolitsea dealbata*	White bolly gum	**C**	
Lower dicots	*Lauraceae*	*Litsea reticulata*		**C**	
Lower dicots	*Lauraceae*	*Litsea australis*	Brown bolly gum	**C**	
Lower dicots	*Lauraceae*	*Beilschmiedia obtusifolia*	Hard bolly gum	**C**	
Lower dicots	*Menispermaceae*	*Hypserpa decumbens*		**C**	
Lower dicots	*Menispermaceae*	*Stephania japonica*		**C**	
Lower dicots	*Menispermaceae*	*Carronia multisepalea*		**C**	
Lower dicots	*Monimiaceae*	*Wilkiea macrophylla*	Large-leaved wilkiea	**C**	
Lower dicots	*Piperaceae*	*Peperomia blanda*		**C**	
Lower dicots	*Piperaceae*	*Piper novae-hollandiae*		**C**	
Monocots	*Araceae*	*Pothos longipes*		**C**	
Monocots	*Araceae*	*Gymnostachys anceps*	Settler's flax	**C**	
Monocots	*Arecaceae*	*Calamus muelleri*	Lawyer vine	**C**	
Monocots	*Arecaceae*	*Archontophoenix cunninghamiana*	Piccabeen palm	**C**	
Monocots	*Arecaceae*	*Linospadix monostachya*	Walking stick palm	**C**	
Monocots	*Arecaceae*	*Livistona australis*	Cabbage tree palm	**C**	
Monocots	*Cyperaceae*	*Gahnia aspera*		**C**	
Monocots	*Cyperaceae*	*Rhynchospora corymbosa*		**C**	
Monocots	*Cyperaceae*	*Lepidosperma laterale*		**C**	

Monocots	*Cyperaceae*	*Carex horsfieldii*		**C**	
Monocots	*Cyperaceae*	*Scleria mackaviensis*		**C**	
Monocots	*Cyperaceae*	*Scleria sphacelata*		**C**	
Monocots	*Dioscoreaceae*	*Dioscorea transversa*	Native yam	**C**	
Monocots	*Flagellariaceae*	*Flagellaria indica*	Whip vine	**C**	
Monocots	*Juncaceae*	*Juncus usitatus*		**C**	
Monocots	*Juncaceae*	*Juncus planifolius*		**C**	
Monocots	*Orchidaceae*	*Cymbidium suave*		**C**	
Monocots	*Orchidaceae*	*Cymbidium madidum*		**C**	
Monocots	*Orchidaceae*	*Calanthe triplicata*	Christmas orchid	**C**	
Monocots	*Orchidaceae*	*Spiranthes sinensis*	Austral ladies tresses	**C**	
Monocots	*Orchidaceae*	*Corybas aconitiflorus*		**C**	
Monocots	*Orchidaceae*	*Geodorum densiflorum*	Pink nodding orchid	**C**	
Monocots	*Pandanaceae*	*Freycinetia scandens*		**C**	
Monocots	*Philydraceae*	*Philydrum lanuginosum*	Frogsmouth	**C**	
Monocots	*Poaceae*	*Oplismenus hirtellus*		**C**	
Monocots	*Poaceae*	*Digitaria violascens*	Bastard summergrass		
Monocots	*Poaceae*	*Cymbopogon refractus*	Barbed-wire grass	**C**	
Monocots	*Poaceae*	*Melinis minutiflora*	Molasses grass		
Monocots	*Poaceae*	*Imperata cylindrica*	Blady grass	**C**	
Monocots	*Poaceae*	*Entolasia marginata*	Bordered panic	**C**	
Monocots	*Poaceae*	*Aristida benthamii*		**C**	
Monocots	*Poaceae*	*Entolasia stricta*	Wiry panic	**C**	
Monocots	*Poaceae*	*Themeda triandra*	Kangaroo grass	**C**	
Monocots	*Poaceae*	*Panicum effusum*		**C**	
Monocots	*Poaceae*	*Ottochloa gracillima*	Pademelon grass	**C**	
Monocots	*Smilacaceae*	*Ripogonum album*	White supplejack	**C**	
Monocots	*Smilacaceae*	*Smilax australis*	Barbed-wire vine	**C**	
Monocots	*Smilacaceae*	*Smilax glyciphylla*	Sweet sarsaparilla	**C**	
Monocots	*Smilacaceae*	*Ripogonum elseyanum*	Hairy supplejack	**C**	
Monocots	*Xanthorrhoeaceae*	*Xanthorrhoea johnsonii*		**C**	
Monocots	*Xanthorrhoeacea*	*Xanthorrhoea*		**C**	

	e	*latifolia*			
Monocots	*Zingiberaceae*	*Alpinia caerulea*	Wild ginger	**C**	
Mosses	*Polytrichaceae*	*Pogonatum neesii*		**C**	
	Byttneriaceae	*Commersonia bartramia*	Brown kurrajong	**C**	
	Hemerocallidaceae	*Dianella caerulea*		**C**	
	Hemerocallidaceae	*Geitonoplesium cymosum*	Scrambling lily	**C**	
	Hemerocallidaceae	*Dianella longifolia*		**C**	
	Hemerocallidaceae	*Dianella revoluta*		**C**	
	Laxmanniaceae	*Cordyline rubra*	Red-fruited palm lily	**C**	
	Laxmanniaceae	*Lomandra hystrix*		**C**	
	Laxmanniaceae	*Lomandra longifolia*		**C**	
	Laxmanniaceae	*Lomandra multiflora*		**C**	
	Laxmanniaceae	*Eustrephus latifolius*	Wombat berry	**C**	
	Laxmanniaceae	*Arthropodium milleflorum*	Vanilla lily	**C**	

Appendix 3:
Site Photos

Photo 1: HA4, looking north of McGilchrist Road at highly disturbed habitat

Photo 2: HA4: looking south at significant habitat

Photo 3: HA5: West of road (right hand side) represents good rainforest habitat, east of road (left hand side) is narrow disturbed band of vegetation.

Photo 4: HA6: Proposed alignment running through riparian vegetation between dam and crossing Eudlo Creek to the south-west

Photo 5: HA6: Proposed alignment to cross Eudlo Creek again through vegetation to the north-east

Photo 6: HA6: Alternative alignment through road reserve (Old Cobb and Co track) south of Eudlo Creek looking south-west.

Photo 7:HA6 Alternative location of alignment though road reserve (Old Cobb and Co track) south of Eudlo Creek looking north-east

Photo 8: HA7: Survey pegs and significant vegetation to the east of the Bruce Highway.

Photo 9: HA8: Significant Vegetation at the Eudlo Flats Road Option

Photo 10: HA8 Alignment should stay clear of significant vegetation in this area.

Photo 11: HA9: Eudlo Creek crossing with narrow riparian vegetation.

Photo 12: HA10: Proposed alignment to go through this dam.

Photo 13:HA10: Proposed alignment to go through significant vegetation. Recommend alternative route.

Photo 14:HA11: Proposed alignment crosses Paynters Creek where vegetation clumped in the centre of the photo.

Photo 15: HA13: Vegetation north of Frances Road.

Photo 16: HA14: Disturbed waterway crossing south of Yandina Bli Bli Road.

Photo 17: HA15: Keep alignment to southern side of Caboolture Creek crossing.

Photo 18: HA16: Disturbed habitat on the edges of riparian vegetation.

Photo 19: HA16: Healthy riparian habitat in around the creek.

Photo 20: HA17: South Maroochy River crossing.

Photo 21: HA20: Creek crossing between Stegalls Road and Brandons Road.

Photo 22: HA21: Brown's Creek crossing at Lee Road.

Photo 23: HA24: Bunya Creek crossing at Dellitt Street.

Photo 24: HA26: Significant habitat trees along Balsam Road.

Photo 25: HA29: Sandy Creek crossing.

Photo 26: HA30: Riparian vegetation at Maroochy River crossing.

Photo 27: HA30: Maroochy River crossing.

Photo 28: HA31: Vegetation along Strong Lane.

Photo 29: HA31: Vegetation along Strong Lane.

Photo 30: HA32: Tributary of the North Maroochy River and vegetation associated with Strong Lane.

Photo 31: HA33: Vegetated areas around the 105 km marker.

Photo 32: HA34: Creek crossing 300 m west of 107 marker.

Photo 33: HA35: Proposed alignment located in cleared easement.

Photo 34: HA36: Significant vegetation west of Racehorse Lane.

Photo 35: HA37: Six Mile Creek crossing (left branch) at quarry.

Photo 36: HA37: Six Mile Creek crossing (left branch) at quarry.

Photo 37: HA38: Six Mile Creek crossing (right branch).

Photo 38: HA39: Construction works to stay clear of canopy of these trees.

Photo 39: HA40: Locate creek crossing of the alignment in already cleared area.

Photo 40: HA42: Significant vegetation and waterway west of Cooney Road.

Photo 41: HA43: Waterway with known Tusked Frog west of Cooney Road.

Photo 42: HA43: Significant vegetation with Flying-fox camp to the north at Cooney Road crossing.

Photo 43: HA44: Significant vegetation west of Bruce Highway and east of Nambour Connection Road.

Photo 44: HA44: Significant vegetation west of Bruce Highway and east of Nambour Connection Road

Photo 45: HA45: Vegetation along Tuckers Creek

Photo 46: HA46: Cleared road reserve and development to the south.

Photo 47: HA46: Water body at the end of Vincent Drive.

Photo 48: HA48: Creek crossing south of Perry Road.

Photo 49: HA49: Creek crossing and dam west of Perry Road.

Photo 50: HA50: Crossing between properties on Image Flat Road.

