

Review of Environmental Factors

Broulee Road Reconstruction – Broulee

March 2025

Version 1.1



Document Tracking

Version No.	Document Author	Reviewed By	Approved By	Last Saved on
1.0	PM	GA	MA	04/03/2025
1.1	PM sensitive information redacted	GA		13/03/2025

Sensitive Information has been redacted from this REF for publishing on a public forum.

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 to take.
- 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 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 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.

Sensitive Information Redacted.

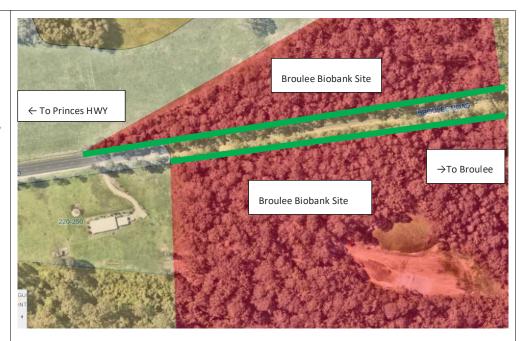


Figure 1. Exclusion Zones for various environmental sensitivities are marked in red. Green lines indicate approximate area for fencing to be placed.

- Before works commence, exclusion fencing will be placed around existing environmentally sensitive sites to prevent damage to these objects and areas.
- Environmental sensitivities include;
 - Broulee Biobanking Agreement Site 153 (<u>BioBanking-agreement_ID-no-153.pdf</u>)
- 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
 information in Table 1 below of this REF for further information on
 placement of exclusion zone fencing.

Soil

- A site-specific erosion and sediment control plan will be implemented on site before earthworks commence.
- Site management will incorporate best management erosion and sediment control practices such as those found in the Landcom's "Blue Book (4th Edition) on erosion and sediment control.
- Either a linear silt stop fencing or an earth mound is to be installed down slope of all affected areas and stockpiles. Sediment controls will be installed before any excavation begins.



	 All erosion and silt control devices will be visually inspected weekly to ensure effectiveness as well as after each rainfall event. 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. Construct temporary drainage structures in accordance with the 'Technical Guideline - Temporary Stormwater Drainage for Road Construction' (RMS 2011) Overburden will be placed in the form of a bund upslope of the site where necessary to reduce surface water entering the site. Stockpiles will be designed, established, operated and decommissioned in accordance with the RMS Stockpile Site Management Guidelines 2015.
Waterways and water quality	 Visual monitoring of local water quality (ie turbidity, hydrocarbon spills/slicks) is to be undertaken on a regular basis to identify any potential spills or deficient erosion and sediment controls. Water quality control measures are to be used to prevent any materials (eg. concrete, grout, sediment etc) entering drain inlets or waterways.
	 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.
Air quality	 Measures to minimise or prevent air pollution or dust are to be used including watering or covering exposed areas.
	 Works are not to be carried out during strong winds or in weather conditions where high levels of dust or air borne particulates are likely.
	Vegetation or other materials are not to be burnt on site.



- Vehicles and vessels transporting waste or other materials that may produce odours or dust are to be covered during transportation.
- Vehicles and equipment are to be maintained in good working order.
- Monitor work areas and stockpiles for dust generation and seed/cover/spray to suppress.
- Measures (including watering or covering exposed areas) are to be used to minimise or prevent air pollution and dust.
- Do not leave vehicles idling

Aboriginal Heritage

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

Follow Unexpected Finds Protocol Appendix C

Sensitive Information Redacted

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.



Unexpected Finds (Appendix C): • If Aboriginal heritage items are uncovered during the works, STOP,

- If Aboriginal 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, 2015) must then be followed.
- Examples of artifacts found in the area can be found in figure 3 above.

Non-Aboriginal Heritage

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

Follow Unexpected Finds Protocol Appendix C

Awareness:

 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.

Management of existing (known) items:

• There are no known Heritage items within the vicinity of the project works.



Unexpected Finds (Appendix C): • If heritage items are uncovered during the works, all works in the vicinity of the find must cease and the Project Manager contacted immediately, and the Standard Management Procedure -Unexpected Heritage Items (RMS, 2015) will be followed. **Traffic and** • Where possible, current traffic movements and property accesses transport are to be maintained during the works. Any disturbance is to be minimised to prevent unnecessary traffic delays. • A Traffic Management Plan (TMP) will be prepared in accordance with the RMS Traffic Control at Work Sites Manual RTA 2010) and QA Specification G10 Control of Traffic (RTA 2008). Comply with Council requirements regarding traffic control, access and road/ pedestrian access. Erect signs regarding proposed works, temporary road closures, diversions etc. • There are 3 schools in the Broulee area, bus companies that service the area should be notified prior to works commencing. Council aims to carry out majority of construction works in the tourist offseason to minimise traffic disruption. Construction area of road to be illuminated during period of • The road will be closed during the construction phase, open only to residence. Other motorists will be directed to use the detour into Broulee. All Businesses will be able to remain open and traffic will be directed to the venue via signs and appropriate Traffic Control. Biodiversity General: Flora and Fauna Identify measures to manage vegetation within the road reserve; Assessment Detail restoration, regeneration and rehabilitation of areas of Broulee-Roadnative vegetation that will be removed to accommodate the reconstructionproposed works. works,-Broulee-Flora-and-Fauna-Detail appropriate management for the potential habitat of Assessment.pdf threatened flora and fauna species that will be indirectly impacted by the proposal. This may include fencing and signage.

Identify weed management strategies.



 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.

Recommendations from Flora and Fauna Report

<u>Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-</u> Assessment.pdf

The following recommendations may assist in minimising impacts on flora and fauna during and post the works:

- 1. The extent of clearing/modification over the work site to be clearly delineated during clearing and "no go" flagging should be used as a barrier to protect vegetation outside the work footprint.
- 2. Any tree that can be retained should be marked with green flagging tape or no-go zone bunting to protect from impacts during clearing/construction.
- 3. Flag the HBT to ensure it is cleared using a two-stage clearing methodology. Two-stage clearing includes:
 - a) HBT removal the day after all underscrubbing of the area/other tree removal has occurred.
 - b) Ecologist or fauna spotter/catcher present on the site for either limb removal or tree felling.
 - c) Any fauna found in hollow will be extracted if possible or, if unable to be safely removed, left within the hollow which should be placed well outside of the works area to vacate overnight. If fauna is left, hollows will be inspected the morning after felling.
 - d) Any extracted fauna is to be checked for injuries/shock and relocated in suitable artificial housing outside of works area when considered appropriate for the species by ecologist or wildlife carer. Any dependent young need to be taken into care by licenced wildlife carer. Fauna that can be released are to be placed minimum of four (4) metres above ground in artificial housing in suitable sized trees. e) If fauna are microbats or reptiles, these will need to be taken into care for overwintering to avoid loss of body fat if clearing is later than 1st May.



4. All machinery entering the works site should be high-pressure air or water hosed and sprayed with PHYTOCLEAN® prior to transportation to limit spread of Chytrid fungus (Batrachochytrium dendrobatidis), Phytophthora cinnamomic, and weed species to the subject site. 5. Parking of vehicles should only be within non-native dominated vegetation. 6. Avoid works in the main breeding period of Gang-gang Cockatoo (October-January) to avoid increased noise disturbance. 7. Should unexpected, threatened fauna be found on the site, all works must cease near the find site and ESC environmental officer/ecologist contacted immediately for advice. A Fauna Rescue and Release Protocol should be implemented for all other fauna. Road Reserve -Trees to be retained within the road corridor are to be protected Retained with measures necessary so as to protect the root system, trunk Vegetation 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). 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. The vegetation to be removed includes approximately 40 Spotted Vegetation Gums, 13 Forest Red Gums, three Swamp Oaks and one Grey Removal



Ironbark, along with approximately 40 saplings under 10cms and

- understory/ground vegetation. Of the trees to be removed, only three are greater than 60cms in diameter at breast height (DBH) with one being the 80cm DBH Grey Ironbark that contained one potential hollow in the form of a fissured broken branch.
- Prior to removal trees are to be marked with an x to clearly identify which ones to fell.
- 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 show no evidence of being culturally modified.
- Trees have been inspected by an external ecologist
- A visual inspection indicated they were not providing habitat for larger fauna.
- The extent of clearing/modification over the work site to be clearly delineated during clearing and "no go" flagging should be used as a barrier to protect vegetation outside the work footprint.
- Any tree that can be retained should be marked with green flagging tape or no-go zone bunting to protect from impacts during clearing/construction.
- Flag the HBT to ensure it is cleared using a two-stage clearing methodology. Two-stage clearing includes:
 - a) HBT removal the day after all underscrubbing of the area/other tree removal has occurred.
 - b) Ecologist or fauna spotter/catcher present on the site for either limb removal or tree felling.
 - c) Any fauna found in hollow will be extracted if possible or, if unable to be safely removed, left within the hollow which should be placed well outside of the works area to vacate overnight. If fauna is left, hollows will be inspected the morning after felling.
 - d) Any extracted fauna is to be checked for injuries/shock and relocated in suitable artificial housing outside of works area when considered appropriate for the species by ecologist or wildlife carer. Any dependent young need to be taken into care by licenced wildlife carer. Fauna that can be released are to be placed minimum of four (4) metres above ground in artificial



housing in suitable sized trees. e) If fauna are microbats or reptiles, these will need to be taken into care for overwintering to avoid loss of body fat if clearing is later than 1st May.

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.

Noise and vibration

Notification:

 All sensitive receivers (eg local residents) likely to be affected will be notified at least five working days prior to the start of any works associated with the activity that may have an adverse noise or vibration impact.

Standard Hours of Operation:

 Works to be carried out during normal work hours (i.e. 7am to 6pm Monday to Friday; 8am to 1pm Saturdays). Any work that is performed outside normal work hours or on Sundays or public holidays may not be permitted and, if permitted, works are to minimise noise impacts.

Out of hours:

 Where out-of-hours activities are required, a Noise and Vibration Management Plan will be prepared and implemented in consultation with sensitive receivers.

