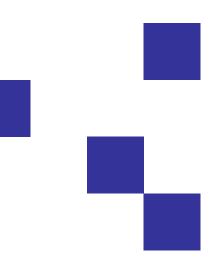


# VEGETATION CLEARING AND FAUNA MANAGEMENT PRACTICE NOTE

Pacific Highway Projects

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#### Document control

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1	January 2012	Draft
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#### Disclaimer

The information contained within this practice note is for general information only and is not intended to constitute legal advice. RMS accepts no responsibility for any loss arising out of reliance on any information contained in this document.

#### Acknowledgements

This practice note was prepared by RMS Pacific Highway Office, in consultation with RMS and EPA specialists, and is based on information presented in the following document:

Biodiversity Guidelines – Protecting and managing biodiversity on RTA projects (RTA 2011)

RMS Pacific Highway Office would like to acknowledge the assistance of all who provided comment and assisted in the development of this practice note.

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## 1. How to use this practice note

This Vegetation Clearing and Fauna Management Practice Note are intended for use by RMS project managers, staff and contractors on RMS Pacific Highway construction projects. Project teams working on Pacific Highway projects must develop and comply with appropriately planned, approved and supervised clearing and fauna management procedures. This practice note has been prepared to identify and consider key management principles for both fauna management and clearing activities and outlines minimum requirements for project specific Environmental Work Method Statements (EWMS) for these activities. Innovation is also encouraged to continually improve environmental outcomes on Pacific Highway Projects and to minimise environmental harm due to management of construction activities.

This Practice Note should be used as a guide by RMS project team during planning and preparation of all pre-clearing activities.

Refer to this practice note when preparing or assessing EWMS for work activities associated with clearing, pre-clearing, staged clearing, grubbing and/or and fauna management.

## 2. Introduction

#### 2.1. Background

Clearing activities associated with RMS Pacific Highway construction projects can result in the loss of fauna habitat and potentially injure fauna. The aim of developing and using vegetation clearing and fauna management procedures is to follow and work towards 'best practises', and to minimise environmental impacts. Environmental impacts that could result from vegetation clearing and fauna management include (but are not limited to) impacts to native flora and fauna, water and air quality, generation of noise, and community disruption.

This practice note helps to ensure RMS Pacific Highway construction projects minimise these impacts, comply with conditions of approval, and current legislation such as the *Environment Planning and Assessment Act 1979*, the *National Parks and Wildlife Act 1974*, the *Threatened Species Conservation Act 1995* and the *Environment Protection Biodiversity Conservation Act 1999*, by describing best management procedures to be followed during activities that involve vegetation clearing and fauna management.

### 2.2. Objective

The objective of this practice note is to provide guidance for vegetation clearing activities RMS Pacific Highway projects to assist in minimising impacts on native flora and fauna.

The pre-clearing process should be implemented as early as possible before clearing begins to:

- Confirm the location of environmentally sensitive areas identified in the environmental assessment process.
- Check for the presence of flora and fauna species and habitat on a site immediately before clearing begins.
- Provide input to determining appropriate exclusion zones.
- Locate nearby habitat suitable for the release of fauna that may be encountered during the pre-clearing process or habitat removal.
- Inform planning and procedures for the staged habitat removal process.
- Ensure that location of any threatened flora species, threatened ecological communities and habitat are mapped.
- Determine any additional management measures that may need to be incorporated into the Construction Environmental Management Plan (CEMP).

During the clearing process, this practice should also be followed to advise on procedures to be followed in order to minimise impacts to flora and fauna, and to the environment.

# 3. Considerations in clearing and fauna management

Undertake clearing and grubbing activities utilising a systematic and pre-determined process. Include management measures that aim to protect native fauna species, including threatened species, in the process..

The three stages that constitute clearing activities are:

- Pre-clearing
- Staged clearing

#### Grubbing

Consider the following sections (*Sections 3.1–3.3*) when preparing mitigation measures for proposed clearing activities. Additional reference documentation is provided in section 5 of this practice note.

