


SUMMARY ENVIRONMENTAL REPORT (SER)

SECTION 1

DECLARATION / COVER PAGE

Activity title: Connection of load
 Worksite address: 12-44 O'Connell St, Kingswood
 CAP / Project No. ULL3222
 Drawing No. A522639

On	15/06/2021	I,	Spiro Mentis / Designer
		Full name and position title	
		of	Mentis Consulting Engineers
		Company Name	
DECLARE THAT:	1.	I have completed the required training to prepare and complete this SER in its entirety.	
	2.	All information contained in this document is to the best of my knowledge true and correct and does not by its presentation or omission of information, materially mislead.	
	3.	I have made all enquires and have provided sufficient evidence of database searches, which I believe are desirable and appropriate in respect of the SER, and I am aware that an authorised person within Endeavour Energy will rely upon this in deciding whether to certify the activity.	
	4.	I am satisfied that the SER examines and takes into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the activity (s111 of the <i>EP&A Act 1979</i> and cl228 of the <i>EP&A Reg 2000</i>).	
	5.	I have prepared an EMP that details relevant environmental risk mitigation measures and this has been signed off by construction crews for implementation.	
	6.	I have inserted Section 1 of this form inclusive of the EMP, site photographs and maps into the work package (Regional Services and ASPs).	
RECOMMENDATIONS – please check as appropriate:			
	<input checked="" type="checkbox"/>	The activity will not cause a significant adverse environmental impact and can proceed subject to the implementation of the mitigative measures as detailed in EMP (Section 1).	
	OR		
	<input type="checkbox"/>	A further EIA has been prepared and is attached OR the activity has been significantly modified and it will require reassessment.	
Signature:			
Contact address:	PO Box 234, St Ives NSW, 2075		
Telephone number:	0433 330 110		
Email address:	info@mentiseng.com.au		

THIS DECLARATION MUST BE SIGNED AND DATED BEFORE COMMENCING THE ACTIVITY

Approval of this SER can only be undertaken by authorised Endeavour Energy personnel. Approval is to be provided on the following basis:

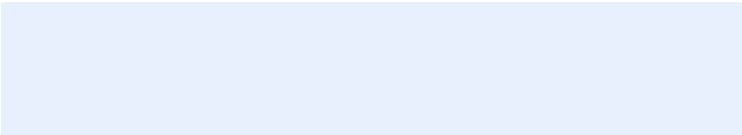
- The authorised person has undertaken the required training provided by Endeavour Energy;
- Approval is provided in accordance with Company Procedure GPE 0008 – Authority for Preparation and Approval of Environmental Assessments as an Authorised Network Operator;
- Approval is provided subject to satisfactory completion of all questions and through the provision of sufficient evidence of database searches;
- All identified environmental risks have been appropriately mitigated in the EMP.

If the Activity is designed by Endeavour Energy, the following environmental risks will render the SER to require verification by an Environmental Business Partner:

- Vegetation removal;
- Access needs to be improved;
- Generation of large amounts of spoil;
- If the worksite is located in or near a contaminated site;
- If the Activity involves a potential impact on threatened species, populations of endangered ecological communities;
- If the Activity involves a potential impact on local, state or commonwealth listed heritage items;
- If the Activity involves a potential impact on Aboriginal heritage;
- If “out of hours works” are proposed;
- If the Activity is likely to impact on Acid Sulfate Soils.

The Environmental Business Partner will escalate the SER to Network Environmental Assessment where there is a requirement for further detailed assessment (for example flora and fauna surveys, heritage investigations).

ASPs are to undertake an appropriate level of investigation to mitigate these environmental risks and provide sufficient evidence of this investigation to permit design certification. Network Connections is to escalate these SERs to Network Environmental Assessment.

Approved by authorised person	Ravi Lal
Signed	
Date	19-11-21
Title	CWE

DOCUMENT CONTROL

Revision	Prepared by and Company Name	Date	Reviewed by and Company Name	Comments
V1	Spiro Mentis / Mentis Consulting Engineers	15/06/2021	Daniel Painter / Projen	Initial Submission
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ENVIRONMENTAL MANAGEMENT PLAN

INSTRUCTIONS:

- Step 1:** The following page contains a Generic Environmental Management Plan for the activity. Delete mitigation measures which are not relevant.
- Step 2:** Add additional rows to the table to document the environmental risks relevant to the activity (refer to SECTION 2 – Environmental Issues Questionnaire)
- Step 3:** Refer to FAT 0051 to supplement mitigation measures were required
- Step 4:** Seek advice from an environmental specialist where there is likelihood that identified environmental impacts cannot be mitigated by using these generic measures.
- Step 5:** Assign responsibility for the implementation of the environmental risk
- Step 6:** Summarise mitigation measures for high risk matters in the top right section of the construction drawing
- Step 7:** Section 1 of this form will be inserted into the work package for the implementation of mitigation measures to reduce environmental harm associated with the Activity
- Step 8:** The **Project Manager, Operations Manager and Site Supervisor** (internal employees) or relevant staff (ASPs) must review this Environmental Management Plan and sign the relevant section below to confirm the document has been read and understood.

Project Manager	
Name	Click here to enter text.
Signed (By signing here you confirm that you have read and understood the EMP and your responsibilities)	
Date	Click here to enter a date.
Title	Click here to enter text.
Operations Manager	
Name	Click here to enter text.
Signed (By signing here you confirm that you have read and understood the EMP and your responsibilities)	
Date	Click here to enter a date.
Title	Click here to enter text.
Site Supervisor	
Name	Click here to enter text.
Signed (By signing here you confirm that you have read and understood the EMP and your responsibilities)	
Date	Click here to enter a date.
Title	Click here to enter text.

ENVIRONMENTAL RISK	CONTROL MEASURES	RESPONSIBILITY FOR IMPLEMENTATION
General	Refer to the Environmental Guidelines Handbook for the identification of generic environmental mitigation measures when preparing the WHRA (or equivalent) for the Activity.	Construction personnel
Environmental Incidents	All accidents and emergencies must be reported by calling Endeavour Energy's Call Centre 131 003. Spills must be controlled and contained. Spill kits will be available at the worksite.	Construction personnel
COMMUNITY		
Community notification	<p>All landowners within or adjacent to the worksite (adjacent lands) will be notified in writing 14 to 30 days prior to the commencement of works. Notification will include:</p> <ul style="list-style-type: none"> • proposed commencement date; • anticipated duration of the works; • 24 hour contact details of the project manager or other appropriate contact person in the event of any complaints; and • details on proposed blocking or impairing access to driveways and/or residences/businesses (if any). <p>Evidence of this notification must be stored on the project file.</p>	Project Manager
Traffic management	Where required, approvals and Road Occupancy Licenses (ROLs) must be in place prior to works commencing. Comply with associated conditions.	Project Manager and construction personnel
Traffic management	Verify that affected residences/businesses are consulted with.	Project Manager
Traffic management	Safe pedestrian pathways are to be established and clearly signposted around the subject site for the duration of the proposal.	Construction personnel
Residents and normal working hours	Residents likely to be affected by excessive noise (for example, generator noise, excavation machinery, and the like) will be notified prior to work commencing.	Project Manager

ENVIRONMENTAL RISK	CONTROL MEASURES	RESPONSIBILITY FOR IMPLEMENTATION
Residents and normal working hours	The hours of work for any noise generating construction associated with the activity are to be limited to between 7am and 6pm, Mondays to Fridays inclusive, 7am to 1pm Saturdays or if audible on residential premises 8am to 1pm, with no construction activities to be undertaken on Sundays or public holidays.	Project Manager
Residents and normal working hours	Where out of normal working hours are proposed, these works will require notification to the local council and all nearby affected residents and sensitive receptors (for example hospitals, aged care homes). This notification must be at least 5 days but no more than 14 days prior to those works commencing. Out of normal working hours cannot be undertaken for more than two (2) consecutive nights in any one week. Seek advice from an environmental specialist in accordance with Company Policy 4.4 – Industrial and Construction Noise.	Project Manager
Residents and normal working hours	Implement noise control measures and respite requirements in accordance with the “Noise and Working Hours” section of the Environmental Guidelines Handbook.	Construction personnel
Air quality	Appropriate dust suppression and other emission reduction techniques will be employed as necessary in accordance with the “Air quality” section of the Environmental Guidelines Handbook.	Construction personnel
ACCESS TO THE WORKSITE		
Access tracks and pathways	<p>All vehicles should keep to any existing access tracks and/or entirely within any designated easement across private lands unless prior agreement with the landowner.</p> <p>Care must be taken with both vehicular access and construction works to minimise disturbance to any soils. Vehicles must use existing formed access tracks to minimise disturbance to the ground surface. If access to the subject is not suitable for the proposal, contact the relevant environmental personnel (internal employees).</p> <p>No vegetation clearing or importation of materials must be undertaken to facilitate access unless it has been identified in the environmental assessment and</p>	Construction personnel

ENVIRONMENTAL RISK	CONTROL MEASURES	RESPONSIBILITY FOR IMPLEMENTATION
	<p>appropriate approval has been obtained.</p> <p>Following the completion of the proposal, access tracks must be restored to the original condition.</p> <p>Access tracks located in sensitive environments (for example, National Parks and Water NSW Special Areas/Controlled Lands) must not be utilised following heavy rainfall (10 mm rainfall in a 24 hour period to 9 am), or if the access track is located on private lands, it must not be used if it is likely to cause damage and subsequent sedimentation and erosion. Damage to access tracks in these areas will be reported to relevant environmental personnel.</p>	
POLLUTION		
Erosion and sedimentation	Manage worksite to prevent sediment leaving the worksite. Refer to “Erosion and Sediment Control” section of the Environmental Guidelines Handbook for methods to achieve this outcome.	Construction personnel
Oils and Fuels	Manage worksite to prevent oils, fuels and chemicals entering a waterway, drain, stormwater drain or ground. Refer to “Oil Management” section of the Environmental Guidelines Handbook.	Construction personnel
Oils and Fuels	The storage and transport of oil and oil filled equipment containing PCBs may necessitate licensing requirements. Refer to “Oil Management” section of the Environmental Guidelines Handbook.	Construction personnel
Liquid waste	Manage the worksite to prevent unclean water leaving the worksite. Refer to “Dewatering” section of the Environmental Guidelines Handbook.	Construction personnel
ECOLOGY		
Threatened biodiversity, SEPP 14 – Coastal Wetlands, SEPP 26 – Littoral Rainforests	<p>All workers to be made aware of sensitive ecology in the worksite and the need to avoid impacts.</p> <p>No disturbance of vegetation.</p> <p>No disturbance of bush rock, tree hollows, wetlands, mangroves, nests, aquatic or other sensitive habitats.</p> <p>No works in undisturbed areas (including storing equipment in, parking vehicles in or accessing the worksite).</p>	Project Manager and construction personnel

