

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Name

Commonwealth Land -
 Commonwealth Land - Australian Postal Commission
 Commonwealth Land - Australian Postal Corporation
 Commonwealth Land - Australian Telecommunications Commission
 Commonwealth Land - Defence Housing Authority
 Commonwealth Land - Defence Service Homes Corporation
 Defence - DCO NOWRA
 Defence - HMAS ALBATROSS
 Defence - Shop 3
 Defence - Suite 18, Holt Centre

Commonwealth Heritage Places [Resource Information]

Name	State	Status
Historic		
Bundanon Trust Area	NSW	Nominated place

Listed Marine Species [Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba		
Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis		
Cattle Egret [59542]		Species or species habitat may occur within area
Arenaria interpres		
Ruddy Turnstone [872]		Species or species habitat known to occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris alba		
Sanderling [875]		Species or species habitat known to occur within area
Calidris canutus		
Red Knot, Knot [855]		Species or species habitat known to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]		Species or species habitat known to occur within area
Calidris melanotos		
Pectoral Sandpiper [858]		Species or species habitat known to occur within area
Calidris ruficollis		
Red-necked Stint [860]		Species or species habitat known to occur within area
Calidris tenuirostris		
Great Knot [862]		Species or species habitat known to occur within area

Appendix D EPBC Act Protected Matters Search

Name	Threatened	Type of Presence
Charadrius bicinctus Double-banded Plover [895]		Species or species habitat known to occur within area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]		Species or species habitat known to occur within area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]		Species or species habitat known to occur within area
Charadrius ruficapillus Red-capped Plover [881]		Species or species habitat known to occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat known to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Heteroscelus brevipes Grey-tailed Tattler [59311]		Species or species habitat known to occur within area
Himantopus himantopus Black-winged Stilt [870]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat may occur within area
Lathamus discolor Swift Parrot [744]	Endangered	Species or species habitat likely to occur within area
Limicola falcinellus Broad-billed Sandpiper [842]		Species or species habitat known to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Limosa limosa Black-tailed Godwit [845]		Species or species habitat known to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Breeding likely to occur within area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew [847]		Species or species

Name	Threatened	Type of Presence
Numenius phaeopus Whimbrel [849]		habitat known to occur within area
Pluvialis fulva Pacific Golden Plover [25545]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Vulnerable*	Breeding may occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat known to occur within area
Tringa glareola Wood Sandpiper [829]		Species or species habitat known to occur within area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area
Mammals		
Dugong dugon Dugong [28]		Species or species habitat may occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat likely to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat likely to occur within area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat likely to occur within area

Extra Information

Places on the RNE		[Resource Information]
Note that not all Indigenous sites may be listed.		
Name	State	Status
Natural		
Bundanon Commonwealth Land Area	NSW	Indicative Place
Bomaderry Creek Gorge	NSW	Registered
Bomaderry Creek Zieria Baeuerlenii Site	NSW	Registered
Bomaderry Creek Zieria Baeuerlenii Site 2	NSW	Registered
Cambewarra Mountain Area	NSW	Registered
Jervis Bay and Surrounds	NSW	Registered
Indigenous		