Socio-economic

- Contain all work within the boundaries designated on the site plan.
- Restore work sites to as close to their original condition as possible.
- Display public information signs until site restoration is complete.
- Carry out community and stakeholder consultation before works start.
- Notify the Works Supervisor and Coordinator immediately of any complaints or any accidental damage to property.
- Locate services on DBYD search and peg out no-go areas to avoid service-disruption.
- All Council staff will exercise courtesy in dealing with the community.



Landscape character and visual amenity	 Contain all work within the boundaries designated on the site plan. Restore work sites to as close to their original condition as possible. Minimise spread of stockpiles, waste, and parking
Waste	 A Waste Management Plan will be prepared as part of the CEMP. All surplus material, off cuts, and other debris resulting from the work shall be removed from site and disposed of by a licensed contractor to a licensed waste management facility.
	 Waste material, other than vegetation and tree mulch, is not to be left on site once the works have been completed. Working areas are to be maintained, kept free of rubbish and cleaned up at the end of each working day.

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 Reconstruction
Proponent (council) name	Eurobodalla Shire Council
Project manager	Philip Oste
Position	Divisional Manager, Major Projects
Contact details	

Project description and background

Background and scope

This project is part of the ongoing improvements to Broulee Road, aimed at enhancing traffic flow, reducing crashes, and improving sight distances while providing a safe, dedicated cycle lane. The reconstruction of this section will extend the road's lifespan, ultimately lowering maintenance costs. Additionally, the upgrades will help minimise sediment runoff into the surrounding biodiversity area.

The project covers approximately 412 meters, starting about 140 meters from the intersection of George Bass Drive and Broulee Road. The existing roadway will be widened to 11 meters, incorporating 2m sealed shoulders on both sides. This initiative is a key component of broader efforts to enhance Broulee Road's safety and functionality.



Scope of Works

Stage 1 – Site Setup;

- Installation of exclusion fencing for retained vegetation.
- Traffic control signages
- Installation of sediment control and traffic control.

Stage 2 – Initial Construction Works;

• Removal of vegetation and initial earthworks.

Stage 3 – Construction Works;

- Extend existing SW pipe at CH 116.0 on the right side and install a letterbox pit.
- Installation of retaining wall from CH 110 to 170 and Ch190 to 210.
- Construction subsoil drainage and connect to the stormwater pits on the south side.
- Modify existing concrete pit at Ch 200, letter pit cover.
- Carry out pavement stabilisation throughout the entire length of the project.
- Importing and placement of 180mm thickness of pavement layer.
- Access Road adjust new finish level and edge strip kerb return as shown in the drawings.
- Installation of SO kerb at the designed locations.
- Sealing of the pavement.
- Installation of new signs and guideposts.

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.



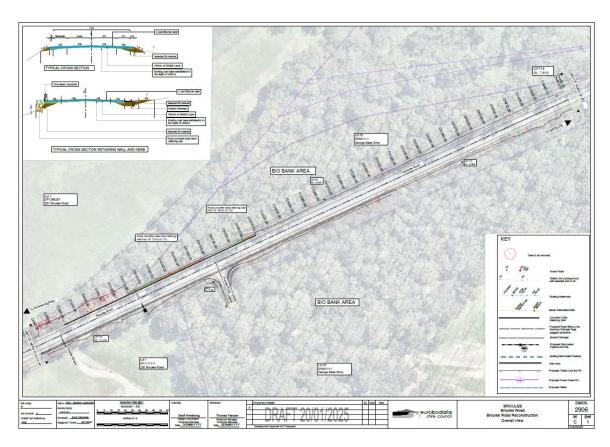


Figure 4. Plan of Broulee Road reconstruction showing full scope of works.

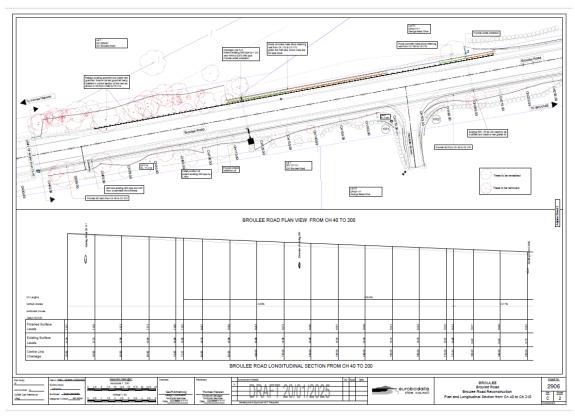


Figure 5. Broulee Rd Plan View from CH 40 to 200.



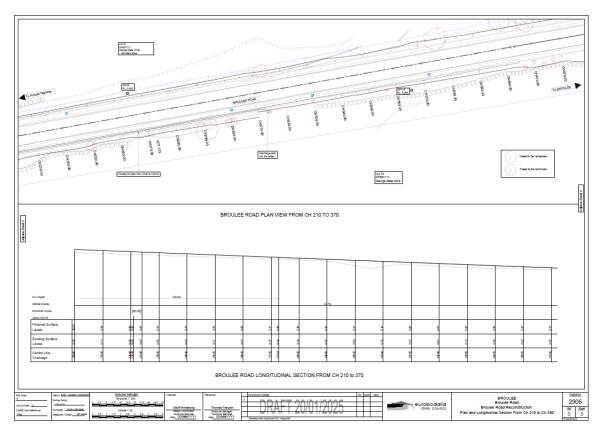


Figure 6. Broulee Rd Plan View from CH 210 to 370

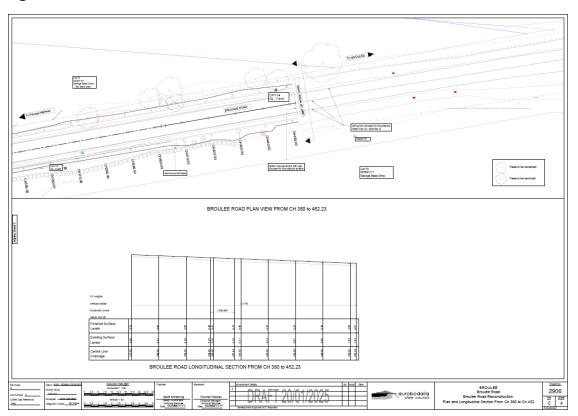


Figure 7. Broulee Rd Plan View from CH 380 to 452.23.



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 8 below. Laydown areas for parking of vehicles/machines/materials can be situated in open areas in the adjacent stockpile site ESC uses in Lot 70 DP 831111 or within already disturbed areas at the corner of George Bass Dr and Broulee Road (Figure 9).





Figure 8. Exclusion Zones containing sensitive environmental areas, ancillary areas must not be within these zones.

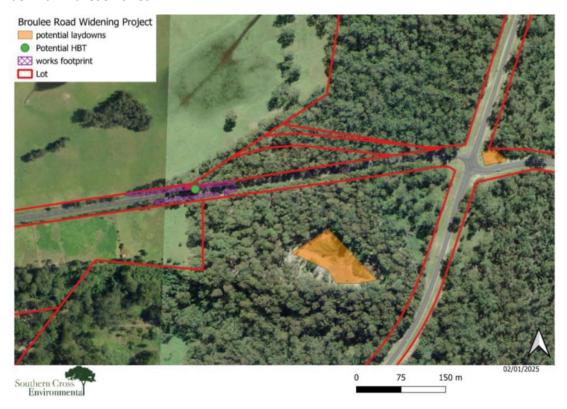


Figure 9. Potential laydown and ancillary areas.

Duration and working hours

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

Table 3. Project timeframes

Start date	March 2025
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.

Project location and context

Location of the proposed activity

The proposed road upgrade will be constructed along Broulee road, coordinates - 35.8559823, 150.1591640. The site is west and adjacent to the new roundabout at the crossroads of George Bass Drive and Broulee Road. The site location is approximately 1km from Broulee, 16km from Batemans Bay and 10km from Moruya.

Site context

Broulee Road is a vital local roadway that connects the coastal community of Broulee to surrounding towns and key infrastructure. It serves as a primary route for residents, businesses, and tourists, providing access to essential services, schools, and recreational areas. The road traverses a mix of natural landscapes, including bushland and wetlands, making it an environmentally sensitive area requiring careful management. Due to its coastal location, the road is subject to variable weather conditions, including heavy rainfall, which impacts drainage and road stability. The planned upgrades aim to improve safety, accessibility, and resilience while minimising environmental impacts and ensuring the road meets the growing needs of the community.



Land use and ownership

The footprint of works will be contained within the Broulee Road Reserve which has existing public road infrastructure to be upgraded. The land use surrounding the site is a combination of cleared farmlands and an ESC reserve that is a Biobanking site

The surrounding land is a combination of cleared farmland (RU1) and land managed by ESC as part operational and part community land (C2). This 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 (Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf) that occur next to the construction zone. Machinery, works and ancillary areas are not to encroach into these areas. There is no land owned by crown, National Parks or Forestry NSW

Project justification and consideration of alternatives

Reconstructing Broulee Road will provide significant benefits to the community by enhancing road safety, comfort, and longevity. The additional pavement width will create a safer and more accommodating roadway for all users, including cyclists, who will have a designated space to travel. Improvements to the drainage system, including subsoil drains, will help regulate moisture content, reducing pavement deterioration and extending its lifespan. Upgrading the existing stormwater system will increase its capacity, effectively managing water runoff and minimising flooding risks. Additionally, these enhancements will reduce sediment runoff and pollution, leading to a positive environmental impact and contributing to a cleaner, more sustainable local ecosystem.

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	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). Impacts to MNES and migratory species listed under the EPBC Act with the potential to occur in the project area have been assessed with none identified so long as mitigation and management recommendations of the Flora & Fauna report (Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf) and Table 1 of this REF are adhered to.		

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.