ENVIRONMENTAL RISK	CONTROL MEASURES	RESPONSIBILITY FOR IMPLEMENTATION
	Refer to “Ecology” section of Environmental Guidelines Handbook	
Vegetation management	Any weeds that need to be cleared from the worksite must be disposed to an appropriate waste facility.	Construction personnel
Vegetation management	Any existing tree(s) that is not required to be removed on the worksite must be protected in accordance to AS4970 – Protection of trees on development sites. Protective fencing for these tree(s) should be erected and secured to restrict access before any machinery or materials are brought onto the worksite, and before the commencement of any works. Once erected, the protective fencing should not be altered or removed without approval.	Construction personnel
Vegetation management	Vehicles, plant, equipment and personnel will be appropriately cleaned (for example, removing soil clods, weed seed, and the like) before entry and when leaving the worksite in accordance with Endeavour Energy’s Vehicle and Machinery Hygiene Protocol for Mitigating the Spread of Pests, Noxious Weeds and Diseases to prevent the spread of weeds and fungal pathogens (refer EMS 0004 Managing vegetation near electrical infrastructure and pest, weed and disease mitigation). These precautions are to be also implemented if the activity involves the generation of mulch.	Construction personnel
Marine vegetation	All workers to be made aware of the presence of seagrass, mangroves and waterways in the worksite and the need to avoid impacts. No disturbance of mangroves, seagrass, salt marsh, creeks or waterways. No disturbance of creeks or waterways. No works in undisturbed areas (including storing equipment in, parking vehicles in or accessing the site)	Construction personnel
HERITAGE		
Aboriginal heritage	Should any Aboriginal objects be encountered on the worksite, works must cease in the vicinity of the find and advice should be sought from an environmental specialist immediately. They will be responsible for notifying the OEH and Aboriginal stakeholders. A qualified archaeologist may also be required to assess the find.	Construction personnel
Non-European heritage	Should unanticipated non-aboriginal relics be discovered in the worksite, work in the vicinity must cease and advice should be sought from an environmental	Construction personnel

ENVIRONMENTAL RISK	CONTROL MEASURES	RESPONSIBILITY FOR IMPLEMENTATION
	specialist to make a preliminary assessment of the find.	
CONTAMINATION AND WASTE		
Contamination	Workers to be made aware of the presence of known and suspected contaminated land. No ground disturbance in areas of known or suspected contaminated land.	Project Manager and Construction personnel
Spoil management	Re-use, storage and disposal of spoil is to occur in accordance with measures included in the "Spoil Management" section of the Environmental Guidelines Handbook	Project Manager and Construction personnel
Acid Sulfate Soil	Workers are to be made aware of the potential presence of Acid Sulfate Soil and the management of this material in accordance with measures included in the "Acid Sulfate Soil" section of the Environmental Guidelines Handbook.	Project Manager and Construction personnel
Waste	All rubbish/wastes must be removed from site daily and appropriately disposed to a licensed facility and/or segregated into correct receptacles available at FSCs. Waste dockets must be obtained for all wastes disposed to licensed facilities.	Construction personnel
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DESCRIPTION OF ACTIVITY

Complete the form below and provide all additional information necessary to describe the activity in the space provided (attach further pages if necessary).

SUMMARY OF THE ACTIVITY	
What will the activity involve?	Installation of a new 1000kVA padmount substation. Replace existing Holec HV switchgear from padmount substation 17337 to new Safelink CFC
Why is the activity required?	To supply the new construction hub building inside Kingswood TAFE.
Location of activity (address) (Include map from Google Earth or Six Maps on following pages)	<p>Street address: 12-44 O'Connell St, Kingswood</p> <hr/> <p>Local government area: Penrith <i>Internal Employees: Refer to Landbase → LPI Landbase → Boundaries → Local Government Area on EnviroGIS</i> <i>ASP: local council website</i></p> <hr/> <p>Land ownership: Lot 1, DP 866081 <i>Internal Employees: Obtain Lot and DP details from EnviroGIS. NPWS and Water NSW (refer to EMS 0012)</i> <i>ASPs: Six Maps</i></p> <hr/> <p>Land zoning: SP2: Infrastructure <i>Internal Employees: For land zoning refer to Local Environment Plans on EnviroGIS</i> <i>ASP: Access current LEP zoning maps on the local council website or Department of Planning and Environment - Web Map Services</i> <i>(The land use could be residential, industrial, commercial, rural, bushland, water catchment and the like)</i></p>
Number of employees on site?	<ul style="list-style-type: none"> • Maximum: 6 • Average: 3
Duration of works? Relevant mitigation measures need to be provided the EMP if out of normal working hours are proposed.	<ul style="list-style-type: none"> • Number of days: 6 day/week • Days of the week: 7.00am to 6.00pm, (Mon-Fri); 8.00am to 1pm (Sat); No works (Sundays and Public Holidays)

Indicative commencement date	4/08/2021
Proposed mode of access:	Directly off O'Connell St.
Machinery (list all machinery):	Excavator, construction crew vehicles, tipper truck
Route justification Provide a description of all feasible alternatives that have been considered to minimise (and where possible avoid) impacts on the environment	Several factors were considered when determining the most suitable option. The preferred project achieves the best balance of social, environmental, technical and financial objectives. Options for this project have been restricted due to the need to make points of connection at certain locations.
Notification requirements: Mandatory 40 days council notification (s45 ES Act) and 21 days council notification for substations (SEPP 2007) Notification or approval requirements for drinking water catchment areas, Water NSW Special Areas, National Parks (refer to EMS 0012) RMS notification for works in State and Regional road reserves	<p>Include summary of response from stakeholders:</p> <p>Council Notification was submitted to council on 6th May 2021.</p> <p>Council made no Submission</p> <p>Council Notification Letter in accordance with s45 ES Act & SEPP 2007 attached.</p> <p>Reference is to be made in the EMP to the relevant notification requirements for the activity. Notifications are to be carried out by the Project Manager and stored on the project file. Evidence is to be provided of council and community notifications before the design can be certified.</p>
Future maintenance activities and operational requirements	The Electrical Infrastructure will be maintained in accordance with Endeavour Energy's maintenance standards and timelines.
Other information (set out any other information required to describe the activity and any specific approvals required for the activity to proceed)	N/A

Include map from Google Earth or Six Maps:

(<http://www.google.com/earth/> or <http://maps.six.nsw.gov.au/>)



SITE INSPECTION

An inspection of the worksite must be undertaken before completing SECTION 2 of this form.

Set out observations collected during the inspection of the worksite and include a description of the environment relevant to the potential environmental impacts on-site and off-site. **Consultation with the an environmental specialist may be required during the inspection of the worksite to assist with the accurate identification of the environmental risks pertaining to the activity.**

The inspection of the worksite should take note of the following:

- Land tenure and surrounding land uses (for example, National Parks, industrial, residential, and the like.)
- Drainage systems – presence of waterways, stormwater and their proximity to the worksite;
- Vegetation – presence of trees, shrubs and other vegetation that may be obstructing access to the worksite and that may affect the construction and operation of the activity;
- Access – availability of existing access tracks in the worksite that are adequate for the activity;
- Heritage items – potential European and Aboriginal heritage items within the worksite;
- Traffic flow and road type (for example, Council Road/RMS Road); and,
- Potential for land contamination – proximity of the worksite to contamination sources (for example, industrial areas, service stations).

Date: 13/01/2021	Time: 11am	By: Spiro Mentis
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General Site Description


Insert a site description for ease of describing potential environmental impacts in SECTION 2.

(Refer to the proximity to sensitive receptors, for example residences, landuse of adjoining properties, distance to any watercourses, whether the worksite is near or is located within a National Park or Water NSW Special Area and also include size, shape, slope, presence of vegetation, natural gradient or filled that is prevalent across the worksite etc.)


Located inside Kingswood TAFE, the proposed substation is to supply the new construction hub building. The site is currently all clear grassed area, the site is not near any national parks or special water ways.

Photographs must be inserted of the worksite to support observations on the following pages. Insert additional rows for photos if required.

Observations:

Environmental Risk	Photograph (Click on image below to insert photo. Add additional rows if required)
Site overview	
Drainage systems (note the presence of any stormwater, drains, creeks, rivers, swamps)	<div data-bbox="515 1151 1222 1854"></div> <div data-bbox="515 1886 1474 1953">Caption: No drainage systems present during site visit.</div>

Environmental Risk	Photograph (Click on image below to insert photo. Add additional rows if required)
<p>Vegetation</p> <p>(note any vegetation removal requirements or potential impacts on root systems from trenching activities)</p>	<div data-bbox="513 203 1224 909" data-label="Image"> </div> <div data-bbox="513 927 970 981" data-label="Text"> <p>Caption: Click here to enter text.</p> </div>
<p>Access</p> <p>(is access considered to be suitable for the activity? Consider condition of access and plant requirements in vicinity of lines/easements or across land in private/other ownership)</p>	<div data-bbox="513 1032 1474 1693" data-label="Image"> </div> <div data-bbox="513 1883 1337 1928" data-label="Text"> <p>Caption: Access with be along private roads within the lot.</p> </div>

Environmental Risk	Photograph (Click on image below to insert photo. Add additional rows if required)
Other Click here to enter text.	
	Caption: Click here to enter text.

SECTION 2: ENVIRONMENTAL ISSUES QUESTIONNAIRE

Complete the following questionnaire to identify environmental risks relevant to the activity. If the answer to any of the following questions is YES, environmental risks need to be mitigated in the EMP (Section 1). If a question is not understood, conduct further investigations or discuss with an environmental specialist. Documentary evidence of database searches must be provided where prompted to do so.