#### 3.1. Pre-clearing process

The objective of the pre-clearing process is to minimise the impact on native flora and fauna. It also provides a final check for any threatened flora or fauna species that may have moved into the project area. The pre-clearing should be followed prior to any activities that may require habitat tree removal, removal of bush rock, etc.

The following activities are required as part of the pre-clearing process:

Review the environmental assessment and project documentation for background information to identify environmentally sensitive areas that may contain native flora and fauna and/or their habitat to be protected. Environmentally Sensitive areas may also include areas at risk of Key Threatening Processes such as Phytophthora and Chytrid, noxious/environmental weeds and management of these.

- Identify exclusion zones. Exclusion zones may include project boundaries, clearing limits or environmentally sensitive areas such as threatened species habitat, Endangered Ecological Communities (EEC), contaminated lands and potential or known archaeological sites. Exclusion zones may also be used to exclude areas that are infected with pathogens or contain weeds.
- Install and maintain appropriate exclusion zone fencing type with consideration to the risk of intrusion
- Procedures for entering exclusion zones. While exclusion zones should be considered offlimits' it may be necessary to enter (e.g. to monitor EEC) and a formalised procedure will ensure a risk assessment is undertaken.
- Engage a suitably licensed, qualified and experienced ecologist to conduct pre-clearing surveys based on predicted species to occur in the project footprint. Note: targeted surveys should be specific to the need to identify the presence of flora or fauna before clearing commences. The purpose of these surveys is not to reassess the impact of clearing activity and survey method used should reflect this approach. Examples of targeted surveys include but not limited to repeated feed trees (v-notch for Yellow-bellied Gliders, scars (koala), scats, dens, raptor nests; searches for tadpoles, searched in artificial habitats, i.e. culverts, bridges, houses to be demolished and ground dwelling fauna i.e. Eastern Chestnut Mouse, Rufous Bettong, Grass Owl, etc).
- In areas where koala have been identified as being present undertake pre-clearing koala searches on the morning prior to clearing commencing
- Undertake frog searches (where relevant) if threatened frog habitat is predicted to be impacted targeted searches for frogs shall be undertaken immediately prior to clearing (Stage 1 clearing). The method used will depend on the frog species likely to occur. For example Giant Barred Frog is receptive to call playback at night, while green thighed frogs are readily detectable after large rainfall events.
- Targeted surveys also recommended for noxious/environmental weeds.
- Threatened species information recorded by ecologist should be forwarded to OEH so that it can be entered into Wildlife Atlas.
- Identify location of:
  - o Non-mobile fauna (e.g. nesting birds) and habitat (e.g. tree hollows, bushrock)
  - Weeds
  - o Threatened species, EECs or other sensitive environmental areas
  - Trees and habitat to be retained during the first stage of the staged clearing

- If not already available, details for hollow bearing trees including GPS location, species, type of habitat feature (eg nest, bushrock), size of hollow (eg small, medium, large), and type of hollows (eg branch, limb, trunk) should be recorded.
- Refer to the Environmental Assessment for any requirements to install nest boxes prior to clearing.
- Identify locations of habitat suitable for the release of fauna that may be encountered during the pre-clearing process or habitat removal.
- Submit any updated maps/plans, pre-determined habitat for the release of fauna, habitat features and recommended clearing procedures to the project manager and/or environment manager (or equivalent).
- Prepare Sensitive Area Maps/Diagrams that identify work area, environmental features listed above, and mitigation measures such as exclusion fencing (refer Table 4.2).
- Prepare works sequencing, ensuring planned activity is both possible and practical.
- Develop chance find procedures to be used in circumstances such as encountering threatened species (refer to Example Fauna Handling and Rescue Procedure, Appendix A)

#### 3.2. Staged habitat removal

The staged clearing process minimises direct impacts on fauna by providing them with an opportunity to vacate habitat (e.g. hollows) and relocate naturally. The staged clearing process is conducted in at least two stages (e.g. clearing of non-habitat trees followed by habitat trees) to allow respite between the initial disturbance of clearing and the final removal of habitat.