Vegetation along Broulee Rd is mapped under Biodiversity Values Mapping for "Threatened species or communities with potential for serious and irreversible impacts". The roadway itself is not mapped; however, this proposal will require works in the mapped land. Part 5 developments do not immediately require entry into the Biodiversity Offset Scheme (BOS), undertaking a Test of Significance (ToS) as part of the Review of Environmental Factors (REF), to determine significance. Should significant impact be identified, the proponent may either opt into the BOS or undertake a Species Impact Statement or decrease the impact of the proposal. The Flora & Fauna assessment



Local Land	(Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf) found no significant impact to threatened species or EECs from the proposal, so long as the recommendations within the report found in Table 1 of this REF are adhered to. The objects of the LLS Act include 'to ensure the proper management
Services Act 2013 (LLS Act)	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 immediately adjacent to a waterbody or mapped fish habitat. However, it should be noted that there is a wetland to the North of the project that is mapped as fish habitat and all mitigation measures outlined in Table 1 of this REF must be followed to ensure sediment and dirty water does not enter this ecosystem.
National Parks and Wildlife Act 1974 (NPW Act) Sensitive Information Redacted	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, see Appendix B.







works on the site is therefore not required under Part 4 of the Heritage Act. Not Applicable. **Protection of the** The POEO Act is the key environmental protection and pollution **Environment** statute. The POEO Act is administered by the EPA and establishes a **Operations Act** licensing regime for waste, air, water and pollution. Relevant sections 1997 (POEO Act) 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 POEO Public Register 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 sustainable Water and integrated manner that will benefit today's generations without Management compromising future generations' ability to meet their needs. Section Act 2000 (WM 91E of the Act establishes an approval regime for controlled activities Act) 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. Although formal approval under the WM Act is not required, if the proposed activity is within 40m of a waterway, an attempt should be made to comply with the requirements of controlled activities in order to reduce risks to waterways. Section 88 of the *Roads Act* states that a roads authority may, despite Roads Act 1993 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. Clearing of vegetation for this project is within the road reserve and will occur under section 88 of the Roads Act in this instance. Chapter 2 of The State Environmental Planning Policy (Resilience and State Hazards) 2021 provides controls for undertaking development and Environmental



Planning Policy – Resilience and Hazards 2021, Chapter 2 -Coastal Management activities in coastal management areas. The four coastal management areas are:

- Coastal wetlands and littoral rainforests area areas which display the characteristics of coastal wetlands or littoral rainforests that were previously protected by SEPP 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.

The proposal is not situated on land mapped under the Coastal Environment or Use Areas.

State
Environmental
Planning Policy
Biodiversity and
Conservation
2021 – Chapter 2
Vegetation in
Non-Rural 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).

This proposal is within an area to which the Biodiversity and Conservation SEPP applies, however as the works are being assessed under part 5 of the EP&A Act and are not "development", the requirements of the SEPP do not apply.

State Environmental Planning Policy - 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



Biodiversity and Conservation 2021 -Chapter 3 Koala Habitat Protection 2020 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.

This proposal is within an area to which the Biodiversity and Conservation SEPP applies, however as the works are being assessed under part 5 of the EP&A Act and are not "development", the requirements of the SEPP do not apply. The site contains potential koala habitat with Forest Red Gums noted that are considered a primary feed trees for the Koala on the south coast. However, no Koala records for the last 18 years are known for the locality. Therefore, the site is not considered core habitat and the proposal is not inconsistent with chapter 4 of this SEPP.

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.

4. Community and agency consultation

Table 5: Community and agency consultation

Community / Have any community stakeholders been identified for the proposed works?

consultation Yes □ No ☒



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 national park, nature reserve or other area reserved under the National Parks and Wildlife Act 1974?

Yes ☒ No □

Are the works adjacent to a declared aquatic reserve under the Fisheries Management Act 1994?

Yes □ No ☒

Other agency and community consultation:

Not applicable

5. 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, geology and	Does the project involve the disturbance of large areas (eg >2ha) for earthworks?	
soils	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 rethe likely project footprint or that would likely receive stormwater disconnection that project?		
	Sensitive receiving environments include (but are not limited to) wetlands, state forests, national parks, nature reserves, rainforests, drinking water catchments).	



Yes ⊠ No □ There is a wetland mapped as fish habitat to the North of the project, see Figure 12. All mitigation measures outlined in Table 1 of this REF must be followed to prevent sediment and dirty water reaching this sensitive environment. Figure 12. Sensitive receiving environment, Wetland mapped as fish habitat to the North of the project site. Potential Any disturbance of groundcover presents a potential risk for erosion, this risk can be minimised through implementation of the following safeguards. impacts A site-specific erosion and sediment control plan will be implemented Safeguards on site before earthworks commence. Site management will incorporate best management erosion and sediment control practices such as those found in the Landcom's "Blue Book (4th Edition) on erosion and sediment control. Either a linear silt stop fencing or an earth mound is to be installed down slope of all affected areas and stockpiles. Sediment controls will be installed before any excavation begins. All erosion and silt control devices will be visually inspected weekly to

ensure effectiveness as well as after each rainfall event.

	 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. Construct temporary drainage structures in accordance with the 'Technical Guideline - Temporary Stormwater Drainage for Road Construction' (RMS 2011) Overburden will be placed in the form of a bund upslope of the site where necessary to reduce surface water entering the site. Stockpiles will be designed, established, operated and decommissioned in accordance with the RMS Stockpile Site Management Guidelines 2015.
Contaminated	Is the project located within an area mapped as Potential Acid Sulfate Soils?
land and acid sulfate soils	Yes □ No ⊠
Sulfate Solis	Are there any known occurrences of acid sulfate soils in the area?
	Yes ⊠ No □
	Provide details
	Potential acid sulphate soils may occur approximately 200m to the east of the project site.
	Is the project located within an area mapped as Potential Contaminated Land?
	Yes □ No ⊠
	Provide details
	The site is adjacent to an area mapped as potentially contaminated land as it was historically a tip.
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.



Are the works located within or adjacent to a waterbody or wetland, or within 40m of a waterway? Yes □ No ☒
If yes, provide details: There is a wetland, mapped as fish habitat approximately 100m to the north of the site and all due care to ensure sediment and dirty water do not enter the sensitive receiving environment should be taken. 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: N/A
Will the proposed works be undertaken on a bridge? Yes □ No ☒ Is the location known to flood or be prone to water logging? Yes □ No ☒ If yes, provide details
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

- Visual monitoring of local water quality (ie turbidity, hydrocarbon spills/slicks) is to be undertaken on a regular basis to identify any potential spills or deficient erosion and sediment controls.
- Water quality control measures are to be used to prevent any materials (eg. concrete, grout, sediment etc) entering drain inlets or waterways.
- 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.
- Divert clean water around the site.
- 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: 25/02/2025, Flora and Fauna Survey and Assessment undertaken by an ecologist on the 17/12/2024 (Broulee-Road-reconstruction-works,-**Broulee-Flora-and-Fauna-Assessment.pdf**) Are the proposed works likely to impact on any vegetation including, shrubs, trees? Yes ⊠ No □ Flora and Fauna Survey and Assessment undertaken by an ecologist on the 17/12/2024 (Broulee-Road-reconstruction-works,-Broulee-Floraand-Fauna-Assessment.pdf) The direct impact of the proposal is the loss or modification of approximately 1,500m2 of native vegetation for clearing and road reconstruction. The vegetation to be removed includes approximately 40 Spotted Gums, 13 Forest Red Gums, three Swamp Oaks and one Grey Ironbark, along with approximately 40 saplings under 10cms and understorey/ground vegetation. Of the trees to be removed, only three are greater than 60cms in diameter at breast height (DBH) with one being the 80cm DBH Grey Ironbark that contained one potential hollow in the form of a fissured broken branch. Limited fallen timber or sedge patches occurred that could provide ground habitat for threatened species. Therefore, the habitats within the works site are not considered particularly important in the locality for most threatened fauna, especially due to the position of the clearing works adjacent to a busy roadway. East and west connectivity is already broken in the locality due to the Broulee township and open farmland to the west. North and south connection is greater. 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 □ Flora and Fauna Survey and Assessment undertaken by an ecologist on the

17/12/2024 (Broulee-Road-reconstruction-works,-Broulee-Flora-



and-Fauna-Assessment.pdf)

Fourteen threatened flora species were flagged as possibly occurring on or within 10 kms of the work site. No listed threatened flora species were found in surveys, and most were considered unlikely to occur due to the level of disturbance within the road reserve area, geology, landform or vegetation constraints.

Appendix A within the Flora and Fauna Assessment Report (Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf) contains threatened fauna identified as occurring or potentially occurring in a 10-km radius around the work site. Several threatened species are known for the vicinity around the works site. However, it was considered unlikely that the proposal, so long as it follows recommendations in section 6 of the report, would impact many of the predicted or known threatened fauna. This was based on the minimal scope of works, the current level of disturbance in the area and lack of essential habitat features for many species' life traits. As one potential HBT will require removal and with the known biology of the Greater Glider, it was determined that the following entities required assessment under Section 7.3 of the BC Act 2016 or the Commonwealth EPBC Act 1999:

- Eastern False Pipistrelle (Falsistrellus tasmaniensis)
- Eastern Coastal Free-tailed Bat (Micronomus norfolkensis)
- Southern Myotis (Myotis macropus)
- Greater Glider (Petauroides volans)

Impacts to MNES and migratory species listed under the EPBC Act with the potential to occur in the project area have been assessed with none identified so long as mitigation and management recommendations of the Flora and Fauna report (Found in Table 1 of this REF) are adhered to.

The site is within the area applied to the Conservation of the Yellow-bellied Glider (YBG) in the Broulee area policy and suitable habitat occurs within the area surrounding the works site. However, no Habitat Bearing Trees (HBTs) suitable for the species, nor sap feed trees, will be impacted. Clearing, especially the western section that is on the edge of already large, cleared farmland, will not impact connectivity for the species in the locality. The extension of the road width does not provide a barrier the species could not cross, with YBG known to undertake glides of c.100m readily. Therefore, the proposal is not considered to be inconsistent with the policy (Flora and Fauna Assessment Report Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf).

PCT 3273- South Coast Lowland Shrub-Grass Forest is not a TEC.