COMMUNITY (ref cl228 (2) (a) EP&A Reg 2000)	
Q1. TRAFFIC MANAGEMENT	
<p>a) Traffic – will the activity disrupt or obstruct traffic or pedestrian flow around the worksite and adjacent lands?</p> <p><i>Consider both the construction and operational phase of the activity when answering this question.</i></p> <p>Approval through the issue of a road occupancy licence is required from RMS for State or Regional Roads. Notification to the relevant Council is required for local roads.</p>	<p><input checked="" type="checkbox"/> Yes. How will traffic and/or pedestrian flow be affected?</p> <p>The proposed works may cause disturbance to the traffic flow along inside Kingswood TAFE private roads. Appointed ASP/1 to acquire relevant road occupancy license and local council notifications if required.</p> <p><input type="checkbox"/> No</p>
Q2. RESIDENTS AND NORMAL WORKING HOURS	
<p>a) Is noise and vibration generated by the activity likely to cause annoyance to nearby residents?</p> <p><i>Consider whether areas adjacent to the worksite are sensitive to noise (for example residences, schools, hospitals etc.) If there will be noise impacts discuss with NEA (internal employees) or investigations should be undertaken to verify that sensitive sites are not adversely affected by the activity (ASPs).</i></p>	<p><input type="checkbox"/> Yes. If yes, what are the likely sources of noise and what are the likely impacts?</p> <p>Click here to enter text.</p> <p><i>If impacts that cannot be mitigated are likely, seek advice from an environmental specialist</i></p> <p><input checked="" type="checkbox"/> No. If no, provide explanation of why noise will be minimal:</p> <p>The construction works might cause only minor noise generation. The noise associated with these works should not cause any annoyance to nearby residents as the impact would be minimal. If required; the residents likely to be affected by excessive noise (for example, generator noise, excavation machinery, and the like) will need to be notified prior to any work commencing. The hours of work for any noise generating construction associated with the proposal are to be limited to between 7am and 6pm, Mondays to Fridays inclusive, 7am to 1pm Saturdays or if audible on residential premises 8am to 1pm, with no construction activities to be undertaken on Sundays or public holidays. Any such works proposed outside of the normal work times specified above will require notification to the Environment Protection Authority (EPA), the local council and all nearby affected residents and sensitive receptors (for example, hospitals, aged care homes) of the intention to work at these times. This notification shall be at least seven (7) days but no more than 14 days prior to those works commencing. All notifications to the EPA are to be</p>

	addressed to the attention of Manager Metropolitan Infrastructure (metro.regulation@epa.nsw.gov.au)
b) Will the activity require works or use of equipment (for example a generator) being undertaken outside normal working hours? <i>Note: Normal hours are 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm Saturday. Construction must comply with road occupancy permit (including delivery of equipment to site).</i>	<input type="checkbox"/> Yes. When will the works be undertaken? Click here to enter text. <i>Project Manager is to notify affected residents 5-14 days prior to the commencement of the Activity in consultation with an environmental specialist.</i> <input checked="" type="checkbox"/> No. The works will be undertaken within normal working hours. If no, go to Q3.
c) Will the activity require works or use of equipment outside of normal working hours (as identified above) for more than two consecutive nights in any given week?	<input type="checkbox"/> Yes. If yes, provide justification Click here to enter text. <i>Seek advice from an environmental specialist as NSW EPA notification may be required.</i> <input type="checkbox"/> No. The works will be less than two consecutive nights in any given week.
Q3. AIR QUALITY	
Is the activity likely to generate significant amounts of dust, fumes and/or odours?	<input type="checkbox"/> Yes. If yes, what impacts are likely to occur from the generation of dust, fumes and/or odours? Click here to enter text. <i>If impacts that cannot be mitigated are likely, seek advice from an environmental specialist</i> <input checked="" type="checkbox"/> No. If no, provide explanation of how dust, fumes and/or odour generation would be avoided: Appropriate dust suppression techniques will be employed as necessary, such as the dampening down of the subject site prior to work or the installation of dust barriers or gates to minimize the risk of dust moving off-site.
Q4. Electromagnetic Fields (EMF)	
Will the activity exceed EMF guideline levels? <i>EMF emission levels must not exceed the recognised exposure limit of 1000 milligauss (mG). Consider if the activity will result in a capacity change to the network.</i>	<input type="checkbox"/> Yes. <i>If yes, further Environmental Assessment will be required. Contact an environmental specialist for advice on how to proceed</i> <input checked="" type="checkbox"/> No. The works will be within recommended guidelines for continuous public exposure.
ACCESS TO THE WORKSITE (ref cl228 (2) (b) – (l) (o) EP&A Reg 2000)	

Q5. ACCESS TRACKS TO AND WITHIN THE WORKSITE

a) Is access to the worksite deemed suitable to undertake the activity?

Consider the type and quantity of machinery that will be used during the activity, whether access is hindered by vegetation, if it has unsuitable pavement and if there are environmental sensitivities that may be impacted on by accessing the worksite.

☒ **Yes. Proceed to Q6.**

☐ **No. If no, proceed to Q5 (b).**

b) Does access to the worksite need improving to make it suitable to undertake the activity?

Note: Endeavour Energy will not provide project management as noted in EMS 0006 for track work undertaken by ASPs

☐ **Yes. What works are required? [Click here to enter text.](#)**

☐ **No. Describe current access arrangements: [Click here to enter text.](#)**

VISUAL AMENITY IMPACTS (ref cl228 (2) (d) EP&A Reg 2000)

Q6. LANDSCAPE AND VISUAL

Does the activity involve changing the visual or scenic landscape (for example restricting views, removing trees, installing OH powerlines (including the installation of a new pole or wires), installing substations, UGOH, causing obtrusive lighting, creating shadows and the like)?

In designing the activity, consider the following:

- *Selecting sites/routes that avoid view corridors of high visual appeal and high number of viewers.*
- *The distance of the infrastructure from viewers (for example foreground, middle ground, background).*
- *Utilising existing electrical infrastructure and corridors where possible.*
- *Selecting materials, textures and colours which blend with the surrounds.*
- *Bundling overhead cables to reduce aesthetic impact*

☒ **Yes. If yes, what unavoidable impacts are likely to occur on the visual or scenic landscape? What alternative options have been considered?**

Proposed padmount substation location will be installed in a place that will have very minimal visual impact by ongoing pedestrians.

If impacts are likely and no alternatives options are feasible, seek advice from an environmental specialist

☐ **No.**

<p><i>and minimise tree pruning (where applicable)</i></p> <ul style="list-style-type: none"> • <i>Limiting the need for vegetation clearing.</i> • <i>Positioning poles between property buildings rather than in front of a particular property.</i> • <i>Utilising the existing topography and vegetation to shield views of the activity.</i> • <i>Installing landscape screening between the activity and viewers.</i> 	
<p>POLLUTION(ref c1228 (2) (I) EP&A Reg 2000)</p>	
<p>Q7. EROSION AND SEDIMENTATION</p>	
<p>Does the activity involve excavation, removal of material, or obstructing water flow within <u>40 metres of a river, creek, lake or gully</u> (drainage line)?</p> <p><i>Provide photographs in Section 1 illustrating the proximity of the worksite to waterways.</i></p>	<p><input type="checkbox"/> Yes. If yes, what impacts are likely to occur on the drainage line as a result of the activity? Click here to enter text. <i>If impacts that cannot be mitigated are likely, seek advice from an environmental specialist</i></p> <p><input checked="" type="checkbox"/> No. If no, chose one of the following:</p> <p><input checked="" type="checkbox"/> No, the site is not located within 40 m of a river/creek/waterbody.</p> <p><input type="checkbox"/> No, other explanation: Click here to enter text.</p>
<p>Q8. SYDNEY DRINKING WATER CATCHMENT SEPP</p>	

Is the worksite within an area covered by the SEPP (Sydney Drinking Water Catchment) 2011?

Note: The SEPP only applies to certain parts of the following local government areas within Endeavour Energy's network area, Shoalhaven, Wollongong, Kiama, Wingecarribee, Wollondilly, Blue Mountains and Lithgow.

Impacts on drinking water can include sediment and oils. Consider the location and siting of oil filled equipment, containment of oils and fuels and the generation of sediment.

Refer to REP → Drinking Water Catchments no. 1 on EnviroGIS (internal employees) or [SEPP \(Sydney Drinking Water Catchment\) 2011](#)

☐ **Yes. If yes, are there any impacts on Sydney's drinking water envisaged?**

[Click here to enter text.](#)

If impacts that cannot be mitigated are likely, seek advice from an environmental specialist

☒ **No. The worksite is not within an area covered by the SEPP (Sydney Drinking Water Catchment) 2011.**

Q9. GROUND DISTURBANCE

a) Does the activity involve extensive disturbance to the ground surface that may occur in response to trenching, removal of ground cover, working on steep land underground excavation for cabling, installation of padmount substations and the like that could increase soil erosion, surface runoff or the possibility of sediment entering a drain or waterway?

Extensive ground disturbance does not include a small number of NDD pole holes, a small trench(es) where they will be backfilled on the same day

Provide photographs in Section 1 of the components of the worksite that will be disturbed.

☒ **Yes. If yes, is erosion and sedimentation likely to occur? What is the extent of the disturbance (in square metres)? Yes there will be excavation works carried out for the installation of undergrounding conduits and cables. Erosion is not likely to occur. Excavation will be approximately 75 square meters. Excavation required for the installation of the PM Substation. Erosion and sedimentation controls are to be managed in accordance with the guidelines contained in Endeavour Energy's Environmental handbook. Excavation works likely to take more than 3 days. Level 1 to make consideration and necessary erosion and sedimentation mitigation measures.**

If impacts that cannot be mitigated are likely, seek advice from an environmental specialist.

