

# **Review of Environmental Factors**

# Roundabout Construction – George Bass Drive x Broulee Road

October 2024

Version 1.2



# **Document Tracking**

| Version No. | Document<br>Author                   | Reviewed By | Approved By | Last Saved on |
|-------------|--------------------------------------|-------------|-------------|---------------|
| 1.0         | PM                                   | GA          | MA          | 3/10/2024     |
| 1.1         | PM Sensitive information redacted    | GA          | МА          | 11/10/2024    |
| 1.2         | PM Water main crossing plan updated. |             |             | 8/11/2024     |



# **Review of Environmental Factors**

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# 1. Environmental Safeguards Summary

**Table 1:** Summary of environmental safeguards to be implemented for more information see relevant sections contained in this document.

#### Safeguards for the proposed work

#### General

- If the scope of the works changes at any time, review this REF to determine any new measures need to be taken and call the Environmental Officer.
- An environmental management plan is prepared and implemented prior to the commencement of works.
- No new access tracks to be created for the works.
- Parking of vehicles and storage of plant/equipment is to occur on existing paved areas. Where this is not possible, vehicles and plant/equipment are to be kept away from environmentally sensitive areas and outside the dripline of trees.
- All project staff and contractors will be inducted on the environmental sensitivities of the work site(s) and relevant safeguards prior to commencement.
- The Project Manager and Environmental Officer will be notified immediately of any complaints relating to management of environmental issues
- To ensure compliance with Section 148(3) of the Protection of the Environment Operations Act 1997, the Council's Health and Building Manager must be notified of any pollution incidents that have caused or threaten material harm to the environment
- The relevant Divisional Manager will be notified if damage occurs to an area (vegetation, etc) outside of the nominated work area.



Exclusion Zones for Environmentally Sensitive areas to be marked before works commence.



**Figure 1.** Exclusion Zones for various environmental sensitivities are marked in red. Green lines indicate approximate area for fencing to be placed. Orange lines indicate the placement of Tree Protection Zone (TPZ) fencing for trees in the road reserve within close proximity to the works.

- Before works commence, exclusion fencing will be placed around existing environmentally sensitive sites to prevent damage to these objects and areas.
- If Fencing involves ground disturbance, this should occur well away from the tree root protection zone (RPZ).
- Please see Broulee/Bengello Biobank Site Agreement no. 153
   (Appendix E) information within Table 1 (pages 71 and 72) of this REF for works that are exempt and have permission to partially work within the zone.
- Please see Broulee/Bengello Biobank Site Agreement no. 153 information in Table 1 (pages 71 and 72) of this REF for further information on placement of exclusion zone fencing.

# Aboriginal Heritage

STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!!

#### **Awareness:**

All personnel working on site will receive training to ensure awareness
of location of existing Aboriginal objects within the Study Area and
immediate surrounds, and relevant statutory responsibilities.



Follow Unexpected Finds Protocol Appendix

- Before work commences a toolbox talk is to occur for all personnel on site explaining the cultural significance of the area and the possibility of unexpected finds. The unexpected finds protocol "STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!! Should be explained during this briefing.
- A list of inductees will be kept as part of this REF.

#### Management of existing (known) items:

- Exclusion fencing will be placed around existing known Aboriginal objects to prevent damage to these objects.
- Fluro bunting will be placed around the Broulee Canoe Tree, if necessary wider than the permanent fence to protect the RPZ and TPZ including branches of the canopy.
- Scar trees within the road reserve of Broulee Rd will also be fenced off from the works.
- If Fencing involves ground disturbance, this should occur well away from the tree root protection zone (RPZ).
- Works to be carried out in accordance with the approved Conservation Management Plan for the heritage item (where available).



Figure 2. Contains sensitive information and has been redacted.

#### **Unexpected Finds (Appendix D):**

If Aboriginal heritage items are uncovered during the works, STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!! Follow Unexpected Finds Protocol Appendix D.



|  | All works in the vicinity of the find must cease and the Project Manager and Environmental Officer contacted immediately.  |  |
|--|--|--|
| Non-Aboriginal Heritage STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!! Follow Unexpected Finds Protocol Appendix | If artifacts are discovered STOP WORK immediately and follow Appendix D Unexpected Finds Protocol as well as contacting the Project Manager and Environmental Officer.      STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!!      Follow Unexpected Finds Protocol Appendix D  |  |
| Traffic and transport  | <ul> <li>Where possible, current traffic movements and property accesses are<br/>to be maintained during the works. Any disturbance is to be<br/>minimised to prevent unnecessary traffic delays.</li> </ul>   |  |
|  | <ul> <li>A Traffic Management Plan (TMP) will be prepared in accordance with<br/>the RMS Traffic Control at Work Sites Manual RTA 2010) and QA<br/>Specification G10 Control of Traffic (RTA 2008).</li> </ul>   |  |
|  | <ul> <li>Comply with Council requirements regarding traffic control, access<br/>and road/ pedestrian access.</li> </ul>  |  |
|  | <ul> <li>Erect signs regarding proposed works, temporary road closures,<br/>diversions etc.</li> </ul>   |  |
|  | <ul> <li>There are 3 schools in the Broulee area, bus companies that service the area should be notified prior to works commencing.</li> <li>Council aims to carry out majority of construction works in the tourist offseason to minimise traffic disruption.</li> <li>Construction area of road to be illuminated during period of construction.</li> <li>The road will be closed during the construction phase, open only to residence.</li> <li>Other motorists will be directed to use the detour into Broulee.</li> <li>All Businesses will be able to remain open and traffic will be directed to the venue via signs and appropriate Traffic Control.</li> </ul> |  |
| Broulee/Bengello<br>Biobank Site<br>Agreement<br>no. 153<br>Appendix E   | <ul> <li>Prior to the commencement of work exclusion fencing will be placed to include the boundary of sites within the Biobanking Agreement no. 153 Appendix E.</li> <li>If Fencing involves ground disturbance, this should occur well away from the tree root protection zone (RPZ).</li> </ul>   |  |



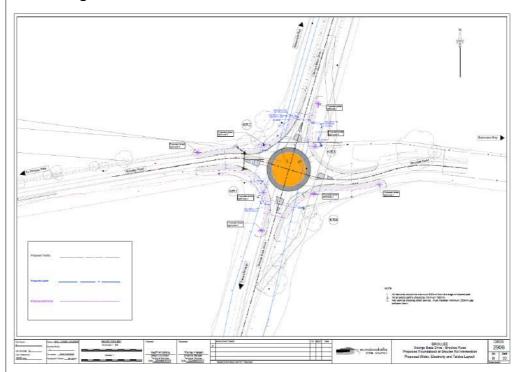
- Trees within the Biobanking site are to be protected with measures necessary so as to protect the root system, trunk and branches for the period of works including demolition, excavation, and construction on the site.
- The scope of works must not disturb the soil supporting the trees in the Biobanking site nor impact their root zone.
- The scope of works must not concentrate subsurface flows in the vicinity of trees within the Biobanking site.
- Trees to be removed outside of the Biobanking site must be felled to fall away from trees and other vegetation within the Biobanking site.
- Trees should be felled with chainsaws rather than pushed over with machines to reduce impacts to soil and the surrounding vegetation.
- Trees to be removed outside of the Biobanking Site are to be clearly marked with an X for removal.



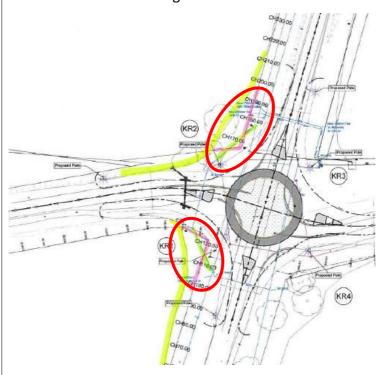
**Figure 3.** The 3 young regrowth trees to be removed will be clearly marked with a red x.



# Approved and permitted Works to be conducted within the boundary of the Biobanking Site 153.



**Figure 4.** Plan showing the proposed water main location, running along small sections of the Biobanking site in two locations.



**Figure 5.** Section of the Biobanking agreement area where the water pipe will run inside the boundary circled in red. And highlighted in green. Biobanking boundary marked in pink.



- Water and sewer are permitted to trench water mains in two locations shown in the plan above within the boundary of the biobanking site.
- Trenching near retained vegetation must follow the Australian standard AS4970-2009 Protection of Trees on Development Sites tree and root protection.
- Where structural woody roots with a diameter of 20mm or greater are to be pruned outside the area of the Tree Protection Zone, they are to be excavated manually first by using hand tools to determine their location. A waterknife or airknife can be used as a mechanised alternative to locate such structural woody roots.
- Once located those roots to be severed are to be cut cleanly with a final cut to undamaged woody tissue and this will prevent tearing damage to the roots from excavation equipment which can extend beyond the point of excavation back towards the tree.
- All other works are to be within the road reserve and outside of the fenced exclusion zone.

#### Road Reserve -Retained Large Eucalypt (Banglay Eucalyptus botrydoides)

- Trees to be retained within the road corridor are to be protected with measures necessary so as to protect the root system, trunk and branches for the period of works including demolition, excavation, and construction on the site.
- If Fencing involves ground disturbance, this should occur well away from the tree root protection zone (RPZ).





**Figure 6.** Large eucalypt to be retained. Yellow line indicating protective fencing to be constructed for the Tree Protection Zone (TPZ).

- Non-invasive potholing is recommended within the Tree Protection
   Zone
  - Where structural woody roots with a diameter of 20mm or greater are to be pruned outside the area of the Tree Protection Zone, they are to be excavated manually first by using hand tools to determine their location. A waterknife or airknife can be used as a mechanised alternative to locate such structural woody roots. Once located those roots to be severed are to be cut cleanly with a final cut to undamaged woody tissue and this will prevent tearing damage to the roots from excavation equipment which can extend beyond the point of excavation back towards the tree.
- If primary roots are located an arborist must assess the tree for viability.
- If there are any concerns or the scope of works changes near the vicinity of the tree call the Environmental Officer.



#### **Biodiversity**

#### General:

- Prepare a Vegetation Management Plan (VMP) to:
  - ➤ Identify measures to manage vegetation within the road reserve;
  - Detail restoration, regeneration and rehabilitation of areas of native vegetation that will be removed to accommodate the proposed works.
  - ➤ Detail appropriate management for the potential habitat of threatened flora and fauna species that will be indirectly impacted by the proposal. This may include fencing and signage.
  - Identify weed management strategies.
- As part of the site induction process, provide all site personnel with information on the biodiversity values of the study area, including threatened species, no-go areas and responsibilities under relevant environmental legislation, including but not limited to the EP&A Act, BC Act and EPBC Act and associated management plans for individual species.
- Should unexpected, threatened fauna be located at any time during construction, cease work immediately in the area to prevent further harm to the individual. Contact Council's Environmental Officer and a suitably qualified ecologist to determine if further assessment or management plans are required.

#### Invasion of Exotic Species:

- Manage vegetation within the road reserve and adjacent to areas of vegetation clearing in accordance with Guide 6 Weed Management and Guide 10 Aquatic Habitats and Riparian Zones of Roads and Maritime's Biodiversity Guidelines (RTA, 2011) to reduce invasion of noxious weed species.
- Use weed-free topsoil in landscaping and revegetate disturbed sites with locally indigenous species.
- Construction machinery should be washed prior to entering and leaving site to ensure weed propagules are not transported.

#### Stockpiling:

- Only place stockpiles in low value vegetation, where cleared sites are unavailable.
- Stockpiles should be no taller than 2m height.
- Use existing stockpiles before creating new ones.



#### **Site Restoration:**

- The rehabilitation of disturbed areas will be carried out progressively as construction stages are completed, and in accordance with:
  - Landcom's "Blue Book (4th Edition) on sediment and erosion control;
  - RMS Landscape Guidelines;
     RMS Guidelines for Batter Stabilisation Using Vegetation.

#### Vegetation Removal

- Three young regrowth trees and 5 saplings are to be removed from the road batter on the N/W side of the Broulee Rd intersection, see figure 7.
- Prior to removal trees are to be marked with an x to clearly identify which ones to fell.
- The trees are within the roadside reserve and evidence suggests they have grown into the fill and batter of previous road works.
- Trees to be removed outside of the Biobanking site must be felled to fall away from trees and other vegetation within the Biobanking site.
- Trees should be felled with chainsaws rather than pushed over with machines to reduce impacts to soil and the surrounding vegetation.
- Trees have been inspected and are young, containing no evidence of hollows.
- Trees show no evidence of being culturally modified.
- A visual inspection indicated they were not providing habitat for larger fauna.
- Before felling trees should be visually inspected for fauna, if found please call the Environmental Officer and/or WIRES.
- The trees can be removed under the ROADS ACT 1993 SECT 88 Tree felling. A roads authority may, despite any other Act or law to the contrary, remove or lop any tree or other vegetation that is on or overhanging a public road if, in its opinion, it is necessary to do so for the purpose of carrying out road work or removing a traffic hazard.





**Figure 7.** Photo showing the 3 young regrowth trees (marked by a red dot) and 5 saplings (circled in red) within the road batter to be removed. Trees to be marked clearly with an X prior to removal, and removed following all conditions in this REF.



# 2. Introduction

The environmental assessment and determination of the proposal has been undertaken in accordance with Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). For this proposal, Eurobodalla Shire Council is both a public authority proponent (EP&A Act s5.3) and the determining authority (EP&A Act s5.1). The REF has been prepared in accordance with Clause 228 of the EP&A Regulation (2000). Table 1 below outlines the proponent contact details.

**Table 2.** Proponent details

| Project name             | Broulee Road Round About  |
|--------------------------|---------------------------|
| Proponent (council) name | Eurobodalla Shire Council |
| Project manager Position | Capital Works Manager     |
| Contact                  | 02 4474 1000              |



## Project description and background

## Background and scope

The project seeks to improve the efficiency and safety at the intersection of Broulee Road and George Bass Drive Broulee by providing a major intersection upgrade. This will provide a safe, efficient, and accessible transport network, improving the connection from Princes Highway to the regional road network.

Works will include realignment of water mains, the construction of a roundabout at the George Bass Drive and Broulee Road intersection, rehabilitation of the existing pavements to cater for B-Doubles, installation of appropriate kerb and gutter and stormwater drainage, construction of pedestrian refuges, and installation of new lighting and signs to support the economic growth of the Eurobodalla community.

#### **Scope of Works**

Stage 1 - Site Setup;

- Mark out and Installation of Exclusion Zone fencing coordinated by a Design and Survey Officer, Environmental Officer and works crew.
- > Traffic control signages.
- > Installation of sediment control measures.

#### Stage 2 – Initial Construction Works;

- > Installation new stormwater pipes and headwall.
- > Installation of subsurface drainage.
- > Realign intersection street-lighting layout to suit roundabout.
- > Realignment of Water mains.
- Removal of 3 eucalypt trees and 5 saplings that have grown within the road reserve and road batter (See figure 8).





**Figure 8.** Photo showing the 3 young regrowth trees (marked by a red dot) and 5 saplings (circled in red) within the road batter to be removed. Trees to be marked clearly with an X prior to removal, and removed following all conditions in this REF.

#### Stage 3 – Roundabout (main) Construction Works;

- > Completion of earthwork for construction of new roundabout.
- Prepare Road base, subbase for the Bitumen and seal treatment.
- ➤ Bitumen/Asphalt surfacing treatment in Broulee Road, George Bass Drive.
- ➤ Provision of improved sub-surface drainage system and upgrading of the storm water system.
- Construction new kerb and gutter around the roundabout.
- Constructions of concrete footpath, pram ramp all sides of the roundabout.
- Construction of concrete traffic islands in each leg of the roundabout.
- Installation road signages, line marking and delineation.



#### Stage 4 - Clean up and remediate the site.

- > Revegetate batter with native grasses and species.
- ➤ Landscaping to use native species
- > All fencing to be removed without causing further disturbance.

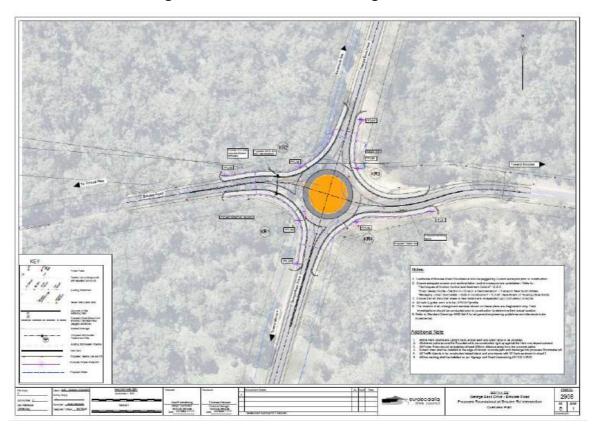


Figure 9. Plan of roundabout showing full scope of works.

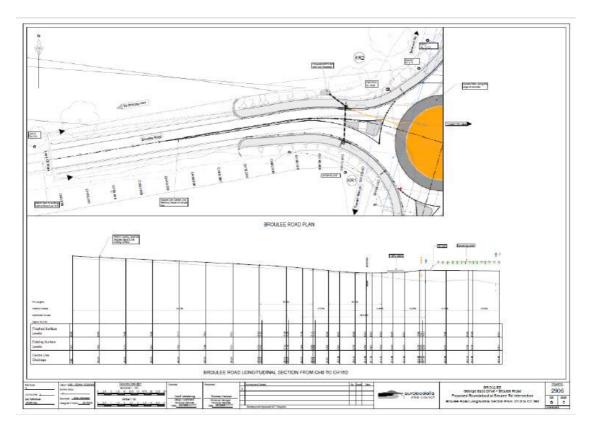


Figure 10. Plan of roundabout showing scope of works for Broulee Road (West).

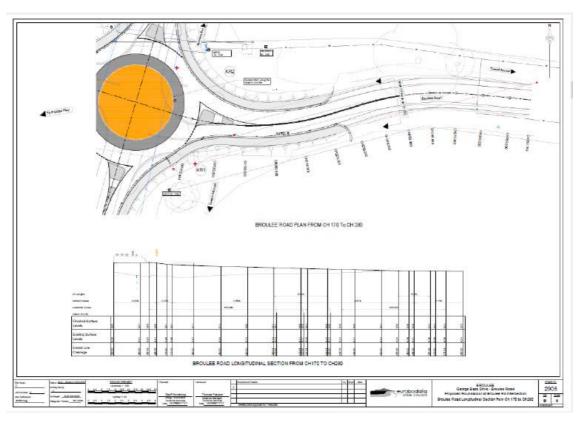


Figure 11. Plan of roundabout showing scope of works for Broulee Road (East).



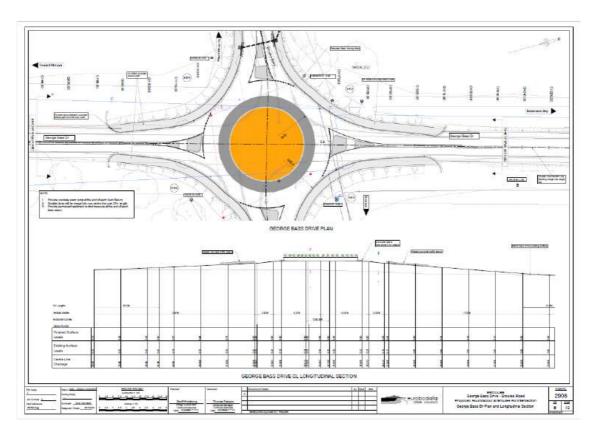
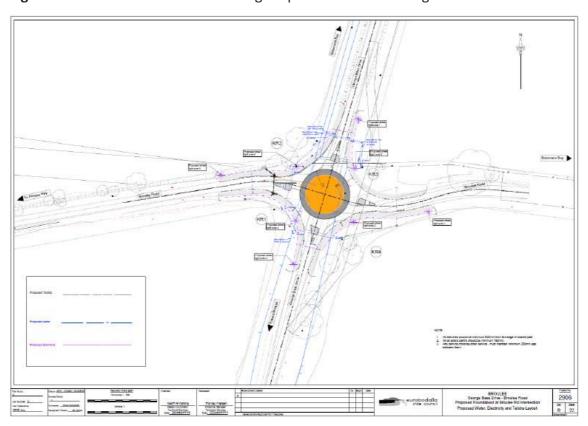
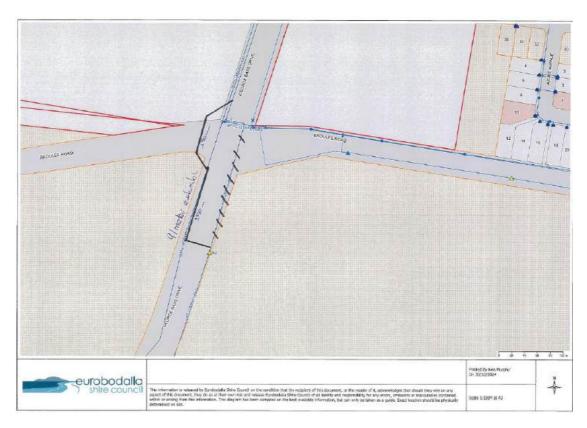


Figure 12. Plan of roundabout showing scope of works for George Bass Drive.



**Figure 13.** Plan showing proposed water and electricity services.





**Figure 14.** Updated plan of the road crossing area for the realigned water main.

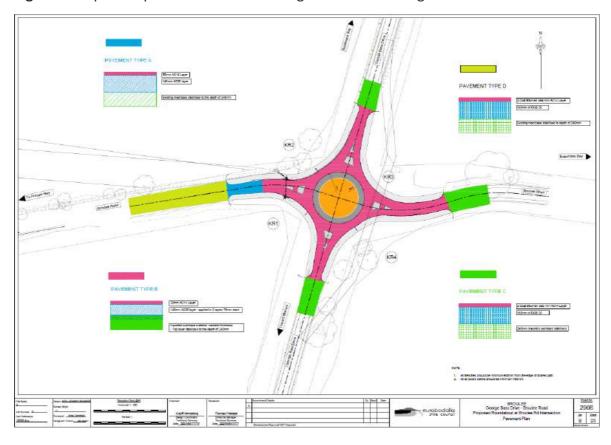


Figure 15. Plan showing pavement types for roundabout construction.





Figure 16. Traffic signage plan.

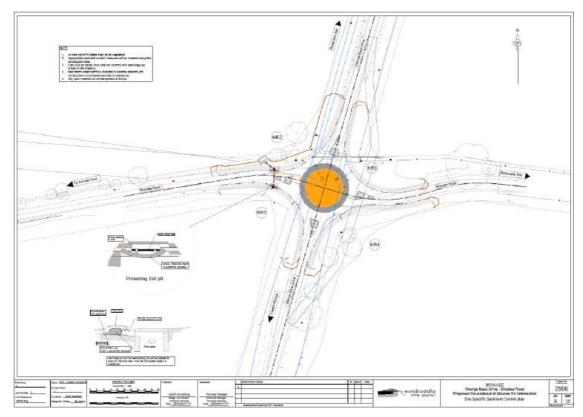


Figure 17. Site specific sediment control plan.



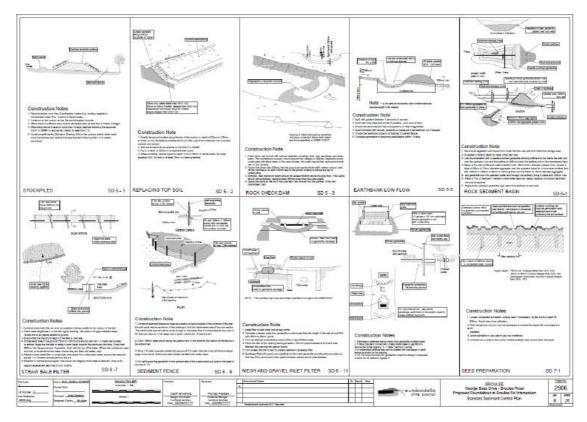


Figure 18. Standard sediment control plan.

# Machinery and equipment

Machinery and equipment used for the works will include.

- Excavator
- Backhoe
- Grader
- Waker packer
- Dozer
- Scraper
- Vibrating roller
- MTSP Roller
- Water cart
- Loader
- Bob-cat
- 10t truck
- Truck and dog



# Access and ancillary works

Storage and Compound areas must be confirmed before works can begin and cannot be in the exclusion zone areas marked out in Figure 19 below.



**Figure 19.** Exclusion Zones containing sensitive environmental areas, ancillary areas must not be within these zones.

# **Duration and working hours**

The works are described as short term, as outlined in Table 3.