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Name	State	Status
Hidden Valley Painted Shelter	NSW	Registered
Historic		
Berry District	NSW	Indicative Place
Bomaderry Public School (1893 building)	NSW	Indicative Place
Kangaroo Valley	NSW	Indicative Place
Mill Bank House and associated buildings	NSW	Indicative Place
Nowra Soldiers Memorial	NSW	Indicative Place
Nowra South African War Memorial	NSW	Indicative Place
Parma Farm and outbuildings	NSW	Indicative Place
Bundanon Including Landscape	NSW	Registered
Meroogal	NSW	Registered
Nowra Post Office (former)	NSW	Registered
Nowra Road Bridge	NSW	Registered
Plunket Street Precinct	NSW	Registered
Shoalhaven Historical Society Museum	NSW	Registered
State and Territory Reserves		[Resource Information]
Name	State	
Bamarang	NSW	
Bomaderry Creek	NSW	
Brundee Swamp	NSW	
Cambewarra Range	NSW	
Colymea	NSW	
Tapitallee	NSW	
Triplarina	NSW	
Wogamia	NSW	
Worrige	NSW	
Regional Forest Agreements		[Resource Information]
Note that all areas with completed RFAs have been included.		
Name	State	
Southern RFA	New South Wales	
Invasive Species		[Resource Information]
Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit,		
Name	Status	Type of Presence
Mammals		
Capra hircus		
Goat [2]		Species or species habitat likely to occur within area
Felis catus		
Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Oryctolagus cuniculus		
Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Sus scrofa		
Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes		
Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Alternanthera philoxeroides		
Alligator Weed [11620]		Species or species habitat likely to occur within area
Asparagus asparagoides		
Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171] Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat likely to occur within area Species or species habitat may occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892] Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area Species or species habitat may occur within area
Nassella neesiana Chilean Needle grass [67699]		Species or species habitat likely to occur within area
Nassella trichotoma Serrated Tussock, Yass River Tussock, Yass Tussock, Nassella Tussock (NZ) [18884]		Species or species habitat likely to occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Ulex europaeus Gorse, Furze [7693]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[Resource Information]
Name		State
Shoalhaven/Crookhaven Estuary		NSW

Coordinates

-34.88092 150.57482

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various

Appendix D EPBC Act Protected Matters Search

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [Department of Environment, Climate Change and Water, New South Wales](#)
- [Department of Sustainability and Environment, Victoria](#)
- [Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [Department of Environment and Natural Resources, South Australia](#)
- [Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts](#)
- [Environmental and Resource Management, Queensland](#)
- [Department of Environment and Conservation, Western Australia](#)
- [Department of the Environment, Climate Change, Energy and Water](#)
- [Birds Australia](#)
- [Australian Bird and Bat Banding Scheme](#)
- [Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [Museum Victoria](#)
- [Australian Museum](#)
- [SA Museum](#)
- [Queensland Museum](#)
- [Online Zoological Collections of Australian Museums](#)
- [Queensland Herbarium](#)
- [National Herbarium of NSW](#)
- [Royal Botanic Gardens and National Herbarium of Victoria](#)
- [Tasmanian Herbarium](#)
- [State Herbarium of South Australia](#)
- [Northern Territory Herbarium](#)
- [Western Australian Herbarium](#)
- [Australian National Herbarium, Atherton and Canberra](#)
- [University of New England](#)
- [Ocean Biogeographic Information System](#)
- [Australian Government, Department of Defence](#)
- [State Forests of NSW](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.



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 E
Flora Species List

November 2012

Table A1 Floristic data for the subject site at Mundamia

KEY	
* Exotic species	
E Endangered Species	
3RCa ROTAP	
2RC ROTAP	
2K ROTAP	
BES - (BES 2004) records	
Q1-5 Systematic quadrat	
Cover abundance	
Braun-Blanquet	Score
<5% uncommon	1
<5% common	2
5-25%	3
25-50%	4
50-75%	5
75-100%	6

Status	Scientific Name	Common Name	BES	Q1	Q2	Q3	Q4	Q5
	LYCOPSIDA							
	Lycopodiaceae							
	<i>Lycopodium deuterodensum</i>	Bushy Clubmoss	x					
	FILICOPSIDA							
	Adiantaceae							
	<i>Adiantum aethiopicum</i>	Common Maidenhair	x					
	<i>Cheilanthes sieberi subsp. sieberi</i>	Mulga fern	x				1	
	<i>Pellaea falcata var. falcata</i>	Sickle Fern	x					
	Aspleniaceae							
	<i>Asplenium flabellifolium</i>	Necklace Fern	x					
	Cyatheaceae							
	<i>Cyathea australis</i>	Rough Treefern	x			1		
	Davalliaceae							
	<i>Davallia pyxidata</i>	Hare's Foot Fern	x					
	Dennstaedtiaceae							
	<i>Pteridium esculentum</i>	Bracken	x	1	1	3	2	