The staged clearing process consists of the following three stages:

- 1) Clearing of non-habitat trees
- 2) Intermittent 'wait' period
- 3) Clearing of habitat

Include the following management measures in staged clearing:

- Prior to commencing ensure appropriately qualified, licensed and experienced personnel (such as from WIRES/FAWNS) are available to care for any injured fauna that may be encountered
- Ensure appropriately qualified personnel are on-site during clearing of habitat and inspect all
  habitat once it is removed (e.g. once a tree is felled), appropriately qualified personnel should
  capture, inspect and relocate any fauna to suitable habitat identified during pre-clearing
- Inspect habitat to confirm the presence of fauna
- Follow rescue and release procedures (developed during pre-clearing) in the event of remaining fauna, especially injured, shocked or juvenile fauna.
- Remove non-hollow-bearing trees, undergrowth, feed-trees, regrowth and grass whilst maintaining habitat trees, bushrock and other habitat features identified during the pre-clearing process
- Allow a minimum of 24 hours between clearing of non-habitat and clearing of habitat to enable fauna to self relocate
- Fell habitat trees with care to avoid possible injury to fauna still remaining within hollows (e.g. where possible by lowering slowly with a claw extension)
- Ensure trees are not fell towards exclusion zones
- Where possible, swivel head clearing machinery to be used to lower habitat/hollow bearing trees.
- Assess the value of natural resources obtained for reuse in the project (e.g. fauna furniture or supplementary habitat)

### 3.3. Grubbing activity

Grubbing involves the shallow excavation of earth in order to remove any trees or stumps that remain in the construction footprint after the completion of staged clearing. A planned and systematic grubbing procedure minimises potential impacts to the environment due to grubbing.

Consider the following management measures in grubbing management:

- Measures to minimise dust emission.
- Appropriate erosion and sediment controls including their ongoing maintenance.
- Measures to minimise noise generation and noise impacts on the adjacent community.
- Protocols for unforseen or problematic circumstances, particularly the event of encountering unexpected soil types including ASS/PASS or contaminated soils.
- Services, particularly underground services, their location and protection measures.
- Remediation requirements, particularly for areas to be grubbed that lie beyond the construction footprint.

# 4. Minimum requirements for clearing activity environmental work method statements

#### 4.1. Summary of minimum EWMS requirements

The format of site-specific EWMS is flexible according to the procedures used by each project team and should be developed in consultation with the EPA. However as a minimum requirement, an EWMS for clearing activity should:

- Incorporate a complete work method risk assessment (Section 4.2) that:
  - Lists the sequence of work activities to be undertaken during clearing activity, including pre-clearing, staged clearing and grubbing.
  - o Identifies potential environmental hazards for each work activity specified
  - o Assigns specific risk ratings to individual hazards specified
  - Identifies control measures to eliminate or reduce risks, or where this is not possible, describe mitigation measures to be utilised in the event of a risk event occurring
  - Assigns responsibility of each control measure to a member of the project team
- Incorporate an induction register as a record of staff who have been approved to partake in activities detailed within the EWMS (Section 4.3)
- Include quality control process where EWMS are updated changed to reflect changes as a result of new information/construction activities.

#### 4.2. Incorporate a work method risk assessment

It is often useful to use the sequence of works as a methodical framework for identifying potential environmental hazards associated with each stage of clearing activity; ensuring risks can be assessed throughout the entire process. Potential hazards then serve as basis for risk management and treatment measures.

Risk treatment measures should be described in terms of measures to eliminate, reduce or mitigate risks.

To ensure risk treatment measures are undertaken as intended, allocation of responsibility shall be given to each risk treatment measure. Persons listed as responsible for risk treatment measures will ultimately be held accountable for proper implementation.