☐ **No. If no, choose one of the following options:**

☐ **No, the disturbance will be relatively minor (for example a small number of NDD pole holes, a small trench where the trenches are opened and filled within one day).**

☐ **No, other explanation: [Click here to enter text.](#)**

	If No, continue to Q10.
b) Is the worksite steeply sloped (greater than 1 in 3)?	<input type="checkbox"/> Yes. If yes, are the impacts of erosion and sedimentation likely to be accelerated (increased/elevated)? Click here to enter text. <i>If impacts are likely, consult with the relevant environmental personnel to determine</i> <input checked="" type="checkbox"/> No. Refer to the Site Description in Part 1.
Q10. INCIDENCE OF FLOODING	
Is the activity likely to increase the incidence of flooding within the worksite and adjacent lands (for example alter ground levels or divert water flow)?	<input type="checkbox"/> Yes. If yes, what impacts are likely to occur from altering ground levels or diverting water flow within the worksite and adjacent lands? Click here to enter text. <i>If impacts that cannot be mitigated are likely, seek advice from an environmental specialist</i> <input checked="" type="checkbox"/> No. Provide an explanation of how this has been determined: Ground levels will be returned to original levels upon completion of trenching. Any disturbances to the ground will be mitigated as per this SER.
Q11. OILS AND FUELS	
Does the activity involve storing, handling, transporting or disposing of oils, PCBs, fuels, pesticides, chemicals or other hazardous liquids (for example, moving or handling transformers or other oil-filled equipment) and/or siting oil filled equipment within 40 metres of a waterway?	<input checked="" type="checkbox"/> Yes. If yes, what impacts are likely to occur that cannot be mitigated using measures in the EMP? A Padmount Substation is being transported. The Sub will be transported in accordance with the guidelines for transporting oils and fuels contained in Endeavour Energy's Environmental Guidelines handbook, therefore potential impacts should be appropriately mitigated. <i>If impacts that cannot be mitigated are likely, seek advice from an environmental specialist.</i> <input type="checkbox"/> No. Provide an explanation of how this has been determined:

	Click here to enter text.
Q12. LIQUID WASTE	
<p>Is liquid waste (for example, stormwater accumulation in pits/trenches, drill mud, NDD works and the like) likely to be generated and/or discharged by the activity?</p>	<p><input checked="" type="checkbox"/> Yes. What liquid waste is expected to be generated? Storm water may accumulate in trenches and excavations during periods of wet weather. Liquid waste will be managed in accordance with the guidelines contained in Endeavour Energy's Environmental Handbook.</p> <p><i>If impacts that cannot be mitigated are likely, seek advice from an environmental specialist.</i></p> <p><input type="checkbox"/> No. Liquid waste will not be generated.</p>
ECOLOGY (ref cl228 (2) (f) – (g) and (p) EP&A Reg 2000)	
Q13. MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE (MNES – Commonwealth) AND BIODIVERSITY	
<p>a) Are there any MNES present within the worksite that the activity may impact on?</p> <p><i>Search the Protected Matters Search Tool and include it as an annexure to this SER save the results of this investigation on the project file.</i></p> <p><i>Route selection is critical to avoiding impacts on MNES.</i></p>	<p><input type="checkbox"/> Yes. If yes, list the MNES that are likely to be impacted on by the activity</p> <p>Click here to enter text.</p> <p><i>If impacts that cannot be mitigated are likely, seek advice from an environmental specialist.</i></p> <p><input checked="" type="checkbox"/> No. Provide an explanation of how this has been determined:</p> <p>Using the Protected matters search tools nothing was found near the area of works. Results have been attached in Annexure A.</p>

b) Are there any rare or threatened species, Endangered Ecological Communities (EECs) and/or Endangered Populations of animals or plants (or their habitat) within or adjacent to the worksite?

Impacts on threatened biodiversity may include clearing/pruning/affecting vegetation excluding maintenance as per MMI 0013, disturbing bush rock, tree hollows, wetlands, mangroves, nests, aquatic or other sensitive habitats, and/or working in/parking plant or vehicles/storing equipment in undisturbed areas.

Route selection is critical to avoiding impacts on threatened species.

Refer to the location of these in relation to the activity (Vegetation → NSW Atlas Flora → Flora – V – Vulnerable, Flora – E1 – Endangered, Flora – E2 – Endangered Population and Flora – E4A – Critically Endangered; NSW Atlas of Fauna → Fauna – V – Vulnerable, Fauna – E1 – Endangered, Fauna – E2 – Endangered Population and Fauna – E4A – Critically Endangered, endangered ecological communities (Vegetation → Vegetation Communities) on EnviroGIS (internal employees) or [NSW BioNet Atlas of NSW Wildlife](#) and [OEI Vegetation Information System](#) (ASPs)

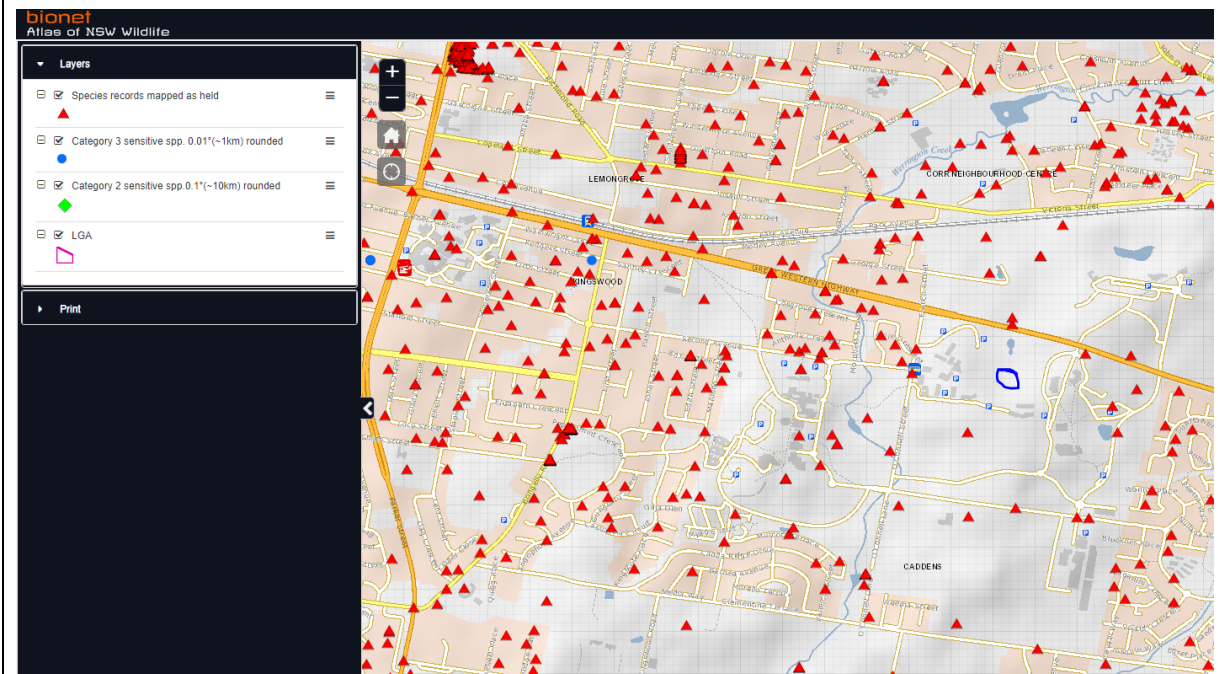
☐ Yes. If yes list the threatened species, EECs and/or Endangered Populations likely to occur in the study area and adjacent lands. This list should include an explanation of any potential impacts:

[Click here to enter text.](#)

Where it is identified that a threatened species, EEC and/or Endangered Population occurs in the vicinity of the worksite and If impacts that cannot be mitigated are likely, seek advice from an environmental specialist.

☒ No. The nominated databases were reviewed and no threatened species, EECs and/or Endangered Populations were identified in the vicinity of the activity.

Insert screenshot demonstrating searches have been undertaken:



c) Is the worksite listed as an area of critical habitat under the *TSC Act 1995*?

Wollemi Pine in Wollemi NP is the only Critical Habitat that occurs within the Endeavour Energy network area. Reference should be made to the [OEH Critical Habitat Register](#) for an up to date list of final determinations of Critical Habitats.

☐ **Yes.** If yes, provide the name of the Critical Habitat and an explanation of any potential impacts:

Click here to enter text.

If the worksite is located in or near a critical habitat, seek advice from an environmental specialist.

☒ **No.** The required databases were checked and no Critical Habitat was identified in the vicinity of the activity.

d) Is the worksite located in areas identified as Coastal Wetlands (refer to SEPP 14 – Coastal Wetlands) or within Littoral Rainforest (refer to SEPP 26 – Littoral Rainforest)?

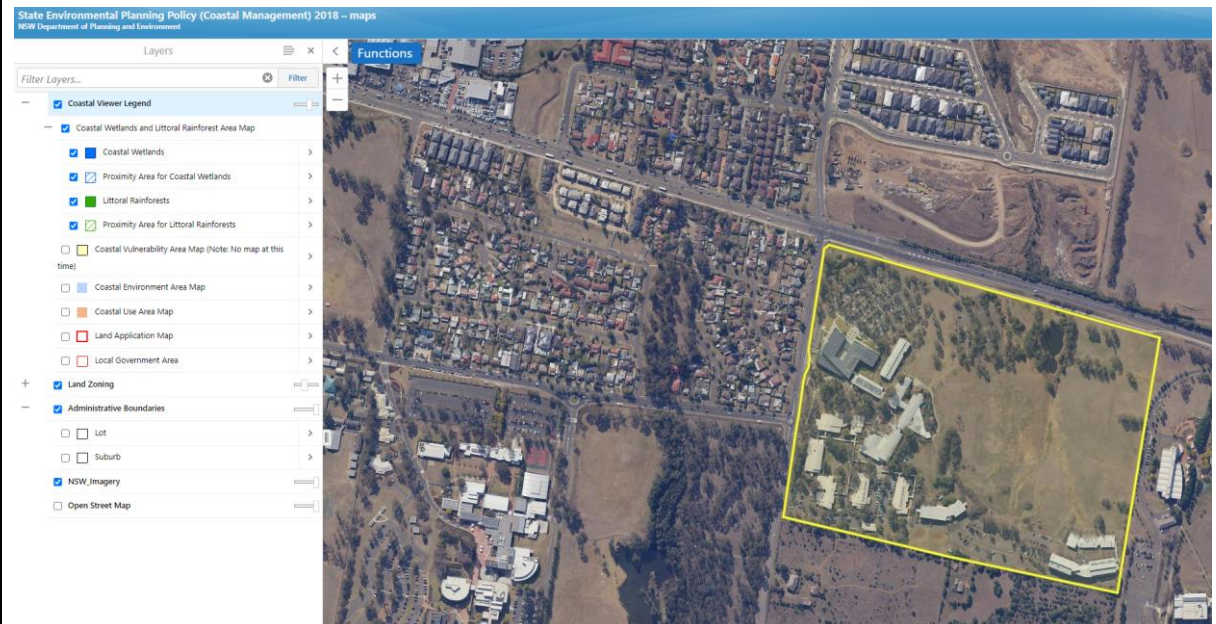
Refer to SEPP → SEPP 14 and SEPP → SEPP 26 on EnviroGIS (internal employees) or [Department of Planning and Environment - Web Map Services](#) (ASPs)

☐ **Yes.** If yes, provide the name and location of the SEPP 14 Wetland/SEPP 26 Rainforest and an explanation of any potential impacts: **Click here to enter text.**

Where it is identified that SEPP 14 or SEPP 26 lands may be impacted on by the activity, seek advice from an environmental specialist.