**Table 3.** Project timeframes

| Start date    | October 2024  |
|---------------|---|
| Work duration | 6 months  |
| Work hours    | Working hours will be Monday-Friday 7am to 6pm  |
|               | Saturday 8am to 1pm   |
|               | Sunday & public holidays – No works other than inspections  |
|               | Any work outside these hours would require appropriate advice to residents, approval of the Divisional Manager Works and notification of the NSW EPA. |



### Location of the proposed activity

The proposed roundabout will be constructed at the crossroads of George Bass Drive and Broulee Road, coordinates -35.8556429, 150.1632711. The roundabout location is approximately 1km from Broulee, 16km from Batemans bay and 10km from Moruya.



Figure 20. Map showing location of the proposed roundabout.

#### Site context

The footprint of the proposed scope of works has been subject to historical vegetation clearance and disturbance from road construction, the remaining vegetation is predominantly grass.

The majority of the surrounding land is managed by ESC as part operational and part community land. The area is marked as having a high biodiversity value and conservation is a high priority. The vegetation community consists of Bangalay sand forest comprising of Bangalay and blackbutt with an understory of burrawang, casuarinas, banksia and wattle. The zones outlined in red in Figure 20 below show the Biobanking area of agreement 153 (Appendix E) that occur next to the construction zone. Machinery, works and ancillary areas are not to encroach into these areas.





**Figure 21.** Area of the Biobanking agreement 153 (Appendix E) that occurs adjacent to the roundabout construction area outlined in red.

### Land use and ownership

The footprint for the proposed works is within the road reserve managed by ESC. The majority of the surrounding land is owned by ESC and is managed as community and operational natural bushland area. The block of land to the northeast of the proposed works is private land consisting of Bangalay sand forest. There is no land owned by crown, National Parks or Forestry NSW

## Project justification and consideration of alternatives

Eurobodalla Shire Council proposes to construct a new roundabout at the intersection of Broulee Road and George Bass Drive. This intersection has been the cause of a large number of casualties causing safety concerns for motorists, pedestrians and cyclists. Broulee is a popular tourist destination and the increase in population size during summer greatly increases the chance of accidents occurring at the intersection as it stands.

Constructing a roundabout at this intersection will improve the road safety of this area. Conflicting traffic movements will be reduced, relative speeds of vehicles going through the roundabout will be reduced, and it is anticipated that fewer high impact crashes or casualties are likely to occur. The roundabout is modelled to balance movement demands improving traffic flow and reducing delayed queuing across the intersection.



The scope of works is designed to meet future development in the area and economic growth.

Council also takes the opportunity to review other assets within the road reserve to assess the need to renew or upgrade these at the same time as the proposed road works are undertaken. This provides a more integrated approach reducing the need to undertake major surface disturbance in the street (on more than one occasion). Thus, the potential impact on residents is reduced, the efficiency of work is improved, and cost of the work and the potential adverse impacts on the environment are reduced.

# 3. Statutory and planning framework

# Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act) and the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) provide the framework for development and environmental assessment in NSW.

As Council is the proponent, the works have been assessed as 'development permissible without consent' under Part 5 of the EP&A Act. Therefore, the activity has been assessed in accordance with Sections 5.5, 5.6 and 5.7 of that Act by examining and taking into account to the fullest extent possible all matters which are likely to affect the environment. Environmental Planning Instruments made under the EP&A Act 1979 may also be relevant and are addressed below.

# State Environmental Planning Policy (Transport and Infrastructure) 2021

The State Environmental Planning Policy (Transport and Infrastructure) 2021 aims to facilitate the delivery of infrastructure across NSW by identifying whether certain types of infrastructure require consent, can be carried out without consent or are exempt development.

Pursuant to Division 17 Section 2.109 (1) of the Transport and Infrastructure SEPP, development for the purpose of a road or road infrastructure facilities may be carried out by or on behalf of a public authority without consent on any land. The proposed works are therefore assessed under Part 5 of the EP&A Act.



Not all roadside vegetation management requires assessment under Part 5 of the EP&A Act. Division 17 Section 2.113 (1) of the Transport and Infrastructure SEPP states:

- (1) Development for any of the following purposes is exempt development if it is carried out by or on behalf of a public authority in connection with a road or road infrastructure facilities and complies with general requirements for exempt development Division 4 section 2.20 of the Transport and Infrastructure SEPP:
- (f) upgrading or maintenance of landscaping, or vegetation management (such as weed spraying, slashing and pruning), and:
- (i) does not involve construction works, and
- (ii) involves the replacement (if any) of existing materials with similar materials only.

Clause 4 Section 2.20 in the T&I SEPP limits when 'exempt development' applies, including a statement that it must not involve clearing of vegetation that would otherwise require a permit – unless the clearing is undertaken in accordance with the permit.



# Other Environmental Legislation

Table 4 outlines how the project has been considered under other relevant Commonwealth and State environmental legislation.

Table 4: Other environmental legislation

| Legislation  | Relevance to the proposed activity  |
|--|---|
| COMMONWEALTH LEGISLATION   |   |
| Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) | The EPBC Act protects matters of National Environmental Significance (NES), such as threatened species and ecological communities, migratory species (protected under international agreements), and National Heritage places (among others).  The footprint of these works will be completed within the heavily disturbed road reserve. There will be limited vegetation clearing under section 88 – tree felling of the Roads Act 1993. This will not contribute to significant loss of habitat.                  |
| STATE LEGISLATION  |   |
| Biodiversity Conservation Act 2016 (BC Act)                                | Part 7 of the BC Act provides the environmental assessment requirements for activities being assessed under Part 5 of the EP&A Act 1979. If a significant impact is likely, a Species Impact Statement is required. A biodiversity development assessment report may also be required if the proponent elects for this. Section 7.2(1)(a) and 7.3 describe the assessment requirements and thresholds for what is considered a significant impact.  |
|  | There will be no significant impact through the scope of works proposed for this project.   |
| Local Land Services<br>Act 2013 (LLS Act)                                  | The objects of the LLS Act include 'to ensure the proper management of natural resources in the social, economic and environmental interests of the State, consistently with the principles of ecologically sustainable development. The Act regulates the clearing of native vegetation, however section 60(O)(b)(ii) excludes the need for consent under the LLS Act where the clearing is an activity carried out by a determining authority within the meaning of Part 5 of the EP&A Act 1979.  Not applicable. |



#### Fisheries Management Act 1995 (FM Act)

FM Act provides for the protection, conservation, and recovery of threatened species, populations and ecological communities of fish and marine vegetation and fish habitats, as well as promoting the development and sharing of fishery resources in NSW.

Not applicable, works are not near a waterbody or mapped fish habitat.

#### National Parks and Wildlife Act 1974 (NPW Act)

The NPW Act regulates the control and management of all national parks, historic sites, nature reserves, and Aboriginal areas.

The main aim of the Act is to conserve the natural and cultural heritage of NSW. Where works will disturb Aboriginal objects, an Aboriginal Heritage Impact Permit (AHIP) is required.

Due Diligence has been completed by Onsite Cultural Heritage Management, see report in Appendix C (redacted). The area is highly disturbed and works can proceed with caution under the Unexpected Finds Protocol Appendix D.

#### Heritage Act 1977

The proposed activity does not involve an item or place listed on the NSW <u>State Heritage Register</u> or the subject of an interim heritage order or listing and is therefore not a controlled activity. Approval of works on the site is therefore not required under Part 4 of the Heritage Act.

The Aboriginal Canoe Tree is beside the footprint of works and care must be taken to avoid this registered site on the State Heritage Inventory. See mitigation measures in Table 1.

#### Protection of the Environment Operations Act 1997 (POEO Act)

The POEO Act is the key environmental protection and pollution statute. The POEO Act is administered by the EPA and establishes a licensing regime for waste, air, water and pollution. Relevant sections of the Act are listed below:

- Part 5.3 Water Pollution
- Part 5.4 Air Pollution
- Part 5.5 Noise Pollution
- Part 5.6 Land Pollution and Waste

Any work potentially resulting in pollution must comply with the POEO Act. Relevant licences must be obtained if required. Check the <u>POEO Public Register</u> for any relevant Environment Protection Licences (EPLs).



#### Licenses are not required, dust and noise will be carefully monitored. The WM Act's main objective is to manage NSW water in a Water sustainable and integrated manner that will benefit today's Management Act generations without compromising future generations' ability to 2000 (WM Act) meet their needs. Section 91E of the Act establishes an approval regime for controlled activities within waterfront land. However, clause 41 of the Water Management (General) Regulation 2018 provides an exemption for public authorities in relation to all controlled activities on waterfront land. Therefore, approval under the WM Act is not required. Not applicable Section 88 of the *Roads Act* states that a roads authority may, Roads Act 1993 despite any other Act or law to the contrary, remove or lop any tree or other vegetation that is on or overhanging a public road if, in its opinion it is necessary to do so for the purposes of carrying out road work or removing a traffic hazard. Three young regrowth trees and 5 saplings that have grown within the roadside batter will be removed under this act. Chapter 2 of The State Environmental Planning Policy (Resilience State and Hazards) 2021 provides controls for undertaking **Environmental** development and activities in coastal management areas. The Planning Policy four coastal management areas are: **Resilience and** Coastal wetlands and littoral rainforests area – areas Hazards 2021. which display the characteristics of coastal wetlands or **Chapter 2 - Coastal** littoral rainforests that were previously protected by SEPP Management 14 and SEPP 26 Coastal vulnerability area – areas subject to coastal hazards such as coastal erosion and tidal inundation Coastal environment area – areas that are characterised by natural coastal features such as beaches, rock platforms, coastal lakes and lagoons and undeveloped headlands. Marine and estuarine waters are also included Coastal use area – land adjacent to coastal waters, estuaries and coastal lakes and lagoons. Under Chapter 2 Part 2.2 Division 1 of the Resilience and Hazards SEPP, clearing native vegetation in the mapped 'Coastal wetland



and littoral rainforest area' is permissible without consent when undertaken by or on behalf of a public authority and in accordance with a certified coastal management program, a plan of management under Clause 2 of Part 2 of Chapter 6 of the Local Government Act, or a plan of management under Division 6 of the Crown Land Management Act 2016. In other cases, the clearing requires consent.

Waldrons Swap is in the larger vicinity of works and all care must be taken for sediment control.

# State Environmental Planning Policy Biodiversity and Conservation 2021 - Chapter 2 Vegetation in NonRural Areas

Chapter 2, part 2.2 of the Biodiversity and Conservation SEPP states that an authority to clear vegetation under this policy is not required if it is a clearing authorised under section 60(O) of the Local Land Services Act 2013. Section 60(O) provides an exemption for clearing under Part 5 of the EP&A Act and therefore consent is not required under the B&C SEPP (Vegetation in Non-Rural Areas).

# State Environmental Planning Policy Biodiversity and Conservation 2021 -Chapter 3 Koala Habitat Protection 2020

Biodiversity and Conservation SEPP aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for *Phascolarctos cinereus* (Koala) to ensure a permanent free-living population over their present range and reverse the current trend of Koala population decline.

B&I SEPP applies to development under part 4 of the EP&A Act 1979. As the proposed activity is not 'development', Koala Habitat Protection SEPP doesn't apply. Regardless, consideration of impacts to koala and koala habitat may still be relevant under the BC Act 2016.

#### Not applicable

#### The Rural Fires Act 1997

Section 100C of the Rural Fires Act 1997 takes in regard –

- a. the principles of ecologically sustainable development (as described by section 6 (2) of the *Protection of the Environment Administration Act 1991*), and
- b. any matter likely to affect the environment by reason of the carrying out of bush fire hazard reduction works on the land that a determining authority would be required to consider under section 5.5 (1) of the Environmental Planning & Assessment Act



| 1979 if Part 5 of that Act were applicable to the work and the |
|--|
| carrying out of the works were and activity within the meaning |
| of that part.  |
| Not applicable   |
|  |
|  |
|  |

# Community and Agency Consultation

Table 5: Community and agency consultation

| Community / agency | Have any community stakeholders been identified for the proposed works?  |
|--------------------|--|
| consultation       | Yes □ No ⊠   |
|                    | If yes, provide details of consultation undertaken and identify where comments received are considered in the REF. Attach any correspondence sent or received (if relevant such as approval for stockpiles on private land, property access, impact on business, etc). |
|                    | Is consultation with other authorities required under the requirements of Clause 1, section 2.15 of the Transport and Infrastructure SEPP 2021?  |
|                    | Yes □ No ⊠   |
|                    | Are the works adjacent to a <u>national park, nature reserve or other</u> <u>area</u> reserved under the National Parks and Wildlife Act 1974?   |
|                    | Yes □ No ⊠   |
|                    | Are the works adjacent to a declared <u>aquatic reserve</u> under the Fisheries Management Act 1994?   |
|                    | Yes □ No ⊠   |
|                    | If yes, provide details of consultation carried out and identify where comments received are considered in the REF. Also include copies of any correspondence in the REF appendices.   |
|                    | Other agency and community consultation:   |
|                    | Community consultation is to commence once the roundabout design has been finalised.   |



# 4. Environmental assessment

This section describes in detail the potential key environmental impacts associated with the proposal during both construction and operation and includes identifying site-specific safeguards to ameliorate the identified potential impacts.

**Table 6:** Impacts, environmental safeguards and mitigation measures

| Issue                             | Description   |  |
|-----------------------------------|---|--|
| Landform,<br>geology and<br>soils | Does the project involve the disturbance of large areas (eg >2ha) for earthworks?   |  |
| 30113                             | Yes □ No ⊠  |  |
|                                   | Does the site have constraints for erosion and sedimentation controls such as steep gradients, narrow corridors or is located on private property?  |  |
|                                   | Yes □ No ⊠  |  |
|                                   | Are there any sensitive receiving environments that are located in or nearby the likely project footprint or that would likely receive stormwater discharge from the project?   |  |
|                                   | Sensitive receiving environments include (but are not limited to) wetlands, state forests, national parks, nature reserves, rainforests, drinking water catchments).  |  |
|                                   | Yes ⊠ No □  |  |
|                                   | <ul> <li>Broulee Biobanking Sites under agreement 153, see Table 1<br/>for mitigation measures.</li> </ul>  |  |
|                                   | <ul> <li>Bangalay Sand Forest of the Sydney Basin and South East<br/>Corner bioregions – listed as EEC under the NSW BC Act</li> </ul>  |  |
|                                   | Waldrons swamp in the wider vicinity  |  |
| Potential impacts                 | Any disturbance of groundcover presents a potential risk for erosion, this risk can be minimised through implementation of the following safeguards.  |  |
| Safeguards                        | <ul> <li>Site management will incorporate best management erosion<br/>and sediment control practices such as those found in the<br/>Landcom's "<u>Blue Book (4th Edition</u>) on erosion and sediment<br/>control.</li> </ul> |  |



|                   | <ul> <li>All erosion and silt control devices will be visually inspected<br/>weekly to ensure effectiveness as well as after each rainfall<br/>event.</li> </ul>   |
|-------------------|--|
|                   | <ul> <li>The rehabilitation of disturbed areas will be carried out<br/>progressively as construction stages are completed, and in<br/>accordance with <u>Landcom's "Blue Book (4th Edition) on</u><br/><u>sediment and erosion control.</u></li> </ul> |
|                   | <ul> <li>Construct temporary drainage structures in accordance with<br/>the 'Technical Guideline - Temporary Stormwater Drainage for<br/>Road Construction' (RMS 2011)</li> </ul>  |
|                   | <ul> <li>Overburden will be placed in the form of a bund upslope of the<br/>site where necessary to reduce surface water entering the site.</li> </ul>   |
|                   | <ul> <li>Stockpiles will be designed, established, operated and<br/>decommissioned in accordance with the RMS Stockpile Site<br/>Management Guidelines 2015.</li> </ul>  |
| Contaminated      | Is the project located within an area mapped as Potential Acid Sulfate   |
| land and acid     | Soils?   |
| sulfate soils     | Yes □ No ⊠   |
|                   | Are there any known occurrences of acid sulfate soils in the area?   |
|                   | Yes □ No ⊠   |
|                   | Provide details  |
|                   | Is the project located within an area mapped as Potential Contaminated Land?   |
|                   | Yes □ No ⊠   |
|                   | Provide details  |
|                   |  |
| Potential impacts | Disturbance of acid sulfate soils can generate large amounts of sulfuric acid leachate which can impact on the surrounding environment.  |
|                   | Potential impacts include water quality impacts and impacts on flora and fauna.  |
| Safeguards        | If it is anticipated that Potential Acid Sulfate Soils will be disturbed, an Acid Sulfate Management Plan will be prepared.  |
|                   | If contaminated areas are encountered during construction, appropriate control measures will be implemented to manage the  |



|                   | immediate risks of contamination. All other works that may impact on the contaminated area will cease until the nature and extent of the contamination has been confirmed and any necessary site-specific controls or further actions identified in consultation with relevant government agencies. |
|-------------------|---|
| Water quality and | Are the works located within or adjacent to a waterbody or wetland, or within 40m of a waterway?  |
| hydrology         | Yes \( \sum \ No \( \subseteq \)  |
|                   |   |
|                   | If yes, provide details:  |
|                   | Waldrons Swamp is in the larger vicinity of works, see Table 1 for mitigation measures.   |
|                   | If yes, the NSW DPI Water or DPI Fisheries should be notified. Have they been notified?   |
|                   | Yes □ No □ N/A ⊠  |
|                   | If yes, is a permit required? Provide details:  |
|                   |   |
|                   | Will the proposed works be undertaken on a bridge?  |
|                   | Yes □ No ⊠  |
|                   | If yes, name the bridge:  |
|                   | Is the location known to flood or be prone to water logging?  |
|                   | Yes □ No ⊠  |
|                   | If yes, provide details   |
|                   | The area has been built up and is predominantly on sandy soils.   |
| Potential impacts | Does the project pose any potential risk to the surrounding water quality?  |
|                   | Yes □ No ⊠  |
|                   | Describe the potential impact   |
|                   | Disturbance of groundcover, use of chemicals and generation of waste all have the potential to impact on the surrounding waterways via runoff. This risk can be minimised through implementation of the following safeguards.   |



### Safeguards

- Wash down should use potable water and excess debris removed using hand tools. Wash down waste must be filtered before release, and away from all waterways.
- No dirty water may be released into drainage lines and/or waterways.
- Prevent sediment moving off-site and sediment laden water entering any water course, drainage lines, or drain inlets.
- Reduce water velocity and capture sediment on site.
- Minimise the amount of material transported from site to surrounding pavement surfaces.
- Store fuels, chemical and hazardous materials in secure, bunded areas within temporary construction ancillary facilities, and at least 50m from all waterways.
- Capture and dispose of spill and contaminated materials from temporary construction ancillary facilities at a licensed facility.
- Provide spill kits around temporary construction ancillary facilities.
- Measures to control pollutants from stormwater and spills will be investigated and incorporated in the pavement drainage system at locations where it discharges to the receiving drainage lines. Measures aimed at reducing flow rates during rain events and potential scour will also be incorporated in the design of the pavement drainage system.

#### **Biodiversity**

Have relevant database searches been carried out?

- NSW Bionet
- Threatened species profile search
   (www.environment.nsw.gov.au/threatenedspeciesapp/)
- Commonwealth EPBC
- Fisheries?

Yes ⊠ No □

Date searches undertaken:

20/03/2024

Are the proposed works likely to impact on any vegetation including, shrubs, trees?



| Yes ⊠ No □   |
|--|
| Three young regrowth trees and 5 saplings within the roadside batter will be removed as part of the works. See Table 1 for mitigation measures.  |
| Did the database searches identify any endangered ecological communities, populations, threatened flora and/or threatened or protected fauna, or migratory species within the vicinity of the proposed works? Both Federal and State listed matters must be considered.  |
| Yes ⊠ No □   |
| <ul> <li>Bangalay Sand Forest of the Sydney Basin and South East<br/>Corner bioregions – listed as EEC under the NSW BC Act</li> </ul>   |
| <ul> <li>Greater Glider Petauroides Volans occurs in the greater<br/>vicinity of the project within the sensitive environment area<br/>exclusion zones. See Table 1 for mitigation measures.</li> <li>Are the works taking place in a roadside area designated as high<br/>conservation value vegetation?</li> </ul> |
| Yes ⊠ No □   |
| If yes, provide details:   |
| Works are beside Biobanking Site 153 an area of high biodiversity value and priority conservation. No areas outside of the proposed footprint of works is to be disturbed. No vegetation within these areas is to be lopped or cleared.  |
| This vegetation is Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions – listed as EEC under the NSW BC Act  |
| Will the proposed works require the removal of any other vegetation?  Yes ☑ No □   |
| If yes, provide details:   |
| Ground cover that is regularly mowed and maintained on the road reserve will be impacted. See Table 1 for mitigation measures.   |
| Do the proposed works involve pruning, trimming or removal of any tree/s?  |



| Yes ⊠ No □  |
|---|
| If yes, provide details:  |
| Some vegetation may need to be trimmed during construction all mitigation measures in table 1 will be followed. Three young regrowth trees and 5 saplings within the roadside batter will be removed as part of the works. See Table 1 for mitigation measures. |
| Will the proposed works affect any tree hollows or hollow logs?  Yes □ No ☒   |
| If yes, provide details:  |
| Will the proposed works disturb any crevices or other locations (such as on bridges and culverts) for potential bat habitat?  Yes □ No ☒  |
| If yes, provide details:  |
| Are there any known areas of Areas of Outstanding Biodiversity Value (formerly known as critical habitat), Directory of Important Wetlands in Australia within the vicinity of the proposed works?  |
| Yes ⊠ No □  |
| If yes, provide details:  |
| Waldrons Swamp is in the wider area of the works and all mitigation measures in Table 1 must be followed.   |
| Will the proposed works disturb any natural waterways or aquatic habitat?   |
| Yes □ No ⊠  |
| If yes, provide details:  |
| There are no waterways within the footprint of works, all mitigation measures outlined in Table 1 must be followed to protect Waldrons Swamp and other waterways in the greater area.   |
| Do the trees form part of a streetscape, an avenue or roadside planting?  |
| Yes □ No ⊠  |



|                   | If yes, provide details:   |
|-------------------|--|
|                   | Have the trees been planted by a community group, Landcare group or by council or is the tree a memorial or part of a memorial group eg. has a plaque?  Yes ☑ No □     |
|                   | If yes, provide details:   |
|                   | There are culturally significant trees beside the works footprint. See Table 1 for mitigation measures.  |
|                   | Do the trees form part of a heritage listing or have other heritage value?   |
|                   | Yes ⊠ No □   |
|                   | If yes, provide details:   |
|                   | The trees are protected by mitigation measures outlined in Table 1 of this REF.  |
|                   | Are there any significant weeds present?   |
|                   | Yes □ No ⊠   |
|                   | If yes, provide details:   |
| Potential impacts | Does the project pose any potential risk to the biodiversity within the vicinity of the site?  |
|                   | Yes □ No ⊠   |
|                   | If yes, describe the potential impacts:  |
|                   | If there are impacts on threatened species, complete Assessment of Significance- under Section 7.3 of the BC Act (2016) to determine if there is a significant impact. |
| Safeguards        | General:   |
|                   | Prepare a Vegetation Management Plan (VMP) to:   |
|                   | <ul> <li>Identify measures to manage vegetation within the road<br/>reserve;</li> </ul>  |
|                   |  |



- Detail restoration, regeneration and rehabilitation of areas of native vegetation that will be removed to accommodate the proposed works.
- Detail appropriate management for the potential habitat of threatened flora and fauna species that will be indirectly impacted by the proposal. This may include fencing and signage.
- Identify weed management strategies.
- As part of the site induction process, provide all site personnel with information on the biodiversity values of the study area, including threatened species, no-go areas and responsibilities under relevant environmental legislation, including but not limited to the EP&A Act, BC Act and EPBC Act and associated management plans for individual species.
- Should unexpected, threatened fauna be located at any time during construction, cease work immediately in the area to prevent further harm to the individual. Contact Council's Environmental Officer and a suitably qualified ecologist to determine if further assessment or management plans are required.

#### Invasion of Exotic Species:

- Manage vegetation within the road reserve and adjacent to areas of vegetation clearing in accordance with Guide 6 Weed Management and Guide 10 Aquatic Habitats and Riparian Zones of Roads and Maritime's Biodiversity Guidelines (RTA, 2011) to reduce invasion of noxious weed species.
- Use weed-free topsoil in landscaping and revegetate disturbed sites with locally indigenous species.
- Construction machinery should be washed prior to entering and leaving site to ensure weed propagules are not transported.

## Stockpiling:

- Only place stockpiles in low value vegetation, where cleared sites are unavailable.
- Stockpiles should be no taller than 2m height.
- Use existing stockpiles before creating new ones.

