

**TABLE A1.1 HOLLOW BEARING TREE SURVEY- TREES TO BE REMOVED**

CLIENT: Crighton Properties...REF NO....8065.... DATE.....17 August 2007.....ASSESSOR.....Paul Shelley.....SHEET NO.....3....of.....5.....

TREE LOCATIONS RECORDED ON MAP ☒ Y/N SITE SURVEY SHEET COMPLETED ☒ Y/N

| Tree Tag Number       | 18                  | 27                    | 35                | 36        | 38                  | 39                  | 40                  | 41                  |
|-----------------------|---------------------|-----------------------|-------------------|-----------|---------------------|---------------------|---------------------|---------------------|
| Species               | <i>E. pilularis</i> | <i>S. glomulifera</i> | <i>E. saligna</i> | Stag      | <i>E. pilularis</i> | <i>E. pilularis</i> | <i>E. pilularis</i> | <i>E. pilularis</i> |
| DBH (cm)              | 145                 | 130                   | 40                | 60        | 140                 | 95                  | 80                  | 100                 |
| Spread (m)            | 18                  | 15                    | 6                 | 8         | 30                  | 15                  | 15                  | 20                  |
| Height (m)            | 25                  | 25                    | 18                | 20        | 35                  | 25                  | 20                  | 30                  |
| Position              | Mid slope           | Mid slope             | Low slope         | Low slope | Top slope           | Mid slope           | Top slope           | Top slope           |
| % Health              |                     | 80                    | 50                | 0         | 80                  | 70                  | 80                  | 70                  |
| Fauna Use             |                     |                       |                   |           |                     |                     |                     |                     |
| <b>HOLLOWS</b>        |                     |                       |                   |           |                     |                     |                     |                     |
| I Broken Trunk        | 0-10cm              |                       |                   |           |                     |                     |                     |                     |
|                       | 10-15cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 15-20cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 20-25cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 25-30cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 30+                 |                       |                   |           |                     |                     |                     |                     |
| II Branch             | 0-10cm              |                       |                   | 3         |                     |                     |                     |                     |
|                       | 10-15cm             |                       |                   | 3         |                     |                     |                     |                     |
|                       | 15-20cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 20-25cm             | 2                     |                   |           |                     |                     | 1                   |                     |
|                       | 25-30cm             | 1                     |                   |           |                     |                     |                     |                     |
|                       | 30+                 |                       |                   |           |                     |                     |                     |                     |
| III Trunk             | 0-10cm              |                       |                   |           |                     |                     |                     |                     |
|                       | 10-15cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 15-20cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 20-25cm             |                       |                   | 1         |                     |                     |                     |                     |
|                       | 25-30cm             |                       |                   |           |                     |                     |                     | 1                   |
|                       | 30+                 |                       |                   |           |                     |                     |                     |                     |
| IV Splits             | 0-10cm              |                       |                   |           |                     |                     |                     |                     |
|                       | 10-15cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 15-20cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 20-25cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 25-30cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 30+                 |                       | 1                 |           | 1                   | 1                   |                     |                     |
| V Cracked Bark        | 0-10cm              |                       |                   |           |                     |                     |                     |                     |
|                       | 10-15cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 15-20cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 20-25cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 25-30cm             |                       |                   |           |                     |                     |                     |                     |
|                       | 30+                 |                       |                   |           |                     |                     |                     |                     |
| Targeted fauna survey |                     |                       |                   |           |                     |                     |                     |                     |

**POSITIONS:** Topographical location - ridge, slope, gully etc **HEALTH:** Record % of healthy growth compared to dead limbs.

**FAUNA USE:** Record scats, scratches, feed scars, nests etc.

**TABLE- A1.1 HOLLOW BEARING TREE SURVEY- TREES TO BE REMOVED**

CLIENT: Crighton Properties...REF NO....8065.... DATE.....17 August 2007.....ASSESSOR.....Paul Shelley.....SHEET NO.....4....of.....5.....

TREE LOCATIONS RECORDED ON MAP ☒ Y/N SITE SURVEY SHEET COMPLETED ☒ Y/N

|                       |         |                     |                  |                  |  |  |  |  |  |
|-----------------------|---------|---------------------|------------------|------------------|--|--|--|--|--|
| Tree Tag Number       |         | 42                  | 47               | 48               |  |  |  |  |  |
| Species               |         | <i>E. pilularis</i> | <i>Syncarpia</i> | <i>Syncarpia</i> |  |  |  |  |  |
| DBH (cm)              |         | 110                 | 90               | 70               |  |  |  |  |  |
| Spread (m)            |         | 20                  | 15               | 15               |  |  |  |  |  |
| Height (m)            |         | 30                  | 18               | 20               |  |  |  |  |  |
| Position              |         | Top slope           | Mid slope        | Mid slope        |  |  |  |  |  |
| % Health              |         | 70                  | 60               | 70               |  |  |  |  |  |
| Fauna Use             |         |                     |                  |                  |  |  |  |  |  |
| HOLLOWS               |         |                     |                  |                  |  |  |  |  |  |
| I Broken Trunk        | 0-10cm  |                     |                  |                  |  |  |  |  |  |
|                       | 10-15cm |                     |                  |                  |  |  |  |  |  |
|                       | 15-20cm |                     |                  |                  |  |  |  |  |  |
|                       | 20-25cm |                     |                  |                  |  |  |  |  |  |
|                       | 25-30cm |                     |                  |                  |  |  |  |  |  |
|                       | 30+     |                     |                  |                  |  |  |  |  |  |
| II Branch             | 0-10cm  |                     |                  |                  |  |  |  |  |  |
|                       | 10-15cm |                     |                  |                  |  |  |  |  |  |
|                       | 15-20cm |                     |                  |                  |  |  |  |  |  |
|                       | 20-25cm | 1                   |                  |                  |  |  |  |  |  |
|                       | 25-30cm |                     |                  |                  |  |  |  |  |  |
|                       | 30+     |                     | 2                |                  |  |  |  |  |  |
| III Trunk             | 0-10cm  |                     |                  |                  |  |  |  |  |  |
|                       | 10-15cm |                     |                  |                  |  |  |  |  |  |
|                       | 15-20cm |                     |                  |                  |  |  |  |  |  |
|                       | 20-25cm |                     |                  |                  |  |  |  |  |  |
|                       | 25-30cm |                     |                  |                  |  |  |  |  |  |
|                       | 30+     |                     |                  |                  |  |  |  |  |  |
| IV Splits             | 0-10cm  |                     |                  |                  |  |  |  |  |  |
|                       | 10-15cm |                     |                  |                  |  |  |  |  |  |
|                       | 15-20cm |                     |                  |                  |  |  |  |  |  |
|                       | 20-25cm |                     |                  | 1                |  |  |  |  |  |
|                       | 25-30cm |                     |                  |                  |  |  |  |  |  |
|                       | 30+     |                     |                  |                  |  |  |  |  |  |
| V Cracked Bark        | 0-10cm  |                     |                  |                  |  |  |  |  |  |
|                       | 10-15cm |                     |                  |                  |  |  |  |  |  |
|                       | 15-20cm |                     |                  |                  |  |  |  |  |  |
|                       | 20-25cm |                     |                  |                  |  |  |  |  |  |
|                       | 25-30cm |                     |                  |                  |  |  |  |  |  |
|                       | 30+     | 1                   |                  |                  |  |  |  |  |  |
| Targeted fauna survey |         |                     |                  |                  |  |  |  |  |  |

