



CROOBYAR ROAD–SMARTS BRIDGE OVER CROOBYAR CREEK CROOBYAR

Review of Environmental Factors REF

- REF shall be published on the NSW Planning Portal

Shoalhaven City Council | August 24

Acknowledgement

Shoalhaven City Council (SCC) acknowledges the ancestral custodians of the territory where the proposed activity is located. We express our reverence for their past and present elders and celebrate the cultural diversity of Aboriginal communities, along with their enduring heritage and ties to the lands and waters of New South Wales. The routes we utilize today, encompassing railways, roadways, bridges, and water crossings, often trace the historical song lines, trade paths, and ceremonial routes in the Country, which the first peoples of our nation have followed for millennia. Shoalhaven City Council is dedicated to honouring the cultural and spiritual bonds of Aboriginal people to the land, waterways, and oceans, as well as their significant contributions to our society.

Document controls

Document status

Document status	Date	Prepared by	Reviewed by
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Final 1	July 24	Sandeep K Salvala	Joseph Saba

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1. Introduction

Croobyar Road – Smarts Bridge replacement project is currently under the **Fixing Country Bridges (FCB)** round 2B bridge replacement program. Shoalhaven City Council's 23/24 capital works program has committed to the delivery of the bridge project as part of Transport for NSW (TfNSW) grant funded, Fixing Country Bridges Program (Round 2B).

The Croobyar Road - Smarts Bridge in Croobyar, NSW, is currently in a deteriorated state and is in urgent need of replacement, which is a crucial part of the Fixing Country Bridges Program. Through site inspections, it has become evident that there is extensive damage, particularly affecting the timber structure of the bridge, further highlighting the immediate necessity for its replacement.

In addition to replacing the bridge, this project encompasses establishing a temporary road alternative to maintain uninterrupted access for road users during the bridge replacement. Three large trees are proposed for removal. All necessary approvals for the removal of the trees have been obtained.

Furthermore, it encompasses the upgrading or replacement of associated infrastructure, including pavement, head and wing walls, rock protection, and traffic signs in the nearby vicinity.

GPS coordinates are as follows:

- **35°19'27.4"S 150°21'59.8"E**

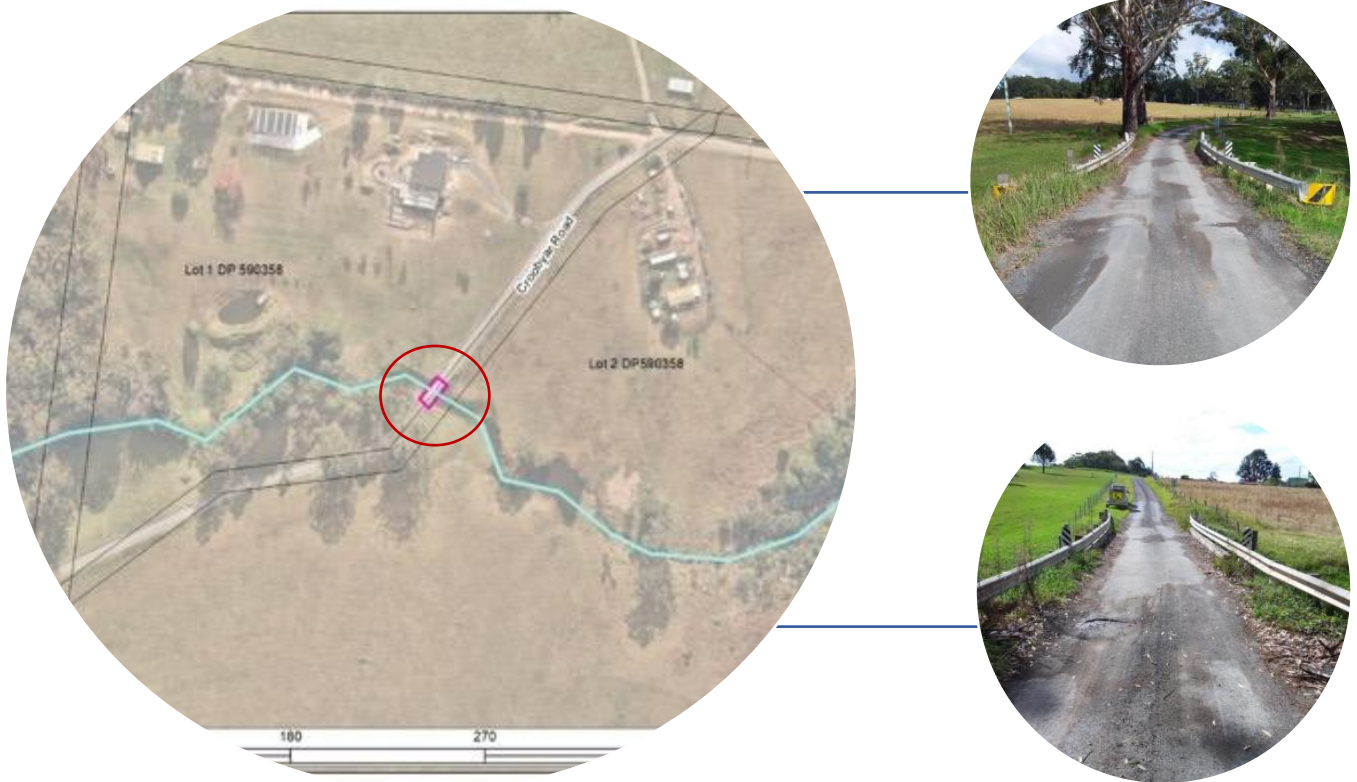


Figure 1 - Study Area

A basic Aboriginal Heritage Information Management System (AHIMS) search was carried out and did not identify any Aboriginal sites in or near the extent of the proposed works.

The findings of the REF considered when assessing:

- Whether it's likely for the proposal to have a significant impact on the environment and the necessity for an environmental impact statement to be prepared and approval to be sought from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act.
- The importance of any impact on threatened species as defined by the NSW Biodiversity and Conservation Act 2016 (BC Act) and/or NSW Fisheries Management Act 1994 (FM Act), in section 1.7 of the EP&A Act and therefore the requirement for a Species Impact Statement or a Biodiversity Development Assessment Report.
- The potential for the proposal to significantly impact a matter of national environmental significance, including nationally listed threatened biodiversity matters, or the environment of Commonwealth land. Where a significant impact is considered likely on nationally listed biodiversity matters, either the proposal must be reconsidered, or a Project REF must be prepared.
- Whether the REF requires publication as per Section 171 of the NSW Environmental Planning and Assessment Regulation 2021 (EP&A Regulation)

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, Shoalhaven City 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 171 of the EP&A Regulation (2021).

2. The proposal

2.1 Description

2.1.1 Proposal location and details

Project Name	Croobyar Road-Smarts Bridge over Croobyar Creek-Croobyar
Proponent (Council Name)	Shoalhaven City Council
Determining authority	Shoalhaven City Council
Project Manager	Joseph Saba
Position	Project manager
Contact Details	0478 415 957

2.1.2 Description of proposed work

The proposal locality is shown below:

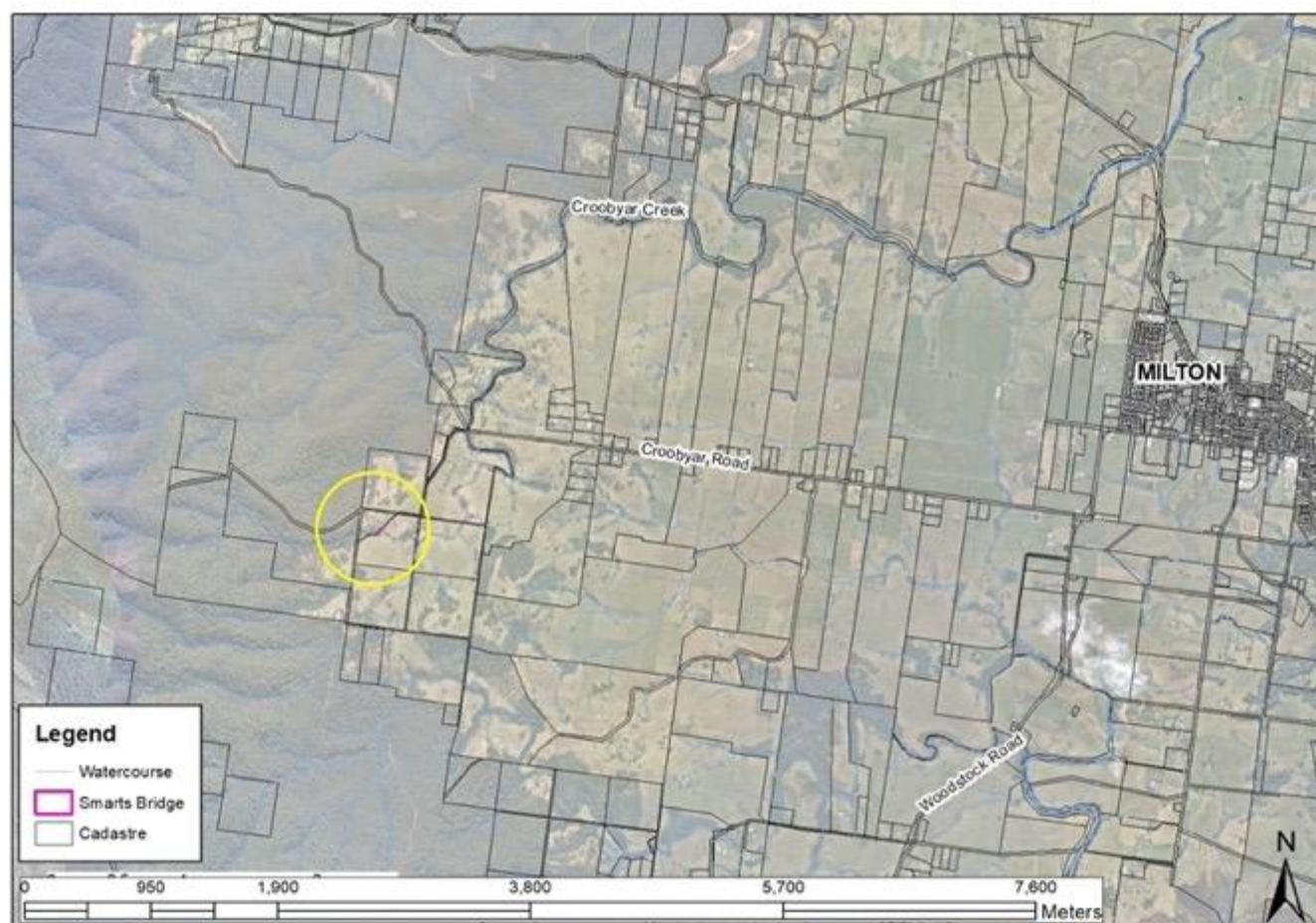


Figure 2: Proposal Location

2.1.3 Objectives of works

Shoalhaven City Council is seeking appropriate design and construction for a new bridge construction to replace the old, deteriorated bridge with improved alignment to enhance the safety for all road users.

The Council is seeking to replace the existing Smarts Bridge over Croobyar Creek along Croobyar Road-Croobyar by constructing the new bridge and all other adjoint infrastructure, such as but not restricted to, pavement, temporary access, abutments, rock protection, traffic signs in the vicinity of the Construction.

The key deliverables of this project shall include (but not limited to), the following works:

- 1) Providing temporary access to road users through the construction of a temporary road whilst works are conducted on the existing bridge.
- 2) Road design for new alignments within the road reserve.
- 3) Minor alignment adjustments such as the widening of the road area to enhance the road safety for all road users within the study area.
 - a) New road lane capacity with adequate shoulder width.
 - b) Provision of new drainage.
 - c) Provide safer approaching roads.
 - d) Reduce the vertical slopes and sharp bends of the road segment.
 - e) Removal of three trees.

2.1.4 Temporary Road Access Plan

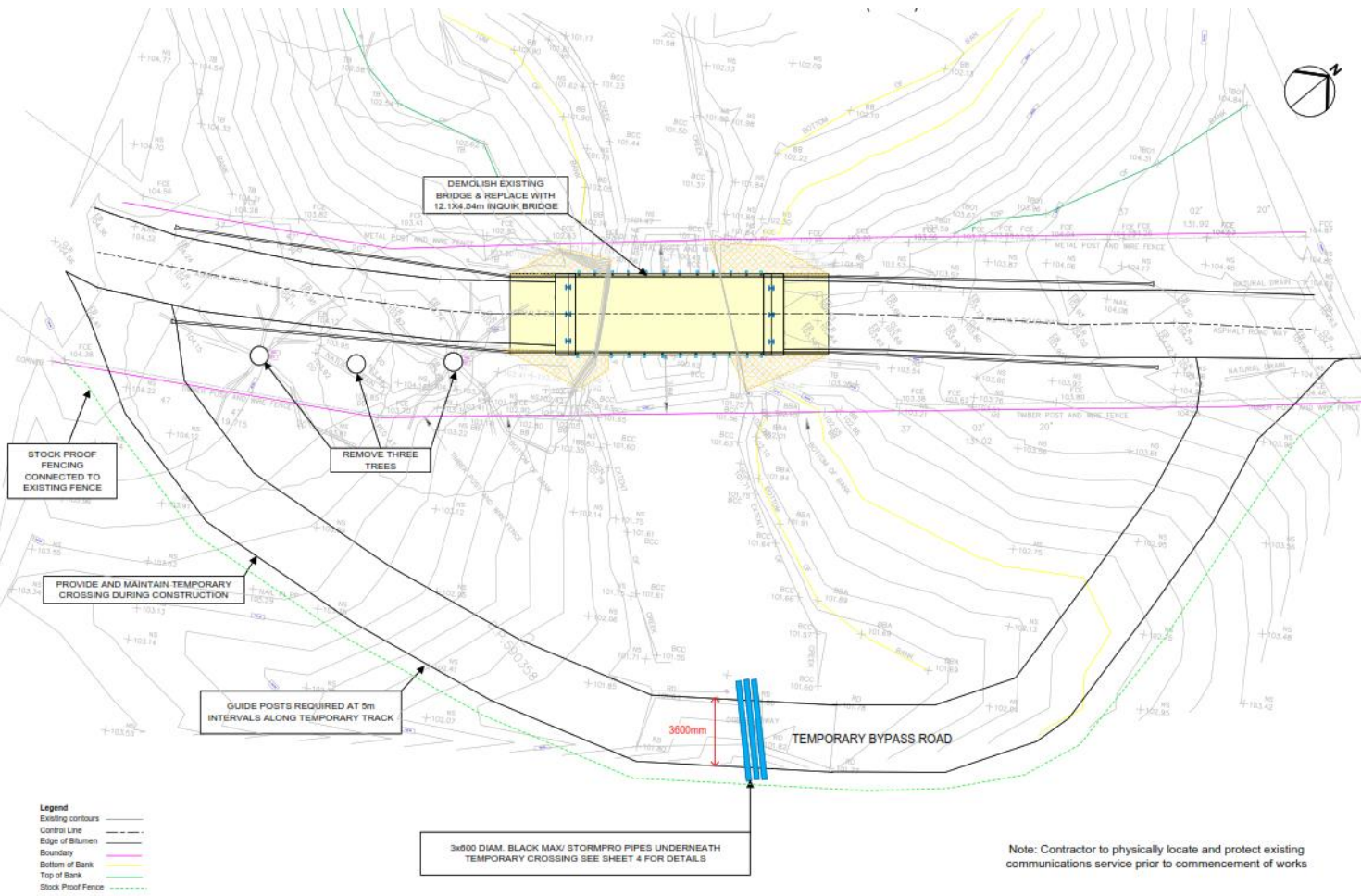
As a component of the bridge replacement project, a temporary road is essential to facilitate public vehicle access and minimise disruptions to the community. To address this need, a carefully designed temporary road access plan has been formulated and appended. The temporary road would be removed when the new bridge is operating.

In a dedicated effort to prioritise the well-being of aquatic ecosystems, a fish passage must be integrated within the design of the temporary road associated with the construction project.

This measure aims to ensure the safety and unimpeded movement of fish during the construction phase, minimizing any potential adverse effects on their natural habitat.

By incorporating fish-friendly design elements, such as properly sized pipes for fish passage and strategic placement of the passage, the project aligns with sustainable practices and environmental consciousness. In addition, rock with no fines would be used and geofabric separation layers to prevent fines entering the waterway and maintain the water quality of the creek.

2.1.5 Concept for Temporary Road Access Plan



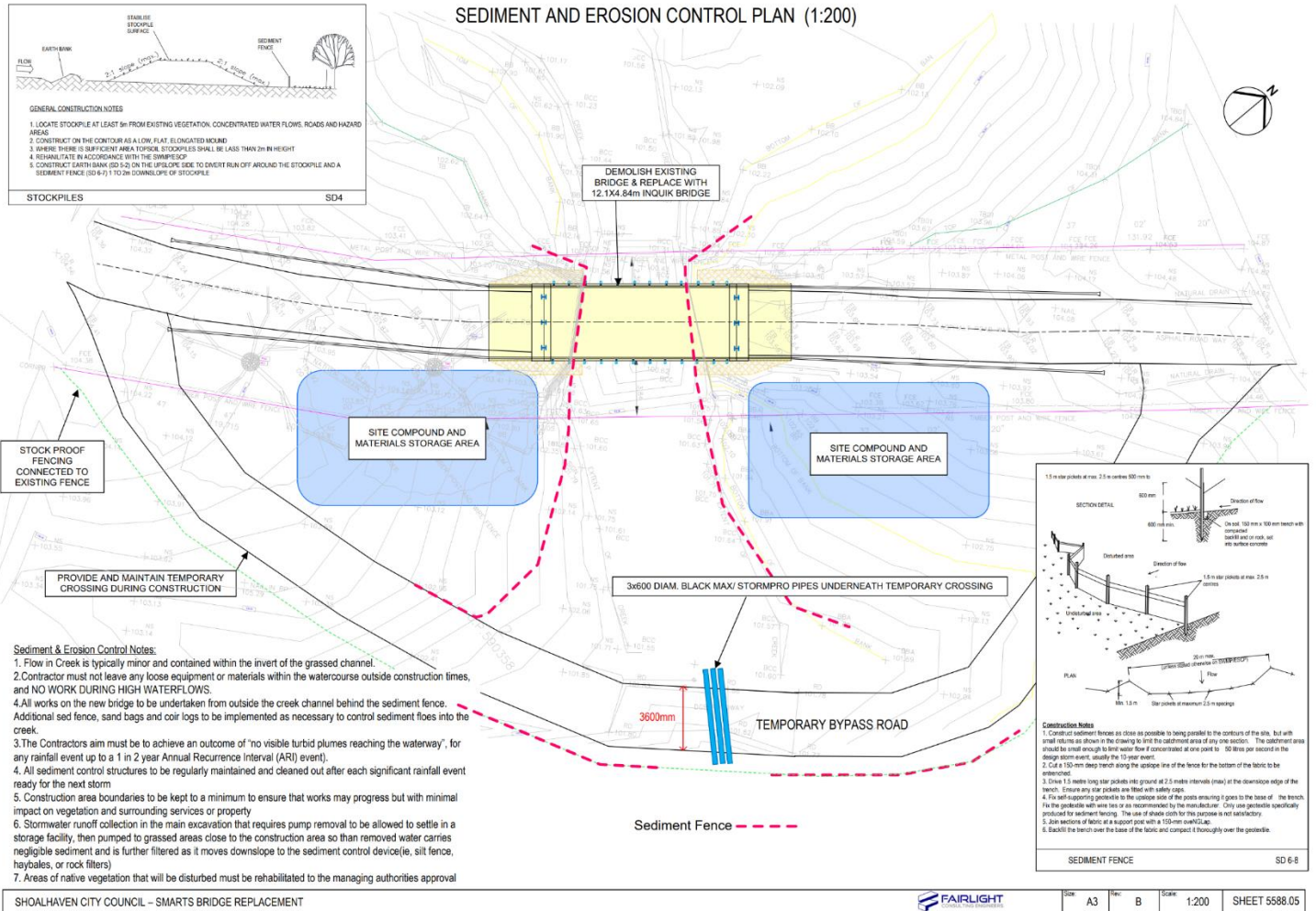
2.1.6 Tree markings and Removal of Three Trees



2.1.7 Ancillary facilities

Ancillary facilities		
Will the proposal require the use or installation of a compound site?		Yes
Will the proposal require the use or installation of a stockpile site?		Yes

SEDIMENT AND EROSION CONTROL PLAN (1:200)



2.1.8 Proposed date of commencement

Construction of the proposal is anticipated to commence in **August 2024**.

Croobyar Road - Smarts Bridge will operate with Road Works Signs with a speed limit of **40 km/hr**.

2.1.9 Estimated length of construction period

The proposal would take about 8 to 10 weeks to complete, subject to the inclement weather.

Construction activities would be undertaken within the following standard hours:

- Monday to Friday: 7am to 6pm
- Saturdays 8am to 1pm
- Sunday and Public Holidays: only if critically required and approved by the principal

2.2 Need and Options

2.2.1 Justification for the proposal

The proposal has been developed in response to the need to provide safety for residents and road users and continuity of road access.

2.3 Statutory and planning framework

2.3.1 State Environmental Planning Policy (Transport and Infrastructure) 2021

The *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP) 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 clause 2.109 of the 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, *i.e.* the preparation and determination of an REF. This includes “*temporary roads that are used solely during road construction*” (S.109(3)(a)(v)).

2.3.2 The Fisheries Management Act 1994

The activity of constructing waterway crossings would require approval under Part 7 (Division 3) of the Fisheries Management Act 1994 (FM Act) to dredge and/or reclaim. Dredging works may be required to demolish the existing bridge and construct the replacement bridge.

Reclamation works could include the construction and replacement of abutments for bridges, placement of scour protection, creation of in-stream construction pads to access the works or the placement of material in a waterway to construct temporary road waterway crossings.

Generally, a local government authority or individual will require a permit to carry out any dredging or reclamation work unless the works are authorised by another public authority (other than a local government authority). Section 200 of the Act requires that a local government authority obtain a permit from the Minister for Fisheries before it carries out or authorises the carrying out of any such works and must consider any matters raised by the Minister in the Permit.

Environmental assessment and planning for any new road works, waterway crossings or maintenance programs for existing structures requires the completion of an '7-part test' (Section 221ZV of the FM Act). The '7-part test' (a series of seven questions) must be completed in order to assess the significance of the impact of the proposed works on listed threatened species, populations or ecological communities. If the '7-part test' indicates a significant impact(s) then a Species Impact Statement (SIS) may also be required. Further information on threatened species is provided on NSW DPI website at www.dpi.nsw.gov.au.