The work method risk assessment in Table 4.2, although not exhaustive, shall be used as a guide for preparation of this section of a clearing activity EWMS. Table 4.2 has incorporated minimum requirements for risk treatment measures. These minimum requirements <u>must</u> be reflected in the chosen risk treatment measures for each EWMS. In addition example work activities and hazards have also been included in Table 4.2. It is important to note that the work activities and hazards listed are for illustrative purposes <u>only</u> and it will be necessary for each project to develop relevant activities and identify hazards in accordance site conditions.

#### 4.3. Incorporate induction register

All staff responsible for approval and/or execution of clearing activities must be trained and inducted into the use of the EWMS. The EWMS should include an induction register as a record of staff that is approved to undertake or manage clearing activities.

#### 5. Additional reference documents for guidance

- DEC Threatened Biodiversity Survey and Assessment: Practice notes for Development and Activities 2004 and field survey methods for Amphibians 2099.
- RMS Biodiversity Practice notes: Protecting and managing biodiversity on RTA projects
- Pacific Highway Office Practice notes (Fauna surveying for clearing for the Pacific Highway -1999).

Table 4.2 – Example work method risk assessment for incorporation in clearing activity EWMS

Sequence	Work Activity	Hazards	Risk Level	Risk Treatment Measures	Responsibility
1	Training of personnel	Non-compliance with EWMS	e.g. high	List all relevant treatment measures  As a minimum listed measures must:  • Ensure all relevant construction personnel are familiar with the EWMS  • Ensure all personnel with allocated EWMS responsibilities are aware of responsibilities  • Ensure records of EWMS training are continually maintained	
2	Pre-Clearing	Clearing limits incorrectly identified; inadvertent detrimental impact on sensitive areas; injury to fauna; inadvertent detrimental impact on threatened species		List all relevant pre-clearing hazard treatment measures  As a minimum listed measures must:  • Ensure clearing limits are located in accordance with relevant drawings and specifications [e.g. use of qualified surveyors, inspection procedures]  • Ensure clearing limits are clearly identifiable at ALL times to all personnel working on-site [e.g. fencing or other visual marker, maintenance measures, fenced buffer zones]  • Ensure that any applicable exclusion zones (EECs, PADs, etc.) are located in accordance with relevant drawings and specifications.  • Ensure additional exclusion zones are clearly identifiable at ALL times to all personnel working on-site [e.g. fencing or other visual marker]  • Ensure appropriate ERSED controls (e.g. sediment basins) are implemented and maintained.  • Ensure qualified personnel undertake a documented preclearing ecology inspection/survey to identify and delineate:  a. Boundaries of prior ecological surveys.  b. Specific threatened/endangered flora species which are to be permanently preserved.  c. Areas of weed infestation.  d. Designated habitat trees (including hollow bearing trees), bushrock or potential roosting habitat to be preserved  e. Any trees outside clearing limits which are unsound and likely to fall upon the roadway or onto private property that are to be lopped or	

			removed.  f. If threatened frog habitat impacted – pre clearing frog surveys must be undertaken and frogs relocated. (separate protocol required for frog relocation).  g. Ensure delineating measures are recognisable by ALL relevant personnel [e.g. clear signage, toolbox training for on-site personnel]  • Ensure protocols are in place in the event of unforseen or problematic circumstances such as a unexpected threatened species find.  • Ensure that designated suitable locations exist for release of fauna that may be encountered during pre-clearing or clearing [e.g. documented release locations advised by ecologist]  • Ensure natural resources obtained as a result of works are assessed for reuse, such as topsoil, millable logs or timber identified for reuse in the project [e.g. documented inspection for trees etc.]  • Notify appropriately qualified, licensed, experienced wildlife carers such as FAWNS or WIRES prior to commencement of any clearing.	
3	Clearing of non-habitat	inadvertent detrimental impact on sensitive areas; injury to fauna; inadvertent detrimental impact on threatened species; pollution of waterways	List all relevant clearing of non-habitat hazard treatment measures  As a minimum listed measures must:  • Ensure pre-clearing has been completed in its entirety for the designated work area.  • Ensure appropriate sediment and erosion control measures are implemented and maintained [e.g. inspected ERSED controls and end-of-day procedures]  • Ensure exclusion areas including designated habitat features to be retained during clearing of non-habitat are clearly visible and known by all relevant site personnel.  • Ensure a minor level of disturbance to habitat trees is created to encourage fauna to vacate the area.  • Ensure trees are not felled towards exclusion zones  • procedures]  • Ensure millable logs are salvaged for recycling and all other cleared vegetation is stockpiled for mulching.  • Ensure the spread of weeds between project areas is minimised.	