☒ **No.** The required databases were checked and no SEPP 14 or SEPP 26 lands were identified in the vicinity of the activity.

Insert screenshot demonstrating searches have been undertaken:



<p>e) Is the Activity likely to impact on marine vegetation (mangroves, seagrass beds) or involve dredging a water body?</p>	<p><input type="checkbox"/> Yes. If yes, provide details on how these are likely to be impacted on by the Activity: Click here to enter text.</p> <p><i>Where it is identified that marine vegetation occurs in the vicinity of the worksite and If impacts that cannot be mitigated are likely, seek advice from an environmental specialist.</i></p> <p><input checked="" type="checkbox"/> No.</p>
<p>Q14. VEGETATION MANAGEMENT</p>	
<p>a) Will the activity potentially damage, or require the removal of, vegetation in order to install, operate and/or access electrical infrastructure?</p> <p><i>Note: Consider the potential damage to trees near work areas and/or to tree roots when undertaking excavation. All trimmings and tree removals are to be carried out to comply with the clearances defined in MMI 0013 and taking into account the location of bush fire prone areas. Documented evidence indicating approvals and/or relevant consultation for any vegetation removals must be supplied.</i></p> <p><i>Refer to the type of vegetation to be removed Vegetation → Vegetation Communities on EnviroGIS (internal employees) or OEH Vegetation Information System (ASPs) and the location of bushfire prone areas - Rural Fire Service on EnviroGIS or from council (ASPs)</i></p>	<p><input type="checkbox"/> Yes. If yes, provide details and an explanation of any potential impacts: Click here to enter text.</p> <p><i>If trees require removal, confirm that the landowner/manager of the worksite is appropriately notified and seek advice from an environmental specialist.</i></p> <p><input checked="" type="checkbox"/> No. If no, choose one of the following options:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> No, no vegetation will be affected by the activity. <input type="checkbox"/> No, electrical clearances have already been established and maintained for this site. <input type="checkbox"/> No, other explanation: Click here to enter text. <p>If no, proceed to Q14.</p>
<p>b) Will the activity affect a significant tree as listed by the local council?</p> <p><i>Refer to local council significant tree register or local heritage items (Schedule 5 of the council LEP) or contact Council if this is not available.</i></p> <p><i>Save the results of this investigation on the project file.</i></p>	<p><input type="checkbox"/> Yes. If yes, provide details of the significant tree and an explanation of the potential impacts: Click here to enter text.</p> <p><i>If impacts to a significant tree are likely, notify the relevant Council of the activity and the likely impacts. Seek advice from an environmental specialist.</i></p> <p>Council contact: Click here to enter text.</p> <p>Summary of consultation: Click here to enter text.</p> <p><input checked="" type="checkbox"/> No. If no, choose one of the following options:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> No, local council significant tree registers and local heritage registers have been checked

	<input type="checkbox"/> No. The council has been contacted and confirmed that the site is not in the vicinity of a significant tree. <input type="checkbox"/> No, other explanation: Click here to enter text.
<p>c) Will the activity involve the disturbance of noxious weeds and/or pests and diseases?</p> <p><i>Consider if mulch containing pests and diseases is to be imported into the worksite and/or the worksite is located in a disturbed area where noxious weeds are prone to occur. Stakeholder management is essential to determine if these issues are prevalent at the worksite.</i></p>	<input type="checkbox"/> Yes. If yes, provide details Click here to enter text. <input checked="" type="checkbox"/> No.

HERITAGE (ref cl228 (2) (e) EP&A Reg 2000)

Q15. ABORIGINAL AND NON-ABORIGINAL HERITAGE ITEMS

Are there any items of Aboriginal or non-Aboriginal heritage on or near the worksite?

Aboriginal heritage: Consideration should involve whether the activity includes working, storing equipment, parking vehicles or accessing the worksite near an identified item or place of Aboriginal heritage, a Potential Archaeological Deposit and/or lands registered as native title.

Refer to Indigenous Heritage on [EnviroGIS](#) in combination with a search of the [AHIMS register](#) (internal employees) or [AHIMS register](#) (ASPs)

Non-Aboriginal heritage: Consideration should involve whether the activity includes changing the appearance of a heritage place and/or when excavating any land that might disturb an archaeological relic.

Refer to Euro Heritage on [EnviroGIS](#), in combination with the [State Heritage Register](#) and local heritage items (refer [Schedule 5 of the council LEP](#)) as well as Endeavour Energy's s170 Heritage Register (EMS 0001).

Save results of this investigation on the project file as well as provide screenshot where indicated to do so.

☐ **Yes. If yes, list the Aboriginal and non-Aboriginal heritage items that have been previously recorded in the study area and adjacent lands and identify potential impacts:**

[Click here to enter text.](#)

Where it is identified that heritage items may be affected by the activity, and If impacts that cannot be mitigated are likely, seek advice from an environmental specialist.

☒ **No. The required databases were checked and no heritage items were identified in the vicinity of the activity.**

Insert screenshot demonstrating searches have been undertaken (aboriginal heritage):



PROJEN

Date: 10 May 2021

PO Box 656
Kingsgrove New South Wales 1480
Attention: Wilson Tan
Email: wilsontan@projen.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 1, DP:DP866081 with a Buffer of 50 meters, conducted by Wilson Tan on 10 May 2021.

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 the Office of the Environment and Heritage 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. *

Insert screenshot demonstrating searches have been undertaken (non-aboriginal heritage)

Listing Type:
☒ All ☐ Aboriginal Places ☐ State Heritage Register

Local government area:
Penrith

Item name/Database ID:

SHR number:

Location:

Local Aboriginal Land Council (LALC):
Please Choose...

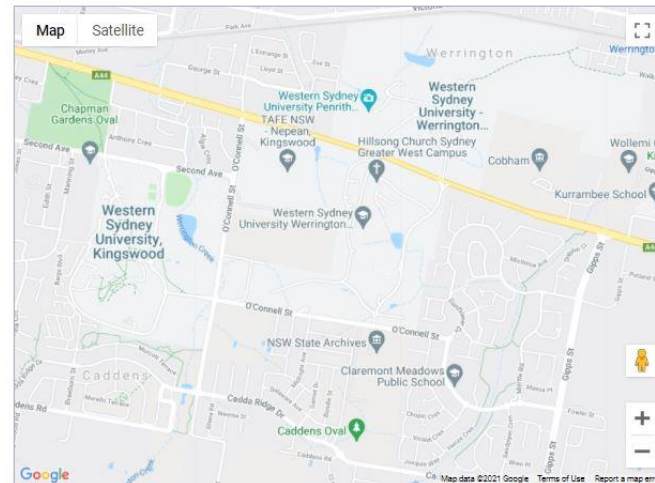
State theme:
Please Choose...

Item type:
Please Choose...

Item Group:
Please Choose...

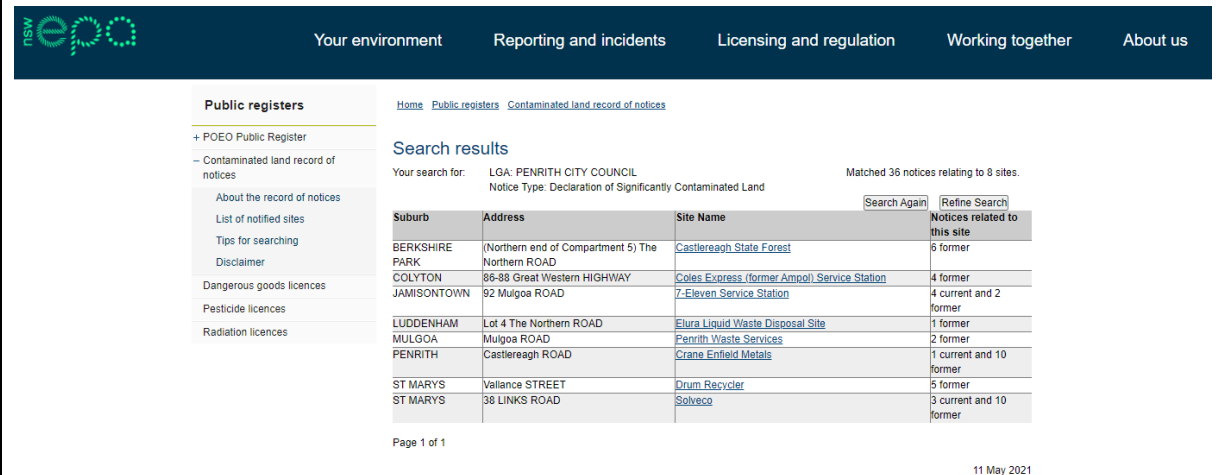
Item category:
Please Choose...