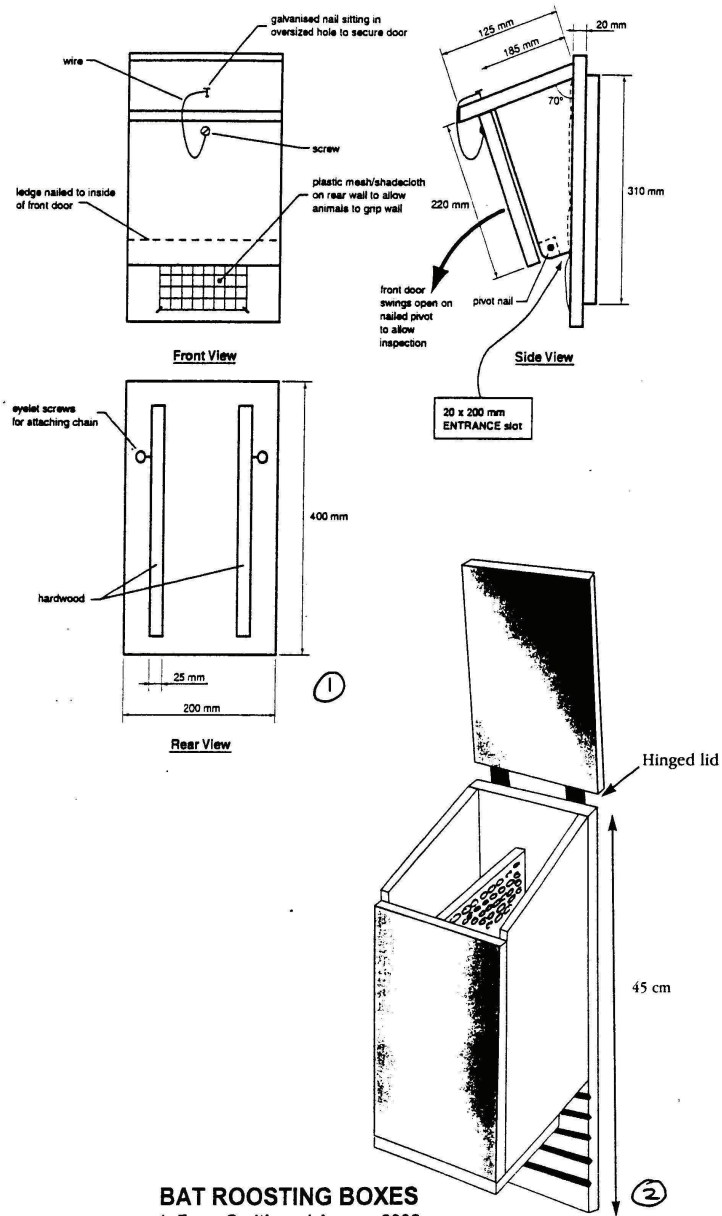
**POSITIONS:** Topographical location - ridge, slope, gully etc.

**HEALTH:** Record % of healthy growth compared to dead limbs.

**FAUNA USE:** Record scats, scratches, feed scars, nests etc.

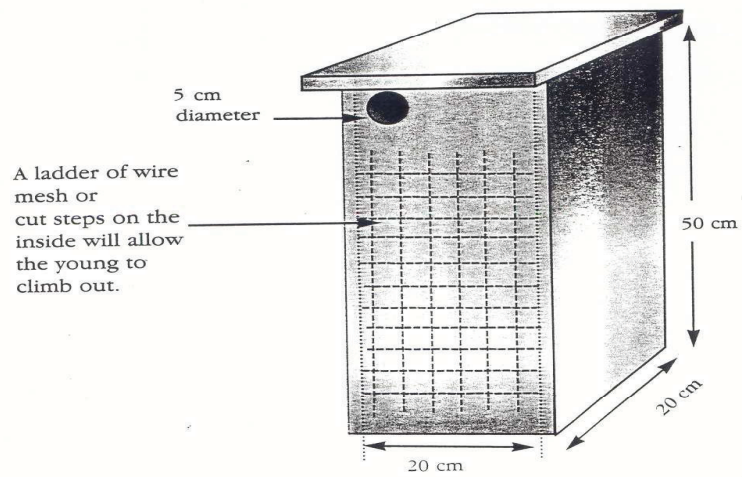
**ATTACHMENT 2**  
**NEST BOX SPECIFICATIONS**

