

Appendix F Fauna Species List

Family	Scientific Name	Common Name	Legal Status			Survey	
			Introduced	TSC Act	EPBC Act	BES 2004	InSites 2008
Avifauna							
Acanthizidae	<i>Gerygone mouki</i>	Brown Gerygone					x
	<i>Acanthiza pusilla</i>	Brown Thornbill				x	x
	<i>Origma solitaria</i>	Rock Warbler				x	x
	<i>Acanthiza lineata</i>	Striated Thornbill				x	x
	<i>Sericornis frontalis</i>	White-browed Scrubwren					x
	<i>Gerygone olivacea</i>	White-throated Gerygone					x
Accipitridae	<i>Lophoictinia isura</i>	Square-tailed Kite		V	M	x	
	<i>Haliaeetus leucogaster</i>	White-bellied Sea Eagle			M		x
Aegothelidae	<i>Aegotheles cristatus</i>	Australian Owlet-nightjar				x	x
Alcedinidae	<i>Alcedo azurea</i>	Azure Kingfisher					x
Anatidae	<i>Chenonetta jubata</i>	Australian Wood Duck			M	x	x
Artamidae	<i>Gymnorhina tibicen</i>	Australian Magpie				x	x
	<i>Artamus cyanopterus</i>	Dusky Woodswallow				x	
	<i>Cracticus torquatus</i>	Grey Butcherbird				x	x
	<i>Strepera graculina</i>	Pied Currawong					x
Cacatuidae	<i>Cacatua roseicapilla</i>	Galah				x	x
	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo		V		x	
	<i>Calyptorhynchus lathamii</i>	Glossy Black Cockatoo		V		x	x
	<i>Cacatua galerita</i>	Sulphur-crested Cockatoo				x	x
	<i>Calyptorhynchus funereus</i>	Yellow-tailed Black Cockatoo				x	x
Campephagidae	<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike				x	x
Caprimulgidae	<i>Eurostopodus mystacalis</i>	White-throated Nightjar				x	
Charadriidae	<i>Vanellus miles</i>	Masked Lapwing			M	x	x
Cinclosomatidae	<i>Psophodes olivaceus</i>	Eastern Whipbird				x	x
Climacteridae	<i>Cormobates leucophaeus</i>	White-throated Tree-creeper				x	

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			Introduced	TSC Act	EPBC Act	BES 2004	InSites 2008
Columbidae	<i>Macropygia amboinensis</i>	Brown Cuckoo-Dove					x
	<i>Phaps chalcoptera</i>	Common Bronze-wing				x	x
	<i>Geopelia striata</i>	Peaceful Dove				x	
Coraciidae	<i>Eurystomus orientalis</i>	Dollarbird				x	
Corvidae	<i>Corvus coronoides</i>	Australian Raven				x	x
Cuculidae	<i>Scythrops novaehollandiae</i>	Channel-billed Cuckoo					x
	<i>Eudynamys scolopacea</i>	Common Koel					x
Dicaeidae	<i>Dicaeum hirundinaceum</i>	Mistletoebird					x
Dicruridae	<i>Rhipidura albiscapa</i>	Grey Fantail				x	x
	<i>Myiagra rubecula</i>	Leaden Flycatcher				x	
	<i>Grallina cyanoleuca</i>	Magpie-lark				x	x
	<i>Rhipidura rufifrons</i>	Rufous Fantail				x	
	<i>Rhipidura leucophrys</i>	Willie Wagtail				x	
Halcyonidae	<i>Dacelo novaeguineae</i>	Kookaburra				x	x
	<i>Todirhamphus sanctus</i>	Sacred Kingfisher				x	
Hirundinidae	<i>Hirundo nigricans</i>	Tree Martin				x	
	<i>Hirundo neoxena</i>	Welcome Swallow					x
Maluridae	<i>Malurus cyaneus</i>	Superb Fairy-wren				x	x
	<i>Malurus lamberti</i>	Variegated Fairy-wren				x	x
Meliphagidae	<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill				x	x
	<i>Meliphaga lewinii</i>	Lewin's Honeyeater				x	x
	<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater				x	
	<i>Philemon corniculatus</i>	Noisy Friarbird				x	x
	<i>Anthochaera carunculata</i>	Red Wattlebird				x	x
	<i>Myzomela sanguinolenta</i>	Scarlet Honeyeater				x	
	<i>Lichenostomus leucotis</i>	White-eared Honeyeater				x	