Status	Scientific Name	Common Name	BES	Q1	Q2	Q3	Q4	Q5
	Dicksoniaceae							
	<i>Calochlaena dubia</i>	Dicksoniaceae	x			2		
	Gleicheniaceae							
	<i>Gleichenia dicarpa</i>	Pouched Coral Fern	x					
	Lindsaeaceae							
	<i>Lindsaea linearis</i>	Screw Fern	x				1	
	<i>Lindsaea microphylla</i>	Lacy Wedge Fern	x					
	Polypodiaceae							
	<i>Pyrrosia rupestris</i>	Rock Felt Fern	x					
	CYCADOPSIDA							
	Zamiaceae							
	<i>Macrozamia communis</i>	Burrawang	x					
	CONIFEROPSIDA							
	Callitrichaceae							
*	<i>Callitris sp.</i>	Cypress Pine	x					
	MAGNOLIOPSIDA:DICOTYLEDONS							
	Acanthaceae							
	<i>Brunoniella australis</i>	Blue Trumpet	x					
	<i>Brunoniella pumilio</i>	Dwarf Blue Trumpet	x		1			
*	<i>Thunbergia alata</i>	Black-eyed Susan	x					
	Amaranthaceae							
*	<i>Amaranthus viridis</i>	Green Amaranth	x					
	Apiaceae							
	<i>Actinotus helianthi</i>	Flannel Flower	x					
	<i>Centella asiatica</i>	Pennywort	x		1	2		
	<i>Hydrocotyle peduncularis</i>	-	x			2		
	<i>Platysace linearifolia</i>	Narrow-leafed Platysace	x	1			2	
	<i>Xanthosia tridentata</i>	Rock Xanthosia	x					
	Apocynaceae							
*	<i>Araujia sericifera</i>	Moth Vine	x					
	<i>Parsonsia straminea</i>	Common Silkpod	x			2		
	Asteraceae							
*	<i>Ageratina adenophora</i>	Crofton Weed	x			2		
*	<i>Bidens pilosa</i>	Cobbler's Pegs	x					

Status	Scientific Name	Common Name	BES	Q1	Q2	Q3	Q4	Q5
	<i>Brachycome spathulata</i>	-	x					
*	<i>Cirsium vulgare</i>	Spear Thistle	x					
*	<i>Conyza sp.</i>	A Fleabane	x					
*	<i>Conyza sumatrensis</i>	Tall fleabane			1	1		
	<i>Euchiton involucratus</i>		x					
	<i>Helichrysum collinum</i>	A Paper-dasiy	x	1				
*	<i>Hypochaeris radicata</i>	Catsear	x					
	<i>Ozothamnus diosmifolius</i>	Everlasting	x					
	<i>Senecio hispidulus</i> var. <i>hispidulus</i>	A Groundsel	x					
	<i>Senecio linearifolius</i>	Fireweed Groundsel	x			2		
*	<i>Senecio madagascariensis</i>	Fireweed	x		1			
	<i>Sigesbeckia orientalis</i> subsp. <i>orientalis</i>	Indian Weed	x					
*	<i>Taraxacum officinale</i>	Dandelion	x	1				
	Baueraceae							
	<i>Bauera rubioides</i>	Dog Rose	x	1				
	Campanulaceae							
	<i>Wahlenbergia gracilis</i>	Sprawling or Australian Bluebell	x		1			
	Casuarinaceae							
	<i>Allocasuarina distyla</i>	-	x					
	<i>Allocasuarina littoralis</i>	Black Sheoak	x	3	2		3	1
	Chenopodiaceae							
*	<i>Chenopodium album</i>	Fat Hen	x					
	Clusiaceae							
	<i>Hypericum gramineum</i>	Small St John's Wort	x	1				1
	Convolvulaceae							
	<i>Dichondra repens</i>	Kidney Weed	x			1		
	Crassulaceae							
*	<i>Crassula multicava</i>	A Stonecrop	x					
	<i>Crassula sieberiana</i>	Austral Stonecrop	x					
	Cunoniaceae							
	<i>Ceratopetalum gummiiferum</i>	NSW Christmas Bush	x					
	Dilleniaceae							
	<i>Hibbertia monogyna</i>	-	x					
	<i>Hibbertia obtusifolia</i>	-	x					
	<i>Hibbertia scandens</i>	Climbing Guinea Flower				2		