#### Site Restoration:



|            | <ul> <li>The rehabilitation of disturbed areas will be carried out progressively as construction stages are completed, and in accordance with:</li> <li>Landcom's "Blue Book (4th Edition) on sediment and erosion control;</li> </ul> |
|------------|--|
|            | <ul> <li>RMS Landscape Guidelines;</li> </ul>  |
|            | RMS Guidelines for Batter Stabilisation Using Vegetation.  |
| Aboriginal | Are the works likely to disturb previously undisturbed areas of the  |
| heritage   | landscape?   |
|            | Yes □ No ⊠   |
|            | Has an AHIMS register search been conducted?   |
|            | Yes □ No □   |
|            | Has Due Diligence been conducted?  |
|            | Yes ⊠ No □   |
|            | Due Diligence was conducted by Onsite Cultural Heritage Management, see report in appendix B. (Report redacted due to sensitive information).  |
|            | Are there any known Aboriginal artefacts/sites within the vicinity of the work site?   |
|            | Yes ⊠ No □   |
|            | If yes, provide details. You may need a permit under s90 of the NP&W Act.  |
|            | https://www.environment.nsw.gov.au/topics/aboriginal-cultural-heritage/protect-and-manage/impact-permits   |
|            | Redacted due to sensitive information  |
|            | Would the proposal involve the removal of mature native trees?   |
|            | Yes ⊠ No □   |
|            | If yes, provide details of whether the trees have been checked to see if they are scarred or are of Aboriginal cultural significance.  |
|            | Trees have been assessed, are relatively young and contain no scarring or are of Aboriginal cultural significance.   |



| Potential  | Does the project pose any potential risk to Aboriginal heritage?   |
|------------|--|
| impacts    | Yes □ No ⊠   |
|            |  |
|            | If yes, provide details.   |
|            |  |
| Safeguards | Awareness:   |
|            | <ul> <li>All personnel working on site will receive training to ensure<br/>awareness of location of existing Aboriginal objects within the<br/>Study Area and immediate surrounds, and relevant statutory<br/>responsibilities.</li> </ul>   |
|            | <ul> <li>Before work commences a toolbox talk is to occur for all<br/>personnel on site explaining the cultural significance of the<br/>area and the possibility of unexpected finds. The unexpected<br/>finds protocol "STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!!<br/>Should be explained during this briefing.</li> </ul>   |
|            | Management of existing (known) items:  |
|            | <ul> <li>Exclusion fencing will be placed around existing known         Aboriginal objects to prevent damage to these objects, see         Figure 2, Table 1 (Redacted due to sensitive information).</li> </ul>   |
|            | <ul> <li>Works to be carried out in accordance with the<br/>recommendations set out in the Due Diligence Report<br/>Appendix C (redacted due to sensitive information).</li> </ul>   |
|            | Unexpected Finds (Appendix D):   |
|            | <ul> <li>If Aboriginal heritage items are uncovered during the works,<br/>STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!! All works in the<br/>vicinity of the find must cease and the Project Manager and<br/>Environmental Officer contacted immediately. The Standard<br/>Management Procedure - Unexpected Heritage Items (RMS,<br/>2015) must then be followed.</li> </ul> |
| Non-       | Complete online heritage database searches   |
| Aboriginal | NSW Heritage database  |
| heritage   | Commonwealth EPBC heritage list  |
|            | Australian Heritage Places Inventory   |
|            | <ul> <li>Local Environmental Plan(s) heritage items</li> </ul>   |



| Potential impacts | Are there any items of Non-Aboriginal heritage located within the vicinity of the proposed works?  Yes □ No ☒  If yes, list the item(s) and their heritage significance.  Include details of any approvals that may be required.  Does the project pose any potential risk to Non-Aboriginal heritage?  Yes □ No ☒  If yes, provide details   |
|-------------------|---|
| Safeguards        | <ul> <li>Awareness:         <ul> <li>All personnel working on site will receive training to ensure awareness of location of existing heritage items within the Study Area and immediate surrounds, and relevant statutory responsibilities.</li> </ul> </li> <li>Management of existing (known) items:         <ul> <li>Exclusion fencing will be placed around existing known heritage items to prevent damage to these objects.</li> <li>Works to be carried out in accordance with the approved Conservation Management Plan for the heritage item (where available).</li> </ul> </li> <li>Unexpected Finds (Appendix D):         <ul> <li>If heritage items are uncovered during the works, STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!! All works in the vicinity of the find must cease and the Project Manager and Environmental Officer contacted immediately. The Standard Management Procedure - Unexpected Heritage Items (RMS,</li> </ul> </li> </ul> |
| Noise             | 2015) must then be followed.  Are there any noise sensitive areas near the location of the proposed works that may be affected by the works (i.e. church, school, hospital, residences)?  During construction?  Yes □ No ☒  During Operation?   |



|                   | Yes □ No ⊠  |  |
|-------------------|---|--|
|                   | If yes, provide details including a map to sh<br>works  | now proximity to proposed                              |
|                   | Are the proposed works going to be under working hours detailed below?  | taken during standard                                  |
|                   | Yes ⊠ No □  |  |
|                   | Standard working hours  |  |
|                   | Monday — Friday   | 7:00am to 6:00pm                                       |
|                   | Saturday  | 8:00am to 1:00pm                                       |
|                   | Sunday and Public Holidays  | No work  |
|                   | Would operation of the proposal alter the sensitive receivers? This might include, but the line or level of an existing carriageway, increasing traffic speeds by more than 10k tactile line markings.  Yes □ No ☒  If yes, provide details | t not be limited to, altering , changing traffic flow, |
| Potential impacts | Does the project pose any potential risk to quality?  | the surrounding noise                                  |
|                   | Yes □ No ⊠  If yes, provide details   |  |
| Safeguards        | Notification:     All sensitive receivers (eg local residual) will be notified at least five working any works associated with the activative adverse noise or vibration impact.  Standard Haves of Operations                              | g days prior to the start of                           |
|                   | <ul> <li>Standard Hours of Operation:</li> <li>Works to be carried out during nor<br/>6pm Monday to Friday; 8am to 1pr<br/>is performed outside normal work</li> </ul>  | n Saturdays). Any work that                            |



|             | public holidays may not be permitted and, if permitted, works are to minimise noise impacts.   |
|-------------|--|
|             | Out of hours:  |
|             | <ul> <li>Where out-of-hours activities are required, a Noise and<br/>Vibration Management Plan will be prepared and implemented<br/>in consultation with sensitive receivers.</li> </ul> |
| Air quality | Are the proposed works likely to result in large areas (>2ha) of exposed soils?  |
|             | Yes □ No ⊠   |
|             | Are there any dust sensitive receivers located within the vicinity of the proposed works during the construction period (i.e. church, school, hospital, residences)?                     |
|             | Yes □ No ⊠   |
|             | Is there likely to be an emission to air of dust, smoke, steam or vehicle emissions?   |
|             | Yes □ No ⊠   |
| Potential   | Does the project pose any potential risk to the surrounding air quality?   |
| impacts     | Yes □ No ⊠   |
|             | If yes, provide details  |
|             |  |
| Safeguards  | <ul> <li>Measures to minimise or prevent air pollution or dust are to be<br/>used including watering or covering exposed areas.</li> </ul>   |
|             | <ul> <li>Works are not to be carried out during strong winds or in<br/>weather conditions where high levels of dust or air borne<br/>particulates are likely</li> </ul>                  |
|             | <ul> <li>Vegetation or other materials are not to be burnt on site.</li> </ul>   |
|             | <ul> <li>Vehicles and vessels transporting waste or other materials that<br/>may produce odours or dust are to be covered during<br/>transportation</li> </ul>                           |
|             | <ul> <li>Vehicles and equipment are to be maintained in good working<br/>order.</li> </ul>   |



|                    | <ul> <li>Monitor work areas and stockpiles for dust generation and<br/>seed/cover/spray to suppress.</li> </ul>   |
|--------------------|---|
|                    | <ul> <li>Measures (including watering or covering exposed areas) are<br/>to be used to minimise or prevent air pollution and dust</li> </ul>  |
|                    | Do not leave vehicles idling  |
| Waste and chemical | Are the proposed works likely to generate >200 tonnes of waste material (contaminated and /or non-contaminated material)?   |
| management         | Yes □ No ⊠  |
|                    |   |
|                    | Are the proposed works likely to require a licence from EPA?  |
|                    | Yes □ No ⊠  |
|                    |   |
|                    | Is waste being transported off site to another location?  |
|                    | Yes □ No ⊠  |
|                    |   |
|                    | Does the project pose any potential risk to the surrounding environment as a result of waste generated?   |
|                    | _   |
|                    | Yes □ No ⊠  |
|                    | If YES to any of these items, you need to prepare a Waste  Management Plan (May be within CEMP document)  |
| Potential          | Describe potential impacts  |
| impacts            |   |
| Safeguards         | <ul> <li>All surplus material, off cuts, and other debris resulting from<br/>the work shall be removed from site and disposed of by a<br/>licensed contractor to a licensed waste management facility.</li> </ul> |
|                    | <ul> <li>Waste material, other than vegetation and tree mulch, is not<br/>to be left on site once the works have been completed.</li> </ul>   |
|                    | Working areas are to be maintained, kept free of rubbish and cleaned up at the end of each working day.   |
|                    |   |
|                    |   |
|                    |   |
|                    |   |



| Traffic and transport | Are the proposed works likely to result in detours, disruptions or delays to traffic flow (vehicular, cycle and pedestrian) or access to properties or businesses?   |
|-----------------------|--|
|                       | During construction <b>Yes</b> ⊠ <b>No</b> □   |
|                       | During Operation <b>Yes</b> □ <b>No</b> ⊠  |
| Potential impacts     | Are the proposed works likely to affect any other transport nodes or transport infrastructure (eg bus stops, bus routes) in the surrounding area? Result in detours or disruptions to traffic flow (vehicular, cycle and pedestrian) or access during operation? |
|                       | Yes ⊠ No □   |
|                       | Describe the potential impacts   |
|                       | There are 3 schools in the Broulee area, bus companies that service the area should be notified prior to works commencing.   |
| Safeguards            |  |
|                       | <ul> <li>Where possible, current traffic movements and property<br/>accesses are to be maintained during the works. Any<br/>disturbance is to be minimised to prevent unnecessary traffic<br/>delays.</li> </ul>   |
|                       | <ul> <li>If traffic disturbance is unavoidable, a Traffic Management Plan<br/>(TMP) will be prepared in accordance with the RMS Traffic<br/>Control at Work Sites Manual RTA 2010) and QA Specification<br/>G10 Control of Traffic (RTA 2008).</li> </ul>        |
|                       | <ul> <li>Comply with Council requirements regarding traffic control,<br/>access and road/ pedestrian access.</li> </ul>  |
|                       | <ul> <li>Erect signs regarding proposed works, temporary road<br/>closures, diversions etc.</li> </ul>   |
| Visual amenity/       | Will the project have any potential impact on visual amenity of the site and surrounding landscape?  |
| landscape             | Yes □ No ⊠   |
|                       | If yes, provide details  |
| Potential impacts     | Describe the potential impacts   |



## Safeguards Contain all work within the boundaries designated on the site Restore work sites to as close to their original condition as possible Minimise spread of stockpiles, waste, and parking Socio-Are the proposed works likely to impact on local business? economic Yes ⊠ No □ If yes, provide details Traffic will be disrupted while trenching occurs over road areas. Alternative routes to local businesses and amenities are available. Are the proposed works likely to require any property acquisition? Yes □ No ⊠ If ves, provide details Are the proposed works likely to alter any access for properties (either temporarily or permanently)? Yes □ No 🏻 If yes, provide details Traffic will be disrupted while trenching occurs over road areas. Alternative routes to properties are available. Are the proposed works likely to alter any on-street parking arrangements (either temporarily or permanently)? Yes □ No ☒ If yes, provide details Are the proposed works likely to change pedestrian movements or pedestrian access (either temporarily or permanently)? Yes □ No ⊠ *If yes, provide details* There is no pedestrian paths in the area. Are the proposed works likely to impact on any items or places of social value to the community (either temporarily or permanently)?



|                   | Yes ⊠ No □  |
|-------------------|---|
|                   | If yes, provide details   |
|                   | The "Broulee Canoe Tree" is a place of cultural and social significance, access to this site will be temporarily restricted during works.                   |
|                   | Are the proposed works likely to reduce or change visibility of any businesses, farms, tourist attractions or the like (either temporarily or permanently)? |
|                   | Yes ⊠ No □  |
|                   | If yes, provide details   |
|                   | The "Broulee Canoe Tree" is a place of cultural and social significance, access to this site will be temporarily restricted during works.                   |
| Potential impacts | Does the project pose any potential risk to the socio-economic factors?   |
| Impacts           | Yes □ No ⊠  |
|                   | If yes, provide details   |
| Safeguards        | Contain all work within the boundaries designated on the site plan  |
|                   | <ul> <li>Restore work sites to as close to their original condition as possible</li> </ul>  |
|                   | <ul> <li>Display public information signs until site restoration is complete</li> </ul>   |
|                   | <ul> <li>Carry out community and stakeholder consultation before works start</li> </ul>   |
|                   | <ul> <li>Notify the Works Supervisor and Asset Manager immediately<br/>of any complaints or any accidental damage to property</li> </ul>                    |
|                   | <ul> <li>Locate services on DBYD search and peg out no-go areas to<br/>avoid service-disruption</li> </ul>  |
|                   | <ul> <li>All Council staff and contracted staff will exercise courtesy in<br/>dealing with the community</li> </ul>   |



## Environmental Planning and Assessment Regulation 2021 – Assessment Considerations

In accordance with the Environmental Planning and Assessment Act, the following factors have been considered in assessing the likely impact of this activity on the environment.

Does the work proposed:

## a) Have any environmental impact on a community?

During construction, the main impact on the people within the community will be from dust, noise and machinery. Works will be undertaken between 7am to 6pm Mondays to Fridays or 8am to 1pm Saturdays. This will be a living document which will be regularly refined or updated as needed to address emerging or new environmental management issues as they arise. The "Broulee Canoe Tree" is a place of cultural and social significance, access to this site will be temporarily restricted during works.

#### b) Cause any transformation of a locality?

The footprint of works is within the heavily disturbed road reserve. Installation of the new roundabout, pedestrian footpaths and landscaping will improve road safety and accessibility.

## c) Have any environmental impact on the ecosystems of the locality?

No, the project area is heavily disturbed and all works will be within the footprint of the road reserve. Limited vegetation will be disturbed.

# d) Have a reduction of the aesthetic, recreational, scientific, or other environmental quality or value of a locality?

No, the project area is heavily disturbed and all works will be within the footprint of the road reserve. Limited vegetation will be disturbed posing no threat to the environmental values of the area. Installation of the new roundabout will improve road safety and accessibility.

# e) Have any effect upon a locality, place or building having aesthetic or anthropological, cultural, historical, scientific or social significance or other social significance or other special value for present or future generations?

Installation of the new roundabout will improve road safety and accessibility and improve the visual amenity of the area.

f) Have any impact on the habitat of protected or endangered fauna (as per Biodiversity Conservation Act 2016)?



No, the project area is heavily disturbed and all works will be within the footprint of the road reserve. Limited vegetation will be disturbed.

## g) Cause any long-term effects on the environment?

No, the project area is heavily disturbed and all works will be within the footprint of the road reserve.

#### h) Cause any degradation of the quality of the environment?

No, the project area is heavily disturbed and all works will be within the footprint of the road reserve. The high value environmental assets of the area will be fenced and remain undisturbed. See the mitigation measures outlined in Table 1.

#### i) Cause any risk to the safety of the environment?

No, the project will improve road safety in the area through improved accessibility and regulation of traffic flow which will reduce the likelihood of accidents.

## j) Cause any reduction in the range of beneficial uses of the environment?

No, the project area is heavily disturbed and all works will be within the footprint of the road reserve. Installation of the new roundabout will improve road safety and accessibility. Installation of pedestrian footpaths will increase the beneficial use of the environment.

#### k) Cause any pollution of the environment?

No, the project area is heavily disturbed and all works will be within the footprint of the road reserve. All precautions to protect environmental sensitivities are outlined in Table 1 of this REF.

#### I) Have any environment problems associated with the disposal of waste?

No, there will not be large amounts of waste generated through the scope of works.

# m) Increase demands on resources (natural or otherwise) which are, or are likely to become, in short supply?

No, there is no supply issues with the proposed materials to be used in this project.

# n) Have any cumulative environmental effect with other existing or likely future activities?

No, the new roundabout and road realignment will improve the traffic flow and road safety of the crossroad. The scope of works is within the heavily disturbed road reserve and do not impinge on any of the environmental sensitivities adjacent to the road reserve.



| U) | Have any impact on coastal processes and coastal hazards, including those und projected climate change conditions. |  |  |
|----|--|--|--|
|    | No, the scope of the project will not impact on coastal processes and hazards.                                     |  |  |
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## Matters of national environmental significance

In accordance with the Environment Protection and Biodiversity Act 1999, the following factors have been considered in assessing the environmental impact of this activity.

**Table 7.** Matters of natural significance factors and possible impacts

| Factor   | Impact |
|--|--------|
| 5. Any impact on a World Heritage property?  | Nil    |
| 6. Any impact on a National Heritage place?  | Nil    |
| 7. Any impact on a wetland of international significance?                                    | Nil    |
| 8. Any impact on nationally threatened species, ecological communities or migratory species? | Nil    |
| 9. Any impact on a Commonwealth marine area?   | Nil    |
| 10. Does the proposal involve a nuclear action?  | Nil    |
| Additionally, any impact (direct or indirect) on the environment of Commonwealth land?       | Nil    |



## 5. Certification, review and decision

This Review of Environmental Factors provides a true and fair review of the proposal in relation to its potential effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposal. It identifies the likely impacts of the proposal on the environment and details the environmental safeguards and mitigation measures to be implemented to minimise the potential impact to the environment. In light of the above assessment of the proposed activity, it is considered that the overall impact on the environment is likely to be minimal and therefore acceptable. The long-term benefits of the activity will have a cumulative positive impact on the safety of road users and the activity should proceed accordingly.

**REF Author** 

Prue McGuffie

Pine Hanki

Signature

**Position** 

**Environmental Engineer Support Officer** 

Date

25/09/2024

Reviewed by:

**Geoff Armstrong** 

heaff Amstrong.

**Signature** 

**Position** 

**Design Coordinator** 

**Date** 

26/09/2024



## Reviewed and Endorsed by: Mir Akbar

Shamsunn

**Position** 

Signature

Design Officer

Date:

27/09/2024

**Accepted By:** 

**Brent Parker** 

**Signature** 

Dooition

**Position** 

Divisional Manager Water and Sewerage

Date

27/09/2024

Aaron Dunne

**Signature** 

**Position** 

**Acting Capital Works Manager** 

Date 1/10/24



## Appendix A – Location



Figure 22. Works location

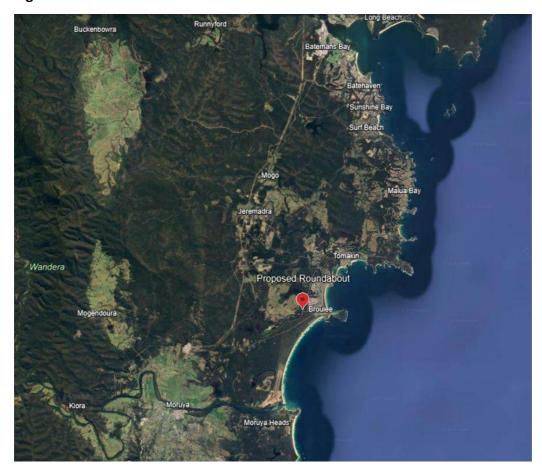


Figure 23. Works location in proximity to larger regional centres



Appendix B – Completed Due Diligence Aboriginal Heritage (Excerpt of report completed by On Site Cultural Heritage Management). Redacted due to sensitive information.



# Appendix C - List of Cultural Heritage Inductees to Site

 Table 7. List of Cultural Heritage Inductees to Site (To be kept on File)

| Name | Company & Role | Signature |
|------|----------------|-----------|
|      |                |           |
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## Appendix D – Unexpected Finds Protocol

STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!!



# **UNEXPECTED FINDS PROTOCOL**

Eurobodalla Shire Council

Version 1.0



## Purpose and scope

This protocol has been developed to provide a consistent method for Eurobodalla Shire Council (ESC) to manage unexpected heritage items (both Aboriginal and non-Aboriginal) that may be discovered during construction works. This protocol will apply to all construction activities undertaken by ESC.

## Unexpected heritage items procedure

| Step | Action  |
|------|---|
| 1    | STOP, MARK THE AREA, TAKE A PHOTO, REPORT!!!  |
| 1.1  | Stop all work in the immediate area of the item and notify the Project Manager and Environmental Officer.   |
| 1.2  | Establish a 'no-go zone' around the item. Use high visibility fencing, where practical. Avoid digging posts in the area.  |
| 1.3  | Inform all site personnel about the no-go zone.   |
| 1.4  | Inspect, document and photograph the item.  |
| 1.5  | Is the item likely to be bone? Where it is obvious that the bones are human remains, you must notify the local police by telephone immediately. They may take command of all or part of the site. |



| Where human remains are likely to be aboriginal ancestral remains, also contact the OEH.   |
|--|
| Confirm with the site environment representative that the site is unexpected and if a permit is in place.  |
| Contact Environmental Officer and Divisional Manager to engage an Aboriginal or Historical archaeologist and/or an Aboriginal heritage consultant  |
| Contact a qualified Aboriginal or Historical archaeologist to discuss the location and extent of the item and arrange a site inspection, if required. If requested, provide photographs.   |
| Preliminary assessment and recording of the find   |
| In a minority of cases, the Aboriginal or Historical archaeologist or LALC Rep may determine from the photographs that no site inspection is required because no archaeological constraint exists for the project (e.g., the item is not a 'relic', a 'heritage item' or an 'Aboriginal object'). Any such advice should be provided in writing (e.g. via email) and confirmed by the Project Manager. |
| Arrange site access for the Aboriginal or Historical archaeologist/Aboriginal heritage consultant to inspect the item as soon as practicable   |
|  |



| 3.3 | Subject to the Aboriginal or Historical archaeologist/Aboriginal heritage consultant's assessment, work may recommence at a set distance from the item. Existing protective fencing established in Step 1 may need to be adjusted to reflect the extent of the newly assessed protective area. No works are to take place within this area once established.  |
|-----|---|
| 3.4 | The Aboriginal or Historical archaeologist/Aboriginal heritage consultant may provide advice after the site inspection and preliminary assessment that no heritage constraint exists for the project (e.g. the item is not a 'relic' or a 'heritage item' or an 'Aboriginal item'. Any such advice should be provided in writing (e.g. via email or letter with the consultant's name and company details clearly identifiable) to the Project Manager. |
| 3.5 | Where required, seek additional specialist technical advice (such as a forensic or physical anthropologist to identify skeletal remains). The Aboriginal or Historical archaeologist consultant can provide contacts for such specialist consultants.   |
| 3.6 | Where the item has been identified as a 'relic' or 'heritage item' or an 'Aboriginal object' the Aboriginal or Historical archaeologist should formally record the item. Where an Aboriginal object is recorded it must be registered on the Aboriginal heritage information management system (AHIMS) in accordance with section 89A of the NPW Act.   |
| 3.7 | OEH (Heritage Division for non-Aboriginal relics and Planning and Aboriginal Heritage Section for Aboriginal objects) can be notified informally by telephone at this stage by the Environment and Cultural Heritage Manager.   |



|     | Any verbal conversations with regulators must be noted on the project file for future reference.  |
|-----|---|
|     | <ul> <li>Heritage NSW ph.: 131 555</li> <li>Email: info@environment.nsw.gov.au</li> </ul>   |
|     | Registered aboriginal parties (RAPs) will be notified at this point to inform them of unexpected find.  |
| 4   | Aboriginal or Historical Archaeologist to prepare management requirements for site  |
| 4.1 | An archaeological or heritage management plan is developed outlining management actions to ensure damage to the site is minimised and work can recommence. This plan will be developed by the Aboriginal or Historical archaeologist in consultation with the RAP's, OEH and DPE as required. |
| 5   | Notify the regulator, if required.  |
| 5.1 | If notification is required, complete the template notification letter, including the archaeological/heritage management plan and other relevant supporting information. For historical relics a s146 notification form will be required to be submitted to the Heritage Division.            |
| 5.2 | Forward the signed notification letter to OEH.  |
| 5.3 |   |
|     |   |
| 5.3 |   |



|     | A copy of the final signed notification letter, archaeological or heritage management plan and the site recording form is to be kept on file and a copy sent to the Project Manager.   |
|-----|--|
| 6   | Resume Work  |
| 6.1 | The management plan is implemented and the project construction environmental management plan (CEMP) is updated to reflect any additional controls and requirements  |
| 6.2 | Seek written clearance to resume project work from the Environment and Planning Manager and the Aboriginal or Historical Archaeologist/Aboriginal heritage consultant. Clearance would only be given once all archaeological excavation and/or heritage recommendations and approvals (where required) are complete. Resumption of project work must be in accordance with all relevant project/heritage approvals/determinations. |
| 6.3 | If required, ensure archaeological excavation/heritage reporting and other heritage approval conditions are completed in the required timeframes. This includes artefact retention repositories, conservation and/or disposal strategies   |



## Responsibilities

| Role                                   | Responsibility  |
|--|---|
| Project Manager                        | Ensure the process for unexpected finds is included as part of all site inductions.   |
|  | Ensure that this protocol is implemented, and all personnel are aware of their responsibilities.  |
| Construction Supervisor                | Ensure this protocol is understood and implemented on site.   |
|  | Stops works immediately adjacent to any unexpected archaeological finds until they have been assessed in accordance with this protocol. |
|  | Report any unexpected finds to the Project Manager.   |
| Aboriginal or Historical archaeologist | On call to provide professional assistance should there be an unexpected find.  |
| LALC                                   | On call to provide professional assistance should there be an unexpected find.  |
| Environmental Officer                  | On call to provide professional assistance should there be an unexpected find.  |
| All personnel                          | Be familiar with this protocol and report any unexpected finds to their construction supervisor or project manager.                     |



## Contact details

| Position              | Name                             | Phone Number |
|-----------------------|----------------------------------|--------------|
| Project Manager       | Capital Works Manager            | 02 4474 1000 |
| Environmental Officer | Environmental Support<br>Officer | 02 4474 1000 |

# Types of unexpected heritage items and their legal protection

An 'unexpected heritage item' means any unanticipated discovery of an actual or potential heritage item, for which Eurobodalla Shire Council does not have approval to disturb or does not have a safeguard in place (apart from this procedure) to manage the disturbance.