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Family	Scientific Name	Common Name	Legal Status			Survey	
			Introduced	TSC Act	EPBC Act	BES 2004	InSites 2008
Menuridae	<i>Melithreptus lunatus</i>	White-naped Honeyeater				x	
	<i>Lichenostomus chrysops</i>	Yellow-faced Honeyeater				x	x
	<i>Lichenostomus melanops</i>	Yellow-tufted Honeyeater				x	x
	<i>Menura novaehollandiae</i>	Superb Lyrebird				x	
Oriolidae	<i>Oriolus sagittatus</i>	Olive-backed Oriole					x
Pachycephalidae	<i>Pachycephala pectoralis</i>	Golden Whistler					x
	<i>Colluricincla harmonica</i>	Grey Shrike-thrush				x	x
	<i>Pachycephala rufiventris</i>	Rufous Whistler				x	x
Pardalotidae	<i>Pardalotus punctatus</i>	Spotted Pardalote				x	x
	<i>Pardalotus striatus</i>	Striated Pardalote				x	x
Passeridae	<i>Taeniopygia bichenovii</i>	Double-barred Finch				x	
	<i>Neochmia temporalis</i>	Red-browed Finch				x	
Petroicidae	<i>Eopsaltria australis</i>	Eastern Yellow Robin					x
	<i>Microeca fascinans</i>	Jacky Winter					x
Psittacidae	<i>Platycercus elegans</i>	Crimson Rosella				x	x
	<i>Platycercus eximius</i>	Eastern Rosella				x	x
	<i>Glossopsitta pusilla</i>	Little Lorikeet				x	
	<i>Glossopsitta concinna</i>	Musk Lorikeet				x	
	<i>Trichoglossus haematodus</i>	Rainbow Lorikeet				x	
Ptilonorhynchidae	<i>Ptilonorhynchus violaceus</i>	Satin Bowerbird				x	x
Strigidae	<i>Ninox strenua</i>	Powerful Owl		V		x	
	<i>Ninox novaeseelandiae</i>	Southern Boobook				x	
Zosteropidae	<i>Zosterops lateralis</i>	Silvereye					x
Mammals							
Bovidae	<i>Bos taurus</i>	European Cattle	Domestic			x	
	<i>Ovis aries</i>	Sheep	Domestic				x