4	Wait Period	Injury to fauna; inadvertent detrimental impact on threatened species	List all relevant hazard treatment measures  As a minimum listed measures must:  • Ensure maintenance of delineation measures for clearing limits and exclusion zones  • Ensure pre-determined habitat features including habitat trees, bush rock and other potential roosting areas retained in clearing of non-habitat are left undisturbed for 24 hours.  • Ensure habitat features and surrounding area to be impacted are thoroughly inspected by appropriately qualified personnel to verify the presence of any fauna [e.g. inspections by ecologist/wildlife carer for injured, shocked or juvenile fauna requiring rescue and/or relocation]  • Ensure that appropriately qualified personnel are available for the safe and timely rescue and/or translocation of fauna  • Ensure protocols exist in the event of threatened flora/fauna species finds [e.g. specialised procedures]	
5	Clearing of habitat trees	Inadvertent detrimental impact on sensitive areas; injury to fauna; inadvertent detrimental impact on threatened species; pollution of waterways	List all relevant clearing of habitat hazard treatment measures  **As a minimum listed measures must:*  • Ensure all necessary ecological inspections have been completed in their entirety prior to clearing of habitat trees  • Ecologist and/or licensed wildlife carer experienced in fauna rescue is present during clearing operations.  • Where possible use machinery which has the ability to lower habitat trees slowly to the ground.  • Ensure appropriate sediment and erosion control measures are implemented and maintained [e.g. inspected ERSED controls and end-of-day procedures]  • Ensure exclusion areas including designated habitat features to be retained permanently are clearly visible and known by all relevant site personnel.  • Ensure millable logs are salvaged for recycling and all other cleared vegetation is stockpiled for mulching.  • Ensure the spread of weeds between project areas is minimised.  • Ensure records are kept of injured or killed fauna.  • Project ecologist to prepare clearing report.	

6	Grubbing	Pollution of waterways, air quality impacts, community impacts	List all relevant grubbing hazard treatment measures  As a minimum listed measures must:  Ensure appropriate ERSED controls are implemented and maintained [e.g. inspected ERSED controls and end-of-day procedures]  Appropriately sized sediment basins are installed as soon as possible after clearing operations  Ensure protocols are in place in the event of unforseen or problematic circumstances such as a threatened species find, unexpected weeds find, unexpected PASS/ASS, heritage item find [e.g. cease work, specialised procedures]  Ensure works are undertaken in a manner that minimises dust generation and particulate emissions [e.g. mandatory activity sequencing, construction speed limits, dust suppression measures, plant maintenance regimes, etc.]  Ensure works are undertaken in a manner that minimises noise to adjacent community [e.g. assess areas vulnerable to high noise levels, administer procedures to prevent needless noise, etc.]  Ensure rehabilitation measures (where applicable) are undertaken within specified time periods
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# Appendix: Example Fauna Handling and Rescue Procedure

# Fauna Handling and Rescue Procedure

#### **Purpose**

This procedure explains the actions to be undertaken in the event fauna (including injured, shocked, juvenile or other animal) are discovered on the project site that require handling or rescue during vegetation and soil clearance and ongoing construction activities.

#### Scope

This procedure is applicable to all native and introduced species that are found on the project site

#### Procedure

The following procedure relates to:

A – In the event wildlife are discovered on the project site during site construction activities that may harm the animal or pose risk to site personnel, the following steps shall be undertaken.