These discoveries are categorised as either:

- (a) Aboriginal objects
- (b) Historic (non-Aboriginal) heritage items
- (c) Human skeletal remains.

## Aboriginal objects

The National Park and Wildlife Act 1974 protects Aboriginal objects which are defined as:

"Any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains"

Examples of Aboriginal objects include stone tool artefacts, shell middens, axe grinding grooves, pigment or engraved rock art, burial sites, and scarred trees.



## Historic heritage

The Heritage Act 1977 protects relics which are defined as:

"Any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and is of State or local heritage significance".

Historic (non-Aboriginal) heritage items may include: Archaeological 'relics'; Other historic items (i.e. works, structures, buildings or movable objects).

Relics are archaeological items of local or state significance which may relate to past domestic, industrial or agricultural activities in NSW, and can include bottles, remnants of clothing, pottery, building materials and general refuse.

## Human skeletal remains

Human skeletal remains can be identified as either an Aboriginal object or non-Aboriginal relic depending on ancestry of the individual (Aboriginal or non-Aboriginal) and burial context (archaeological or non-archaeological). Remains are considered to be archaeological when the time elapsed since death is suspected of being 100 years or more.

All bones must be treated as potential human skeletal remains and work around them must stop while they are protected and investigated urgently.



## Appendix E – Excerpt of Biobanking Agreement 153



# BioBanking agreement ID number: 153

## Under the Threatened Species Conservation Act 1995

for

Eurobodalla Shire Council
for
Broulee Biobank
Lot 10 in Deposited Plan number 831878
Lot 12 in Deposited Plan number 831878
Lot 70 in Deposited Plan number 831111 (part lot)
Lot 8 in Deposited Plan number 258299 (part lot)
Lot 4 in Deposited Plan number 1090948 (part lot)
Lot 11 in Deposited Plan number 771575 (part lot)
Lot 41 in Deposited Plan number 1036166 (Lot 49 DP
1016474) (part lot)



Version 1.3 June 2011





## BioBanking agreement under Part 7A Division 2 of the Threatened Species Conservation Act 1995

This agreement made on the day of between the Minister for the Environment of the State of New South Wales, being the Minister currently administering the *Threatened Species Conservation Act 1995* ('the Minister', which expression shall where the context admits, be deemed to include his or her successors in office) on the one part and Eurobodalla Shire Council (ABN 47 504 455 945) ('the landowner') of Broulee Biobank, George Bass Drive, Broulee, on the other part.

#### Background

A The landowner is the owner of those parcels of land being:

Lot 10, Deposited Plan 831878,

Lot 12 DP 831878

Part of Lot 70 DP 831111

Part of Lot 8 DP 258299

Part of Lot 4 DP 1090948

Part of Lot 11 DP 771575

Part of Lot 41 DP1036166 (Lot 49 DP 1016474), Parish of Tomaga, County of St Vincent,

known as Broulee Biobank ('the land').

- B The biobank site that is the subject of this agreement forms part of the land and is shown on the Map 1 Biobank site boundary; Broulee biobank site. The biobank site covered by this agreement consists of approximately 405 hectares.
- C The landowner has requested the Minister to enter into a biobanking agreement under clause 14 of the BioBanking Regulation for the purpose of designating the biobank site on the land.
- D The Minister and landowner recognise that the landowner will receive biodiversity credits determined in accordance with the BioBanking Assessment Methodology (and set out in Annexure B) relating to the impact or likely impact of the management actions required to be carried out under Clause 3 and Annexure C of this agreement regarding the biodiversity values listed in Annexure B.
- E The landowner and the Minister recognise that the biobank site contains the following known Aboriginal objects and/or Aboriginal places as defined by the National Parks and Wildlife Act 1974:

Scar tree

#### Artefact

Note: This biobanking agreement only recognises the existence of known Aboriginal objects and/or Aboriginal places. It does not provide for the protection of Aboriginal objects or Aboriginal places. The protection of Aboriginal objects and Aboriginal places is dealt with by the National Parks and Wildlife Act

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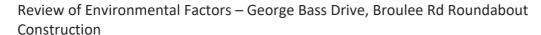




- 1974. This agreement does not authorise any person to damage or to cause or permit damage to an Aboriginal object or Aboriginal place in, on or under the biobank site land (see clause 2.2).
- F The landowner and the Minister recognise that this biobanking agreement is being entered into for the purposes of the BioBanking Scheme established under Part 7A of the Act.
- G The landowner agrees to undertake the management actions and implement the management plans to improve the biodiversity values of the biobank site as set out in Annexure C.
- H The landowner agrees to undertake monitoring, reporting and record keeping as set out in Annexure D.
- Accordingly, the parties hereby enter into the following biobanking agreement under section 127D of the Act.
- J The Minister has delegated the power to enter into this biobanking agreement to the Chief Executive of the Office of Environment and Heritage.
- K Under section 127L of the Act, any person may bring proceedings in the Land and Environment Court for an order to remedy or restrain a breach of this agreement. Among other things, the Minister may ask the Court to award damages against the landowner for certain breaches of this agreement.
- L The Minister may, by order under section 127N of the Act, direct the landowner to carry out at their cost such work or actions as the Minister considers necessary to rectify any breach of this agreement. If the landowner does not comply with the order, the Minister may enter the land and cause the work or actions set out in the order to be carried out and may recover the costs of complying with the order from the landowner.
- M Where a person contravenes this agreement, the Minister may apply to the Land and Environment Court under section 127O of the Act for an order that the land be conveyed or transferred to the Minister or to another person or body nominated by the Minister.

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#### Now this agreement witnesses:

#### 1. Interpretation

1.1 In this agreement, unless the contrary intention appears:

the 'Act' means the Threatened Species Conservation Act 1995 and any regulations from time to time in force thereunder

'adaptive management' means a process for improving management where the outcomes of monitoring indicate that minor alterations to the management actions or management plans are required to improve biodiversity values

'agreement' means this biobanking agreement entered into by the Minister and the landowner under section 127D of the Act for this biobank site

'animal' has the same meaning as in section 4 of the Act

'Annexure A' means Annexure A to this agreement entitled 'Maps of the biobank site'

'Annexure B' means Annexure B to this agreement entitled 'BioBanking Agreement Credit Report'

'Annexure C' means Annexure C to this agreement entitled 'Management actions and management plans'

'Annexure D' means Annexure D to this agreement entitled 'Monitoring, reporting and record keeping requirements'

'Annexure E' means Annexure E to this agreement entitled 'Payment schedules'

'annual report' means the annual report to be prepared by the landowner in accordance with item 2 of Annexure D

'authorised officer' means a person appointed under section 156B of the National Parks and Wildlife Act 1974

'biobank site' means that part of the land shown as the "biobank site" on the biobank site boundary map

'biobank site boundary map' means the map entitled Map 1, Biobank site boundary; Broulee biobank site dated 27/02/2014 and included in Annexure A

'Biobanking Agreement Credit Report' means the report contained in Annexure B generated by a BioBanking Assessor for the biobank site using the BioBanking Assessment Methodology and the BioBanking Credit Calculator which includes the number and type of biodiversity credits to be created on the biobank site

'biobanking agreements register' means the register of biobank sites kept by the Chief Executive under Part 7A of the Act

'BioBanking Assessment Methodology' means the rules established under section 127B of the Act

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'BioBanking Regulation' means the Threatened Species Conservation (Biodiversity Banking) Regulation 2008

'BioBanking Scheme' means the Biodiversity Banking and Offsets Scheme established under Part 7A of the Act

'BioBanking Trust Fund' means the fund established under Part 7A of the Act to hold funds from the sale of biodiversity credits (the Total Fund Deposit)

'biodiversity credits' means biodiversity credits created under Part 7A of the Act

'biodiversity credits register' means the register of biodiversity credits kept by the Chief Executive under Part 7A of the Act

'biodiversity values' has the same meaning as in section 4A of the Act

'Chief Executive' means the Chief Executive of the Office of Environment and Heritage

'commencement date' means the date this agreement commences under clause 18 of this agreement

'critical habitat' has the same meaning as in section 4 of the Act

'day' means any day including Saturdays, Sundays and public holidays

'development' has the same meaning as in section 127(1) of the Act

'Director General' has the same meaning as in section 4 of the Act

'ecological burn' means a burn to improve biodiversity values carried out as part of the management of fire for conservation

'fee unit' has the same meaning as in the BioBanking Regulation

'first payment date' means the date the balance in the relevant biobank site account is equal to or greater than 80% of the Total Fund Deposit for the first time

**'Fund Manager'** means the person appointed by the Minister from time to time under Part 7A of the Act as the Fund Manager to manage the BioBanking Trust Fund

**GST** has the same meaning as given to that term in *A New Tax System (Goods and Services Tax) Act 1999 (Commonwealth) and any other Act or regulation relating to the imposition or administration of the GST* 

'land' means that parcel or parcels of land which contains the biobank site as described in paragraph A of this agreement

'management action' means the actions to be carried out by the landowner on the biobank site to improve biodiversity values for which biodiversity credits may be created. Such actions are set out in of Annexure C. A reference to a management action includes a reference to refraining from doing anything, whether or not that thing was being done beforehand

'management of fire for conservation' means the controlled application of fire under specified environmental and weather conditions to a predetermined area and

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at the time, intensity and rate of spread required to attain planned improvement of biodiversity values

'management of grazing for conservation' is the implementation of a variable and adaptive stock grazing regime for improving biodiversity values, such as for controlling exotic weeds or vegetation biomass, or enhancing the competitiveness of native perennial species. Typically it involves short periods of intensive grazing between long periods of little or no grazing. Management of grazing for conservation differs with site condition, specific management goals, seasonal conditions and regions

'management payments' means the payments to be made to the landowner in accordance with the payment schedules and the requirements in Annexure E

'management plans' means the management plans to be implemented by the landowner in carrying out the management actions and included in Section 3 and Section 4 of Annexure C (or such other management plans as approved by the Chief Executive in accordance with the provisions of Annexure C)

'management zone' means those areas of the biobank site identified on the map entitled Map 3, Management zones; Broulee biobank site dated 27/02/2014 and included in Annexure A

'maximum operational surplus' has the same meaning as in clause 33(2) of the BioBanking Regulation

'Minister' means the Minister for the time being administering the Act and where not repugnant to the context includes the servants and agents of the Minister

'native animal' has the same meaning as in section 5 of the NPW Act

'native plant' has the same meaning as in section 5 of the NPW Act

'native vegetation' has the same meaning as in section 6 of the NV Act

'NPW Act' means the National Parks and Wildlife Act 1974 and any regulations from time to time in force thereunder

'NV Act' means the Native Vegetation Act 2003 (NSW)

'OEH' means the Office of Environment and Heritage

'ongoing' in relation to the timing of carrying out a management action means commencing on the commencement date or first payment date (as indicated) and continuing in perpetuity, unless specified otherwise

'operational deficit' has the same meaning as in clause 31(2) of the BioBanking Regulation

'operational deficit threshold' has the same meaning as in clause 32(2) of the BioBanking Regulation

'operational surplus' has the same meaning as in clause 31(3) of the BioBanking Regulation

'owner' has the same meaning as in section 127(1) of the Act and includes successors in title referred to in section 127J of the Act

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'party' means a party to this agreement

'payment schedules' means the tables entitled 'payment schedule' and 'in perpetuity management costs' included in Annexure E

'pesticide' has the same meaning as in section 5 of the Pesticides Act 1999 which includes herbicides, insecticides, fungicides, baits and rodenticides

'plant' has the same meaning as in section 4 of the Act

'planting schedule' means the schedule at item 6.6 of Section 1, Annexure C

'processing fee' means the processing fee which is to accompany an application to enter into a biobanking agreement as required by clause 14 of the BioBanking Regulation

'record keeping requirements' means those record keeping requirements set out in item 3 of Annexure D

'regrowth' has the same meaning as in section 9 of the NV Act

'relevant biobank site account' means the biobank site account within the BioBanking Trust Fund kept by the Fund Manager in accordance with clause 30(1) of the BioBanking Regulation

'remnant native vegetation' has the same meaning as in section 9 of the NV Act

'sensitive threatened species' means any threatened species, populations or ecological communities or any critical habitat (or any area or areas of land proposed to be identified as critical habitat), information relating to the location of which must not be made available to the public on a register kept under Part 7A of the Act, as required by clause 48(1)(a) or (b) of the BioBanking Regulation

'threatened species, populations and ecological communities' and 'threatened species, population or ecological community' have the same meaning as in the Act

'Total Fund Deposit' has the same meaning as in clause 26(1) of the BioBanking Regulation

'waste' has the same meaning as in the Protection of the Environment Operations Act 1997.

- 1.2 A word or expression that indicates one or more particular genders shall be taken to indicate every other gender. A reference to a word or expression in the singular form includes a reference to the word or expression in the plural form, and vice versa.
- 1.3 Any reference to an action, or carrying out an action, includes a reference to doing anything or refraining from doing anything.
- 1.4 Any reference to a person shall be deemed to include a corporate body and vice versa.
- 1.5 Any covenant or agreement on the part of two or more persons shall be deemed to bind them jointly and severally.

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- 1.6 The schedules and Annexures to this agreement form part of this agreement.
- 1.7 Any notes included in the agreement do not form part of the agreement.

# 2. Status of this agreement

The parties agree that this agreement is a biobanking agreement within the meaning of section 127D of the Act.

### 3. Use of the biobank site

The landowner covenants with the Minister as follows:

#### General responsibilities

3.1 Except as otherwise permitted by this agreement, the landowner must not carry out any act or omit to carry out any act, or cause or permit any act to be carried out or any act not to be carried out which act or omission may harm biodiversity values on the biobank site, including but not limited to any native animals, native plants, threatened species, populations and ecological communities, and their habitats.

Note: The clearing of native vegetation that is otherwise permissible in accordance with the NV Act (whether it is permissible under a Property Vegetation Plan, routine agricultural management activity (as defined under the NV Act), or is otherwise permitted under Part 3 of that Act) can only be carried out on the biobank site to which this agreement applies if it is also permissible under this agreement. Item 5.1 of the management actions contained in Section 1 of Annexure C of this agreement sets out the limited circumstances in which native vegetation can be cleared on the blobank site. Annexure C of this agreement also contains limited exceptions in relation to when a landowner is not required to comply with the management actions contained in Annexure C.

#### **Cultural** heritage

3.2 To avoid any doubt, nothing in this agreement is to be construed as authorising (including, but not limited to, by way of a consent, permit, approval or authorisation of any kind for the purposes of Part 6 of the NPW Act) any person to damage or to cause or permit damage to an Aboriginal object or Aboriginal place in, on or under the biobank site.

# Obtaining of consents, permits and authorisations

3.3 The landowner is responsible for obtaining all necessary licences, consents, authorisations, permits or approvals in order to lawfully comply with and carry out its obligations under this agreement or to undertake or enable any other identified matter under clause 3.5 and/or clause 3.6.

#### Development

- 3.4 The landowner must not carry out, or cause or permit to be carried out, any development (as defined under clause 1 above) on the biobank site, unless the development:
  - 3.4.1 is permitted or required under Annexure C, or

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3.4.2 is identified in the table entitled 'Permissible development on the biobank site' contained in clause 3.5 or identified in the table entitled 'Permissible human activities on the biobank site' contained in clause 3.6.

#### Permissible development

3.5 The landowner shall be permitted to carry out, or cause or permit to be carried out, the development specified in the following table in the management zone specified in the table.

| Description of development  | Management zone/s |
|---|-------------------|
| Note: 'development' and 'activity' (which is part of the definition of development' for the purposes of this agreement) are defined in the Environmental Planning and Assessment Act 1979.  |                   |
| Any development within the meaning of section 127(1) of the Act reasonably considered necessary to remove or reduce an imminent risk of serious personal injury or damage to property.  | All zones         |
| Any development permitted or required as part of a management action under Annexure C, including but not limited to maintaining existing access tracks on the biobank site, building shed/s to store weed control chemicals or other pesticides on the biobank site, building fences to manage stock on the biobank site and building structures to restore natural water flow regimes. | All zones         |
| Maintenance of roads and tracks as marked on Map 6 Access and<br>Infrastructure; Broulee biobank site for emergency, public utility and<br>maintenance access.  | All zones         |
| The construction of bollards and fencing for the purpose of controlling access.   | All zones         |
| Maintenance of existing tracks as marked on Map 6 Access and<br>Infrastructure; Broulee biobank site to a maximum width of 6m.  | All zones         |
| Maintenance of beach access control fencing to a maximum width of 1m  | Cst               |
| Maintenance of boundary fencing to a maximum width of 3 metres.   | All zones         |
| Construction of erosion control beach access as marked on Map 6<br>Access and Infrastructure; Broulee biobank site to a maximum width<br>of 4m.   | Cst               |
| Maintenance of powerline easements as marked on Map 6 Access and Infrastructure; Broulee biobank site to a maximum width of 12.5m on either side from the centre line for 11KV up to and including 33 kV and a maximum width of 5m on either side from the centre line for up to 11kV.  |                   |
| The landholder is to ensure that any trimming of vegetation for aviation safety purposes in any management zone is to no more   | Fst, Zones A - E  |

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than height(s) specified in the Bengello Masterplan 2007 and Broulee Biodiversity Certification Strategy 2013 (Map 7 Airport Vegetation Management Zones; Broulee biobank site). Pruning actions must employ best environmental practice and have regard for key threatening processes, ecological communities and threatened species and their habitats as listed under the Threatened Species Conservation Act 1995.

In the event that the landholder wishes to extend the Moruya Airport runway, written approval must be obtained from the Office of Environment and Heritage prior to any extension, within the biobank, of the trimming area or changes to the pruning heights for aviation safety purposes (as described in the Bengello Masterplan 2007 and Broulee Biodiversity Certification Strategy 2013, see Map 7 Airport Vegetation Management Zones; Broulee biobank site).

#### Permissible human activities

3.6 Notwithstanding clause 3.1, the landowner may carry out or cause or permit to be carried out any human activities specified in the following table, in the management zone specified in the table.

| Description of human activities  | Management zone/s |
|--|-------------------|
| Any human activity reasonably considered necessary to remove or reduce an imminent risk of serious personal injury or damage to property.  | All zones         |
| Any activity or any development permitted or required as part of a management action under Annexure C, including but not limited to mustering stock or feral herbivores including with mechanised vehicles, spraying or mechanically removing weeds, planting tubestock or sowing seeds of native vegetation, using drip torches, thinning native vegetation, disturbing soil temporarily to control erosion, encouraging regeneration, controlling nutrients or restoring natural flow regimes, laying baits, trapping or otherwise controlling vertebrate pests and feral herbivores and overabundant native herbivores. |                   |
| Traditional Aboriginal cultural activities, except commercial activities.  | All zones         |
| Existing low impact passive recreational uses such as bushwalking and cycling.   | All zones         |
| Ecotourism activities such as guided nature walks and spotlighting.  | All zones         |
| Ecological, geomorphic and coastal research activities.  | All zones         |
| Any activity permitted by this agreement   | All zenes         |

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### 4. Management actions and management plans

- 4.1 The landowner must carry out or procure the carrying out of the management actions in accordance with the timing, manner and requirements of Annexure C.
- 4.2 The landowner must:
  - i. implement or procure the implementation of; and
  - ii. comply or procure the compliance with

the management plans in accordance with the timing, manner and requirements of Annexure C.

Note: The management actions listed in Annexure C include requirements to take certain action and requirements to refrain from taking certain action.

- 4.3 Unless otherwise indicated by Annexure C, the landowner must ensure that
  - i. the management actions to be carried out in accordance with clause 4.1; and
  - ii.the management plans to be implemented and complied with in accordance with clause 4.2

are carried out in perpetuity, commencing from the date indicated in Annexure C.

4.4 The landowner's obligations under this clause are subject to clause 12.4 of this agreement.

#### 5. Total Fund Deposit

For the purpose of clause 26 of the BioBanking Regulation, the Total Fund Deposit for this biobank site is \$3,217,644 excluding GST, determined in accordance with Part 6 of the BioBanking Regulation.

Note: Part 6 of the BioBanking Regulation prescribes the amount that must be deposited in the BioBanking Trust Fund before the first transfer (or retirement without transfer) of each biodiversity credit can be registered. The prescribed amount is the Total Fund Deposit, or proportion thereof if a partial sale of credits is made. The Total Fund Deposit is the present value of the total of all management payments listed under this agreement, as determined by the Chief Executive.

#### 6. Biodiversity credits

- 6.1 The Chief Executive is permitted under section 127W(4) of the Act, to create (without application by the landowner under section 127W(4) of the Act) the biodiversity credits listed in Annexure B on the commencement date.
- 6.2 The biodiversity credits listed in Annexure B will be created for the biobank site.
- 6.2 The biodiversity credits listed in Annexure B will be created for the biobank site.
- 6.3 At the commencement date, the landowner is entitled to receive \$0, to be satisfied in full by the creation of the biodiversity credits listed in Annexure B.

Note: \$0 is a best estimate of the market value of the biodiversity credits at the time of creation. The market value has been estimated by reference to the notional Part B amount as determined by the landowner in the credit pricing spreadsheet or reference to the notional Part B amount for the last traded biodiversity credit of the same or similar type.

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The Part B amount is that part of the sale price received by the landowner (or another landowner if reference is made to a previous sale of that biodiversity credit type) after the entire Total Fund Deposit is satisfied and deposited into the BioBanking Trust Fund.

The sale price of each biodiversity credit will be negotiated between the landowner and the buyer and will be affected by supply and demand for each biodiversity credit. The final price at the time of transfer of the biodiversity credit (or retirement or the biodiversity credit without transfer) may not reflect this estimated amount.

The Minister does not warrant that the landowner will be able to sell biodiversity credits for the estimated market value.

# 7. Monitoring, record keeping and reporting

- 7.1 The landowner must comply with the monitoring and record keeping requirements as set out in Annexure D.
- 7.2 The landowner must submit an annual report complying with the requirements set out in Annexure D to the Chief Executive within the timeframe specified in Annexure D.
- 7.3 The landowner must notify the Chief Executive in writing as soon as practicable after becoming aware of any failure to comply with this agreement or any other incident at the biobank site (or surrounds) which results or may result in a sudden or significant decline of biodiversity values at the biobank site. In particular, the landowner must notify the Chief Executive of:
  - 7.3.1 the nature, location and time of the incident
  - 7.3.2 the impact of the incident on biodiversity values
  - 7.3.3 the measures that have been taken or will be taken in response to the incident
  - 7.3.4 any provision of this agreement which may have been breached
  - 7.3.5 the extent of any damage caused or permitted by the incident
  - 7.3.6 the measures which have been taken or will be taken to prevent a recurrence of the incident.

# 8. Use of the land by servants, agents, lessees or licensees

The landowner must incorporate all relevant requirements of this agreement in any lease or licence issued for the biobank site, and must at all times ensure that any servant, contractor, consultant, agent, lessee or licensee occupying the biobank site area shall be aware of, and not undertake any act inconsistent with, the landowner's obligations under this agreement.

# 9. Change of land ownership or subdivision of land

9.1 The landowner must notify the Chief Executive in writing of any change of:ownership of the biobank site, or any part thereof, within seven (7) days after the change of ownership of the biobank site; or lessee of the biobank site, or any part thereof, within twenty eight (28) days after the change of lessee or

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licensee of the biobank site. The notice must include the name and address and other relevant contact details of the new landowner, lessee or licensee.