## NEST BOX SPECIFICATIONS



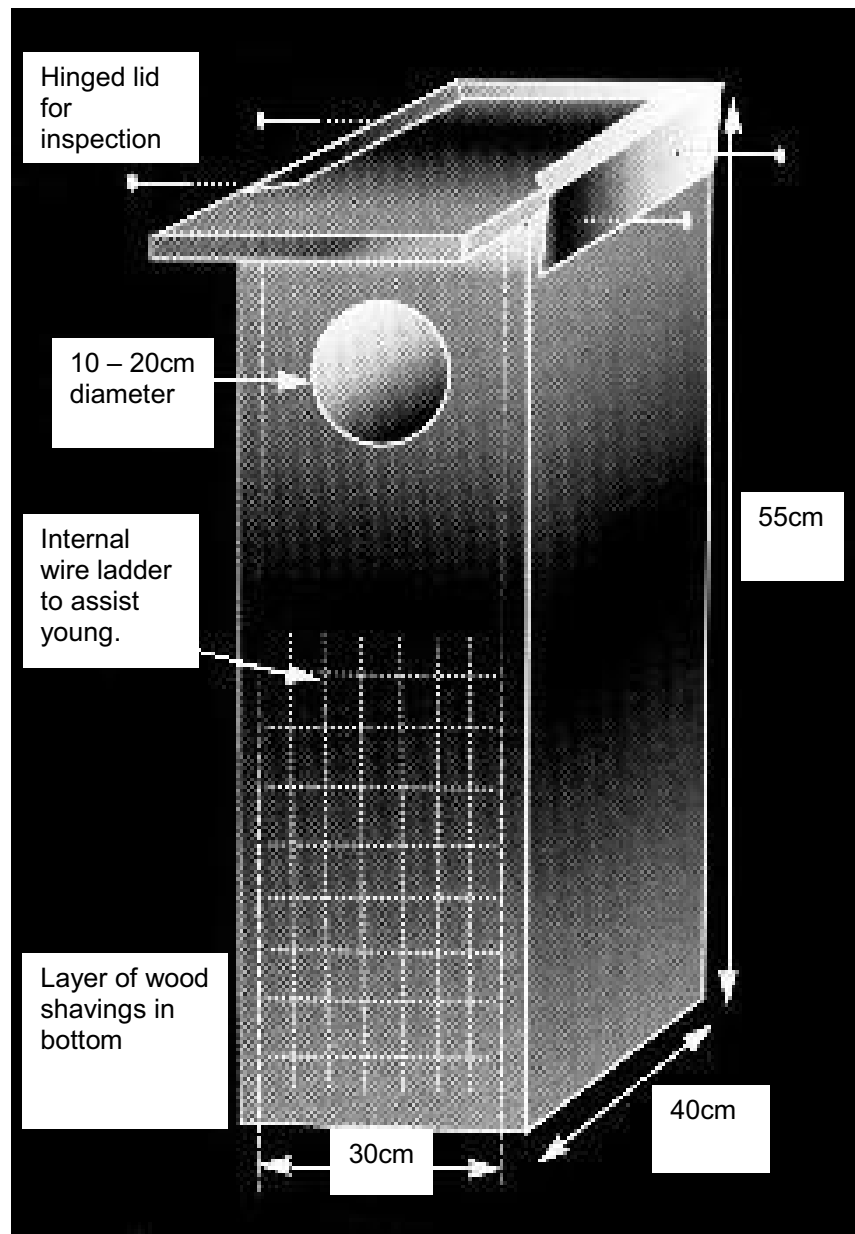
**BAT ROOSTING BOXES**  
 1. From Smith and Agnew 2002  
 2. From Gould League of Victoria 1997