Several TECs occur in the locality, including Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions, Lowland Grassy Woodland in the South East Corner Bioregion and Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions. However no direct or indirect impact from the extent of works for this proposal is envisaged on any EEC (Flora and Fauna Assessment Report). Are the works taking place in a roadside area designated as high conservation value vegetation? Yes ⊠ No □ If yes, provide details: Vegetation along Broulee Rd is mapped under Biodiversity Values Mapping for "Threatened species or communities with potential for serious and irreversible impacts". The roadway itself is not mapped; however, this proposal will require works in the mapped land. Part 5 developments do not immediately require entry into the Biodiversity Offset Scheme (BOS), undertaking a Test of Significance (ToS) as part of the Review of Environmental Factors (REF), to determine significance. Should significant impact be identified, the proponent may either opt into the BOS or undertake a Species Impact Statement or decrease the impact of the proposal. This assessment has found no significant impact to threatened species or EECs from the proposal, so long as the recommendations within the report are adhered to (Flora & Fauna Assessment Report). Will the proposed works require the removal of any other vegetation? Yes ⊠ No □ If yes, provide details: Works will entail removal of vegetation along the north (eastbound) and south (westbound) sides of Broulee Road, from a culvert at chainage 200 approximately 40m to the west. This is the edge of existing canopy vegetation. Do the proposed works involve pruning, trimming or removal of any tree/s? Yes ⊠ No □ If yes, provide details: 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:
The vegetation to be removed includes approximately 40 Spotted Gums, 13 Forest Red Gums, three Swamp Oaks and one Grey Ironbark, along with approximately 40 saplings under 10cms and understorey/ground vegetation. Of the trees to be removed, only three are greater than 60cms in diameter at breast height (DBH) with one being the 80cm DBH Grey Ironbark that contained one potential hollow in the form of a fissured broken branch. Limited fallen timber or sedge patches occurred that could provide ground habitat for threatened species. Therefore, the habitats within the works site are not considered particularly important in the locality for most threatened fauna, especially due to the position of the clearing works adjacent to a busy roadway. 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:
Will the proposed works disturb any natural waterways or aquatic habitat?
Yes □ No ⊠
If yes, provide details:
The closest waterway is a wetland approximately 100m north of the site that is mapped as fish habitat. With stormwater and road infrastructure draining towards that area it is important that all mitigation measures in table 1 of this REF are followed during construction.
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:		
	Do the trees form part of a heritage listing or have other heritage value?		
	Yes □ No ⊠		
	If yes, provide details:		
	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:		
	The potential risks to the biodiversity within the vicinity of the site have been assessed by a qualified ecologist, please see full report in Link.		
	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: 		
	 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.

Clearing of Vegetation: Pre-clearing:

- Qualified fauna experts are required to conduct pre-clearing surveys and undertake fauna handling if required. This may include:
 - Hollow bearing tree survey;
 - Stag-watching survey (targeted threatened bird species, arboreal mammals and microbats) in order to identify the number and type of nest boxes required and appropriate locations to install them.
- Where clearing is required, establish exclusion zones in accordance with Guide 2 Exclusion Zones of Roads and Maritime Biodiversity Guidelines (RTA 2011) to ensure clearing does not extend beyond the approved area.
- Trees that are to be trimmed (or removed if necessary) will be clearly marked. Any vegetation to be protected adjacent to the work area will be protected with exclusion fencing.
- Exclusion fencing will be placed at or beyond the drip lines of the protected vegetation so as to prevent damage to their root systems.
- Any trees with hollows are to be checked for native fauna prior to being removed. If any fauna is found, works will stop and WIRES will be contacted. Refer to any Council specific policy requirements for hollow bearing trees and amend mitigation measures accordingly.

Clearing of vegetation - general safeguards

- Remove minimum required vegetation and minimise disturbance to remaining vegetation
- If any damage occurs to vegetation outside of the boundaries of the work site as a result of the implementation of the proposal, the Project Manager will be notified and will establish strategies for mitigation of impacts and site restoration.

Loss of threatened species and their habitats:

- Minimise removal of native vegetation and fauna habitat.
- Implement exclusion zones to protect threatened ecological communities and threatened species habitat.
- Remove trees in accordance with Guide 4: Clearing of Vegetation and Removal of Bushrock of Roads and Maritimes Biodiversity Guidelines (RTA, 2011) and in the presence of a qualified ecologist or wildlife expert experienced in the rescue of fauna.



- Where reasonable and feasible, retain mature and hollow bearing habitat trees, including dead stags.
- If hollow bearing trees are being removed, provide nest boxes to mitigate impacts, as determined by the pre-clearing survey.
- Works are not to harm threatened fauna.
- Works are not to create a barrier to fauna movement.

Aquatic habitats and Riparian Zones:

- Manage riparian areas in accordance with Roads and Maritime's 'Biodiversity Guidelines Guidance Note 10: Aquatic Habitats and Riparian Zones' (RTA 2011).
- Should alteration of fish passage occur during construction consult with NSW Department of Primary Industries to determine if a permit under Section 219 of the FM Act is 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.



Aboriginal	Are the works likely to disturb previously undisturbed areas of the landscape?	
heritage	Yes □ No ⊠	
	The area to be disturbed is within the road corridor	
	Has an AHIMS register search been conducted?	
	Yes ⊠ No □	
	Has Due Diligence been conducted?	
	Yes ⊠ No □	
	Please see the Due Diligence in appendix B.	
	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	
	The footprint of works is within the heavily disturbed road corridor and the	
	Due Diligence checklist (Appendix B) found that works could proceed under	
	the Unexpected Finds Protocol (Appendix C). Would the proposal involve the removal of mature native trees?	
	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 checked for scarring and Aboriginal Cultural Significance.	
Potential	Does the project pose any potential risk to Aboriginal heritage?	
impacts	Yes □ No ⊠	
	If yes, provide details.	
	Under the Due Diligence Code of Conduct the project is assessed as having low potential risk to Aboriginal heritage.	
Safeguards	Awareness:	
Sensitive Information Redacted	 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. 	

	 There are 2 existing AHIM sites recorded to the North of the footprint of works, the sites are far enough away from the construction area that fencing is not necessary. 	
	Unexpected Finds (Appendix C):	
	 If Aboriginal 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, 2015) must then be followed. 	
Non-	Complete online heritage database searches	
Aboriginal	NSW Heritage database	
heritage	Commonwealth EPBC heritage list	
	Australian Heritage Places Inventory	
	Local Environmental Plan(s) heritage items	



	Are there any items of Non-Aboriginal heritage located within the vicinity of the proposed works?	
	Yes □ No ⊠	
Potential	Does the project pose any potential risk to Non-Aboriginal heritage?	
impacts	Yes □ No ⊠	
Safeguards	Awareness:	
	 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. 	
	Management of existing (known) items:	
	There are no known items in the vicinity of the work site.	
	<u>Unexpected Finds (Appendix C):</u>	
	 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, 2015) must then be followed. 	
Noise	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 show proximity to proposed works	





	 Standard Hours of Operation: Works to be carried out during normal work hours (i.e. 7am to 6pm Monday to Friday; 8am to 1pm Saturdays). Any work that is performed outside normal work hours or on Sundays or public holidays may not be permitted and, if permitted, works are to minimise noise impacts. Out of hours: Where out-of-hours activities are required, a Noise and Vibration Management Plan will be prepared and implemented in consultation with sensitive receivers.
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 □
	There is one residence in the vicinity of the works, please see map in figure 14 above.
	Is there likely to be an emission to air of dust, smoke, steam or vehicle emissions?
	Yes □ No ⊠
Potential impacts	Does the project pose any potential risk to the surrounding air quality? Yes □ No ☒
	If yes, provide details
	Mitigation measures outlined in Table 1 of this REF will be ustalised to ensure dust is kept to a minimum during construction.
Safeguards	 Measures to minimise or prevent air pollution or dust are to be used including watering or covering exposed areas.
	 Works are not to be carried out during strong winds or in weather conditions where high levels of dust or air borne particulates are likely
	Vegetation or other materials are not to be burnt on site.
	 Vehicles and vessels transporting waste or other materials that may produce odours or dust are to be covered during transportation
	Vehicles and equipment are to be maintained in good working order.



	 Monitor work areas and stockpiles for dust generation and seed/cover/spray to suppress. 			
	 Measures (including watering or covering exposed areas) are to be used to minimise or prevent air pollution and dust 			
	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 impacts	There is potential for waste material to end up in the surrounding sensitive environments if not managed properly. All mitigation measures outlined in Table 1 of this REF must be followed.			
Safeguards	A Waste Management Plan will be prepared as part of the CEMP			
	 All surplus material, off cuts, and other debris resulting from the work shall be removed from site and disposed of by a licensed contractor to a licensed waste management facility. 			
	 Waste material, other than vegetation and tree mulch, is not to be left on site once the works have been completed. 			
	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 Yes ⊠ No □			



	During Operation Yes □ No ⊠	
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 Bus Poutes and timing to and from Schools and residences in Browles will be	
	Bus Routes and timing to and from Schools and residences in Broulee will be affected. Bus companies should be notified prior to works commencing.	
Safeguards	 Where possible, current traffic movements and property accesses are to be maintained during the works. Any disturbance is to be minimised to prevent unnecessary traffic delays. 	
	 If traffic disturbance is unavoidable, a Traffic Management Plan (TMP) will be prepared in accordance with the RMS Traffic Control at Work Sites Manual RTA 2010) and QA Specification G10 Control of Traffic (RTA 2008). 	
	 Comply with Council requirements regarding traffic control, access and road/ pedestrian access. 	
	 Erect signs regarding proposed works, temporary road closures, diversions etc. 	
Visual amenity/	Will the project have any potential impact on visual amenity of the site a surrounding landscape?	
landscape	Yes ⊠ No □	
	If yes, provide details	
	Vegetation within the road corridor will be cleared to allow the road to be widened.	
Potential impacts	Loss of vegetation may change the visual amenity of the project area.	
Safeguards	Contain all work within the boundaries designated on the site plan	
	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
	Are the proposed works likely to require any property acquisition?
	Yes □ No ⊠
	If yes, provide details
	Are the proposed works likely to alter any access for properties (either temporarily or permanently)?
	Yes ⊠ No □
	If yes, provide details
	There is one rural residence within close proximity to the works which may temporarily have access issues during construction. Please see figure 14.
	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
	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 Memorial Gardens & Crematorium is along Broulee Rd to the West of the project location. Access from Broulee may be affected. However, access from the Princes Hwy will be maintained throughout the construction period of the project.
	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



Potential	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
	Restore work sites to as close to their original condition as possible
	Display public information signs until site restoration is complete
	Carry out community and stakeholder consultation before works start
	 Notify the Works Supervisor and Asset Manager immediately of any complaints or any accidental damage to property
	 Locate services on DBYD search and peg out no-go areas to avoid service-disruption
	All Council staff will exercise courtesy in dealing with the community

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.

b) Cause any transformation of a locality?