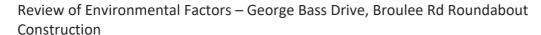
- 9.2 The landowner must provide a copy of this agreement, including a copy of each management plan and a copy of all records required to be kept under the record keeping requirements, to the transferee before completion of the assignment, transfer, disposal or sale of any interest in the biobank site.
- 9.3 The landowner must notify the Chief Executive in writing no less than 14 days before the biobank site is subdivided.
- 9.4 The landowner cannot assign, transfer, dispose of or sell its rights, title or interest in part of the land containing any area of the biobank site unless the landowner and the Minister have first agreed to vary the agreement to apportion the obligations and rights under the agreement in respect of that part of the biobank site that will be assigned, transferred, disposed of or sold.

# 10. Right to enter biobank site for research and monitoring

- 10.1 The landowner must permit access to the biobank site at any time to the Minister, the Chief Executive, an authorised officer or an officer of OEH for the purpose of carrying out research or monitoring in relation to the biodiversity values on the biobank site for which biodiversity credits have been created under this agreement, but only where the person has given reasonable notice to the landowner and the landowner's agent, lessee or licensee, of the intention to enter the biobank site for that purpose and the nature of the research or monitoring that will be conducted. In exercising its right of access under this clause, the Minister, the Chief Executive, an authorised officer or an officer of OEH must ensure that such access does not:
  - 10.1.1 result in physical or radio interference which obstructs, interrupts or impedes the use or operation of any telecommunications network and telecommunications service of a lessee or licensee of a part of the land; or
  - 10.1.2 interfere with the electricity supply separate from the landowner's electricity supply to any part of the land occupied by a lessee or licensee.
- 10.2 The Minister, Chief Executive, an authorised officer or an officer of OEH may make a written request to the landowner to consent to any other person specified in the written request to enter the biobank site for the purpose of carrying out the research or monitoring referred to in clause 10.1, whether or not that person will accompany the Minister, Chief Executive, an authorised officer or an officer of OEH. The landowner will not unreasonably withhold consent.
- 10.3 Clauses 10.1 and 10.2 do not affect or limit the powers of authorised officers under the NPW Act to enter premises for the purpose of determining whether there has been compliance with, or contravention of, this agreement.

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#### 11. Agreement preparation expenses

Each party bears its own costs in connection with the preparation and execution of this agreement.

### 12. Obligations of the Minister

- 12.1 Subject to clauses 12.2 and 12.3 and starting from the first payment date, the Minister is required to direct the Fund Manager to make such management payments specified in the payment schedules from the relevant biobank site account to the landowner, at such intervals specified in the payment schedules.
- 12.2 The Minister may only make such a direction if:
  - 12.2.1 the relevant biobank site account has sufficient funds to cover the management payment, and
  - 12.2.2 the landowner has submitted the annual report for the preceding reporting period in accordance with clause 7.2 and Annexure D of this agreement, and
  - 12.2.3 the Minister has reviewed the annual report for the preceding reporting period and is satisfied that the landowner has complied with their obligations set out in this agreement in the preceding period.
- 12.3 The landowner acknowledges that the Minister may, with the agreement of the landowner, direct that the management payments should not be made, or should be reduced, for a specified period of time or until further notice if the biobank site account has an operational deficit greater than the operational deficit threshold.
  - Note: Withholding or lowering payments when funds in the account are below the maximum operational deficit may help to preserve the long-term financial viability of the fund for the landowner.
- 12.4 If the Minister, with the agreement of the landowner, directs that management payments be reduced or not be made for a specified period of time or until further notice, then:
  - 12.4.1 the Minister may, by written agreement with the landowner, suspend or vary any of the landowner's obligations to carry out management actions under this agreement for the same period of time or some other period, and
  - 12.4.2 despite clause 4 of this agreement, the landowner's obligations to carry out management actions under this agreement are suspended or varied in accordance with the agreement.

The Minister must not agree to any variation or suspension under this clause unless satisfied that the variation or suspension does not have a negative impact on the biodiversity values protected by the agreement.

12.5 The landowner acknowledges that the Minister may, in addition to the management payments, direct additional payments to be paid from the BioBanking Trust Fund to the landowner, but only in circumstances where the biobank site account has an operational surplus, the operational surplus amount exceeds the maximum operational surplus for the biobank site account, and the amount the Minister directs

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to be paid does not exceed the difference between the operational surplus amount and the maximum operational surplus.

12.6 All management payments shall be paid into the bank account nominated by the landowner in accordance with the payment schedules.

# 13. Ownership of the land and registration of this agreement

- 13.1 The landowner represents and warrants to the Minister that as at the date of this agreement it is:
  - 13.1.1 the legal and beneficial owner of the land; or
  - 13.1.2 legally and beneficially entitled to become the owner of the land and will become the legal and beneficial owner of the land, prior to the date that this agreement is to be registered under clause 13.2 of this agreement.
- 13.2 As contemplated by section 127I(1) of the Act, the Minister agrees to notify the Registrar General when this agreement has been entered into, varied or terminated so the Registrar General can register the agreement, variation or termination by making an entry concerning the agreement, variation or termination in the relevant folio of the Register kept under the Real Property Act 1900 (NSW) for the land.
- 13.3 The fee to register the agreement in accordance with section 127I(1) of the Act will be taken from the processing fee, except as provided by clause 13.4.
- 13.4 If the landowner elects to identify the exact boundaries of the biobank site on the Deposited Plan for the land, the landowner must bear any additional costs of registration.

#### 14. Variation and termination

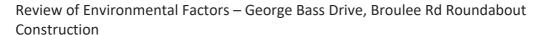
- 14.1 Subject to clause 14.2, this agreement can only be varied or terminated in accordance with the Act.
- 14.2 The landowner waives any right to request voluntary termination in accordance with subsections 127G(5) and (6) of the Act.
- 14.3 This clause does not affect the ability of the Minister and the landowner to terminate this agreement by consent under section 127G(2)(a) of the Act (including in the circumstances described in subsection 127G(6) of the Act).

Note: Clause 14.2 ensures that the landowner can obtain Commonwealth Government tax advantages that apply to conservation covenants. Those tax advantages would not be available if the right to request termination of the agreement under subsections 127G (5) and (6) of the Act was available.

Subsections 127(5) and (6) of the Act give landowners the right to request termination of the agreement where credits are not sold within 3 months or after 5 years of entering the agreement. The effect of clause 14.2 is that the landowner gives up that right. This is essential as the tax advantages are only available where the Commonwealth Government has conferred conservation covenant status on biobank sites — and a requirement of this status is that the sites will operate permanently.

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#### 15. Indemnity and release

- 15.1 The landowner agrees to indemnify the protected persons against all expenses, losses, damages and costs that the protected person may sustain or incur as a result, whether directly or indirectly, of carrying out obligations under this agreement.
- 15.2 The indemnity given by the landowner does not cover any loss or damage that is caused by a negligent act or omission of the protected persons, or any loss or damage that is contributed to by a negligent act or omission of the protected persons to the extent of the protected persons' contribution to that loss or damage.
- 15.3 The landowner releases to the full extent permitted by law the protected persons from all claims and demands arising out of or in connection with, or as a consequence of, carrying out of obligations by the landowners under this agreement, or in connection with, or as a consequence of, a direction made by the Minister regarding the payment of management payments to the landowner under this agreement.
- 15.4 The release given by the landowner does not cover any claims and demands in respect of any loss or damage that is caused by a negligent act or omission of the protected persons, or any loss or damage that is contributed to by a negligent act or omission of the protected persons to the extent of the protected persons' contribution to that loss or damage.
- 15.5 It is immaterial to the obligations of the landowner under this clause that a claim or demand arises out of any act, event or thing that the landowner is authorised or obliged to do under this agreement or that any time waiver or other indulgence has been given to the landowner for any such obligation under this agreement.

#### In clauses 15.1-15.4:

- (i) 'protected person' means:
  - (a) the Minister
  - (b) the Chief Executive
  - (c) the employees or officers of the Office of Environment and Heritage
  - (d) any other person acting under the direction or control of the Minister or Chief Executive for any purpose
  - (e) the Crown in right of the State of New South Wales;
- (ii) 'claims and demands' means all actions, suits, claims, demands, proceedings, losses, compensation, damages, sums of money, costs, legal costs, charges, and expenses to which the protected persons are or may become liable for in respect of loss or damage to the fixtures of the biobank site, financial or economic loss, loss of opportunity or other consequential loss of the landowner, and injury of any kind to or death of any person claiming through the landowner and however sustained on or outside the biobank site.

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#### 16. Dispute resolution

- 16.1 Where there is a dispute, difference or claim (dispute), the party raising the dispute must notify the other party in writing of the nature of the dispute, including the factual and legal basis of the dispute.
- 16.2 Within 14 days of the written notice, the Chief Executive and the landowner, or nominated senior representatives of the parties, must confer to attempt to resolve the dispute, and if the dispute cannot be resolved within twenty-one (21) days of the written notice, the Chief Executive and the landowner will refer the matter to mediation.
- 16.3 The parties will agree on the terms of appointment of the mediator and the terms of the mediation in writing within twenty-eight (28) days, failing which the mediation will be at an end and either party may commence court proceedings in respect of the dispute, difference or claim.
- 16.4 If the matter has not been resolved within 28 days of the appointment of the mediator, the mediation process will be at an end and either party may commence court proceedings in respect of the dispute, difference or claim.
- 16.5 Notwithstanding the above clauses, the Minister, the Chief Executive or a person duly authorised by the Chief Executive, may enforce this agreement under the Act, or institute proceedings without first entering into the dispute resolution procedure set out in clauses 16.1, 16.2, 16.3, and 16.4.
- 16.6 Clause 10.1 of this agreement is not affected by these arrangements for dispute resolution.

#### 17. Governing law

This agreement is governed by the laws of the State of New South Wales and the parties agree to submit to the jurisdiction of the courts of that State.

#### 18. Commencement

This agreement shall have effect from the day it is executed by all parties.

#### 19. Privacy statement

The landowner acknowledges and consents to the information contained in this agreement being made publicly available on the biobanking agreements register and, where biodiversity credits have been registered, on the biobanking credits register maintained by the Chief Executive and made available on the web.

Note: In accordance with the *Privacy and Personal Information Protection Act 1998* and the Act, some of the information contained in this agreement cannot be made available to the public.

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# 20. Exercise of Minister's and Chief Executive's powers

- 20.1 The landowner acknowledges that the Minister may authorise any officer of OEH to exercise any of the Minister's functions under this agreement on the Minister's behalf.
- 20.2 The landowner acknowledges that the Chief Executive may authorise any officer of OEH to do any thing that the Chief Executive authorises for the purposes of this agreement.

#### 21. Notices

21.1 Any notice, consent, information, application or request that must or may be given or made to a party is only given or made if it is in writing and delivered or posted to that party at its address set out below, or faxed to that party at its fax number set out below:

#### The Minister

Address

Office of Environment and Heritage

PO Box A290

SYDNEY SOUTH NSW 1232

Fax

(02) 9995 6795

Attention (nominated officer)

Senior Team Leader, Ecosystems and Threatened

Species, Environmental Programs Branch

#### Landowner

Address

PO Box 99, Moruya NSW 2537

Fax

02 4474 1234

Attention

Dr Catherine Dale

- 21.2 The name or title of the nominated officer or the address for the Minister referred to in clause 21.1 above may be updated from time to time by a further written notice being sent to the landowner by an officer of OEH advising of the new officer (or title of an office) and address to which such documents, information or notification may be sent.
- 21.3 For the avoidance of doubt, this clause does not fetter the Minister or Chief Executive's discretion to give or withhold from giving such notice, consent or permission.

#### Agreement annexures

Annexure A Maps of biobank site

Annexure B Biobanking Agreement Credit Report

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# Biodiversity Banking and Offsets Scheme

### Biobanking agreement

ID number 153

Annexure C Management actions and management plans

Annexure D Monitoring, reporting and record keeping requirements

Annexure E Payment schedules

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| Biobanking agreement   | ID number 153  |
|--|--|
|  | TB III III III   |
| n witness where of the parties hereto  | have executed this agreement the day and year  |
| Signed by Robert Stokes, Minister for the Environme the State of New South Wales, being the Madministering the Threatened Sp Conservation Act 1995 in the presence of: | Robert Stokes Date 19th September 2014   |
|  | Date 19th Schlember 2014   |
| John Stare   |  |
| Witness signature  |  |
| Date 19 September 2014   |  |
| Witness name Edward Thomas St  |  |
|  | ross Rd, Potts Point, NSW 2011   |
| None of the the landaumanta or directo   |  |
| Signed by the landowner/s or directo   |  |
| Signed by the landowner/s or directors   | Name of landowner/director signature   |
|  | Callerin Del   |
| Name of landowner/director signature   | Name of landowner/director signature Date 3/9/14- Full name & position   |
| Name of landowner/director signature  Date  Full name & position   | Name of landowner/director signature Date 3/9/14- Full name & position   |
| Name of landowner/director signature  Date   | Name of landowner/director signature Date 3/9/14- Full name & position  CATHERINE DAVE - GENERAL MANAGER In the presence of EUROBODALIA SHIRE CO.  |
| Name of landowner/director signature  Date  Full name & position  In the presence of   | Name of landowner/director signature Date 3/9/14- Full name & position  CATHERINE DAVE - CENTRAL MANAGER In the presence of EUROBODALIA SHIRE CO.  Witness signature   |
| Name of landowner/director signature  Date  Full name & position  In the presence of   | Name of landowner/director signature Date 3/9/14- Full name & position  CATHERINE DAVE - GENERAL MANAGER In the presence of EUROBODALIA SHIRE CO.  |
| Name of landowner/director signature Date Full name & position In the presence of Witness signature  | Name of landowner/director signature Date 3/9/14- Full name & position  CATHERINE DAVE - GENERAL MANAGER In the presence of EUROBODALIA SHIRE CO.  Witness signature   |
| Name of landowner/director signature Date Full name & position In the presence of Witness signature Date   | Name of landowner/director signature Date 3/9/14- Full name & position  CATHERINE DAVE GENERAL MWATER In the presence of EUROBODALLA SHIRE CO.  Witness signature Date 3/9/14-   |
| Name of landowner/director signature Date Full name & position In the presence of Witness signature Date Witness name  | Name of landowner/director signature Date 3/9/14- Full name & position  CATHERINE DAKE - GENERAL MANAGER In the presence of EUROSODALLA SHIRE CO.  Witness signature Date 3/9/14-  Witness name SHANNON E BURT                                   |
| Name of landowner/director signature Date Full name & position In the presence of Witness signature Date Witness name  | Name of landowner/director signature Date 3/9/14- Full name & position  CATHERINE DAVE - GENERAL MANNER In the presence of EURDBODALLA SHIRE CO  Witness signature Date 3/9/14-  Witness name SHANNON E BURT  Witness address 6 GLD FRINCES MINY |

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The Minister approves Annexure C and Annexure D as a property management plan prepared by the Landowner under the section 113B of the *Threatened Species Conservation Act 1995*.

Signed by

Robert Stokes, Minister for the Environment for the State of New South Wales, being the Minister administering the *Threatened Species* Conservation Act 1995 in the presence of:

Robert Stokes

Date 19+ September 2014

Witness signature

Date 19 September 2014

Witness name Edward Thomas Steane

Witness address 16/30-32 Kings Cross Rd, Potts Point, NSW 2011

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# Consent to a biobanking agreement under the Threatened Species Conservation Act 1995

I, Kevin Humphries, the Minister for Natural Resources, Lands and Water for the State of New South Wales being the Minister administering the Crown Lands Act 1989 consent to the attached biobanking agreement between the Minister administering the Threatened Species Conservation Act 1995 and the owner/s of Part of Lot 8 DP 258299,

Kevin Humphries

Date

In the presence of

Witness signature

Date

8/10/14

Witness name Nicholas Sauces

Witness address

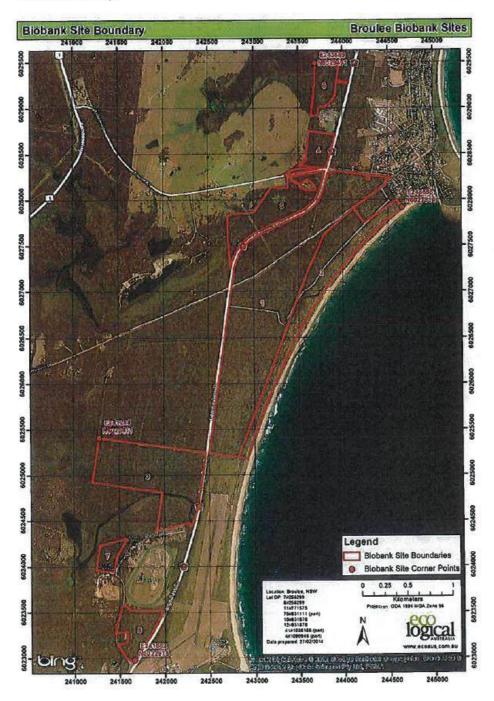
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#### Annexure A: Maps of biobank site

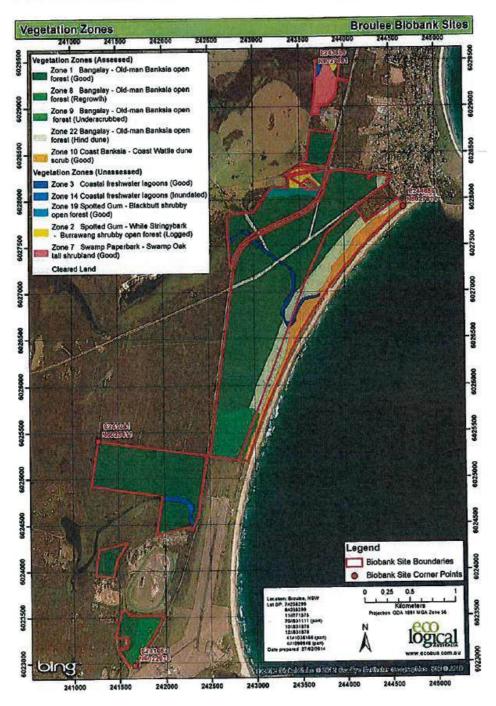


Map 1 Biobank site boundary; Broulee biobank site

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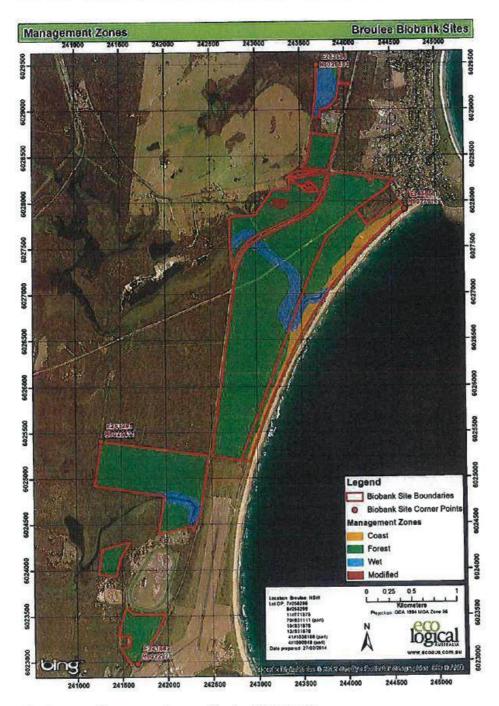


Map 2 Vegetation zones; Broulee biobank site

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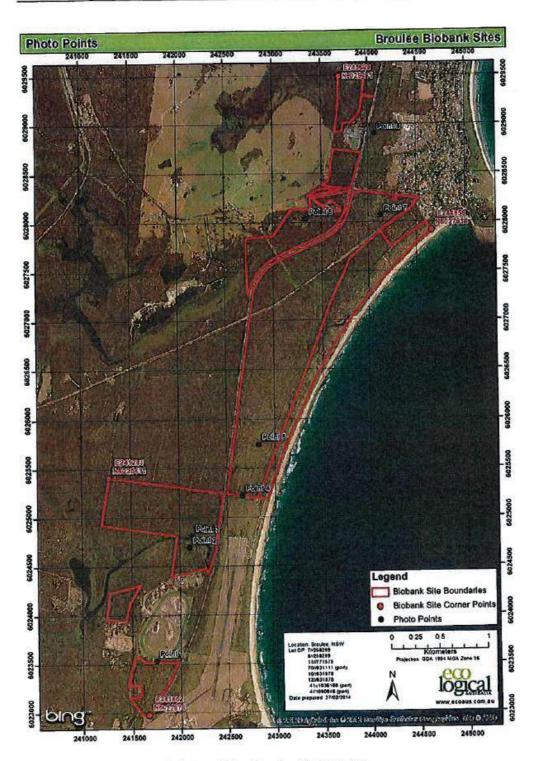
Map 3 Management zones; Broulee biobank site

(Coast: MZ\_Cst, Forest: MZ\_Fst, Wet: MZ\_Wet, Modified: MZ\_Mod)

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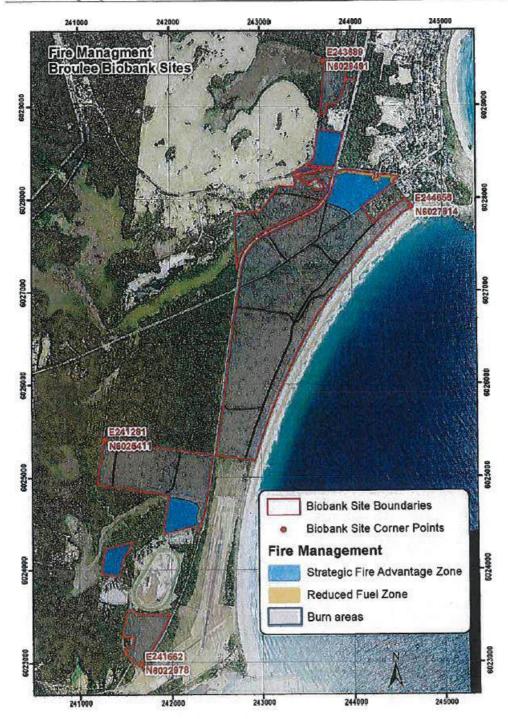


Map 4 Location of photo points; Broulee biobank site

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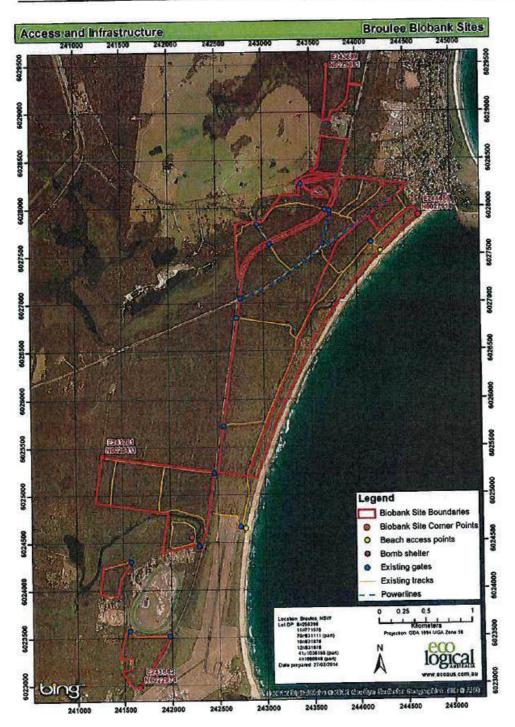


Map 5 Fire management; Broulee biobank site

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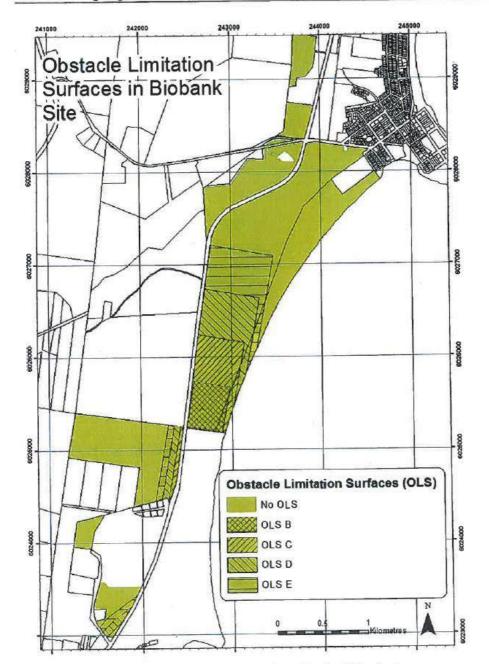