Appendix 4:
Washdown Property Register

Names & Vehicle Registration Details	Date & Time of Entry to Property	Property #	Method of Entry - Walk/Vehicle	Cleandown Method - Washdown/Disinfect	Date & Time of Exit from Property	Next Destination	Travel via public road, private road, 4WD track	VERIFIED BY
Toyota Landcruiser 946 FLN	17-10-2007 ~ 11am	30801	walk	Prior to entering and upon leaving the property, disinfectant was sprayed on shoes, tires and wheel arches.	11:15am	Vegetation located west of Strong Lane.	Public road	Adrian Caneris
Toyota Landcruiser 946 FLN	17-10-2007 ~ 12pm	30561	walk	Prior to entering and upon leaving the property, disinfectant was sprayed on shoes, tires and wheel arches.	12:30pm	Brandons Road.	Public road	Adrian Caneris
Toyota Landcruiser 946 FLN	18-10-2007 ~ 8am	30133	walk	Prior to entering and upon leaving the property, disinfectant was sprayed on shoes, tires and wheel arches.	10am	Maroochydore Road	Public road	Adrian Caneris
Toyota Landcruiser 946 FLN	29/10/2007 1pm	30201	walk	Prior to entering and upon leaving the property, disinfectant was sprayed on shoes, tires and wheel arches.	1:30 PM	Brisbane	Public road	Terry Reis
Toyota Landcruiser 946 FLN	02/11/2007 3pm	30115	drove	Prior to entering and upon leaving the property, disinfectant was sprayed on shoes, tires and wheel arches.	3:15pm	Nobels Road	Public road	Adrian Caneris

Appendix 5:
Terrestrial Vertebrate Species List

Special Status abbreviations are as follows:

Maroochy Shire Council's Biodiversity Strategy (MSC Status): X = Shire Significant Species.

Noosa Shire Council's Noosa Shire Fauna Study (NSC Status): Re = Regionally Significant within SEQ/Noosa Shire, **L** = Locally Significant, **NS** = National or State Significance.

EPA's Biodiversity Assessment and Mapping Methodology (BAMM Status): X = Priority fauna in SEQ other than EVR taxa.

Queensland's *Nature Conservation Act 1992* (NCA Status): E = Endangered, **V** = Vulnerable, **R** = Rare, **S** = Special Least Conern, **C** = Least Concern wildlife.

Federal *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Status): E = Endangered, **V** = Vulnerable, **M** = Migratory Species.

Other abbreviations: **I** = Introduced; **Site** = recorded within current study area; **INC** = Incidental records; **Likelihood** = potential occurrence of unobserved species database species, where E = expected, L = Likely, U = Unlikely, and N = Not likely/expected, **DB** = results of searches from the Queensland Museum and EPA WildNet databases.

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
ACTINOPTERYGII	*Maccullochella peelii mariensis*	Mary River Cod	E				NS			E
ACTINOPTERYGII	*Rhadinocentrus ornatus*	Soft-spined Sunfish	U			X	Re	X		
SARCOPTERYGII	*Neoceratodus forsteri*	Queensland Lungfish	N				NS	X		V
AMPHIBIA	*Adelotus brevis*	Tusked Frog		X			Re		V	
AMPHIBIA	*Assa darlingtoni*	Pouched Frog	N						R	
AMPHIBIA	*Bufo marinus*	Cane Toad		X					I	
AMPHIBIA	*Crinia parinsignifera*	Beeping Froglet		X					C	
AMPHIBIA	*Crinia signifera*	Clicking Froglet		X		X		X	C	
AMPHIBIA	*Crinia tinnula*	Wallum Froglet	L				NS		V	
AMPHIBIA	*Cyclorana alboguttatus*	Greenstripe Frog	N						C	
AMPHIBIA	*Limnodynastes ornatus*	Ornate Burrowing Frog	E						C	
AMPHIBIA	*Limnodynastes peronii*	Striped Marshfrog		X					C	
AMPHIBIA	*Limnodynastes tasmaniensis*	Spotted Grassfrog	E						C	
AMPHIBIA	*Limnodynastes terraereginae*	Scarlet Sided Pobblebonk	E						C	
AMPHIBIA	*Litoria brevipalmata*	Green Thighed Frog	U				NS		R	
AMPHIBIA	*Litoria caerulea*	Common Green Treefrog	E						C	
AMPHIBIA	*Litoria chloris*	Orange Eyed Treefrog	L						C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AMPHIBIA	*Litoria dentata*	Bleating Treefrog	E				L	X	C	
AMPHIBIA	*Litoria fallax*	Eastern Sedgefrog		X					C	
AMPHIBIA	*Litoria freycineti*	Wallum Rocketfrog	L				NS		V	
AMPHIBIA	*Litoria gracilenta*	Graceful Treefrog		X					C	
AMPHIBIA	*Litoria latopalmata*	Broad Palmed Rocketfrog	E						C	
AMPHIBIA	*Litoria nasuta*	Striped Rocketfrog		X					C	
AMPHIBIA	*Litoria olongburensis*	Wallum Sedgefrog	N				NS		V	V
AMPHIBIA	*Litoria pearsoniana*	Cascade Treefrog	N				NS		V	
AMPHIBIA	*Litoria peronii*	Emerald Spotted Treefrog	E					X	C	
AMPHIBIA	*Litoria rubella*	Ruddy Treefrog		X					C	
AMPHIBIA	*Litoria tyleri*	Southern Laughing Treefrog	E				L	X	C	
AMPHIBIA	*Litoria verreauxii*	Whistling Treefrog	N			X	L	X	C	
AMPHIBIA	*Litoria wilcoxii*	Stony Creek Frog	E				Re		C	
AMPHIBIA	*Mixophyes fasciolatus*	Great Barred Frog	E				Re		C	
AMPHIBIA	*Mixophyes iteratus*	Giant Barred Frog	E						E	E
AMPHIBIA	*Pseudophryne major*	Great Brown Broodfrog		X				X	C	
AMPHIBIA	*Pseudophryne raveni*	Copper Backed Broodfrog		X				X	C	
AMPHIBIA	*Rheobatrachus silus*	Southern Gastric Brooding Frog	N						E	X
AMPHIBIA	*Taudactylus diurnus*	Southern Dayfrog	N						E	X
AMPHIBIA	*Uperoleia fusca*	Dusky Gungan	L						C	
AMPHIBIA	*Uperoleia laevigata*	Eastern Gungan	L					X	C	
AVES	*Acanthiza chrysorrhoa*	Yellow-rumped Thornbill		X					C	
AVES	*Acanthiza lineata*	Striated Thornbill		X					C	
AVES	*Acanthiza nana*	Yellow Thornbill	E						C	
AVES	*Acanthiza pusilla*	Brown Thornbill		X					C	
AVES	*Acanthiza reguloides*	Buff-rumped Thornbill	E						C	
AVES	*Acanthorhynchus tenuirostris*	Eastern Spinebill	E						C	
AVES	*Accipiter cirrhocephalus*	Collared Sparrowhawk	E						C	
AVES	*Accipiter fasciatus*	Brown Goshawk		X					C	
AVES	*Accipiter novaehollandiae*	Grey Goshawk		X			NS		R	
AVES	*Acridotheres tristis*	Common Myna		X					I	
AVES	*Acrocephalus stentoreus*	Clamorous Reed-Warbler	E						S	M