## NEST BOX TYPE A



**SQUIRREL GLIDER NEST BOX**

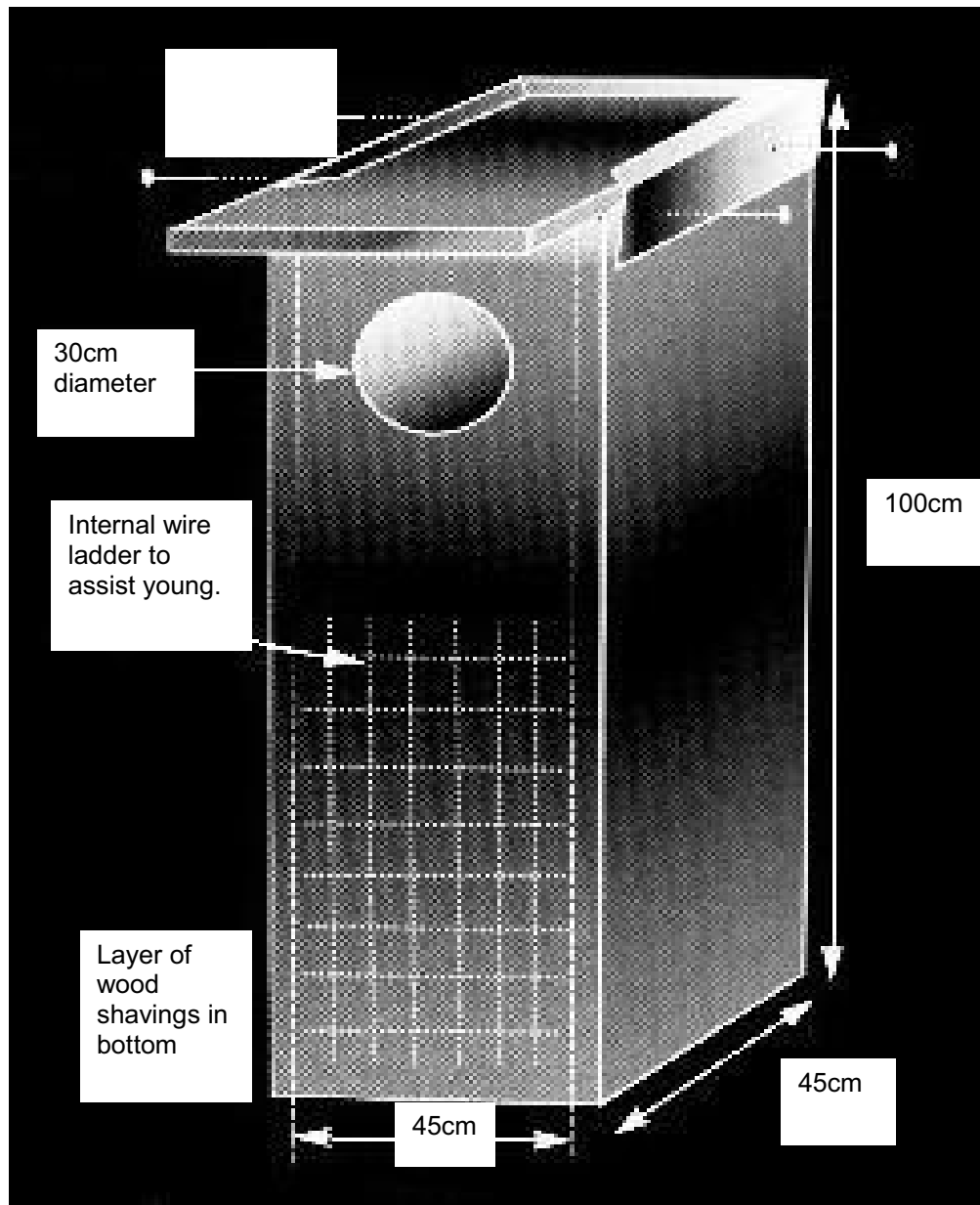
**NEST BOX TYPE B**



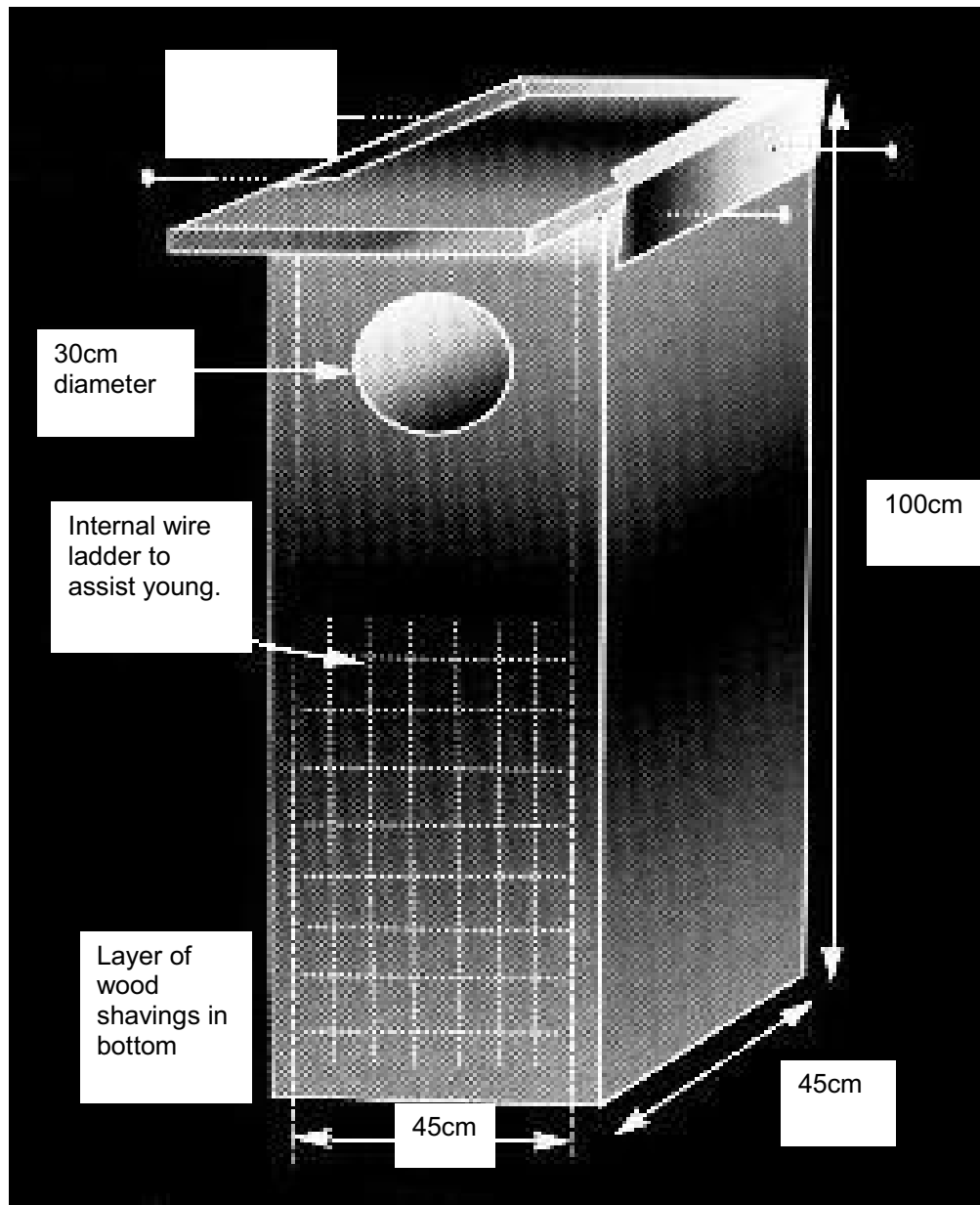
### **PARROT NEST BOX**

#### **NEST BOX TYPE C & D**

**The aperture to this box can be enlarged or reduced to accommodate both large and small parrot species**



**COMMON BRUSHTAIL POSSUM NEST BOX DETAIL**  
**NEST BOX TYPE E**



## FOREST OWL ROOSTING / NESTING BOX

### NEST BOX TYPE F



## **APPENDIX 5**

### **ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT**



## INTRODUCTION

The *Environment Protection and Biodiversity Conservation Act*, (1999) requires that Commonwealth approval be obtained for certain actions. The Act provides an assessment and approvals system for actions that have a significant impact on matters of National Environment Significance (NES). The matters of national environmental significance are:

- Listed threatened species and ecological communities;
- Migratory species protected under international agreements;
- Ramsar wetlands of international importance;
- The Commonwealth marine environment;
- World Heritage properties;
- National Heritage places;
- Great Barrier Reef Marine Park; and
- Nuclear actions.

Actions are projects, developments, undertakings, activities, series of activities or alteration of any of these. An action that needs Commonwealth approval is known as a controlled action. A controlled action needs approval where the Commonwealth decides the action would have a significant effect on a matter of National Environmental Significance.

Where a proposed activity is located in an area identified to be of National Environmental Significance, or such that it is likely to significantly impact a matter of National Environmental Significance, the proposal needs to be referred to the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC).

A Protected Matters search was undertaken within 10km of the subject site to determine the likely occurrence of Matters of National Environmental Significance. A printout of the Protected Matters search is provided as Attachment 1.