A permit may also be required under s.219 of the FM Act for any works, which may result in the temporary or permanent blockage of fish passage within a waterway. Such blockages can include waterways sediment and erosion control and bunding and dewatering works during construction of crossings.

Croobyar Creek at the location of the proposed activity is “key fish habitat” for the purposes of the FM Act and will require a dredging and reclamation permit for works relating to the existing bridge and the temporary road crossing (Section 200 of the FM Act). If blockage to fish passage is required, including temporary obstruction in the waterway) a permit (Section 219 of the FM Act) would also need to be sought prior to the commencement of works.

With regard to the *Policy and Guidelines for Fish Habitat Conservation and Management*¹ Croobyar Creek at the proposed activity location is “Type 2 – Moderately sensitive key fish habitat” and “Class 2 Moderate Key Fish Habitat”. The replacement of the bridge with a similarly size bridge structure is the preferred waterway crossing structure for such waterways.

https://www.dpi.nsw.gov.au/_data/assets/pdf_file/0008/634697/Fish-friendly-waterway-crossings_Policy-and-guidelines_FN-1181.pdf

Safeguards

Safeguards to be implemented are:

- F1. Implementing best practices for sediment control.
- F3. Using fish-friendly construction methods.
- F4. A Fisheries Permit for dredging and reclamation shall be obtained prior to the commencement of works.

2.4 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) provide the framework for development and environmental assessment in NSW.

As council is the proponent, the works have been assessed under Part 5 of the EP&A Act. Accordingly, Council must satisfy Sections 5.5, 5.6 and 5.7 of that Act by examining, and fully considering possible, all matters which are likely to affect the environment. This REF is intended to address Council's compliance with the EP&A Act including Sections 5.5, 5.6 and 5.7 and the requirements of clause 171 of the EP&A Regulation 2021. Environmental Planning Instruments made under the EP&A Act 1979 may also be relevant and are addressed in Section 4 of this REF.

2.4.1 Local Environmental Plan

The proposal activity is located within the Shoalhaven City Council local government area (LGA). The relevant Local Environmental Plan (LEP) for the proposal is the Shoalhaven LEP 2014. However, the provisions of SEPP (Transport and Infrastructure) override development consent requirements of the relevant LEPs and development consent from Shoalhaven City Council is not required.

2.5 Community and agency consultation

2.5.1 SEPP (Transport and Infrastructure) consultation

Part 2.2 of the SEPP contains provisions for public authorities to consult with local council and other public authorities prior to the commencement of certain types of development. This is detailed below:

Is consultation with the Council required under sections 2.10 - 2.12 and 2.14 of SEPP (Infrastructure)?

Are the works likely to have a substantial impact on the stormwater management services which are provided by council?

No

Are the works likely to generate traffic to an extent that will strain the capacity of the existing road system in a local government area?

No

Will the works involve connection to a council owned sewerage system? If so, will this connection have a substantial impact on the capacity of the system?

No

Will the works involve connection to a council owned water supply system? If so, will this require the use of a substantial volume of water?

No

Will the works involve the installation of a temporary structure on, or the enclosing of, a public place which is under local council management or control? If so, will this cause more than a minor or inconsequential disruption to pedestrian or vehicular flow?

Yes

Croobyar Road – Smarts Bridge falls under the jurisdiction of the local council for management.

During the construction period, a temporary road detour plan will be enacted, allowing users to access an alternate route until the construction is completed.

It is anticipated that there will be a minor impact on vehicular flow along the road due to the proposed construction work.

Will the works involve more than a minor or inconsequential excavation of a road or adjacent footpath for which council is the roads authority and responsible for maintenance? Council is the proponent of the road works.	Yes
Is there a local heritage item (that is not also a state heritage item) or a heritage conservation area in the study area for the works? If yes, does a heritage assessment indicate that the potential impacts to the heritage significance of the item/area are more than minor or inconsequential?	No
Is the proposal within the coastal vulnerability area and is it inconsistent with a certified coastal management program applying to that land? Note: See interactive map here: Coastal management mapping (nsw.gov.au) . Note the coastal vulnerability area has not yet been mapped. Note: a certified coastal zone management plan is taken to be a certified coastal management program.	No
Are the works located on flood liable land? If so, will the works change flooding patterns to more than a minor extent?	No

Is consultation with a public authority (other than Council) required under sections 2.10, 2.13 and 2.15 of SEPP (Transport and Infrastructure)?

Are the works located on flood liable land? (To any extent) (SEPP(Infrastructure) s2.13) If so, do the works comprise more than minor alterations or additions to, or the demolition of, a building, emergency works or routine maintenance? Note: Flood liable land means land that is susceptible to flooding by the probable maximum flood event, identified in accordance with the principles set out in the manual entitled <i>Floodplain Development Manual: the management of flood liable land</i> published by the New South Wales Government.	No
Are the works adjacent to a national park, nature reserve or other area reserved under the <i>National Parks and Wildlife Act 1974</i> , or on land acquired under that Act?	No
Are the works on land in Zone E1 National Parks and Nature Reserves or in a land use zone equivalent to that zone?	No
Are the works for the purpose of residential development, an educational establishment, a health services facility, a correctional facility or group home in bush fire prone land?	No
Would the works increase the amount of artificial light in the night sky and that is on land within the dark sky region as identified on the dark sky region map? (Note: the dark sky region is within 200 kilometers of the Siding Spring Observatory)	No

Is consultation with a public authority (other than Council) required under sections 2.10, 2.13 and 2.15 of SEPP (Infrastructure)?

Are the works on buffer land around the defence communications facility near Morundah? (Note: refer to Defence Communications Facility Buffer Map referred to in clause 5.15 of Lockhart LEP 2012, Narrandera LEP 2013 and Urana LEP 2011).

No

Are the works on land in a mine subsidence district within the meaning of the *Mine Subsidence Compensation Act 1961*?

No

Are the Works on Creek require Fisheries permit to safeguard the aquatic life according to *The Fisheries Management Act 1994*

Yes

SCC will apply for a fisheries permit and gain approval prior to starting the works.

More information about this can be found at [Activities requiring a permit \(nsw.gov.au\)](#); and key fish habitat can be obtained from the Fisheries spatial data portal [Geocortex Viewer for HTML5 \(nsw.gov.au\)](#).

2.5.2 Other agency and community consultation

Variable message signs would be utilised prior to and during the construction of the proposal to inform road users of the planned works, potential delays, and other changes.

Noise impacted receivers would also be consulted where necessary, see Section 3.3.

2.5.3 Ongoing community consultation

Consultation would also be carried out with the residents and property owners who traverse the bridge to access their property (i.e. south of the bridge), including National Parks and Wildlife Service, located near the proposal, including a notification of the commencement of construction work. Notification would be given using variable message signs, letterbox drop (or equivalent), website / social media or a combination to distribute information detailing work activities, time periods, closed facilities, impacts and safeguards.

2.5.4 Project Meeting Minutes with Residents for Temporary Access

On-site meeting 30/11/2023 11:15am – 12:00pm.

Croobyar Road, Croobyar

Meeting Attendees

- Ken Smart, Jamie Smart, Paul McKenzie, Joseph Saba.

Achievements for period

- Ken and Jamie expressed satisfaction with the provision of temporary access through their property (Lot 2 DP 590358) during the construction phase. Ken, acting on behalf of his son Scott as well, confirms their unanimous acceptance of the temporary access arrangement.

- While approving the removal of three trees as planned, they specifically request the preservation of the turpentine tree (the third tree, farthest from the bridge) if feasible.
- Although desiring negotiations on certain points, they emphasize their support for the access regardless of the resolution of those negotiation points.

Project Status

- Granted temporary use of their land for transportation access on a temporary basis.

Points raised on previous experience

Shin's Insights from previous bridge works:

- Based on experience with other bridge replacement projects, I would recommend Joseph to consider adding a provision in the scope within the Request for Tender (RFT). This provision should state that Council staff and/or the landowner have the first right of refusal to select any timber members from the old bridge. The selected timbers should then be delivered to a site specified by the council or stored safely on site. All other non-chosen bridge components should be disposed of by the contractor.
- It's crucial to specify in the RFT how the chosen timbers should be stored and/or transported and delivered to prevent issues encountered in previous bridge projects. For instance, detailing the size requirements and ensuring they are not cut up into unusable sizes during delivery.
- To avoid past mistakes, it would be beneficial to include explicit instructions on proper storage. For instance, in a previous bridge job, timber components were delivered without adequate protection, leading to exposure and compromising their condition. Specify requirements such as using packers to lift components off the ground, providing tarps for coverage, and ensuring proper storage instructions are communicated to the contractor.
- This proactive approach will help ensure the preservation of the old bridge components and avoid any disappointments or compromises in their condition during the project.

Negotiation requests

- They (Smarts) have expressed the desire not to be held liable for any incidents occurring on the temporary access route, and we have assured them that this aligns with Section 175(8) of the Roads Act. During its use for temporary road provision, the land is considered a public road under this Act, with exceptions for Parts 2, 3, 4, and 10.
- In their request, they seek to retain any timber from the existing bridge and the trees slated for removal. We believe this is a reasonable compensation measure for the use of their property
- They have specifically requested the installation of a stock-proof fence along the temporary access route, and we have confirmed that this will be implemented.
- Expressing a desire for a plaque on the new bridge bearing the name "Smarts Bridge," they are amenable to including a tagline such as 'proudly funded by NSW government' if deemed necessary.

Action points	Person Responsible	Due Date
Need to Construct Temporary Road Access Necessary Land got allocated.	Allocate to Joseph Saba	Till the Bridge Construction.

3. Description of the Environment

This section provides a detailed description of the potential environmental impacts associated with the construction and operation of the proposal. All aspects of the environmental potentially impacted upon by the proposal are considered. This includes consideration of the factors specified in the *Guidelines for Division 5.1 Assessments* (DPE, 2022) and section 171 of the Environmental Planning and Assessment Regulation 2021. The matters of national environmental significance under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* are also considered in section 5. Site-specific safeguards are provided to ameliorate the identified potential impacts.

3.1 Soil

3.1.1 ACID SULPHATE SOILS:

Acid Sulphate Soils (ASS) are a type of soil that poses significant environmental and engineering challenges due to their unique chemical composition and properties. These soils contain high concentrations of iron sulphide minerals, primarily pyrite (FeS_2), which can undergo oxidation when exposed to air and water. This oxidation process leads to the production of sulphuric acid, which can result in soil acidification and the release of harmful substances into the environment.

Formation of Acid Sulphate Soils:

The formation of acid sulphate soils typically occurs in waterlogged or water-saturated environments, such as coastal plains, estuaries, and wetlands. Organic-rich sediments, along with iron and sulphur compounds, accumulate in these areas over time. Under anaerobic (low oxygen) conditions, sulphate-reducing bacteria decompose organic matter, releasing hydrogen sulphide gas (H_2S). When these sediments are exposed to oxygen, such as through drainage or excavation activities, the iron sulphide minerals react with oxygen and water to form sulphuric acid.

Characteristics of Acid Sulphate Soils:

High concentrations of iron sulphide minerals, particularly pyrite and marcasite.

Low pH (acidic), often below 4, due to the presence of sulphuric acid.

Elevated levels of sulphate, aluminium, iron, and other heavy metals.

Poor soil structure and fertility, leading to reduced agricultural productivity.

Typically found in coastal areas, floodplains, and areas with fluctuating water levels.

Effects of Acid Sulphate Soils:

Soil Acidification:

Acid sulphate soils have low pH levels, which can inhibit plant growth and reduce soil fertility. Soil acidification can also impact nutrient availability and soil structure, leading to decreased agricultural productivity.

Water Pollution:

The release of sulphuric acid and heavy metals from acid sulphate soils can contaminate surface and groundwater resources, posing risks to aquatic ecosystems and human health. Acidic drainage can lower the pH of water bodies, affecting aquatic organisms and biodiversity.

Corrosion of Infrastructure:

Acidic drainage from acid sulphate soils can corrode and degrade infrastructure such as bridges, roads, and buildings. Concrete and metal structures are particularly susceptible to corrosion in acidic environments, leading to structural damage and increased maintenance costs.

Environmental Degradation:

Acid sulphate soils can contribute to the degradation of sensitive habitats such as wetlands, mangroves, and estuaries. Soil acidification and contamination can harm plant and animal species, disrupt ecosystems, and threaten biodiversity.

Human Health Risks:

Exposure to acidic drainage and contaminated water from acid sulphate soils can pose risks to human health, including skin irritation, respiratory problems, and potential ingestion of heavy metals. Communities living in or near areas affected by acid sulphate soils may be vulnerable to these health impacts.

In conclusion, acid sulphate soils represent a significant environmental and engineering challenge, with potential impacts on soil and water quality, ecosystem health, infrastructure integrity, agricultural productivity, and human well-being. Effective management and mitigation strategies are essential to address these risks and protect both the environment and communities living in affected areas.

ACID SULPHATES TEST:

Based on the provided information, the soil sample from borehole BH1 at a depth range of 0.2-0.5 meters below the ground surface level exhibits chemical characteristics that suggest low-risk conditions in terms of acid sulphate levels. Here's the analysis:

Borehole BH1:

- Depth Range: 0.2-0.5 meters
- Soil Condition: B
- Electrical Conductivity (EC): 41 ds/m
- pH: 5.1
- Chloride: < 10 mg/kg
- Sulphate: < 10 mg/kg
- Moisture Content: 8%
- Soil Description: Silty Clay

The soil condition classification as "B" indicates low permeability soils and all soils above groundwater. According to the Australian Standard AS2159 - 2009, the condition leading to non-aggressive conditions may be adopted for such soil conditions.

Furthermore, the low sulphate levels (both chloride and sulphate are less than 10 mg/kg) and the near-neutral pH value of 5.1 suggest minimal risk of acid sulphate formation. Additionally, the moisture content of 8% is relatively low, which further reduces the likelihood of acid sulphate generation.

In conclusion, based on the available information and the assessment criteria provided, the soil conditions in borehole BH1 are likely to be low-risk in terms of acid sulphate levels. However, it's important to note that a comprehensive analysis would require additional data and consideration of other factors such as site-specific conditions and regulatory requirements.

GEOTECHNICAL TEST RESULTS:

Please Find attached Geotechnical test results [RG726-1-GR-1-1 Croobyar Rd Report Rev01 \(1\).pdf](#)

Description of existing environmental and potential impacts		
Are there any known occurrences of salinity or acid sulphate soils in the area?	Acid-Sulphates	Low-Level
Level of Risk:		

Based on the available information and the assessment criteria provided, the soil conditions in borehole BH1 are likely to be very low-risk in terms of acid sulphate levels.		
Does the proposal involve the disturbance of large areas (e.g., >2ha) for earthworks?		No
Does the site have constraints for erosion and sedimentation controls such as steep gradients or narrow corridors?		No
Are there any sensitive receiving environments that are in or near by the likely proposal area or that would likely receive stormwater discharge from the proposal? Sensitive receiving environments include (but are not limited to) wetlands, state forests, national parks, nature reserves, rainforests, drinking water catchments).		No
Is there any evidence within or nearby the likely footprint of potential contamination?		No
Is the likely proposal footprint in or nearby highly sloping landform?		No
Are the proposals likely to result in more than 2.5ha (area) of exposed soil?		No

Description of existing environmental and potential impacts

Impact to soil and landscape would primarily result from earthworks associated with excavation and ground vegetation removal. Sediment could also be generated during rainfall and storm events from works including site set up, transportation of soil and demobilization. The potential impacts from erosion and sedimentation would be minimized through the construction methodology and implementation of erosion and sediment controls. The implementation of the safeguards outlined below would reduce the risks to soils.

Safeguards

Safeguards to be implemented are:

E1. Erosion and sediment control measures are to be implemented and maintained to:

- a. Prevent sediment moving off-site and sediment laden water entering any water course, drainage lines, or drain inlets
- b. Reduce water velocity and capture sediment on site
- c. Minimise the amount of material transported from site to surrounding pavement surfaces
- d. Divert clean water around the site.

E2. Erosion and sedimentation controls are to be checked and maintained on a regular basis (including clearing of sediment from behind barriers) and records kept and provided on request

E3. Erosion and sediment control measures are not to be removed until the works are complete, and areas are stabilised

E4. Work areas are to be stabilised progressively during the works

E5. A progressive erosion and sediment control plan is to be prepared for the works.

3.2 Waterways and water quality

Description of existing environment and potential impacts

Is the proposal located within, adjacent to or near a waterway?	Yes
Is the location known to flood or prone to water logging?	Yes

Description of existing environment and potential impacts

Is the proposal located within or immediately adjacent to the area managed by Sydney Catchment Authority covered by Part 6.5 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021

No

Maps of the Sydney Water Drinking Water Catchment are available from:

<https://www.planningportal.nsw.gov.au/publications/environmental-planning-instruments/state-environmental-planning-policy-sydney-drinking-water-catchment-2011>

Would the proposal be undertaken on a bridge or ferry?

Yes

Is the proposal likely to require the extraction of water from a local water course (not mains)?

No

Water quality has the potential to be impacted during ground disturbance works including vegetation removal and excavation. Excavation would expose soils to erosive forces, such as rainfall and storm events. If the disturbed areas are not sufficiently stabilised following works, there is potential for ongoing erosion and impacts on water quality. To mitigate potential impacts to waterways and water quality, such as through run-off and sedimentation, the safeguards below would be implemented as part of the proposal.

Safeguards

Safeguards to be implemented are:

- W1. There is to be no release of dirty water into drainage lines and/or waterways.
- W2. Work will not be carried out during periods of heavy rainfall.
- W3. Visual monitoring of local water quality (i.e., turbidity, hydrocarbon spills/slicks) is to be undertaken on a regular basis to identify any potential spills or deficient erosion and sediment controls.
- W4. Water quality control measures are to be used to prevent any materials (e.g., sediment) entering draininlets or waterways
- W5. Vehicle wash down and/or cement washout is to occur in a designated bunded area located in the proposal boundary and clearly signposted
- W6. Vehicles and plant must be properly maintained and regularly inspected for fluid leaks
- W7. If refueling of plants and equipment is required on site it will take place on flat ground only, within a bunded area large enough to contain 120 per cent of the container's contents.

3.3 Noise and vibration

Description of existing environmental and potential impacts

Are there any residential properties or other noise sensitive areas near the location of the proposal that may be affected by the work (i.e., church, school, hospital) during construction?

No

Description of existing environmental and potential impacts

During operation?

No

It is not anticipated that the proposal would increase existing noise levels during operation.

Is the proposal going to be undertaken only during standard working hours?

No

Standard working hours

Monday-Friday: 6:00am to 5:00pm

Saturday: 8:00am to 1:00pm

Sunday and Public Holidays: only if critically required and approved by the principal

Is any explosive blasting required for the proposal?

No

Would construction noise or vibration from the proposal affect sensitive receivers?

No

Description of existing environmental and potential impacts

Would the operation of the proposal alter the noise environment for sensitive receivers? This might include, but not be limited to, altering the line or level of an existing carriageway, changing traffic flow, adding extra lanes, increasing traffic volume, increasing the number of heavy vehicles, removing obstacles that provide shielding including changing the angle of view of the traffic, changing the type of pavement, increasing traffic speeds by more than 10km/hr or installing audio-tactile line markings.

No

Would the proposal result in vibration being experienced by any surrounding properties or infrastructure during operation?

No

Safeguards

Safeguards to be implemented are:

N1. Only have necessary equipment on site

N2. Works are to be carried out during standard construction hours between 7am to 6pm Monday to Friday

and 8am to 1pm Saturdays.

N3. Notification must be given using variable message signs, letterbox drop (or equivalent), website / social media or a combination to distribute the information detailing work activities, time periods, impacts and safeguards. Notification should be a minimum of ten working days prior to the start of work.

3.4 Air Quality

Description of existing environmental and potential impacts		
Is the proposal likely to result in large areas (>2ha) of exposed soils?		No
Are there any dust sensitive receivers located within the vicinity of the proposal during the construction period		No
Is there likely to be an emission to air during construction?		No

Safeguards

Safeguards to be implemented are:

- A1. Measures (including watering or covering exposed areas) are to be used to minimise or prevent air pollution and dust.
- A2. 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.
- A3. Vegetation or other materials are not to be burnt on site.
- A4. Vehicles and vessels transporting waste or other materials that may produce odours or dust are to be covered during transportation.
- A5. Stockpiles or areas that may generate dust are to be managed to suppress dust emissions in accordance with the Transport for NSW Stockpile Site Management Guidelines (EMS-TG-10) and Managing Urban Stormwater: Soils and construction - Volume 1 (the Blue Book).

3.5 Aboriginal heritage

Description of existing environmental and potential impacts		
Would the proposal involve disturbance in any area that has not been subject to previous ground disturbances?		No
Have online AHIMS search been completed?		Yes
A basic search of the Aboriginal Heritage Information Management System (AHIMS) was undertaken for the proposal area. There are no known Aboriginal heritage items located within the proposal area and associated sites. The proposal is unlikely to impact on Aboriginal cultural heritage. The AHIMS searches are shown in Appendix B.		

Is there potential for the proposal to impact on any items of Aboriginal heritage?	No
<p>Would the proposal involve the removal of mature native trees?</p> <p>Removal of three mature trees. No tree exhibits any scarring suspected to be of Aboriginal origin.</p> <p>24/07/2024</p> <p><i>Note: Three large trees are proposed for removal. Among them, one is a Turpentine tree which the adjacent land owner preferred retention. This tree was inspected by a tree surgeon who recommended its removal. The inspection report indicated that the Turpentine tree was compromised by fire (2019/20 Currowan Bushfire), and both its root ball and base are unhealthy. The root system of this tree poses a risk to the integrity of the road surface, making its removal necessary.</i></p> <p><i>All necessary approvals for the removal of the Turpentine tree have been obtained. Additionally, the remaining two trees have also been approved for removal. The approval documentation is attached in the appendix below.</i></p>	Yes

Description of existing environmental and potential impacts		
Would the proposals impact on any features that may indicate any potential archaeological remains?		No
Is the proposal consistent with the requirements of the Aboriginal cultural heritage consultation and Construction?		Yes
<p>The approach taken in this Project REF involved a desktop assessment via an AHIMS search to determine whether the proposal is likely to harm Aboriginal cultural heritage and whether further assessment is required.</p>		

Safeguards

Safeguards to be implemented are:

B1. If unexpected Aboriginal heritage items are uncovered during the works, all works in the vicinity of the item must cease and Council's Environmental Operations Officer contacted immediately.