The footprint of works is within mainly the heavily disturbed road reserve. Clearing of vegetation from the road reserve will change the visual amenity of the area, however the vegetation on either side of the project footprint will be retained and the area will not be largely altered over the long term. Reconstructing this section of road will improve road safety and accessibility.

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

The Flora and Fauna Assessment by a qualified external ecologist (Report <u>Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf</u>) found that there will not be an overall negative environmental impact on the local ecosystems if mitigation measures in the report and Table 1 of this REF are followed.

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

No, majority of the project footprint is in the heavily disturbed road reserve. The Flora and Fauna Assessment (<u>Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf</u>) found there would be no significant threat to the environmental values of the area. Reconstructing the road will improve 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?

The removal of vegetation from the road reserve will not have a significant impact on the aesthetic, cultural, historical, scientific, or social values of the surrounding



environment for present or future generations. A qualified external ecologist has assessed the area, with the full report available via the link <u>Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf</u>. Enhancing the road's width and resilience will improve safety and accessibility.

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

Loss of vegetation from the road reserve will not significantly impact on the habitat of protected or endangered fauna (as per Biodiversity Conservation Act 2016), a qualified external ecologist assessed the area and the full report can be found at Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf. Reconstructing the road and increasing its resilience will improve road safety and accessibility.

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

The footprint of works is within the road reserve a qualified external ecologist assessed the area and determined that there would be no long-term effects on the environment caused by the project. The full report can be found at Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf.

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

No, majority of the project area is heavily disturbed, and all works will be within the footprint of the road reserve. A qualified external ecologist assessed the area (Report Broulee-Road-reconstruction-works,-Broulee-Flora-and-Fauna-Assessment.pdf) and determined that there would be no degradation on the quality of the environment caused by the project. The full report can be found in. The high value environmental assets of the area outside of the road reserve will be fenced and remain undisturbed.

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

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

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

No, majority of the project area is heavily disturbed and all works will be within the footprint of the road reserve. Reconstructing the road and upgrading the infrastructure will improve road safety and accessibility. The footprint of works is already functioning as public road infrastructure.

k) Cause any pollution of the environment?

Table 1 of this REF outlines mitigation measures to ensure the surrounding environment will not be significantly impacted by the construction of this project.



- 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 footprint of works is already functioning as public road infrastructure and the project will improve the safety of the area.
- o) Have any impact on coastal processes and coastal hazards, including those under projected climate change conditions.
 - No, the project is not within or adjacent to lands which are subject to coastal processes or hazards.

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
(a) Any impact on a World Heritage property?	Nil
(b) Any impact on a National Heritage place?	Nil
(c) Any impact on a wetland of international significance?	Nil
(d) Any impact on nationally threatened species, ecological communities or migratory species?	Nil
(e) Any impact on a Commonwealth marine area?	Nil
(f) Does the proposal involve a nuclear action?	Nil
Additionally, any impact (direct or indirect) on the environment of Commonwealth land?	Nil

6. 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

Signature

Position: Engineering Environmental Support Officer

Date: 4/03/2025

Reviewed and endorsed by: Mir Akbar

Signature

Position: Design Officer

Date: 04/03/2025



Appendix A – Works Location

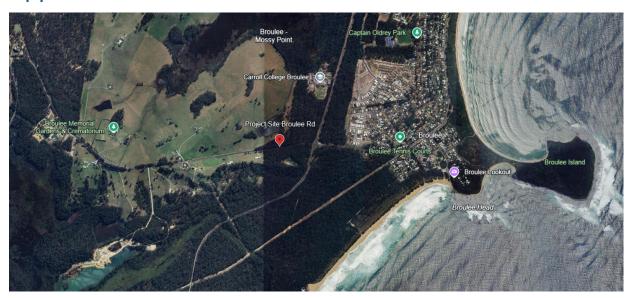


Figure 15. Works location

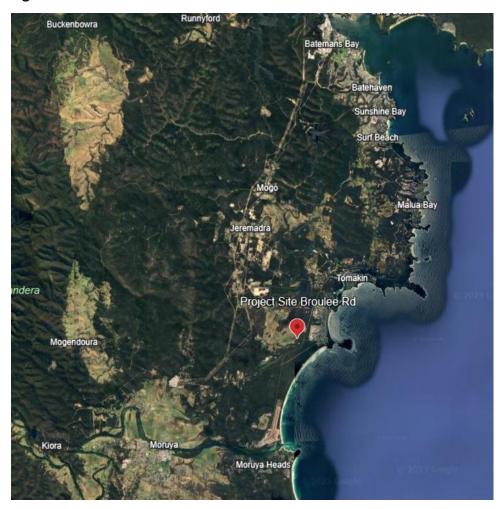


Figure 16. Works location in proximity to larger regional centres



Appendix B – Completed Due Diligence Aboriginal Heritage.

Aboriginal Cultural Heritage - Due Diligence Checklist

This checklist is intended to act as a guide in carrying out due diligence under the *National Parks and Wildlife Act 1974* (NSW) (**Act**). This checklist should be used in conjunction with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* published by the Department of Environment, Climate Change and Water and dated 13 September 2010 (**Code**).

It is an offence under s 86(2) the *National Parks and Wildlife Act 1974* (NSW) to harm an Aboriginal object. It is a defence to a prosecution for this offence if the Defendant shows that they exercised due diligence to determine whether the act or omission constituting the offence would harm an Aboriginal object and reasonably determined that no Aboriginal object would be harmed. Compliance with the Code is taken to constitute due diligence for the purposes of this defence, under cl 57 of the *National Parks and Wildlife Regulation 2019* (**Regulations**). However, the defence can only be relied upon if the outcome of the due diligence reasonably determines that no Aboriginal object would be harmed.

Compliance with the Code does **not** provide a defence to the offences of harming or desecrating an object that the person knows to be an Aboriginal object (under s 86(1) of the Act) or an Aboriginal place (under s 86(4) of the Act). However, use of this checklist can assist in identifying whether a site is an Aboriginal place or contains an Aboriginal object, to avoid committing these offences.

Due diligence can be carried out as part of an environmental impact assessment (**EIA**) under the *Environmental Planning and Assessment Act 1979* (NSW). While this does not need to follow the same process as in the Code, it should consider, at a minimum the issues set out in this checklist.

Additional records should be kept recording the searches conducted, and evidencing the matters considered in completing this checklist. These records should be kept together with a completed copy of this checklist, and any EIA, and maintained on Council's file.

¹ There are also a number of industry specific due diligence guidelines, which can be used under cl 57 of the Regulations, instead of the Code. These industry specific guidelines are not considered in this checklist.



1. Project details			
Project name	Broulee Road Reconstruction Project		
Address	-35.8559455, 150.1596040		
Lot and DP	Road reserve adjacent to Lot 70 DP831111		
Description of the project site	The project footprint is within the road reserve of which majority is disturbed due to the public road that is pre-existant. The edges of the reserve are vegetated. The dominant canopy over the works site is Spotted Gum (Corymbia maculata) with some Forest Red Gum (E.tereticornis) and Grey Ironbark (E. paniculata). The area surrounding the site is a mixture of cleared farm land and bushland.		
Description of the works	Works will entail removal of vegetation along the north (eastbound) and south (westbound) sides of Broulee Road, from a culvert at chainage 200 approximately 3 40m to the west. This is the edge of existing canopy vegetation. Sections of the southern verge (westbound lane) will be kerbed/guttered, including an access track to a section of crown land (Lot 70 DP 831111) managed by ESC under a biobanking agreement with the State of NSW. Under road drainage will be upgraded, and gabion rock walls and guard rails installed on the northern (eastbound) lane. The estimated extent of the clearing is approximately 1500m2 for road reserve and side access track.		
Type of works	 □ New development □ Major maintenance □ Minor maintenance 		
Disturbance footprint (including ancillary or laydown areas)	900m ²		
Located on disturbed land (including ancillary or laydown areas)	│ │ │ │ l ocated both on and off disturbed land		



Plant and equipment required	 Excavator Backhoe Grader Waker packer Dozer 	
	• Scraper	
	Vibrating roller	
	MTSP Roller	
	Water cart	
	• Loader	
	Bob-cat	
	10t truck	
	Truck and dog	
2. Exemption	ons from the offences in s 86(1)-(4) (see ss 87A-87B of the Act)	
Is the activity su	bject to one of the following exemptions:	
☐ yes ☒ no w carried	work for the conservation or protection of an Aboriginal object or place out by or at the direction of the National Parks and Wildlife Service	
□ yes ⊠ no a	any emergency fire fighting or emergency bush fire hazard reduction work authorised under the <i>Rural Fires Act 1997</i>	
in re	authorised under the <i>State Emergency and Rescue Management Act 1989</i> relation to an emergency and being reasonably necessary in order to avoid actual or imminent threat to life or property	
	specifically required or permitted under a conservation agreement entered or modified under the Act after 1 October 2010	
-	traditional cultural activities (except commercial activities) carried out by Aboriginal people	
Note: If 'yes' to any of the above, the activity is exempt from the offences in s 86(1)-(4) of the Act and can proceed without carrying out further due diligence.		
3. Trivial or	r negligible acts (see definition of 'harm' in s 5 of the Act)	
☐ yes ⊠ no Is	s the act or omission trivial or negligible. Examples include:	



		gardening (resulting in a small Aboriginal object below the surface being broken)
		walking, picnicking, camping or similar recreational activities
(resulting		in a small Aboriginal object being crushed)
'harm' for the purpos or place, the act can	ses of the A proceed wi place, you s	of the act or omission, as well as the extent of harm caused. Acts that are trivial or negligible are not ct. If 'yes' to the above, provided that the act does not otherwise desecrate a known Aboriginal object thout carrying out further due diligence. If you are unsure as to whether the act would desecrate an hould carry out the searches in section 5 below, to confirm that there is no known Aboriginal object or t.
	npact a	ct or omission (excluding known Aboriginal objects and places)
		one of the following low impact acts or omissions:
$oxtimes$ yes \Box no	on lan	d that has been disturbed, maintenance of:
	\boxtimes	existing roads, fire and other trails and tracks
		existing utilities and similar services
□ yes ⊠ no		d that has been disturbed, the following kinds of farming and land rement work:
		cropping and leaving paddocks fallow
		the construction of water storage works
		the construction of fences
flood		the construction of irrigation infrastructure, ground water bores or mitigation works
		the construction of erosion control or soil conservation works
\square yes \boxtimes no	farmin	g and land management work that involves the maintenance of:
		grain, fibre or fertiliser storage areas
		water storage works (such as farm dams or water tanks)
		irrigation infrastructure, ground water bores or flood mitigation
works		
		fences
		erosion control or soil conservation works (such as contour banks)
\square yes \boxtimes no	no grazing of animals	