With regard to matters of National Environmental Significance, several criteria must be assessed to satisfy the requirements of the *EPBC Act* (1999). Criteria identified within the EPBC Act Policy Statement 1.1 *Significant Impact Guidelines* (DEWHA 2009), is required to determine whether the proposed development is likely to significantly impact on matter of National Environmental Significance and constitute a controlled action. The criteria for assessment are provided in **bold** print below.

### **1. Are there any Matters of National Environmental Significance located in the area of the proposed action?**

#### ***Nationally Listed Threatened Species***

Fifty six nationally listed threatened species have been recorded within 10km of the subject site on the EPBC Act Protected Matters Search Report (DSEWPC 2010).

One nationally listed threatened species, the Grey-headed Flying-fox (*Pteropus poliocephalus*) was observed within the subject site.

#### ***Nationally Listed Threatened Ecological Communities***

No threatened ecological communities listed within the EPBC Act (1999) were observed within the subject site or recorded within 10km of the subject site on the EPBC Act Protected Matters Search Report (DSEWPC 2010).

### ***Nationally Listed Migratory Species Protected Under International Agreements***

Fifty two migratory species protected under international agreements listed within the *EPBC Act* (1999) have been recorded within 10km of the subject site on the EPBC Act Protected Matters Search Report (DSEWPC 2010).

Two migratory species protected under international agreements, the Rufous Fantail (*Rhipidura rufifrons*) and the Cattle Egret (*Ardea alba*), listed within the *EPBC Act* (1999) have been recorded within the subject site.

### ***Ramsar Wetlands of International Importance***

No Ramsar wetlands of international importance as listed within the EPBC Act (1999) were observed within the subject site or recorded within 10km of the subject site on the EPBC Act Protected Matters Search Report (DSEWPC 2010).

### ***The Commonwealth Marine Environment***

No Commonwealth marine environments as listed within the EPBC Act (1999) were observed within the subject site or recorded within 10km of the subject site on the EPBC Act Protected Matters Search Report (DSEWPC 2010).

### ***Listed World Heritage Properties***

No world heritage properties as listed within the EPBC Act (1999) were observed within the subject site or recorded within 10km of the subject site on the EPBC Act Protected Matters Search Report (DSEWPC 2010).

### ***Listed National Heritage Places***

No national heritage places as listed within the EPBC Act (1999) were observed within the subject site or recorded within 10km of the subject site on the EPBC Act Protected Matters Search Report (DSEWPC 2010).

### ***The Great Barrier Reef Marine Park***

The subject site is not located within 10km of the Great Barrier Reef Marine Park.

### ***Nuclear Actions***

The proposal is not a type of development classed as a nuclear action and is not located within 10km of a nuclear action.

## **1.1 Considering the proposed action at its broadest scope, is there potential for impacts on Matters of National Environmental Significance?**

With regard to the proposed development, the following assessments are provided to determine the potential for the proposal to impact, at its broadest scope, on Matters of National Environmental Significance.

## **2.1 Assessment of significant impact on a vulnerable species**

### **2.1.1 Grey-headed Flying-fox**

#### **Vulnerable Species Important Population Criteria**

- **Whether the population has been identified within a recovery plan**

A draft recovery plan exists for this species at state level (DECCW 2009). A population of this species has not been identified as occurring within the subject site within any recovery plan.

- **Whether the population constitutes a key source population for breeding or dispersal**

The Grey-headed Flying-fox is common throughout its distribution, occurring within 200km of the east coast of Australia between Bundaberg and Melbourne in the Sydney Basin Bioregion (DECCW, 2009). They are a mobile species, flying long distances to forage (up to 50 km) and roost (DECCW, 2009). The subject site contains foraging habitat for the species, however is not critical to the species' survival. It is therefore considered that any Grey-headed Flying-fox population that may use the subject site does not constitute a key source population for breeding and dispersal for the species.

- **Whether the population constitutes a population necessary for maintaining genetic diversity**

The Grey-headed Flying-fox is common throughout its distribution along the southern east coast of Australia, and fly long distances to forage and roost (DECCW 2009). The subject site is suitable foraging grounds for the species, however is not critical to the species' survival. It is therefore considered that any Grey-headed Flying-fox population that may use the subject site does not constitute a population necessary for maintaining genetic diversity.

- **Whether the population is at the limit of its known distribution**

The Grey-headed Flying-fox is known to occupy the coastal lowlands and slopes of south-eastern Australia from Bundaberg to Geelong and are usually found at altitudes < 200 m. Areas of repeated occupation extend inland to the tablelands and western slopes in northern New South Wales and the tablelands in southern Queensland. Sightings in inland areas of southern New South Wales and Victoria are uncommon. There are rare records of individuals or small groups west to Adelaide, north to Gladstone and south to Flinders Island (DECCW 2009).

This species is therefore not at the limit of its distribution within the subject site.

From the above information and details it is considered that the Grey-headed Flying-fox observed within the subject site is not:

- Identified in a recovery plan for this species;
- A key source population for breeding or dispersal;
- A population necessary for maintaining genetic diversity;
- A population which is near this species range.

Therefore it is considered that the threatened species observed does not satisfy the criteria of an important population as identified by the DEWHA (2009).

Notwithstanding the above conclusions if the precautionary approach is adopted, further consideration as to whether the proposed action is likely to have a significant impact on this species needs to assess the significant impact criteria (DEWHA 2009) for a vulnerable species.

#### **Vulnerable Species Significant Impact Criteria**

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

It is considered that the Grey-headed Flying-fox population utilising the subject site is not an "important population" necessary for the species long-term survival and recovery. The proposed development will require the removal or modification of approximately 17.38 ha of potential habitat for this species. The Grey-headed Flying-fox was observed foraging within the subject site, however no roosting camps were located within the subject site. It is therefore considered that the proposed action will not lead to a long-term decrease in the size of an important population of a species

- ***Reduce the area of occupancy of an important population;***

It is considered that the Grey-headed Flying-fox population utilising the subject site is not an "important population" necessary for the species long-term survival and recovery. The proposed development will require the removal or modification of approximately 17.38 ha of potential habitat for this species. The Grey-headed Flying-fox was observed foraging within the subject site, however no roosting camps were located within the subject site. It is therefore considered that the proposed action will not lead to a long-term decrease in the size of an important population of a species

- ***Fragment an existing important population into two or more populations;***

No important populations of the Grey-headed Flying-fox has been found within the subject site. The proposal is will still allow for movement of this species over and around the subject site. It is therefore considered unlikely the proposed action will fragment an existing important population into two or more populations.