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Family	Scientific Name	Common Name	Legal Status			Survey	
			Introduced	TSC Act	EPBC Act	BES 2004	InSites 2008
Canidae	<i>Canis familiaris</i>	Dog	Domestic			x	x
	<i>Vulpes vulpes</i>	Fox	X			x	x
Dasyuridae	<i>Antechinus agilis</i>	Agile Antechinus				x	
Equidae	<i>Equus caballus</i>	Horse	Domestic			x	
Felidae	<i>Felis catus</i>	Cat	Domestic			x	
Leporidae	<i>Lepus capensis</i>	Brown Hare	X			x	
	<i>Oryctolagus cuniculus</i>	Rabbit	X			x	x
Macropodidae	<i>Macropus giganteus giganteus</i>	Eastern Grey Kangaroo				x	x
	<i>Wallabia bicolor</i>	Swamp Wallaby				x	
Molossidae	<i>Mormopterus norfolkensis</i>	East-coast Free-tail Bat		V			x
	<i>Tadarida australis</i>	White-striped Free-tail Bat				x	x
Muridae	<i>Rattus lutreolus</i>	Swamp Rat				x	
Peramelidae	<i>Perameles nasuta nasuta</i>	Long-nosed Bandicoot				x	
Petauridae	<i>Petaurus breviceps breviceps</i>	Sugar Glider				x	x
	<i>Petaurus australis australis</i>	Yellow-bellied Glider		V		x	x
Phalangeridae	<i>Trichosurus vulpecula vulpecula</i>	Common Brushtail Possum				x	
Pseudocheiridae	<i>Pseudocheirus peregrinus peregrinus</i>	Common Ringtail Possum				x	x
Pteropodidae	<i>Pteropus poliocephalus</i>	Grey-headed Flying Fox		V	V	x	
Rhinolophidae	<i>Rhinolophus megaphyllus</i>	Eastern Horseshoe Bat				x	x
Vespertilionidae	<i>Miniopterus schreibersii oceanensis</i>	Common Bent-wing Bat		V		x	x
	<i>Chalinolobus morio</i>	Chocolate Wattled Bat				x	x
	<i>Scotorepens orion</i>	Eastern Broad-nosed Bat				x	
	<i>Chalinolobus gouldii</i>	Gould's Wattled Bat				x	x
	<i>Vespadelus darlingtoni</i>	Large Forest Bat				x	x
	<i>Vespadelus vulturnus</i>	Little Forest Bat				x	x
	<i>Vespadelus regulus</i>	Southern Forest Bat					x

Appendix F Fauna Species List

Family	Scientific Name	Common Name	Legal Status			Survey	
			Introduced	TSC Act	EPBC Act	BES 2004	InSites 2008
Vombatidae	<i>Nyctophilus gouldi</i>	Gould's Long-eared Bat					x
	<i>Nyctophilus geoffroyi</i>	Lesser Long-eared Bat					x
	<i>Nyctophilus sp.</i>	Long-eared Bat				x	
	<i>Wombatus ursinus ursinus</i>	Common Wombat					x



global environmental solutions

Lot 3 in DP 568613 and Lot 384 in DP 755952
George Evans Road, Mundamia

Proposed Residential Estate

Flora & Fauna Issues & Assessment Report

Appendix G
Decision of the SEWPaC with respect to the EPBC Act

November 2012



Australian Government

Department of Sustainability, Environment, Water, Population and Communities

Mr Francis Dominic Fanning
Technical Director – Ecology
SLR Consulting Australasia Pty Ltd
PO Box 176
LANE COVE NSW 1595

Date: 26 April 2012
EPBC Ref: 2012/6327
EPBC contact: Mark Jenkins
(02) 6274 1558
mark.jenkins@environment.gov.au

Dear Mr Fanning

Decision on referral

**Residential development - Lot 3 and Lot 384 George Evans Road
Mundamia, NSW**

This is to advise you of my decision, under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), about the proposed action to develop a residential subdivision at Lot 3 and Lot 384 George Evans Road, Mundamia, New South Wales.

As a delegate of the Minister for Sustainability, Environment, Water, Population and Communities, I have decided that the proposed action is not a controlled action. This means that the proposed action does not require further assessment and approval under the EPBC Act before it can proceed.

A copy of the document recording this decision is enclosed. This document will be published on the department's website.

Please note that this decision relates only to the specific matters protected under Chapter 2 of the EPBC Act.


This decision does not affect any requirement for separate state or local government environment assessment and approvals of the proposed action.

The department has an active audit program for proposals that have been referred under the EPBC Act. The audit program aims to ensure that proposals are implemented as planned. You should be aware that the project may be selected for audit by the department at any time and all related records and documents may be subject to scrutiny. Information about the department's compliance monitoring and auditing program is enclosed.

I have also written to Mr Richard Ash, Project Manager, Twynam Mundamia Pty Ltd and Mr John Ross, Project Manager, NSW Department of Planning and Infrastructure advising them of this decision.