Map 6 Access and Infrastructure; Broulee biobank site

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Map 7 Airport Vegetation Management Zones; Broulee biobank site (Maximum Vegetation Heights Permissible: Zone A: 0 - 5m, Zone B: 0 - 9m, Zone C: 9 - 15m, Zone D: 19 - 29m, Zone E: 29 - 34m)

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# Annexure B: Biobanking Agreement Credit Report

# BioBanking credit report



| Tool version: v2.1 |
|--------------------|
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# **Ecosystem credits summary**

| Vegetation Type  | Area<br>(ha) | Credits created | Final Credits<br>(10% discount) |
|--|--------------|-----------------|---------------------------------|
| Bangalay Old man Banksia open forest on coastal sands, Sydney Basin and South East Corner                                  | 162.7        | 1337.4          | 1337.4                          |
| Bangalay Old man Banksia open forest on coastal sands, Sydney Basin and South East Corner (10% discount)                   | 175.6        | 1443.4          | 1299                            |
| Coast Banksia - Coast Wattle dune scrub, Sydney<br>Basin and South East Corner   | 25.0         | 226.0           | 226                             |
| Coastal freshwater lagoons of the Sydney Basin and South East Corner   | 7.4          | 50.5            | 50.5                            |
| Coastal freshwater lagoons of the Sydney Basin and South East Corner (10% discount)  | 5.5          | 37.5            | 33.8                            |
| Spotted Gum - Blackbutt shrubby open forest on the coastal foothills, southern Sydney Basin and northern South East Corner | 4.9          | 41.0            | 41.0                            |
| Spotted Gum - White Stringybark - Burrawang shrubby<br>open forest on hinterland foothills, northern South East<br>Corner  | 5.1          | 41.0            | 41.0                            |
| Swamp Paperbark - Swamp Oak tall shrubland on estuarine flats, Sydney Basin and South East Corner                          | 9.8          | 58.0            | 58.0                            |
| Total  | 396.00       | 3236            | 3086.7                          |

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#### **Credit Profiles**

1. Spotted Gum - Blackbutt shrubby open forest on the coastal foothills, southern Sydney Basin and northern South East Corner, (SR641)

Number of ecosystem credits created

36

CMA sub-region

Bateman

Minimum percent native vegetation cover class

31-70%

Minimum adjacent remnant area class

>100 ha

2. Spotted Gum - White Stringybark - Burrawang shrubby open forest on hinterland foothills, northern South East Corner, (\$R643)

Number of ecosystem credits created

41

CMA sub-region

Bateman

Minimum percent native vegetation cover class

31-70%

Minimum adjacent remnant area class

>100 ha

3. Bangalay - Old-man Banksia open forest on coastal sands, Sydney Basin and South East Comer, (SR512)

Number of ecosystem credits created

2,785

CMA sub-region

Bateman

Minimum percent native vegetation cover class Minimum adjacent remnant area class. 31-70% >100 ha

4. Coast Banksia - Coast Wattle dune scrub, Sydney Basin and South East Corner, (SR531)

Number of ecosystem credits created

228

CMA sub-region

Bateman

Minimum percent native vegetation cover class

31-70%

Minimum adjacent remnant area class

>100 ha

5. Coastal freshwater lagoons of the Sydney Basin and South East Comer, (\$R536)

Number of ecosystem credits created

80

CMA sub-region

Bateman

Minimum percent native vegetation cover class

Minimum percent native vegetation cover class

31-70% >100 ha

6. Swamp Paperbark - Swamp Oak tall shrubland on estuarine flats, Sydney Basin and South East Corner, (SR651)

Number of ecosystem credits created

Minimum adjacent remnant area class

5.5

CMA sub-region

Bateman 31-70%

Minimum adjacent remnant are a class

>100 ha

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ID number 153

# Species credit summary

| Common name          | Scientifio name      | Extent of impact<br>Ha or individuals | Number of<br>species credits<br>created |
|----------------------|----------------------|---------------------------------------|---|
| White-footed Dunnart | Sminthopsis leucopus | 405.40                                | 2,432                                   |

# **Additional management actions**

Additional management actions are required for:

| Vegetation type or threatened species  | Management action details                           |
|--|---|
| Bangalay - Old-man Banksia open forest on coastal sands, Sydney Basin and South East Corner                                      | Exclude miscellaneous feral species                 |
| Bangalay - Old-man Banksia open forest on coastal sands, Sydney Basin and South East Corner                                      | Feral and/or over-abundant native herbivore control |
| Bangalay - Old-man Banksia open forest on coastal<br>sands, Sydney Basin and South East Corner                                   | Fax control   |
| Bangalay - Old-man Banksia open forest on coastal<br>sands, Sydney Basin and South East Corner                                   | Maintain or re-introduce natural flow regimes       |
| Coast Banksia - Coast Wattle dune scrub, Sydney Basin<br>and South East Comer  | Exclude miscellaneous feral species                 |
| Coast Banksia - Coast Wattle dune scrub, Sydney Basin<br>and South East Corner   | Feral and/or over-abundant native herbivore control |
| Coast Banksia - Coast Wattle dune scrub, Sydney Basin<br>and South East Corner   | Fax central   |
| Coast Banksia - Coast Wattle dune scrub, Sydney Basin<br>and South East Comer  | Maintain or re-introduce natural flow regimes       |
| Coastal freshwater lagoons of the Sydney Basin and<br>South East Corner  | Control of feral pigs                               |
| Coastal freshwater lagoons of the Sydney Basin and<br>South East Corner  | Feral and/or over-abundant native herbivore control |
| Coastal freshwater lagoons of the Sydney Basin and<br>South East Corner  | Maintain or re-introduce natural flow regimes       |
| Spotted Gum - Blackbuit shrubby open forest on the<br>coastal foothills, southern Sydney Basin and northern<br>South East Comer  | Exolude miscellaneous feral species                 |
| Spotted Gum - Blackbutt shrubby open forest on the<br>coastal foothills, southern Sydney Basin and northern<br>South East Comer  | Feral and/or over-abundant native herbivore control |
| Spotted Gum - Blackbutt shrubby open forest on the<br>coastal foothills, southern Sydney Basin and northern<br>South East Corner | Fex control   |
| Spotted Gum - Blackbuit shrubby open forest on the<br>coastal foothills, southern Sydney Basin and northern<br>South East Corner | Maintain or re-introduce natural flow regimes       |
| Spotted Gum - White Stringybark - Burrawang shrubby<br>open forest on hinterland foothills, northern South East<br>Corner        | Exclude miscellaneous feral species                 |

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| Spotted Gum - White Stringybark - Burrawang shrubby<br>open forest on hinterland foothills, northern South East<br>Corner  | Feral and/or over-abundant native herbivore control |
|--|---|
| Spotted Gum - White Stringybark - Burrawang shrubby<br>open forest on hinterland foothills, northern South East<br>Corner  | Fox gentrel   |
| Spotted Gurn - White Stringybark - Burrawang shrubby<br>open forest on hinterland footbills, northern South East<br>Corner | Maintain or re-introduce natural flow regimes       |
| Swamp Paperbark - Swamp Oak tall shrubland on<br>estuarine flats, Sydney Basin and South East Corner                       | Feral and/or over-abundant native herbivore control |
| Swamp Paperbark - Swamp Oak tall shrubland on<br>estuarine flats, Sydney Basin and South East Corner                       | Fox control   |
| Swamp Paperbark - Swamp Oak tail shrubland on<br>estuarine flats. Sydney Basin and South East Corner                       | Maintain or re-introduce natural flow regimes       |
| White-footed Dunnart   | Feral and/or over-abundant native herbivore control |
| White-footed Dunnart   | Fox control   |

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# Annexure C: Management actions and management plans

This Annexure C, together with Annexure D, is approved as a property management plan prepared by the landowner under the section 113B of the Threatened Species Conservation Act 1995.

#### A Management actions

- A1 The landowner must undertake, or cause to be undertaken, the Management Actions contained in the following tables in this Annexure C:
  - (i) Section 1: Standard management actions ('Section 1'); and
  - (ii) Section 2: Additional management actions ('Section 2')

in accordance with the conditions specified in Section 1 and Section 2 and within the timeframes (if any) specified in Section 1 and Section 2.

- A2 In carrying out the management actions, the landowner must implement and, at all relevant times comply with, the management plans as contained in the following tables in this Annexure C:
  - (i) Section 3: Standard management plans ('Section 3'); and
  - (ii) Section 4: Additional management plans ('Section 4')

in accordance with the conditions specified in those tables and management plans and within the timeframes (if any) specified in Section 3 and Section 4.

- A3 Where a management action requires that something must not be done, the landowner must not do that thing and must not cause, authorise or permit any other person to do that thing.
- A4 Notwithstanding A1 and A2 above, the landowner is not required to undertake the management actions so described if the action is inconsistent with anything (act or omission) required or authorised to be done by the landowner by or under any of the following:
  - removal of noxious weeds under the Noxious Weeds Act 1993
  - II. the control of noxious animals under the Local Land Services Act 2013
- an obligation arising under an eradication order or pest control order under Part 10 of the Local Land Services Act 2013
- IV. a direction under section 37A of the State Emergency and Rescue Management Act 1989 in relation to a state of emergency or a direction under section 22A of the State Emergency Service Act 1989
- V. in respect of the Rural Fires Act 1997:
  - (a) an emergency fire fighting act within the meaning of that Act
  - (b) emergency bushfire hazard reduction work within the meaning of that Act

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ID number 153

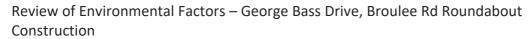
# Section 1: Standard management actions



| Standard management actions                     |  |                                  |
|---|--|----------------------------------|
| Item 1  | Management of grazing for conservation   | Timing                           |
| 1.1   | Stock must not be permitted to graze in any area of the biobank site.  | Ongoing from commencement date.  |
| 1.2   | This item is not applicable.   |                                  |
| 1.3   | This item is not applicable.   |                                  |
| 1.4   | If, at any time, the landowner observes stock in any area of the biobank site, other than an area on the biobank site where grazing is permitted, the landowner must take necessary measures to remove the stock from the area immediately.  | Ongoing from commencement date.  |
| Item 2  | Weed control   | Timing                           |
| 2.1   | The landowner must implement and, at all relevant times, comply with, the integrated weed management plan included in Section 3 ('the weed management plan') (or such updated integrated weed management plan as has been approved by the Chief Executive under item 2.2 below).   | Ongoing from first payment date. |
|   | To allow for adaptive management, minor alterations can be made to the implementation of the weed management plan. Any alterations must be recorded in writing in accordance with Section 3 of this Annexure.  |                                  |
| 2.2   | The weed management plan must be reviewed at intervals of no less than 4 years and no more than 6 years by an appropriately qualified person. The review is to consider the efficacy of the management actions in the plan and consider the effectiveness of the matters contained in the current plan that are outlined in the dot points below. Notification of the date of the review commencement must be provided to the Chief Executive in writing within 14 days of the commencement of the review. The findings of the review must be submitted to the Chief Executive within 3 months of commencing the review. | Ongoing from first payment date. |
| upo<br>land<br>land<br>Exe<br>not<br>req<br>qua | Where the Chief Executive determines from the review that an update of the plan is required, the Chief Executive will notify the landowner in writing that an update of the plan is required. The landowner must update the plan and submit it to the Chief Executive for approval within 3 months of receiving written notification from the Chief Executive that an update of the plan is required. The revised plan must be prepared by an appropriately qualified person and must cover the matters outlined below and any additional matters specified by the Chief Executive in writing:                           |                                  |
|   | <ul> <li>a description of the target weed/s at the biobank site and their<br/>location/s, linked to each management zone where weeds are<br/>present</li> </ul>  |                                  |
|   | the method/s of weed control in each zone  |                                  |

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- the frequency of weed control activities at the site, taking into account management practices where weeds are providing habitat for native species
- the timing of any planting of native plant species required in each management zone to provide alternative habitat for native species affected by weed control activities
- methods for monitoring the success of weed control activities
- a timetable/measures for inspections to identify new weed species or exotic plant species (including noxious weeds under the Noxious Weeds Act 1993)
- additional weed control activities to destroy or remove any new weed species that are found on the site
- measures for assessing and reporting monitoring results
- a diary for recording actions taken in accordance with the weed management plan and minor alterations to this plan permitted for adaptive management. The details (management zone/s, date, alternative action) and reasons for the minor alterations must be recorded in the diary.

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| Item 3 | Management of fire for conservation  | Timing                           |
|--------|--|----------------------------------|
| 3.1    | The landowner must implement, and at all relevant times, comply with the fire management plan included in Section 3 (or such updated fire management plan as has been approved by the Chief Executive under item 3.2 below) ('the fire management plan"). To allow for adaptive management and weather conditions, minor alterations can be made to the implementation of the fire management plan, and must be recorded in writing in accordance with Section 3 of this Annexure.   | Ongoing from first payment date. |
| 3.2    | The fire management plan must be reviewed at intervals of no less than 4 years and no more than 6 years by an appropriately qualified person. The review is to consider the efficacy of the management actions in the plan and consider the effectiveness of the matters contained in the current plan that are outlined in the dot points below. Notification of the date of the review commencement must be provided to the Chief Executive in writing within 14 days of the commencement of the review. The findings of the review must be submitted to the Chief Executive within 3 months of commencing the review. | Ongoing from first payment date. |
|        | Where the Chief Executive determines from the review that an update of the fire management plan is required, the Chief Executive will notify the landowner in writing that an update of the plan is required. The landowner must update the plan and submit it to the Chief Executive for approval within 3 months of receiving written notification from the Chief Executive that an update of the plan is required. The revised plan must be prepared by an appropriately qualified person and cover the matters outlined below and any additional matters specified by the Chief Executive in writing:                |                                  |
|        | the year the last fire went through, the type of fire and the extent of the fire and location, where known   |                                  |
|        | frequency of natural fires in the area of the biobank site, where known  |                                  |
|        | <ul> <li>a description of locations and management zones where<br/>ecological burns will be conducted and areas that will not be<br/>burnt</li> </ul>  |                                  |
|        | <ul> <li>the methods that will be used for ecological burns</li> </ul>   |                                  |
|        | <ul> <li>the fire frequency intervals recommended for the vegetation<br/>types and threatened species present, including any required<br/>adjustment to the schedule in the event of a wildfire or<br/>activities undertaken under the Rural Fires Act 1997 to ensure<br/>minimum frequency between ecological burns</li> </ul>  |                                  |
|        | the fire intensity for the recommended vegetation types  |                                  |
|        | the time of year suitable for ecological burns   |                                  |
|        | <ul> <li>the diary for recording actions taken in accordance with the<br/>fire management plan and minor alterations to fire<br/>management plan permitted for adaptive management. The<br/>details (management zone/s, date, alternative action) and<br/>reasons for the minor alterations must be recorded in the<br/>diary.</li> </ul>  |                                  |

|     | 0 U/V 10 00 \$1.5 - 10 U/V 10 U |                                 |
|-----|---|---------------------------------|
| 3,3 | Fires must not be lit on the biobank site other than for the purpose of ecological burning in accordance with the fire management plan or as permitted as a permissible human   | Ongoing from commencement date. |

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|        | activity on the biobank site under item 4 of this Annexure or clause 3.6 of this agreement.   |                                  |
|--------|---|----------------------------------|
| Item 4 | Management of human disturbance   | Timing                           |
| 4.1    | Except as permitted under clause 3 of this agreement or item 4.2 (below), human activities that adversely affect biodiversity values on the biobank site, including repeated disturbance of native animals, must not be carried out, or caused or permitted to be carried out, on the biobank site. | Ongoing from commencement date.  |
| 4.2    | Human activities that may have a negative impact on biodiversity values on the biobank site are permitted if they are listed as permissible activities under clause 3.6 of this agreement or if they are undertaken as part of the management actions or management plans.                          | Ongoing from commencement date.  |
| 4.3    | This item is not applicable.  |                                  |
| 4.4    | The landowner must not store, dispose of, or cause or permit to be disposed of, any waste on the biobank site.  Note: The storage or disposal of waste on the biobank site may require an approval under the <i>Protection of the Environment Operations Act</i> 1997.                              | Ongoing from commencement date.  |
| 4.5    | The landowner must take all reasonable steps to remove waste deposited by others on the biobank site, or which is otherwise present on the biobank site.  | Ongoing from first payment date. |
| 4.6    | Signage must be installed and maintained to deter human disturbance including waste dumping. Signage must be the BioBanking signs available from the OEH.  Specific requirements:   | Ongoing from first payment date. |
|        | Signage to be erected and maintained at priority access points.   | 14                               |

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| Item 5 | Retention of regrowth and remnant native vegetation  | Timing                                |
|--------|--|---------------------------------------|
|        | Note: An approval under the Native Vegetation Act 2003 may be required to carry out thinning or any other removal or damage to native vegetation under this item.  |                                       |
| 5.1    | Native vegetation (whether remnant native vegetation or regrowth) on the biobank site must not be cut down, felled, thinned, logged, killed, destroyed, poisoned, ringbarked, uprooted, burnt or otherwise removed, except in accordance with items 5.2 and 5.3 below, or if it is required as part of the management actions or it is essential for the carrying out of permissible development under clause 3.5 of this agreement.   | Ongoing from commencement date.       |
|        | Note: Native vegetation on the biobank site may be managed to improve biodiversity values by thinning to benchmark stem densities over no more than 80% of each management zone. Benchmark stem densities has the same meaning as defined in the Vegetation Benchmark Database as published by OEH and updated from time to time. An approval under the <i>Native Vegetation Act</i> 2003 may be required to carry out thinning or any other removal or damage to native vegetation under this item.   |                                       |
| 5.2    | Native vegetation on the biobank site must not be burnt except in accordance with the fire management plan prepared pursuant to item 3 above.  | Ongoing from<br>commencement<br>date. |
| 5.3    | The landholder is to ensure that any trimming of vegetation for aviation safety purposes in any management zone is to no more than height(s) specified in the Bengello Masterplan 2007 and Broulee Biodiversity Certification Strategy 2013 (Map 7 Airport Vegetation Management Zones; Broulee biobank site). Pruning actions must employ best environmental practice and have regard for key threatening processes, ecological communities and threatened species and their habitats as listed under the Threatened Species Conservation Act 1995. | Ongoing from commencement date.       |
|        | In the event that the landholder wishes to extend the Moruya Airport runway, written approval must be obtained from the Office of Environment and Heritage prior to any extension, within the biobank, of the trimming area or changes to the pruning heights for aviation safety purposes (as described in the Bengello Masterplan 2007 and Broulee Biodiversity Certification Strategy 2013, see Map 7 Airport Vegetation Management Zones; Broulee biobank site).   |                                       |
| Item 6 | Replanting or supplementary planting where natural regeneration will not be sufficient   | Timing                                |
| 6.1    | This item is not applicable  |                                       |
| 6.2    | This item is not applicable  |                                       |
| 6.3    | This item is not applicable  |                                       |
| 6.4    | This item is not applicable  |                                       |
| 6.5    | This item is not applicable  |                                       |

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| Item 7 | Retention of dead timber  | Timing  |
|--------|---|---|
| 7.1    | Dead timber (whether standing or fallen and including branches and leaf litter) must not be removed from or moved within the biobank site.  | Ongoing from commencement date.                               |
| 7.2    | Timber from outside the biobank site may be introduced to and placed on the biobank site to improve biodiversity values. Once the timber has been brought onto the site, it is subject to the requirements of item 7.1 above.  Timber brought from outside the biobank site must be documented by the landowner in writing and records must be kept in accordance with the record keeping requirements. The landowner must record the approximate amount of timber brought from outside the biobank site, the location where the timber was placed on the biobank site and the date on which it was placed (month, year). | When required but not required before the first payment date. |
| Item 8 | Erosion control   | Timing  |
| 8.1    | All reasonable steps must be undertaken to prevent, control and remedy erosion on the biobank site.  Soil management for preventing and controlling erosion is to be undertaken using best practice management, such as that developed by the Soil Conservation Service, applied as relevant for the biobank site.  | Commencing from first payment date.                           |
| Item 9 | Retention of rocks  | Timing  |
| 9.1    | The landowner must not remove, or cause or permit to be removed, rocks from the biobank site or move, or cause or permit to be moved, rocks within the biobank site.  | Ongoing from commencement date.                               |
| 9.2    | Rocks from outside the site may be placed on the biobank site to improve habitat for threatened species. Rocks, once placed on the biobank site, are subject to item 9.1 above. The landowner must make and retain records of the location of the rocks placed on the site and the date the rocks were brought onto the site in accordance with the record keeping requirements.  | payment date.   |

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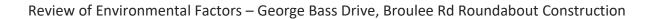


## Section 2: Additional management actions

|         | Additional management actions   |                                  |
|---------|---|----------------------------------|
| Item 10 | Control of feral and overabundant native herbivores   | Timing                           |
| 10.1    | The landowner must implement, and at all relevant times, comply with the management plan to control feral and overabundant native herbivores included in Section 4 (or such updated management plan as has been approved by the Chief-Executive under item 10.2 below) ('the feral and overabundant native herbivores management plan'). To allow for adaptive management, minor alterations can be made to the implementation of the feral and overabundant native herbivores management plan, which must be recorded in writing in accordance with Section 3 of this Annexure.  Note: A licence under Section 121 of the National Parks and Wildlife Act 1974 may | Ongoing from first payment date. |
|         | be required to control overabundant native herbivores.  |                                  |
| 10.2    | The feral and overabundant native herbivores management plan must be reviewed at intervals of no less than 4 years and no more than 6 years. The review is to consider the efficacy of the management actions in the plan and consider the effectiveness of the matters contained in the plan that are outlined in the dot points below. Notification of the date of the review commencement must be provided to the Chief-Executive in writing within 14 days of the commencement of the review. The findings of the review must be submitted to the Chief-Executive within 3 months of commencing the review.   | Ongoing from first payment date. |
|         | Where the Chief-Executive determines from the review that an update of the feral and overabundant native herbivores management plan is required, the Chief-Executive will notify the landowner in writing that an update of the plan is required and the landowner must update the plan and submit the amended plan to the Chief-Executive for approval within 3 months of receiving written notification from the Chief-Executive that an update of the plan is required. The revised plan must cover the matters outlined below and any additional matters specified by the Chief-Executive in writing:   |                                  |
|         | a description of the feral or overabundant native herbivore/s   |                                  |
|         | consideration of relevant current OEH and other pest<br>management programs and methods   |                                  |
|         | the method/s for feral and overabundant native herbivore control<br>in each management zone, determined in accordance with best<br>practice management  |                                  |
|         | the frequency and timing of the control actions in each<br>management zone  |                                  |
|         | methods for monitoring the success of the pest control actions  |                                  |
|         | <ul> <li>a timetable and measures for inspections to identify new feral or<br/>overabundant native herbivores that may adversely affect<br/>biodiversity values on the biobank site</li> </ul>  |                                  |
|         | <ul> <li>additional control actions to destroy or remove any new feral and<br/>overabundant native herbivore pest species that occur on site</li> </ul>   |                                  |

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|         | <ul> <li>measures for assessing and reporting monitoring results</li> <li>a diary for recording actions taken in accordance with the feral and overabundant native herbivores management plan and minor alterations to this plan permitted for adaptive management. The details (management zone/s, date, alternative action) and reasons for the minor alterations must be recorded in the diary.</li> </ul>   |                                  |
|---------|---|----------------------------------|
| Item 11 | Vertebrate pest management pigs, foxes, goats, cats, deer & dogs  | Timing                           |
| 11.1    | The landowner must implement, and at all relevant times, comply with the vertebrate pest management plan included in Section 4 (or such updated vertebrate pest management plan as has been approved by the Chief-Executive under item 11.2 below) ('the vertebrate pest management plan'). To allow for adaptive management, minor alterations can be made to the implementation of the vertebrate pest management plan, but these must be recorded in writing in accordance with Section 3 of this Annexure.  | Ongoing from first payment date. |
| 11.2    | The vertebrate pest management plan must be reviewed at intervals of no less than 4 years and no more than 6 years by an appropriately qualified person. The review is to consider the efficacy of the management actions in the plan and consider the effectiveness of the matters contained in the current plan that are outlined in the dot points below. Notification of the review commencement must be provided to the Chief-Executive in writing within 14 days of the commencement. The findings of the review must be submitted to the Chief-Executive within 3 months of commencing the review. | Ongoing from first payment date. |
|         | Where the Chief-Executive determines from the review that an update of the plan is required, the Chief-Executive will notify the landowner in writing that an update of the plan is required. The landowner must update the plan and submit it to the Chief-Executive for approval within 3 months of receiving written notification from the Chief-Executive that an update of the plan is required. The revised plan must cover the matters outlined below and any additional matters specified by the Chief-Executive in writing:  |                                  |
|         | a description of the target fauna species e.g. pigs, foxes or other species such as feral dogs or goats     consideration of relevant current OEH and other pest  |                                  |
|         | management programs  the method/s of vertebrate pest control in each management   |                                  |
|         | zone determined in accordance with best management practice  the frequency and timing of vertebrate pest control actions in each management zone  |                                  |
|         | methods for monitoring the success of vertebrate pest control actions   |                                  |
|         | a timetable and measures for inspections to identify new<br>vertebrate pest species that may negatively impact on<br>threatened species on the biobank site.  |                                  |

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| 1       | additional vertebrate pest control actions to destroy or remove<br>any new vertebrate pest species that occur on-site  |                                  |
|---------|--|----------------------------------|
|         | measures for assessing and reporting monitoring results  |                                  |
|         | <ul> <li>a diary for recording actions taken in accordance with the<br/>vertebrate pest management plan and minor alterations to this<br/>plan permitted for adaptive management. The details<br/>(management zone/s, date, alternative actions) and reasons for<br/>the minor alterations must be recorded in the diary.</li> </ul>   |                                  |
| Item 12 | Nutrient control   | Timing                           |
| 12.1    | Fertilisers, pesticides and herbicides must not be applied on the biobank site, except where required to undertake the management actions. Use of fertilisers for establishing native vegetation through planting or seeding, use of herbicides for controlling weeds or use of pesticides for controlling vertebrate pests or feral herbivores can be undertaken in accordance with best practice management when required to undertake the management actions. | Ongoing from commencement date.  |
| Item 13 | Control of exotic fish species   | Timing                           |
| 13.1    | This item is not applicable  |                                  |
| item 14 | Maintenance or reintroduction of natural flow regimes  | Timing                           |
| 14.1    | This item is not applicable  |                                  |
| 14.2    | This item is not applicable  | 4                                |
| 14.3    | Artificial structures such as dams or levee banks that impede the natural flow regimes on the biobank site must not be constructed unless approved by the Director General in writing for the purpose of restoring natural flows.  | Ongoing from commencement date.  |
| 14.4    | The landholder is not to remove any water from waterbodies in zone MZ_Wet. The removal of native flora and fauna from the waterbodies in zone MZ_Wet is not permitted at any time.   | Ongoing from commencement date.  |
| item 15 | Management of white-footed dunnart   | Timing                           |
| 15.1    | The landowner must prepare, and at all relevant times, comply with the white-footed dunnart management plan included in Section 4 (or an updated management plan as has been approved by the Chief-Executive under item 15.2 below). To allow for adaptive management, minor alterations can be made to the implementation of the white-footed dunnart management plan, but these must be recorded in writing in accordance with Section 3 of this Annexure.     | Ongoing from first payment date. |
| 15.2    | The white-footed dunnart management plan must be reviewed at intervals of no less than 4 years and no more than 6 years by an appropriately qualified person. The review is to consider the efficacy   | Ongoing from first payment date. |

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of the management actions in the plan and consider the effectiveness of the matters contained in the current plan that are outlined in the dot points below. Notification of the review commencement must be provided to the Chief-Executive in writing within 14 days of the commencement. The findings of the review must be submitted to the Chief-Executive within 3 months of commencing the review.