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Actitis hypoleucos*	Common Sandpiper	N				Re		S	M
AVES	*Aegotheles cristatus*	Australian Owlet-Nightjar	E						C	
AVES	*Ailuroedus crassirostris*	Green Catbird	U					X	C	
AVES	*Alcedo azureus*	Azure Kingfisher		X					C	
AVES	*Alectura lathami*	Australian Brush Turkey		X					C	
AVES	*Alisterus scapularis*	Australian King Parrot		X					C	
AVES	*Amaurornis olivaceus*	Bush-hen	U				Re		C	
AVES	*Anas castanea*	Chestnut Teal		X			Re		C	
AVES	*Anas gracilis*	Grey Teal		X			Re		C	
AVES	*Anas platyrhynchos*	Mallard	E						I	
AVES	*Anas rhynchotis*	Australasian Shoveller	U						C	
AVES	*Anas superciliosa*	Black Duck		X					C	
AVES	*Anhinga melanogaster*	Darter		X					C	
AVES	*Anous stolidus*	Common Noddy	U						S	M
AVES	*Anseranas semipalmata*	Magpie Goose		X					C	
AVES	*Anthochaera chrysoptera*	Little Wattlebird		X				X	C	
AVES	*Anthus novaeseelandiae*	Richard's Pipit		X					C	
AVES	*Aprosmictus erythropterus*	Red-winged Parrot	U						C	
AVES	*Apus pacificus*	Fork-tailed Swift	U				Re		S	M
AVES	*Aquila audax*	Wedge-tailed Eagle	E						C	
AVES	*Ardea alba*	Great or White Egret		X			Re		S	M
AVES	*Ardea ibis*	Cattle Egret		X			Re		S	M
AVES	*Ardea intermedia*	Intermediate Egret		X					C	
AVES	*Ardea pacifica*	White-necked Heron		X					C	
AVES	*Ardea sumatrana*	Great-billed Heron	U					X	C	
AVES	*Arenaria interpres*	Ruddy Turnstone	U						S	M
AVES	*Artamus cinereus*	Black-faced Woodswallow	U					X	C	
AVES	*Artamus cyanopterus*	Dusky Woodswallow	U						C	
AVES	*Artamus leucorhynchus*	White-breasted Woodswallow		X					C	
AVES	*Artamus personatus*	Masked Woodswallow	U						C	
AVES	*Artamus superciliosus*	White-browed Woodswallow	U						C	
AVES	*Aviceda subcristata*	Pacific Baza		X					C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Aythya australis*	Hardhead		X					C	
AVES	*Biziura lobata*	Musk Duck	U			X		X	C	
AVES	*Botaurus poiciloptilus*	Australasian Bittern	U						C	
AVES	*Burhinus grallarius*	Bush Stone-Curlew	E				Re	X	C	
AVES	*Butorides striatus*	Striated Heron	E						C	
AVES	*Cacatua galerita*	Sulphur-crested Cockatoo		X					C	
AVES	*Cacatua leadbeateri*	Major Mitchell's Cockatoo	NO						V	
AVES	*Cacatua roseicapilla*	Galah		X					C	
AVES	*Cacatua sanguinea*	Little Corella		X					C	
AVES	*Cacatua tenuirostris*	Long-billed Corella	E						C	
AVES	*Cacomantis flabelliformis*	Fan-tailed Cuckoo		X					C	
AVES	*Cacomantis variolosus*	Brush Cuckoo		X					C	
AVES	*Calidris acuminata*	Sharp-tailed Sandpiper	U				Re		S	M
AVES	*Calidris ferruginea*	Curlew Sandpiper	U				Re		S	M
AVES	*Calidris ruficollis*	Red-necked Stint	U				Re		S	M
AVES	*Calidris tenuirostris*	Great Knot	U				Re		S	M
AVES	*Calonectris leucomelas*	Streaked Shearwater	U						S	M
AVES	*Calyptorhynchus banksii*	Red-tailed Black-Cockatoo	E						C	
AVES	*Calyptorhynchus funereus*	Yellow-tailed Black-Cockatoo	E						C	
AVES	*Calyptorhynchus lathami*	Glossy Black-Cockatoo	E				NS		V	
AVES	*Centropus phasianinus*	Pheasant Coucal		X					C	
AVES	*Chalcophaps indica*	Emerald Dove		X					C	
AVES	*Charadrius bicincutus*	Double-banded Plover	U				Re		S	M
AVES	*Charadrius leschenaultii*	Greater Sand Plover	U						S	M
AVES	*Charadrius mongolus*	Lesser Sand Plover	U				Re		S	M
AVES	*Charadrius ruficapillus*	Red-capped Plover	U						C	
AVES	*Chenonetta jubata*	Australian Wood Duck		X					C	
AVES	*Cheramoeca leucosternus*	White-backed Swallow	U				L		C	
AVES	*Chlidonias hybridus*	Whiskered Tern	U						C	
AVES	*Chlidonias leucopterus*	White-winged Black Tern	U				Re		S	M
AVES	*Chrysococcyx basalis*	Horsfield's Bronze-Cuckoo	E						C	
AVES	*Chrysococcyx lucidus*	Shining Bronze-Cuckoo		X					C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Chrysococcyx minutillus*	Little Bronze-Cuckoo	E						C	
AVES	*Chthonicola sagittata*	Speckled Warbler	U				Re		C	
AVES	*Cincloramphus cruralis*	Brown Songlark	L						C	
AVES	*Cincloramphus mathewsi*	Rufous Songlark	L						C	
AVES	*Cinclosoma punctatum*	Spotted Quail-Thrush	U						C	
AVES	*Circus approximans*	Swamp Harrier	L						C	
AVES	*Circus assimilis*	Spotted Harrier	L						C	
AVES	*Cisticola exilis*	Golden-headed Cisticola		X					C	
AVES	*Climacteris erythrops*	Red-browed Treecreeper	U				NS		R	
AVES	*Climacteris picumnus*	Brown Treecreeper	U						C	
AVES	*Colluricincla harmonica*	Grey Shrike-Thrush		X					C	
AVES	*Colluricincla megarhyncha*	Little Shrike-Thrush		X					C	
AVES	*Columba leucomela*	White-headed Pigeon		X			NS		C	
AVES	*Columba livia*	Rock Dove		X					I	
AVES	*Coracina lineata*	Barred Cuckoo-Shrike	E				Re		C	
AVES	*Coracina maxima*	Ground Cuckoo-Shrike	L						C	
AVES	*Coracina novaeollandiae*	Black-faced Cuckoo-Shrike		X					C	
AVES	*Coracina papuensis*	Little Cuckoo-Shrike	E						C	
AVES	*Coracina tenuirostris*	Cicadabird		X					C	
AVES	*Cormobates leucophaeus*	White-throated Treecreeper		X					C	
AVES	*Corvus bennetti*	Little Crow	U						C	
AVES	*Corvus coronoides*	Australian Raven	U						C	
AVES	*Corvus orru*	Torresian Crow		X					C	
AVES	*Coturnix chinensis*	King Quail	L						C	
AVES	*Coturnix pectoralis*	Stubble Quail	L						C	
AVES	*Coturnix ypsilophora*	Brown Quail		X					C	
AVES	*Cracticus nigrogularis*	Pied Butcherbird		X					C	
AVES	*Cracticus torquatus*	Grey Butcherbird		X					C	
AVES	*Cuculus pallidus*	Pallid Cuckoo	E						C	
AVES	*Cuculus saturatus*	Oriental Cuckoo	U				Re		S	M
AVES	*Cyclopsitta diophthalma coxeni*	Double-eyed Fig Parrot (Coxen's)	U				NS		E	E,M
AVES	*Cygnus atratus*	Black Swan		X					C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Dacelo leachii*	Blue-winged Kookaburra	U					X	C	
AVES	*Dacelo novaeguineae*	Laughing Kookaburra		X					C	
AVES	*Daphoenositta chrysoptera*	Varied Sittella		X			Re		C	
AVES	*Dendrocygna arcuata*	Wandering Whistling-Duck		X					C	
AVES	*Dendrocygna eytoni*	Plumed Whistling-Duck	L						C	
AVES	*Dicaeum hirundinaceum*	Mistletoebird		X					C	
AVES	*Dicrurus bracteatus*	Spangled Drongo		X					C	
AVES	*Diomedea chlororhynchos*	Yellow-nosed Albatross	N						S	M
AVES	*Diomedea dabbenena*	Tristan Albatross	N						S	E,M
AVES	*Dromaius novaehollandiae*	Emu	U				Re		C	
AVES	*Egretta garzetta*	Little Egret		X					C	
AVES	*Egretta novaehollandiae*	White-faced Heron		X					C	
AVES	*Egretta sacra*	Eastern Reef Egret	U				Re		S	M
AVES	*Elanus axillaris*	Black-shouldered Kite		X					C	
AVES	*Elseyornis melanops*	Black-fronted Dotterel		X					C	
AVES	*Entomyzon cyanotis*	Blue-faced Honeyeater		X					C	
AVES	*Eopsaltria australis*	Eastern Yellow Robin		X					C	
AVES	*Ephippiorhynchus asiaticus*	Black-necked Stork (Jabiru)	L				NS		R	
AVES	*Erythrogonys cinctus*	Red-kneed Dotterel	L						C	
AVES	*Erythrotriorchis radiatus*	Red Goshawk	U				NS		E	V
AVES	*Esacus neglectus*	Beach Stone-Curlew	N				NS		V	
AVES	*Eudynamys scolopacea*	Common Koel		X					C	
AVES	*Eurostopodus mystacalis*	White-throated Nightjar	E						C	
AVES	*Eurystomus orientalis*	Dollarbird		X					C	
AVES	*Falco berigora*	Brown Falcon		X			Re		C	
AVES	*Falco cenchroides*	Nankeen Kestrel		X			Re		C	
AVES	*Falco longipennis*	Australian Hobby	E				Re		C	
AVES	*Falco peregrinus*	Peregrine Falcon	E			X	Re		C	
AVES	*Falco subniger*	Black Falcon	N						C	
AVES	*Falcunculus frontalis*	Crested Shrike-tit	N				Re		C	
AVES	*Fregata ariel*	Lesser Frigatebird	N						S	M
AVES	*Fulica atra*	Eurasian Coot		X					C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Gallinago hardwickii*	Latham's Snipe	U				Re		S	M
AVES	*Gallinula tenebrosa*	Dusky Moorhen		X					C	
AVES	*Gallirallis philippensis*	Buff-Banded Rail	E						C	
AVES	*Geopelia cuneata*	Diamond Dove	N				L		C	
AVES	*Geopelia humeralis*	Bar-shouldered Dove		X					C	
AVES	*Geopelia striata*	Peaceful Dove		X					C	
AVES	*Gerygone laevigaster*	Mangrove Gerygone		X		X			C	
AVES	*Gerygone mouki*	Brown Gerygone		X					C	
AVES	*Gerygone olivacea*	White-throated Gerygone		X					C	
AVES	*Gerygone palpebrosa*	Fairy Gerygone	N				S	X	C	
AVES	*Glossopsitta concinna*	Musk Lorikeet	U					X	C	
AVES	*Glossopsitta pusilla*	Little Lorikeet		X					C	
AVES	*Grallina cyanoleuca*	Magpie-Lark or Peewee		X					C	
AVES	*Grus rubricunda*	Brolga	U			X	Re		C	
AVES	*Gymnorhina tibicen*	Australian Magpie		X					C	
AVES	*Haematopus fuliginosus*	Sooty Oystercatcher	N						R	
AVES	*Haematopus longirostris*	Pied Oystercatcher	N						C	
AVES	*Haliaeetus leucogaster*	White-bellied Sea-Eagle		X			Re		S	M
AVES	*Haliastur indus*	Brahminy Kite		X					C	
AVES	*Haliastur sphenurus*	Whistling Kite		X					C	
AVES	*Heteroscelus brevipes*	Grey-tailed Tattler	N				Re		S	M
AVES	*Hieraaetus morphnoides*	Little Eagle	E						C	
AVES	*Himantopus himantopus*	Black-winged Stilt		X			Re		C	
AVES	*Hirundapus caudacutus*	White-throated Needletail		X			Re		S	M
AVES	*Hirundo ariel*	Fairy Martin	E						C	
AVES	*Hirundo neoxena*	Welcome Swallow		X					C	
AVES	*Hirundo nigricans*	Tree Martin	E						C	
AVES	*Hirundo rustica*	Barn Swallow	N						S	M
AVES	*Irediparra gallinacea*	Comb-crested Jacana		X					C	
AVES	*Ixobrychus flavicollis*	Black Bittern	N				Re		C	
AVES	*Ixobrychus minutus*	Little Bittern	N			X	Re		C	
AVES	*Lalage leucomela*	Varied Triller		X					C	
AVES	*Lalage sueurii*	White-winged Triller		X					C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Larus novaehollandiae*	Silver Gull	E						C	
AVES	*Larus pacificus*	Pacific Gull	N						C	
AVES	*Lathamus discolor*	Swift Parrot	N				NS		E	E
AVES	*Leucosarcia melanoleuca*	Wonga Pigeon	L						C	
AVES	*Lichenostomus chrysops*	Yellow-faced Honeyeater		X					C	
AVES	*Lichenostomus fasciogularis*	Mangrove Honeyeater		X					C	
AVES	*Lichenostomus fuscus*	Fuscous Honeyeater	N						C	
AVES	*Lichenostomus leucotis*	White-eared Honeyeater	N						C	
AVES	*Lichenostomus melanops*	Yellow-tufted Honeyeater	N				Re	X	C	
AVES	*Lichmera indistincta*	Brown Honeyeater		X					C	
AVES	*Limosa lapponica*	Bar-tailed Godwit	N				Re		S	M
AVES	*Lonchura castaneothorax*	Chestnut-breasted Mannikin	E						C	
AVES	*Lonchura punctulata*	Nutmeg Mannikin	E						I	
AVES	*Lophoictinia isura*	Square-tailed Kite	E				NS		R	
AVES	*Lopholaimus antarcticus*	Topknot Pigeon	E						C	
AVES	*Macronectes giganteus*	Southern Giant Petrel	N						E	E,M
AVES	*Macronectes halli*	Northern Giant Petrel	N						V	V,M
AVES	*Macropygia amboinensis*	Brown Cuckoo-Dove		X					C	
AVES	*Malacorhynchus membranaceus*	Pink-eared Duck	N						C	
AVES	*Malurus cyaneus*	Superb Fairy-Wren		X					C	
AVES	*Malurus lamberti*	Variegated Fairy-Wren		X					C	
AVES	*Malurus leucopterus*	White-winged Fairy-Wren	N						C	
AVES	*Malurus melanocephalus*	Red-backed Fairy-Wren		X					C	
AVES	*Manorina melanocephala*	Noisy Miner		X					C	
AVES	*Manorina melanophrys*	Bell Miner	U					X	C	
AVES	*Megalurus gramineus*	Little Grassbird	E						C	
AVES	*Megalurus timoriensis*	Tawny Grassbird	E						C	
AVES	*Meliphaga lewinii*	Lewin's Honeyeater		X					C	
AVES	*Melithreptus albogularis*	White-throated Honeyeater		X					C	
AVES	*Melithreptus brevirostris*	Brown-headed Honeyeater	N						C	
AVES	*Melithreptus gularis*	Black-chinned Honeyeater	N				NS		R	
AVES	*Melithreputs lunatus*	White-naped Honeyeater	L						C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Menura alberti*	Albert's Lyrebird	N						R	
AVES	*Merops ornatus*	Rainbow Bee-Eater		X			Re		S	M
AVES	*Microeca fascinans*	Jacky Winter	L						C	
AVES	*Milvus migrans*	Black Kite	U				L		C	
AVES	*Mirafra javanica*	Singing Bushlark	U						C	
AVES	*Monarcha leucotis*	White-eared Monarch	L				Re		C	
AVES	*Monarcha melanopsis*	Black-faced Monarch		X					S	M
AVES	*Monarcha trivirgatus*	Spectacled Monarch		X					S	M
AVES	*Morus serrator*	Australasian Gannet	N						C	
AVES	*Myiagra alecto*	Shining Flycatcher	N				L	X	C	
AVES	*Myiagra cyanoleuca*	Satin Flycatcher	L						S	M
AVES	*Myiagra inquieta*	Restless Flycatcher	E						C	
AVES	*Myiagra rubecula*	Leaden Flycatcher		X					C	
AVES	*Myzomela obscura*	Dusky Honeyeater		X				X	C	
AVES	*Myzomela sanguinolenta*	Scarlet Honeyeater		X					C	
AVES	*Neochmia temporalis*	Red-browed Finch		X					C	
AVES	*Neophema pulchella*	Turquoise Parrot	N				NS		R	
AVES	*Nettapus coromandelianus albipennis*	Cotton Pygmy-Goose	U				NS		R	M
AVES	*Ninox connivens*	Barking Owl	L				Re	X	C	
AVES	*Ninox novaeseelandiae*	Southern Boobook		X					C	
AVES	*Ninox strenua*	Powerful Owl	E				NS		V	
AVES	*Numenius madagascariensis*	Eastern Curlew	N				NS		R	M
AVES	*Numenius minutus*	Little Curlew	N				Re	X	S	M
AVES	*Numenius phaeopus*	Whimbrel	N				Re		S	M
AVES	*Nycticorax caledonicus*	Nankeen Night Heron		X					C	
AVES	*Nymphicus hollandicus*	Cockatiel	N						C	
AVES	*Ocyphaps lophotes*	Crested Pigeon		X					C	
AVES	*Oreoica gutturalis*	Crested Bellbird	N						C	
AVES	*Oriolus sagittatus*	Olive-backed Oriole		X					C	
AVES	*Orthonyx temminckii*	Logrunner	N				Re	X	C	
AVES	*Oxyura australis*	Blue-billed Duck	N			X		X	C	
AVES	*Pachycephala pectoralis*	Golden Whistler		X					C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Pachycephala rufiventris*	Rufous Whistler		X					C	
AVES	*Pandion haliaetus*	Osprey	E				Re		S	M
AVES	*Pardalotus punctatus*	Spotted Pardalote		X					C	
AVES	*Pardalotus striatus*	Striated Pardalote		X					C	
AVES	*Passer domesticus*	House Sparrow	L						I	
AVES	*Pavo cristatus*	Indian Peafowl	L						I	
AVES	*Pelecanus conspicillatus*	Australian Pelican		X					C	
AVES	*Petroica goodenovii*	Red-capped Robin	N						C	
AVES	*Petroica multicolor*	Scarlet Robin	N					X	C	
AVES	*Petroica phoenica*	Flame Robin	N					X	C	
AVES	*Petroica rosea*	Rose Robin	L						C	
AVES	*Pezoporus wallicus wallicus*	Ground Parrot (Eastern subsp)	N				NS		V	
AVES	*Phaethon rubricauda*	Red-tailed Tropicbird	N				NS		V	
AVES	*Phalacrocorax carbo*	Great Cormorant	L						C	
AVES	*Phalacrocorax melaleucos*	Little Pied Cormorant		X					C	
AVES	*Phalacrocorax sulcirostris*	Little Black Cormorant		X					C	
AVES	*Phalacrocorax varius*	Pied Cormorant		X					C	
AVES	*Phaps chalcoptera*	Common Bronzewing		X					C	
AVES	*Philemon citreogularis*	Little Friarbird		X					C	
AVES	*Philemon corniculatus*	Noisy Friarbird		X					C	
AVES	*Phylidonyris nigra*	White-cheeked Honeyeater		X					C	
AVES	*Phylidonyris novaehollandiae*	New Holland Honeyeater	U				L	X	C	
AVES	*Pitta versicolor*	Noisy Pitta	E						C	
AVES	*Platalea flavipes*	Yellow-billed Spoonbill	L						C	
AVES	*Platalea regia*	Royal Spoonbill		X					C	
AVES	*Platycercus adscitus*	Pale-headed Rosella		X					C	
AVES	*Platycercus elegans*	Crimson Rosella		X					C	
AVES	*Platycercus eximius*	Eastern Rosella	L				L	X	C	
AVES	*Plectorhyncha lanceolata*	Striped Honeyeater		X					C	
AVES	*Plegadis falcinellus*	Glossy Ibis	U				Re		S	M
AVES	*Pluvialis fulva*	Pacific Golden Plover	U				Re		S	M