- 1. Stop all work in the vicinity of the fauna and <u>immediately notify</u> project Superintendent who is then to notify the Environmental Manager or Project Ecologist if the latter is present onsite.
- 2. Preferably allow fauna to leave an area without intervention.
- 3. Use a licensed fauna ecologist or wildlife carer with specific animal handling experience to carry out any fauna handling.
- 4. Where necessary, to minimise stress to native fauna and/or remove the risk of further injury before a licensed fauna handler arrives onsite, the Environmental Officer shall:
  - a) Cover larger animals with a towel or blanket and place in a cardboard box and/or hessian bag;
  - b) Place smaller animals in a cotton bag, tied at the top;
  - c) Keep the animal quiet, warm, ventilated and in a dark location away from noisy construction activities; and
  - d) Frogs and aquatic fauna to be placed in plastic aquaria or plastic bag with sufficient amount of water.

Note 1. Some animals require particular handling (e.g. venomous reptiles, raptors) and should only be handled by appropriately qualified personnel i.e. Project Ecologist or FAWNA representative(s)

Note 2. If handling bats, the handler must be vaccinated against the Australian Bat Lyssavirus (ABL) which is a form of rabies.

Note 3.Any frog handling would be undertaken in accordance with the *Hygiene Protocol for the Control of Disease in Frogs* (DECC 2008). This protocol recommends onsite hygiene precautions be undertaken to minimise the transfer of disease between and within wild frog populations. Measures recommended include:

 Thoroughly cleaning/disinfecting footwear and equipment when moving from one site to another;

- ii) Where necessary in high risk areas, spraying/flushing vehicle tyres with a disinfecting solution;
- iii) Cleaning/disinfecting hands between collecting samples/frogs; and
- iv) Limiting one frog or tadpole to a bag. Bags should not be reused.
  - 5. If the <u>animal cannot be handled</u> (i.e. venomous reptiles);
    - a) Exclude all personnel from the vicinity with fencing and/or signage; and
    - b) The exact location of the animals is to be recorded and provided to the Project Ecologist or appropriate rescue agency (i.e. FAWNA).
  - 6. <u>Call the appropriate rescue agency immediately</u> and follow any advice provided by the agency. Once the rescue agency arrives at the site, they are responsible for the animal. Any decisions regarding the care of the animal will be made by the rescue agency. The relevant fauna rescue services and local veterinary surgeries contact details are as follow:

Agency/business	Contact Number
Project Ecologist	
FAWNA/WIRES	
RSPCA	
Veterinary Services	

In the event the rescue service and/or local veterinary service cannot be contacted, the injured animal will be delivered to the relevant agency as soon as practically possible.

- 7. If the fauna species is identified as a <u>threatened species that is not identified in the Flora and Fauna Management Sub Plan,</u> the environmental Officer or Environmental Manager must:
  - a) Immediately cease all work likely to affect the threatened species;
  - b) The Environmental Manager shall contact the RMS Environmental Officer to inform of the situation.
  - c) The Environmental Manger shall then contact the following stakeholders, in this order, to determine the appropriate corrective actions and additional safeguards to be undertaken:
    - i. EPA (131 555)
    - ii. Project Ecologist (0400 456 723)
    - iii. Environmental Representative
    - iv. Others as instructed by Principal or EPA
- 8. Environmental Manager to record find in RMS Environmental Incident Report
- Following consultation with all relevant stakeholders, the Environmental Manager shall implement any corrective actions and additional safeguards.
- 10. Following confirmation by the Environmental Manager that all appropriate safeguards have been implemented, construction works shall recommence.
  - a) Relocation of fauna along the footprint will be undertaken by the Environmental Officer and will be recorded on the Weekly Environmental Inspection Checklist. If the animal is not injured or stressed, it may be released nearby in an area that is not to be

- disturbed by the project construction works, in accordance with the following procedures:
- b) Sites identified as suitable release points by the Project Ecologist or FAWNA rescuer:
- c) Release site will contain similar habitat and occur as close to the original capture location as possible;
- d) If the species is nocturnal, release will be carried out at dusk; and
- e) Release would generally not be undertaken during periods of heavy rainfall.