- ***Adversely affect habitat critical to the survival of a species;***

There has currently been no critical habitat for this species declared under the *EPBC Act* (1999) or listed within a recovery plan for this species.

The study area is not considered to constitute habitat critical to the survival of the species. Similar vegetation communities and habitat types are represented in adjoining bushland within the locality. It is therefore considered unlikely the proposed action will adversely affect habitat critical to the survival of a species.

- ***Disrupt the breeding cycle of an important population;***

This species was observed flying over the subject site. No roost or camp sites utilised for breeding were observed within the subject site. The subject site provides only a relatively small area of potential foraging habitat for this species. There are larger areas of suitable foraging habitat that support this species within the local area including within conservation reserves such as Kincumba Mountain Reserve, Katandra Reserve and Wambina Nature Reserve.

It is therefore considered that the proposed action will not disrupt the breeding cycle of an important population of this species.

- ***Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that a species is likely to decline;***

The Grey-headed Flying-fox was observed foraging within and adjacent to the subject site. The loss of habitat associated with any future development is unlikely to contribute towards a decline in the local population of the species. Since there is a large availability of quality habitat located off-site, it is considered unlikely the proposed action will modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.

- ***Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat;***

The subject site has already been affected by invasive species such as Lantana. It is considered that the high levels of weed invasion within some areas of the subject site may potentially impact upon this species. However, the proposed development incorporates a management plan for the removal of weed species within the proposed riparian zone. In addition it is expected that the proposed development will provide an opportunity to manage the whole of the site with respect to weed control. It is therefore considered unlikely the proposed action will result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species habitat.

- ***Introduce disease that may cause the species to decline; or***

The proposed development is not of a type that is likely to introduce disease that may cause this species to decline.

- ***Interferes substantially with recovery of the species.***

This species is not dependant on factors within the subject site for its recovery; therefore it is considered unlikely the proposed action will interfere substantially with the recovery of the species.

It is therefore considered that the proposed development is not likely to have a significant impact on a nationally listed threatened species.

## **2.2 Assessment of significant impact on a migratory species**

### **2.2.1 Rufous Fantail (*Rhipidura rufifrons*)**

#### **Migratory Species Important Habitat Criteria**

- **Habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species; and/or**

Due to the presence of larger areas of suitable habitat within adjoining lands it is considered that the subject site does not support an ecologically significant proportion of the population of the species.

- **Habitat that is of critical importance to the species at particular life-cycle stages; and/or**

The subject site is considered to provide foraging and breeding habitat for this species. The subject site has not been registered as critical habitat for this species within the provisions of the *EPBC Act* (1999). Larger areas of suitable foraging habitat and breeding for this species are present within the adjoining areas and therefore the subject site is considered to not be habitat that is of critical importance to the species at particular life-cycle stages.

- **Habitat utilised by a migratory species which is at the limit of the species range;**

On the eastern coast of mainland Australia this species is widespread from Queensland to Victoria (Higgins *et al.* 2006). Therefore the subject site is considered to not contain habitat utilised by a migratory species which is at the limit of the species range.

- **Habitat within an area where the species is declining.**

The subject site has not been registered as critical habitat for this species within the provisions of the *EPBC Act* (1999). The population demographics for this species within the local area are not known. Further studies are required in order to ascertain whether the species is declining within the local area. These studies are beyond the scope of this assessment.

From the above information and details it is considered that the habitats for this species within the subject site are not:

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

Therefore it is considered that the habitat within the subject site for this migratory species does not satisfy the criteria of “*important habitat*” as identified by the DEWHA (2009).

Notwithstanding the above conclusions if the precautionary approach is adopted, further consideration as to whether the proposed action is likely to have a significant impact on this species needs to assess the significant impact criteria (DEWHA 2009) for a migratory species.

#### **Migratory Species Significant Impact Criteria**

The consideration as to whether the proposed action is likely to have a significant impact on a migratory species needs to assess the significant impact criteria (DEWHA 2009) for a migratory species.

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



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

Some areas of suitable habitat for this species within the subject site, including the Coastal Warm Temperate Rainforest vegetation community, will be retained.

Therefore it is considered that the proposed action is unlikely to substantially modify, destroy or isolate and area of important habitat for this species.

- ***Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species; or***

The proposed action is not of a type of development that is likely to result in the establishment of an invasive species that is harmful to this species becoming established in an area of important habitat for this species.

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

Some areas of suitable habitat for this species within the subject site, including the Coastal Warm Temperate Rainforest vegetation community, will be retained.

It is therefore considered that the proposed development is not likely to seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the migratory species.

It is therefore considered that the proposed development is not likely to have a significant impact this nationally listed migratory species.

### **2.2.2 Cattle Egret (*Ardea idis*)**

With regard to the migratory species, the Cattle Egret (*Ardea ibis*), observed within the subject site, several criteria must be assessed to satisfy the requirements of the EPBC Act (1999). Criteria identified within the EPBC Act Policy Statement 1.1 *Significant Impact Guidelines* (DEWHA 2009), is required to determine whether there is a real chance or possibility, that the proposed action is likely to have a significant impact on a migratory species. The criteria for assessment are provided in **bold** print below.

#### **Migratory Species Important Habitat Criteria**

- ***Habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species; and/or***

Due to the presence of larger areas of suitable habitat within adjoining lands it is considered that the subject site does not support an ecologically significant proportion of the population of the species.

- ***Habitat that is of critical importance to the species at particular life-cycle stages; and/or***

The subject site is considered to provide mainly foraging habitat for this species. The subject site has not been registered as critical habitat for this species within the provisions of the *EPBC Act* (1999). Larger areas of suitable foraging habitat for this species are present within the adjoining areas and therefore the subject site is considered to not be habitat that is of critical importance to the species at particular life-cycle stages.

- ***Habitat utilised by a migratory species which is at the limit of the species range;***

In Australia this species is widespread and common in north-eastern Western Australia across the Top End, Northern Territory, and in south-eastern Australia from Bundaberg, Queensland to Port Augusta, South Australia, including Tasmania. Therefore the subject site is considered to not contain habitat utilised by a migratory species which is at the limit of the species range.