3.6 Biodiversity

Description of existing environmental and potential impacts		
Have relevant database searches been carried out?		Yes
<p>Multiple desktop searches were undertaken in August 24:</p> <ul style="list-style-type: none"> • NSW Office of Environment and Heritage BioNet Database with a 10 km x 10 km area centered on the proposal • Protected Matters Report that documents all Matters of National Environmental Significance (MNES) within a 5 km radius of the Proposal area. MNES include threatened species, communities and migratory species which are listed under the EPBC Act (DoEE 2019) <p><i>The full results of these database searches are in Appendix C</i></p>		
<p><i>Did the database searches identify any endangered ecological communities, threatened flora and/or threatened or protected fauna, or migratory species in or within the vicinity of the proposed works? Both Commonwealth and State listed matters must be considered.</i></p> <p><i>While species are recorded within the search zones of 10 x 10 km search there are no sightings within the proposal boundary. As the proposal would only be clearing minimal vegetation, there is a very low risk of impacting any threatened or protected flora and fauna. See Appendix C.</i></p> <p><i>The terrestrial environment within the proposal area is highly modified and consists of planted shrubs.</i></p> <p><i>24/07/2024</i> <i>Note:</i> <u><i>Before demolishing the current bridge, an official notification must be sent to the council. The Environmental Officer will visit the site to ensure that all environmental conditions are met and to safeguard against harm to any species during the demolition process.</i></u> <u><i>Additionally, an inspection has been conducted underneath the bridge to check for microbats. The report states that the Environmental Officer carried out an inspection of the underside of Smarts Bridge. No microbats were seen during the inspection.</i></u> <u><i>Some photos are attached in Appendix Below.</i></u></p> <p><u><i>There are however a half a dozen mud bird nests (probably Swallows) on the timber girders that currently appear to be inactive.</i></u></p> <p><i>24/07/2024</i> <i>Note:</i> Removal of two trees and the third tree (turpentine tree) was not in the proposal but after the Tree Surgeon has inspected the place for the removal of the three trees as per his inspection the turpentine tree inspection report indicated that the Turpentine tree has been compromised by fire, and both</p>		No

<p><i>its root ball and base are unhealthy. The root system of this tree poses a risk to the integrity of the road surface, making its removal necessary.</i></p> <p><i>All necessary approvals for the removal of the Turpentine tree have been obtained. Additionally, the remaining two trees have also been approved for removal. The approval documentation is attached in the appendix below.</i></p>		
Is the proposal likely to impact nationally listed threatened species, ecological communities, or migratory species?		No
Would the proposal require the removal of any other vegetation?		No

Description of existing environmental and potential impacts		
Would the proposal affect any tree hollows or hollow logs?		No
Are there any known areas of outstanding biodiversity value or areas mapped as 'littoral rainforest' or 'coastal wetland' in the Coastal Management SEPP in or within the vicinity of the proposed work?		No
Would the proposal provide any additional barriers to the movement of wildlife?		No
Would the proposal disturb any natural waterways or aquatic habitat?		Yes
Would the proposal disturb any crevices or other locations (such as on bridges and culverts) for potential bat habitat?		Yes
<i>An Inspection has been undertaken on the 23/07/2024 and it's been clear that there are no microbats inhabiting the underside of the bridge, nor any threatened species noticed in the Inspection.</i>		

Safeguards

Safeguards to be implemented are:

F1. If unexpected, threatened fauna or flora species are discovered, stop works immediately and the Shoalhaven City Council's Environmental Operations Officer be contacted (ph:0478 307 936)

F2. Declared noxious weeds are to be managed according to requirements under the Biosecurity Act, 2015.

F3. Parking of vehicles and storage of plant/equipment is to occur on existing paved areas and shoulders. Where this is not possible, vehicles and plant/equipment are to be kept away from environmentally sensitive areas and outside the dripline of trees

F4. All vegetation removal is to be limited to the minimum extent necessary, there will be up to three trees removed with all the necessary permissions and approvals.

F5. Prior to the demolition of the existing bridge, an inspection of the underside shall be undertaken to determine the presence of microbats. If microbats are present, they shall be removed by a suitably qualified wildlife handler.

Note: *An Inspection has been undertaken on the 23/07/2024 and it's been clear that there are no microbats inhabiting the underside of the bridge.*

3.7 Trees

Description of existing environmental and potential impacts		
Does the proposal involve pruning, trimming or removal of any tree/s? Removal of two Blackbutts (1.5m DBH) and one Turpentine tree		Yes
Do the trees form part of a streetscape, an avenue or roadside planting? Naturally occurring, remnant trees.		No
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 e.g., has a plaque?		No
Do the trees form part of a heritage listing or have other heritage value?		No

Safeguards

Safeguards to be implemented are:

G1. No trees to be retained in the construction.

Note: *Three trees have been approved for Removal.*

G2. An arborist/ecologist will be engaged prior to the removal of any trees onsite if hollows are found to ensure that no living beings inhabit the tree hollows.

3.8 Traffic and transport

Description of existing environmental and potential impacts		
Is the proposal likely to result in detours or disruptions to traffic flow (vehicular, cycle and pedestrian) or access during construction?		Yes
Croobay Road-Smarts Bridge will be closed with an alternative temporary road access and operate with traffic control near the site area with the max speed limit of 40 Km/hr.		

Is the proposal likely to result in detours or disruptions to traffic flow (vehicular, cycle and pedestrian) or access during operation?		Yes
Is the proposal likely to affect any other transport nodes or transport infrastructure (e.g., bus stops, bus routes) in the surrounding area? Or result in detours or disruptions to traffic flow (vehicular, cycle and pedestrian) or access during operation?		No

Safeguards

Safeguards to be implemented are:

T1. 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.

T2. Appropriate traffic control to facilitate safe construction is to be implemented including construction zone speed limits, temporary road safety barriers, temporary lane closures and stop/go traffic control as per project specific traffic control plan (safeguard T5). Reduced speed limits may be introduced for longer periods, as required to ensure construction workers' safety.

T3. A traffic control plan is to be prepared in accordance with the 'Traffic control at work sites manual' (RTA, 2010) and Australian Standard 1742.3 Manual of uniform control devices. The traffic control plan is to provide details of traffic management measures to be implemented during construction to ensure traffic flow on the surrounding network is maintained where possible. The Traffic Control Plan would also contain safeguards to ensure the safe separation of workers on site from vehicles to respective access paths.

T4. Existing access for nearby or adjoining properties is always to be maintained during the works unless otherwise agreed by the affected property owners.

T5. Notifications to be sent to potentially affected Property owners, residents and national parks.

3.9 Socio-economic

Description of existing environmental and potential impacts		
Is the proposal likely to impact local business?		No
Is the proposal likely to require any property acquisition?		No
Is the proposal likely to alter any access for properties (either temporarily or permanently)?		No
Is the proposal likely to alter any on-street parking arrangements (either temporarily or permanently)?		No
Is the proposal likely to change pedestrian movements or pedestrian access (either temporarily or permanently)?		No
Once the upgrade is complete, pedestrian access would be permanently improved.		
Is the proposal likely to impact on any items or places of social value to the community (either temporarily or permanently)?		No
Is the proposal likely to reduce or change the visibility of any businesses, farms, tourist attractions or the like (either temporarily or permanently)?		No

Safeguards

Safeguards to be implemented are:

SE1. Any complaints are to be recorded in complaints register, the Project Manager is to be contacted, and the issue is to be assessed and attended to promptly.

3.10 Landscape character and visual amenity

Description of existing environmental and potential impacts		
Is the proposed work over or near an important physical or cultural element or landscape? (Heritage items and areas, distinctive or historic built form, National Parks, conservation areas, scenic highways etc.)?		No
Would the proposal obstruct or intrude upon the character or views of a valued landscape or urban area. For example, locally significant topography, arural landscape or a park, a river, lake or the ocean or a historic or distinctive townscape or landmark?		No
Would the proposal require the removal of mature trees or stands of vegetation, either native or introduced?		Yes
Would the proposal result in large areas of shotcrete visible from the road or adjacent properties?		No
Would the proposal involve new noise walls or visible changes to existing noise walls?		No
Would the proposal involve the removal or reuse of large areas of road corridor, landscape, either verges or medians?		No
Would the proposal involve substantial changes to the appearance of a bridge (including piers, girders, abutments and parapets) that are visible from the road or residential areas?		No
If involving lighting, would the proposal create unwanted light spillage on residential properties at night (in construction or operation)?		No
Would any new structures or features be being constructed result in overshadowing to adjoining properties or areas?		No

Safeguards

Safeguards to be implemented are:

L1. All construction related material and equipment will be removed from the proposal site at the completion of work and disturbed areas restored, including replacement seeding to assist in the remediation of the site if required.

3.11 Waste

Description of existing environmental and potential impacts	
Is the proposal likely to generate >200 tones of waste material (contaminated and /or non-contaminated material)?	Yes
Is the proposal likely to require a license from EPA?	No
Is the proposal likely to require the removal of asbestos?	No

Safeguards

Safeguards to be implemented are:

M1. Resource management hierarchy principles are to be followed:

- Avoid unnecessary resource consumption as a priority
- Avoidance is followed by resource recovery (including reuse of materials, reprocessing, recycling and energy recovery)
- Disposal is undertaken as a last resort (in accordance with the *Waste Avoidance & Resource Recovery Act 2001*).

M2. Waste is not to be burnt onsite

M3 The timber from the dismantled bridge will be used by the neighbouring property or taken offsite by the Contractor if unwanted by the Smarts family. Additionally, the timber obtained from the removal of the trees will be used by the neighboring property (Smarts family) or taken offsite by the Contractor if unwanted by the Smarts family. However, according to our records, all timber obtained from the dismantling of the bridge and the removal of trees must be given to the Smarts family as per their request.

M4. Waste material is not to be left onsite once works have been completed

M5. Working areas are to be maintained, kept free of rubbish and cleaned up at the end of each working day

M6. Where practical, material is to be reused onsite in accordance with Roads and Maritime Waste Fact Sheet 3 Excavated Public Road Materials, or alternatively, classified in accordance with the *NSW EPA Waste Classification Guidelines 2014* and disposed of at an applicable licensed facility.

M7. Disposal of waste will be undertaken in accordance with the DECC's (2008) Waste Classification Guidelines: Parts 1 and 2 and transported to a suitably licensed waste facility. Suspected contaminated waste, harmful materials or classifiable special wastes will be managed in accordance with the Contaminated Land Management Act 1997 and other relevant legislation.

4 Consideration of State and Commonwealth environmental factors

A. Environmental Planning and Assessment Regulation 2021 checklist

The following factors, listed in both the *Guidelines for Division 5.1 Assessments* (DPE, 2022) and section 171(2) of the Environmental Planning and Assessment Regulation 2021, have been considered to assess the likely impacts of the proposal on the natural and built environment. This consideration is required to comply with sections 5.5 and 5.7 of the EP&A Act.

Environmental factor	Impact
<p>(a) Any environmental impact on a community?</p> <p>The proposed work may cause minor short-term environmental impacts on the community, such as slow vehicular traffic flow and noise impacts during the construction phase. The potential impacts would be minimised with the implementation of the safeguards as detailed in this Project REF.</p> <p>The proposal would have no adverse environmental impact on a community in the long-term and residents would benefit from an upgraded Bridge which will lower the risk level.</p>	<p>Minor short-term negative</p> <p>Long-term positive</p>
<p>(b) Any transformation of a locality?</p> <p>During construction the proposal would result in minimal disturbance to the locality as the works would be contained within the existing area.</p>	<p>Minor short-term negative</p>
<p>(c) Any environmental impact on the ecosystems of a locality?</p> <p>The proposal is unlikely to have an environmental impact on the ecosystems of the locality, any potential impacts would be minimised with the implementation of the safeguards given in Section 3 of this REF.</p> <p>Two Blackbutts <i>Eucalyptus pilularis</i> and one Turpentine <i>Syncarpia glomulifera</i>, are proposed for removal. These are substantial trees (1.5 metres diameter at breast height (dbh)) but appear not to contain any hollows suitable for fauna or nests. They are not threatened species and are common in the region.</p>	<p>Minor potential short-term negative</p>
<p>(d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>The proposal would not reduce the aesthetic, recreational, scientific or other environmental quality or value of the locality, as works would generally be contained with the existing area.</p>	<p>Minor potential short-term negative</p>
<p>(e) Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?</p>	<p>Minor potential short-term negative</p>

<p>The proposal is unlikely to influence a locality, place or building of significance or other special value for present or future generations. Any potential impact would be minimised with the implementation of the safeguards given in Section 3 in this REF.</p>	
<p>(f) Any impact on habitat of any protected animals (within the meaning of the <i>Biodiversity Conservation Act 2016</i>)?</p> <p>The proposal would not have any impact on the habitat of any protected animals due to the limited scope of works for the proposed activities and the implementation of the safeguards given in Section 3 of this REF.</p> <p>Prior to initiating the bridge dismantling process, it is essential to conduct a thorough check to ensure the absence of any existing bat species.</p> <p>Note: <i>An Inspection has been undertaken on the Date 23/07/2024 and it's been clear that there is no Bat habitat, nor any threatened species noticed in the Inspection.</i></p>	<p>Nil</p>
<p>(g) Endanger of any species of animal, plant or other form of life, whether living on land, in water or in the air?</p> <p>The proposal would not endanger any species of animal, plant or other form of life, whether living on land, in water or in the air due to the limited scope of works for the proposed activities and the implementation of the safeguards given in Section 3 of this REF.</p>	<p>Nil</p>
<p>(h) Any long-term effects on the environment?</p> <p>The proposal would have positive long-term effects on the environment due to improved safety for road users. There are no anticipated negative long-term effects on the environment from the proposed works due to the limited scope of these works and the implementation of the safeguards given in Section 3 of this REF.</p>	<p>Long-term positive</p>
<p>(i) Any degradation of the quality of the environment?</p> <p>The proposal would have potential to minorly degrade the quality of the environment in the short-term due to construction works. However, the potential impacts would be minimised with the implementation of the safeguards given in Section 3 of this REF.</p>	<p>Minor short-term negative</p>
<p>(j) Any risk to the safety of the environment?</p> <p>The proposal would have minimal risk to the safety of the environment due to the limited scope of works for the activities covered in this Minor Works REF. The potential impacts would be minimised with the implementation of the safeguards in Section 5.0 in this REF.</p>	<p>Nil</p>

<p>(k) Any reduction in the range of beneficial users of the environment?</p> <p>The proposal would cause a minor disruption in vehicular traffic flow during the construction phase, with traffic managed by controlled measures and restricted speed limits for about 8-10 weeks. There would be no long-term reduction in the range of beneficial uses of the environment because of the maintenance works. In fact, the proposal would have positive long-term effects on the environment due to the bridge replacement.</p>	<p>Minor short-term negative</p>
<p>(l) Any pollution of the environment?</p> <p>The proposal would potentially cause pollution of the environment; however, the risks and potential impacts would be minimised with the implementation of the safeguards given in Section 3 of this REF.</p>	<p>Minor short-term negative</p>
<p>(m) Any environmental problems associated with the disposal of waste?</p> <p>Any waste generated during the proposal would be contained and removed for disposal to approved recycling facilities, reused appropriately onsite or to licensed landfill in accordance with the safeguards in Section 3 of this REF. No environmental problems are anticipated for the disposal of waste.</p>	<p>Nil</p>
<p>(n) Any increased demands on resources, natural or otherwise which are, or are likely to become, in short supply?</p> <p>The proposal would not significantly increase demands on resources, which are, or are likely to become, in short supply. Relatively small amounts of materials would be required for the proposed work.</p>	<p>Nil</p>
<p>(o) Any cumulative environmental effect with other existing or likely future activities?</p> <p>The proposal has the potential to have cumulative environmental effects with other existing or likely future activities, however the effects would be minimal due to the limited scope of works for the activities covered in this REF, and the potential impacts on the environment would be minimised with the implementation of the safeguards given in Section 3 in this REF.</p>	<p>Minor long-term positive</p>
<p>(p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</p> <p>There would be no impact to coastal process or hazards, including those under projected climate change conditions due to the limited changes in the road formation and the implementation of the safeguards listed in this REF.</p>	<p>Nil</p>

(q) Any impact on applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1?	Minor long-term positive
(r) Any impact on other relevant environmental factors? In considering the potential impacts of this proposal all relevant environmental factors have been considered, refer to Section 3 of this assessment.	Nil

B. Matters of National Environmental Significance checklist

Under the environmental assessment provisions of the EPBC Act, the following matters of national environmental significance are required to be considered to:

- Assist in determining whether the proposal should be referred to the Australian Government Department of Agriculture, Water and the Environment
- For nationally listed threatened species, ecological communities, and migratory species, whether the impacts are significant and should be assessed via a Project REF.

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 importance (often called 'Ramsar' wetlands)?	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 nuclear action (including uranium mining)?	Nil
Additionally, any impact (direct or indirect) on the environment of Commonwealth land?	Nil

5 Summary of safeguards and environmental management measures

This section provides a summary of the site-specific environmental safeguards and management measures identified in described in chapters 3 and 4 of this REF. These safeguards will be implemented to reduce potential environmental impacts throughout construction and operation. A framework for managing the potential impacts is provided with reference to environmental management plans and relevant to all TfNSW specifications. Fisheries Permit shall be obtained for dredging and reclamation and blockage of fish passage prior to the commencement of works. And after that follow all the conditions of the permit. Any potential license and/or approval requirements required prior to construction are also listed.

Table 5-1: Summary of site-specific safeguards for proposed work

Safeguards for the proposed work	
Soil	<p>E1. Erosion and sediment control measures are to be implemented and maintained to:</p> <ul style="list-style-type: none"> a. Prevent sediment moving off-site and sediment laden water entering any water course, drainage lines, or drain inlets b. Reduce water velocity and capture sediment on site c. Minimise the amount of material transported from site to surrounding pavement surfaces d. Divert clean water around the site. <p>E2. Erosion and sedimentation controls are to be checked and maintained on a regular basis (including clearing of sediment from behind barriers) and records kept and provided on request</p> <p>E3. Erosion and sediment control measures are not to be removed until the works are complete, and areas are stabilised</p> <p>E4. Work areas are to be stabilised progressively during the works</p> <p>E5. A progressive erosion and sediment control plan is to be prepared for the works.</p>
Waterways and water quality	<p>W1. There is to be no release of dirty water into drainage lines and/or waterways</p> <p>W2. Work will not be carried out during periods of heavy rainfall</p> <p>W3. Visual monitoring of local water quality (i.e., turbidity, hydrocarbon spills/slicks) is to be undertaken on a regular basis to identify any potential spills or deficient erosion and sediment controls</p> <p>W4. Water quality control measures are to be used to prevent any materials (e.g., sediment) entering drain inlets or waterways</p> <p>W5. Vehicle wash down and/or cement washout is to occur in a designated bunded area located in the proposal boundary and clearly signposted</p> <p>W6. Vehicles and plant must be properly maintained and regularly inspected for fluid leaks</p> <p>W7. If refueling of plant and equipment is required on site it will take place on flat ground only, within a bunded area large enough to contain 120 per cent of the container's contents.</p>

Noise and vibration	<p>N1. Only have necessary equipment on site</p> <p>N2. Works are to be carried out during standard construction hours between 7am to 6pm Monday to Friday and 8am to 1pm Saturdays.</p> <p>N3. Notification must be given using variable message signs, letterbox drop (or equivalent), website / social media or a combination to distribute the information detailing work activities, time periods, impacts and safeguards. Notification should be a minimum of ten working days prior to start of works.</p>
Air quality	<p>A1. Measures (including watering or covering exposed areas) are to be used to minimise or prevent air pollution and dust.</p> <p>A2. 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.</p> <p>A3. Vegetation or other materials are not to be burnt on site.</p> <p>A4. Vehicles and vessels transporting waste or other materials that may produce odors or dust are to be covered during transportation.</p> <p>A5. Stockpiles or areas that may generate dust are to be managed to suppress dust emissions in accordance with the Transport for NSW Stockpile Site Management Guidelines (EMS-TG-10) and Managing Urban Stormwater: Soils and construction - Volume 1 (the Blue Book).</p>
Aboriginal Heritage	<p>B1. If unexpected Aboriginal heritage items are uncovered during the works, all works in the vicinity of the item must cease and Council's Environmental Operations Officer contacted immediately.</p>
Biodiversity	<p>F1. If unexpected, threatened fauna or flora species are discovered, stop works immediately and the Shoalhaven City Council's Environmental Operations Officer shall be contacted (ph:0478 307 936)</p> <p>F2. Declared noxious weeds are to be managed according to requirements under the Biosecurity Act, 2015.</p> <p>F3. Parking of vehicles and storage of plant/equipment is to occur on existing paved areas and shoulders. Where this is not possible, vehicles and plant/equipment are to be kept away from environmentally sensitive areas and outside the dripline of trees</p> <p>F4. All vegetation removal is to be limited to the minimum extent necessary, there will be up to three trees removed which includes turpentine tree with all necessary permissions and approvals.</p> <p>F5. Prior to the demolition of the existing bridge, an inspection of the underside shall be undertaken to determine the presence of microbats. If microbats are present, they shall be removed by a suitably qualified wildlife handler.</p>
Trees	<p>G1. All material and plants will be located outside of driplines from trees to be retained.</p> <p>G2. An arborist/ecologist will be engaged prior to the removal of any trees onsite if hollows are found to ensure that no living beings inhabit the tree hollows.</p>

Traffic and transport	<p>T1. 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.</p> <p>T2. Appropriate traffic control to facilitate safe construction is to be implemented including construction zone speed limits, temporary road safety barriers, temporary lane closures and stop/go traffic control as per a project specific traffic control plan (safeguard T5). Reduced speed limits may be introduced for longer periods, as required to ensure construction workers' safety.</p> <p>T3. A traffic control plan is to be prepared in accordance with the 'Traffic control at work sites manual' (RTA, 2010) and Australian Standard 1742.3 Manual of uniform control devices. The traffic control plan is to provide details of traffic management measures to be implemented during construction to ensure traffic flow on the surrounding network is maintained where possible. The Traffic Control Plan would also contain safeguards to ensure the safe separation of workers on site from vehicles to respective access paths.</p> <p>T4. Existing access for nearby or adjoining properties is always to be maintained during the works unless otherwise agreed by the affected property owners.</p> <p>T5. Notifications to be sent to potentially affected Property owners, residents and national parks.</p>
Socio-economic	<p>SE1. Any complaints are to be recorded in complaints register, Project Manager is to be contacted, issue is to be assessed and attended to promptly.</p>
Landscape character and visual amenity	<p>L1. All construction related material and equipment will be removed from the proposal site at the completion of work and disturbed areas restored, including replacement seeding to assist in the remediation of the site if required.</p>
Fisheries Management	<p>F1. Implementing best practices for sediment control.</p> <p>F3. Using fish-friendly construction methods.</p> <p>F4. A Fisheries Permit for dredging and reclamation shall be obtained prior to the commencement of works.</p>

Waste	<p>M1. Resource management hierarchy principles are to be followed:</p> <ul style="list-style-type: none"> • Avoid unnecessary resource consumption as a priority • Avoidance is followed by resource recovery (including reuse of materials, reprocessing, recycling and energy recovery) • Disposal is undertaken as a last resort (in accordance with the Waste Avoidance & Resource Recovery Act 2001). <p>M2. Waste is not to be burnt onsite</p> <p>M3 The timber from the dismantled bridge will be used by the neighboring property or taken offsite by the Contractor if unwanted. Additionally, the timber obtained from the removal of the trees will be used by the neighboring property (Smarts family) structure will be given or taken offsite by the Contractor if unwanted.</p> <p>M4. Waste material, other than vegetation is not to be left onsite once works have been completed</p> <p>M5. Working areas are to be maintained, kept free of rubbish and cleaned up at the end of each working day</p> <p>M6. Where practical, material is to be reused onsite in accordance with Roads and Maritime Waste Fact Sheet 3 Excavated Public Road Materials, or alternatively, classified in accordance with the NSW EPA Waste Classification Guidelines 2014 and disposed of at an applicable licensed facility.</p> <p>M7. Disposal of waste will be undertaken in accordance with the DECC's (2008) Waste Classification Guidelines: Parts 1 and 2 and transported to a suitably licensed waste facility. Suspected contaminated waste, harmful materials or classifiable special wastes will be managed in accordance with the Contaminated Land Management Act 1997 and other relevant legislation.</p>
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6 SIGNIFICANCE EVALUATION & DECISION STATEMENT

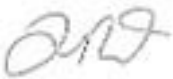
This Review of Environmental Factors has assessed the likely environmental impacts, in the context of Part 2 of the Environmental Planning and Assessment Act 1979, of a proposal by **Shoalhaven City Council** for the construction of **Smarts Bridge Replacement on Croobyar Road – Croobyar**.