□ yes ⊠ no	on land that has been disturbed, exempt development or complying development		
\square yes \boxtimes no kind:	on lan	on land that has been disturbed, mining exploration work of the following	
		costeaning	
		bulk sampling	
		drilling	
\square yes \boxtimes no	work	of the following kind:	
		geological mapping	
		surface geophysical surveys (excluding seismic surveys)	
		sub-surface geophysical surveys that involve downhole logging	
		sampling and coring using hand-held equipment (excluding archaeological investigations)	
\square yes \boxtimes no to the		moval of isolated, dead or dying vegetation with minimal disturbance unding ground surface	
\square yes \boxtimes no	on land that has been disturbed, work of the following kind:		
		seismic surveying	
		the construction and maintenance of groundwater monitoring	
bores			
☐ yes ☒ no planting, control or soil		bnmental rehabilitation work, including temporary silt fencing, tree bush regeneration and weed removal (but excluding erosion conservation works).	
4.B. If 'yes'	to any	of the above, carry out the searches in section 5 below to confirm:	
oxtimes yes $oxtimes$ no	is the	re any known Aboriginal object or place in the vicinity of the project	
\square yes $oxtimes$ no	will ar	ny harm will be caused to an Aboriginal culturally modified tree.	
Note: See clause 58 f modified tree'.	or full deta	ails of the above exemptions, including the definitions of 'disturbed land', 'harm' and a 'culturally	
If 'yes' to any of the questions in 4.A. <u>and</u> 'no' to <u>both</u> of the questions in 4.B, the act can proceed without carrying out further due diligence. However, while these activities are exempt from the offence in s 86(2) of the Act, in many circumstances, it may still prudent to complete the due diligence process to prevent any unintended harm to Aboriginal objects.			



5. Known	Aboriginal objects and places		
Conduct the following searches: AHIMS Ref			
⊠ search /	AHIMS (Note: do not rely on a previous search)	Number:	
⊠ search (Council records relevant to the site	978879	
	with relevant Council staff with knowledge of objects	Other sites known to Council:	
Are any of the	following identified:		
oxtimes yes $oxtimes$ no	Aboriginal objects in the vicinity of the project		
\square yes \boxtimes no	Aboriginal places in the vicinity of the project		
•	iginal object or Aboriginal place is identified, obtain copies of the relevant and go to section 6.3 below.		
6. Due di	ligence process under Part 8 of the Code		
6.1. Will th	e activity cause disturbance? (Step 1 of Code)		
Will the activit	y disturb:		
⊠ yes □ no removing v	the surface of the ground (Note: this includes the use of machinery to egetation)	dig into the ground or	
\square yes \boxtimes no	any Aboriginal culturally modified tree (Note: this is also known	as a scar tree)	
Note: If 'yes' to either	of the above, continue onto the next question.		
If 'no' to both, the activity can proceed, although you should stop work if any Aboriginal objects are found.			
6.2. Is there a low likelihood of encountering Aboriginal objects? (Step 2 of Code)			
Conduct the fo	llowing searches:		
⊠ consult	with relevant Council staff with knowledge of the site		
	inspect the site		
and determine the following:			
\square yes \boxtimes no	is the project on land that is not disturbed		
\square yes \boxtimes no	are any of the associated landscape features present:		
	within 200m of waters (including a river, stream, lake, lagoo natural watercourse or the high water mark of tidal waters)	n, swamp, wetlands,	



	located on a sand dune system (i.e. sand ridges and hills, usually occurring near deserts, lakes, rivers or coastal areas)		
		located on a ridge top, ridge line or headland	
		located within 200m below or above a cliff face	
		within 20m of or in a cave, rock shelter or a cave mouth	
		these landscape features indicate a likelihood of Aboriginal objects, although see also <u>DECCW the Fact</u> <u>'What is an Aboriginal cultural landscape' (April 2010)</u> in relation to the significance of the landscape as le)	
Note: If 'yes' to both o	of the above	e, continue onto the next question.	
		on disturbed land or no associated landscape features are present), the activity can proceed, although iginal objects are found.	
6.3. Can h	arm be	avoided? (Step 3 of Code)	
□ yes □ no □	□ n/a	If an Aboriginal place is identified, can the activity be re-	
located to be		carried out outside of the place?	
☐ yes ☐ no ☐	□ n/a	If an Aboriginal object is identified, can the activity be	
carried out		without harming the Aboriginal object?	
	disturbanc	(Note that the definition of 'harm' is very broad and could include any potential e of the object)	
☐ yes ☐ no ☐	□ n/a	If there is a high likelihood of Aboriginal objects being	
encountered,		can the activity be carried out away from the associated	
landscape		features or on disturbed land?	
Note: If 'no' to any of	the above,	continue onto the next question.	
If harm can be avoide	d, the activ	ity can proceed, although you should stop work if any Aboriginal objects are found.	
6.4. Desktop assessment and visual inspection (Step 4 of Code)			
If the due diligence has reached this stage, Council is required to conduct a desktop analysis and visual inspection of the site to confirm whether Aboriginal objects can be identified or are likely to be present below the surface of the ground.			
The desktop analysis is an assessment of any existing records or documents relating to an aboriginal object, place or previous surveys. The analysis should consider the entire area in the vicinity of the project, and include consideration of previous heritage and archaeological studies.			



A visual (in person) inspection of the site is also required. In order to comply with the Code, the visual inspection of the site must be carried out by a person with expertise (like an archaeologist) in identifying Aboriginal objects.

We recommend that Council engage a qualified archaeologist to conduct **both** the desktop analysis and the site inspection, and who will also be able to advise Council in relation to next steps. While the Code indicates that it is acceptable for an Aboriginal person or landholder to carry out the visual inspection, if they have experience in locating and identifying Aboriginal objects, there are risks involved in engaging someone without formal qualifications, and this is not recommended.

While consultation is not a requirement of the Code, it is required prior to applying for an Aboriginal Heritage Impact Permit, so may also be useful to undertake at this stage.

Note: If the desktop assessment and inspection indicate that there are unlikely to be any Aboriginal objects, the activity can proceed, although you should stop work if any Aboriginal objects are found.

6.5. Further investigations and impact assessment (Step 5 of the Code)

If uncertainty remains as to whether the proposed activity could potentially harm any Aboriginal objects or places, a detailed investigation and impact assessment, including consultation with the local Aboriginal community, will be required to determine whether an Aboriginal Heritage Impact Permit is required.

Council will need to engage a qualified archaeologist to carry out this investigation.

See: <u>Guide to Investigating</u>, <u>Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales</u>, published by OEH and dated 1 April 2011 and related guidelines on Heritage NSW's Website.



Definitions

Term	Meaning	Reference
Aboriginal object	Means 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	Act, s 5
	See Appendix 1 of the Code for examples of Aboriginal objects	
Aboriginal place	Any place declared to be an Aboriginal place under section 84 of the Act	Act, s 5
Act	National Parks and Wildlife Act 1974 (NSW)	
Code	Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW published by the Department of Environment, Climate Change and Water and dated 13 September 2010	
Culturally modified tree	A tree that, before or concurrent with (or both) the occupation of the area in which the tree is located by a person who is not an Aboriginal person, has been scarred, carved or modified by an Aboriginal person by—	Regulations, cl 58(3)
	(a) the deliberate removal, by traditional methods, of bark or wood from the tree, or	
	(b) the deliberate modification, by traditional methods, of the wood of the tree	
Disturbed land	Land that has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable.	Regulations, cl 58(4)
	Note—	
	Examples of activities that may have disturbed land include the following—	
	(a) soil ploughing,	
	(b) construction of rural infrastructure (such as dams and fences),	
	(c) construction of roads, trails and tracks (including fire trails and tracks and walking tracks),	
	(d) clearing of vegetation,	
	(e) construction of buildings and the erection of other structures,	
	(f) construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure),	
	(g) substantial grazing involving the construction of rural infrastructure,	



	(h) construction of earthworks associated with any thing referred to in paragraphs (a)–(g).		
Harm	Includes any act or omission that—	Act, s 5	
	(a) destroys, defaces or damages the object or place, or		
	(b) in relation to an object—moves the object from the land on which it had been situated, or		
	(c) is specified by the regulations, or		
	(d) causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c),		
	but does not include any act or omission that—		
	(e) desecrates the object or place, or		
	(f) is trivial or negligible, or		
	(g) is excluded from this definition by the regulations		
	The Regulations do not prescribe any acts for the purposes of paragraph (c).		
	For the purposes of paragraph (g), the Regulations state as follows:		
	An act carried out in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales as published by the Department of Environment, Climate Change and Water in the Gazette on 24 September 2010 is excluded from the definition of harm an object or place in section 5(1) of the Act.	Regulations, cl 5	
Regulations	National Parks and Wildlife Regulation 2019 (NSW)		