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Podargus ocellatus plumiferus*	Marbled Frogmouth (Southern subsp)	N				NS		V	
AVES	*Podargus strigoides*	Tawny Frogmouth		X					C	
AVES	*Podiceps cristatus*	Great Crested Grebe	U			X			C	
AVES	*Poliocephalus poliocephalus*	Hoary-headed Grebe	U						C	
AVES	*Pomatostomus temporalis*	Grey-crowned Babbler	U			X	Re		C	
AVES	*Porphyrio porphyrio*	Purple Swamphen		X					C	
AVES	*Porzana pusilla*	Baillon's Crake	U						C	
AVES	*Porzana tabuensis*	Spotless Crake	U						C	
AVES	*Psophodes olivaceus*	Eastern Whipbird		X					C	
AVES	*Pterodroma neglecta neglecta*	Kermadec Petrel (Western)	N						C	V
AVES	*Ptilinopus magnificus*	Wompoo Fruit-Dove		X					C	
AVES	*Ptilinopus regina*	Red-crowned Fruit-Dove	L					X	C	
AVES	*Ptilinopus superbus*	Superb Fruit-Dove	L			X	Re	X	C	
AVES	*Ptilonorhynchus violaceus*	Satin Bowerbird	U						C	
AVES	*Ptiloris paradiseus*	Paradise Riflebird	N					X	C	
AVES	*Rallus pectoralis*	Lewin's Rail	E				NS		R	
AVES	*Recurvirostra novaehollandiae*	Red-necked Avocet	U						C	
AVES	*Rhipidura fuliginosa*	Grey Fantail		X					C	
AVES	*Rhipidura leucophrys*	Willie Wagtail		X					C	
AVES	*Rhipidura rufifrons*	Rufous Fantail		X					S	M
AVES	*Rostratula australis*	Australian Painted Snipe	U				NS		V	V
AVES	*Rostratula benghalensis*	Painted Snipe	U						V	M
AVES	*Scythrops novaehollandiae*	Channel-billed Cuckoo		X					C	
AVES	*Sericornis citreogularis*	Yellow-throated Scrubwren	E				Re		C	
AVES	*Sericornis frontalis*	White-browed Scrubwren		X					C	
AVES	*Sericornis magnirostris*	Large-billed Scrubwren		X					C	
AVES	*Sericulus chrysocephalus*	Regent Bowerbird	U				Re		C	
AVES	*Smicrornis brevirostris*	Weebill		X					C	
AVES	*Sphecotheres viridis*	Figbird		X					C	
AVES	*Steganopleura guttata*	Diamond Firetail	N				Re	X	C	
AVES	*Sterna albifrons*	Little Tern	N				NS		E	M