- ***Habitat within an area where the species is declining.***

The subject site has not been registered as critical habitat for this species within the provisions of the *EPBC Act* (1999). The population demographics for this species within the local area are not known. Further studies are required in order to ascertain whether the species is declining within the local area. These studies are beyond the scope of this assessment.

From the above information and details it is considered that the habitats for this species within the subject site are not:

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

Therefore it is considered that the habitat within the subject site for this migratory species does not satisfy the criteria of “*important habitat*” as identified by the DEWHA (2009).

Notwithstanding the above conclusions if the precautionary approach is adopted, further consideration as to whether the proposed action is likely to have a significant impact on this species needs to assess the significant impact criteria (DEWHA 2009) for a migratory species.

### **Significant Impact Criteria**

The consideration as to whether the proposed action is likely to have a significant impact on a migratory species needs to assess the significant impact criteria (DEWHA 2009) for a migratory species.

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

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

The subject site has already been substantially modified by land clearing and the establishment of pasture grasses. Therefore it is considered that the proposed action is unlikely to substantially modify, destroy or isolate an area of important habitat for this species.

- ***Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species; or***

The proposed action is not of a type of development that is likely to result in the establishment of an invasive species that is harmful to this species becoming established in an area of important habitat for this species.

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

According to Marchant and Higgins (1990) this species is widespread and common according to migrations, movements and breeding localities between approximately Bundaberg in Queensland from the coast south-west to Port Augusta South Australia. The range of the Cattle Egret has expanded to include every continent except Antarctica and is widely distributed across Australia. Genetically birds within Australia have come from Asian origins. The Cattle Egret is a partial migrant which winters in Australia and New Zealand, and travels to breeding colonies in south-east Queensland and north-east New South Wales, with some birds staying within wintering areas to breed.

It is therefore considered that the proposed development not likely to seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the migratory species.

It is therefore considered that the proposed development is not likely to have a significant impact on a nationally listed migratory species.

## **2. Are there any proposed measures to avoid or reduce impacts on Matters of National Environmental Significance?**

The proposed development is not likely to have a significant impact on a matter of NES. It is therefore considered that measures to avoid or reduce impacts on Matters of NES are not required. Notwithstanding this, proposed measures to avoid or reduce impacts are provided within the Maintain or Improve Assessment which is contained in documentation additional to this report.

## **3. Are any impacts of the proposed action on Matters of National Environmental Significance likely to be significant impacts?**

Assessments undertaken in accordance with the Criteria identified within the EPBC Act Policy Statement 1.1 *Significant Impact Guidelines* (DEWHA 2009), and contained within Section 2 of this Report have determined that the proposed development is not likely to have a significant impact on a matter of NES.

#### 4. Conclusion

It is considered that a referral of this project to the DSEWPC is not required as the proposal is not likely to significantly impact on matter of National Environmental Significance and therefore not likely to constitute a controlled action.

#### REFERENCES

- Department of Environment, Climate Change and Water NSW. 2009. Draft National Recovery Plan for the Grey-headed Flying-fox *Pteropus poliocephalus*. Prepared by Dr Peggy Eby. Department of Environment, Climate Change and Water NSW, Sydney.
- Department of the Environment Water Heritage and the Arts (2009). EPBC Act Policy Statement 1.1, Significant Impact Guidelines.
- Department of Sustainability, Environment, Water, Population and Communities (2010), Protected Matters Search Tool website: <http://www.environment.gov.au/erin/ert/epbc/>
- Environmental Protection and Biodiversity Conservation Act* (1999). Environment Australia. GHD (June 2009) Review of Environmental Factors for the Mardi-Mangrove Link Project.
- Higgins, P.J., J.M. Peter & S.J. Cowling. (Eds) 2006. *Handbook of Australian, New Zealand and Antarctic Birds. Volume 7: Boatbill to Starlings*. Oxford University Press, Melbourne.
- Marchant, S., & P.J. Higgins (Eds) (1990). *Handbook of Australian, New Zealand and Antarctic Birds. Volume 1 Ratite's to Ducks Part A Ratite's to Petrels* Oxford University Press, Melbourne.

**ATTACHMENT 1**

**EPBC PROTECTED MATTERS SEARCH RESULTS**

**Protected Matters Search Tool**You are here: [Environment Home](#) > [EPBC Act](#) > [Search](#)

6 December 2010 10:30

**EPBC Act Protected Matters Report**

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Information on the coverage of this report and qualifications on data supporting this report are contained in the [caveat](#) at the end of the report.

You may wish to print this report for reference before moving to other pages or websites.

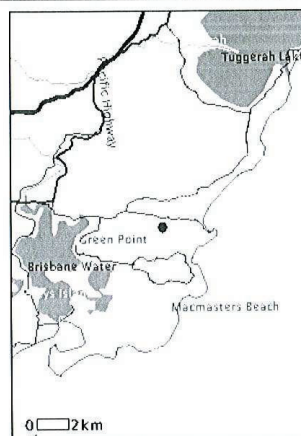
The Australian Natural Resources Atlas at <http://www.environment.gov.au/atlas> may provide further environmental information relevant to your selected area. Information about the EPBC Act including significance guidelines, forms and application process details can be found at <http://www.environment.gov.au/epbc/assessmentsapprovals/index.html>

**Search Type:** Point  
**Buffer:** 10 km  
**Coordinates:** -33.44444,151.4152



**Report Contents:** [Summary](#)  
[Details](#)  
• [Matters of NES](#)  
• [Other matters protected by the EPBC Act](#)  
• [Extra Information](#)

[Caveat](#)  
[Acknowledgments](#)



This map may contain data which are  
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**Summary****Matters of National Environmental Significance**

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see <http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>.

|                                                                   |      |
|-------------------------------------------------------------------|------|
| <b>World Heritage Properties:</b>                                 | None |
| <b>National Heritage Places:</b>                                  | None |
| <b>Wetlands of International Significance:<br/>(Ramsar Sites)</b> | None |
| <b>Commonwealth Marine Areas:</b>                                 | None |
| <b>Threatened Ecological Communities:</b>                         | None |

[http://www.environment.gov.au/cgi-bin/erin/ert/epbc/epbc\\_report.pl?searchtype=point;...](http://www.environment.gov.au/cgi-bin/erin/ert/epbc/epbc_report.pl?searchtype=point;...) 6/12/2010

|                            |    |
|----------------------------|----|
| <u>Threatened Species:</u> | 56 |
| <u>Migratory Species:</u>  | 52 |

### Other Matters Protected by the EPBC Act

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

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage/index.html>.