If you have any questions about the referral process or this decision, please contact the EPBC project manager and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely



Charmayne Murray
Assistant Secretary (acting)
Environment Assessment Branch



**Notification of
REFERRAL DECISION – not controlled action**

**Residential development - Lot 3 and Lot 384 George Evans Road Mundamia,
NSW (EPBC 2012/6327)**

This decision is made under Section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Proposed action

person named in the referral	Twynam Mundamia Pty Ltd (ABN 68 147 695 994)
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proposed action	The proposed action is the development of a residential subdivision at Lot 3 and Lot 384 George Evans Road, Mundamia, New South Wales, as described in the referral documentation received on 26 March 2012 (see EPBC Act referral 2012/6327).
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Referral decision: Not a controlled action

status of proposed action	The proposed action is not a controlled action.
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Person authorised to make decision

Name and position	Charmayne Murray Assistant Secretary (acting) Environment Assessment Branch
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signature

date of decision

24/4/2012



global environmental solutions

Lot 3 in DP 568613 and Lot 384 in DP 755952
George Evans Road, Mundamia

Proposed Residential Estate

Flora & Fauna Issues & Assessment Report

Appendix H
Vegetation Management Principles Plan

November 2012

**LOT 3 in DP 568613 and LOT 384 in DP 755952
GEORGE EVANS ROAD, MUNDAMIA
PROPOSED RESIDENTIAL ESTATE**

VEGETATION MANAGEMENT PRINCIPLES PLAN

November 2012

1 INTRODUCTION

- The proposed residential development of the subject site at Mundamia involves the retention of 9.49 hectares of vegetation for conservation purposes running along the northern and eastern boundaries of the proposed sub-division (Figure 1).
- The *Conservation Area* is proposed to be zoned *2E – Environmental Conservation* as part of the rezoning of the site.
- An variable width *Asset Protection Zone* (APZ), to be managed as an *Inner Protection Area* (IPA) is required along the western boundary of the *Conservation Area*.
- The remainder of the vegetation within the *Conservation Area* will be retained and managed for biodiversity conservation purposes.
- This *Vegetation Management Principles Plan* (VMPP) outlines the structure and general principles of the final *Vegetation Management Plan* (VMP) which will be produced following approval of the Part 3A *Project Application*.
- One threatened flora species Nowra Heath Myrtle *Triplarina nowraensis* is present within the proposed *Conservation Area* (Figure 2), some of which are located within the proposed *Asset Protection Zone* (APZ).
- All individuals of this species within the *Conservation Area* are to be retained and the VMP would provide detailed recommendations on the management of this species, the aim being to protect, conserve and expand the local population.
- Eight threatened fauna species have been recorded within and adjacent to the subject site, and the proposed *Conservation Area* provides the highest quality habitat for these species (the East Coast Free-tail Bat, Common Bent-wing Bat, Grey-headed Flying Fox, Yellow-bellied Glider, Square-tailed Kite, Powerful Owl, Gang Gang Cockatoo and Glossy Black Cockatoo).
- The area of vegetation to be retained within the *Conservation Area* will involve 3 different management regimes:
 - the active management of the APZ within the *Conservation Area*;
 - the active management of the water quality features at the interface between the development footprint and the *Conservation Area*; and
 - management of the remainder of vegetation within the *Conservation Area*.
- The aims of this VMPP are to provide the basic principles to guide the preparation of a detailed VMP with respect to:
 - the management and maintenance of the APZ;
 - management of the population of and habitat for the Nowra Heath Myrtle;
 - the management and maintenance of the water quality features;
 - the implementation of appropriate enhancement measures within areas of retained native vegetation;
 - the maintenance and enhancement of habitat for native fauna; and
 - the monitoring of the *Conservation Area*, APZs, constructed swales and detention areas.

2 GENERAL PROTECTION MEASURES

- Erection of appropriate protection barriers and signage, including temporary fencing and sediment fencing (pursuant to a *Fencing Protocol*).
- Identification by the Project Ecologist of all trees to be removed within the APZ for bushfire protection purposes, avoiding hollow-bearing trees (unless absolutely necessary).
- The identification of individuals of the Nowra Heath Myrtle to ensure their protection during any management activities.
- The provision of sediment fences around all earthworks to protect areas of retained vegetation and/or habitats downslope and downstream.
- The conduct of an environmental induction program for site workers, and the provision of relevant signage around the site.
- Monitoring of works and the provision of a mechanism for the remedy of any disturbance or damage.