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Sterna anaethetus*	Bridled Tern	U						S	M
AVES	*Sterna bengalensis*	Lesser Crested Tern	L				Re		S	M
AVES	*Sterna bergii*	Crested Tern	E				Re		S	M
AVES	*Sterna caspia*	Caspian Tern	E				Re		S	M
AVES	*Sterna hirundo*	Common Tern	U				Re		S	M
AVES	*Sterna nilotica*	Gull-billed Tern	U						C	
AVES	*Stictonetta naevosa*	Freckled Duck	N				NS		R	
AVES	*Stipiturus malachurus*	Southern Emu-Wren	N						V	
AVES	*Strepera graculina*	Pied Currawong		X					C	
AVES	*Streptopelia chinensis*	Spotted Turtle-Dove		X					I	
AVES	*Sturnus vulgaris*	Common Starling	E						I	
AVES	*Sula dactylatra*	Masked Booby	N				NS		S	M
AVES	*Tachybaptus novaehollandiae*	Australasian Grebe		X					C	
AVES	*Taeniopygia bichenovii*	Double-barred Finch		X					C	
AVES	*Taeniopygia guttata*	Zebra Finch	L				L		C	
AVES	*Thalassarche impavida*	Campbell Albatross	N						S	V,M
AVES	*Threskiornis molucca*	Australian White Ibis		X					C	
AVES	*Threskiornis spinicollis*	Staw-necked Ibis		X					C	
AVES	*Todiramphus chloris*	Collared Kingfisher		X		X			C	
AVES	*Todiramphus macleayii*	Forest Kingfisher		X					C	
AVES	*Todiramphus sanctus*	Sacred Kingfisher		X					C	
AVES	*Tregellasia capito*	Pale-yellow Robin	N				Re		C	
AVES	*Trichoglossus chlorolepidotus*	Scaly-breasted Lorikeet		X		X			C	
AVES	*Trichoglossus haematodus*	Rainbow Lorikeet		X					C	
AVES	*Tringa nebularia*	Common Greenshank	N				Re		S	M
AVES	*Tringa stagnatilis*	Marsh Sandpiper	N				Re		S	M
AVES	*Turnix maculosa*	Red-backed Button-Quail	U						C	
AVES	*Turnix melanogaster*	Black-breasted Button-Quail	U				NS		V	V
AVES	*Turnix pyrrhothorax*	Red-chested Button Quail	U						C	
AVES	*Turnix varia*	Painted Button-Quail	L						C	
AVES	*Turnix velox*	Little Button-Quail	U						C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
AVES	*Tyto alba*	Barn Owl	E						C	
AVES	*Tyto capensis*	Grass Owl	U			X	Re		C	
AVES	*Tyto novaehollandiae novaehollandiae*	Masked Owl (Southern subsp)	N				Re	X	C	
AVES	*Tyto tenebricosa*	Sooty Owl	N				NS		R	
AVES	*Vanellus miles*	Masked Lapwing		X					C	
AVES	*Vanellus tricolor*	Banded Lapwing	N						C	
AVES	*Xanthomyza phrygia*	Regent Honeyeater	N						E	E,M
AVES	*Xenus cinereus*	Terek Sandpiper	N				Re		S	M
AVES	*Zoothera heinei*	Russet-tailed Thrush	N				Re		C	
AVES	*Zoothera lunulata*	Bassian Thrush	N				Re		C	
AVES	*Zosterops lateralis*	Silvereye		X					C	
INSECTA	*Argyreus hyperbius inconstans*	Australian Fritillary Butterfly	N				NS		E	
INSECTA	*Ornithoptera richmondia*	Richmond Birdwing Butterfly	E				NS		V	
INSECTA	*Phyllodes imperialis*									E
MAMMALIA	*Acrobates pygmaeus*	Feathertail Glider	L						C	
MAMMALIA	*Aepyprymnus rufescens*	Rufous Bettong	U				Re	X	C	
MAMMALIA	*Antechinus flavipes*	Yellow-footed Antechinus	E						C	
MAMMALIA	*Antechinus subtropicus*	Subtropical Antechinus	U				Re	X	C	
MAMMALIA	*Canis familiaris familiaris*	Dog	E						I	
MAMMALIA	*Canis lupus dingo*	Dingo	N							
MAMMALIA	*Chalinolobus dwyeri*	Large-eared Pied Bat	N						R	V
MAMMALIA	*Chalinolobus gouldii*	Gould's Wattled Bat	L						C	
MAMMALIA	*Chalinolobus morio*	Chocolate Wattled Bat	L						C	
MAMMALIA	*Chalinolobus nigrogriseus*	Hoary Wattled Bat	L						C	
MAMMALIA	*Dasyurus hallucatus*	Northern Quoll	U					X	C	E
MAMMALIA	*Dasyurus maculatus maculatus*	Spot-tailed Quoll (SE Mainland)	U						V	E
MAMMALIA	*Equus caballus*	Horse		X					I	
MAMMALIA	*Felis catus*	House Cat		X					I	
MAMMALIA	*Hydromys chrysogaster*	Water Rat	E						C	
MAMMALIA	*Isoodon macrourus*	Northern Brown Bandicoot		X					C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
MAMMALIA	*Kerivoula papuensis*	Golden-tipped Bat	U						R	
MAMMALIA	*Lepus capensis*	Brown Hare		X					I	
MAMMALIA	*Macropus dorsalis*	Black-striped Wallaby	U					X	C	
MAMMALIA	*Macropus giganteus*	Eastern Grey Kangaroo	L						C	
MAMMALIA	*Macropus parryi*	Whiptail Wallaby	U				L		C	
MAMMALIA	*Macropus rufogriseus*	Red-necked Wallaby		X					C	
MAMMALIA	*Melomys burtoni*	Grassland Melomys	L						C	
MAMMALIA	*Melomys cervinipes*	Fawn-footed Melomys	L						C	
MAMMALIA	*Miniopterus australis*	Little Bentwing Bat	L				Re		C	
MAMMALIA	*Miniopterus schreibersii oceanensis*	Common Bentwing Bat (Eastern Form)	E				Re		C	
MAMMALIA	*Mormopterus beccarii*	Beccari's Freetail Bat	E						C	
MAMMALIA	*Mormopterus norfolkensis*	East-coast Freetail Bat	L				Re	X	C	
MAMMALIA	*Mormopterus species 2*	Eastern Freetail Bat	L						C	
MAMMALIA	*Mus musculus*	House Mouse		X					I	
MAMMALIA	*Myotis macropus*	Southern Myotis	L				Re	X	C	
MAMMALIA	*Nyctimene robinsoni*	Eastern Tube-nosed Bat	E				Re		C	
MAMMALIA	*Nyctophilus bifax*	Northern Long-eared Bat	U				L		C	
MAMMALIA	*Nyctophilus gouldi*	Gould's Long-eared Bat	L						C	
MAMMALIA	*Ornithorhynchus anatinus*	Platypus	E				NS	X	S	
MAMMALIA	*Perameles nasuta*	Long-nosed Bandicoot	L						C	
MAMMALIA	*Petauroides volans*	Greater Glider	E				Re	X	C	
MAMMALIA	*Petaurus australis australis*	Yellow-bellied Glider (Southern subsp)	U				Re	X	C	
MAMMALIA	*Petaurus breviceps*	Sugar Glider	E						C	
MAMMALIA	*Petaurus norfolcensis*	Squirrel Glider	E				Re	X	C	
MAMMALIA	*Phascogale tapoatafa*	Brush-tailed Phascogale	U				Re	X	C	
MAMMALIA	*Phascolarctos cinereus (SEQ Bioregion)*	Koala (SEQ Bioregion)		X			NS		V	
MAMMALIA	*Planigale maculata*	Common Planigale	E						C	
MAMMALIA	*Potorous tridactylus tridactylus*	Long-nosed Potoroo (SE Mainland)	U						V	V
MAMMALIA	*Pseudocheirus peregrinus*	Common Ringtail Possum		X					C	
MAMMALIA	*Pseudomys delicatulus*	Delicate Mouse	U			X	Re	X	C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
MAMMALIA	*Pseudomys gracilicaudatus*	Eastern Chestnut Mouse	U			X	Re	X	C	
MAMMALIA	*Pseudomys oralis*	Hastings River Mouse	U						V	E
MAMMALIA	*Pteropus alecto*	Black Flying-fox		X			Re	X	C	
MAMMALIA	*Pteropus poliocephalus*	Grey-headed Flying-fox		X			Re		C	V
MAMMALIA	*Pteropus scapulatus*	Little Red Flying-fox	E				Re	X	C	
MAMMALIA	*Rattus fuscipes*	Bush Rat	E						C	
MAMMALIA	*Rattus lutreolus*	Swamp Rat	E						C	
MAMMALIA	*Rattus norvegicus*	Brown Rat	E						I	
MAMMALIA	*Rattus rattus*	Black Rat	E						I	
MAMMALIA	*Rattus tunneyi*	Pale Field Rat	E				Re		C	
MAMMALIA	*Rhinolophus megaphyllus*	Eastern Horseshoe Bat	L				Re		C	
MAMMALIA	*Saccolaimus flaviventris*	Yellow-bellied Sheathtail Bat	U						C	
MAMMALIA	*Scoteanax rueppellii*	Greater Broad-nosed Bat	U					X	C	
MAMMALIA	*Scotorepens greyii*	Little Broad-nosed Bat	L						C	
MAMMALIA	*Scotorepens orion*	Eastern Broad-nosed Bat	L			X		X	C	
MAMMALIA	*Sminthopsis murina*	Common Dunnart	E					X	C	
MAMMALIA	*Sus scrofa*	Pig	E						I	
MAMMALIA	*Syconycteris australis*	Eastern Blossum Bat	U				Re	X	C	
MAMMALIA	*Tachyglossus aculeatus*	Short-beaked Echidna	E				NS		S	
MAMMALIA	*Tadarida australis*	White-striped Freetail Bat		X					C	
MAMMALIA	*Thylogale stigmatica*	Red-legged Pademelon	U					X	C	
MAMMALIA	*Thylogale thetis*	Red-necked Pademelon	U				Re		C	
MAMMALIA	*Trichosurus caninus*	Mountain Brushtail Possum	U					X	C	
MAMMALIA	*Trichosurus vulpecula*	Common Brushtail Possum		X					C	
MAMMALIA	*Vespadelus darlingtoni*	Large Forest Bat	U					X	C	
MAMMALIA	*Vespadelus pumilus*	Eastern Forest Bat	U						C	
MAMMALIA	*Vespadelus troughtoni*	Eastern Cave Bat	U						C	
MAMMALIA	*Vulpes vulpes*	Red Fox		X					I	
MAMMALIA	*Wallabia bicolor*	Swamp or Black Wallaby		X					C	
MAMMALIA	*Xeromys myoides*	Water Mouse or False Water Rat	N				NS		V	V
REPTILIA	*Acanthophis antarcticus*	Common Death Adder	U				NS		R	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
REPTILIA	*Anomalopus verreauxi*	Verreaux's Skink		X					C	
REPTILIA	*Antaresia maculosa*	Spotted Python	U						C	
REPTILIA	*Boiga irregularis*	Brown Tree Snake	E						C	
REPTILIA	*Cacophis harrietae*	White-crowned Snake	E						C	
REPTILIA	*Cacophis krefftii*	Southern Dwarf Crowned Snake	L					X	C	
REPTILIA	*Cacophis squamulosus*	Goldern-crowned Snake	E						C	
REPTILIA	*Calyptotis lepidorostrum*		E			X	Re	X	C	
REPTILIA	*Calyptotis scutirostrum*			X					C	
REPTILIA	*Caretta caretta*	Loggerhead Turtle	N				NS		E	E,M
REPTILIA	*Carlia foliorum*	Leaf-litter Skink		X					C	
REPTILIA	*Carlia vivax*			X					C	
REPTILIA	*Chelodina longicollis*	Snake-necked Turtle	E						C	
REPTILIA	*Chelonia mydas*	Green Turtle	N						V	V,M
REPTILIA	*Chlamydosaurus kingii*	Frilled Lizard	N			X	Re	X	C	
REPTILIA	*Coeranoscincus reticulatus*	Three-toed Snake-tooth Skink	N				NS		R	V
REPTILIA	*Cryptoblepharus virgatus*	Wall Skink		X					C	
REPTILIA	*Cryptophis nigrescens*	Small-eyed Snake		X					C	
REPTILIA	*Ctenotus arcanus*		U			X	Re	X	C	
REPTILIA	*Ctenotus robustus*	Eastern Striped Skink		X					C	
REPTILIA	*Ctenotus taeniolatus*	Copper-tailed Skink		X					C	
REPTILIA	*Cyclodomorphus gerrardii*	Pink-Tongued Skink	E						C	
REPTILIA	*Delma tincta*		N						C	
REPTILIA	*Delma torquata*	Collared Delma	N						V	V
REPTILIA	*Demansia psammophis*	Yellow-faced Whipsnake	E						C	
REPTILIA	*Demansia vestigiata*	Lesser Black Whipsnake	U			X			C	
REPTILIA	*Dendrelaphis punctulata*	Common or Green Tree Snake	E						C	
REPTILIA	*Dermochelys coriacea*	Leathery or Luth Turtle	N						E	V,M
REPTILIA	*Diporiphora australis*	Tommy Roundhead Dragon		X				X	C	
REPTILIA	*Egernia frerei*	Major Skink	U				Re		C	
REPTILIA	*Egernia major*	Land Mullet	U				Re	X	C	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
REPTILIA	*Elseya latisternum*	Saw-shelled Turtle		X					C	
REPTILIA	*Elusor macrurus*	Mary River Turtle	N						E	E
REPTILIA	*Emydura macquarii krefftii*	Krefft's Turtle	E						C	
REPTILIA	*Eroticoscincus graciloides*	Elf Skink		X			NS		R	
REPTILIA	*Eulamprus brachysoma*		U						C	
REPTILIA	*Eulamprus martini*		E						C	
REPTILIA	*Eulamprus murrayi*	Murray's Skink	E			X		X	C	
REPTILIA	*Eulamprus quoyii*	Water Skink		X					C	
REPTILIA	*Eulamprus tenuis*	Barred-sided Skink		X					C	
REPTILIA	*Gehyra dubia*		E						C	
REPTILIA	*Hemiaspis signata*	Black-bellied Swamp Snake	E						C	
REPTILIA	*Hemidactylus frenatus*	Asian House Gecko		X						
REPTILIA	*Hoplocephalus bitorquatus*	Pale-headed Snake	U			X	Re	X	C	
REPTILIA	*Hoplocephalus stephensii*	Stephens' Banded Snake	U				NS		R	
REPTILIA	*Hypsilurus spinipes*	Southern Angle-headed Dragon	N					X	C	
REPTILIA	*Lampropholis adonis*		U				Re		C	
REPTILIA	*Lampropholis amicula*		E				L	X	C	
REPTILIA	*Lampropholis couperi*		E				Re	X	C	
REPTILIA	*Lampropholis delicata*	Garden Skink							C	
REPTILIA	*Lampropholis guichenoti*	Grass Skink	L			X	Re	X	C	
REPTILIA	*Lepidochelys olivacea*	Pacific or Olive Ridley Turtle	N						E	E,M
REPTILIA	*Lialis burtonis*	Burton's Snake-lizard	E						C	
REPTILIA	*Morelia spilota*	Carpet Python	E						C	
REPTILIA	*Morethia taeniopleura*	Fire-tailed Skink	E			X		X	C	
REPTILIA	*Notechis scutatus*	Tiger Snake	U			X	Re	X	C	
REPTILIA	*Oedura lesueurii*	Lesueur's Velvet Gecko	E					X	C	
REPTILIA	*Oedura robusta*	Robust Velvet Gecko	L						C	
REPTILIA	*Oedura tryoni*	Southern Spotted Velvet Gecko	E						C	
REPTILIA	*Ophioscincus ophioscincus*		L			X		X	C	
REPTILIA	*Ophioscincus truncatus*		U				NS		R	