Appendix C – 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.
1.6	Confirm with the site environment representative that the site is unexpected and if a permit is in place.
2	Contact Environmental Officer and Divisional Manager to engage an Aboriginal or Historical archaeologist and/or an Aboriginal heritage consultant
2.1	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.
3	Preliminary assessment and recording of the find
3.1	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.
3.2	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.
	Heritage NSW ph.: 131 555
	• Email: info@environment.nsw.gov.au
	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	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



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 D – Threatened Species Search (Batemans region)

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



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



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



Haematopus longirostris	Pied Oystercatcher	Haematopus longirostris conservation project	Animal > Birds	Endange red	Known	Show 9 linked vegetation classes
Haloragis exalata subsp. exalata	Square Raspwort	Haloragis exalata subsp. exalata conservation project	Plant > Shrubs	Vulnerab le	Known	Show 12 linked vegetation classes
Hamirostra melanosterno n	Black-breasted Buzzard	Hamirostra melanosterno n conservation project	Animal > Birds	Vulnerab le	Known	Show 44 linked vegetation classes
Heleioporus australiacus	Giant Burrowing Frog	Heleioporus australiacus conservation project	Animal > Amphibia ns	Vulnerab le	Known	Show 45 linked vegetation classes
Hoplocephalu s bungaroides	Broad-headed Snake	Hoplocephalu s bungaroides conservation project	Animal > Reptiles	Endange red	Known	Show 24 linked vegetation classes
Isoodon obesulus obesulus	Southern Brown Bandicoot (eastern)	Isoodon obesulus obesulus conservation project	Animal > Marsupial s	Endange red	Known	Show 42 linked vegetation classes
Ixobrychus flavicollis	Black Bittern	Ixobrychus flavicollis conservation project	Animal > Birds	Vulnerab le	Known	Show 59 linked vegetation classes
Phoniscus papuensis	Golden-tipped Bat	Phoniscus papuensis conservation project	Animal > Bats	Vulnerab le	Known	Show 45 linked vegetation classes
Lathamus discolor	Swift Parrot	Lathamus discolor conservation project	Animal > Birds	Endange red	Known	Show 77 linked vegetation classes
Limosa limosa	Black-tailed Godwit	Limosa limosa conservation project	Animal > Birds	Vulnerab le	Known	Show 15 linked



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



Ninox strenua	Powerful Owl	Ninox strenua conservation project	Animal > Birds	Vulnerab le	Known	Show 53 linked vegetation classes
Pachycephala olivacea	Olive Whistler	Pachycephala olivacea conservation project	Animal > Birds	Vulnerab le	Known	Show 50 linked vegetation classes
Pandion cristatus	Eastern Osprey	Pandion cristatus conservation project	Animal > Birds	Vulnerab le	Known	Show 48 linked vegetation classes
Persicaria elatior	Tall Knotweed	Persicaria elatior conservation project	Plant > Herbs and Forbs	Vulnerab le	Known	Show 10 linked vegetation classes
Petaurus australis	Yellow-bellied Glider	Petaurus australis conservation project	Animal > Marsupial s	Vulnerab le	Known	Show 38 linked vegetation classes
Petaurus norfolcensis	Squirrel Glider	Petaurus norfolcensis conservation project	Animal > Marsupial s	Vulnerab le	Known	Show 61 linked vegetation classes
Petroica rodinogaster	Pink Robin	Petroica rodinogaster conservation project	Animal > Birds	Vulnerab le	Known	Show 19 linked vegetation classes
Pezoporus wallicus wallicus	Eastern Ground Parrot	Pezoporus wallicus wallicus conservation project	Animal > Birds	Vulnerab le	Known	Show 13 linked vegetation classes
Phascogale tapoatafa	Brush-tailed Phascogale	Phascogale tapoatafa conservation project	Animal > Marsupial s	Vulnerab le	Known	Show 57 linked vegetation classes
Phascolarctos cinereus	Koala	Phascolarctos cinereus conservation project	Animal > Marsupial s	Endange red	Known	Show 87 linked vegetation classes



Potorous tridactylus	Long-nosed Potoroo	Potorous tridactylus conservation project	Animal > Marsupial s	Vulnerab le	Known	Show 44 linked vegetation classes
Pteropus poliocephalus	Grey-headed Flying- fox	Pteropus poliocephalus conservation project	Animal > Bats	Vulnerab le	Known	Show 71 linked vegetation classes
Ptilinopus superbus	Superb Fruit-Dove	Ptilinopus superbus conservation project	Animal > Birds	Vulnerab le	Known	Show 24 linked vegetation classes
Chthonicola sagittata	Speckled Warbler	Chthonicola sagittata conservation project	Animal > Birds	Vulnerab le	Known	Show 57 linked vegetation classes
Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Saccolaimus flaviventris conservation project	Animal > Bats	Vulnerab le	Known	Show 81 linked vegetation classes
Scoteanax rueppellii	Greater Broad- nosed Bat	Scoteanax rueppellii conservation project	Animal > Bats	Vulnerab le	Known	Show 51 linked vegetation classes
Senecio spathulatus	Coast Groundsel	Senecio spathulatus conservation project	Plant > Herbs and Forbs	Endange red	Predicted	Show 14 linked vegetation classes
Sminthopsis leucopus	White-footed Dunnart	Sminthopsis leucopus conservation project	Animal > Marsupial s	Vulnerab le	Known	Show 20 linked vegetation classes
Stagonopleura guttata	Diamond Firetail	Stagonopleura guttata conservation project	Animal > Birds	Vulnerab le	Known	Show 62 linked vegetation classes
Sternula albifrons	Little Tern	Sternula albifrons conservation project	Animal > Birds	Endange red	Known	Show 9 linked vegetation classes



Onychoprion fuscata	Sooty Tern	Onychoprion fuscata conservation project	Animal > Birds	Vulnerab le	Known	Show 3 linked vegetation classes
Stictonetta naevosa	Freckled Duck	Stictonetta naevosa conservation project	Animal > Birds	Vulnerab le	Known	Show 12 linked vegetation classes
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	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 red Ecologic al Commun ity	Known	Show 4 linked vegetation 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 red Ecologic al Commun ity	Known	Show 5 linked vegetation classes
Thesium australe	Austral Toadflax	Thesium australe conservation project	Plant > Herbs and Forbs	Vulnerab le	Known	Show 26 linked vegetation classes
Thinornis cucullatus cucullatus	Eastern Hooded Dotterel	Thinornis cucullatus cucullatus conservation project	Animal > Birds	Critically Endange red	Known	Show 15 linked vegetation classes
Tyto novaehollandi ae	Masked Owl	Tyto novaehollandi ae conservation project	Animal > Birds	Vulnerab le	Known	Show 75 linked vegetation classes



Tyto tenebricosa	Sooty Owl	Tyto tenebricosa conservation project	Animal > Birds	Vulnerab le	Known	Show 39 linked vegetation classes
Wilsonia backhousei	Narrow-leafed Wilsonia	Wilsonia backhousei conservation project	Plant > Shrubs	Vulnerab le	Known	Show 5 linked vegetation classes
Wilsonia rotundifolia	Round-leafed Wilsonia	Wilsonia rotundifolia conservation project	Plant > Shrubs	Endange red	Known	Show 7 linked vegetation classes
Anthochaera phrygia	Regent Honeyeater	Anthochaera phrygia conservation project	Animal > Birds	Critically Endange red	Known	Show 43 linked vegetation classes
Xenus cinereus	Terek Sandpiper	Xenus cinereus conservation project	Animal > Birds	Vulnerab le	Known	Show 16 linked vegetation classes
Zieria tuberculata	Warty Zieria	Zieria tuberculata conservation project	Plant > Shrubs	Vulnerab le	Known	Show 8 linked vegetation classes
Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions conservation project	Communi ty > Threatene d Ecologica 1 Communi ties	Endange red Ecologic al Commun ity	Known	Saltmarsh es
Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner 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 red Ecologic al Commun ity	Known	Show 4 linked vegetation classes



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



Physeter macrocephalu s	Sperm Whale	Physeter macrocephalu s conservation project	Animal > Marine Mammals	Vulnerab le	Known	Marine environme nts
Pterodroma leucoptera leucoptera	Gould's Petrel	Pterodroma leucoptera leucoptera conservation project	Animal > Birds	Vulnerab le	Known	Show 8 linked vegetation classes
Thalassarche cauta	Shy Albatross	Thalassarche cauta conservation project	Animal > Birds	Endange red	Known	Marine environme nts
Thalassarche melanophris	Black-browed Albatross	Thalassarche melanophris conservation project	Animal > Birds	Vulnerab le	Known	Marine environme 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 ty > Threatene d Ecologica 1 Communi ties	Endange red Ecologic al Commun ity	Known	Coastal Freshwate r Lagoons
Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Swamp Oak Floodplain Forest 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 red Ecologic al Commun ity	Known	Show 4 linked vegetation classes
Callocephalon fimbriatum	Gang-gang Cockatoo	Callocephalon fimbriatum conservation project	Animal > Birds	Vulnerab le	Known	Show 65 linked vegetation classes



Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands	Alteration to the natural flow regimes of rivers, streams, floodplains & wetlands.	Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands conservation project	Threat > Habitat Loss/Cha nge	Key Threaten ing 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 > Disease	Key Threaten ing Process	Predicted	
Competition from feral honey bees, Apis mellifera L.	Competition from feral honeybees	Competition from feral honey bees, Apis mellifera L. conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Introduction of the Large Earth Bumblebee Bombus terrestris (L.)	Introduction of the large earth bumblebee (Bombus terrestris)	Introduction of the Large Earth Bumblebee Bombus terrestris (L.) conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Bushrock removal	Bushrock Removal	Bushrock removal conservation project	Threat > Habitat Loss/Cha nge	Key Threaten ing Process	Predicted	
Loss or degradation (or both) of sites used for hill-topping by butterflies	Loss and/or degradation of sites used for hill-topping by butterflies	Loss or degradation (or both) of sites used for hill-topping by butterflies conservation project	Threat > Habitat Loss/Cha nge	Key Threaten ing Process	Predicted	