Where the Chief-Executive determines from the review that an update of the plan is required, the Chief-Executive will notify the landowner in writing that an update of the plan is required. The landowner must update the plan and submit it to the Chief-Executive for approval within 3 months of receiving written notification from the Chief-Executive that an update of the plan is required. The revised plan must cover the matters outlined below and any additional matters specified by the Chief-Executive in writing:

- consideration of relevant current OEH and other management programs for this species
- the method/s of management in each management zone determined in accordance with best management practice
- the frequency and timing of management actions in each management zone
- methods for monitoring the success of management actions
- identification of any existing or emerging threats to the longterm survival of the species within the biobank site
- additional management actions considered necessary to enhance the existing habitat and reduce existing threats for the species within the biobank site
- measures for assessing and reporting monitoring results
- a diary for recording actions taken in accordance with the white-footed dunnart management plan and alterations to this plan permitted for adaptive management. The details (management zone/s, date, alternative actions) and reasons for the alterations must be recorded in the diary.

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## Appendix F – Threatened Species Search

## (Batemans region)

**Table 8.** Threatened Species Search results, Batemans region.

|                            | 1                          |   |                              |                |                |  |
|----------------------------|----------------------------|---|------------------------------|----------------|----------------|--|
| Scientific<br>name         | Common name                | Conservation<br>project                               | Type of species              | NSW<br>status  | Occurre<br>nce | Vegetatio<br>n class                       |
| Aldrovanda<br>vesiculosa   | Waterwheel Plant           | Aldrovanda<br>vesiculosa<br>conservation<br>project   | Plant ><br>Aquatic<br>Plants | Endange<br>red | Known          | Show 4<br>linked<br>vegetation<br>classes  |
| Botaurus<br>poiciloptilus  | Australasian Bittern       | Botaurus<br>poiciloptilus<br>conservation<br>project  | Animal ><br>Birds            | Endange<br>red | Known          | Show 25<br>linked<br>vegetation<br>classes |
| Epacris<br>gnidioides      | Budawangs Cliff-<br>heath  | Epacris<br>gnidioides<br>conservation<br>project      | Plant ><br>Shrubs            | Vulnerab<br>le | Known          | Show 8<br>linked<br>vegetation<br>classes  |
| Burhinus<br>grallarius     | Bush Stone-curlew          | Burhinus<br>grallarius<br>conservation<br>project     | Animal ><br>Birds            | Endange<br>red | Known          | Show 73<br>linked<br>vegetation<br>classes |
| Caladenia<br>tessellata    | Thick Lip Spider<br>Orchid | Caladenia<br>tessellata<br>conservation<br>project    | Plant ><br>Orchids           | Endange<br>red | Predicted      | Show 10<br>linked<br>vegetation<br>classes |
| Calamanthus<br>fuliginosus | Striated Fieldwren         | Calamanthus<br>fuliginosus<br>conservation<br>project | Animal ><br>Birds            | Endange<br>red | Known          | Show 8<br>linked<br>vegetation<br>classes  |
| Calidris alba              | Sanderling                 | Calidris alba<br>conservation<br>project              | Animal ><br>Birds            | Vulnerab<br>le | Known          | Show 17<br>linked<br>vegetation<br>classes |
| Calidris<br>tenuirostris   | Great Knot                 | Calidris<br>tenuirostris<br>conservation<br>project   | Animal ><br>Birds            | Vulnerab<br>le | Known          | Show 17<br>linked<br>vegetation<br>classes |



| Calyptorhync<br>hus lathami          | Glossy Black-<br>Cockatoo                 | Calyptorhync<br>hus lathami<br>conservation<br>project          | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 75<br>linked<br>vegetation<br>classes |
|--------------------------------------|---|---|-------------------------------|----------------|-------|--|
| Cercartetus<br>nanus                 | Eastern Pygmy-<br>possum                  | Cercartetus<br>nanus<br>conservation<br>project                 | Animal ><br>Marsupial<br>s    | Vulnerab<br>le | Known | Show 68<br>linked<br>vegetation<br>classes |
| Chalinolobus<br>dwyeri               | Large-eared Pied<br>Bat                   | Chalinolobus<br>dwyeri<br>conservation<br>project               | Animal ><br>Bats              | Vulnerab<br>le | Known | Show 58<br>linked<br>vegetation<br>classes |
| Charadrius<br>leschenaultii          | Greater Sand-plover                       | Charadrius<br>leschenaultii<br>conservation<br>project          | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 15<br>linked<br>vegetation<br>classes |
| Charadrius<br>mongolus               | Lesser Sand-plover                        | Charadrius<br>mongolus<br>conservation<br>project               | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 17<br>linked<br>vegetation<br>classes |
| Climacteris<br>picumnus<br>victoriae | Brown Treecreeper<br>(eastern subspecies) | Climacteris<br>picumnus<br>victoriae<br>conservation<br>project | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 64<br>linked<br>vegetation<br>classes |
| Correa<br>baeuerlenii                | Chef's Cap Correa                         | Correa<br>baeuerlenii<br>conservation<br>project                | Plant ><br>Shrubs             | Vulnerab<br>le | Known | Show 15<br>linked<br>vegetation<br>classes |
| Cryptostylis<br>hunteriana           | Leafless Tongue<br>Orchid                 | Cryptostylis<br>hunteriana<br>conservation<br>project           | Plant ><br>Orchids            | Vulnerab<br>le | Known | Show 32<br>linked<br>vegetation<br>classes |
| Dasyurus<br>maculatus                | Spotted-tailed Quoll                      | Dasyurus<br>maculatus<br>conservation<br>project                | Animal ><br>Marsupial<br>s    | Vulnerab<br>le | Known | Show 73<br>linked<br>vegetation<br>classes |
| Distichlis<br>distichophylla         | Australian Saltgrass                      | Distichlis<br>distichophylla<br>conservation<br>project         | Plant ><br>Herbs and<br>Forbs | Endange<br>red | Known | Show 5<br>linked<br>vegetation<br>classes  |



| Dry Rainforest of the South East Forests in the South East Corner Bioregion | Dry Rainforest of<br>the South East<br>Forests in the South<br>East Corner<br>Bioregion | Dry Rainforest of the South East Forests in the South East Corner Bioregion conservation project | Communi<br>ty ><br>Threatene<br>d<br>Ecologica<br>1<br>Communi<br>ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known     | Show 2<br>linked<br>vegetation<br>classes  |
|---|---|--|--|---|-----------|--|
| Esacus<br>magnirostris  | Beach Stone-curlew  | Esacus<br>magnirostris<br>conservation<br>project  | Animal ><br>Birds  | Critically<br>Endange<br>red                      | Predicted | Show 16<br>linked<br>vegetation<br>classes |
| Eucalyptus<br>sturgissiana  | Ettrema Mallee  | Eucalyptus<br>sturgissiana<br>conservation<br>project  | Plant ><br>Mallees   | Vulnerab<br>le                                    | Known     | Show 5<br>linked<br>vegetation<br>classes  |
| Falco<br>hypoleucos   | Grey Falcon   | Falco<br>hypoleucos<br>conservation<br>project   | Animal ><br>Birds  | Vulnerab<br>le                                    | Known     | Show 39<br>linked<br>vegetation<br>classes |
| Falsistrellus<br>tasmaniensis   | Eastern False<br>Pipistrelle  | Falsistrellus<br>tasmaniensis<br>conservation<br>project   | Animal ><br>Bats   | Vulnerab<br>le                                    | Known     | Show 56<br>linked<br>vegetation<br>classes |
| Galium<br>australe  | Tangled Bedstraw  | Galium<br>australe<br>conservation<br>project  | Plant ><br>Herbs and<br>Forbs  | Endange<br>red                                    | Known     | Show 6<br>linked<br>vegetation<br>classes  |
| Genoplesium<br>vernale  | East Lynne Midge<br>Orchid  | Genoplesium<br>vernale<br>conservation<br>project  | Plant ><br>Orchids   | Vulnerab<br>le                                    | Known     | Show 6<br>linked<br>vegetation<br>classes  |
| Grammitis<br>stenophylla  | Narrow-leaf Finger<br>Fern  | Grammitis<br>stenophylla<br>conservation<br>project  | Plant ><br>Ferns and<br>Cycads   | Endange<br>red                                    | Predicted | Show 16<br>linked<br>vegetation<br>classes |
| Haematopus<br>fuliginosus   | Sooty Oystercatcher   | Haematopus<br>fuliginosus<br>conservation<br>project   | Animal ><br>Birds  | Vulnerab<br>le                                    | Known     | Show 4<br>linked<br>vegetation<br>classes  |
| Haematopus<br>longirostris  | Pied Oystercatcher  | Haematopus<br>longirostris   | Animal ><br>Birds  | Endange<br>red                                    | Known     | Show 9<br>linked                           |



|  |                                       | conservation<br>project   |                            |                |       | vegetation<br>classes                      |
|--|---------------------------------------|---|----------------------------|----------------|-------|--|
| Haloragis<br>exalata subsp.<br>exalata | Square Raspwort                       | Haloragis<br>exalata subsp.<br>exalata<br>conservation<br>project | Plant ><br>Shrubs          | Vulnerab<br>le | Known | Show 12<br>linked<br>vegetation<br>classes |
| Hamirostra<br>melanosterno<br>n        | Black-breasted<br>Buzzard             | Hamirostra<br>melanosterno<br>n conservation<br>project           | Animal ><br>Birds          | Vulnerab<br>le | Known | Show 44<br>linked<br>vegetation<br>classes |
| Heleioporus<br>australiacus            | Giant Burrowing<br>Frog               | Heleioporus<br>australiacus<br>conservation<br>project            | Animal ><br>Amphibia<br>ns | Vulnerab<br>le | Known | Show 45<br>linked<br>vegetation<br>classes |
| Hoplocephalu<br>s bungaroides          | Broad-headed Snake                    | Hoplocephalu<br>s bungaroides<br>conservation<br>project          | Animal ><br>Reptiles       | Endange<br>red | Known | Show 24<br>linked<br>vegetation<br>classes |
| Isoodon<br>obesulus<br>obesulus        | Southern Brown<br>Bandicoot (eastern) | Isoodon<br>obesulus<br>obesulus<br>conservation<br>project        | Animal ><br>Marsupial<br>s | Endange<br>red | Known | Show 42<br>linked<br>vegetation<br>classes |
| Ixobrychus<br>flavicollis              | Black Bittern                         | Ixobrychus<br>flavicollis<br>conservation<br>project              | Animal ><br>Birds          | Vulnerab<br>le | Known | Show 59<br>linked<br>vegetation<br>classes |
| Phoniscus<br>papuensis                 | Golden-tipped Bat                     | Phoniscus<br>papuensis<br>conservation<br>project                 | Animal ><br>Bats           | Vulnerab<br>le | Known | Show 45<br>linked<br>vegetation<br>classes |
| Lathamus<br>discolor                   | Swift Parrot                          | Lathamus<br>discolor<br>conservation<br>project                   | Animal ><br>Birds          | Endange<br>red | Known | Show 77<br>linked<br>vegetation<br>classes |
| Limosa limosa                          | Black-tailed Godwit                   | Limosa limosa<br>conservation<br>project                          | Animal ><br>Birds          | Vulnerab<br>le | Known | Show 15<br>linked<br>vegetation<br>classes |



| Litoria aurea                         | Green and Golden<br>Bell Frog        | Litoria aurea<br>conservation<br>project                         | Animal ><br>Amphibia<br>ns | Endange<br>red               | Known     | Show 41<br>linked<br>vegetation<br>classes |
|---------------------------------------|--------------------------------------|--|----------------------------|------------------------------|-----------|--|
| Lophoictinia<br>isura                 | Square-tailed Kite                   | Lophoictinia<br>isura<br>conservation<br>project                 | Animal ><br>Birds          | Vulnerab<br>le               | Known     | Show 87<br>linked<br>vegetation<br>classes |
| Melanodryas<br>cucullata<br>cucullata | Hooded Robin<br>(south-eastern form) | Melanodryas<br>cucullata<br>cucullata<br>conservation<br>project | Animal ><br>Birds          | Vulnerab<br>le               | Known     | Show 82<br>linked<br>vegetation<br>classes |
| Miniopterus<br>orianae<br>oceanensis  | Large Bent-winged<br>Bat             | Miniopterus<br>orianae<br>oceanensis<br>conservation<br>project  | Animal ><br>Bats           | Vulnerab<br>le               | Known     | Show 76<br>linked<br>vegetation<br>classes |
| Mixophyes<br>balbus                   | Stuttering Frog                      | Mixophyes<br>balbus<br>conservation<br>project                   | Animal ><br>Amphibia<br>ns | Endange<br>red               | Predicted | Show 46<br>linked<br>vegetation<br>classes |
| Micronomus<br>norfolkensis            | Eastern Coastal<br>Free-tailed Bat   | Micronomus<br>norfolkensis<br>conservation<br>project            | Animal ><br>Bats           | Vulnerab<br>le               | Known     | Show 45<br>linked<br>vegetation<br>classes |
| Myotis<br>macropus                    | Southern Myotis                      | Myotis<br>macropus<br>conservation<br>project                    | Animal ><br>Bats           | Vulnerab<br>le               | Known     | Show 58<br>linked<br>vegetation<br>classes |
| Neophema<br>chrysogaster              | Orange-bellied<br>Parrot             | Neophema<br>chrysogaster<br>conservation<br>project              | Animal ><br>Birds          | Critically<br>Endange<br>red | Predicted | Show 19<br>linked<br>vegetation<br>classes |
| Ninox<br>connivens                    | Barking Owl                          | Ninox<br>connivens<br>conservation<br>project                    | Animal ><br>Birds          | Vulnerab<br>le               | Known     | Show 71<br>linked<br>vegetation<br>classes |
| Ninox strenua                         | Powerful Owl                         | Ninox strenua<br>conservation<br>project                         | Animal ><br>Birds          | Vulnerab<br>le               | Known     | Show 53<br>linked<br>vegetation<br>classes |



| Pachycephala<br>olivacea          | Olive Whistler             | Pachycephala<br>olivacea<br>conservation<br>project          | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 50<br>linked<br>vegetation<br>classes |
|-----------------------------------|----------------------------|--|-------------------------------|----------------|-------|--|
| Pandion<br>cristatus              | Eastern Osprey             | Pandion<br>cristatus<br>conservation<br>project              | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 48<br>linked<br>vegetation<br>classes |
| Persicaria<br>elatior             | Tall Knotweed              | Persicaria<br>elatior<br>conservation<br>project             | Plant ><br>Herbs and<br>Forbs | Vulnerab<br>le | Known | Show 10<br>linked<br>vegetation<br>classes |
| Petaurus<br>australis             | Yellow-bellied<br>Glider   | Petaurus<br>australis<br>conservation<br>project             | Animal ><br>Marsupial<br>s    | Vulnerab<br>le | Known | Show 38<br>linked<br>vegetation<br>classes |
| Petaurus<br>norfolcensis          | Squirrel Glider            | Petaurus<br>norfolcensis<br>conservation<br>project          | Animal ><br>Marsupial<br>s    | Vulnerab<br>le | Known | Show 61<br>linked<br>vegetation<br>classes |
| Petroica<br>rodinogaster          | Pink Robin                 | Petroica<br>rodinogaster<br>conservation<br>project          | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 19<br>linked<br>vegetation<br>classes |
| Pezoporus<br>wallicus<br>wallicus | Eastern Ground<br>Parrot   | Pezoporus<br>wallicus<br>wallicus<br>conservation<br>project | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 13<br>linked<br>vegetation<br>classes |
| Phascogale<br>tapoatafa           | Brush-tailed<br>Phascogale | Phascogale<br>tapoatafa<br>conservation<br>project           | Animal ><br>Marsupial<br>s    | Vulnerab<br>le | Known | Show 57<br>linked<br>vegetation<br>classes |
| Phascolarctos<br>cinereus         | Koala                      | Phascolarctos<br>cinereus<br>conservation<br>project         | Animal ><br>Marsupial<br>s    | Endange<br>red | Known | Show 87<br>linked<br>vegetation<br>classes |
| Potorous<br>tridactylus           | Long-nosed Potoroo         | Potorous<br>tridactylus<br>conservation<br>project           | Animal ><br>Marsupial<br>s    | Vulnerab<br>le | Known | Show 44<br>linked<br>vegetation<br>classes |



| Pteropus<br>poliocephalus   | Grey-headed Flying-<br>fox       | Pteropus<br>poliocephalus<br>conservation<br>project   | Animal ><br>Bats              | Vulnerab<br>le | Known     | Show 71<br>linked<br>vegetation<br>classes |
|-----------------------------|----------------------------------|--|-------------------------------|----------------|-----------|--|
| Ptilinopus<br>superbus      | Superb Fruit-Dove                | Ptilinopus<br>superbus<br>conservation<br>project      | Animal ><br>Birds             | Vulnerab<br>le | Known     | Show 24<br>linked<br>vegetation<br>classes |
| Chthonicola<br>sagittata    | Speckled Warbler                 | Chthonicola<br>sagittata<br>conservation<br>project    | Animal ><br>Birds             | Vulnerab<br>le | Known     | Show 57<br>linked<br>vegetation<br>classes |
| Saccolaimus<br>flaviventris | Yellow-bellied<br>Sheathtail-bat | Saccolaimus<br>flaviventris<br>conservation<br>project | Animal ><br>Bats              | Vulnerab<br>le | Known     | Show 81<br>linked<br>vegetation<br>classes |
| Scoteanax<br>rueppellii     | Greater Broad-<br>nosed Bat      | Scoteanax<br>rueppellii<br>conservation<br>project     | Animal ><br>Bats              | Vulnerab<br>le | Known     | Show 51<br>linked<br>vegetation<br>classes |
| Senecio<br>spathulatus      | Coast Groundsel                  | Senecio<br>spathulatus<br>conservation<br>project      | Plant ><br>Herbs and<br>Forbs | Endange<br>red | Predicted | Show 14<br>linked<br>vegetation<br>classes |
| Sminthopsis<br>leucopus     | White-footed<br>Dunnart          | Sminthopsis<br>leucopus<br>conservation<br>project     | Animal ><br>Marsupial<br>s    | Vulnerab<br>le | Known     | Show 20<br>linked<br>vegetation<br>classes |
| Stagonopleura<br>guttata    | Diamond Firetail                 | Stagonopleura<br>guttata<br>conservation<br>project    | Animal ><br>Birds             | Vulnerab<br>le | Known     | Show 62<br>linked<br>vegetation<br>classes |
| Sternula<br>albifrons       | Little Tern                      | Sternula<br>albifrons<br>conservation<br>project       | Animal ><br>Birds             | Endange<br>red | Known     | Show 9<br>linked<br>vegetation<br>classes  |
| Onychoprion<br>fuscata      | Sooty Tern                       | Onychoprion<br>fuscata<br>conservation<br>project      | Animal ><br>Birds             | Vulnerab<br>le | Known     | Show 3<br>linked<br>vegetation<br>classes  |



| Stictonetta<br>naevosa   | Freckled Duck   | Stictonetta<br>naevosa<br>conservation<br>project  | Animal ><br>Birds                                 | Vulnerab<br>le                                    | Known | Show 12<br>linked<br>vegetation<br>classes |
|--|---|--|---|---|-------|--|
| Swamp<br>Sclerophyll<br>Forest on<br>Coastal<br>Floodplains of<br>the New South<br>Wales North<br>Coast, Sydney<br>Basin and<br>South East<br>Corner<br>Bioregions | Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions   | Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions conservation project   | Communi ty > Threatene d Ecologica l Communi ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known | Show 4<br>linked<br>vegetation<br>classes  |
| River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions                                | River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions | River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions conservation project | Communi ty > Threatene d Ecologica l Communi ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known | Show 5<br>linked<br>vegetation<br>classes  |
| Thesium<br>australe  | Austral Toadflax  | Thesium<br>australe<br>conservation<br>project   | Plant ><br>Herbs and<br>Forbs                     | Vulnerab<br>le                                    | Known | Show 26<br>linked<br>vegetation<br>classes |
| Thinornis<br>cucullatus<br>cucullatus  | Eastern Hooded<br>Dotterel  | Thinornis<br>cucullatus<br>cucullatus<br>conservation<br>project   | Animal ><br>Birds                                 | Critically<br>Endange<br>red                      | Known | Show 15<br>linked<br>vegetation<br>classes |
| Tyto<br>novaehollandi<br>ae  | Masked Owl  | Tyto<br>novaehollandi<br>ae<br>conservation<br>project   | Animal ><br>Birds                                 | Vulnerab<br>le                                    | Known | Show 75<br>linked<br>vegetation<br>classes |
| Tyto<br>tenebricosa  | Sooty Owl   | Tyto<br>tenebricosa<br>conservation<br>project   | Animal ><br>Birds                                 | Vulnerab<br>le                                    | Known | Show 39<br>linked<br>vegetation<br>classes |