In consideration of the proposal as described In Section 1, in accordance with any design plans referred to in this report, and assuming the implementation of all proposed safeguards and mitigation measures (Section 5), it is determined that:

- It is unlikely that there will be any significant environmental impact because of the proposed activity and an Environmental Impact Statement is not required.
- The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats, and a Species Impact Statement / BDAR is not required.
- Exempting Fisheries Permit, no other statutory approvals, licenses, permits or external government consultations are required.
- The proposed activity may proceed.

In accepting and adopting this REF, Shoalhaven City Council commits to ensuring the Implementation of the proposed safeguards and mitigation measures identified in this report (Section 5) to minimise and/or prevent detrimental environmental impacts.

Determined by:



Troy Punnett

District Engineer – Southern District
Shoalhaven City Council

Date: 2/8/2024

7 Certification, review, and decision

7.1 Certification

This project works REF provides a true and fair review of the proposal in relation to its potential effects on the environment. It fully addresses all the possible matters affecting or likely to affect the environment as a result of the proposal.

Prepared by:

Mr JOSEPH SABA

MIEAust B.Eng CPEng NER APEC Engineer IntPE(Aus)

Registered Professional Engineer of Queensland RPEQ: **25081**

Registered Professional Engineer of New South Wales: **2536458**

M 0478 415 957

Date: Friday 2 August 2024

7.2 Environment staff review

The Project REF has been reviewed and considered against the requirements of sections 5.5 and 5.7 of the EP&A Act.

In considering the proposal this assessment has examined and considered to the fullest extent possible, all matters affecting or likely to affect the environment by reason of that activity as addressed in the Minor Works REF and associated information. This assessment is in accordance with the factors required to be considered under section 171 of the Environmental Planning and Assessment Regulation 2021.

The proposal described in the Project Works REF will have some environmental impacts which can be ameliorated satisfactorily. Having regard to the safeguard and management measures proposed, this assessment has considered that these impacts are unlikely to be significant and therefore an approval for the proposal does not need to be sought under Division 5.2 of the EP&A Act.

The assessment has considered the potential impacts of the activity on areas of outstanding value and on threatened species, ecological communities, or their habitats for both terrestrial and aquatic species as defined by the *Biodiversity Conservation Act 2016* and the *Fisheries Management Act 1994*.

The proposal described in the Project Works REF will not affect areas of outstanding value. The activity described in the Minor Works REF will not significantly affect threatened species ecological communities or their habitats. Therefore, a species impact statement is not required.

The assessment has also addressed the potential impacts on the activity on matters of national environmental significance and any impacts on the environment of Commonwealth land and concluded that there will be no significant impacts. Therefore, there is no need for a referral to be made to the Australian Government Department of Agriculture, Water and the Environment for a decision by the commonwealth minister for the Environment on whether assessment and approval is required under the *Environment Protection and Biodiversity Conservation Act 1999*.

I certify that I have reviewed and endorsed the contents of this REF document and, to the best of my knowledge, it is in accordance with the EP&A act, the EP&A Regulation and Guidelines approved under clause 170 of the EP&A Regulation, and the information it contains is neither false nor misleading.



Geoff Young
Environmental Operations Officer
City Services

Date: Friday 2 August 2024

Appendix A

Project Site Pictures















Appendix B

Inspection Photos of the Underside of Smarts Bridge for Confirmation of Microbat Habitation











Appendix C

AHIMS Search



AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : Bridge
Client Service ID : 844926

SABA CIVIL MANAGEMENT AND CONSULTANCY PTY LTD

Date: 30 November 2023

113 The Comenarra Parkway
Turramurra New South Wales 2074

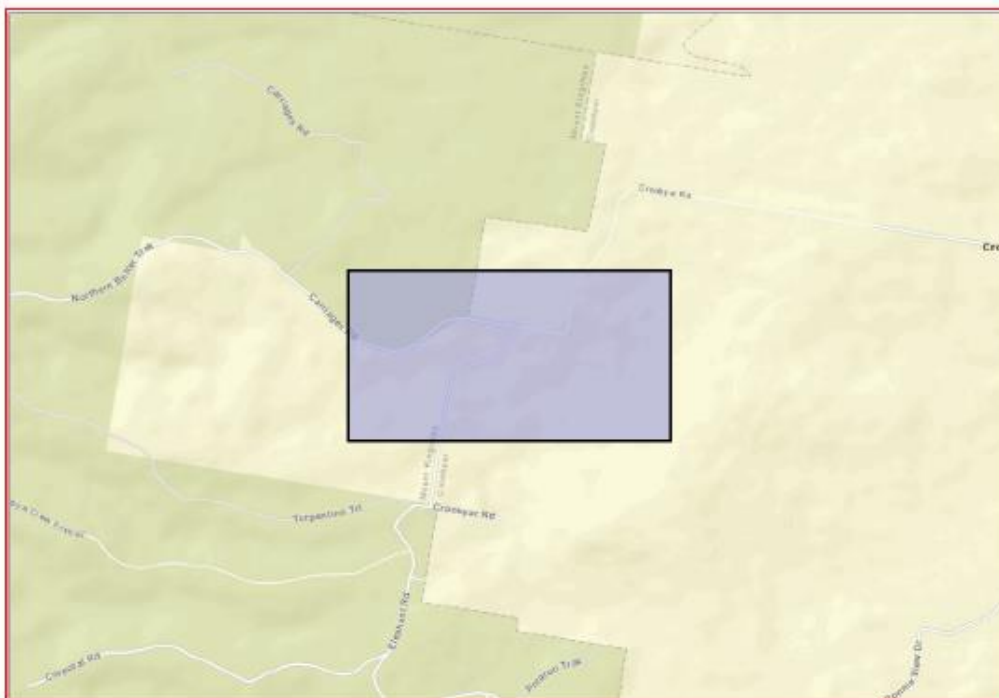
Attention: Sandeep Salvala

Email: sandeepsalvala@sabacmc.com

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -35.3278, 150.3594 - Lat, Long To : -35.3209, 150.3749, conducted by Sandeep Salvala on 30 November 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.




A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

Figure 3 AHIMS search, Croobyar Road - Smarts Bridge, Croobyar

Appendix D

Tree removal change proposal and request for direction

	EAST COAST CIVIL CONSTRUCTIONS PTY LTD	FORM 112
	Change proposal & Request for direction	

Reviewed: 10 Jul. 24

Project: Smarts Creek, Croobyar Road – Contract 76601E	Date: 22.07.2024
To: Joseph Saba, Superintendent's Rep Shoalhaven City Council	Ref No: 1 – Tree removal
Subject: (Tick box with "X" to select notice type)	
<input type="checkbox"/> Engineering change proposal: Please review the engineering change proposal described below and respond with approval or otherwise by (date)	
<input checked="" type="checkbox"/> Request for direction: Please provide the direction requested below, before we establishment on site.	
<input type="checkbox"/> Confirmation of instruction: Please confirm your instruction, as described below	
<input type="checkbox"/> Advice of delay (as detailed below)	
Details (use reverse side or attach additional sheet if required): Gary has met Steve Wilson from Steve Wilson Tree Services on site to discuss removal of the three trees. Steve is a professional tree surgeon based in Milton with over 18 years experience. Steve inspected all three trees and has advised that he can remove the three trees. Steve has advised the turpentine tree No. 3 be removed. This is the tree the resident, James Smart, requested be retained if possible. Steve's professional opinion is the tree has been compromised by the fire. The root ball and base of the tree are not healthy and the root system will compromise the completed road surface.	
Please confirm you are happy if we proceed with full removal of all three trees as priced in our tender and you will notify Mr Smart of this outcome.	
<div style="text-align: right;"> (Signature)</div> <div>Name: Gary Cochrane Position: Director</div>	
Reply: _____	
<small>Confirmation to proceed with full tree removal. No work is to commence onsite to remove the trees without the signed off Project REF and approved fisheries permit, which has been submitted and is currently awaiting review and decision. Once the permit is signed off, it will be added to the Project REF, reviewed / updated and submitted to council for sign off.</small>	
Change proposal or instruction approved?	
<div style="text-align: right;">(Signature)</div> <div>Name: Mr Joseph Saba Position:  23rd July 2024</div>	

Appendix E


Biodiversity Search



Figure 4 - BioNet Search, Croobyar Road-Smarts Bridge-Croobyar

BIONET DATA:

Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria : Public Report of all Valid Records of Entities in selected area [North: -35.28 West: 150.32 East: 150.42 South: -35.38] returned a total of 5,479 records of 873 species.
Report generated on 4/12/2023 3:30 PM

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm . status	Record s	Inf o
Animalia	Actinopterygi i	Eleotridae	T1002	<i>Hypseleotris galii</i>		Firetail Gudgeon			1	
Animalia	Amphibia	Myobatrachidae	3134	<i>Crinia signifera</i>		Common Eastern Froglet	P		81	
Animalia	Amphibia	Myobatrachidae	3103	<i>Paracrinia haswelli</i>		Haswell's Froglet	P		43	
Animalia	Amphibia	Myobatrachidae	3117	<i>Pseudophryne bibronii</i>		Bibron's Toadlet	P		1	
Animalia	Amphibia	Myobatrachidae	3302	<i>Uperoleia tyleri</i>		Tyler's Toadlet	P		24	
Animalia	Amphibia	Limnodynastidae	3058	<i>Limnodynastes dumerilii</i>		Eastern Banjo Frog	P		3	
Animalia	Amphibia	Limnodynastidae	3061	<i>Limnodynastes peronii</i>		Brown-striped Frog	P		67	
Animalia	Amphibia	Hylidae	3182	<i>Litoria ewingii</i>		Brown Tree Frog	P		2	
Animalia	Amphibia	Hylidae	3183	<i>Litoria fallax</i>		Eastern Dwarf Tree Frog	P		1	
Animalia	Amphibia	Hylidae	3190	<i>Litoria jervisiensis</i>		Jervis Bay Tree Frog	P		34	
Animalia	Amphibia	Hylidae	3316	<i>Litoria lesueuri</i>		Lesueur's Frog	P		2	
Animalia	Amphibia	Hylidae	3309	<i>Litoria nudidigita</i>		Leaf Green River Tree Frog	P		3	
Animalia	Amphibia	Hylidae	3204	<i>Litoria peronii</i>		Peron's Tree Frog	P		54	
Animalia	Amphibia	Hylidae	3214	<i>Litoria tyleri</i>		Tyler's Tree Frog	P		14	
Animalia	Amphibia	Hylidae	3215	<i>Litoria verreauxii</i>		Verreaux's Frog	P		38	
Animalia	Amphibia	Hylidae	T1122	<i>Litoria watsoni</i>			E1	E	2	
Animalia	Reptilia	Chelidae	2017	<i>Chelodina longicollis</i>		Eastern Snake-necked Turtle	P		2	
Animalia	Reptilia	Scincidae	2557	<i>Eulamprus quoyii</i>		Eastern Water-skink	P		2	
Animalia	Reptilia	Scincidae	2450	<i>Lampropholis delicata</i>		Dark-flecked Garden Sunskink	P		2	
Animalia	Reptilia	Scincidae	2451	<i>Lampropholis guichenoti</i>		Pale-flecked Garden Sunskink	P		1	
Animalia	Reptilia	Scincidae	2580	<i>Tiliqua scincoides</i>		Eastern Blue-tongue	P		1	
Animalia	Reptilia	Agamidae	2194	<i>Amphibolurus muricatus</i>		Jacky Lizard	P		1	
Animalia	Reptilia	Agamidae	2252	<i>Intellagama lesueurii</i>		Eastern Water Dragon	P		1	
Animalia	Reptilia	Varanidae	2283	<i>Varanus varius</i>		Lace Monitor	P		7	
Animalia	Reptilia	Pythonidae	5096	<i>Morelia spilota spilota</i>		Diamond Python	P		2	
Animalia	Reptilia	Elapidae	2615	<i>Austrelaps ramsayi</i>		Highland Copperhead	P		1	
Animalia	Reptilia	Elapidae	2665	<i>Drysdalia coronoides</i>		White-lipped Snake	P		1	
Animalia	Reptilia	Elapidae	2693	<i>Pseudechis porphyriacus</i>		Red-bellied Black Snake	P		11	
Animalia	Reptilia	Elapidae	2699	<i>Pseudonaja textilis</i>		Eastern Brown Snake	P		1	
Animalia	Aves	Phasianidae	0011	<i>Synoicus ypsilophora</i>		Brown Quail	P		2	
Animalia	Aves	Anatidae	0210	<i>Anas castanea</i>		Chestnut Teal	P		2	
Animalia	Aves	Anatidae	0202	<i>Chenonetta jubata</i>		Australian Wood Duck	P		2	
Animalia	Aves	Columbidae	0044	<i>Leucosarcia melanoleuca</i>		Wonga Pigeon	P		4	
Animalia	Aves	Columbidae	0027	<i>Lopholaimus antarcticus</i>		Topknot Pigeon	P		1	
Animalia	Aves	Columbidae	0029	<i>Macropygia phasianella</i>		Brown Cuckoo-Dove	P		3	
Animalia	Aves	Columbidae	0043	<i>Ocyphaps lophotes</i>		Crested Pigeon	P		2	
Animalia	Aves	Columbidae	0034	<i>Phaps chalcoptera</i>		Common Bronzewing	P		2	
Animalia	Aves	Columbidae	0989	<i>Spilopelia chinensis</i>	*	Spotted Turtle-Dove			1	
Animalia	Aves	Podargidae	0313	<i>Podargus strigoides</i>		Tawny Frogmouth	P		3	
Animalia	Aves	Apodidae	0334	<i>Hirundapus caudacutus</i>		White-throated Needletail	P	V,C,J,K	1	
Animalia	Aves	Phalacrocoracidae	0099	<i>Phalacrocorax varius</i>		Pied Cormorant	P		1	
Animalia	Aves	Accipitridae	0220	<i>Accipiter novaehollandiae</i>		Grey Goshawk	P		1	
Animalia	Aves	Accipitridae	0224	<i>Aquila audax</i>		Wedge-tailed Eagle	P		1	
Animalia	Aves	Accipitridae	0219	<i>Circus approximans</i>		Swamp Harrier	P		1	
Animalia	Aves	Accipitridae	0232	<i>Elanus axillaris</i>		Black-shouldered Kite	P		1	

Animalia	Aves	Falconidae	0240	<i>Falco cenchroides cenchroides</i>	Nankeen Kestrel	P		2	
Animalia	Aves	Falconidae	0235	<i>Falco longipennis</i>	Australian Hobby	P		1	
Animalia	Aves	Cacatuidae	0269	<i>Cacatua galerita</i>	Sulphur-crested Cockatoo	P		1	
Animalia	Aves	Cacatuidae	8862	<i>^Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo	V,P,2	V	2	Th e lin
Animalia	Aves	Cacatuidae	0273	<i>Eolophus roseicapilla</i>	Galah	P		2	
Animalia	Aves	Cacatuidae	0267	<i>Zanda funereus</i>	Yellow-tailed Black-Cockatoo	P		1	
Animalia	Aves	Psittacidae	0281	<i>Alisterus scapularis</i>	Australian King-Parrot	P		8	
Animalia	Aves	Psittacidae	0258	<i>Glossopsitta concinna</i>	Musk Lorikeet	P		1	
Animalia	Aves	Psittacidae	8913	<i>^^Pezoporus wallicus wallicus</i>	Eastern Ground Parrot	V,P,3		4	Th e lin
Animalia	Aves	Psittacidae	0282	<i>Platycercus elegans</i>	Crimson Rosella	P		6	
Animalia	Aves	Psittacidae	0288	<i>Platycercus eximius</i>	Eastern Rosella	P		3	
Animalia	Aves	Psittacidae	0256	<i>Trichoglossus chlorolepidotus</i>	Scaly-breasted Lorikeet	P		1	
Animalia	Aves	Psittacidae	9947	<i>Trichoglossus haematodus</i>	Rainbow Lorikeet	P		6	
Animalia	Aves	Cuculidae	0338	<i>Cacomantis flabelliformis</i>	Fan-tailed Cuckoo	P		1	
Animalia	Aves	Cuculidae	0337	<i>Heteroscenes pallidus</i>	Pallid Cuckoo	P		1	
Animalia	Aves	Cuculidae	0348	<i>Scythrops novaehollandiae</i>	Channel-billed Cuckoo	P		1	
Animalia	Aves	Strigidae	9922	<i>Ninox novaeseelandiae</i>	Southern Boobook	P		6	
Animalia	Aves	Strigidae	0248	<i>^^Ninox strenua</i>	Powerful Owl	V,P,3		5	
Animalia	Aves	Tytonidae	0250	<i>^^Tyto novaehollandiae</i>	Masked Owl	V,P,3		3	
Animalia	Aves	Tytonidae	9924	<i>^^Tyto tenebricosa</i>	Sooty Owl	V,P,3		3	
Animalia	Aves	Alcedinidae	0322	<i>Dacelo novaeguineae</i>	Laughing Kookaburra	P		10	
Animalia	Aves	Alcedinidae	0326	<i>Todiramphus sanctus</i>	Sacred Kingfisher	P		1	
Animalia	Aves	Menuridae	0350	<i>Menura novaehollandiae</i>	Superb Lyrebird	P		29	
Animalia	Aves	Climacteridae	0558	<i>Cormobates leucophaea</i>	White-throated Treecreeper	P		3	
Animalia	Aves	Ptilonorhynchidae	0676	<i>Ailuroedus crassirostris</i>	Green Catbird	P		1	
Animalia	Aves	Ptilonorhynchidae	0679	<i>Ptilonorhynchus violaceus</i>	Satin Bowerbird	P		7	
Animalia	Aves	Maluridae	0529	<i>Malurus cyaneus</i>	Superb Fairy-wren	P		3	
Animalia	Aves	Maluridae	0536	<i>Malurus lamberti</i>	Variegated Fairy-wren	P		1	
Animalia	Aves	Maluridae	0526	<i>Stipiturus malachurus</i>	Southern Emu-wren	P		1	
Animalia	Aves	Dasyornithidae	0506	<i>Pycnoptilus floccosus</i>	Pilotbird	P	V	1	Th e lin
Animalia	Aves	Acanthizidae	0470	<i>Acanthiza lineata</i>	Striated Thornbill	P		3	
Animalia	Aves	Acanthizidae	0471	<i>Acanthiza nana</i>	Yellow Thornbill	P		1	
Animalia	Aves	Acanthizidae	0475	<i>Acanthiza pusilla</i>	Brown Thornbill	P		2	
Animalia	Aves	Acanthizidae	0500	<i>Calamanthus fuliginosus</i>	Striated Fieldwren	E1,P		1	Th e lin
Animalia	Aves	Acanthizidae	0454	<i>Gerygone mouki</i>	Brown Gerygone	P		2	
Animalia	Aves	Acanthizidae	0453	<i>Gerygone olivacea</i>	White-throated Gerygone	P		1	
Animalia	Aves	Acanthizidae	0488	<i>Sericornis frontalis</i>	White-browed Scrubwren	P		5	
Animalia	Aves	Acanthizidae	0465	<i>Smicrornis brevirostris</i>	Weebill	P		1	
Animalia	Aves	Pardalotidae	0565	<i>Pardalotus punctatus</i>	Spotted Pardalote	P		3	
Animalia	Aves	Meliphagidae	0591	<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill	P		4	
Animalia	Aves	Meliphagidae	0638	<i>Anthochaera carunculata</i>	Red Wattlebird	P		2	
Animalia	Aves	Meliphagidae	0710	<i>Anthochaera chrysoptera</i>	Little Wattlebird	P		1	
Animalia	Aves	Meliphagidae	0614	<i>Caligavis chrysops</i>	Yellow-faced Honeyeater	P		6	
Animalia	Aves	Meliphagidae	0605	<i>Meliphaga lewinii</i>	Lewin's Honeyeater	P		4	
Animalia	Aves	Meliphagidae	0578	<i>Melithreptus lunatus</i>	White-naped Honeyeater	P		1	
Animalia	Aves	Meliphagidae	0586	<i>Myzomela sanguinolenta</i>	Scarlet Honeyeater	P		1	
Animalia	Aves	Meliphagidae	0645	<i>Philemon corniculatus</i>	Noisy Friarbird	P		2	
Animalia	Aves	Meliphagidae	0631	<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater	P		1	
Animalia	Aves	Psophodidae	0421	<i>Psophodes olivaceus</i>	Eastern Whipbird	P		8	
Animalia	Aves	Campephagidae	0424	<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike	P		2	
Animalia	Aves	Campephagidae	0429	<i>Edolisoma tenuirostris</i>	Cicadabird	P		1	