B – Whilst the Project Ecologist is present on Project Site (i.e. clearing of vegetation) they will be responsible for fauna handling/rescue. The Project Ecologist will follow the relevant steps detailed below.

- 1. Targeted surveys will be undertaken in accordance with the two stage clearing process
  - a. During Stage 1 (under-scrubbing and non habitat tree removal) all fauna that can be physically captured during targeted works (i.e. active searches) will be relocated into areas of suitable habitat adjacent to the Project site(i.e. normally adjacent to the clearing footprint). The species, number, sex, age, class and general health of each individual is to be recorded for later reporting. The handling procedures are described below.
  - b. During Stage 2 (habitat tree removal) all fauna captured will be relocated into areas of suitable habitat adjacent to the Project site. The species, number, sex, age, class and general health of each individual is to be recorded for later reporting. The handling procedures are described below.
- 2. To minimise stress to native fauna and/or remove the risk of further injury the Project Ecologist shall:
  - a. Cover larger animals with a towel or blanket and place in a cardboard box and/or hessian bag;
  - b. Place smaller animals in a cotton bag, tied at the top;
  - c. Place frogs/tadpoles in a plastic bag with a small amount of water and/or vegetation;
  - d. Fish and other aquatic life (i.e. turtles) place in plastic aquaria or plastic container with sufficient water; and
  - e. For terrestrial fauna keep the animal in a quiet, warm, ventilated and dark place away from noisy construction activities.
  - f. For aquatic fauna species ensure sufficient amount of water and ensure adequate aeration;
- Note 1. Some animals require particular handling (e.g. venomous reptiles, raptors) and should only be handled by appropriately qualified personnel i.e. Project Ecologist or FAWNA representative(s)
- Note 2. If handling bats, the handler must be vaccinated against the Australian Bat Lyssavirus (ABL) which is a form of rabies.
- Note 3. Any frog handling would be undertaken in accordance with the Hygiene Protocol for the Control of Disease in Frogs (DECC 2008).

3. In the event an animal is injured the following fauna rescue services and local veterinary surgeries contact details are as follows:

Agency/business	Contact Number
Project Ecologist	
FAWNA	
RSPCA	
Veterinary Services	

In the event the rescue service and/or local veterinary service cannot be contacted, the most appropriate euthanasia will be administered by the Project Ecologist (i.e. cervical dislocation for small vertebrates, ice slurry for introduced fish).

- 4. If the fauna species is identified as a <u>threatened species that is not identified</u> <u>in the Flora and Fauna Management Sub Plan</u>, the Environmental Officer or Environmental Manager must:
  - a. Immediately cease all work likely to affect the threatened species;
  - b. The Environmental Manager shall contact the RMS Environmental Officer to inform of the situation.
  - c. The Environmental Manger shall then contact the following stakeholders, to determine the appropriate corrective actions and additional safeguards to be undertaken:
    - i. EPA (131 555)
    - ii. Project Ecologist (0400 456 723)
    - iii. Environmental Representative
    - iv. Others as instructed by Principal or EPA
  - d. Environmental Manager to record find in RMS Environmental Incident Report
  - e. Following consultation with all relevant stakeholders, the Environmental Manager shall implement any corrective actions and additional safeguards.
  - f. Following confirmation by the Environmental Manager that all appropriate safeguards have been implemented, construction works shall recommence.
- 2. Relocation of fauna captured during the clearing and associated works will generally take place in areas of suitable habitat immediately adjacent to the Project site taking into account:
  - a. The release site contains similar habitat and occurs as close to the original area as possible:
  - b. If the species is nocturnal, release will normally be carried out at dusk;
  - c. Release would generally not be undertaken during periods of heavy rainfall expect for aquatic fauna; and
  - d. Non-native fauna will not be translocated and will be euthanised.

If the animal has been placed into care due to injury, age (i.e. young) or stress, upon its rehabilitation it will be released in an area that is not to be disturbed by the project construction works, at the discretion of the project ecologist taking the above into account. The Project Ecologist will record and provide the capture and relocation data in the post clearing report.