[Search](#) [Reset](#)



CONTAMINATION AND WASTE (ref cl228 (2) (m) EP&A Reg 2000)	
Q16. SPOIL MANAGEMENT	
a) Will the activity involve the excavation and generation of spoil?	<input checked="" type="checkbox"/> Yes. If yes, answer the remainder of Q16. <input type="checkbox"/> No. If no, proceed to Q18.
b) Will the excavated spoil be potentially contaminated (for example FSC, substation, previous landfill, near a pole butt treated with creosote industrial land use, relinquishing easements that has contained operational electrical equipment.) or a site that has been declared contaminated by the NSW? <i>Refer NSW EPA Contaminated Sites Register and List of NSW contaminated sites notified to the EPA</i>	<input type="checkbox"/> Yes. If yes, provide details of the potentially contaminated site (including the name of the contaminated site if listed on the NSW contaminated sites register): <ul style="list-style-type: none"> Click here to enter text. <i>If yes, seek advice from an environmental specialist</i> <input checked="" type="checkbox"/> No. If no, proceed to Q16c).

Save results of this investigation on the project file



Public registers

Home Public registers Contaminated land record of notices

Search results

Your search for: LGA: PENRITH CITY COUNCIL
Notice Type: Declaration of Significantly Contaminated Land

Matched 36 notices relating to 8 sites.

Suburb	Address	Site Name	Notices related to this site
BERKSHIRE PARK	(Northern end of Compartment 5) The Northern ROAD	Castlereagh State Forest	6 former
COLYTON	86-88 Great Western HIGHWAY	Coles Express (former Ampol) Service Station	4 former
JAMISONTOWN	92 Mulgoa ROAD	7-Eleven Service Station	4 current and 2 former
LUDDENHAM	Lot 4 The Northern ROAD	Elura Liquid Waste Disposal Site	1 former
MULGOA	Mulgoa ROAD	Penrith Waste Services	2 former
PENRITH	Castlereagh ROAD	Crane Enfield Metals	1 current and 10 former
ST MARYS	Vallance STREET	Drum Recycler	5 former
ST MARYS	38 LINKS ROAD	Solveco	3 current and 10 former

Page 1 of 1

11 May 2021

c) Does the activity require the re-use of spoil on the site?

Note: conditions apply for re-using spoil on other worksites as outlined in FAT0051.

☒ **Yes.**

☐ **No.**

d) Does the activity require the disposal of spoil from the worksite?

☒ **Yes.**

☐ **No.**

e) Is storage of spoil required while awaiting re-use and/or disposal?

☒ **Yes.**

☐ **No. If no, proceed to Q17.**

Q17. ACID SULFATE SOIL

Is the worksite located in the vicinity of Potential Acid Sulfate Soils?

Internal employees: Refer to Soils → NSW Acid Sulfate Soil on EnviroGIS

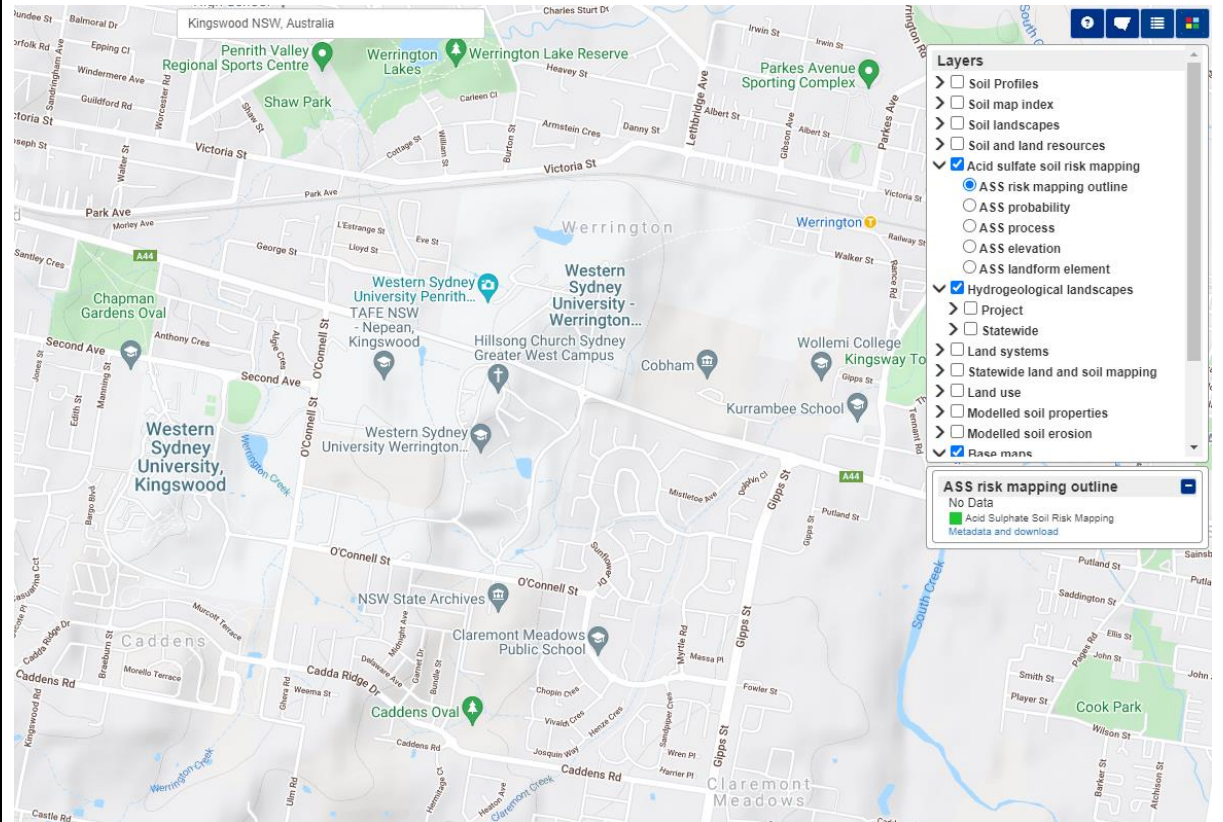
ASPs: **Department of Planning and Environment - Web Map Services**

☐ Yes.

Acid sulfate soil will be managed in accordance with Endeavour Energy's Acid Sulfate Soil Management Plan.

☒ **No. The required databases were checked and the activity is not located in the vicinity of Potential Acid Sulfate Soil.**

Insert screenshot demonstrating searches have been undertaken:



Q18. OTHER WASTES

<p>a) Does the activity involve handling asbestos or other hazardous materials?</p> <p>Refer NSW EPA Contaminated Sites Register and List of NSW contaminated sites notified to the EPA and HAZMAT register (internal employees) or NSW EPA Contaminated Sites Register and List of NSW contaminated sites notified to the EPA (ASPs) as well as the age of the asset (assets installed pre late 1980s are likely to contain asbestos containing materials).</p> <p>Save results of this investigation on the project file</p>	<p><input type="checkbox"/> Yes. What contains asbestos/hazardous materials?</p> <p>Click here to enter text.</p> <p><input checked="" type="checkbox"/> No. There are no known asbestos/hazardous materials on the worksite.</p>
<p>b) Will any other waste types- be generated by the activity?</p>	<p><input checked="" type="checkbox"/> Yes. If yes, specify the waste types and how they will be managed (for example, internal employees will sort waste into the correct receptacles at the nearest FSC)?:</p> <p>All rubbish/wastes, eg. Cable and cable insulation cut off's & construction packaging must be removed from site daily and appropriately disposed to a licensed facility and/or segregated into correct receptacles. Waste dockets must be obtained for all wastes disposed to licensed facilities.</p> <p><input type="checkbox"/> No.</p>
<p>SECTION 10: OTHER ISSUES (ref cl228 (2) (n) – (p) EP&A Reg 2000)</p>	
<p>Are there any other ways in which the works could affect the environment that need to be considered?</p>	<p><input type="checkbox"/> Yes. If yes, provide explanation:</p> <ul style="list-style-type: none"> Click here to enter text. <p>If yes, provide appropriate mitigation measures to address these environmental risks in the EMP</p> <p><input checked="" type="checkbox"/> No.</p>

KEY CONTACTS FOR ENDEAVOUR ENERGY EMPLOYEES

Contact	Details
Network Environmental Assessment Manager	02 9853 6552 0419 628 593 pat.woodbury@endeavourenergy.com.au
Manager Safety and Environmental Services	02 9853 4183 0434 687 434 john.curran@endeavourenergy.com.au
Environmental Business Partner – Team Leader	02 4252 2207 0423 826 529 michael.w.roberts@endeavourenergy.com.au

INFORMATION RESOURCES

The following resources should be used when completing the SER.

Resource	Location
<u>Endeavour Energy Employees</u>	
EnviroGIS <i>Environmental layers and NPWS and SCA boundaries in relation to Endeavour Energy assets</i>	http://envirogis.eeaus.com/envirogis/framesetup.asp
Environmental Fact Sheets <i>One page summaries of control measures for major environmental risks.</i>	Safety and Environmental Services - Environmental Factsheets
Environmental Handbook <i>A collation of common environmental risks on worksites and relevant mitigation measures</i>	Safety and Environmental Services - Environmental Handbook
Environmental policies and procedures <i>Guidance on the best practice management of environmental risks and legislative requirements</i>	Business Management System (BMS)
<u>Other information sources referred to in the SER</u>	
Bionet Atlas of NSW Wildlife <i>Recorded sightings of plants, mammals, birds, reptiles, amphibians, some fish, and some (mainly endangered) invertebrates</i>	http://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS/AtlasSearch.aspx
EPBC Protected Matters Search Tool <i>Records and predictions of Matters of National Environmental Significance</i>	http://www.environment.gov.au/epbc/pmst/index.html
NSW OEH State Heritage Register <i>Records of European heritage items, state heritage listings</i>	http://www.environment.nsw.gov.au/heritageapp/heritagesearch.aspx
NSW OEH – Spatial Data Catalogue and download site <i>Biodiversity spatial information and management plans</i>	http://mapdata.environment.nsw.gov.au/DDWA/