Predation by the Feral Cat Felis catus (Linnaeus, 1758)	Predation by feral cats	Predation by the Feral Cat Felis catus (Linnaeus, 1758) conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Infection of frogs by amphibian chytrid causing the disease chytridiomyco sis	Infection of frogs by amphibian chytrid causing the disease chytridiomycosis	Infection of frogs by amphibian chytrid causing the disease chytridiomyco sis conservation project	Threat > Disease	Key Threaten ing Process	Predicted	
Invasion of the Yellow Crazy Ant, Anoplolepis gracilipes (Fr. Smith) into NSW	Invasion of the yellow crazy ant (<i>Anoplolepis</i> gracilipes) into NSW	Invasion of the Yellow Crazy Ant, Anoplolepis gracilipes (Fr. Smith) into NSW conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Removal of dead wood and dead trees	Removal of dead wood and dead trees	Removal of dead wood and dead trees conservation project	Threat > Habitat Loss/Cha nge	Key Threaten ing Process	Predicted	
Herbivory and environmental degradation caused by feral deer	Herbivory and environmental degradation caused by feral deer	Herbivory and environmental degradation caused by feral deer conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition	Ecological consequences of high frequency 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 > Habitat Loss/Cha nge	Key Threaten ing Process	Predicted	



Predation by the European Red Fox Vulpes Vulpes (Linnaeus, 1758)	Predation by the European Red Fox	Predation by the European Red Fox Vulpes Vulpes (Linnaeus, 1758) conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Predation by Gambusia holbrooki Girard, 1859 (Plague Minnow or Mosquito Fish)	Predation by the Plague Minnow (Gambusia holbrooki)	Predation by Gambusia holbrooki Girard, 1859 (Plague Minnow or Mosquito Fish) conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Competition and habitat degradation by Feral Goats, Capra hircus Linnaeus 1758	Competition and habitat degradation by Feral Goats, Capra hircus Linnaeus 1758	Competition and habitat degradation by Feral Goats, Capra hircus Linnaeus 1758 conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Invasion of native plant communities by exotic perennial grasses	Invasion of native plant communities by exotic perennial g rasses	Invasion of native plant communities by exotic perennial grasses conservation project	Threat > Weed	Key Threaten ing Process	Predicted	
Predation, habitat degradation, competition and disease transmission by Feral Pigs, Sus scrofa 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 Threaten ing Process	Predicted	
Importation of Red Imported Fire Ants Solenopsis invicta Buren 1972	Importation of red imported fire ants into NSW	Importation of Red Imported Fire Ants Solenopsis invicta Buren 1972	Threat > Pest Animal	Key Threaten ing Process	Predicted	



		conservation				
		project				
Clearing of native vegetation	Clearing of native vegetation	Clearing of native vegetation conservation project	Threat > Habitat Loss/Cha nge	Key Threaten ing Process	Predicted	
Competition and grazing by the feral European Rabbit, Oryctolagus cuniculus (L.)	Competition and grazing by the feral European rabbit	Competition and grazing by the feral European Rabbit, Oryctolagus cuniculus (L.) conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Anthropogeni c Climate Change	Human- caused Climate Change	Anthropogeni c Climate Change conservation project	Threat > Habitat Loss/Cha nge	Key Threaten ing Process	Predicted	
Infection of native plants by Phytophthora cinnamomi	Infection of native plants by <i>Phytophthora cinnamomi</i>	Infection of native plants by Phytophthora cinnamomi conservation project	Threat > Disease	Key Threaten ing Process	Predicted	
Invasion of native plant communities by Chrysanthem oides monilifera	Invasion of native plant communities by bitou bush & boneseed	Invasion of native plant communities by Chrysanthem oides monilifera conservation project	Threat > Weed	Key Threaten ing Process	Predicted	
Pomaderris bodalla	Bodalla Pomaderris	Pomaderris bodalla conservation project	Plant > Shrubs	Vulnerab le	Known	Show 8 linked vegetation classes
Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions	Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions	Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions	Communi ty > Threatene d Ecologica l	Endange red Ecologic al Commun ity	Known	Show 2 linked vegetation classes



		conservation project	Communi ties			
Themeda grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions	Themeda grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner bioregions	Themeda grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions conservation project	Communi ty > Threatene d Ecologica l Communi ties	Endange red Ecologic al Commun ity	Known	Maritime Grassland s
Invasion and establishment of the Cane Toad (Bufo marinus)	Invasion and establishment of the Cane Toad	Invasion and establishment of the Cane Toad (Bufo marinus) conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Invasion, establishment and spread of Lantana (Lantana camara L. sens. Lat)	Invasion, establishment and spread of Lantana (Lantana camara L. sens. lat)	Invasion, establishment and spread of Lantana (Lantana camara L. sens. Lat) conservation project	Threat > Weed	Key Threaten ing Process	Predicted	
Invasion and establishment of exotic vines and scramblers	Invasion and establishment of exotic vines and scramblers	Invasion and establishment of exotic vines and scramblers conservation project	Threat > Weed	Key Threaten ing Process	Predicted	
Invasion and establishment of Scotch Broom (Cytisus scoparius)	Invasion and establishment of Scotch Broom (Cytisus scoparius)	Invasion and establishment of Scotch Broom (Cytisus scoparius) conservation project	Threat > Weed	Key Threaten ing Process	Predicted	
Lowland Grassy Woodland in the South East	Lowland Grassy Woodland in the South East Corner Bioregion	Lowland Grassy Woodland in the South East Corner	Communi ty > Threatene d Ecologica	Endange red Ecologic al	Known	Show 3 linked vegetation classes



Corner Bioregion		Bioregion conservation project	l Communi ties	Commun ity		
Loss of Hollow- bearing Trees	Loss of Hollow- bearing Trees	Loss of Hollow- bearing Trees conservation project	Threat > Habitat Loss/Cha nge	Key Threaten ing Process	Predicted	
Forest eucalypt dieback associated with over- abundant psyllids and Bell Miners	Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners	Forest eucalypt dieback associated with over- abundant psyllids and Bell Miners conservation project	Threat > Other Threat	Key Threaten ing Process	Predicted	
Glossopsitta pusilla	Little Lorikeet	Glossopsitta pusilla conservation project	Animal > Birds	Vulnerab le	Known	Show 63 linked vegetation classes
Predation and hybridisation by Feral Dogs, Canis lupus familiaris	Predation and hybridisation by Feral Dogs, Canis lupus familiaris	Predation and hybridisation by Feral Dogs, Canis lupus familiaris conservation project	Threat > Pest Animal	Key Threaten ing Process	Predicted	
Eucalyptus aggregata	Black Gum	Eucalyptus aggregata conservation project	Plant > Trees	Vulnerab le	Predicted	Show 12 linked vegetation classes
Petroica phoenicea	Flame Robin	Petroica phoenicea conservation project	Animal > Birds	Vulnerab le	Known	Show 62 linked vegetation classes
Hieraaetus morphnoides	Little Eagle	Hieraaetus morphnoides conservation project	Animal > Birds	Vulnerab le	Known	Show 94 linked vegetation classes
Petroica boodang	Scarlet Robin	Petroica boodang conservation project	Animal > Birds	Vulnerab le	Known	Show 75 linked vegetation classes



Circus assimilis	Spotted Harrier	Circus assimilis conservation project	Animal > Birds	Vulnerab le	Known	Show 75 linked vegetation classes
Daphoenositta chrysoptera	Varied Sittella	Daphoenositta chrysoptera conservation project	Animal > Birds	Vulnerab le	Known	Show 88 linked vegetation classes
Epthianura albifrons	White-fronted Chat	Epthianura albifrons conservation project	Animal > Birds	Vulnerab le	Known	Show 34 linked vegetation classes
Araluen Scarp Grassy Forest in the South East Corner Bioregion	Araluen Scarp Grassy Forest in the South East Corner Bioregion	Araluen Scarp Grassy Forest in the South East Corner Bioregion conservation project	Communi ty > Threatene d Ecologica l Communi ties	Endange red Ecologic al Commun ity	Known	Coastal Valley Grassy Woodland s
Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif.	Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif.	Invasion of native plant communities by African Olive Olea europaea subsp. cuspidata (Wall. ex G. Don) Cif. conservation project	Threat > Weed	Key Threaten ing Process	Predicted	
Calidris ferruginea	Curlew Sandpiper	Calidris ferruginea conservation project	Animal > Birds	Endange red	Known	Show 23 linked vegetation classes
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	Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae conservation project	Threat > Disease	Key Threaten ing 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 > Weed	Key Threaten ing Process	Predicted	
Falco subniger	Black Falcon	Falco subniger conservation project	Animal > Birds	Vulnerab le	Known	Show 53 linked vegetation classes
Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners, Manorina melanocephal a (Latham, 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 Threaten ing Process	Predicted	
Artamus cyanopterus cyanopterus	Dusky Woodswallow	Artamus cyanopterus cyanopterus conservation project	Animal > Birds	Vulnerab le	Known	Show 103 linked vegetation classes
Petauroides volans	Southern Greater Glider	Petauroides volans conservation project	Animal > Marsupial s	Endange red	Known	Show 56 linked vegetation classes
Haliaeetus leucogaster	White-bellied Sea- Eagle	Haliaeetus leucogaster conservation project	Animal > Birds	Vulnerab le	Known	Show 92 linked vegetation classes
Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus	Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus caballus Linnaeus 1758	Habitat degradation and loss by Feral Horses (brumbies, wild horses), Equus	Threat > Pest Animal	Key Threaten ing Process	Predicted	



caballus Linnaeus 1758		caballus Linnaeus 1758 conservation project				
Rhodamnia rubescens	Scrub Turpentine	Rhodamnia rubescens conservation project	Plant > Shrubs	Critically Endange red	Known	Show 30 linked vegetation classes
Litoria watsoni	Watson's Tree Frog or Southern Heath Frog	Litoria watsoni conservation project	Animal > Amphibia ns	Endange red	Known	Show 9 linked vegetation classes