3 VEGETATION WITHIN the CONSERVATION AREA

- The overwhelming majority of the *Conservation Area* will be managed to maintain the current biodiversity values.
- Specific activities to be undertaken in this area will include:
 - a dedicated and ongoing weed removal and monitoring program;
 - the removal of debris and rubbish;
 - the identification of areas requiring supplementary plantings, and the implementation of a planting regime if necessary;
 - the implementation of a monitoring program during and immediately post-construction to identify any problems which may arise and to monitor the ongoing condition of vegetation in this area; and,
 - monitoring of the Nowra Heath Myrtle population.
- Given the relatively good condition of most the vegetation communities in the *Conservation Area*, it is considered that any weed management will be minor.
- It is likely that supplementary plantings will not be required throughout the majority of the *Conservation Area*. The only areas where supplementary plantings may be required is potentially along roads and other areas of disturbance.

4 ASSET PROTECTION ZONES

- Management of the *Asset Protection Zones* (APZs) within the *Conservation Area* along the eastern side of the residential subdivision will be undertaken in an environmentally sensitive manner, designed to achieve the requirements of the RFS without compromising the integrity of the vegetation communities or threatened species habitats.
- Any removal of vegetation within the APZs will be the minimum required by the RFS to achieve acceptable bushfire protection outcomes.
- All removal or modification of vegetation within the APZs will be supervised by the Project Ecologist to ensure threatened species habitat is maintained.
- Hollow-bearing trees and Yellow-bellied Glider feed trees will be retained preferentially throughout the APZs under the supervision of the Project Ecologist.
- All removal or thinning of mid-storey and understorey vegetation will be conducted by hand and/or hand tools to limit potential impacts.
- Vegetation removed from APZs will be re-used in other parts of the site.
- The APZs will be monitored and managed to ensure that no weed infestations occur and that the threatened species are not being affected.
- Unless absolutely essential, subject to approval by the Project Ecologist, no hollow-bearing trees will be removed from within the APZ.

5 STORMWATER MANAGEMENT FEATURES

- The landscaping of the bioretention swales and detention basins will be undertaken in consultation with the Project Ecologist to ensure that these structures function both as water management features and as fauna habitat.
- Any changes to the planting schedule must be approved by the Project Ecologist.
- Monitoring of the bioretention swales and detention basins will include:
 - ongoing review of the extent, distribution and composition of weed and native plant species;
 - monitoring of native fauna species utilising the wetlands; and
 - identification of any issues, problems or additional opportunities, and implementation of approved improvements.

6 MAINTENANCE REGIME

- The *Conservation Area* will be subject to an ongoing regime of:
 - monitoring (see below); and
 - 3-monthly management of weeds during construction works.
- The *Asset Protection Zones* will be managed by:
 - the annual hand removal of excess forest debris (<6mm in diameter) and/or lower stratum vegetation to achieve the fuel loads required by the RFS;
 - monitoring (see below);
 - 3-monthly management of weeds during construction works; and
 - annual weed removal as deemed necessary by the monitoring program.

7 MONITORING PROGRAM

- Establishment of photo-monitoring points and fixed survey quadrats (where possible) in the *Conservation Area* and APZ.
- Monitoring of the Nowra Heath Myrtle population.
- Monitoring of construction activities and protection fencing.
- Monitoring of the *Conservation Area* in respect of:
 - native plant species diversity, percentage cover and abundance;
 - weed species diversity, percentage cover and abundance;
 - vertebrate fauna diversity and abundance; and
 - disturbance.
- Monitoring of APZs and stormwater management features (3-monthly during construction), annually thereafter for the life of development activities.
- *Monitoring Reports* to DoP/Council (annually).