Resource	Location
NSW Spatial Data Catalogue <i>Spatial Information on land, the environment, transport, communications, utility services and demographics</i>	http://www.sdi.nsw.gov.au/GPT9/catalog/main/home.page
NSW Planning and Environment – Web Map Services <i>Spatial Information on land, the environment, including heritage, SEPPs and Acid Sulfate Soils</i>	https://www.planningportal.nsw.gov.au/planning-tools/open-data/
SIX Spatial Information Exchange <i>Aerial images, cadastral and land and property information, spatial viewers, topography and land features</i>	https://six.nsw.gov.au/wps/portal/
General	
Endeavour Energy Standards <i>Environmental Management Standards (EMS), Mains Maintenance Instructions.</i>	http://asp.endeavourenergy.com.au/wps/wcm/connect/ASP/Content/Standards
NSW OEH Threatened Species Information <i>Profiles of threatened species, endangered populations and endangered ecological communities.</i>	http://www.environment.nsw.gov.au/threatenedspecies/
Aboriginal Heritage Information Management System (AHIMS) <i>Aboriginal heritage information, aboriginal places</i>	http://www.environment.nsw.gov.au/licences/WhatInformationCanYouObtainFromAHIMS.htm
Local Councils <i>Environmental data, LEPs, Local Government Heritage Register (Schedule 5 of LEP)</i>	<p>The following LGA's occur within the Endeavour Energy network area; Mid-western Regional, Lithgow, Bathurst Regional Council, Fairfield, Cumberland (previously known as Holroyd Council), Hawkesbury, Liverpool, Blue Mountains, The Hills Shire, Blacktown, Hornsby, Parramatta, Penrith, Wollondilly, Camden, Campbelltown, Wollongong, Wingecarribee, Shellharbour, Kiama, Goulburn Mulwaree, Shoalhaven.</p>
Endeavour Energy s170 Heritage Register <i>Endeavour Energy assets that are heritage items</i>	EMS 0001 (Annexure A)
NSW Legislation <i>Acts, Regulations and EPIs (SEPPs, LEPs) as consolidated and in force or as repealed.</i>	http://www.legislation.nsw.gov.au/maintop/scanact/inforce/NONE/0
NSW Land and Property information <i>Cadastral information, title searches, plans and dealings (easements and rights of way)</i>	http://www.lpi.nsw.gov.au/land_titles/
List of NSW contaminated sites notified to EPA <i>Contaminated sites that have been notified to the EPA by the land occupier</i>	http://www.environment.nsw.gov.au/clm/publiclist.htm

Resource	Location
NSW Contaminated Sites Register Contaminated sites that are regulated by the EPA	http://www.epa.nsw.gov.au/prclmapp/searchregister.aspx
NSW RMS Classification of roads	http://www.rms.nsw.gov.au/business-industry/partners-suppliers/lgr/arrangements-councils/road-classification.html

DEFINITIONS OF COMMONLY USED TERMS

Term	Definition
biodiversity	The variety of biological life (plants and animals).
Easement	An easement gives someone who does not own land a right to use it, or a part of it, for specific purposes. Common examples as they affect the electricity industry are rights of way, drainage easements and easements for electricity mains. The portion of the land subject to the easement is shown on a plan. Easements must be created and registered on title. Easements may be created for a definite period of time or in perpetuity.
Endangered Ecological Communities (EECs)	An endangered ecological community (EEC) is an ecological community listed under the NSW TSC Act and/or the Commonwealth EPBC Act as being at risk of extinction unless threats affecting these areas are managed and reduced.
Excavated Natural Material (ENM)	<p>Material that meets the conditions of the Excavated Natural Material Exemption 2012 and includes naturally occurring rock and soil that:</p> <ul style="list-style-type: none"> • has been excavated from the ground; • contains at least 98% (by weight) natural material (such as clay, gravel, sand, soil or rock fines); • does not meet the definition of Virgin Excavated Natural Material (VENM) in the Protection of <i>Environment Operations Act 1997 (NSW)</i>; and • has been sampled and tested in accordance with the Excavated Natural Material Exemption 2012. <p>ENM does not include material that has been processed, for example mixed, blended, from a contamination hotspot, or that contains asbestos or actual or potential acid sulphate soils. In other words, ENM is previously disturbed soil which has been proven to be uncontaminated via sampling and testing.</p>
Important habitat for migratory species	<p>An area of “important habitat” for a migratory species is:</p> <ol style="list-style-type: none"> habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species, and/or habitat that is of critical importance to the species at particular life-cycle stages, and/or habitat utilised by a migratory species which is at the limit of the species range, and/or habitat within an area where the species is declining.
Activity	The work to be performed, which includes all activities, including material storage and access to the worksite.
Worksite	The area directly affected by the activity including the actual work area and access pathways. This may include additional areas beyond the immediate work area that may be subject to disturbance in response to the Activity (for example clearance around poles, vegetation clearance required and areas for storage compounds, sediment runoff), which are likely to be affected by the activity, either directly or indirectly.
Adjacent lands	Infers the parcel(s) of land immediately next to or bordering the worksite and taking into account potential indirect impacts encompassing the study area.

Term	Definition
Council	Refers to the body or organisation managing the LGA.
National Park/State Recreation Area	Refers to lands reserved and acquired under the <i>National Parks and Wildlife Act 1974</i> .
Matters of National Environmental Significance (MNES)	<p>The eight matters of national environmental significance protected under the EPBC Act are:</p> <ul style="list-style-type: none"> • world heritage properties; • national heritage places; • wetlands of international importance (listed under the Ramsar Convention); • listed threatened species and ecological communities; • migratory species protected under international agreements; • Commonwealth marine areas; • the Great Barrier Reef Marine Park; and • nuclear actions (including uranium mines).
Potential Archeological Deposit (PAD)	<p>A PAD (aboriginal heritage) is likely to be found if you:</p> <ul style="list-style-type: none"> • Are working in undisturbed areas or natural landscapes. • Observe any evidence of Aboriginal artefacts or past habitation such as caves, rocks, overhangs and platforms, shell mound. • Are working next to freshwater, springs, swamp, bush foods and the like. • Are removing undisturbed topsoil.
Water NSW Special Area/Controlled Lands	Refers to lands owned and managed by the SCA under the <i>Water NSW Act 2014</i> .
Normal Working Hours	Normal hours are 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm Saturday.
Virgin Excavated Natural Material (VENM)	<p>The <i>Protection of the Environment Operations Act 1997</i> (NSW) defines VENM as natural material (such as clay, gravel, sand, soil or rock fines) that:</p> <ul style="list-style-type: none"> • has been excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, as a result of industrial, commercial, mining or agricultural activities; and • does not contain any sulfidic ores or soils or any other waste. <p>VENM cannot be “made” from processed soils, and excavated material that has been stored or processed in any way cannot be classified as VENM. In other words, VENM is previously unturned soil that has no potential to be contaminated.</p>

ABBREVIATIONS

Abbreviated	Expanded
AHIMS	Aboriginal Heritage Information Management System
ASPs	Accredited Service Provider
BMS	Business Management System
EECs	Endangered Ecological Communities
EIA	Environmental Impact Assessment
EMS	Environmental Management Standard
ENM	Excavated Natural Material
EPA	Environment Protection Authority
EPBC	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
LGA	Local Government Area
LEP	Local Environment Plan
MMI	Mains Maintenance Instruction
MNES	Matters of National Environmental Significance
NBN	National Broadband Network
NPWS	National Parks and Wildlife Service
OEH	Office of Environment and Heritage NSW
PAD	Potential Archeological Deposit
REF	Review of Environmental Factors
RMS	Roads and Maritime Service (formerly the RTA - Roads and Traffic Authority)
SEPPs	State Environmental Planning Policies
SER	Summary Environmental Report
TSC	NSW <i>Threatened Species Conservation Act 1995</i>
UGOH	Under Ground to Overhead construction
VENM	Virgin Excavated Natural Material

DOCUMENTS AND PLANS REFERENCED IN THIS SER

Title
General <i>(will be referenced when completing the SER)</i>
EMS 0001 – Environmental Impact Assessment and Environmental Management Plans
EMS 0004 – Vegetation Management
EMS 0006 – Maintenance and Construction of Access Tracks
EMS 0007 – Waste Management
EMS 0008 – Environmental Incident Response and Management
EMS 0012 – Notification of access to National Parks, reserves and Water NSW special areas and controlled lands
EMS 0013 – De-watering
EMS 0014 – Spoil Management
FAT 0051 – Generic Environmental Risk Mitigation Measures for use in preparing Environmental Management Plans
Additional documents referenced <i>(Please add any documents/plans referenced)</i>
Notice to Council
Notice to Residents
MNES Report
Click here to enter text.
Click here to enter text.
Click here to enter text.

6 May 2021

Reference: ULL3222

General Manager
Penrith City Council
Penrith Civic Centre
601 High St
Penrith NSW 2750
council@penrith.city

Dear Sir or Madam,

**Re: Proposed project at 12-44 O'Connel St, Kingswood (TAFE NSW), Plan No. ULL3222–
consultation under the *Electricity Supply Act 1995* and *State Environmental Planning Policy
(Infrastructure) 2007***

I am writing to provide formal notification to Council with the opportunity to review and make a submission in relation to a proposal to install a new padmount substation for the new "Construction Hub Building" inside Kingswood TAFE, as required by the *Electricity Supply Act 1995* and the *State Environmental Planning Policy (Infrastructure) 2007*.

The attached Notification Plan illustrates the proposed works which includes excavation within the footway and roadway of Kingswood TAFE to allow for the installation of new underground cables and conduits, and the installation of a padmount substation.

An environmental assessment will be undertaken for this project to meet the requirements of the *Environmental Planning and Assessment Act 1979*. Therefore, in addition to any submission, can you please advise of any information that Council has which will assist us in considering all relevant issues and adequately assessing the environmental impacts. Such information could include:

- specific zoning and consent requirements
- approved surrounding land uses
- any known environmental restrictions (eg environmental protection area etc)
- threatened or endangered flora or fauna species
- fire prone land
- stormwater
- Council's infrastructure
- locally rare or protected flora or fauna or areas of critical habitat
- wetlands or flood prone areas

- land contamination, potential or actual acid sulphate soils, soil instability or subsidence
- heritage items or relics, including Aboriginal heritage and sites
- site access, traffic or parking restrictions
- adjacent sensitive sites
- potential community concerns of which Council may be aware
- other nearby development proposals likely to impact upon the proposal
- any other items that Council considers relevant.