CLASS	GENUS/SPECIES	COMMON NAME	Likelihood	Site	INC	MSC	NSC	BAMM	NCA	EPBC
REPTILIA	*Physignathus lesueurii*	Water Dragon		X					C	
REPTILIA	*Pogona barbata*	Common or Eastern Bearded Dragon		X					C	
REPTILIA	*Pseudechis porphyriacus*	Red-bellied Black Snake	E						C	
REPTILIA	*Pseudonaja textilis*	Common or Eastern Brown Snake	E						C	
REPTILIA	*Pygopus lepidopodus*	Common Scaly-foot	L						C	
REPTILIA	*Ramphotyphlops ligatus*		U						C	
REPTILIA	*Ramphotyphlops nigrescens*		E					X	C	
REPTILIA	*Ramphotyphlops silvia*	Cooloola Blind Snake	U				NS		R	
REPTILIA	*Saproscincus challengeri*		U					X	C	
REPTILIA	*Saproscincus rosei*		E				NS		R	
REPTILIA	*Tiliqua scincoides*	Eastern Blue-tongue	E						C	
REPTILIA	*Tropidechis carinatus*	Rough-scaled Snake	L				Re		C	
REPTILIA	*Tropidonophis mairii*	Keelback or Freshwater Snake	E						C	
REPTILIA	*Varanus gouldii*	Sand or Gould's Goanna	E			X	L		C	
REPTILIA	*Varanus varius*	Lace Monitor		X					C	
REPTILIA	*Vermicella annulata*	Bandy-bandy	E				Re		C	

Appendix 6:
Habitat Assessment Results

Habitat Assessment Data Table for the Proposed NPI Alignment (N.B. HA sites shaded in yellow were not visited due to landholder access restrictions)

HA Site	River/Creek/ Drainage Line	Fauna Movement Corridor	Habitat Values	Significant Species	Other Issues	Further Work Required	Preferred Option
NPI Corridor							
1	n/a	Mapped by BAMM as having State Corridor Significance.	This area is expected to have good habitat values as it is part of a contiguous block of native vegetation which forms part of a large vegetated corridor. Not known at this stage.	This area is expected to support several significant species listed under the EPBC and/or the NCA.	Not known	n/a	
2	Creekline	This vegetated corridor would provide for some local movement with east-west linkages.	This area may support habitat for several species listed under the EPBC and the NCA. Not known at this stage.	Essential Habitat is mapped in the vicinity of the 65km marker for Koala, Wallum Froglet, Tusked Frog, Wallum Rocketfrog and Grey Goshawk.	Not known	n/a	
3	Eudlo Creek	This vegetated corridor would provide for some local movement with east-west linkages.	This area may support habitat for several species listed under the EPBC and the NCA. Not known at this stage.	No Essential Habitat is mapped in this area.	Not known	n/a	
4	Waterway	Vegetated corridor broken by road. Still provides regional corridor movement north-south linkages.	69 km marker: Healthy habitat to the south of the road with some old growth vegetation, highly disturbed habitat to the north of the road however, still significant.	Essential Habitat is mapped in the vicinity of the 67-69km markers for Koala, Wallum Froglet, Tusked Frog, Wallum Rocketfrog and Ground Parrot. The alignment will not impact on Wallum Froglet, Wallum Rocketfrog or Ground Parrot habitats in this location. Potential for Tusked Frog.	North of road high weed infestation.	n/a	Constrain disturbance in this area as there is significant vegetation either side of the road (more on south).
5	n/a	Significant vegetated regional corridor either side of Winston Road South with east-west linkages.	West of road represents good rainforest habitat with some weeds on the edges. East of track is disturbed with a narrow band of native vegetation.	Essential Habitat mapped in the vicinity of this point for Ground Parrot, Wallum Froglet and Wallum Rocketfrog. There is no suitable habitat for these species at this location. West of track supports habitat for significant species including Elf Skink. East of track supports habitat suitable for the Tusked Frog.	Weeds present on edges west of road. Highly disturbed habitat to the east with previous clearing and weeds.	n/a	Constrain disturbance in this area as there is significant vegetation either side of the road particularly the west.
6	Eudlo Creek and large dam to the north.	This area represents an important local movement corridor with NE-SW linkages.	The riparian vegetation represents significant habitat for a several significant species listed under the EPBC and/or the NCA.	Several significant species listed under the EPBC and the NCA are known and/or expected to use in this area. Essential Habitat mapped in the vicinity of this point for Ground Parrot, Wallum Froglet and Wallum Rocketfrog. There is no suitable habitat for these species at this location. Potential for Tusked Frog and Elf Skink.	Weeds present along the edge of riparian areas.	n/a	The alignment would be better suited located in the road reserve to the south of Eudlo Creek in this area.
7	Eudlo Creek and large dam	This area has regional corridor value which provides SW to NE linkages and movement opportunities for fauna.	Areas NW of 71.5 are included in the Koala Plan as Urban Koala Area. There was no access to this area to verify its suitability to support this species. Eudlo Creek represents significant habitat area for several species listed under the EPBC and the NCA.	Essential Habitat is mapped for areas in the vicinity of 71.5-73 for several species including: Koala, Lewin's Rail, Ground Parrot, Grey Goshawk, Elf Skink, Wallum Froglet, Wallum Rocketfrog and Tusked Frog. Several significant species listed under the EPBC and the NCA are known and/or expected to use in this area. Grey Goshawk seen onsite.	Some weeds on edges of vine forest.	Further detailed fauna survey work is required in this area if the alignment is to disturb significant habitat.	Alignment should stay clear of this area. Micro-tunnelling recommended at Eudlo Creek crossing and associated habitats.
8	Eudlo Creek to the west	This area has regional corridor value which provides NE-SW linkages and movement opportunities for fauna.	Intact vegetation and good habitat. Large hollow-bearing trees.	Essential Habitat is mapped for areas in the vicinity of 73-76km for several species including: Koala, Wallum Froglet, Wallum Rocketfrog, Grey Goshawk, Lewin's Rail and Elf Skink. Several significant species listed under the EPBC and the NCA are known and/or expected to utilise habitat in this area.		n/a	The alignment should be located in cleared areas to the east of vegetation along Eudlo Flats Road and Ti Tree Rd. Stay clear of large habitat trees.
9	Eudlo Creek	Narrow riparian corridor providing for localised fauna movement with NE-SW linkages.	Low habitat value with vegetation cleared to a narrow strip along Eudlo Creek.	Potential for Platypus	Minimal weed invasion.	n/a	It may be appropriate to go over the creek in this location as micro-tunnelling may result in a greater disturbance to this