Animalia	Aves	Pachycephalidae	0408	<i>Colluricincla harmonica</i>	Grey Shrike-thrush	P		18	
Animalia	Aves	Pachycephalidae	0401	<i>Pachycephala rufiventris</i>	Rufous Whistler	P		2	
Animalia	Aves	Artamidae	0702	<i>Cracticus torquatus</i>	Grey Butcherbird	P		3	
Animalia	Aves	Artamidae	0705	<i>Gymnorhina tibicen</i>	Australian Magpie	P		9	
Animalia	Aves	Artamidae	0694	<i>Strepera graculina</i>	Pied Currawong	P		2	
Animalia	Aves	Rhipiduridae	0361	<i>Rhipidura albiscapa</i>	Grey Fantail	P		3	
Animalia	Aves	Rhipiduridae	0364	<i>Rhipidura leucophrys</i>	Willie Wagtail	P		3	
Animalia	Aves	Rhipiduridae	0362	<i>Rhipidura rufifrons</i>	Rufous Fantail	P		1	
Animalia	Aves	Corvidae	0930	<i>Corvus coronoides</i>	Australian Raven	P		1	
Animalia	Aves	Monarchidae	0415	<i>Grallina cyanoleuca</i>	Magpie-lark	P		1	
Animalia	Aves	Monarchidae	0373	<i>Monarcha melanopsis</i>	Black-faced Monarch	P		2	
Animalia	Aves	Monarchidae	0366	<i>Myiagra cyanoleuca</i>	Satin Flycatcher	P		1	
Animalia	Aves	Monarchidae	0365	<i>Myiagra rubecula</i>	Leaden Flycatcher	P		1	
Animalia	Aves	Petroicidae	0392	<i>Eopsaltria australis</i>	Eastern Yellow Robin	P		6	
Animalia	Aves	Petroicidae	0384	<i>Petroica rosea</i>	Rose Robin	P		1	
Animalia	Aves	Locustellidae	0509	<i>Cincloramphus mathewsi</i>	Rufous Songlark	P		1	
Animalia	Aves	Hirundinidae	0357	<i>Hirundo neoxena</i>	Welcome Swallow	P		2	
Animalia	Aves	Turdidae	0991	<i>Turdus merula</i> *	Eurasian Blackbird			2	
Animalia	Aves	Turdidae	0779	<i>Zoothera lunulata</i>	Bassian Thrush	P		1	
Animalia	Aves	Zosteropidae	0574	<i>Zosterops lateralis</i>	Silvereye	P		2	
Animalia	Aves	Dicaeidae	0564	<i>Dicaeum hirundinaceum</i>	Mistletoebird	P		1	
Animalia	Aves	Estrildidae	0662	<i>Neochmia temporalis</i>	Red-browed Finch	P		3	
Animalia	Aves	Estrildidae	0650	<i>Stagonopleura bella</i>	Beautiful Firetail	P		1	
Animalia	Aves	Motacillidae	0647	<i>Anthus novaeseelandiae</i>	Australian Pipit	P		1	
Animalia	Mammalia	Tachyglossidae	1003	<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	P		6	
Animalia	Mammalia	Dasyuridae	T093	<i>Antechinus sp.</i>	Unidentified Antechinus	P		3	
Animalia	Mammalia	Dasyuridae	1008	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E	1	
Animalia	Mammalia	Peramelidae	1097	<i>Perameles nasuta</i>	Long-nosed Bandicoot	P		39	
Animalia	Mammalia	Phascolarctidae	1162	<i>Phascolarctos cinereus</i>	Koala	E1,P	E	1	
Animalia	Mammalia	Vombatidae	1165	<i>Vombatus ursinus</i>	Bare-nosed Wombat	P		147	
Animalia	Mammalia	Burramyidae	1150	<i>Cercartetus nanus</i>	Eastern Pygmy-possum	V,P		1	
Animalia	Mammalia	Petauridae	1136	<i>Petaurus australis</i>	Yellow-bellied Glider	V,P	V	1	
Animalia	Mammalia	Petauridae	1138	<i>Petaurus breviceps</i>	Sugar Glider	P		8	
Animalia	Mammalia	Pseudocheiridae	1133	<i>Petauroides volans</i>	Southern Greater Glider	E1,P	E	1	
Animalia	Mammalia	Pseudocheiridae	1129	<i>Pseudocheirus peregrinus</i>	Common Ringtail Possum	P		3	
Animalia	Mammalia	Acrobatidae	1147	<i>Acrobates pygmaeus</i>	Feathertail Glider	P		4	
Animalia	Mammalia	Phalangeridae	1113	<i>Trichosurus vulpecula</i>	Common Brushtail Possum	P		203	
Animalia	Mammalia	Macropodidae	T108	<i>Macropod sp.</i>	unidentified macropod	P		1	
Animalia	Mammalia	Macropodidae	1265	<i>Macropus giganteus</i>	Eastern Grey Kangaroo	P		17	
Animalia	Mammalia	Macropodidae	T085	<i>Macropus sp.</i>	kangaroo / wallaby	P		6	
Animalia	Mammalia	Macropodidae	1261	<i>Notamacropus rufogriseus</i>	Red-necked Wallaby	P		5	
Animalia	Mammalia	Macropodidae	1242	<i>Wallabia bicolor</i>	Swamp Wallaby	P		954	
Animalia	Mammalia	Pteropodidae	1280	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	13	
Animalia	Mammalia	Pteropodidae	T087	<i>Pteropus sp.</i>	Flying-fox	P		1	
Animalia	Mammalia	Rhinolophidae	1303	<i>Rhinolophus megaphyllus</i>	Eastern Horseshoe-bat	P		1	
Animalia	Mammalia	Molossidae	1324	<i>Austronomus australis</i>	White-striped Freetail-bat	P		1	
Animalia	Mammalia	Molossidae	T454	<i>Molossidae sp.</i>	unidentified mastiff bat	P		1	
Animalia	Mammalia	Vespertilionidae	1349	<i>Chalinolobus gouldii</i>	Gould's Wattled Bat	P		1	
Animalia	Mammalia	Vespertilionidae	1357	<i>Myotis macropus</i>	Southern Myotis	V,P		1	
Animalia	Mammalia	Vespertilionidae	1335	<i>Nyctophilus geoffroyi</i>	Lesser Long-eared Bat	P		11	
Animalia	Mammalia	Vespertilionidae	1334	<i>Nyctophilus gouldi</i>	Gould's Long-eared Bat	P		6	
Animalia	Mammalia	Vespertilionidae	T092	<i>Nyctophilus sp.</i>	long-eared bat	P		1	
Animalia	Mammalia	Vespertilionidae	1361	<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V,P		1	

Animalia	Mammalia	Vespertilionidae	1365	<i>Scotorepens orion</i>	Eastern Broad-nosed Bat	P	1
Animalia	Mammalia	Vespertilionidae	1022	<i>Vespadelus darlingtoni</i>	Large Forest Bat	P	1
Animalia	Mammalia	Vespertilionidae	1378	<i>Vespadelus regulus</i>	Southern Forest Bat	P	1
Animalia	Mammalia	Vespertilionidae	1379	<i>Vespadelus vulturnus</i>	Little Forest Bat	P	3
Animalia	Mammalia	Muridae	1412	<i>Mus musculus</i> *	House Mouse		1
Animalia	Mammalia	Muridae	1395	<i>Rattus fuscipes</i>	Bush Rat	P	14
Animalia	Mammalia	Muridae	1408	<i>Rattus rattus</i> *	Black Rat		1
Animalia	Mammalia	Muridae	T094	<i>Rattus sp.</i>	rat	P	181
Animalia	Mammalia	Canidae	1905	<i>Canis familiaris</i> *	Dog		2
Animalia	Mammalia	Canidae	1531	<i>Canis lupus</i> *	Dingo, domestic dog		2
Animalia	Mammalia	Canidae	1904	<i>Canis lupus dingo</i> *	Dingo		2
Animalia	Mammalia	Canidae	1532	<i>Vulpes vulpes</i> *	Fox		49
Animalia	Mammalia	Felidae	1536	<i>Felis catus</i> *	Cat		2
Animalia	Mammalia	Leporidae	1510	<i>Oryctolagus cuniculus</i> *	Rabbit		2
Animalia	Mammalia	Equidae	1512	<i>Equus caballus</i> *	Horse		1
Animalia	Mammalia	Bovidae	1518	<i>Bos taurus</i> *	European cattle		1
Animalia	Mammalia	Cervidae	9112	<i>Cervus sp.</i> *	Unidentified Deer		1
Animalia	Insecta	Petaluridae	I007	<i>Petalura gigantea</i>	Giant Dragonfly	E1	1
Animalia	Unknown	Unknown Fauna	T355	<i>Bird sp.</i>	Unidentified Bird		1
Animalia	Unknown	Unknown Fauna	T350	<i>Fauna sp.</i>	Unidentified Fauna		7
Animalia	Unknown	Unknown Fauna	T351	<i>Mammal sp.</i>	Unidentified Mammal		18
Animalia	Unknown	Unknown Fauna	T202	<i>Microchiroptera suborder</i>	Unidentified Microbat		1
Animalia	Unknown	Unknown Fauna	T353	<i>Small mammal sp.</i>	Unidentified small mammal (<500g)		21
Plantae	Flora	Acanthaceae	1004	<i>Brunoniella pumilio</i>	Dwarf Blue Trumpet		5
Plantae	Flora	Acanthaceae	1010	<i>Pseuderanthemum variable</i>	Pastel Flower		8
Plantae	Flora	Alismataceae	1043	<i>Alisma plantago-aquatica</i>	Water Plantain		1
Plantae	Flora	Amaranthaceae	7896	<i>Deeringia amaranthoides</i>			1
Plantae	Flora	Anthericaceae	3556	<i>Laxmannia gracilis</i>	Slender Wire Lily		1
Plantae	Flora	Anthericaceae	3567	<i>Sowerbaea juncea</i>	Vanilla Plant		1
Plantae	Flora	Anthericaceae	3572	<i>Thysanotus juncifolius</i>			1
Plantae	Flora	Anthericaceae	7355	<i>Tricoryne elatior</i>	Yellow Autumn-lily		2
Plantae	Flora	Aphanopetalaceae	2266	<i>Aphanopetalum resinosum</i>	Gum Vine		7
Plantae	Flora	Apiaceae	1095	<i>Actinotus minor</i>	Lesser Flannel Flower		7
Plantae	Flora	Apiaceae	11823	<i>Apium prostratum var. filiforme</i>			1
Plantae	Flora	Apiaceae	1106	<i>Centella asiatica</i>	Indian Pennywort		2
Plantae	Flora	Apiaceae	11195	<i>Cyclospermum leptophyllum</i> *	Slender Celery		1
Plantae	Flora	Apiaceae	1108	<i>Daucus carota</i> *	Wild Carrot		1
Plantae	Flora	Apiaceae	7959	<i>Hydrocotyle acutiloba</i>			1
Plantae	Flora	Apiaceae	1123	<i>Hydrocotyle bonariensis</i> *			1
Plantae	Flora	Apiaceae	1126	<i>Hydrocotyle geraniifolia</i>	Forest Pennywort		3
Plantae	Flora	Apiaceae	1128	<i>Hydrocotyle laxiflora</i>	Stinking Pennywort		2
Plantae	Flora	Apiaceae	1132	<i>Hydrocotyle tripartita</i>	Pennywort		1
Plantae	Flora	Apiaceae	1144	<i>Platysace lanceolata</i>	Shrubby Platysace		9
Plantae	Flora	Apiaceae	1160	<i>Xanthosia atkinsoniana</i>			1
Plantae	Flora	Apiaceae	1162	<i>Xanthosia pilosa</i>	Woolly Xanthosia		11
Plantae	Flora	Apiaceae	1163	<i>Xanthosia tridentata</i>	Rock Xanthosia		1
Plantae	Flora	Apocynaceae	11047	<i>Araujia sericifera</i> *	Moth Vine		2
Plantae	Flora	Apocynaceae	1231	<i>Marsdenia flavescens</i>	Hairy Milk Vine		1
Plantae	Flora	Apocynaceae	1234	<i>Marsdenia rostrata</i>	Milk Vine		15
Plantae	Flora	Apocynaceae	1235	<i>Marsdenia suaveolens</i>	Scented Marsdenia		10
Plantae	Flora	Apocynaceae	1177	<i>Parsonsia brownii</i>	Mountain Silkpod		2
Plantae	Flora	Apocynaceae	1185	<i>Parsonsia straminea</i>	Common Silkpod		10
Plantae	Flora	Apocynaceae	1240	<i>Tylophora barbata</i>	Bearded Tylophora		13
Plantae	Flora	Araceae	1195	<i>Gymnostachys anceps</i>	Settler's Twine		3
Plantae	Flora	Araceae	1197	<i>Typhonium eliosurum</i>			1
Plantae	Flora	Araliaceae	12476	<i>Astrotricha sp. B</i>			9



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Plantae	Flora	Araliaceae	1206	<i>Cephalalaria cephalobotrys</i>		Climbing Panax	1
Plantae	Flora	Araliaceae	1207	<i>Hedera helix</i>	*	English Ivy	1
Plantae	Flora	Araliaceae	1154	<i>Trachymene incisa</i>		Trachymene	1
Plantae	Flora	Arecaceae	1221	<i>Livistona australis</i>		Cabbage Palm	P 12
Plantae	Flora	Asparagaceae	3517	<i>Arthropodium milleflorum</i>		Pale Vanilla-lily	1
Plantae	Flora	Asparagaceae	PROT	<i>Protasparagus spp.</i>	*		1
Plantae	Flora	Asphodelaceae	3540	<i>Dianella caerulea</i>		Blue Flax-lily	6
Plantae	Flora	Asphodelaceae	6811	<i>Dianella caerulea</i> var. <i>assera</i>			1
Plantae	Flora	Asphodelaceae	6700	<i>Dianella caerulea</i> var. <i>caerulea</i>			15
Plantae	Flora	Asphodelaceae	7337	<i>Dianella caerulea</i> var. <i>producta</i>			3
Plantae	Flora	Aspleniaceae	8033	<i>Asplenium flabellifolium</i>		Necklace Fern	3
Plantae	Flora	Asteraceae	1270	<i>Anthemis cotula</i>	*	Stinking Mayweed	1
Plantae	Flora	Asteraceae	1283	<i>Bidens pilosa</i>	*	Cobbler's Pegs	10
Plantae	Flora	Asteraceae	1363	<i>Cassinia aureonitens</i>			P 1
Plantae	Flora	Asteraceae	1400	<i>Cirsium vulgare</i>	*	Spear Thistle	3
Plantae	Flora	Asteraceae	1404	<i>Conyza bonariensis</i>	*	Flaxleaf Fleabane	1
Plantae	Flora	Asteraceae	CONY	<i>Conyza spp.</i>	*		2
Plantae	Flora	Asteraceae	10442	<i>Conyza sumatrensis</i>	*	Tall fleabane	4
Plantae	Flora	Asteraceae	13745	<i>Coronidium elatum</i>			3
Plantae	Flora	Asteraceae	1412	<i>Cotula australis</i>		Common Cotula	1
Plantae	Flora	Asteraceae	15365	<i>Cyanthillium cinereum</i> var. <i>cinereum</i>	*		1
Plantae	Flora	Asteraceae	9690	<i>Euchiton sphaericus</i>		Star Cudweed	1
Plantae	Flora	Asteraceae	12748	<i>Gamochaeta purpurea</i>	*	Purple Cudweed	2
Plantae	Flora	Asteraceae	9111	<i>Gazania rigens</i>	*		1
Plantae	Flora	Asteraceae	1494	<i>Helichrysum leucopsideum</i>		Satin Everlasting	1
Plantae	Flora	Asteraceae	8788	<i>Hypochaeris radicata</i>	*	Catsear	8
Plantae	Flora	Asteraceae	1551	<i>Lagenifera stipitata</i>		Blue Bottle-daisy	3
Plantae	Flora	Asteraceae	1617	<i>Olearia tomentosa</i>		Toothed Daisy-bush	10
Plantae	Flora	Asteraceae	1618	<i>Olearia viscidula</i>		Wallaby Weed	6
Plantae	Flora	Asteraceae	8884	<i>Onopordum acanthium</i> subsp. <i>acanthium</i>	*	Scotch Thistle	2
Plantae	Flora	Asteraceae	9404	<i>Ozothamnus argophyllus</i>			2
Plantae	Flora	Asteraceae	8557	<i>Ozothamnus diosmifolius</i>		White Dogwood	6
Plantae	Flora	Asteraceae	OZOT	<i>Ozothamnus spp.</i>			1
Plantae	Flora	Asteraceae	6465	<i>Senecio madagascariensis</i>	*	Fireweed	3
Plantae	Flora	Asteraceae	1671	<i>Senecio minimus</i>			1
Plantae	Flora	Asteraceae	1680	<i>Senecio velleioides</i>			5
Plantae	Flora	Asteraceae	8789	<i>Sigesbeckia orientalis</i> subsp. <i>orientalis</i>		Indian Weed	7
Plantae	Flora	Asteraceae	7851	<i>Soliva sessilis</i>	*	Bindyi	1
Plantae	Flora	Asteraceae	1690	<i>Sonchus oleraceus</i>	*	Common Sowthistle	1
Plantae	Flora	Asteraceae	11377	<i>Xerochrysum bracteatum</i>		Golden Everlasting	1
Plantae	Flora	Bignoniaceae	1740	<i>Pandorea pandorana</i>		Wonga Wonga Vine	13
Plantae	Flora	Bignoniaceae	10485	<i>Pandorea pandorana</i> subsp. <i>pandorana</i>		Wonga Wonga Vine	1
Plantae	Flora	Blandfordiaceae	3529	<i>Blandfordia nobilis</i>		Christmas Bells	P 4
Plantae	Flora	Blechnaceae	8051	<i>Blechnum camfieldii</i>			1
Plantae	Flora	Blechnaceae	8052	<i>Blechnum cartilagineum</i>		Gristle Fern	20
Plantae	Flora	Blechnaceae	7760	<i>Blechnum minus</i>		Soft Water Fern	1
Plantae	Flora	Blechnaceae	14900	<i>Blechnum neohollandicum</i>			17
Plantae	Flora	Blechnaceae	8058	<i>Blechnum nudum</i>		Fishbone Water Fern	4
Plantae	Flora	Blechnaceae	8060	<i>Blechnum patersonii</i>		Strap Water Fern	1
Plantae	Flora	Blechnaceae	10519	<i>Blechnum patersonii</i> subsp. <i>patersonii</i>			2
Plantae	Flora	Blechnaceae	14901	<i>Blechnum spinulosum</i>		Small Rasp Fern	1
Plantae	Flora	Blechnaceae	8063	<i>Blechnum wattsii</i>		Hard Water Fern	1
Plantae	Flora	Boraginaceae	1747	<i>Cynoglossum australe</i>			1
Plantae	Flora	Boraginaceae	7370	<i>Ehretia acuminata</i> var. <i>acuminata</i>		Koda	3
Plantae	Flora	Callitrichaceae	1909	<i>Callitriche stagnalis</i>	*	Common Starwort	1