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|---|--|--|--|---|-------|--|
| Wilsonia<br>backhousei  | Narrow-leafed<br>Wilsonia  | Wilsonia<br>backhousei<br>conservation<br>project  | Plant ><br>Shrubs  | Vulnerab<br>le                                    | Known | Show 5<br>linked<br>vegetation<br>classes  |
| Wilsonia<br>rotundifolia  | Round-leafed<br>Wilsonia   | Wilsonia<br>rotundifolia<br>conservation<br>project  | Plant ><br>Shrubs  | Endange<br>red                                    | Known | Show 7<br>linked<br>vegetation<br>classes  |
| Anthochaera<br>phrygia  | Regent Honeyeater  | Anthochaera<br>phrygia<br>conservation<br>project  | Animal ><br>Birds  | Critically<br>Endange<br>red                      | Known | Show 43<br>linked<br>vegetation<br>classes |
| Xenus<br>cinereus   | Terek Sandpiper  | Xenus<br>cinereus<br>conservation<br>project   | Animal ><br>Birds  | Vulnerab<br>le                                    | Known | Show 16<br>linked<br>vegetation<br>classes |
| Zieria<br>tuberculata   | Warty Zieria   | Zieria<br>tuberculata<br>conservation<br>project   | Plant ><br>Shrubs  | Vulnerab<br>le                                    | Known | Show 8<br>linked<br>vegetation<br>classes  |
| Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions                           | Coastal Saltmarsh<br>in the New South<br>Wales North Coast,<br>Sydney Basin and<br>South East Corner<br>Bioregions   | Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions conservation project   | Communi<br>ty ><br>Threatene<br>d<br>Ecologica<br>l<br>Communi<br>ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known | Saltmarsh<br>es                            |
| Littoral<br>Rainforest in<br>the New South<br>Wales North<br>Coast, Sydney<br>Basin and<br>South East<br>Corner<br>Bioregions | Littoral Rainforest<br>in the New South<br>Wales North Coast,<br>Sydney Basin and<br>South East Corner<br>Bioregions | Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions conservation project | Communi ty > Threatene d Ecologica l Communi ties                      | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known | Show 4<br>linked<br>vegetation<br>classes  |
| Puffinus<br>assimilis   | Little Shearwater  | Puffinus<br>assimilis<br>conservation<br>project   | Animal ><br>Birds  | Vulnerab<br>le                                    | Known | Show 2<br>linked<br>vegetation<br>classes  |



| Ardenna<br>carneipes                   | Flesh-footed<br>Shearwater | Ardenna<br>carneipes<br>conservation<br>project                   | Animal ><br>Birds             | Vulnerab<br>le | Known | Show 2<br>linked<br>vegetation<br>classes |
|--|----------------------------|---|-------------------------------|----------------|-------|---|
| Chelonia<br>mydas                      | Green Turtle               | Chelonia<br>mydas<br>conservation<br>project                      | Animal ><br>Reptiles          | Vulnerab<br>le | Known | Show 5<br>linked<br>vegetation<br>classes |
| Arctocephalus<br>forsteri              | New Zealand Furseal        | Arctocephalus<br>forsteri<br>conservation<br>project              | Animal ><br>Marine<br>Mammals | Vulnerab<br>le | Known | Show 2<br>linked<br>vegetation<br>classes |
| Arctocephalus<br>pusillus<br>doriferus | Australian Fur-seal        | Arctocephalus<br>pusillus<br>doriferus<br>conservation<br>project | Animal ><br>Marine<br>Mammals | Vulnerab<br>le | Known | Show 2<br>linked<br>vegetation<br>classes |
| Diomedea<br>exulans                    | Wandering<br>Albatross     | Diomedea<br>exulans<br>conservation<br>project                    | Animal ><br>Birds             | Endange<br>red | Known | Marine<br>environme<br>nts                |
| Diomedea<br>gibsoni                    | Gibson's Albatross         | Diomedea<br>gibsoni<br>conservation<br>project                    | Animal ><br>Birds             | Vulnerab<br>le | Known | Marine<br>environme<br>nts                |
| Eubalaena<br>australis                 | Southern Right<br>Whale    | Eubalaena<br>australis<br>conservation<br>project                 | Animal ><br>Marine<br>Mammals | Endange<br>red | Known | Marine<br>environme<br>nts                |
| Macronectes<br>giganteus               | Southern Giant<br>Petrel   | Macronectes<br>giganteus<br>conservation<br>project               | Animal ><br>Birds             | Endange<br>red | Known | Marine<br>environme<br>nts                |
| Macronectes<br>halli                   | Northern Giant-<br>Petrel  | Macronectes<br>halli<br>conservation<br>project                   | Animal ><br>Birds             | Vulnerab<br>le | Known | Marine<br>environme<br>nts                |
| Physeter<br>macrocephalu<br>s          | Sperm Whale                | Physeter<br>macrocephalu<br>s conservation<br>project             | Animal ><br>Marine<br>Mammals | Vulnerab<br>le | Known | Marine<br>environme<br>nts                |



| Pterodroma<br>leucoptera<br>leucoptera   | Gould's Petrel  | Pterodroma<br>leucoptera<br>leucoptera<br>conservation<br>project   | Animal ><br>Birds  | Vulnerab<br>le                                    | Known     | Show 8<br>linked<br>vegetation<br>classes  |
|--|---|---|--|---|-----------|--|
| Thalassarche<br>cauta  | Shy Albatross   | Thalassarche<br>cauta<br>conservation<br>project  | Animal ><br>Birds  | Endange<br>red                                    | Known     | Marine<br>environme<br>nts                 |
| Thalassarche<br>melanophris  | Black-browed<br>Albatross   | Thalassarche<br>melanophris<br>conservation<br>project  | Animal ><br>Birds  | Vulnerab<br>le                                    | Known     | Marine<br>environme<br>nts                 |
| Freshwater Wetlands on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions             | Freshwater Wetlands on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions    | Freshwater Wetlands on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions conservation project                   | Communi<br>ty ><br>Threatene<br>d<br>Ecologica<br>l<br>Communi<br>ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known     | Coastal<br>Freshwate<br>r Lagoons          |
| Swamp Oak<br>Floodplain<br>Forest of the<br>New South<br>Wales North<br>Coast, Sydney<br>Basin and<br>South East<br>Corner<br>Bioregions | Swamp Oak<br>Floodplain Forest of<br>the New South<br>Wales North Coast,<br>Sydney Basin and<br>South East Corner<br>Bioregions | Swamp Oak<br>Floodplain<br>Forest of the<br>New South<br>Wales North<br>Coast, Sydney<br>Basin and<br>South East<br>Corner<br>Bioregions<br>conservation<br>project | Communi ty > Threatene d Ecologica l Communi ties                      | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known     | Show 4<br>linked<br>vegetation<br>classes  |
| Callocephalon<br>fimbriatum  | Gang-gang<br>Cockatoo   | Callocephalon<br>fimbriatum<br>conservation<br>project  | Animal ><br>Birds  | Vulnerab<br>le                                    | Known     | Show 65<br>linked<br>vegetation<br>classes |
| Alteration to<br>the natural<br>flow regimes<br>of rivers and<br>streams and<br>their<br>floodplains<br>and wetlands                     | Alteration to the natural flow regimes of rivers, streams, floodplains & wetlands.  | Alteration to<br>the natural<br>flow regimes<br>of rivers and<br>streams and<br>their<br>floodplains<br>and wetlands<br>conservation<br>project                     | Threat ><br>Habitat<br>Loss/Cha<br>nge                                 | Key<br>Threaten<br>ing<br>Process                 | Predicted |  |



| Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations | Infection by Psittacine circoviral (beak and feather) disease affecting endangered psittacine species | Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations conservation project | Threat ><br>Disease                    | Key<br>Threaten<br>ing<br>Process | Predicted |  |
|---|---|--|--|-----------------------------------|-----------|--|
| Competition<br>from feral<br>honey bees,<br>Apis mellifera<br>L.  | Competition<br>from feral<br>honeybees  | Competition<br>from feral<br>honey bees,<br>Apis mellifera<br>L.<br>conservation<br>project  | Threat ><br>Pest<br>Animal             | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Introduction<br>of the Large<br>Earth<br>Bumblebee<br>Bombus<br>terrestris (L.)                                       | Introduction of<br>the large earth<br>bumblebee (Bombus<br>terrestris)                                | Introduction<br>of the Large<br>Earth<br>Bumblebee<br>Bombus<br>terrestris (L.)<br>conservation<br>project                                 | Threat ><br>Pest<br>Animal             | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Bushrock<br>removal   | Bushrock Removal  | Bushrock<br>removal<br>conservation<br>project   | Threat ><br>Habitat<br>Loss/Cha<br>nge | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Loss or<br>degradation<br>(or both) of<br>sites used for<br>hill-topping<br>by butterflies                            | Loss and/or<br>degradation of sites<br>used for hill-topping<br>by butterflies                        | Loss or<br>degradation<br>(or both) of<br>sites used for<br>hill-topping<br>by butterflies<br>conservation<br>project                      | Threat ><br>Habitat<br>Loss/Cha<br>nge | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Predation by<br>the Feral Cat<br>Felis catus<br>(Linnaeus,<br>1758)   | Predation by feral cats   | Predation by<br>the Feral Cat<br>Felis catus<br>(Linnaeus,<br>1758)<br>conservation<br>project   | Threat > Pest Animal                   | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Infection of<br>frogs by<br>amphibian<br>chytrid<br>causing the<br>disease  | Infection of frogs by<br>amphibian chytrid<br>causing the disease<br>chytridiomycosis                 | Infection of<br>frogs by<br>amphibian<br>chytrid<br>causing the<br>disease   | Threat ><br>Disease                    | Key<br>Threaten<br>ing<br>Process | Predicted |  |



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| chytridiomyco<br>sis  |   | chytridiomyco<br>sis<br>conservation<br>project   |  |                                   |           |  |
| Invasion of<br>the Yellow<br>Crazy Ant,<br>Anoplolepis<br>gracilipes (Fr.<br>Smith) into<br>NSW   | Invasion of<br>the yellow crazy<br>ant ( <i>Anoplolepis</i><br>gracilipes) into NSW | Invasion of<br>the Yellow<br>Crazy Ant,<br>Anoplolepis<br>gracilipes (Fr.<br>Smith) into<br>NSW<br>conservation<br>project  | Threat > Pest Animal                   | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Removal of<br>dead wood<br>and dead trees   | Removal of dead<br>wood and dead trees  | Removal of<br>dead wood<br>and dead trees<br>conservation<br>project  | Threat ><br>Habitat<br>Loss/Cha<br>nge | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Herbivory<br>and<br>environmental<br>degradation<br>caused by<br>feral deer   | Herbivory and<br>environmental<br>degradation caused<br>by feral deer               | Herbivory<br>and<br>environmental<br>degradation<br>caused by<br>feral deer<br>conservation<br>project  | Threat > Pest Animal                   | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| High<br>frequency fire<br>resulting in<br>the disruption<br>of life cycle<br>processes in<br>plants and<br>animals and<br>loss of<br>vegetation<br>structure and<br>composition | Ecological<br>consequences<br>of high frequency<br>fires                            | High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition conservation project | Threat ><br>Habitat<br>Loss/Cha<br>nge | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Predation by<br>the European<br>Red Fox<br>Vulpes Vulpes<br>(Linnaeus,<br>1758)   | Predation by<br>the European Red<br>Fox   | Predation by<br>the European<br>Red Fox<br>Vulpes Vulpes<br>(Linnaeus,<br>1758)<br>conservation<br>project  | Threat > Pest Animal                   | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Predation by<br>Gambusia<br>holbrooki<br>Girard, 1859<br>(Plague<br>Minnow or   | Predation by<br>the Plague<br>Minnow (Gambusia<br>holbrooki)                        | Predation by<br>Gambusia<br>holbrooki<br>Girard, 1859<br>(Plague<br>Minnow or   | Threat ><br>Pest<br>Animal             | Key<br>Threaten<br>ing<br>Process | Predicted |  |



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| Mosquito<br>Fish)  |   | Mosquito Fish) conservation project   |  |                                   |           |  |
| Competition<br>and habitat<br>degradation<br>by Feral<br>Goats, Capra<br>hircus<br>Linnaeus 1758                                     | Competition and<br>habitat degradation<br>by Feral<br>Goats, <i>Capra</i><br><i>hircus</i> Linnaeus<br>1758 | Competition and habitat degradation by Feral Goats, Capra hircus Linnaeus 1758 conservation project                               | Threat > Pest Animal                   | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Invasion of<br>native plant<br>communities<br>by exotic<br>perennial<br>grasses  | Invasion of native<br>plant communities<br>by exotic perennial g<br>rasses                                  | Invasion of<br>native plant<br>communities<br>by exotic<br>perennial<br>grasses<br>conservation<br>project                        | Threat ><br>Weed                       | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Predation,<br>habitat<br>degradation,<br>competition<br>and disease<br>transmission<br>by Feral Pigs,<br>Sus scrofa<br>Linnaeus 1758 | Predation, habitat degradation, competition and disease transmission by Feral Pigs (Sus scrofa)             | Predation, habitat degradation, competition and disease transmission by Feral Pigs, Sus scrofa Linnaeus 1758 conservation project | Threat > Pest Animal                   | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Importation<br>of Red<br>Imported Fire<br>Ants<br>Solenopsis<br>invicta Buren<br>1972  | Importation of red<br>imported fire<br>ants into NSW  | Importation of Red Imported Fire Ants Solenopsis invicta Buren 1972 conservation project  | Threat > Pest Animal                   | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Clearing of<br>native<br>vegetation  | Clearing of native vegetation   | Clearing of<br>native<br>vegetation<br>conservation<br>project  | Threat ><br>Habitat<br>Loss/Cha<br>nge | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Competition<br>and grazing<br>by the feral<br>European<br>Rabbit,<br>Oryctolagus<br>cuniculus (L.)                                   | Competition and grazing by the feral European rabbit  | Competition<br>and grazing<br>by the feral<br>European<br>Rabbit,<br>Oryctolagus<br>cuniculus (L.)                                | Threat ><br>Pest<br>Animal             | Key<br>Threaten<br>ing<br>Process | Predicted |  |



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|  |  | conservation<br>project   |  |   |           |   |
| Anthropogeni<br>c Climate<br>Change  | Human-<br>caused Climate<br>Change   | Anthropogeni<br>c Climate<br>Change<br>conservation<br>project  | Threat ><br>Habitat<br>Loss/Cha<br>nge                                 | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |
| Infection of<br>native plants<br>by<br>Phytophthora<br>cinnamomi   | Infection of native plants by <i>Phytophthora cinnamomi</i>  | Infection of<br>native plants<br>by<br>Phytophthora<br>cinnamomi<br>conservation<br>project   | Threat ><br>Disease  | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |
| Invasion of<br>native plant<br>communities<br>by<br>Chrysanthem<br>oides<br>monilifera   | Invasion of native<br>plant communities<br>by bitou bush &<br>boneseed   | Invasion of<br>native plant<br>communities<br>by<br>Chrysanthem<br>oides<br>monilifera<br>conservation<br>project   | Threat ><br>Weed   | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |
| Pomaderris<br>bodalla  | Bodalla Pomaderris   | Pomaderris<br>bodalla<br>conservation<br>project  | Plant ><br>Shrubs  | Vulnerab<br>le                                    | Known     | Show 8<br>linked<br>vegetation<br>classes |
| Bangalay<br>Sand Forest of<br>the Sydney<br>Basin and<br>South East<br>Corner<br>bioregions  | Bangalay Sand<br>Forest of the Sydney<br>Basin and South<br>East Corner<br>bioregions  | Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions conservation project  | Communi<br>ty ><br>Threatene<br>d<br>Ecologica<br>1<br>Communi<br>ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known     | Show 2<br>linked<br>vegetation<br>classes |
| Themeda<br>grassland on<br>seacliffs and<br>coastal<br>headlands in<br>the NSW<br>North Coast,<br>Sydney Basin<br>and South<br>East Corner<br>Bioregions | Themeda grassland<br>on seacliffs and<br>coastal headlands in<br>the NSW North<br>Coast, Sydney Basin<br>and South East<br>Corner bioregions | Themeda<br>grassland on<br>seacliffs and<br>coastal<br>headlands in<br>the NSW<br>North Coast,<br>Sydney Basin<br>and South<br>East Corner<br>Bioregions<br>conservation<br>project | Communi<br>ty ><br>Threatene<br>d<br>Ecologica<br>1<br>Communi<br>ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known     | Maritime<br>Grassland<br>s                |



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|---|---|--|---|---|-----------|---|
| Invasion and<br>establishment<br>of the Cane<br>Toad (Bufo<br>marinus)                        | Invasion and establishment of the Cane Toad   | Invasion and<br>establishment<br>of the Cane<br>Toad (Bufo<br>marinus)<br>conservation<br>project                        | Threat ><br>Pest<br>Animal                        | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |
| Invasion,<br>establishment<br>and spread of<br>Lantana<br>(Lantana<br>camara L.<br>sens. Lat) | Invasion,<br>establishment and<br>spread of Lantana<br>( <i>Lantana</i><br>camara L. sens. lat) | Invasion,<br>establishment<br>and spread of<br>Lantana<br>(Lantana<br>camara L.<br>sens. Lat)<br>conservation<br>project | Threat ><br>Weed                                  | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |
| Invasion and<br>establishment<br>of exotic vines<br>and<br>scramblers                         | Invasion and<br>establishment<br>of exotic vines and<br>scramblers                              | Invasion and<br>establishment<br>of exotic vines<br>and<br>scramblers<br>conservation<br>project                         | Threat ><br>Weed                                  | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |
| Invasion and<br>establishment<br>of Scotch<br>Broom<br>(Cytisus<br>scoparius)                 | Invasion and establishment of Scotch Broom (Cytisus scoparius)                                  | Invasion and<br>establishment<br>of Scotch<br>Broom<br>(Cytisus<br>scoparius)<br>conservation<br>project                 | Threat ><br>Weed                                  | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |
| Lowland<br>Grassy<br>Woodland in<br>the South East<br>Corner<br>Bioregion                     | Lowland Grassy<br>Woodland in the<br>South East Corner<br>Bioregion                             | Lowland<br>Grassy<br>Woodland in<br>the South East<br>Corner<br>Bioregion<br>conservation<br>project                     | Communi ty > Threatene d Ecologica l Communi ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known     | Show 3<br>linked<br>vegetation<br>classes |
| Loss of<br>Hollow-<br>bearing Trees   | Loss of Hollow-<br>bearing Trees  | Loss of<br>Hollow-<br>bearing Trees<br>conservation<br>project   | Threat ><br>Habitat<br>Loss/Cha<br>nge            | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |
| Forest eucalypt dieback associated with over- abundant psyllids and Bell Miners               | Forest eucalypt<br>dieback associated<br>with over-abundant<br>psyllids and Bell<br>Miners      | Forest eucalypt dieback associated with over- abundant psyllids and Bell Miners  | Threat ><br>Other<br>Threat                       | Key<br>Threaten<br>ing<br>Process                 | Predicted |   |



|   |  | conservation<br>project  |                      |                                   |           |  |
|---|--|--|----------------------|-----------------------------------|-----------|--|
|   |  | project  |                      |                                   |           |  |
| Glossopsitta<br>pusilla   | Little Lorikeet  | Glossopsitta<br>pusilla<br>conservation<br>project   | Animal ><br>Birds    | Vulnerab<br>le                    | Known     | Show 63<br>linked<br>vegetation<br>classes |
| Predation and<br>hybridisation<br>by Feral Dogs,<br>Canis lupus<br>familiaris | Predation and<br>hybridisation by<br>Feral Dogs, Canis<br>lupus familiaris | Predation and<br>hybridisation<br>by Feral Dogs,<br>Canis lupus<br>familiaris<br>conservation<br>project | Threat > Pest Animal | Key<br>Threaten<br>ing<br>Process | Predicted |  |
| Eucalyptus<br>aggregata   | Black Gum  | Eucalyptus<br>aggregata<br>conservation<br>project   | Plant ><br>Trees     | Vulnerab<br>le                    | Predicted | Show 12<br>linked<br>vegetation<br>classes |
| Petroica<br>phoenicea   | Flame Robin  | Petroica<br>phoenicea<br>conservation<br>project   | Animal ><br>Birds    | Vulnerab<br>le                    | Known     | Show 62<br>linked<br>vegetation<br>classes |
| Hieraaetus<br>morphnoides   | Little Eagle   | Hieraaetus<br>morphnoides<br>conservation<br>project   | Animal ><br>Birds    | Vulnerab<br>le                    | Known     | Show 94<br>linked<br>vegetation<br>classes |
| Petroica<br>boodang   | Scarlet Robin  | Petroica<br>boodang<br>conservation<br>project   | Animal ><br>Birds    | Vulnerab<br>le                    | Known     | Show 75<br>linked<br>vegetation<br>classes |
| Circus<br>assimilis   | Spotted Harrier  | Circus<br>assimilis<br>conservation<br>project   | Animal ><br>Birds    | Vulnerab<br>le                    | Known     | Show 75<br>linked<br>vegetation<br>classes |
| Daphoenositta<br>chrysoptera  | Varied Sittella  | Daphoenositta<br>chrysoptera<br>conservation<br>project  | Animal ><br>Birds    | Vulnerab<br>le                    | Known     | Show 88<br>linked<br>vegetation<br>classes |
| Epthianura<br>albifrons   | White-fronted Chat   | Epthianura<br>albifrons<br>conservation<br>project   | Animal ><br>Birds    | Vulnerab<br>le                    | Known     | Show 34<br>linked<br>vegetation<br>classes |



| Araluen Scarp<br>Grassy Forest<br>in the South<br>East Corner<br>Bioregion  | Araluen Scarp<br>Grassy Forest in the<br>South East Corner<br>Bioregion   | Araluen Scarp<br>Grassy Forest<br>in the South<br>East Corner<br>Bioregion<br>conservation<br>project  | Communi ty > Threatene d Ecologica l Communi ties | Endange<br>red<br>Ecologic<br>al<br>Commun<br>ity | Known     | Coastal<br>Valley<br>Grassy<br>Woodland<br>s |
|---|---|--|---|---|-----------|--|
| Invasion of<br>native plant<br>communities<br>by African<br>Olive Olea<br>europaea<br>subsp.<br>cuspidata<br>(Wall. ex G.<br>Don) Cif.                  | Invasion of native<br>plant communities<br>by African Olive<br>Olea europaea<br>subsp. cuspidata<br>(Wall. ex G. Don)<br>Cif. | Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif. conservation project               | Threat ><br>Weed                                  | Key<br>Threaten<br>ing<br>Process                 | Predicted |  |
| Calidris<br>ferruginea  | Curlew Sandpiper  | Calidris<br>ferruginea<br>conservation<br>project  | Animal ><br>Birds                                 | Endange<br>red                                    | Known     | Show 23<br>linked<br>vegetation<br>classes   |
| Introduction<br>and<br>establishment<br>of Exotic Rust<br>Fungi of the<br>order<br>Pucciniales<br>pathogenic on<br>plants of the<br>family<br>Myrtaceae | Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae     | Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae conservation project | Threat ><br>Disease                               | Key<br>Threaten<br>ing<br>Process                 | Predicted |  |
| Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants                                  | Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants        | Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants conservation project    | Threat ><br>Weed                                  | Key<br>Threaten<br>ing<br>Process                 | Predicted |  |
| Falco<br>subniger   | Black Falcon  | Falco<br>subniger<br>conservation<br>project   | Animal ><br>Birds                                 | Vulnerab<br>le                                    | Known     | Show 53<br>linked<br>vegetation<br>classes   |



| Aggressive<br>exclusion of<br>birds from<br>woodland and<br>forest habitat<br>by abundant<br>Noisy Miners,<br>Manorina<br>melanocephal<br>a (Latham,<br>1802) | Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners Manorina melanocephala.   | Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners, Manorina melanocephal a (Latham, 1802) conservation project | Threat > Pest Animal       | Key<br>Threaten<br>ing<br>Process | Predicted |   |
|---|---|--|----------------------------|-----------------------------------|-----------|---|
| Artamus<br>cyanopterus<br>cyanopterus   | Dusky Woodswallow   | Artamus<br>cyanopterus<br>cyanopterus<br>conservation<br>project   | Animal ><br>Birds          | Vulnerab<br>le                    | Known     | Show 103<br>linked<br>vegetation<br>classes |
| Petauroides<br>volans   | Southern Greater<br>Glider  | Petauroides<br>volans<br>conservation<br>project   | Animal ><br>Marsupial<br>s | Endange<br>red                    | Known     | Show 56<br>linked<br>vegetation<br>classes  |
| Haliaeetus<br>leucogaster   | White-bellied Sea-<br>Eagle   | Haliaeetus<br>leucogaster<br>conservation<br>project   | Animal ><br>Birds          | Vulnerab<br>le                    | Known     | Show 92<br>linked<br>vegetation<br>classes  |
| Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus caballus Linnaeus 1758  | Habitat degradation<br>and loss by Feral<br>Horses (brumbies,<br>wild horses), Equus<br>caballus Linnaeus<br>1758 | Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus caballus Linnaeus 1758 conservation project                              | Threat > Pest Animal       | Key<br>Threaten<br>ing<br>Process | Predicted |   |
| Rhodamnia<br>rubescens  | Scrub Turpentine  | Rhodamnia<br>rubescens<br>conservation<br>project  | Plant ><br>Shrubs          | Critically<br>Endange<br>red      | Known     | Show 30<br>linked<br>vegetation<br>classes  |
| Litoria<br>watsoni  | Watson's Tree Frog<br>or Southern Heath<br>Frog   | Litoria<br>watsoni<br>conservation<br>project  | Animal ><br>Amphibia<br>ns | Endange<br>red                    | Known     | Show 9<br>linked<br>vegetation<br>classes   |