HA Site	River/Creek/ Drainage Line	Fauna Movement Corridor	Habitat Values	Significant Species	Other Issues	Further Work Required	Preferred Option
							waterway.
10	Dam on property where NPI alignment currently located	This area has local corridor value which provides movement opportunities with east-west linkages.	This area may support habitat area for several species listed under the EPBC and the NCA. Bird species present indicate good quality habitat nearby.	Essential Habitat is mapped in the vicinity of 76km for several species including: Ophioscincus truncatus, Elf Skink, Koala, Wallum Froglet and Wallum Rocketfrog. This area was subject to a fauna survey in the past. Elf Skink, *Ophioscincus truncatus* and Koala expected.	Some weeds present, adjacent bushland grazed by cattle. Alignment currently shown to go through existing dam.	Obtain a copy of the results from previous fauna survey work in this area.	The alignment should be relocated to more disturbed areas to the east of where the current alignment
11	Paynter Creek	Local movement corridor with east-west linkage for fauna movement.	Marine Plants present along creekline. Some native vegetation regrowth at top of hill north of Paynter Creek Road in the power easement.	Essential Habitat is mapped in the vicinity of 77-78km markers for several species including: Ophioscincus truncatus, Elf Skink, Koala, Wallum Froglet and Wallum Rocketfrog. Low habitat values present in the area for the above species.	Some weeds present including Camphor Laurel (LPA Class 3).	n/a	Avoid disturbance to native vegetation where possible.
12	Petrie Creek	Very low corridor value	Not much vegetation on the north bank with some marine plants on south bank.	Essential Habitat is mapped in the vicinity of the Petrie Creek crossing for several species including: Koala, Wallum Froglet and Wallum Rocketfrog. Low habitat values present in the area for the above species.	Weeds present.	n/a	n/a
13	Waterway at the bottom of the hill. Waterway at 83.5km mark.	This area has been mapped by BAMM as having Regional Significance	Open woodland with areas of regrowth vegetation including Glossy Black-cockatoo food trees (i.e. *Allocasuarina littoralis* and *A. torulosa*). No hollows present on slopes however some hollow-bearing trees in the gully. Large dead trees with hollows on the ground. Rocky substrate.	There is no Essential Habitat mapped for this area however, several significant species listed under the EPBC and the NCA are known and/or expected to use in this area including migratory bird species and the Glossy Black-Cockatoo.	Weeds present in waterway.	This area should be surveyed for the presence of fauna within the alignment prior to the removal of vegetation for the construction phase of the NPI.	Stay clear of large habitat trees. Direct alignment to disturbed areas (i.e. introduced pine trees)
14	Overland flow path/drainage line.	Low corridor value as local north-south fauna movement corridor.	Narrow vegetated corridor, highly disturbed.	n/a	Weeds present in waterway.	n/a	n/a
15	Caboolture Creek	Local movement corridor with SW to NE linkages.	Existing track through this area. Cleared open area with marine vegetation on the southern side of the track. The northern side of the track has more intact vegetation with some hollows present.	No Essential Habitat mapped along the alignment along the creek however, significant habitat area south of Yandina Bli Bli Road is mapped as Essential Habitat for several listed species which may use the riparian corridor for movement. No suitable habitat where pipeline crosses creek.	Disturbed area with some weeds present.	n/a	Alignment should be located in already cleared areas on the southern side of the existing track/crossing.
16	Tributary of South Maroochy River	Narrow corridor for local movement with north-south linkages.	Weeds present on edges of vegetation however, intact native vegetation.	Essential Habitat is mapped in the vicinity of the 89 and 90 km markers for several species including: Koala, Wallum Froglet and Wallum Rocketfrog. Significant habitat area. Several significant species listed under the EPBC and the NCA known and/or likely to occur in this area. Potential frog habitat.	Weeds present including Camphor Laurel (class 3)	n/a	Recommend micro-tunnelling under the creek in this location.
17	South Maroochy River	Local movement corridor with east-west linkage for fauna movement.	Upstream very healthy, banks dropped and eroded in places. Weeds present.	Essential Habitat is mapped in the vicinity of the 89 and 90 km markers for several species including: Koala, Wallum Froglet and Wallum Rocketfrog. Riparian habitats supporting and providing movement options for several significant species. Koala, Platypus, frogs and Elf Skink expected to occur.	Weeds present including Camphor Laurel (class 3)	n/a	Recommend micro-tunnelling under the river in this location.
18	Small creek north of South Maroochy River.	Isolated vegetation.	Highly disturbed vegetated corridor. Weeds present.	Essential Habitat is mapped in the vicinity of the 89 and 90 km markers for several species including: Koala, Wallum Froglet and Wallum Rocketfrog. These species are not relevant at	Weeds present including Camphor Laurel	n/a	n/a

HA Site	River/Creek/ Drainage Line	Fauna Movement Corridor	Habitat Values	Significant Species	Other Issues	Further Work Required	Preferred Option
				this location.	(class 3)		
19	n/a	Local movement corridor with east-west linkage for fauna movement.	Locally significant stand of Eucalyptus trees. Very narrow patch.	Essential Habitat is mapped in the vicinity of the 91 km markers for several species including: Koala, Wallum Froglet and Wallum Rocketfrog. Koalas expected in vegetated areas both east and west of this location.		n/a	n/a
20	Tributaries of the North Maroochy River	Local movement corridor with east-west linkage for fauna movement.	Highly disturbed vegetated corridor. Weeds present.	Essential Habitat is mapped in the vicinity of the 91 km markers for several species including: Koala, Wallum Froglet and Wallum Rocketfrog.	Dominated by Camphor Laurel (class 3)	n/a	n/a
21	Browns Creek, a tributary of the North Maroochy River	Local movement corridor with east-west linkage for fauna movement.	Highly disturbed vegetated corridor. Weeds present.	No Essential Habitat is mapped in the vicinity of this location.	Dominated by Camphor Laurel (class 3). Rubbish dumped.	n/a	n/a
22	Tributary of North Maroochy River	Local movement corridor with east-west linkage for fauna movement.	Highly disturbed vegetated corridor. Weeds present.	No Essential Habitat is mapped in the vicinity of this location.	Dominated by Camphor Laurel (class 3)	n/a	n/a
23	Tributary of the North Maroochy River	End of creekline, low local corridor value to the west	Creek peters out where the alignment crosses creek. Disturbed habitat on the edge of the riparian area.	No Essential Habitat is mapped in the vicinity of this location.	Weeds present	n/a	n/a
24	Bunya Creek	End of creekline, low local corridor value to the west. Upstream to the east, Bunya Creek rehabilitation program underway. Degrades rapidly from rehabilitation works towards the alignment.	Creek peters out where the alignment crosses creek. Disturbed habitat on the edge of the riparian area.	No Essential Habitat is mapped in the vicinity of this location.	Weeds present	n/a	n/a
25	Proposed alignment crosses two dams and a small creek in this area and runs adjacent to a third dam.	Little to no corridor value.	The dams may provide habitat for several terrestrial and aquatic vertebrate species.	No Essential Habitat is mapped in the vicinity of this location.	Dams may be subject to high nutrient levels. Dams may have breeding fauna and could be used by water birds.	n/a	n/a
26	n/a	This area is mapped by BAMM as a regionally significant corridor. This area is located at the eastern extent of a vegetated regional corridor which provides movement opportunities with NW-SE linkages for species listed under the EPBC and the NCA either known or likely to occur.	Four large habitat trees (*Eucalyptus pilularis* and *Corymbia intermedia*) and some *Allocasuarina torulosa* along road edges.	Essential Habitat is mapped in the vicinity of the 99 and 100 km markers for the Koala and the Grey Goshawk.		Further detailed fauna survey work is required in this area if the alignment is to disturb significant habitat trees.	Alignment should stay clear of large habitat trees and native vegetation in this area.
27	Constructed dam	This area is mapped by BAMM as a regionally significant corridor. The area is at the south-eastern extent of a regional corridor.	Highly disturbed vegetated corridor. Weeds present.	Essential Habitat is mapped in the vicinity of the 99 and 100 km markers for the Koala and the Grey Goshawk.		n/a	n/a
28	n/a	This area is mapped by BAMM as a regionally significant corridor. The area is at the eastern extent of a regional corridor.	Potentially remnant vegetation with some weeds present.	Essential Habitat is mapped in the vicinity of the 99 and 100 km markers for the Koala and the Grey Goshawk.	Weeds present including Camphor Laurel (class 3). Steep slope in places.	n/a	n/a