The proposed activities will have environmental management safeguards to a suitable standard implemented in accordance with the assessment and Ausgrid's Environmental Handbook.

Submissions and information for this project will be considered if received within 40 days of the date of this letter. Submissions and information can be sent to the following (email preferred):

Attn: Spiro Mentis
Mentis Consulting Engineers
PO Box 234
St Ives 2075
e-mail: info@mentiseng.com.au

If no written correspondence is received by 15th June 2021 we will consider that Council does not wish to lodge a submission and we will proceed to schedule work after this date.
Please contact me if you would like to discuss this matter on 0433330110.

Yours sincerely,



Spiro Mentis
Level 3 ASP
Mentis Consulting

ATTACHMENT: Notification Plan



Mentis Infrastructure P/L
t/as Mentis Consulting Engineers
ASP3 License No.4930
info@mentiseng.com.au
PO Box 234
St Ives NSW 2075
Tel: 0433 330 110
ABN: 57 635 221 132

13 May 2021

Reference: ULL3222

Dear Resident,

Re: Installation of a Padmount Substation on the premises of Kingswood TAFE, 12-44 O'Connell St, Kingswood

We are planning to install a new padmount substation inside Kingswood TAFE to supply the new Construction Hub Building.

The proposed padmount substation is to be located within Kingswood TAFE, just outside their proposed building, as per attached notification plan.

Council notification

We have notified Penrith City Council regarding the proposed location of this padmount substation.

Environmental considerations

Minimising the impact our works have on the environment is of paramount importance to us. These proposed works will be assessed under Part 5 of the *Environmental Planning and Assessment Act 1979* and every effort will be made to minimise disruption to the community.

Construction works and timing

Once the location has been confirmed we will commence site preparation activities followed by the kiosk placement. This includes some excavation, soil removal and placing the kiosk on the site. We anticipate the work to begin around June 2019 and further notification will be provided to affected residents before works commence.

Comments welcome

Under the State Environmental Planning Policy (Infrastructure) 2007, we welcome written comments on this proposal within 21 days from the receipt of this letter, on 03/06/2021. Please send these to

Mentis Consulting Engineers
email to info@mentiseng.com.au

Your feedback is important to us and all comments will be carefully considered before a final decision is made. If no feedback is received we will proceed with the proposed design and the construction phase will begin in due course.

Should you have any questions in relation to the proposed works, please call 0433330110 or email.

Spiro Mentis
Mentis Consulting Engineers



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

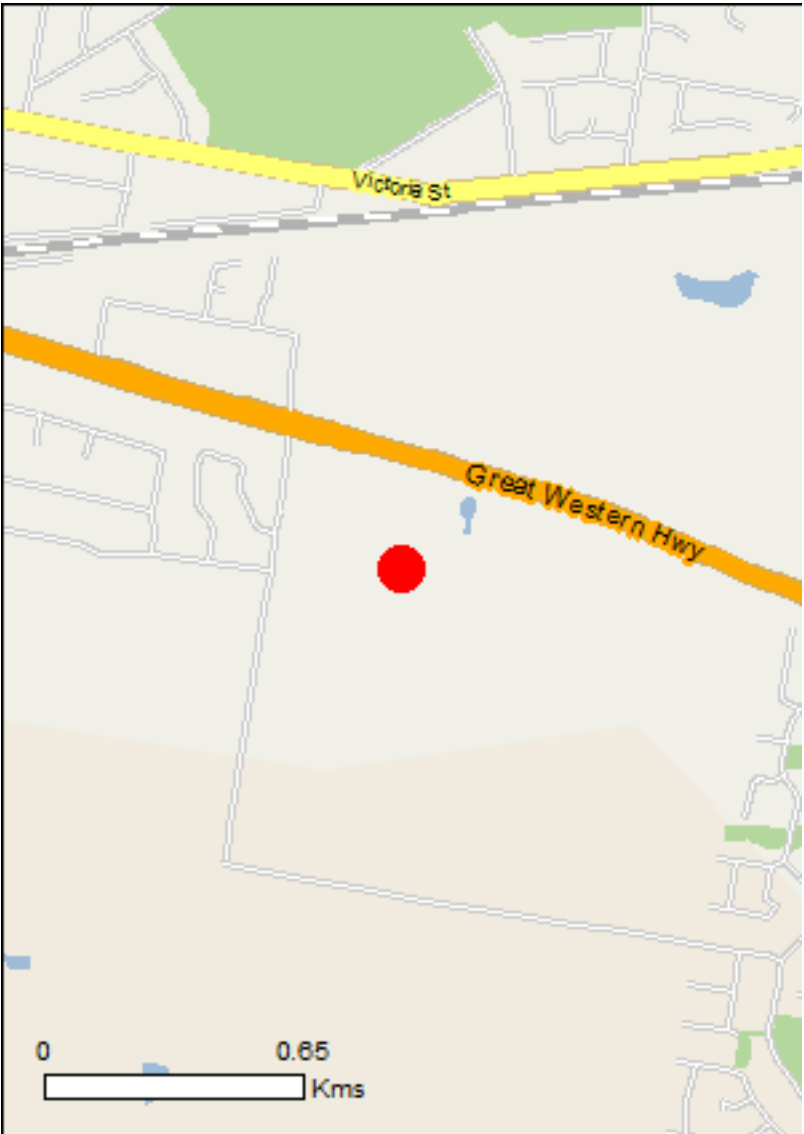
Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 07/05/21 15:58:12

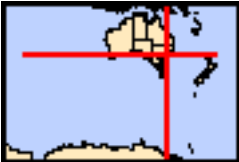
- [Summary](#)
- [Details](#)

[Matters of NES](#)[Other Matters Protected by the EPBC Act](#)[Extra Information](#)
- [Caveat](#)
- [Acknowledgements](#)



This map may contain data which are
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[Coordinates](#)
Buffer: 0.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	5
Listed Threatened Species:	33
Listed Migratory Species:	14

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	19
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	49
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[Resource Information]

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

Name	Status	Type of Presence
Castlereagh Scribbly Gum and Agnes Banks Woodlands of the Sydney Basin Bioregion	Endangered	Community may occur within area
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community may occur within area
Cooks River/Castlereagh Ironbark Forest of the Sydney Basin Bioregion	Critically Endangered	Community may occur within area
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community may occur within area
Western Sydney Dry Rainforest and Moist Woodland on Shale	Critically Endangered	Community may occur within area

Listed Threatened Species

[Resource Information]

Name	Status	Type of Presence
Birds		
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat likely to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species

Name	Status	Type of Presence
habitat likely to occur within area		
Fish		
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
Frogs		
Heleioporus australiacus Giant Burrowing Frog [1973]	Vulnerable	Species or species habitat may occur within area
Litoria aurea Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat likely to occur within area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area
Petauroides volans Greater Glider [254]	Vulnerable	Species or species habitat may occur within area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat likely to occur within area
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat may occur within area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Plants		
Acacia bynoeana Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat may occur within area
Acacia pubescens Downy Wattle, Hairy Stemmed Wattle [18800]	Vulnerable	Species or species habitat may occur within area
Allocasuarina glareicola [21932]	Endangered	Species or species habitat may occur within area
Genoplesium baueri Yellow Gnat-orchid, Bauer's Midge Orchid, Brittle Midge Orchid [7528]	Endangered	Species or species habitat may occur within area
Haloragis exalata subsp. exalata Wingless Raspwort, Square Raspwort [24636]	Vulnerable	Species or species habitat may occur within area
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat may occur within

Name	Status	Type of Presence
		area
Persoonia hirsuta Hairy Geebung, Hairy Persoonia [19006]	Endangered	Species or species habitat likely to occur within area
Persoonia nutans Nodding Geebung [18119]	Endangered	Species or species habitat may occur within area
Pimelea spicata Spiked Rice-flower [20834]	Endangered	Species or species habitat likely to occur within area
Pterostylis saxicola Sydney Plains Greenhood [64537]	Endangered	Species or species habitat may occur within area
Pultenaea parviflora [19380]	Vulnerable	Species or species habitat may occur within area
Syzygium paniculatum Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat may occur within area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area

Listed Migratory Species

[[Resource Information](#)]

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

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat likely to occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat likely to occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species	[Resource Information]	
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Chrysococcyx osculans Black-eared Cuckoo [705]		Species or species habitat likely to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat likely to occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat likely to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area

Extra Information

Invasive Species

[Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Alauda arvensis Skylark [656]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Carduelis chloris European Greenfinch [404]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Lonchura punctulata Nutmeg Mannikin [399]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
Pycnonotus jocosus Red-whiskered Bulbul [631]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Frogs		
Rhinella marina Cane Toad [83218]		Species or species habitat likely to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur

Name	Status	Type of Presence
		within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Alternanthera philoxeroides Alligator Weed [11620]		Species or species habitat likely to occur within area
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]		Species or species habitat likely to occur within area
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]		Species or species habitat likely to occur within area
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171]		Species or species habitat likely to occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Cytisus scoparius Broom, English Broom, Scotch Broom, Common Broom, Scottish Broom, Spanish Broom [5934]		Species or species habitat likely to occur within area
Dolichandra unguis-cati Cat's Claw Vine, Yellow Trumpet Vine, Cat's Claw Creeper, Funnel Creeper [85119]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat likely to occur within area
Genista monspessulana Montpellier Broom, Cape Broom, Canary Broom, Common Broom, French Broom, Soft Broom [20126]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Nassella neesiana Chilean Needle grass [67699]		Species or species

Name	Status	Type of Presence
Nassella trichotoma Serrated Tussock, Yass River Tussock, Yass Tussock, Nassella Tussock (NZ) [18884]		habitat likely to occur within area Species or species habitat likely to occur within area
Opuntia spp. Prickly Pears [82753]		Species or species habitat likely to occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
Ulex europaeus Gorse, Furze [7693]		Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area

Caveat

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

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

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

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

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

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

- migratory and
- marine

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

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

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

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

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

Coordinates

-33.7649 150.73747

Acknowledgements

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

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

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Please feel free to provide feedback via the [Contact Us](#) page.

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[Department of Agriculture Water and the Environment](#)

GPO Box 858

Canberra City ACT 2601 Australia

+61 2 6274 1111