Plantae	Flora	Campanulaceae	10465	<i>Lobelia anceps</i>			3
Plantae	Flora	Campanulaceae	14415	<i>Lobelia purpurascens</i>		whiteroot	5
Plantae	Flora	Campanulaceae	1934	<i>Wahlenbergia gracilis</i>		Sprawling Bluebell	2
Plantae	Flora	Caryophyllaceae	1979	<i>Polycarpon tetraphyllum</i>	*	Four-leaved Allseed	1
Plantae	Flora	Caryophyllaceae	7021	<i>Silene gallica</i> var. <i>quinquevulnera</i>	*	Five-wounded Catchfly	1
Plantae	Flora	Caryophyllaceae	2004	<i>Stellaria flaccida</i>			4
Plantae	Flora	Casuarinaceae	2010	<i>Allocasuarina distyla</i>			4
Plantae	Flora	Casuarinaceae	2012	<i>Allocasuarina littoralis</i>		Black She-Oak	28
Plantae	Flora	Casuarinaceae	2015	<i>Allocasuarina paludosa</i>			1
Plantae	Flora	Casuarinaceae	2022	<i>Casuarina glauca</i>		Swamp Oak	2
Plantae	Flora	Celastraceae	2026	<i>Celastrus australis</i>		Staff Climber	4
Plantae	Flora	Celastraceae	2029	<i>Elaeodendron australe</i>			4
Plantae	Flora	Celastraceae	12523	<i>Elaeodendron australe</i> var. <i>australe</i>			1
Plantae	Flora	Centrolepidaceae	2038	<i>Centrolepis fascicularis</i>			1
Plantae	Flora	Chenopodiaceae	1000	<i>Atriplex cinerea</i>		Grey Saltbush	4
Plantae	Flora	Chenopodiaceae	2084	<i>Chenopodium album</i>	*	Fat Hen	2
Plantae	Flora	Chenopodiaceae	2111	<i>Einadia nutans</i>		Climbing Saltbush	1
Plantae	Flora	Commelinaceae	2207	<i>Aneilema biflorum</i>			1
Plantae	Flora	Commelinaceae	2209	<i>Commelina cyanea</i>		Native Wandering Jew	2
Plantae	Flora	Commelinaceae	10508	<i>Tradescantia fluminensis</i>	*	Wandering Jew	1
Plantae	Flora	Convolvulaceae	2215	<i>Calystegia marginata</i>			1
Plantae	Flora	Convolvulaceae	2218	<i>Calystegia soldanella</i>			1
Plantae	Flora	Convolvulaceae	2219	<i>Convolvulus arvensis</i>	*	Field Bindweed	1
Plantae	Flora	Convolvulaceae	2220	<i>Convolvulus erubescens</i>		Pink Bindweed	1
Plantae	Flora	Convolvulaceae	2222	<i>Dichondra repens</i>		Kidney Weed	10
Plantae	Flora	Convolvulaceae	15127	<i>Dichondra</i> sp. <i>Inglewood</i>			1
Plantae	Flora	Convolvulaceae	2231	<i>Polymeria calycina</i>			1
Plantae	Flora	Crassulaceae	2242	<i>Crassula sieberiana</i>		Australian Stonecrop	2
Plantae	Flora	Cunoniaceae	2268	<i>Bauera rubioides</i>		River Rose	2
Plantae	Flora	Cunoniaceae	2270	<i>Callicoma serratifolia</i>		Black Wattle	15
Plantae	Flora	Cunoniaceae	2271	<i>Ceratopetalum apetalum</i>		Coachwood	9
Plantae	Flora	Cunoniaceae	2272	<i>Ceratopetalum gummiferum</i>		Christmas Bush	9
Plantae	Flora	Cunoniaceae	2275	<i>Schizomeria ovata</i>		Crabapple	2
Plantae	Flora	Cyatheaceae	8074	<i>Cyathea australis</i>		Rough Treefern	P 9
Plantae	Flora	Cyperaceae	2305	<i>Bolboschoenus caldwellii</i>			1
Plantae	Flora	Cyperaceae	2310	<i>Carex appressa</i>		Tall Sedge	3
Plantae	Flora	Cyperaceae	2313	<i>Carex breviculmis</i>			1
Plantae	Flora	Cyperaceae	9019	<i>Carex brunnea</i>		Greater Brown Sedge	1
Plantae	Flora	Cyperaceae	2321	<i>Carex fascicularis</i>		Tassel Sedge	1
Plantae	Flora	Cyperaceae	2331	<i>Carex longebrachiata</i>			13
Plantae	Flora	Cyperaceae	CARE	<i>Carex</i> spp.			6
Plantae	Flora	Cyperaceae	2347	<i>Cyathochaeta diandra</i>			5
Plantae	Flora	Cyperaceae	2353	<i>Cyperus brevifolius</i>	*		2
Plantae	Flora	Cyperaceae	2383	<i>Cyperus lucidus</i>		Leafy Flat Sedge	3
Plantae	Flora	Cyperaceae	CYPE	<i>Cyperus</i> spp.			1
Plantae	Flora	Cyperaceae	2403	<i>Cyperus tetraphyllus</i>			2
Plantae	Flora	Cyperaceae	2431	<i>Gahnia aspera</i>		Rough Saw-sedge	1
Plantae	Flora	Cyperaceae	2439	<i>Gahnia melanocarpa</i>		Black Fruit Saw-sedge	9
Plantae	Flora	Cyperaceae	2442	<i>Gahnia sieberiana</i>		Red-fruit Saw-sedge	P 7
Plantae	Flora	Cyperaceae	GAHN	<i>Gahnia</i> spp.			5
Plantae	Flora	Cyperaceae	2445	<i>Gymnoschoenus sphaerocephalus</i>		Button Grass	3
Plantae	Flora	Cyperaceae	2448	<i>Isolepis cernua</i>		Nodding Club-rush	1
Plantae	Flora	Cyperaceae	2454	<i>Isolepis inundata</i>		Club-rush	2
Plantae	Flora	Cyperaceae	2460	<i>Isolepis prolifera</i>	*		3
Plantae	Flora	Cyperaceae	8379	<i>Lepidosperma elatius</i>			2
Plantae	Flora	Cyperaceae	2465	<i>Lepidosperma filiforme</i>			18
Plantae	Flora	Cyperaceae	6402	<i>Lepidosperma laterale</i>		Variable Sword-sedge	20

Plantae	Flora	Cyperaceae	2469	<i>Lepidosperma limicola</i>					1
Plantae	Flora	Cyperaceae	LEPD	<i>Lepidosperma spp.</i>					24
Plantae	Flora	Cyperaceae	2475	<i>Lepidosperma urophorum</i>					28
Plantae	Flora	Cyperaceae	15320	<i>Machaerina articulata</i>	Jointed Twig-rush				1
Plantae	Flora	Cyperaceae	15321	<i>Machaerina gunnii</i>					1
Plantae	Flora	Cyperaceae	8956	<i>Ptilothrix deusta</i>					3
Plantae	Flora	Cyperaceae	2490	<i>Schoenoplectus validus</i>					2
Plantae	Flora	Cyperaceae	2495	<i>Schoenus ericetorum</i>					3
Plantae	Flora	Cyperaceae	2500	<i>Schoenus melanostachys</i>					2
Plantae	Flora	Cyperaceae	2508	<i>Schoenus villosus</i>					4
Plantae	Flora	Davalliaceae	8086	<i>Arthropteris tenella</i>					1
Plantae	Flora	Davalliaceae	10647	<i>Davallia solida</i> var. <i>pyxidata</i>	Hare's Foot Fern				1
Plantae	Flora	Dennstaedtiaceae	7271	<i>Histiopteris incisa</i>	Bat's Wing Fern				1
Plantae	Flora	Dennstaedtiaceae	7385	<i>Hypolepis glandulifera</i>	Downy Ground Fern				3
Plantae	Flora	Dennstaedtiaceae	7749	<i>Hypolepis muelleri</i>	Harsh Ground Fern				4
Plantae	Flora	Dennstaedtiaceae	6403	<i>Pteridium esculentum</i>	Bracken				25
Plantae	Flora	Dicksoniaceae	8341	<i>Calochlaena dubia</i>	Rainbow Fern				30
Plantae	Flora	Dilleniaceae	2527	<i>Hibbertia aspera</i>	Rough Guinea Flower				10
Plantae	Flora	Dilleniaceae	2532	<i>Hibbertia dentata</i>	Twining Guinea Flower				7
Plantae	Flora	Dilleniaceae	10863	<i>Hibbertia empetrifolia</i> subsp. <i>empetrifolia</i>					3
Plantae	Flora	Dilleniaceae	2543	<i>Hibbertia pedunculata</i>					1
Plantae	Flora	Dilleniaceae	2545	<i>Hibbertia riparia</i>					1
Plantae	Flora	Dilleniaceae	2546	<i>Hibbertia rufa</i>	Brown Guinea Flower				1
Plantae	Flora	Dilleniaceae	2548	<i>Hibbertia scandens</i>	Climbing Guinea Flower				15
Plantae	Flora	Droseraceae	2557	<i>Drosera binata</i>	Forked Sundew				1
Plantae	Flora	Droseraceae	2561	<i>Drosera spatulata</i>					7
Plantae	Flora	Dryopteridaceae	8015	<i>Lastreopsis decomposita</i>	Trim Shield Fern				5
Plantae	Flora	Dryopteridaceae	11102	<i>Lastreopsis microsora</i> subsp. <i>microsora</i>	Creeping Shield Fern				3
Plantae	Flora	Dryopteridaceae	8023	<i>Polystichum australiense</i>	Harsh Shield Fern				2
Plantae	Flora	Ebenaceae	2562	<i>Diospyros australis</i>	Black Plum				5
Plantae	Flora	Elaeocarpaceae	2574	<i>Elaeocarpus reticulatus</i>	Blueberry Ash				21
Plantae	Flora	Elaeocarpaceae	6214	<i>Tetratheca thymifolia</i>	Black-eyed Susan				16
Plantae	Flora	Ericaceae	2581	<i>Acrotriche divaricata</i>					4
Plantae	Flora	Ericaceae	ACRT	<i>Acrotriche spp.</i>					1
Plantae	Flora	Ericaceae	2589	<i>Dracophyllum secundum</i>					1
Plantae	Flora	Ericaceae	7850	<i>Epacris calvertiana</i> var. <i>calvertiana</i>					1
Plantae	Flora	Ericaceae	15212	<i>Epacris gnidioides</i>	Budawangs Cliff-heath	V	V		2
Plantae	Flora	Ericaceae	2599	<i>Epacris microphylla</i>	Coral Heath				6
Plantae	Flora	Ericaceae	2602	<i>Epacris obtusifolia</i>	Blunt-leaf Heath				6
Plantae	Flora	Ericaceae	2603	<i>Epacris paludosa</i>	Swamp Heath				1
Plantae	Flora	Ericaceae	EPAC	<i>Epacris spp.</i>					1
Plantae	Flora	Ericaceae	2610	<i>Leucopogon amplexicaulis</i>	Beard-heath				1
Plantae	Flora	Ericaceae	2616	<i>Leucopogon ericoides</i>	Pink Beard-heath				5
Plantae	Flora	Ericaceae	2617	<i>Leucopogon esquamatus</i>					4
Plantae	Flora	Ericaceae	2623	<i>Leucopogon juniperinus</i>	Prickly Beard-heath				14
Plantae	Flora	Ericaceae	2624	<i>Leucopogon lanceolatus</i>					4
Plantae	Flora	Ericaceae	6425	<i>Leucopogon lanceolatus</i> var. <i>lanceolatus</i>					9
Plantae	Flora	Ericaceae	2631	<i>Leucopogon neoanglicus</i>					4
Plantae	Flora	Ericaceae	2639	<i>Leucopogon virgatus</i>					1
Plantae	Flora	Ericaceae	2642	<i>Lissanthe strigosa</i>	Peach Heath				1
Plantae	Flora	Ericaceae	2647	<i>Monotoca elliptica</i>	Tree Broom-heath				1
Plantae	Flora	Ericaceae	2649	<i>Monotoca scoparia</i>					3
Plantae	Flora	Ericaceae	2654	<i>Sprengelia incarnata</i>	Pink Swamp Heath	P			6
Plantae	Flora	Ericaceae	2664	<i>Woolfsia pungens</i>					5
Plantae	Flora	Escalloniaceae	3227	<i>Polyosma cunninghamii</i>	Featherwood				1
Plantae	Flora	Euphorbiaceae	9713	<i>Amperea xiphoclada</i> var. <i>xiphoclada</i>					4



Plantae	Flora	Euphorbiaceae	8400	<i>Baloghia inophylla</i>		Brush Bloodwood	4
Plantae	Flora	Euphorbiaceae	2691	<i>Beyeria lasiocarpa</i>			1
Plantae	Flora	Euphorbiaceae	2698	<i>Claoxylon australe</i>		Brittlewood	7
Plantae	Flora	Euphorbiaceae	2721	<i>Euphorbia peplus</i>	*	Petty Spurge	1
Plantae	Flora	Euphorbiaceae	2723	<i>Euphorbia prostrata</i>	*	Red Caustic Weed	1
Plantae	Flora	Euphorbiaceae	11947	<i>Homalanthus populifolius</i>			1
Plantae	Flora	Eupomatiaceae	2768	<i>Eupomatia laurina</i>		Bolwarra	14
Plantae	Flora	Fabaceae (Caesalpinioideae)	14602	<i>Senna barronfieldii</i>			1
Plantae	Flora	Fabaceae (Caesalpinioideae)	10505	<i>Senna septemtrionalis</i>	*	Arsenic Bush	1
Plantae	Flora	Fabaceae (Faboideae)	2770	<i>Aotus ericoides</i>			11
Plantae	Flora	Fabaceae (Faboideae)	2778	<i>Bossiaea ensata</i>		Sword Bossiaea	1
Plantae	Flora	Fabaceae (Faboideae)	2780	<i>Bossiaea heterophylla</i>		Variable Bossiaea	1
Plantae	Flora	Fabaceae (Faboideae)	2781	<i>Bossiaea kiamensis</i>			5
Plantae	Flora	Fabaceae (Faboideae)	2784	<i>Bossiaea obcordata</i>		Spiny Bossiaea	4
Plantae	Flora	Fabaceae (Faboideae)	2816	<i>Daviesia acicularis</i>			1
Plantae	Flora	Fabaceae (Faboideae)	2831	<i>Daviesia alata</i>			4
Plantae	Flora	Fabaceae (Faboideae)	10831	<i>Daviesia ulicifolia</i> <i>subsp. ulicifolia</i>			1
Plantae	Flora	Fabaceae (Faboideae)	2843	<i>Dillwynia floribunda</i>			2
Plantae	Flora	Fabaceae (Faboideae)	2844	<i>Dillwynia glaberrima</i>			1
Plantae	Flora	Fabaceae (Faboideae)	2850	<i>Dillwynia retorta</i>			1
Plantae	Flora	Fabaceae (Faboideae)	2854	<i>Dipogon lignosus</i>	*	Dolichos Pea	1
Plantae	Flora	Fabaceae (Faboideae)	2860	<i>Glycine clandestina</i>		Twining glycine	11
Plantae	Flora	Fabaceae (Faboideae)	7208	<i>Glycine microphylla</i>		Small-leaf Glycine	3
Plantae	Flora	Fabaceae (Faboideae)	2861	<i>Glycine tabacina</i>		Variable Glycine	4
Plantae	Flora	Fabaceae (Faboideae)	7844	<i>Glycine tomentella</i>		Woolly Glycine	1
Plantae	Flora	Fabaceae (Faboideae)	13008	<i>Gompholobium aspalathoides</i>			1
Plantae	Flora	Fabaceae (Faboideae)	2864	<i>Gompholobium glabratum</i>		Dainty Wedge Pea	2
Plantae	Flora	Fabaceae (Faboideae)	6921	<i>Gompholobium huegelii</i>		Pale Wedge Pea	1
Plantae	Flora	Fabaceae (Faboideae)	2866	<i>Gompholobium latifolium</i>		Golden Glory Pea	11
Plantae	Flora	Fabaceae (Faboideae)	2868	<i>Gompholobium pinnatum</i>		Pinnate Wedge Pea	1
Plantae	Flora	Fabaceae (Faboideae)	15314	<i>Grona varians</i>			4
Plantae	Flora	Fabaceae (Faboideae)	2873	<i>Hardenbergia violacea</i>		False Sarsaparilla	7
Plantae	Flora	Fabaceae (Faboideae)	2877	<i>Hovea longifolia</i>		Rusty Pods	3
Plantae	Flora	Fabaceae (Faboideae)	HOVE	<i>Hovea spp.</i>			2
Plantae	Flora	Fabaceae (Faboideae)	2882	<i>Indigofera australis</i>		Australian Indigo	1
Plantae	Flora	Fabaceae (Faboideae)	2898	<i>Kennedia rubicunda</i>		Dusky Coral Pea	8
Plantae	Flora	Fabaceae (Faboideae)	12079	<i>Lotus subbiflorus</i>	*	Hairy Birds-foot Trefoil	1
Plantae	Flora	Fabaceae (Faboideae)	8928	<i>Lotus uliginosus</i>	*	Birds-foot Trefoil	1
Plantae	Flora	Fabaceae (Faboideae)	2922	<i>Medicago polymorpha</i>	*	Burr Medic	1
Plantae	Flora	Fabaceae (Faboideae)	2938	<i>Mirbelia rubiifolia</i>		Heathy Mirbelia	5
Plantae	Flora	Fabaceae (Faboideae)	2949	<i>Oxylobium cordifolium</i>		Heart-leaved Shaggy Pea	2
Plantae	Flora	Fabaceae (Faboideae)	2961	<i>Platylobium formosum</i>			2

Plantae	Flora	Fabaceae (Faboideae)	9354	<i>Platylobium formosum</i> <i>subsp. formosum</i>		2	
Plantae	Flora	Fabaceae (Faboideae)	14702	<i>Platylobium parviflorum</i> Small-flowered Flat-pea		2	
Plantae	Flora	Fabaceae (Faboideae)	10705	<i>Podolobium aciculiferum</i> Needle Shaggy Pea		1	
Plantae	Flora	Fabaceae (Faboideae)	9912	<i>Podolobium ilicifolium</i> Prickly Shaggy Pea		7	
Plantae	Flora	Fabaceae (Faboideae)	15315	<i>Pullenia gunnii</i>		1	
Plantae	Flora	Fabaceae (Faboideae)	2977	<i>Pultenaea blakelyi</i>		3	
Plantae	Flora	Fabaceae (Faboideae)	2985	<i>Pultenaea daphnoides</i> Large-leaf Bush-pea		12	
Plantae	Flora	Fabaceae (Faboideae)	2993	<i>Pultenaea flexilis</i>		2	
Plantae	Flora	Fabaceae (Faboideae)	2997	<i>Pultenaea hispidula</i>		1	
Plantae	Flora	Fabaceae (Faboideae)	3002	<i>Pultenaea linophylla</i>		1	
Plantae	Flora	Fabaceae (Faboideae)	9223	<i>Sphaerolobium minus</i>		1	
Plantae	Flora	Fabaceae (Faboideae)	3076	<i>Trifolium dubium</i>	*	Yellow Suckling Clover	1
Plantae	Flora	Fabaceae (Faboideae)	3085	<i>Trifolium repens</i>	*	White Clover	5
Plantae	Flora	Fabaceae (Faboideae)	TRIF	<i>Trifolium spp.</i>	*		1
Plantae	Flora	Fabaceae (Faboideae)	3093	<i>Ulex europaeus</i>	*	Gorse	1
Plantae	Flora	Fabaceae (Faboideae)	3097	<i>Vicia sativa</i>	*	Common vetch	1
Plantae	Flora	Fabaceae (Mimosoideae)	3723	<i>Acacia brownii</i> Heath Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	3742	<i>Acacia cognata</i> Narrow-leaf Bower Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	3751	<i>Acacia covenyi</i>		1	
Plantae	Flora	Fabaceae (Mimosoideae)	3758	<i>Acacia dealbata</i> Silver Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	3769	<i>Acacia elongata</i> Swamp Wattle		6	
Plantae	Flora	Fabaceae (Mimosoideae)	3773	<i>Acacia filicifolia</i> Fern-leaved Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	3792	<i>Acacia implexa</i> Hickory Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	10920	<i>Acacia lanigera</i> var. <i>lanigera</i> Hairy Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	3816	<i>Acacia longifolia</i>		9	
Plantae	Flora	Fabaceae (Mimosoideae)	10790	<i>Acacia longifolia</i> subsp. <i>longifolia</i> Sydney Golden Wattle		3	
Plantae	Flora	Fabaceae (Mimosoideae)	3817	<i>Acacia longissima</i> Long-leaf Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	7028	<i>Acacia mabellae</i> Mabel's Wattle		21	
Plantae	Flora	Fabaceae (Mimosoideae)	3821	<i>Acacia maidenii</i> Maiden's Wattle		5	
Plantae	Flora	Fabaceae (Mimosoideae)	3823	<i>Acacia mearnsii</i> Black Wattle		12	
Plantae	Flora	Fabaceae (Mimosoideae)	3824	<i>Acacia melanoxylon</i> Blackwood		3	
Plantae	Flora	Fabaceae (Mimosoideae)	3834	<i>Acacia myrtifolia</i> Red-stemmed Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	3839	<i>Acacia obtusifolia</i>		31	
Plantae	Flora	Fabaceae (Mimosoideae)	3847	<i>Acacia parvipinnula</i> Silver-stemmed Wattle		1	
Plantae	Flora	Fabaceae (Mimosoideae)	3880	<i>Acacia stricta</i> Straight Wattle		5	
Plantae	Flora	Fabaceae (Mimosoideae)	3881	<i>Acacia suaveolens</i> Sweet Wattle		2	
Plantae	Flora	Fabaceae (Mimosoideae)	3885	<i>Acacia terminalis</i> Sunshine Wattle		2	
Plantae	Flora	Fabaceae (Mimosoideae)	10793	<i>Acacia terminalis</i> subsp. <i>angustifolia</i>		2	
Plantae	Flora	Fabaceae (Mimosoideae)	3893	<i>Acacia ulicifolia</i> Prickly Moses		2	
Plantae	Flora	Geraniaceae	3148	<i>Geranium homeanum</i>		6	
Plantae	Flora	Geraniaceae	10093	<i>Geranium molle</i> subsp. <i>molle</i>	*	Cranesbill Geranium	1