HA Site	River/Creek/ Drainage Line	Fauna Movement Corridor	Habitat Values	Significant Species	Other Issues	Further Work Required	Preferred Option
29	Sandy Creek	Regional movement corridor with linkage to the south-east providing opportunities for fauna movement.	Potential for significant frogs within gully areas.	There is no Essential Habitat that is mapped for this location. High potential for the Tusked Frog and low potential for Southern Barred Frog.		Although this area is disturbed (i.e. where the Bruce Highway crosses the creek), there are significant species and habitats present. The finalised alignment and corridor should be subject to detailed design in this location to minimise ecological impacts.	n/a
30	Maroochy River	Local movement corridor with NE-SW linkage for fauna movement which joins to the regionally significant corridor to the south-west.	This area represents significant habitat area for several species listed under the EPBC and the NCA.	Essential Habitat for the Koala is mapped in the vicinity of the 102 km marker. Significant habitat area. Several significant species listed under the EPBC and the NCA known and/or likely to occur in this area. Potential frog habitat. Platypus, Echidna, Elf Skink, Tusked Frog and Southern Barred Frog expected.	Weeds present	Although this area is disturbed (i.e. where the Bruce Highway crosses the creek), there are significant species and habitats present. The finalised alignment and corridor should be subject to detailed design in this location to minimise ecological impacts.	Micro-tunnelling recommended in this area.
31	n/a	Isolated vegetation.	Potential habitat for significant species listed under the EPBC and NCA.	There is no Essential Habitat mapping for this area. Potential frog habitat.	Weeds present including Camphor Laurel (class 3). Steep slope in places.	n/a	n/a
32	Tributary of the North Maroochy River	This area represents a local movement corridor with north-south linkages.	This area represents significant habitat area for several species listed under the EPBC and the NCA.	Essential Habitat is mapped in the vicinity of the 104 km marker for the Koala. Several significant species listed under the EPBC and the NCA known and/or likely to occur in this area. Tusked Frog and Southern Barred Frog expected.	Weeds present including Camphor Laurel (class 3). Steep slope in places.	n/a	Alignment should stay clear of native riparian vegetation and waterway.
33	n/a	Regional movement corridor with NE-SW linkage providing opportunities for fauna movement.	Disturbed area in power easement. Weeds present. No hollows present.	There is no Essential Habitat mapped for this area. Potential for Elf Skink and migratory bird species in the gully.	Weeds present including Camphor Laurel (class 3), Lantana (class 3) and Groundsel (Class 2).	n/a	n/a
34	Creek crossing (unknown name)	This area is mapped by BAMM as a regionally significant corridor. Vegetated areas at the creek crossing provide east-west movement opportunities for fauna.	Areas to the west of the alignment are degraded.	There is no Essential Habitat mapped for this area. Potential for Tusked Frog and Koala movement.	Weeds present including Camphor Laurel (class 3) and Lantana (class 2).	n/a	n/a
35	n/a	This area is mapped by BAMM as a regionally significant corridor. The alignment is located in a cleared power easement.	The alignment is located in a cleared power easement.	n/a	n/a	n/a	Keep alignment in cleared areas.

HA Site	River/Creek/ Drainage Line	Fauna Movement Corridor	Habitat Values	Significant Species	Other Issues	Further Work Required	Preferred Option
36	n/a	This area is mapped by BAMM as a regionally significant corridor. Vegetated areas at the creek crossing provide east-west movement opportunities for fauna.	Largely native regrowth, relatively weed free. Occasional remnant trees to the east of alignment. Small patch of vegetation with reasonable habitat value linking to significant habitat to the west where the NPI corridor is proposed.	This area is expected to support several significant species listed under the EPBC and/or the NCA. There is no Essential Habitat mapped for this area. Glossy Black-cockatoo known in habitat areas to the west.	Very little weeds present which included Lantana (class 2)	The construction phase should be designed to: ensure minimal corridor width, to minimise the construction time, and maximise restoration actions.	Realign NPI corridor to cleared areas if possible.Constrain the corridor and disturbance in this area as this is significant vegetation.
37	Six Mile Creek (Left branch)	This area is mapped by BAMM as a regionally significant corridor. Vegetated areas at the creek crossing provide east-west movement opportunities for fauna.	Habitat and creek highly degraded. Areas upstream represent good quality habitat supporting significant species. This area has the potential to be rehabilitated to provide better quality habitat.	n/a	Creek polluted with rubbish and and hydrocarbon slick on the surface. Severe weed invasion in this area.	n/a	n/a
38	Six Mile Creek (Right Branch)	While this area provides some opportunities for movement, it is a narrow disturbed riparian corridor at the point of crossing.	This area is highly disturbed around the creek although there was a Wompoo Fruit Dove in the vegetation suggesting there may be better quality habitat nearby (i.e. upstream).	There is no Essential Habitat mapped for this area. Potential for Tusked Frog and Platypus.	Weeds present dominated by Camphor Laurel (class 3)	Given the proximity to known Mary River Cod populations, further detailed assessment of the aquatic fauna is required to determine appropriate management of the crossing at this site	n/a
Image Flat Connection							
39	n/a	n/a	Small clump of mature Eucalyptus habitat trees.	n/a	Located in cleared paddock.	n/a	Keep alignment and associated construction works away from the line at tree canopy extent.
40	Tributary of Petrie Creek	Some local movement providing north-south linkages. BAMM Regional Corridor mapped to the north.	Vegetated riparian corridor with a mixture of native and exotic species. Creek cleared of vegetation in places. Creek holds permanent water.	Potential for Tusked Frog in this location.	Weeds present.	n/a	Alignment should cross the creek in a previously cleared area located just south of Bli Bli Yandina Road.
41	Tributary of Petrie Creek	Some local movement providing north-south linkages. BAMM Regional Corridor mapped to the north.	Highly modified vegetated riparian corridor dominated by weed species.	n/a	Weed infestation. These habitats would not be disturbed if the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B) was adopted.	n/a	Opportunity for restoration in this area. The recommended option for the alignment in this area would follow the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B). A variation of this alignment is shown on Figure 4.22: SRWPA Map B5c (version: 19 September, 2007 (Prior to revision C)).
42	Tributary of Petrie Creek.	Local movement corridor providing some east-west linkages across the landfill site.	Significant vegetation and associated habitat containing an ephemeral waterway.	The Birdwing Butterfly is known from this location. This area is expected to support several significant species listed under the EPBC and/or the NCA. Essential habitat is mapped for the Koala, the Tusked Frog and the Cooloola Blind Snake in this area.	These habitats would not be disturbed if the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B) was adopted.	n/a	Realign Image Flat Connection to avoid significant vegetation and ephemeral waterway located east of the Bruce Highway. The recommended option for the alignment in this area would follow the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B). A variation of this alignment is shown on Figure 4.22: SRWPA Map B5c (version: 19 September, 2007 (Prior to revision C)).

HA Site	River/Creek/ Drainage Line	Fauna Movement Corridor	Habitat Values	Significant Species	Other Issues	Further Work Required	Preferred Option
43	Waterway east of Cooney Road.	Vegetation located to the west of Cooney Road provides for regionally significant north-south linkage with significant habitat and Flying-Fox camp to the north. Waterway running along the east of Cooney Road low corridor value. BAMM Regional Corridor mapped to the north.	The vegetation in this area represents the southern extent of significant vegetation containing protected habitats (i.e. Flying-fox camp).	Flying-fox camp located to the north of where alignment crosses through vegetation. Grey-headed Flying-fox are known from this camp. The Birdwing Butterfly (i.e. NCA listed invertebrate) is known from this location. This area is expected to support several significant species listed under the EPBC and/or the NCA. Tusked Frog known to occur in waterway to the east of Cooney Road. Essential habitat is mapped for the Koala, the Tusked Frog and the Cooloola Blind Snake in this area.	Weeds present in waterway to the east of Cooney Road. These habitats would not be disturbed if the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B) was adopted.	A referral to the DEWR is required for approval under the EPBC prior to conducting any works in this area that may disturb the Flying-fox camp.	Realign Image Flat Connection to avoid significant vegetation and disturbance to the Flying-fox camp located east of the Bruce Highway. The recommended option for the alignment in this area would follow the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B). A variation of this alignment is shown on Figure 4.22: SRWPA Map B5c (version: 19 September, 2007 (Prior to revision C)).
44	Tributary of Tuckers Creek	This area represents a significant regional corridor with NE-SSW linkages for fauna movement. BAMM Regional Corridor mapped to the north-east and south-west.	The vegetation in this area provides a significant habitat for a variety of species and a refuge for less mobile species. A variety of vegetation and habitats are present in this area.	This area represents significant habitat for several species listed under the EPBC Act and the NCA. Essential habitat is mapped for the Koala and the Tusked Frog in this area and these species are expected to occur.	Some weeds present on the edges. These habitats would not be disturbed if the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B) was adopted.	Further detailed work is required in this area if the alignment is to remain in this area.	Realign the Image Flat Connection to disturbed cleared areas to the south of its current location. The recommended option for the alignment in this area would follow the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B). A variation of this alignment is shown on Figure 4.22: SRWPA Map B5c (version: 19 September, 2007 (Prior to revision C)).
45	Tuckers Creek	This area represents a local movement corridor with linkages from the south-east to regionally significant corridors to the west. BAMM Regional Corridor mapped to the west	The vegetation in this area provides a significant habitat for a variety of species and a refuge for less mobile species. A variety of vegetation and habitats are expected in this area.	This area represents significant waterway and habitat for several species listed under the EPBC Act and the NCA. Essential habitat is mapped for the Koala and the Tusked Frog in this area.	Some weeds dominated by Camphor Laurel (class 3) on edges of riparian vegetation. Recent restoration/reveg etation works will be disturbed. These habitats would not be disturbed if the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B) was adopted.	Further detailed work is required in this area if the alignment is to remain in this area.	Realign the Image Flat Connection to disturbed cleared areas to the south of its current location. The recommended option for the alignment in this area would follow the original alignment shown on SRWPA Map B5c (version: 23 July 2007 Rev B). A variation of this alignment is shown on Figure 4.22: SRWPA Map B5c (version: 19 September, 2007 (Prior to revision C)). Tuckers Creek and surrounds should be checked for the presence of significant frog species in suitable weather conditions
46	n/a	BAMM Regional Corridor mapped to the north.	Low habitat value in this area due to the road reserve being mostly cleared and the presence of a new residential development to the south.	Several significant species expected to be using habitat to the north of the road reserve. Essential habitat is mapped for the Koala and the Tusked Frog in this area.	Potential for weed invasion from the south of the road reserve.	n/a	
47	Waterbody/dam at the end of Vincent Drive	This area has regional corridor values providing north-south linkages.	Several water birds breeding in this area and around the dam.	Essential habitat is mapped for the Koala and the Tusked Frog in this area.	Weeds along the edges of vegetation. Potential for weeds to invade the dam and surrounding area.	n/a	Minimise trenching in this area as the risk for fauna to move through areas with trenching is greater than in other locations along the Image Flat Connection.

HA Site	River/Creek/ Drainage Line	Fauna Movement Corridor	Habitat Values	Significant Species	Other Issues	Further Work Required	Preferred Option
48	Drainage line/creek	This area represents a narrow corridor for local movement with NE-SW linkages.	This area supports localised habitat for significant species listed under the NCA.	Potential for Tusked Frog and Platypus.	Weeds present along the waterway including Camphor Laurel (class 3).	n/a	Keep alignment to already cleared areas of the creek.
49	Drainage line and dam crossing	This area represents a narrow corridor for local movement with east-west linkages.	n/a	n/a	Weeds are present in the area.	n/a	Keep alignment to already cleared areas of the creek and dam.
50	n/a	n/a	n/a	n/a	Exotic species present.	n/a	n/a