Please note that the current dataset on Commonwealth land is not complete. Further information on Commonwealth land would need to be obtained from relevant sources including Commonwealth agencies, local agencies, and land tenure maps.

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species. Information on EPBC Act permit requirements and application forms can be found at <http://www.environment.gov.au/epbc/permits/index.html>.

|                                      |      |
|--------------------------------------|------|
| <u>Commonwealth Lands:</u>           | 4    |
| <u>Commonwealth Heritage Places:</u> | None |
| <u>Places on the RNE:</u>            | 11   |
| <u>Listed Marine Species:</u>        | 68   |
| <u>Whales and Other Cetaceans:</u>   | 13   |
| <u>Critical Habitats:</u>            | None |
| <u>Commonwealth Reserves:</u>        | None |

### Extra Information

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

|                                      |      |
|--------------------------------------|------|
| <u>State and Territory Reserves:</u> | 8    |
| <u>Other Commonwealth Reserves:</u>  | None |
| <u>Regional Forest Agreements:</u>   | 1    |

### Details

#### Matters of National Environmental Significance

| Threatened Species [ <a href="#">Dataset Information</a> ]           | Status     | Type of Presence                                       |
|----------------------------------------------------------------------|------------|--------------------------------------------------------|
| <b>Birds</b>                                                         |            |                                                        |
| <u><i>Anthochaera phrygia</i></u><br>Regent Honeyeater               | Endangered | Species or species habitat likely to occur within area |
| <u><i>Diomedea exulans (sensu lato)</i></u><br>Wandering Albatross   | Vulnerable | Species or species habitat may occur within area       |
| <u><i>Diomedea exulans amsterdamensis</i></u><br>Amsterdam Albatross | Endangered | Species or species habitat may occur within area       |
| <u><i>Diomedea exulans antipodensis</i></u><br>Antipodean Albatross  | Vulnerable | Species or species habitat may occur within area       |

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|                                                                                                                                                              |            |                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------|
| <u><i>Diomedea exulans exulans</i></u><br>Tristan Albatross                                                                                                  | Endangered | Foraging, feeding or related behaviour may occur within area |
| <u><i>Diomedea exulans gibsoni</i></u><br>Gibson's Albatross                                                                                                 | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Lathamus discolor</i></u><br>Swift Parrot                                                                                                              | Endangered | Species or species habitat likely to occur within area       |
| <u><i>Macronectes giganteus</i></u><br>Southern Giant-Petrel                                                                                                 | Endangered | Species or species habitat may occur within area             |
| <u><i>Macronectes halli</i></u><br>Northern Giant-Petrel                                                                                                     | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Pterodroma leucoptera leucoptera</i></u><br>Gould's Petrel                                                                                             | Endangered | Species or species habitat may occur within area             |
| <u><i>Pterodroma neglecta neglecta</i></u><br>Kermadec Petrel (western)                                                                                      | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Rostratula australis</i></u><br>Australian Painted Snipe                                                                                               | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Thalassarche bulleri</i></u><br>Buller's Albatross                                                                                                     | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Thalassarche cauta cauta</i></u><br>Shy Albatross, Tasmanian Shy Albatross                                                                             | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Thalassarche cauta salvini</i></u><br>Salvin's Albatross                                                                                               | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Thalassarche cauta steadi</i></u><br>White-capped Albatross                                                                                            | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Thalassarche melanophris</i></u><br>Black-browed Albatross                                                                                             | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Thalassarche melanophris impavida</i></u><br>Campbell Albatross                                                                                        | Vulnerable | Species or species habitat may occur within area             |
| <b>Frogs</b>                                                                                                                                                 |            |                                                              |
| <u><i>Heleioporus australiacus</i></u><br>Giant Burrowing Frog                                                                                               | Vulnerable | Species or species habitat likely to occur within area       |
| <u><i>Litoria aurea</i></u><br>Green and Golden Bell Frog                                                                                                    | Vulnerable | Species or species habitat known to occur within area        |
| <u><i>Litoria littlejohni</i></u><br>Littlejohn's Tree Frog, Heath Frog                                                                                      | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Mixophyes balbus</i></u><br>Stuttering Frog, Southern Barred Frog (in Victoria)                                                                        | Vulnerable | Species or species habitat likely to occur within area       |
| <u><i>Mixophyes iteratus</i></u><br>Southern Barred Frog, Giant Barred Frog                                                                                  | Endangered | Species or species habitat likely to occur within area       |
| <b>Mammals</b>                                                                                                                                               |            |                                                              |
| <u><i>Balaenoptera musculus</i></u><br>Blue Whale                                                                                                            | Endangered | Species or species habitat may occur within area             |
| <u><i>Chalinolobus dwyeri</i></u><br>Large-eared Pied Bat, Large Pied Bat                                                                                    | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Dasyurus maculatus maculatus (SE mainland population)</i></u><br>Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) | Endangered | Species or species habitat may occur within area             |
| <u><i>Eubalaena australis</i></u><br>Southern Right Whale                                                                                                    | Endangered | Species or species habitat likely to occur within area       |
| <u><i>Megaptera novaeangliae</i></u><br>Humpback Whale                                                                                                       | Vulnerable | Species or species habitat known to occur within area        |
| <u><i>Potorous tridactylus tridactylus</i></u><br>Long-nosed Potoroo (SE mainland)                                                                           | Vulnerable | Species or species habitat may occur within area             |
| <u><i>Pseudomys novaehollandiae</i></u><br>New Holland Mouse                                                                                                 | Vulnerable | Species or species habitat known to occur within area        |

[http://www.environment.gov.au/cgi-bin/erin/ert/epbc/epbc\\_report.pl?searchtype=point;...](http://www.environment.gov.au/cgi-bin/erin/ert/epbc/epbc_report.pl?searchtype=point;...) 6/12/2010