Plantae	Flora	Geraniaceae	3156	<i>Geranium solanderi</i>	Native Geranium	1
Plantae	Flora	Geraniaceae	8226	<i>Geranium solanderi</i> var. <i>solanderi</i>		1
Plantae	Flora	Geraniaceae	3157	<i>Pelargonium australe</i>	Native Storksbill	1
Plantae	Flora	Geraniaceae	3161	<i>Pelargonium inodorum</i>		2
Plantae	Flora	Gleicheniaceae	7138	<i>Gleichenia dicarpa</i>	Pouched Coral Fern	7
Plantae	Flora	Gleicheniaceae	6708	<i>Gleichenia microphylla</i>	Scrambling Coral Fern	1
Plantae	Flora	Gleicheniaceae	11175	<i>Sticherus flabellatus</i> var. <i>flabellatus</i>	Umbrella Fern P	4
Plantae	Flora	Gleicheniaceae	7035	<i>Sticherus lobatus</i>	Spreading Shield Fern	2
Plantae	Flora	Goodeniaceae	3174	<i>Dampiera stricta</i>		5
Plantae	Flora	Goodeniaceae	3175	<i>Goodenia bellidifolia</i>		1
Plantae	Flora	Goodeniaceae	8711	<i>Goodenia bellidifolia</i> subsp. <i>bellidifolia</i>		4
Plantae	Flora	Goodeniaceae	3184	<i>Goodenia glomerata</i>		1
Plantae	Flora	Goodeniaceae	3190	<i>Goodenia heterophylla</i>		1
Plantae	Flora	Goodeniaceae	8755	<i>Goodenia heterophylla</i> subsp. <i>eglandulosa</i>		2
Plantae	Flora	Goodeniaceae	3192	<i>Goodenia ovata</i>	Hop Goodenia	7
Plantae	Flora	Goodeniaceae	3208	<i>Scaevola ramosissima</i>	Purple Fan-flower	1
Plantae	Flora	Grammitidaceae	10518	<i>Grammitis billardiarei</i>	Finger Fern	1
Plantae	Flora	Haemodoraceae	6435	<i>Haemodorum corymbosum</i>		4
Plantae	Flora	Haloragaceae	3241	<i>Gonocarpus humilis</i>		1
Plantae	Flora	Haloragaceae	8649	<i>Gonocarpus micranthus</i> subsp. <i>micranthus</i>		4
Plantae	Flora	Haloragaceae	GONO	<i>Gonocarpus</i> spp.	Raspwort	1
Plantae	Flora	Haloragaceae	3247	<i>Gonocarpus tetragynus</i>	Poverty Raspwort	8
Plantae	Flora	Haloragaceae	3248	<i>Gonocarpus teucrioides</i>	Germander Raspwort	10
Plantae	Flora	Hydrocharitaceae	10855	<i>Ottelia ovalifolia</i> subsp. <i>ovalifolia</i>	Swamp Lily	1
Plantae	Flora	Hymenophyllaceae	8107	<i>Hymenophyllum cupressiforme</i>	Common Filmy Fern	1
Plantae	Flora	Iridaceae	3298	<i>Libertia paniculata</i>	Branching Grass-flag	2
Plantae	Flora	Iridaceae	3301	<i>Patersonia glabrata</i>	Leafy Purple-flag	5
Plantae	Flora	Iridaceae	3303	<i>Patersonia sericea</i>	Silky Purple-Flag	8
Plantae	Flora	Juncaceae	3325	<i>Juncus cognatus</i> *		1
Plantae	Flora	Juncaceae	3338	<i>Juncus pallidus</i>		1
Plantae	Flora	Juncaceae	3342	<i>Juncus prismatocarpus</i>		2
Plantae	Flora	Juncaceae	JUNC	<i>Juncus</i> spp.		1
Plantae	Flora	Juncaceae	3350	<i>Juncus usitatus</i>		5
Plantae	Flora	Juncaginaceae	TRIG	<i>Triglochin</i> spp.		1
Plantae	Flora	Lamiaceae	6243	<i>Chloanthes stoechadis</i>		1
Plantae	Flora	Lamiaceae	6484	<i>Clerodendrum tomentosum</i>	Hairy Clerodendrum	10
Plantae	Flora	Lamiaceae	3386	<i>Mentha pulegium</i> *	Pennyroyal	1
Plantae	Flora	Lamiaceae	3396	<i>Plectranthus graveolens</i>		2
Plantae	Flora	Lamiaceae	3397	<i>Plectranthus parviflorus</i>		7
Plantae	Flora	Lamiaceae	3412	<i>Prostanthera incana</i>	Velvet Mint-bush	1
Plantae	Flora	Lamiaceae	3413	<i>Prostanthera incisa</i>	Cut-leaved Mint-bush	3
Plantae	Flora	Lamiaceae	3415	<i>Prostanthera lasianthos</i>	Victorian Christmas Bush	1
Plantae	Flora	Lamiaceae	10244	<i>Prostanthera saxicola</i> var. <i>montana</i>		1
Plantae	Flora	Lamiaceae	PROS	<i>Prostanthera</i> spp.		3
Plantae	Flora	Lamiaceae	7166	<i>Prostanthera violacea</i>	Violet Mint-bush	8
Plantae	Flora	Lamiaceae	3440	<i>Prunella vulgaris</i> *	Self-heal	1
Plantae	Flora	Lamiaceae	3450	<i>Stachys arvensis</i> *	Stagger Weed	3
Plantae	Flora	Lauraceae	3467	<i>Cassytha glabella</i>		4
Plantae	Flora	Lauraceae	3469	<i>Cassytha pubescens</i>	Downy Dodder-laurel	10
Plantae	Flora	Lauraceae	3479	<i>Cryptocarya glaucescens</i>	Jackwood	4
Plantae	Flora	Lindsaeaceae	6406	<i>Lindsaea linearis</i>	Screw Fern	9
Plantae	Flora	Lindsaeaceae	6401	<i>Lindsaea microphylla</i>	Lacy Wedge Fern	9
Plantae	Flora	Loganiaceae	3588	<i>Logania albiflora</i>		1
Plantae	Flora	Loganiaceae	10201	<i>Mitrasacme pilosa</i> var. <i>pilosa</i>		1
Plantae	Flora	Loganiaceae	3595	<i>Mitrasacme polymorpha</i>		5
Plantae	Flora	Loganiaceae	15351	<i>Orianthera pusilla</i>		1
Plantae	Flora	Lomandraceae	6304	<i>Lomandra glauca</i>	Pale Mat-rush	5
Plantae	Flora	Lomandraceae	6305	<i>Lomandra gracilis</i>		2
Plantae	Flora	Lomandraceae	6308	<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	27

Plantae	Flora	Lomandraceae	8802	<i>Lomandra multiflora</i> <i>subsp. multiflora</i>	Many-flowered Mat-rush	1
Plantae	Flora	Lomandraceae	6312	<i>Lomandra obliqua</i>		2
Plantae	Flora	Luzuriagaceae	6015	<i>Eustrephus latifolius</i>	Wombat Berry	27
Plantae	Flora	Luzuriagaceae	6016	<i>Geitonoplesium</i> <i>cymosum</i>	Scrambling Lily	10
Plantae	Flora	Lycopodiaceae	6409	<i>Lycopodium</i> <i>deuterodensum</i>	Bushy Clubmoss	P1
Plantae	Flora	Lythraceae	3623	<i>Lythrum hyssopifolia</i>	Hyssop Loosestrife	1
Plantae	Flora	Malvaceae	6128	<i>Brachychiton populneus</i>	Kurrajong	1
Plantae	Flora	Malvaceae	6130	<i>Commersonia fraseri</i>	Brush Kurrajong	8
Plantae	Flora	Malvaceae	3649	<i>Howittia trilocularis</i>		3
Plantae	Flora	Malvaceae	6139	<i>Lasiopetalum</i> <i>ferrugineum</i>		1
Plantae	Flora	Malvaceae	9008	<i>Lasiopetalum</i> <i>ferrugineum</i> var. <i>ferrugineum</i>		4
Plantae	Flora	Malvaceae	3660	<i>Modiola caroliniana</i>	*Red-flowered Mallow	1
Plantae	Flora	Malvaceae	6151	<i>Seringia arborescens</i>		1
Plantae	Flora	Malvaceae	3673	<i>Sida rhombifolia</i>	*Paddy's Lucerne	6
Plantae	Flora	Malvaceae	SIDA	<i>Sida spp.</i>		1
Plantae	Flora	Meliaceae	11178	<i>Synoum glandulosum</i> <i>subsp. glandulosum</i>	Scentless Rosewood	12
Plantae	Flora	Meliaceae	8839	<i>Toona ciliata</i>	Red Cedar	3
Plantae	Flora	Menispermaceae	3686	<i>Legnephora moorei</i>	Round-leaf Vine	2
Plantae	Flora	Menispermaceae	3688	<i>Sarcopetalum</i> <i>harveyanum</i>	Pearl Vine	8
Plantae	Flora	Menispermaceae	3690	<i>Stephania japonica</i>	Snake vine	3
Plantae	Flora	Menispermaceae	8428	<i>Stephania japonica</i> var. <i>discolor</i>	Snake Vine	4
Plantae	Flora	Monimiaceae	3913	<i>Doryphora sassafras</i>	Sassafras	6
Plantae	Flora	Monimiaceae	3914	<i>Hedycarya angustifolia</i>	Native Mulberry	1
Plantae	Flora	Monimiaceae	3915	<i>Palmeria scandens</i>	Anchor Vine	4
Plantae	Flora	Monimiaceae	3918	<i>Wilkiea huegeliana</i>	Veiny Wilkiea	1
Plantae	Flora	Moraceae	7479	<i>Ficus coronata</i>	Creek Sandpaper Fig	1
Plantae	Flora	Moraceae	7301	<i>Ficus obliqua</i>	Small-leaved Fig	1
Plantae	Flora	Moraceae	11720	<i>Ficus rubiginosa</i> f. <i>rubiginosa</i>		1
Plantae	Flora	Moraceae	3928	<i>Maclura</i> <i>cochinchinensis</i>	Cockspur Thorn	2
Plantae	Flora	Moraceae	3931	<i>Streblus brunonianus</i>	Whalebone Tree	6
Plantae	Flora	Moraceae	10416	<i>Trophis scandens</i>	Burny Vine	1
Plantae	Flora	Myrtaceae	3968	<i>Acmena smithii</i>	Lilly Pilly	14
Plantae	Flora	Myrtaceae	3971	<i>Angophora floribunda</i>	Rough-barked Apple	6
Plantae	Flora	Myrtaceae	3984	<i>Backhousia myrtifolia</i>	Grey Myrtle	9
Plantae	Flora	Myrtaceae	3986	<i>Baeckea brevifolia</i>		2
Plantae	Flora	Myrtaceae	3995	<i>Baeckea imbricata</i>		6
Plantae	Flora	Myrtaceae	3997	<i>Baeckea linifolia</i>	Weeping Baeckea	P5
Plantae	Flora	Myrtaceae	9687	<i>Corymbia gummifera</i>	Red Bloodwood	29
Plantae	Flora	Myrtaceae	9692	<i>Corymbia maculata</i>	Spotted Gum	1
Plantae	Flora	Myrtaceae	4030	<i>Darwinia leptantha</i>		6
Plantae	Flora	Myrtaceae	4037	<i>Eucalyptus</i> <i>agglomerata</i>	Blue-leaved Stringybark	2
Plantae	Flora	Myrtaceae	4040	<i>Eucalyptus amplifolia</i>	Cabbage Gum	2
Plantae	Flora	Myrtaceae	4060	<i>Eucalyptus botryoides</i>	Bangalay	13
Plantae	Flora	Myrtaceae	9959	<i>Eucalyptus botryoides</i> <--> <i>saligna</i>		5
Plantae	Flora	Myrtaceae	4073	<i>Eucalyptus</i> <i>consideniana</i>	Yertchuk	3
Plantae	Flora	Myrtaceae	4087	<i>Eucalyptus eugenioides</i>	Thin-leaved Stringybark	6
Plantae	Flora	Myrtaceae	4097	<i>Eucalyptus globoidea</i>	White Stringybark	13
Plantae	Flora	Myrtaceae	4117	<i>Eucalyptus ligustrina</i>	Privet-leaved Stringybark	3
Plantae	Flora	Myrtaceae	4118	<i>Eucalyptus longifolia</i>	Woollybutt	1
Plantae	Flora	Myrtaceae	4132	<i>Eucalyptus muelleriana</i>	Yellow Stringybark	6
Plantae	Flora	Myrtaceae	10029	<i>Eucalyptus obstans</i>	Port Jackson Mallee	2
Plantae	Flora	Myrtaceae	4149	<i>Eucalyptus paniculata</i>	Grey Ironbark	4
Plantae	Flora	Myrtaceae	8831	<i>Eucalyptus paniculata</i> <i>subsp. paniculata</i>		4
Plantae	Flora	Myrtaceae	4155	<i>Eucalyptus pilularis</i>	Blackbutt	17
Plantae	Flora	Myrtaceae	4156	<i>Eucalyptus piperita</i>	Sydney Peppermint	36
Plantae	Flora	Myrtaceae	4165	<i>Eucalyptus punctata</i>	Grey Gum	2
Plantae	Flora	Myrtaceae	4167	<i>Eucalyptus</i> <i>quadrangulata</i>	White-topped Box	4

Plantae	Flora	Myrtaceae	4177	<i>Eucalyptus saligna</i>	Sydney Blue Gum			3	
Plantae	Flora	Myrtaceae	8950	<i>Eucalyptus scias</i>	Large-fruited Red Mahogany			10	
Plantae	Flora	Myrtaceae	9954	<i>Eucalyptus scias subsp. callimastha</i>				18	
Plantae	Flora	Myrtaceae	4178	<i>Eucalyptus sclerophylla</i>	Hard-leaved Scribbly Gum			1	
Plantae	Flora	Myrtaceae	4182	<i>Eucalyptus sieberi</i>	Silvertop Ash			22	
Plantae	Flora	Myrtaceae	8353	<i>Eucalyptus sparsifolia</i>	Narrow-leaved Stringybark			2	
Plantae	Flora	Myrtaceae	EUCA	<i>Eucalyptus spp.</i>				2	
Plantae	Flora	Myrtaceae	4189	<i>Eucalyptus stricta</i>	Blue Mountains Mallee Ash			10	
Plantae	Flora	Myrtaceae	4191	<i>Eucalyptus tereticornis</i>	Forest Red Gum			2	
Plantae	Flora	Myrtaceae	4204	<i>Kunzea ambigua</i>	Tick Bush	P		9	
Plantae	Flora	Myrtaceae	4207	<i>Kunzea capitata</i>		P		5	
Plantae	Flora	Myrtaceae	4221	<i>Leptospermum juniperinum</i>	Prickly Tea-tree			4	
Plantae	Flora	Myrtaceae	8399	<i>Leptospermum morrisonii</i>				2	
Plantae	Flora	Myrtaceae	7245	<i>Leptospermum polygalifolium</i>	Tantoon			23	
Plantae	Flora	Myrtaceae	8197	<i>Leptospermum polygalifolium subsp. polygalifolium</i>				2	
Plantae	Flora	Myrtaceae	9958	<i>Leptospermum rotundifolium</i>		P		6	
Plantae	Flora	Myrtaceae	LEPT	<i>Leptospermum spp.</i>	Tea-tree			1	
Plantae	Flora	Myrtaceae	4239	<i>Leptospermum squarrosum</i>				4	
Plantae	Flora	Myrtaceae	8316	<i>Leptospermum subglabratum</i>				1	
Plantae	Flora	Myrtaceae	8486	<i>Leptospermum trinervium</i>	Slender Tea-tree			8	
Plantae	Flora	Myrtaceae	4247	<i>Melaleuca capitata</i>				6	
Plantae	Flora	Myrtaceae	6391	<i>Melaleuca ericifolia</i>	Swamp Paperbark			1	
Plantae	Flora	Myrtaceae	4254	<i>Melaleuca hypericifolia</i>	Hillock bush			2	
Plantae	Flora	Myrtaceae	4257	<i>Melaleuca linariifolia</i>	Flax-leaved Paperbark			3	
Plantae	Flora	Myrtaceae	4263	<i>Melaleuca squarrosa</i>	Scented Paperbark			6	
Plantae	Flora	Myrtaceae	4283	<i>Rhodamnia rubescens</i>	Scrub Turpentine	E4A	CE	10	
Plantae	Flora	Myrtaceae	13751	<i>Sannantha pluriflora</i>				7	
Plantae	Flora	Myrtaceae	6688	<i>Syncarpia glomulifera</i>	Turpentine			75	
Plantae	Flora	Myrtaceae	10748	<i>Syncarpia glomulifera subsp. glomulifera</i>				2	
Plantae	Flora	Myrtaceae	6778	<i>Syzygium australe</i>	Brush Cherry			2	
Plantae	Flora	Myrtaceae	4296	<i>Tristaniopsis collina</i>	Mountain Water Gum			22	
Plantae	Flora	Myrtaceae	4297	<i>Tristaniopsis laurina</i>	Kanooka			5	
Plantae	Flora	Oleaceae	4312	<i>Ligustrum lucidum</i>	* Large-leaved Privet			2	
Plantae	Flora	Oleaceae	4313	<i>Ligustrum sinense</i>	* Small-leaved Privet			2	
Plantae	Flora	Oleaceae	4318	<i>Notelaea longifolia</i>	Large Mock-olive			6	
Plantae	Flora	Oleaceae	6423	<i>Notelaea longifolia f. longifolia</i>				11	
Plantae	Flora	Oleaceae	4322	<i>Notelaea venosa</i>	Veined Mock-olive			18	
Plantae	Flora	Oleaceae	4324	<i>Olea europaea</i>	* Common Olive			1	
Plantae	Flora	Oleaceae	11220	<i>Olea europaea subsp. cuspidata</i>	* African Olive			1	
Plantae	Flora	Onagraceae	4330	<i>Epilobium hirtigerum</i>				1	
Plantae	Flora	Orchidaceae	4353	<i>Acianthus fornicatus</i>	Pixie Caps	P		2	
Plantae	Flora	Orchidaceae	ACIA	<i>Acianthus spp.</i>	Mosquito Orchid	P		1	
Plantae	Flora	Orchidaceae	4365	<i>Bulbophyllum minutissimum</i>		P		1	
Plantae	Flora	Orchidaceae	4389	<i>Caleana major</i>	Large Duck Orchid	P		1	
Plantae	Flora	Orchidaceae	4394	<i>Calochilus paludosus</i>	Red Beard Orchid	P		1	
Plantae	Flora	Orchidaceae	13657	^ <i>Calochilus pulchellus</i>	Pretty Beard Orchid	E1,P,2		12	
Plantae	Flora	Orchidaceae	14091	<i>Cestichis reflexa</i>		P		1	
Plantae	Flora	Orchidaceae	CHIL	<i>Chiloglottis spp.</i>		P		1	
Plantae	Flora	Orchidaceae	4415	^ <i>Cryptostylis hunteriana</i>	Leafless Tongue Orchid	V,P,2	V	2	
Plantae	Flora	Orchidaceae	CRYT	<i>Cryptostylis spp.</i>		P		2	
Plantae	Flora	Orchidaceae	4417	<i>Cryptostylis subulata</i>	Large Tongue Orchid	P		1	
Plantae	Flora	Orchidaceae	4419	<i>Cymbidium suave</i>	Snake Orchid	P		23	
Plantae	Flora	Orchidaceae	4433	<i>Dendrobium striolatum</i>	Streaked Rock Orchid	P		1	
Plantae	Flora	Orchidaceae	7888	<i>Dipodium variegatum</i>		P		2	
Plantae	Flora	Orchidaceae	11258	^ <i>Genoplesium vernale</i>	East Lynne Midge Orchid	V,P,2	V	6	



Plantae	Flora	Orchidaceae	4535	<i>Pterostylis acuminata</i>	Pointed Greenhood	P	1
Plantae	Flora	Orchidaceae	4545	<i>Pterostylis curta</i>	Blunt Greenhood	P	1
Plantae	Flora	Orchidaceae	PTER	<i>Pterostylis spp.</i>	Greenhood	P	1
Plantae	Flora	Osmundaceae	8151	<i>Todea barbara</i>	King Fern	P	1
Plantae	Flora	Oxalidaceae	4608	<i>Oxalis articulata</i>	*		1
Plantae	Flora	Oxalidaceae	4612	<i>Oxalis chnoodes</i>			2
Plantae	Flora	Oxalidaceae	4615	<i>Oxalis exilis</i>			1
Plantae	Flora	Oxalidaceae	4622	<i>Oxalis pes-caprae</i>	*	Soursob	1
Plantae	Flora	Oxalidaceae	OXAL	<i>Oxalis spp.</i>			4
Plantae	Flora	Passifloraceae	4643	<i>Passiflora edulis</i>	*	Common Passionfruit	3
Plantae	Flora	Passifloraceae	4646	<i>Passiflora herbertiana</i>			1
Plantae	Flora	Phormiaceae	7664	<i>Thelionema caespitosum</i>	Tufted Blue-lily		1
Plantae	Flora	Phyllanthaceae	2695	<i>Breynia oblongifolia</i>	Coffee Bush		14
Plantae	Flora	Phyllanthaceae	7866	<i>Glochidion ferdinandi</i>	Cheese Tree		1
Plantae	Flora	Phyllanthaceae	9360	<i>Glochidion ferdinandi</i> <i>var. ferdinandi</i>	Cheese Tree		2
Plantae	Flora	Phyllanthaceae	2746	<i>Phyllanthus gunnii</i>			2
Plantae	Flora	Phyllanthaceae	8216	<i>Phyllanthus hirtellus</i>	Thyme Spurge		7
Plantae	Flora	Phyllanthaceae	2753	<i>Poranthera corymbosa</i>			1
Plantae	Flora	Phyllanthaceae	2754	<i>Poranthera ericifolia</i>			1
Plantae	Flora	Phytolaccaceae	4658	<i>Phytolacca octandra</i>	*	Inkweed	4
Plantae	Flora	Pittosporaceae	4671	<i>Billardiera scandens</i>	Hairy Apple Berry		15
Plantae	Flora	Pittosporaceae	11204	<i>Pittosporum multiflorum</i>	Orange Thorn		8
Plantae	Flora	Pittosporaceae	4683	<i>Pittosporum revolutum</i>	Rough Fruit Pittosporum		10
Plantae	Flora	Pittosporaceae	4685	<i>Pittosporum undulatum</i>	Sweet Pittosporum		10
Plantae	Flora	Pittosporaceae	8623	<i>Rhytidosporum procumbens</i>			1
Plantae	Flora	Plantaginaceae	4691	<i>Plantago debilis</i>	Shade Plantain		2
Plantae	Flora	Plantaginaceae	4699	<i>Plantago lanceolata</i>	*	Lamb's Tongues	6
Plantae	Flora	Plantaginaceae	4700	<i>Plantago major</i>	*	Large Plantain	2
Plantae	Flora	Plantaginaceae	6003	<i>Veronica calycina</i>	Hairy Speedwell		1
Plantae	Flora	Plantaginaceae	6009	<i>Veronica plebeia</i>	Trailing Speedwell		4
Plantae	Flora	Poaceae	4749	<i>Anisopogon avenaceus</i>	Oat Speargrass		2
Plantae	Flora	Poaceae	4750	<i>Anthoxanthum odoratum</i>	*	Sweet Vernal Grass	1
Plantae	Flora	Poaceae	ARIS	<i>Aristida spp.</i>			1
Plantae	Flora	Poaceae	4773	<i>Aristida vagans</i>	Threeawn Speargrass		1
Plantae	Flora	Poaceae	9603	<i>Austrostipa pubescens</i>			1
Plantae	Flora	Poaceae	AUSO	<i>Austrostipa spp.</i>			3
Plantae	Flora	Poaceae	4779	<i>Avena barbata</i>	*	Bearded Oats	1
Plantae	Flora	Poaceae	11194	<i>Axonopus fissifolius</i>	*	Narrow-leafed Carpet Grass	3
Plantae	Flora	Poaceae	4801	<i>Briza minor</i>	*	Shivery Grass	1
Plantae	Flora	Poaceae	14903	<i>Cenchrus clandestinus</i>	*	Kikuyu Grass	8
Plantae	Flora	Poaceae	14862	<i>Cenchrus longisetus</i>	*	Feathertop, White Foxtail	1
Plantae	Flora	Poaceae	6655	<i>Chloris virgata</i>	*	Feathertop Rhodes Grass	1
Plantae	Flora	Poaceae	6540	<i>Cynodon dactylon</i>		Common Couch	2
Plantae	Flora	Poaceae	4881	<i>Deyeuxia decipiens</i>		Devious Bent-grass	2
Plantae	Flora	Poaceae	4891	<i>Deyeuxia quadriseta</i>			1
Plantae	Flora	Poaceae	4898	<i>Dichelachne micrantha</i>		Shorthair Plumegrass	2
Plantae	Flora	Poaceae	9151	<i>Dichelachne sieberiana</i>			1
Plantae	Flora	Poaceae	4913	<i>Digitaria parviflora</i>		Small-flowered Finger Grass	1
Plantae	Flora	Poaceae	4929	<i>Echinopogon caespitosus</i>		Bushy Hedgehog-grass	1
Plantae	Flora	Poaceae	4934	<i>Echinopogon ovatus</i>		Forest Hedgehog Grass	2
Plantae	Flora	Poaceae	4937	<i>Ehrharta erecta</i>	*	Panic Veldtgrass	1
Plantae	Flora	Poaceae	4938	<i>Ehrharta longiflora</i>	*	Annual Veldtgrass	1
Plantae	Flora	Poaceae	4946	<i>Entolasia marginata</i>		Bordered Panic	13
Plantae	Flora	Poaceae	4947	<i>Entolasia stricta</i>		Wiry Panic	38
Plantae	Flora	Poaceae	4955	<i>Eragrostis elongata</i>		Clustered Lovegrass	1
Plantae	Flora	Poaceae	4960	<i>Eragrostis leptostachya</i>		Paddock Lovegrass	4
Plantae	Flora	Poaceae	4970	<i>Eragrostis pilosa</i>	*	Soft Lovegrass	1
Plantae	Flora	Poaceae	7871	<i>Hemarthria uncinata</i> <i>var. uncinata</i>			1
Plantae	Flora	Poaceae	5005	<i>Holcus lanatus</i>	*	Yorkshire Fog	5
Plantae	Flora	Poaceae	6803	<i>Imperata cylindrica</i>		Blady Grass	11
Plantae	Flora	Poaceae	11388	<i>Lachnagrostis filiformis</i>			1
Plantae	Flora	Poaceae	5032	<i>Lolium perenne</i>	*	Perennial Ryegrass	1
Plantae	Flora	Poaceae	5037	<i>Microlaena stipoides</i>		Weeping Grass	7

Plantae	Flora	Poaceae	7707	<i>Microlaena stipoides</i> <i>var. stipoides</i>	Weeping Grass		12
Plantae	Flora	Poaceae	5044	<i>Oplismenus aemulus</i>			5
Plantae	Flora	Poaceae	5045	<i>Oplismenus imbecillis</i>			18
Plantae	Flora	Poaceae	5066	<i>Panicum simile</i>	Two-colour Panic		5
Plantae	Flora	Poaceae	5086	<i>Paspalum dilatatum</i>	*	Paspalum	2
Plantae	Flora	Poaceae	5093	<i>Paspalum urvillei</i>	*	Vasey Grass	1
Plantae	Flora	Poaceae	5120	<i>Poa affinis</i>			1
Plantae	Flora	Poaceae	5127	<i>Poa ensiformis</i>		Purple-sheathed Tussock-grass	1
Plantae	Flora	Poaceae	11196	<i>Poa labillardierei</i> <i>var. labillardierei</i>		Tussock	5
Plantae	Flora	Poaceae	5134	<i>Poa meionectes</i>			1
Plantae	Flora	Poaceae	8742	<i>Poa sieberiana</i> <i>var. sieberiana</i>		Snowgrass	1
Plantae	Flora	Poaceae	POA	<i>Poa spp.</i>			2
Plantae	Flora	Poaceae	14312	<i>Rytidosperma longifolium</i>		Long-leaved Wallaby Grass	5
Plantae	Flora	Poaceae	RYTI	<i>Rytidosperma spp.</i>			2
Plantae	Flora	Poaceae	13468	<i>Setaria parviflora</i>	*		1
Plantae	Flora	Poaceae	5176	<i>Sporobolus africanus</i>	*	Parramatta Grass	1
Plantae	Flora	Poaceae	5179	<i>Sporobolus creber</i>		Slender Rat's Tail Grass	2
Plantae	Flora	Poaceae	SPOR	<i>Sporobolus spp.</i>		Rat's Tail Couch	1
Plantae	Flora	Poaceae	5185	<i>Stenotaphrum secundatum</i>	*	Buffalo Grass	4
Plantae	Flora	Poaceae	5217	<i>Tetrarrhena juncea</i>		Wiry Ricegrass	4
Plantae	Flora	Poaceae	7770	<i>Themeda triandra</i>			2
Plantae	Flora	Poaceae	6629	<i>Vulpia fasciculata</i>	*		1
Plantae	Flora	Poaceae	5242	<i>Vulpia myuros</i>	*	Rat's Tail Fescue	1
Plantae	Flora	Podocarpaceae	5248	<i>Podocarpus spinulosus</i>		Spiny-leaf Podocarp	1
Plantae	Flora	Polygonaceae	5263	<i>Acetosa sagittata</i>	*	Rambling Dock	1
Plantae	Flora	Polygonaceae	5265	<i>Acetosella vulgaris</i>	*	Sheep Sorrel	1
Plantae	Flora	Polygonaceae	5274	<i>Muehlenbeckia gracillima</i>		Slender Lignum	1
Plantae	Flora	Polygonaceae	7568	<i>Persicaria decipiens</i>		Slender Knotweed	3
Plantae	Flora	Polygonaceae	5281	<i>Persicaria hydropiper</i>		Water Pepper	1
Plantae	Flora	Polygonaceae	8887	<i>Persicaria praetermissa</i>			1
Plantae	Flora	Polygonaceae	5296	<i>Rumex brownii</i>		Swamp Dock	1
Plantae	Flora	Polygonaceae	5298	<i>Rumex crispus</i>	*	Curled Dock	1
Plantae	Flora	Polygonaceae	5303	<i>Rumex pulcher</i>	*	Fiddle Dock	1
Plantae	Flora	Polypodiaceae	8158	<i>Microsorium scandens</i>		Fragrant Fern	1
Plantae	Flora	Polypodiaceae	8163	<i>Pyrrosia rupestris</i>		Rock Felt Fern	2
Plantae	Flora	Primulaceae	14614	<i>Lysimachia arvensis</i>	*	Scarlet Pimpernel	2
Plantae	Flora	Primulaceae	11948	<i>Myrsine howittiana</i>		Brush Muttonwood	5
Plantae	Flora	Primulaceae	11953	<i>Myrsine variabilis</i>			1
Plantae	Flora	Primulaceae	5337	<i>Samolus repens</i>		Creeping Brookweed	1
Plantae	Flora	Primulaceae	5338	<i>Samolus valerandi</i>		Common Brookweed	1
Plantae	Flora	Proteaceae	5342	<i>Banksia ericifolia</i>		Heath-leaved Banksia	29
Plantae	Flora	Proteaceae	11049	<i>Banksia ericifolia</i> <i>subsp. ericifolia</i>			2
Plantae	Flora	Proteaceae	5346	<i>Banksia paludosa</i>			3
Plantae	Flora	Proteaceae	10874	<i>Banksia paludosa</i> <i>subsp. paludosa</i>			8
Plantae	Flora	Proteaceae	5348	<i>Banksia serrata</i>		Old-man Banksia	2
Plantae	Flora	Proteaceae	5349	<i>Banksia spinulosa</i>		Hairpin Banksia	P 6
Plantae	Flora	Proteaceae	7488	<i>Banksia spinulosa</i> <i>var. spinulosa</i>			P 17
Plantae	Flora	Proteaceae	5352	<i>Conospermum taxifolium</i>		Variable Smoke-bush	5
Plantae	Flora	Proteaceae	5364	<i>Grevillea buxifolia</i>		Grey Spider Flower	2
Plantae	Flora	Proteaceae	5381	<i>Grevillea linearifolia</i>		Linear-leaf Grevillea	4
Plantae	Flora	Proteaceae	5409	<i>Hakea dactyloides</i>		Finger Hakea	6
Plantae	Flora	Proteaceae	10804	<i>Hakea laevipes</i> <i>subsp. laevipes</i>			1
Plantae	Flora	Proteaceae	5424	<i>Hakea salicifolia</i>		Willow-leaved Hakea	3
Plantae	Flora	Proteaceae	10806	<i>Hakea salicifolia</i> <i>subsp. salicifolia</i>			1
Plantae	Flora	Proteaceae	5425	<i>Hakea sericea</i>		Needlebush	1
Plantae	Flora	Proteaceae	5427	<i>Hakea teretifolia</i>		Needlebush	31
Plantae	Flora	Proteaceae	5433	<i>Isopogon anemonifolius</i>		Broad-leaf Drumsticks	P 8
Plantae	Flora	Proteaceae	5440	<i>Lambertia formosa</i>		Mountain Devil	12
Plantae	Flora	Proteaceae	5443	<i>Lomatia ilicifolia</i>		Holly Lomatia	5
Plantae	Flora	Proteaceae	5444	<i>Lomatia myricoides</i>		River Lomatia	2

Plantae	Flora	Proteaceae	9081	<i>Persoonia laurina</i> <i>subsp. leiogyna</i>		P	1
Plantae	Flora	Proteaceae	5462	<i>Persoonia levis</i>	Broad-leaved Geebung	P	9
Plantae	Flora	Proteaceae	5463	<i>Persoonia linearis</i>	Narrow-leaved Geebung	P	24
Plantae	Flora	Proteaceae	5465	<i>Persoonia mollis</i>	Soft Geebung	P	2
Plantae	Flora	Proteaceae	8990	<i>Persoonia mollis subsp. caleyi</i>		P	16
Plantae	Flora	Proteaceae	8991	<i>Persoonia mollis subsp. ledifolia</i>		P	1
Plantae	Flora	Proteaceae	9005	<i>Persoonia mollis subsp. leptophylla</i>		P	1
Plantae	Flora	Proteaceae	5473	<i>Persoonia silvatica</i>		P	1
Plantae	Flora	Proteaceae	5478	<i>Petrophile pedunculata</i>		P	3
Plantae	Flora	Proteaceae	5479	<i>Petrophile pulchella</i>	Conesticks	P	2
Plantae	Flora	Proteaceae	5480	<i>Petrophile sessilis</i>		P	2
Plantae	Flora	Proteaceae	5481	<i>Stenocarpus salignus</i>	Scrub Beefwood		4
Plantae	Flora	Pteridaceae	7997	<i>Adiantum aethiopicum</i>	Common Maidenhair	P	7
Plantae	Flora	Pteridaceae	7999	<i>Adiantum formosum</i>	Giant Maidenhair	P	6
Plantae	Flora	Pteridaceae	8000	<i>Adiantum hispidulum</i>	Rough Maidenhair	P	4
Plantae	Flora	Pteridaceae	11226	<i>Adiantum hispidulum</i> <i>var. hispidulum</i>	Rough Maidenhair	P	1
Plantae	Flora	Pteridaceae	10439	<i>Cheilanthes sieberi</i>	Rock Fern		5
Plantae	Flora	Pteridaceae	8444	<i>Pellaea falcata</i>	Sickle Fern		7
Plantae	Flora	Pteridaceae	10488	<i>Pellaea nana</i>	Dwarf Sickle Fern		1
Plantae	Flora	Pteridaceae	8175	<i>Pteris tremula</i>	Tender Brake		1
Plantae	Flora	Ranunculaceae	5493	<i>Clematis aristata</i>	Old Man's Beard		6
Plantae	Flora	Ranunculaceae	6903	<i>Clematis glycinoides</i> <i>var. glycinoides</i>			2
Plantae	Flora	Ranunculaceae	5507	<i>Ranunculus inundatus</i>	River Buttercup		1
Plantae	Flora	Ranunculaceae	5508	<i>Ranunculus lappaceus</i>	Common Buttercup		2
Plantae	Flora	Restionaceae	10606	<i>Baloskion fimbriatum</i>			1
Plantae	Flora	Restionaceae	5532	<i>Empodisma minus</i>			7
Plantae	Flora	Restionaceae	10615	<i>Eurychorda complanata</i>			2
Plantae	Flora	Restionaceae	5533	<i>Hypolaena fastigiata</i>			3
Plantae	Flora	Restionaceae	5534	<i>Leptocarpus tenax</i>			7
Plantae	Flora	Restionaceae	5541	<i>Lepyrodia scariosa</i>			7
Plantae	Flora	Rhamnaceae	7686	<i>Alphitonia excelsa</i>	Red Ash		10
Plantae	Flora	Rhamnaceae	5556	<i>Cryptandra ericoides</i>	Heathy Cryptandra		1
Plantae	Flora	Rhamnaceae	5571	<i>Pomaderris aspera</i>	Hazel Pomaderris		1
Plantae	Flora	Rhamnaceae	7979	<i>Pomaderris intermedia</i>			1
Plantae	Flora	Rhamnaceae	5581	<i>Pomaderris lanigera</i>	Woolly Pomaderris		4
Plantae	Flora	Rhamnaceae	POMA	<i>Pomaderris spp.</i>			1
Plantae	Flora	Ripogonaceae	6018	<i>Ripogonum album</i>	White Supplejack		2
Plantae	Flora	Rosaceae	5635	<i>Rosa rubiginosa</i>	* Sweet Briar		1
Plantae	Flora	Rosaceae	11303	<i>Rubus fruticosus sp. agg.</i>	* Blackberry complex		3
Plantae	Flora	Rosaceae	11236	<i>Rubus moluccanus var. trilobus</i>	Molucca Bramble		4
Plantae	Flora	Rosaceae	9917	<i>Rubus nebulosus</i>	Green-leaved Bramble		1
Plantae	Flora	Rosaceae	5642	<i>Rubus parvifolius</i>	Native Raspberry		7
Plantae	Flora	Rosaceae	5645	<i>Rubus rosifolius</i>	Rose-leaf Bramble		1
Plantae	Flora	Rosaceae	RUBU	<i>Rubus spp.</i>			1
Plantae	Flora	Rosaceae	5646	<i>Rubus ulmifolius</i>	* Blackberry		1
Plantae	Flora	Rubiaceae	5675	<i>Coprosma quadrifida</i>	Prickly Currant Bush		3
Plantae	Flora	Rubiaceae	13838	<i>Galium leiocarpum</i>			1
Plantae	Flora	Rubiaceae	5688	<i>Galium propinquum</i>	Maori Bedstraw		1
Plantae	Flora	Rubiaceae	14922	<i>Gynochthodes jasminoides</i>	Sweet Morinda		12
Plantae	Flora	Rubiaceae	5697	<i>Opercularia aspera</i>	Coarse Stinkweed		6
Plantae	Flora	Rubiaceae	5699	<i>Opercularia hispida</i>	Hairy Stinkweed		1
Plantae	Flora	Rubiaceae	5701	<i>Opercularia varia</i>	Variable Stinkweed		1
Plantae	Flora	Rubiaceae	5703	<i>Pomax umbellata</i>	Pomax		6
Plantae	Flora	Rubiaceae	5706	<i>Psychotria loniceroides</i>	Hairy Psychotria		12
Plantae	Flora	Rutaceae	5722	<i>Acronychia oblongifolia</i>	White Aspen		1
Plantae	Flora	Rutaceae	12257	<i>Boronia anemonifolia</i> <i>subsp. anemonifolia</i>		P	1
Plantae	Flora	Rutaceae	5744	<i>Boronia ledifolia</i>	Sydney Boronia	P	2
Plantae	Flora	Rutaceae	5750	<i>Boronia pinnata</i>		P	1
Plantae	Flora	Rutaceae	7210	<i>Boronia thujona</i>		P	2
Plantae	Flora	Rutaceae	10046	<i>Correa alba var. alba</i>	White Correa		1
Plantae	Flora	Rutaceae	11021	<i>Correa lawrenceana</i> <i>var. cordifolia</i>			10

Plantae	Flora	Rutaceae	8801	<i>Correa reflexa</i> var. <i>reflexa</i>	Native Fuschia		2
Plantae	Flora	Rutaceae	10797	<i>Correa reflexa</i> var. <i>speciosa</i>			1
Plantae	Flora	Rutaceae	5826	<i>Phebalium squamulosum</i>	Scaly Phebalium	P	1
Plantae	Flora	Rutaceae	8258	<i>Phebalium squamulosum</i> subsp. <i>argenteum</i>		P	1
Plantae	Flora	Rutaceae	10577	<i>Philotheca buxifolia</i>		P	5
Plantae	Flora	Rutaceae	PHIL	<i>Philotheca</i> spp.		P	2
Plantae	Flora	Rutaceae	8842	<i>Sarcomelicope simplicifolia</i> subsp. <i>simplicifolia</i>	Big Yellow Wood		1
Plantae	Flora	Rutaceae	5834	<i>Zieria arborescens</i>	Stinkwood		1
Plantae	Flora	Rutaceae	9994	<i>Zieria arborescens</i> subsp. <i>arborescens</i>			8
Plantae	Flora	Rutaceae	11036	<i>Zieria caducibracteata</i>			5
Plantae	Flora	Rutaceae	5847	<i>Zieria smithii</i>	Sandfly Zieria		4
Plantae	Flora	Santalaceae	5864	<i>Exocarpos strictus</i>	Dwarf Cherry		3
Plantae	Flora	Santalaceae	5865	<i>Leptomeria acida</i>	Sour Currant Bush		4
Plantae	Flora	Santalaceae	5870	<i>Santalum obtusifolium</i>	Sandalwood		2
Plantae	Flora	Sapindaceae	5875	<i>Alectryon subcinereus</i>	Wild Quince		6
Plantae	Flora	Sapindaceae	5911	<i>Dodonaea triquetra</i>	Large-leaf Hop-bush		4
Plantae	Flora	Sapindaceae	5917	<i>Guioa semiglauca</i>	Guioa		2
Plantae	Flora	Selaginellaceae	8187	<i>Selaginella uliginosa</i>	Swamp Selaginella		4
Plantae	Flora	Smilacaceae	7592	<i>Smilax australis</i>	Lawyer Vine		15
Plantae	Flora	Smilacaceae	6022	<i>Smilax glyciophylla</i>	Sweet Sarsparilla		16
Plantae	Flora	Solanaceae	6033	<i>Datura stramonium</i>	* Common Thornapple		2
Plantae	Flora	Solanaceae	6036	<i>Duboisia myoporoides</i>	Corkwood		1
Plantae	Flora	Solanaceae	6058	<i>Physalis peruviana</i>	* Cape Gooseberry		1
Plantae	Flora	Solanaceae	7043	<i>Solanum americanum</i>	* Glossy Nightshade		1
Plantae	Flora	Solanaceae	6065	<i>Solanum aviculare</i>	Kangaroo Apple		2
Plantae	Flora	Solanaceae	6071	<i>Solanum chenopodioides</i>	* Whitetip Nightshade		2
Plantae	Flora	Solanaceae	6090	<i>Solanum mauritianum</i>	* Wild Tobacco Bush		7
Plantae	Flora	Solanaceae	6091	<i>Solanum nigrum</i>	* Black-berry Nightshade		2
Plantae	Flora	Solanaceae	6100	<i>Solanum prinophyllum</i>	Forest Nightshade		1
Plantae	Flora	Solanaceae	6101	<i>Solanum pseudocapsicum</i>	* Madeira Winter Cherry		2
Plantae	Flora	Solanaceae	6102	<i>Solanum pungetium</i>	Eastern Nightshade		2
Plantae	Flora	Solanaceae	6109	<i>Solanum stelligerum</i>	Devil's Needles		1
Plantae	Flora	Sparganiaceae	6767	<i>Sparganium subglobosum</i>	Floating Bur-reed		1
Plantae	Flora	Stackhousiaceae	6120	<i>Stackhousia monogyna</i>	Creamy Candles		1
Plantae	Flora	Stylidiaceae	6158	<i>Stylidium laricifolium</i>	Tree Triggerplant		3
Plantae	Flora	Stylidiaceae	6159	<i>Stylidium lineare</i>	Narrow-leaved Triggerplant		6
Plantae	Flora	Symplocaceae	6166	<i>Symplocos thwaitesii</i>	Buff Hazelwood		1
Plantae	Flora	Thymelaeaceae	8676	<i>Pimelea ligustrina</i> subsp. <i>ligustrina</i>			1
Plantae	Flora	Thymelaeaceae	6182	<i>Pimelea linifolia</i>	Slender Rice Flower		4
Plantae	Flora	Thymelaeaceae	6635	<i>Pimelea linifolia</i> subsp. <i>collina</i>			3
Plantae	Flora	Thymelaeaceae	6814	<i>Pimelea linifolia</i> subsp. <i>linifolia</i>			4
Plantae	Flora	Ulmaceae	6761	<i>Trema tomentosa</i> var. <i>aspera</i>	Native Peach		2
Plantae	Flora	Ulmaceae	11222	<i>Ulmus parvifolia</i>	* Chinese Elm		1
Plantae	Flora	Urticaceae	6226	<i>Dendrocnide excelsa</i>	Giant Stinging Tree		4
Plantae	Flora	Urticaceae	6231	<i>Parietaria debilis</i>	Native Pellitory		1
Plantae	Flora	Urticaceae	6237	<i>Urtica incisa</i>	Stinging Nettle		2
Plantae	Flora	Uvulariaceae	3566	<i>Schelhammera undulata</i>			15
Plantae	Flora	Verbenaceae	6256	<i>Verbena bonariensis</i>	* Purpletop		6
Plantae	Flora	Verbenaceae	6259	<i>Verbena officinalis</i>	* Common Verbena		1
Plantae	Flora	Verbenaceae	11406	<i>Verbena rigida</i> var. <i>rigida</i>	* Veined Verbena		2
Plantae	Flora	Violaceae	12061	<i>Melicytus dentatus</i>	Tree Violet		11
Plantae	Flora	Violaceae	11863	<i>Viola banksii</i>			1
Plantae	Flora	Violaceae	6272	<i>Viola hederacea</i>	Ivy-leaved Violet		8
Plantae	Flora	Violaceae	12580	<i>Viola silicestris</i>			3
Plantae	Flora	Vitaceae	6282	<i>Cissus antarctica</i>	Water Vine		5
Plantae	Flora	Vitaceae	6283	<i>Cissus hypoglauca</i>	Giant Water Vine		12

Plantae	Flora	Winteraceae	6290	<i>Tasmania insipida</i>	Brush Pepperbush		2
Plantae	Flora	Xanthorrhoeaceae	7995	<i>Xanthorrhoea concava</i>		P	5
Plantae	Flora	Xanthorrhoeaceae	6321	<i>Xanthorrhoea resinosa</i>		P	4
Plantae	Flora	Xyridaceae	6323	<i>Xyris juncea</i>	Dwarf Yellow-eye		1
Plantae	Flora	Xyridaceae	6324	<i>Xyris operculata</i>			1
Plantae	Flora	Zamiaceae	6327	<i>Macrozamia communis</i>	Burrawang	P	1

Biodiversity Search: Threatened Species



Figure 5 - Bionet Search limit to Threatened Species, Croobyar Road-Smarts Bridge-Croobyar

BIONET DATA: Threatened Species

No records found

Search criteria: Public Report of all Valid Records of Endangered Populations in selected area [North: -35.28 West: 150.32 East: 150.42 South: -35.38] returned 0 records for 0 species.

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